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KARLSRUHE**

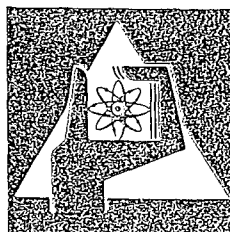
Dezember 1975

KFK 2233
NEANDC (E) 170 »U«

Institut für Neutronenphysik und Reaktortechnik
Projekt Schneller Brüter

**Graphical Representation of the German Nuclear Data
Library K E D A K
Part 1: Nonfissile Materials**

B. Goel



**GESELLSCHAFT
FÜR
KERNFORSCHUNG M.B.H.**

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Graphical Representation of the German Nuclear Data Library KEDAK
Part 1: Non-fissile Materials

B. Goel

Gesellschaft für Kernforschung m.b.H., Karlsruhe

ERRATUM

The first word on all the blue
pages should be Figure

Abstract

In this report the nuclear data library KEDAK-3 is presented in graphical form for the non-fissile materials. It is also compared with the KEDAK-2 and the KFKINR set of group constants.

Graphische Darstellung der deutschen Kerndatenbibliothek KEDAK
Teil I: Nichtspaltbare Materialien

Zusammenfassung

In diesem Bericht ist die Kerndatenbibliothek KEDAK-3 für die nichtspaltbaren Materialien graphisch dargestellt. Sie ist ferner mit KEDAK-2 und dem KFKINR Gruppenkonstantensatz verglichen.

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Since the last publication/1/ of the neutron cross section library KEDAK in graphical form in 1962 a number of cross sections has been reevaluated. Two new versions of KEDAK have been issued in the meantime. Therefore it is deemed necessary to republish the neutron data file KEDAK in graphical form.

In this report neutron cross sections of nonfissile materials of the newest version of KEDAK (KEDAK-3) are presented in graphical form for energies ranging from 0.001 eV to 15.0 MeV. It is also compared with the 1971 version of KEDAK/2/ and the relevant data from the KFKINR-set/3/ are also plotted. The KFKINR-set is an adjusted set of nuclear group constants in ABBN 26 group structure. It has been established in 1972 and is presently used at the Nuclear Research Centre Karlsruhe and other institutions to perform fast reactor calculations. The primary basis of this set is KEDAK-2, most of the group constants for nonfissile materials are the weighted averages of the corresponding KEDAK-2 data. The main difference between the KEDAK-2 data and the KFKINR-set is to be observed for fissile materials. While comparing the KEDAK-2 and the KFKINR data account should be taken of the somewhat arbitrary choice of the energy limits of the plots. In some cases these energy limits may give a misleading impression of the discrepancy between the KFKINR-set and KEDAK-2.

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It should be noted that the label OLD KEDAK does not represent the data published in reference 1 but stands for KEDAK-2 for which no graphical presentation is available so far. The label NEW KEDAK stands for KEDAK-3; status October 1975.

In cases where only one curve is plotted the relevant data are missing in KEDAK-2. Overlapping of old and new KEDAK throughout the energy range plotted indicates that no new evaluation of this cross section is performed at Karlsruhe after 1970. The status of KEDAK-3 is described in reference 6. In the appendix the tables summarising the status and the contents of KEDAK-3 are reproduced.

These plots were generated with the computer program PLKFG/4/and PLOT EASY/5/. The nomenclature of the cross sections is as in KEDAK file and is listed below.

SGT = σ_t = Total neutron cross section

SGG = $\sigma(n, \gamma)$ = Radiative capture cross section

SGA = σ_{ab} = Absorption cross section
= SGG + SGP + SGALP + SGD + (SGF)

SGX = σ_{non} = Nonelastic cross section
= SGT - SGn = SGA + SG2N + SG3N

SGN = $\sigma(n, n)$ = Elastic scattering cross section

SGI = $\sigma(n, n')$ = Total inelastic cross section

$SGIZ = \sigma(n, n' E)$ = Cross section for the inelastic excitation of
the residual nucleus to the level E

$SGTR = \sigma_{tr}$ = Transport cross section

= $SGT - MUEL * SGN$

$MUEL = \bar{\mu}_1$ = Average of the cosine of the elastic scattering
angle in the laboratory system

SGP = Cross section for the (n,p) process

SGD = Cross section for the (n,d) process

$SGALP$ = Cross section for the (n, α) process

$SG2N$ = Cross section for the (n, 2n) process

In the energy region where in addition to the elastic channel the only other open channel is the radiative capture channel, $SGG = SGA = SGX$. Only one of these cross sections, namely SGG , is plotted.

The contents of the KEDAK file can be obtained in tabular form or on tapes, either through the CCDN-Saclay or directly from this institute. For a complete list of the contents of the present version of KEDAK see appendix.

ACKNOWLEDGMENTS

The author expresses his thanks to Messrs. Broeders and Stein for developing the computer codes used in this publication. He also thanks Dr. Kiefhaber for critically going through this work and for his valuable suggestions.

REFERENCES

1. J. J. Schmidt, KFK 120(1962)
2. B. Hinkelmann, B. Krieg, I. Langner, J. J. Schmidt and D. Woll, KFK 1340(1971)
3. E. Kiefhaber, KFK 1572(1972)
4. E. Stein, private communications
5. C. H. M. Broeders, private communications
6. B. Goel and B. Krieg, KFK 2234(1975)

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 15 MeV	H H1
2	SGG	??	
3	SGN	??	
4	SGTR	??	
5	MUEL	??	

H
(-H1)

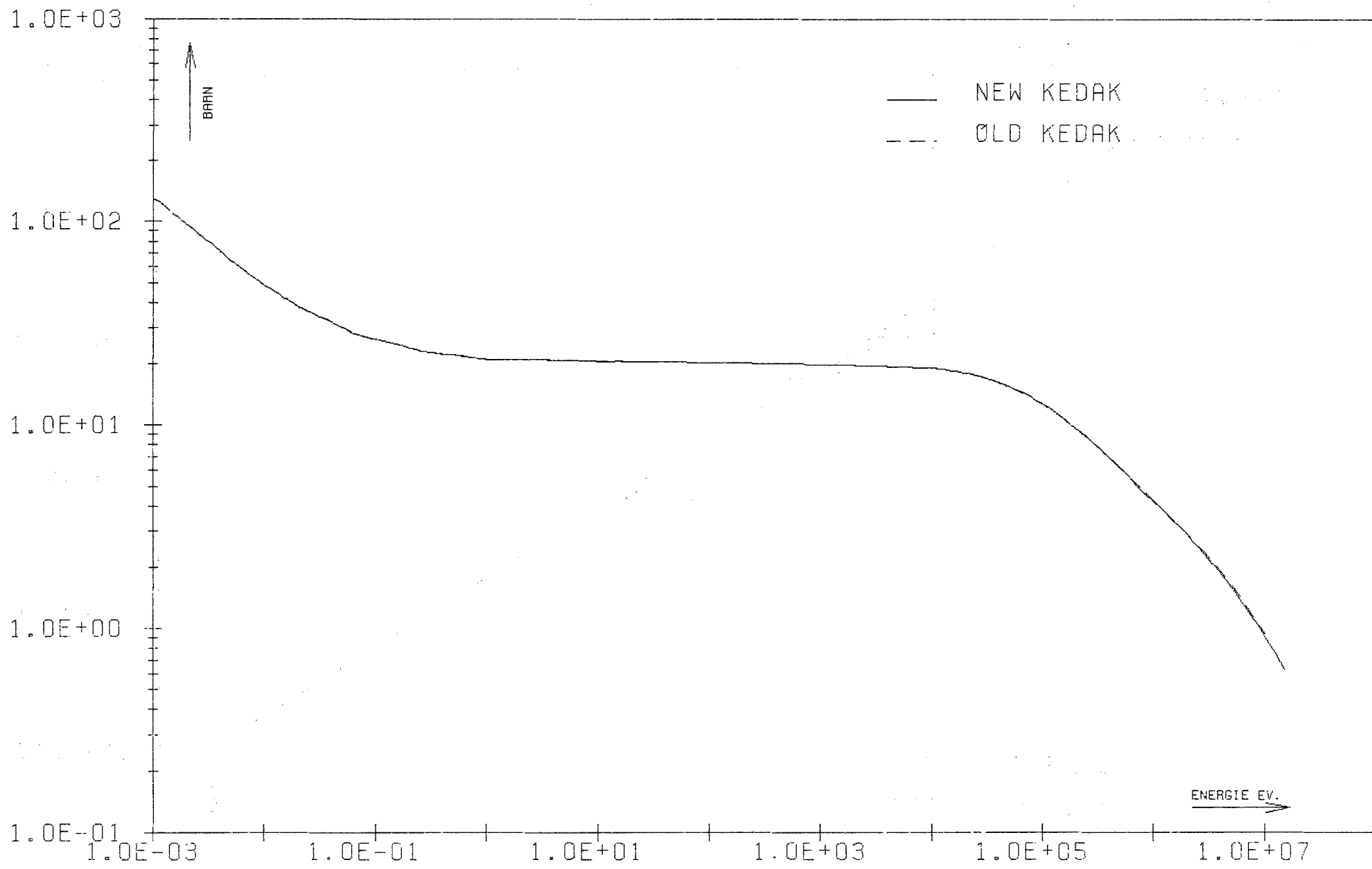


FIG. 1

H H1

SGT

INR901HH 03.10 09.55.

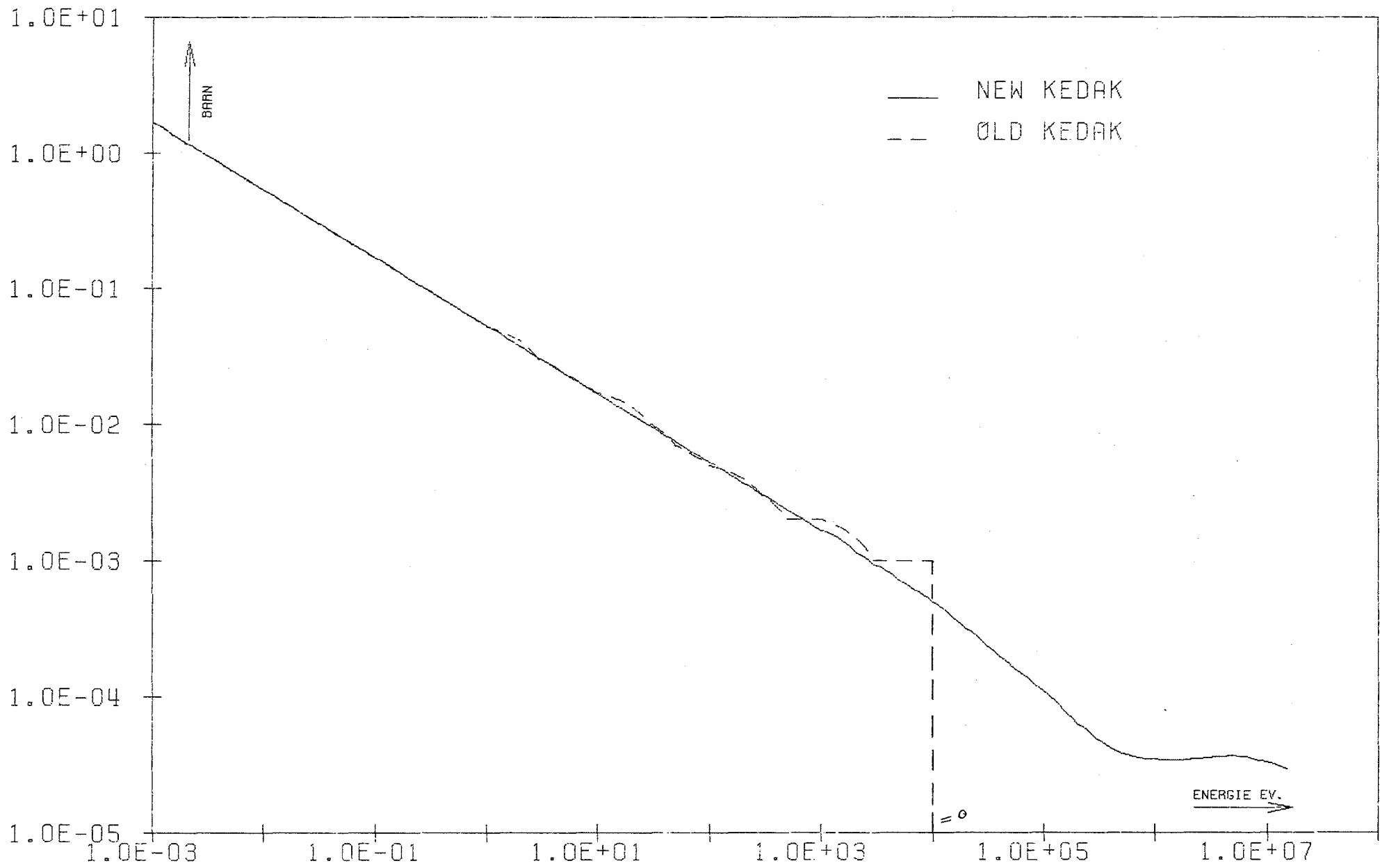


FIG. 2 H H1 SGG

INR901HH 03.10 18.24.

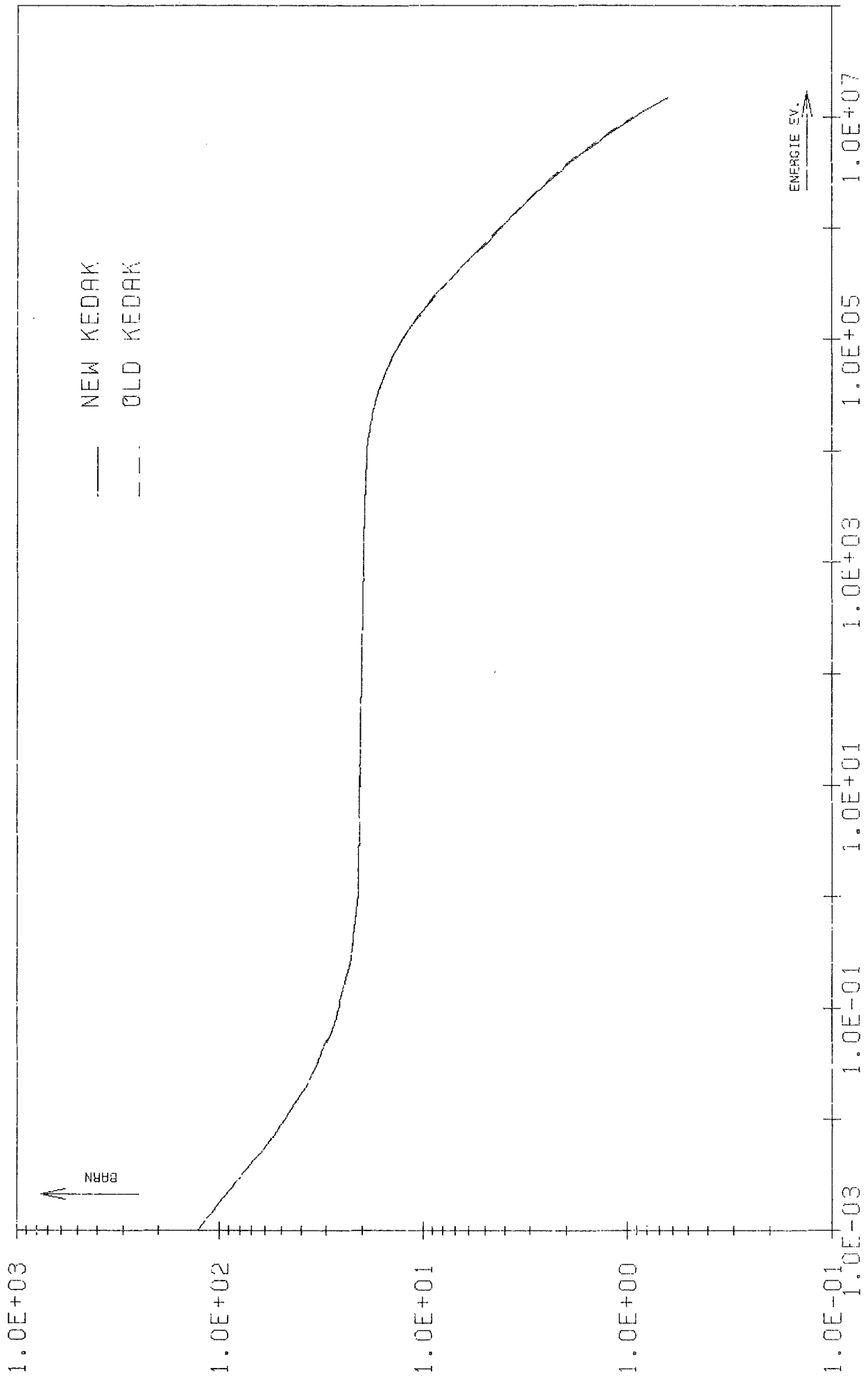


FIG. 3 H H1 SGN INR901HH 03.10 09.55.

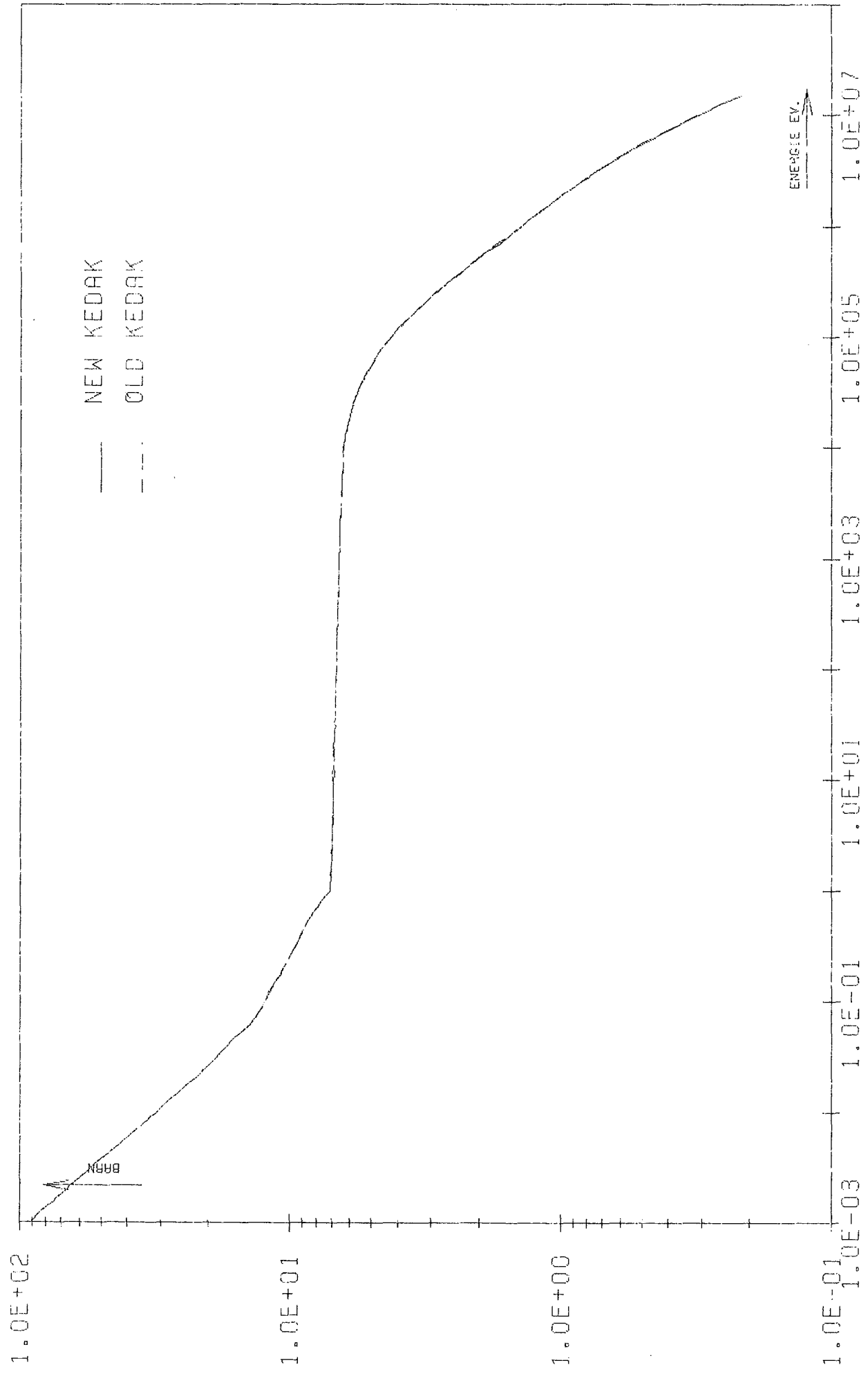


FIG. 4 H H1 SGTR INR901HH 03.10 09.55.

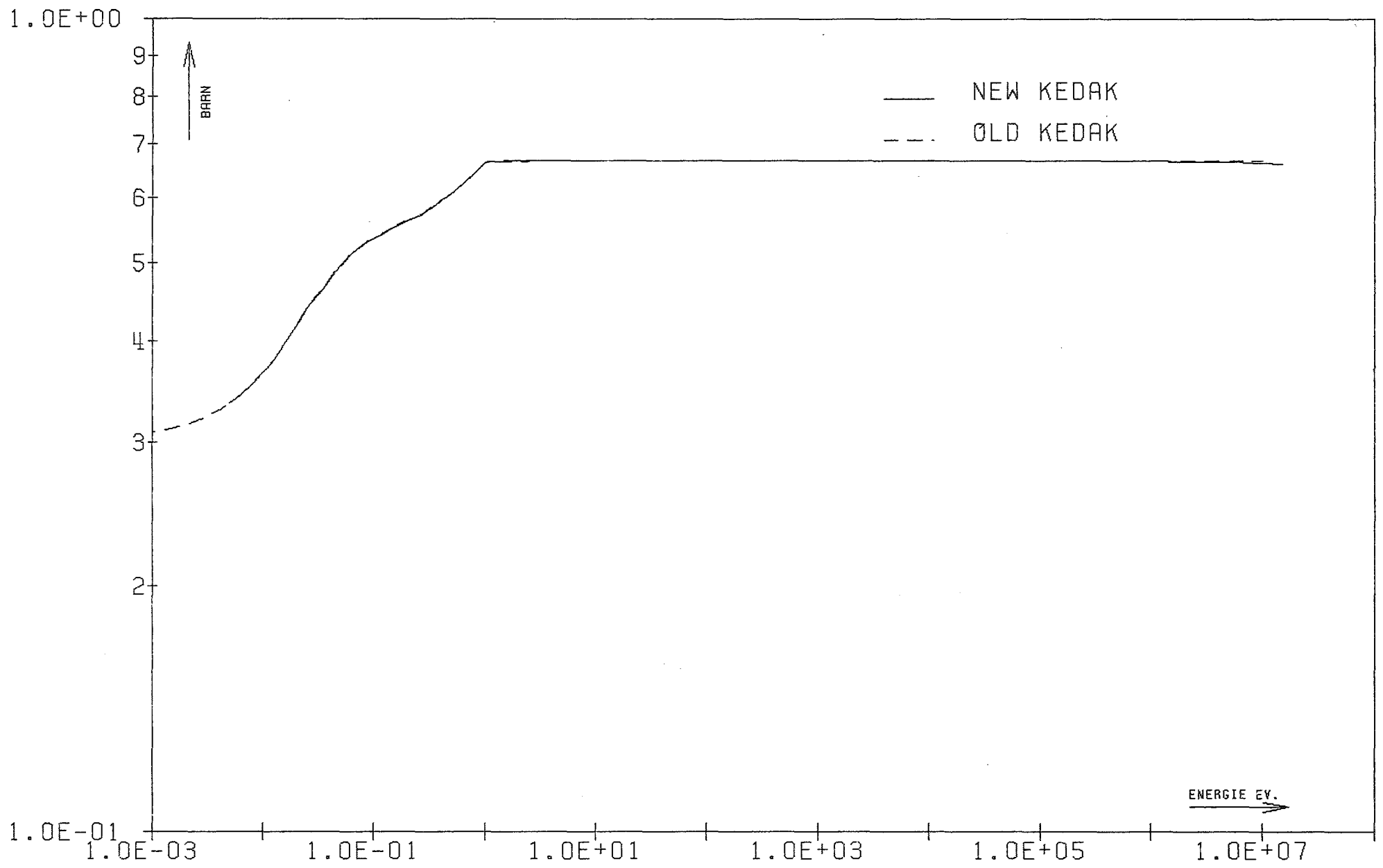


FIG. 5 H H1 MUEL

INR901HH 03.10 18.24.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 15 MeV	H 01
2	SGG	" "	
3	SGN	" "	
4	SGTR	" "	
5	MUEL	" "	

H

(- 01)

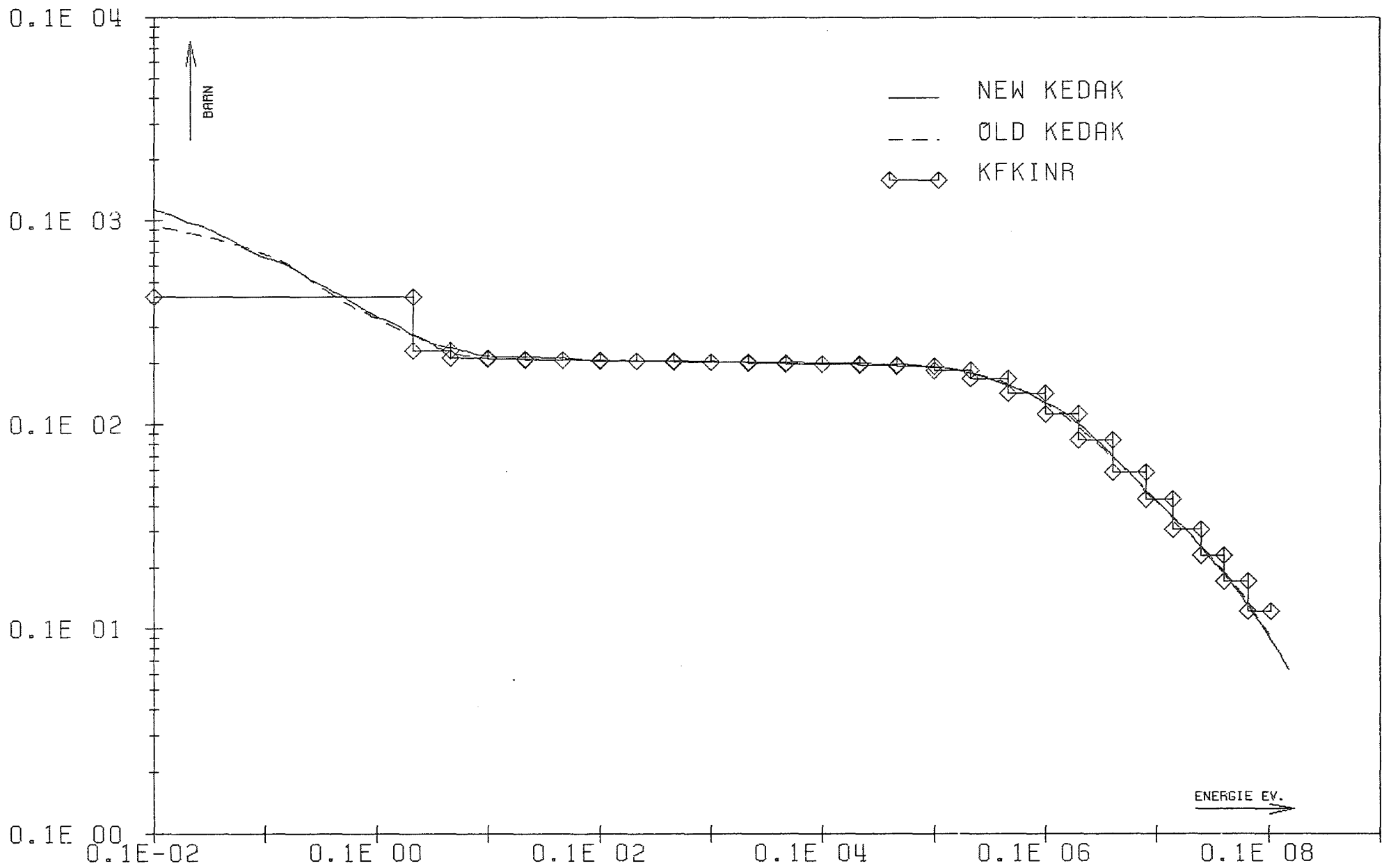
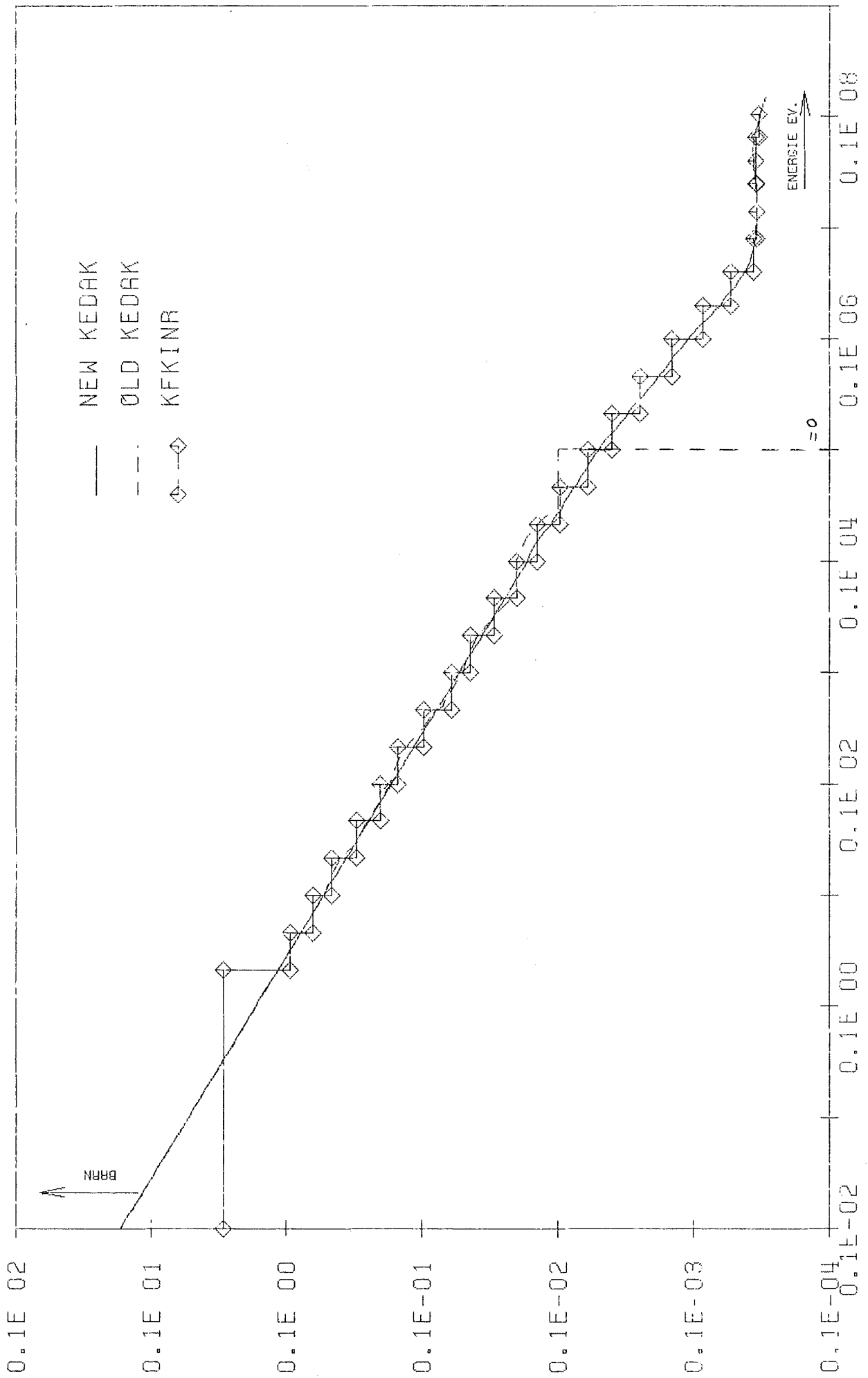


FIG. 1

H 01

SGT

INR901H0 07.08 21.27.

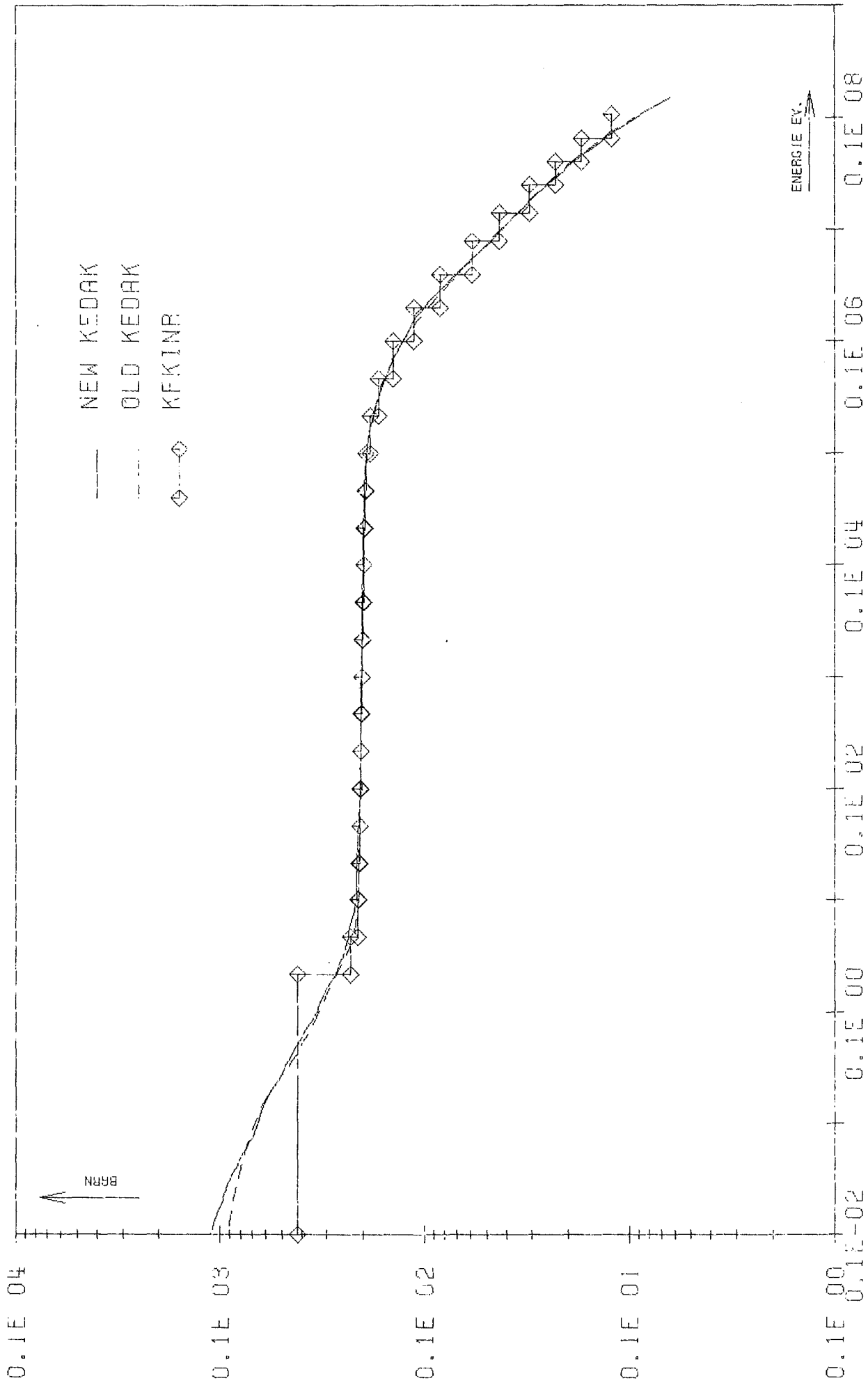


INR901H0 07.08 21.27.

SGG

H 01

FIG. 2



INR901H0 07.08 21.27.

FIG. 3 H 01 SGN

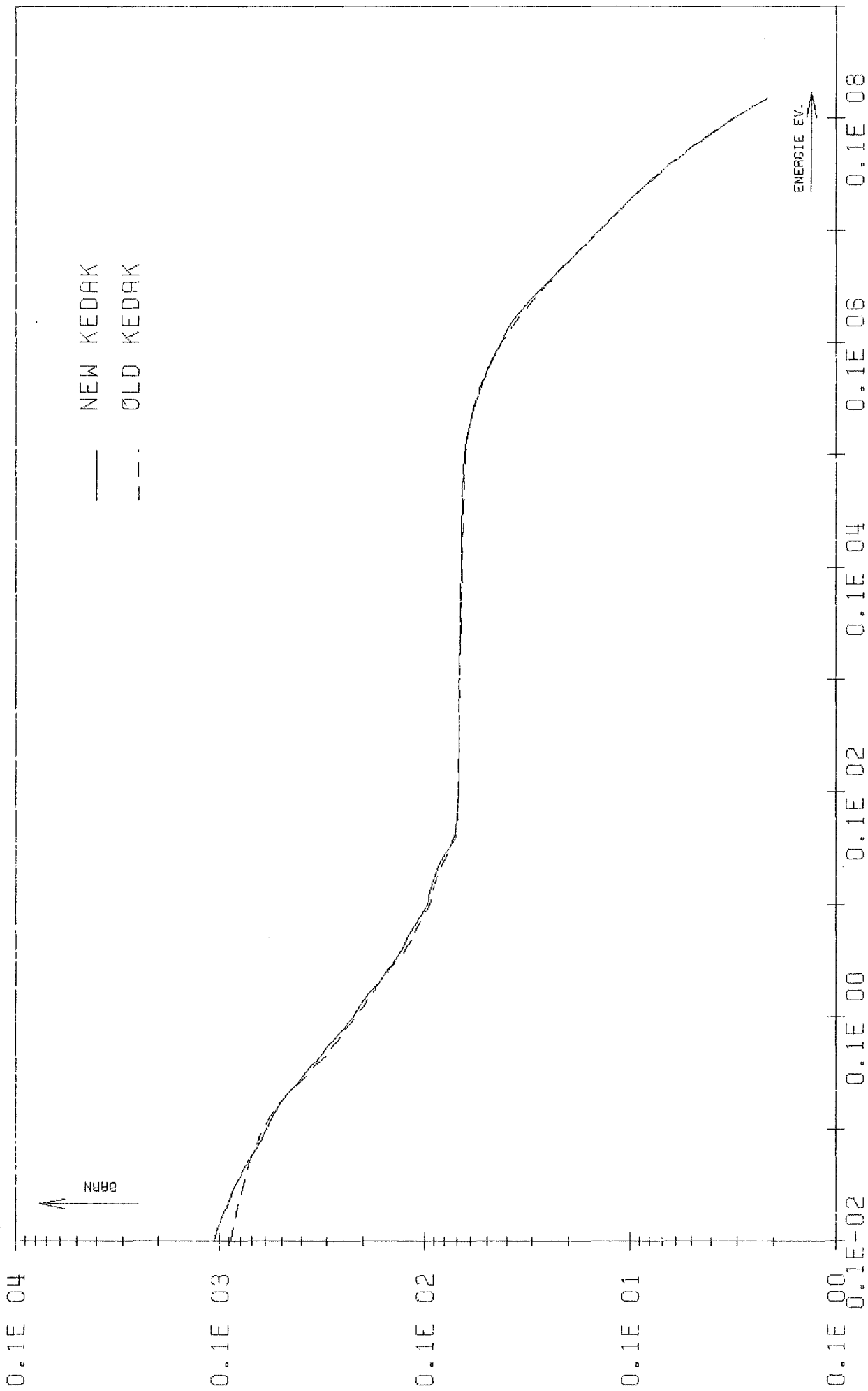


FIG. 4 H 01 SGTR INR901H0 07.08 21.27.

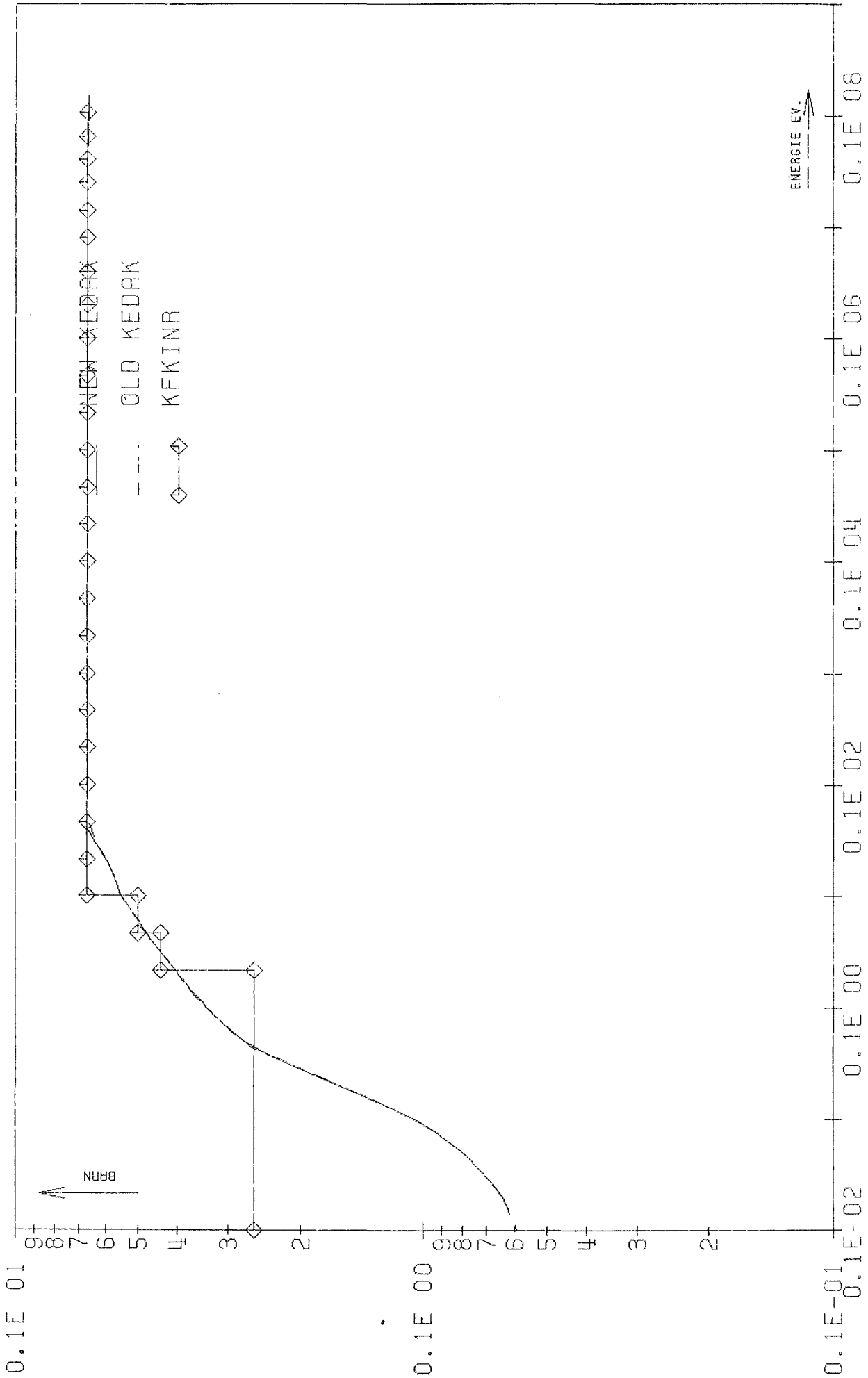


FIG. 5 H 01 MUEL
INR901H0 07.08 21.27.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 10 MeV	H 2
2	SGG	''	
3	SGN	''	
4	SGTR	''	
5	MUEL	''	
6	SGT	1 MeV to 15 MeV	
7	SGG	''	
8	SGX	''	
9	SGN	''	
10	SGTR	''	
11	MUEL	''	
12	SG2N	''	

d

(H2)

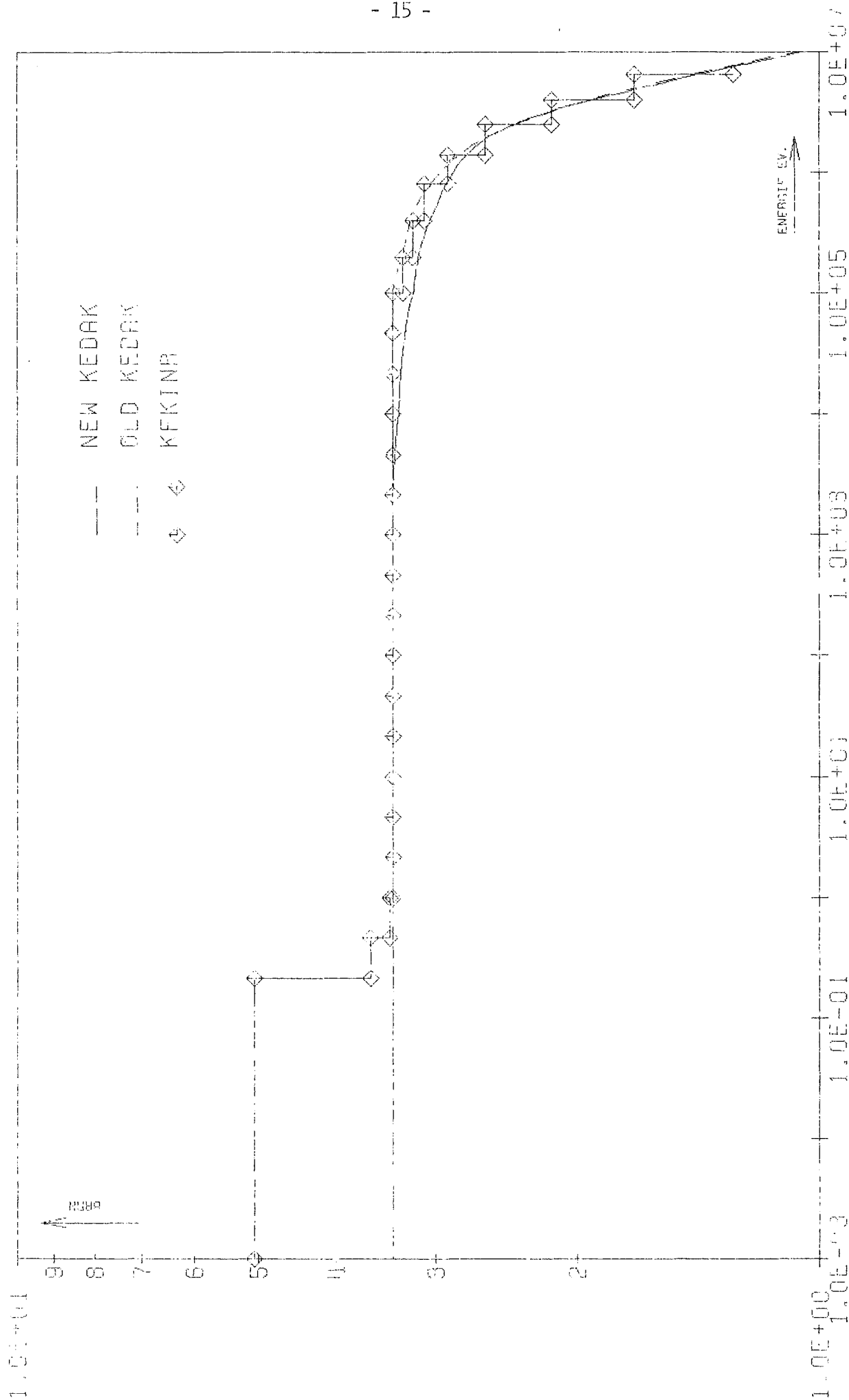


FIG. 1 H 2 SGT

INR901H2 03.10 09.59.

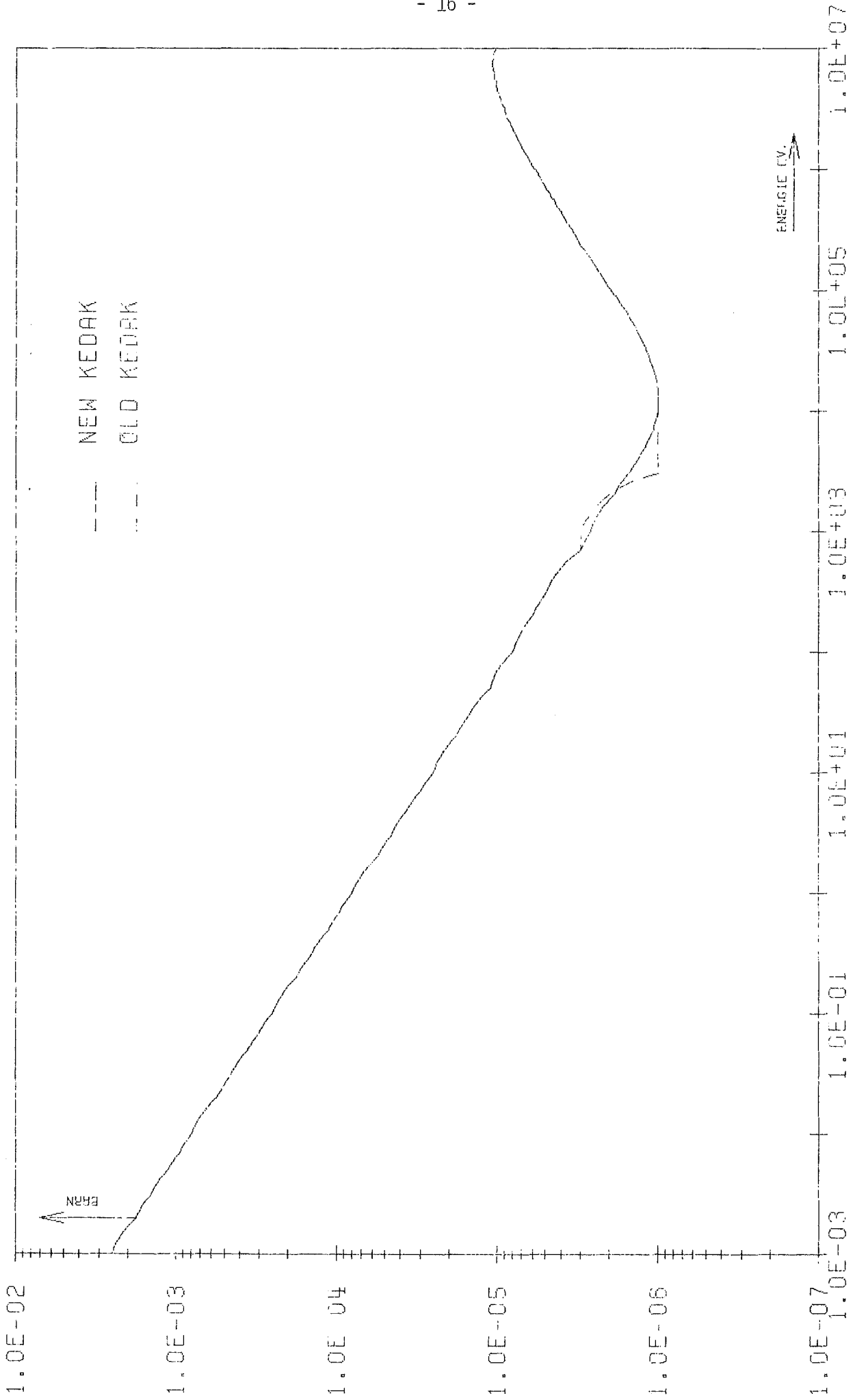


FIG. 2 H 2 SGG INR901H2 03.10 09.59.

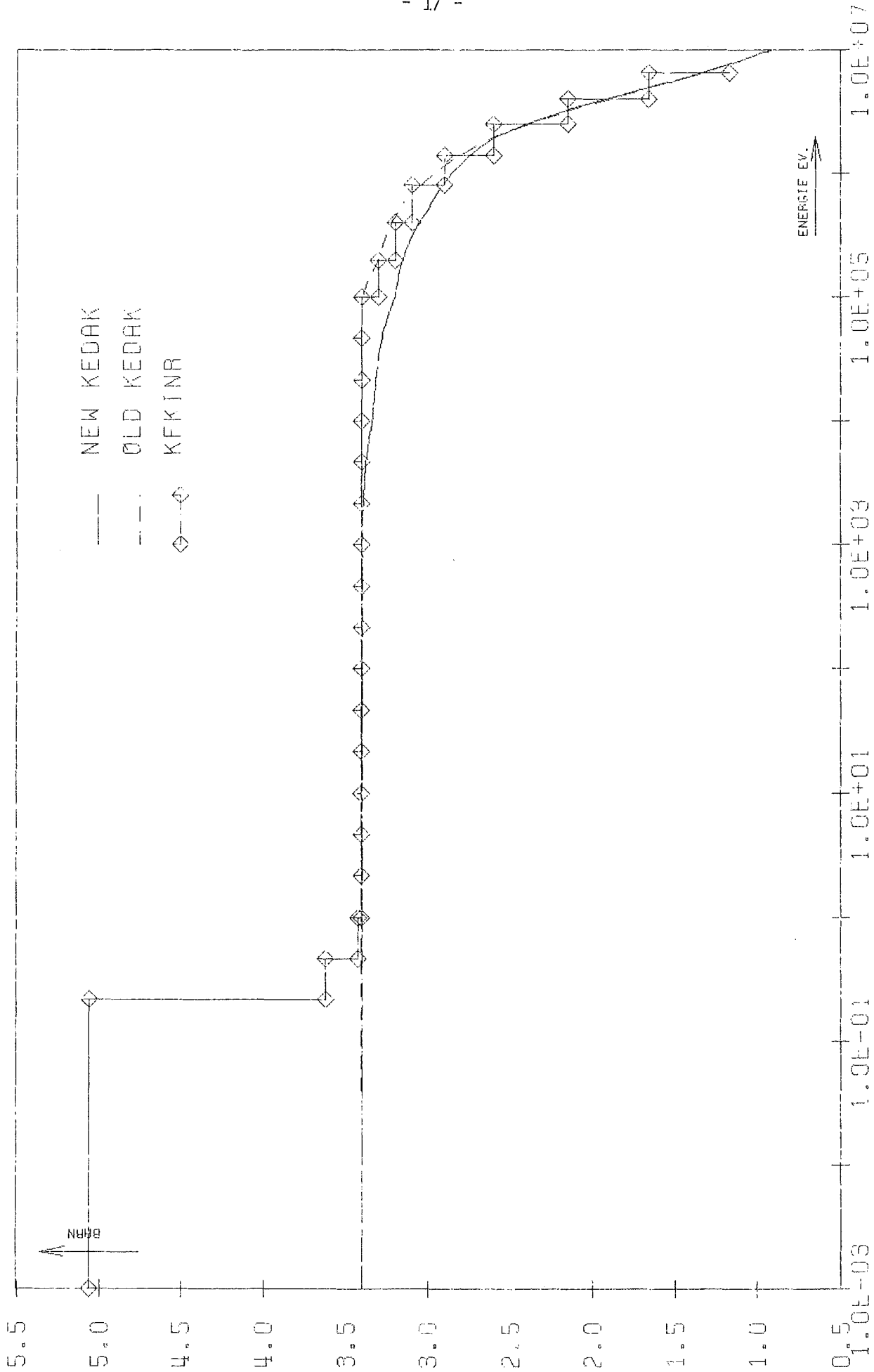


FIG. 3 H 2 SGN INR901H2 03.10 09.59.

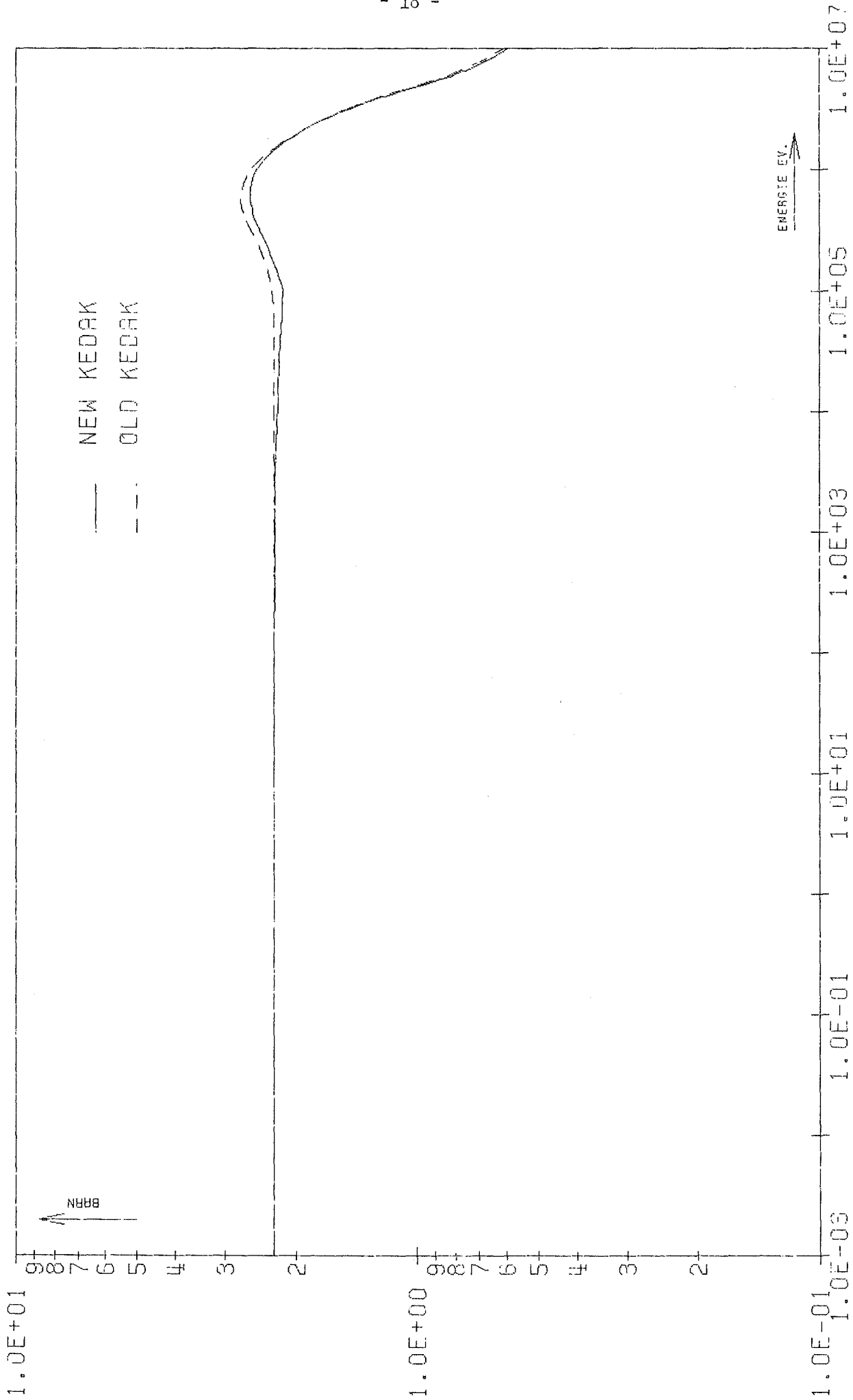
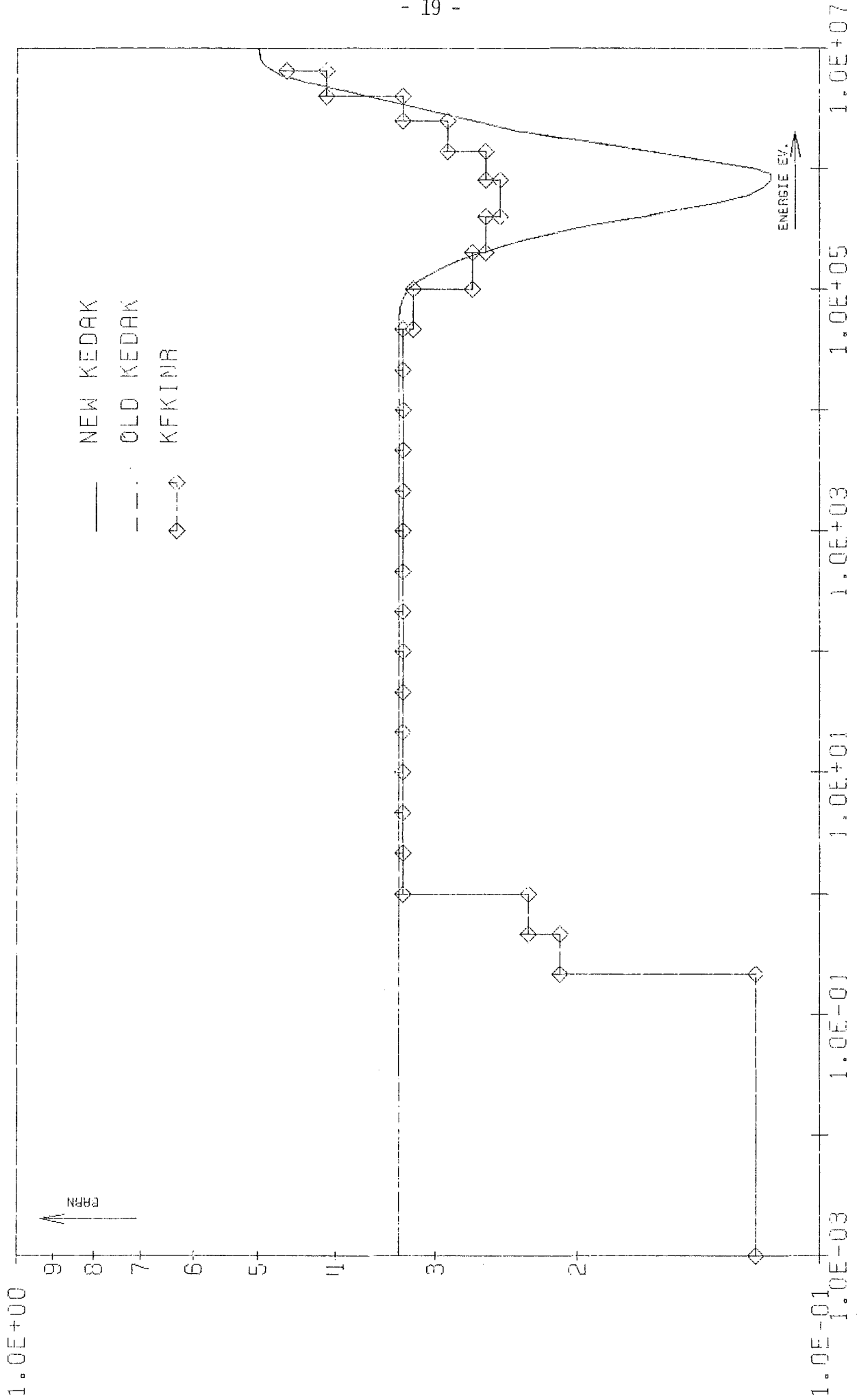


FIG. 4 H 2 SGTR INR901H2 03.10 09.59.



INR901H2 03.10 09.59.

MUEL

H 2

FIG. 5

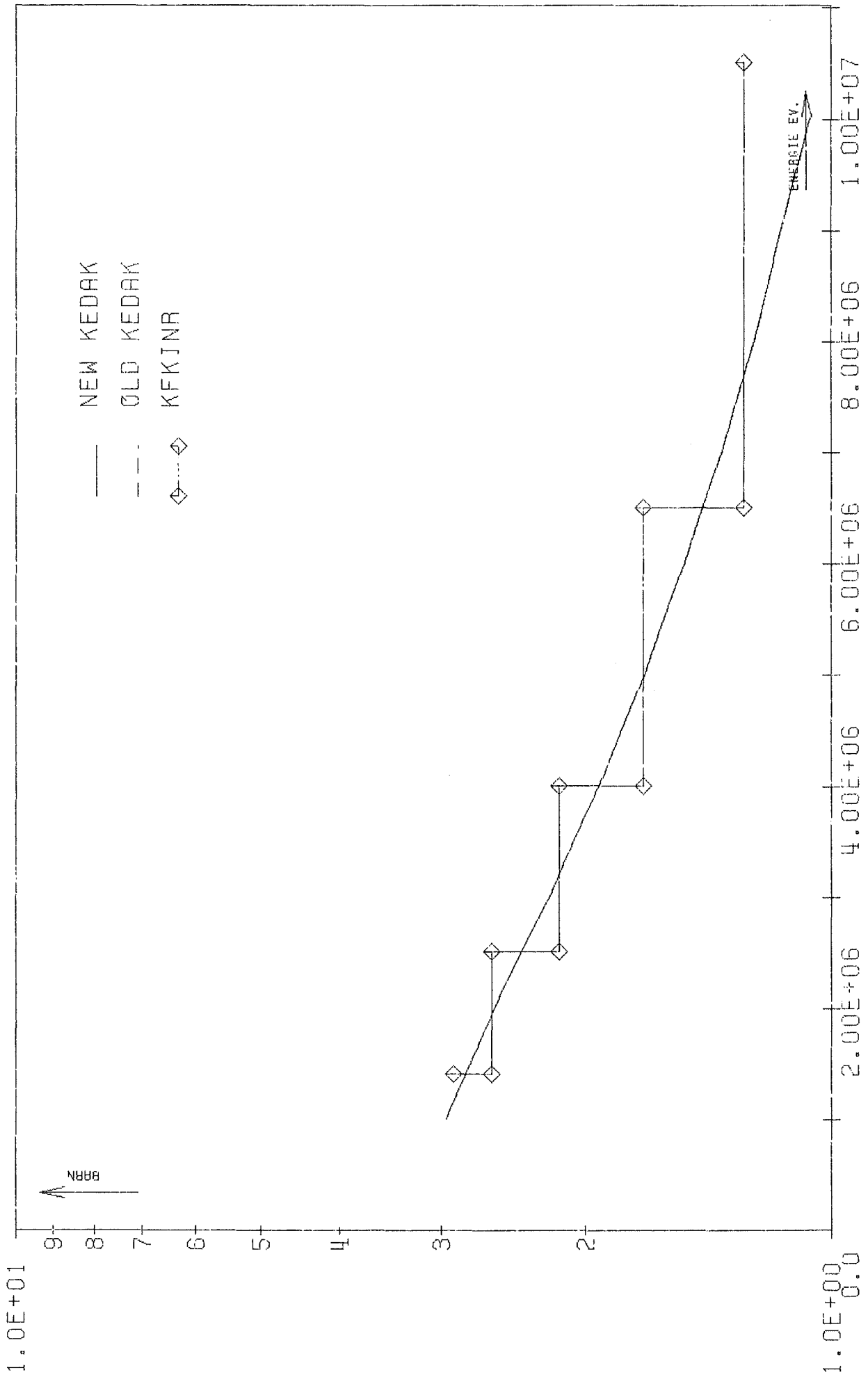


FIG. 6 H 2 SGT INR901H2 03.10 09.59.

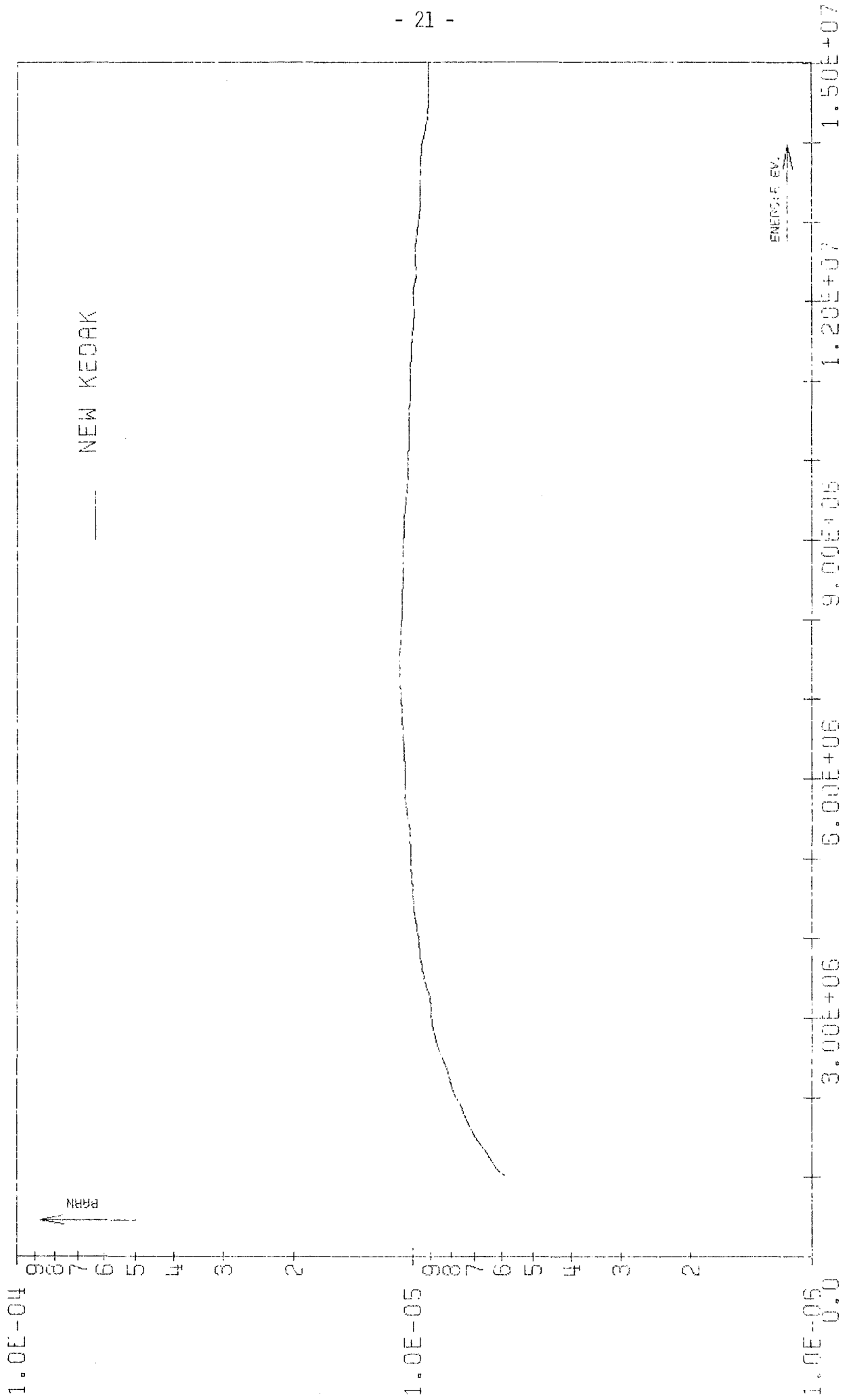


FIG. 7 · H 2 SGG JNR901H2 03.10 09.59.

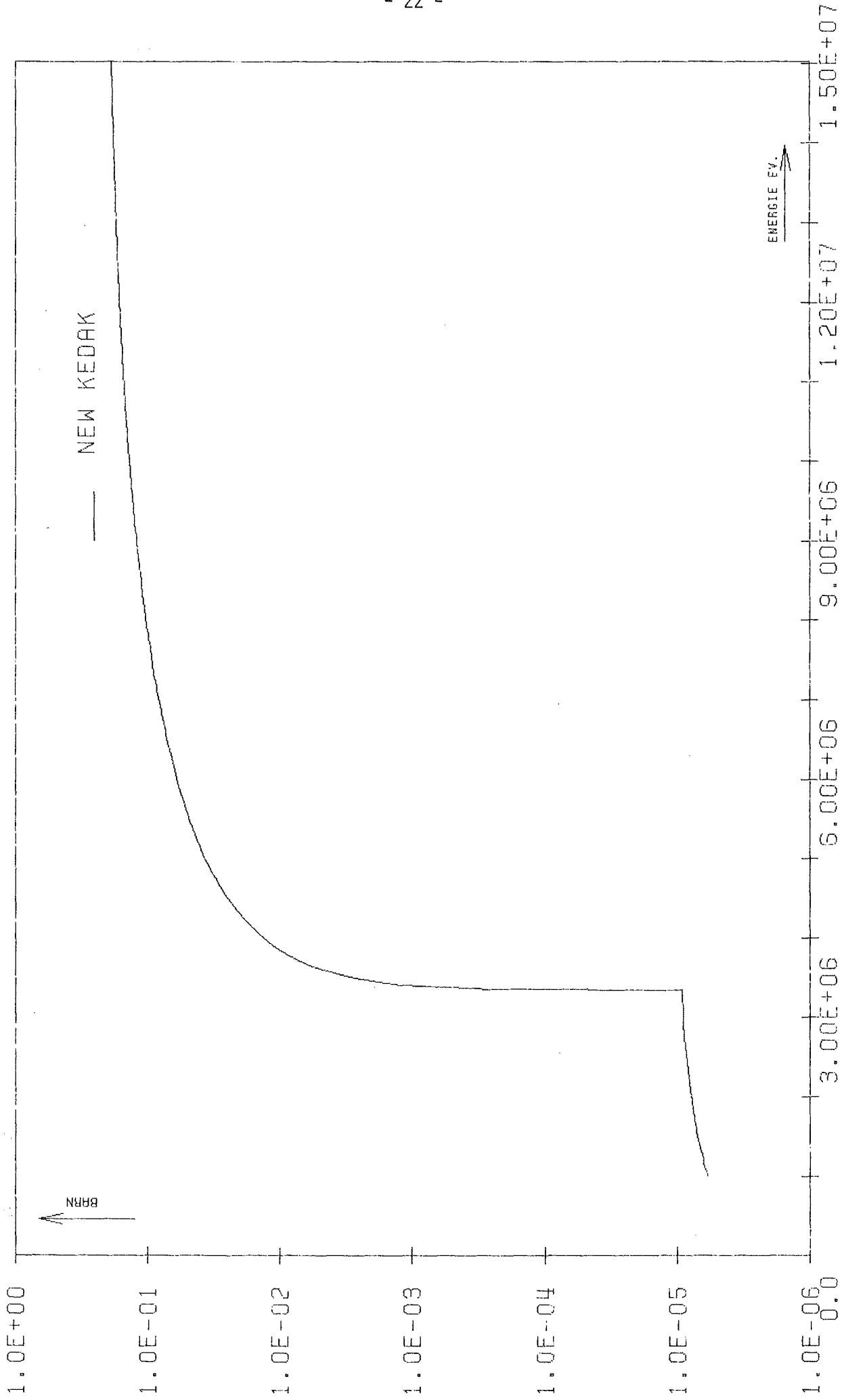


FIG. 8 H 2 SGX

INR901H2 04.10 16.20.

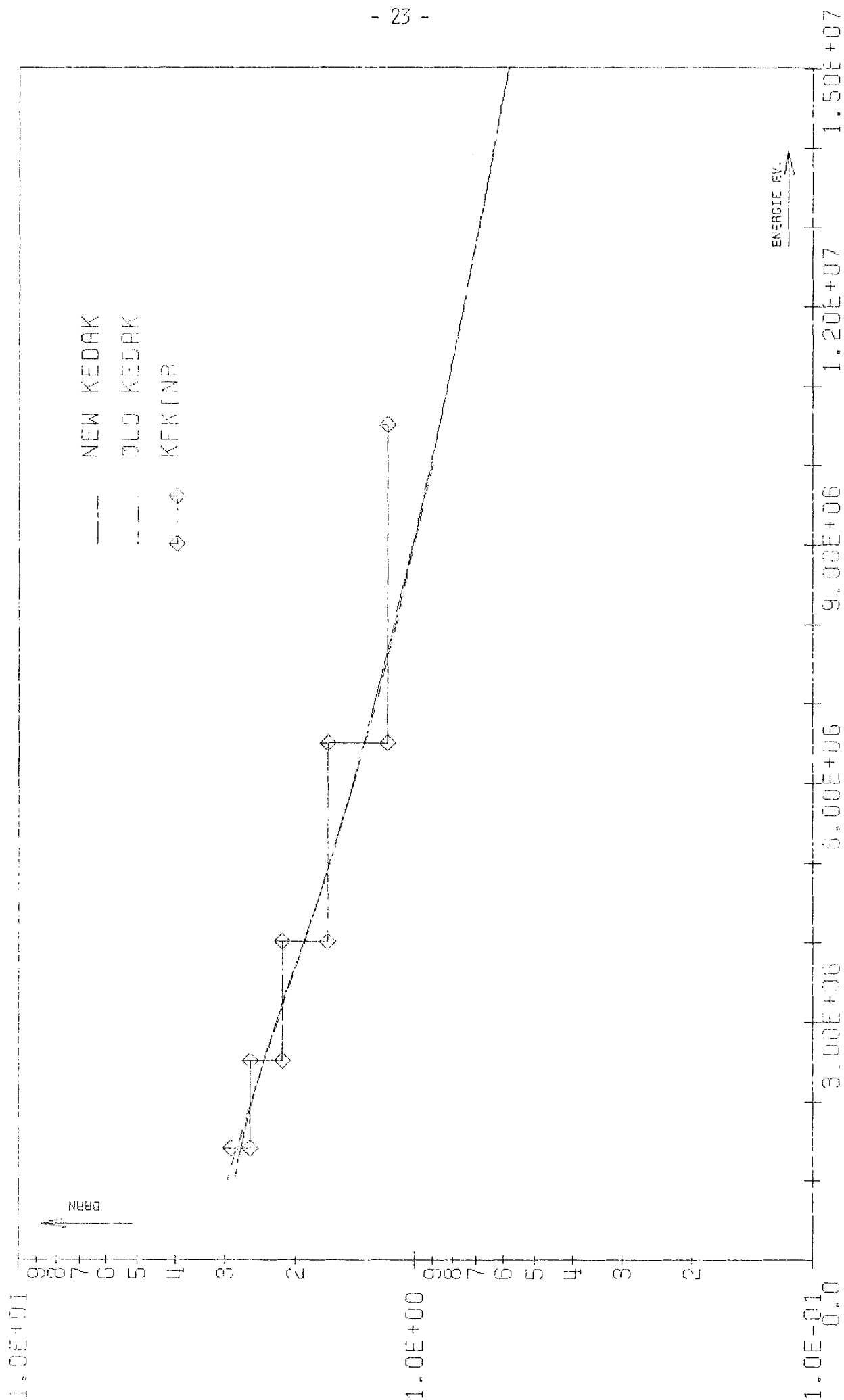


FIG. 9 H 2 SGN
INR901H2 03.10 09.59.

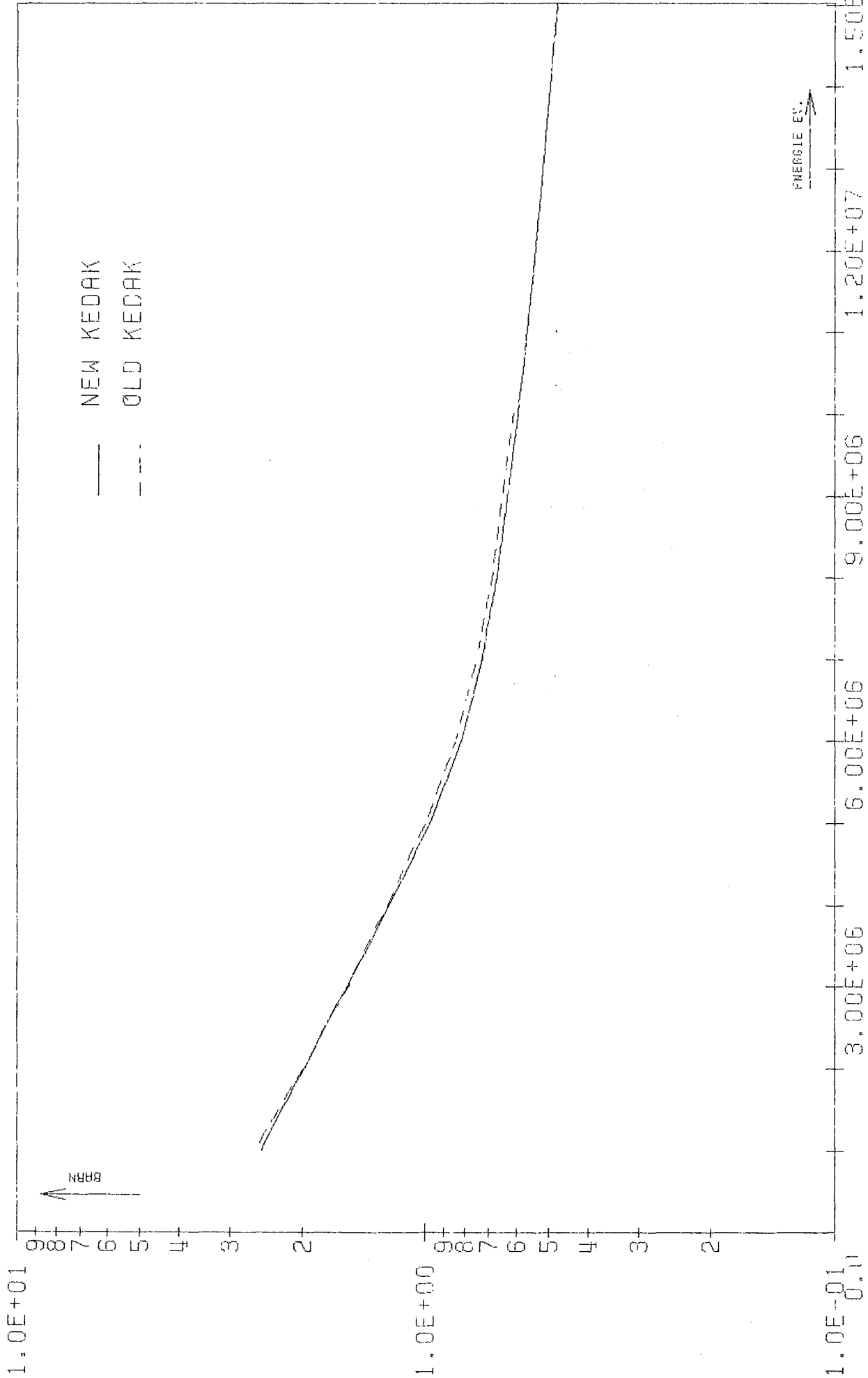


FIG. 10 H 2 SGTR INR901H2 03.10 09.59.

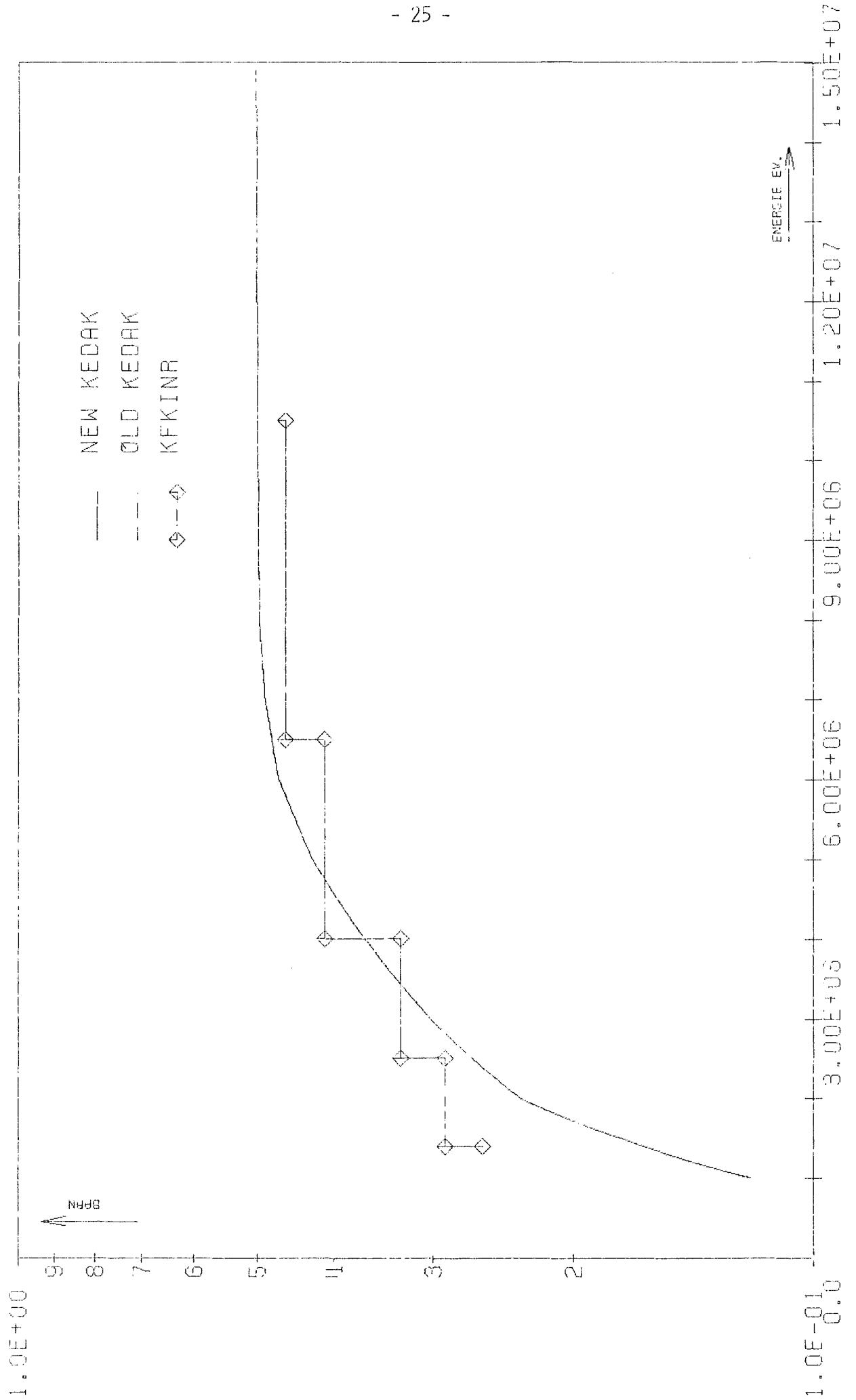


FIG. 11 H 2 MUEL
INR901H2 03.10 09.59.

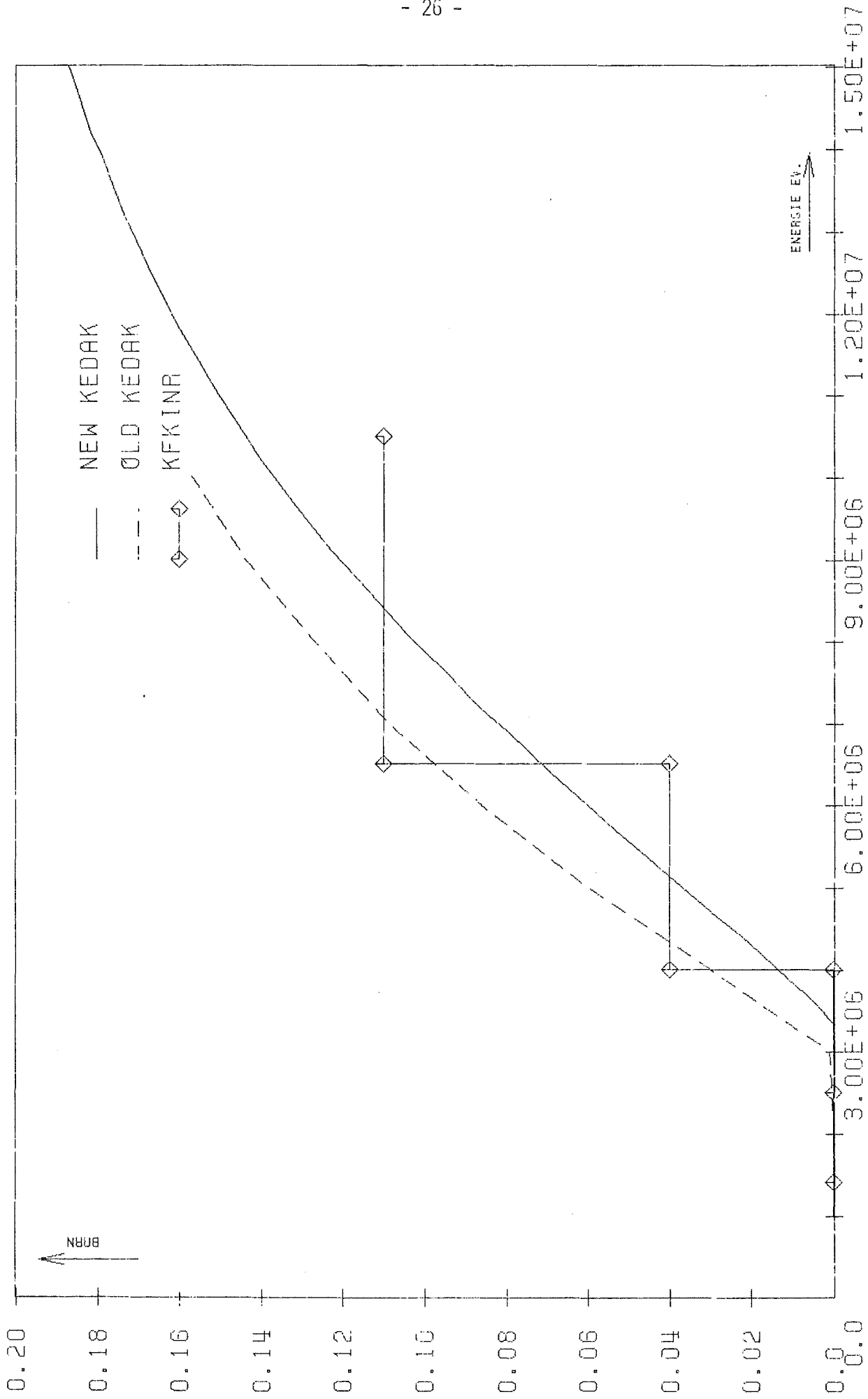


FIG. 12 H 2 SG2N INR901H2 03.10 09.59.

Figure	Reaction type	Energy range	Material name
1	SGP	0.001 eV to 10 MeV	HE 3
2	SGT	''	HE 4
3	SGN	''	
4	SGTR	''	
5	MUEL	''	

He

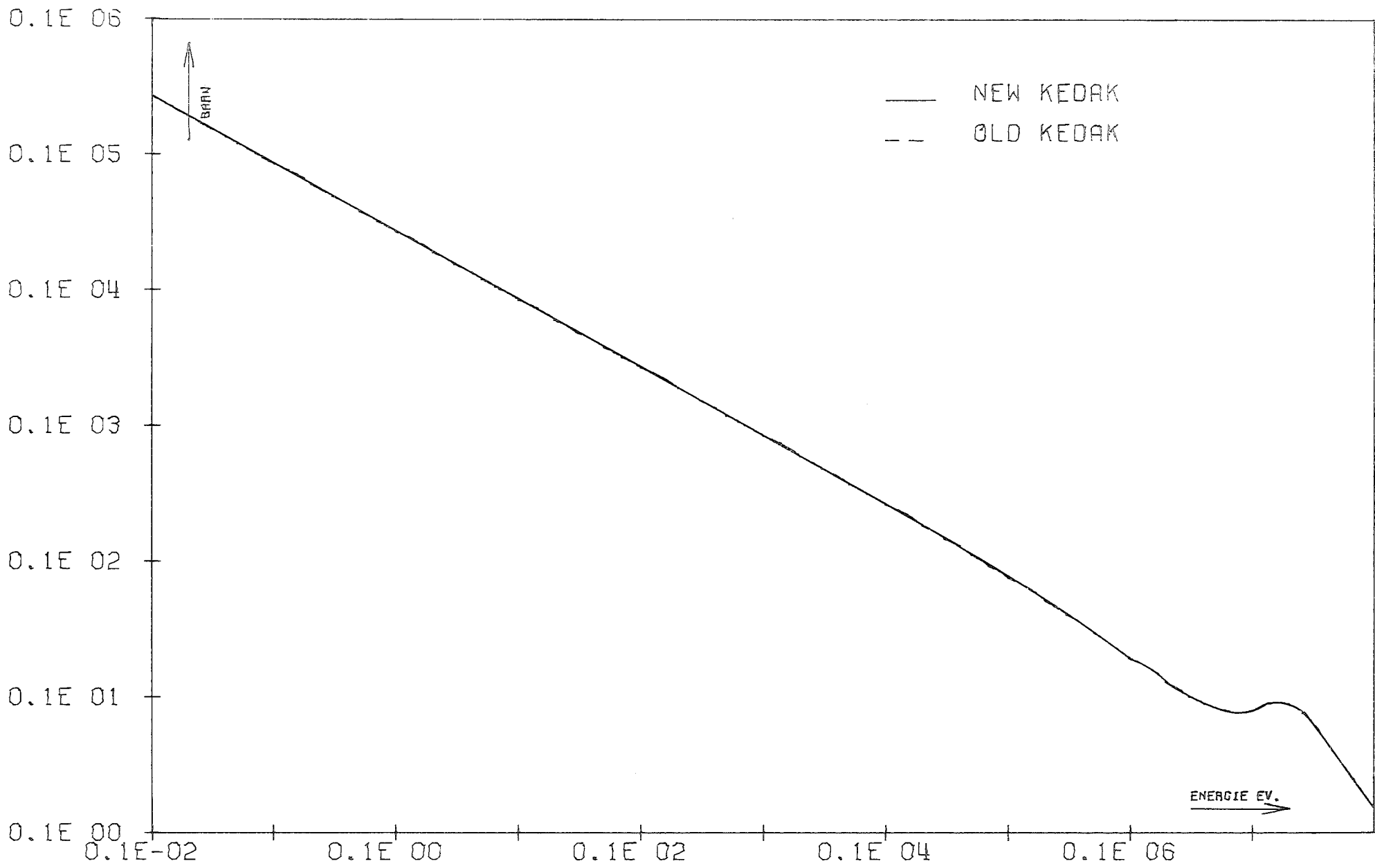


FIG. 1 HE 3 SGP

INR901HE 28.01 18.54.

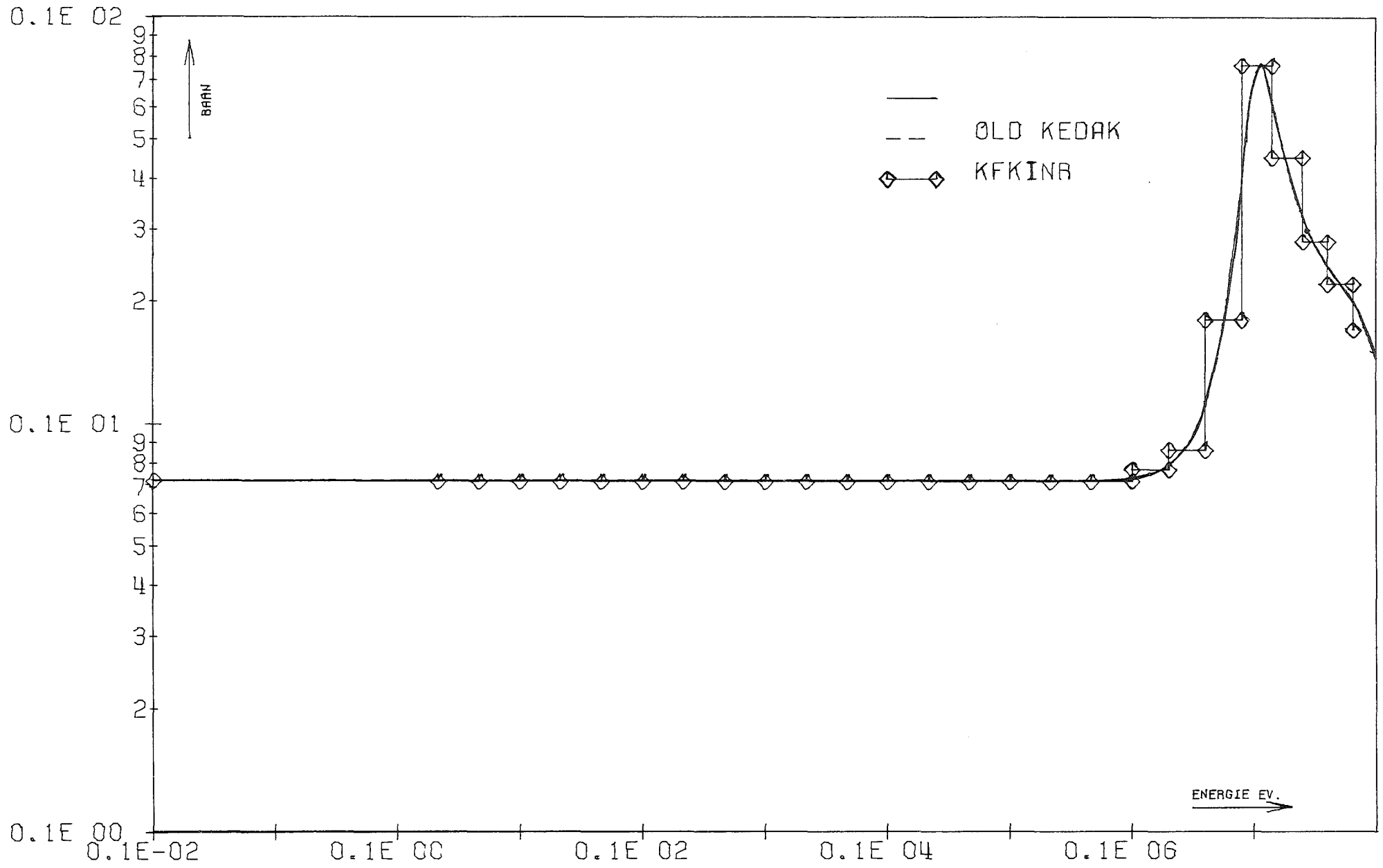


FIG. 2 HE 4 SGT

INR901HE 28.01 18.54.

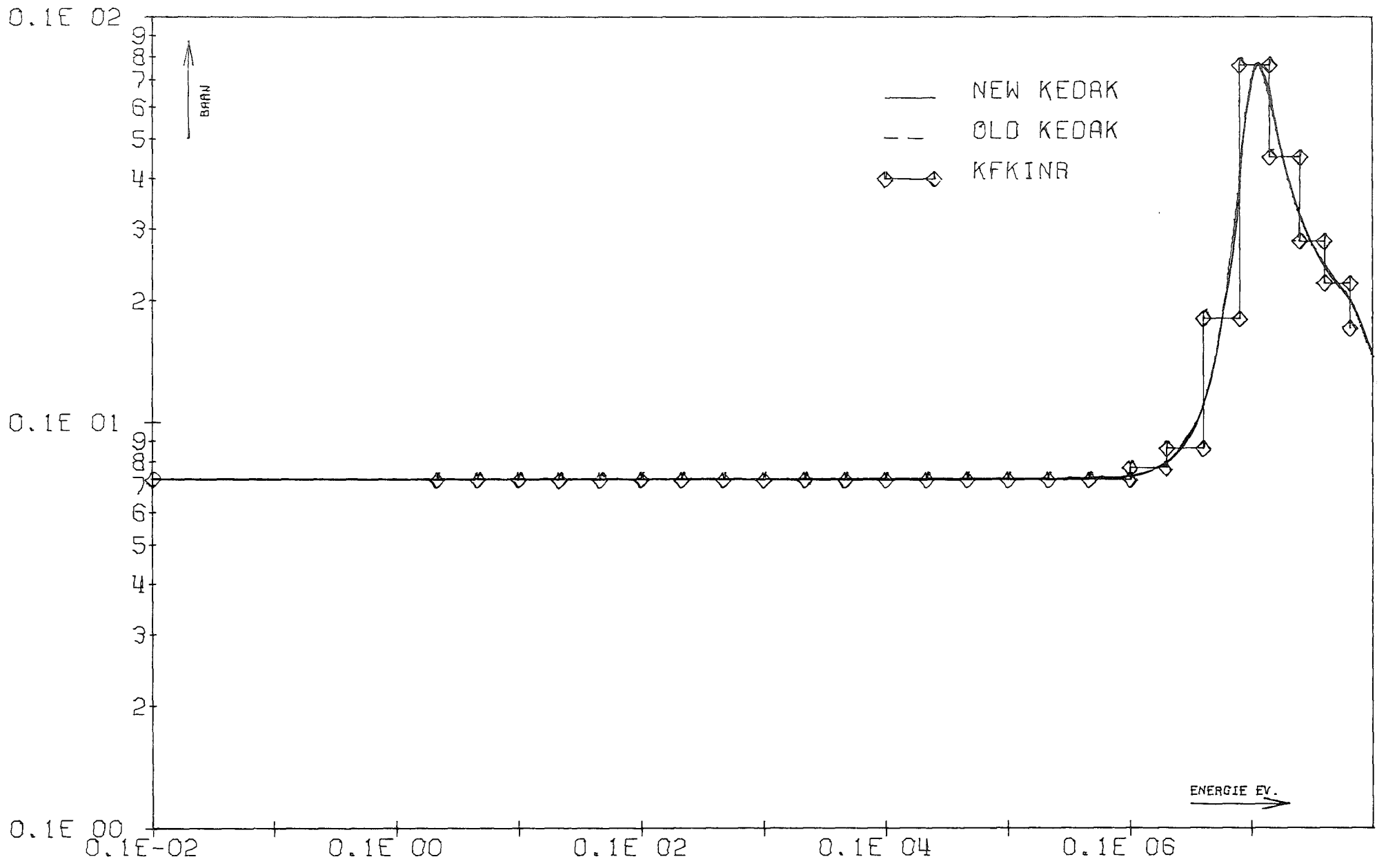


FIG. 3 HE 4 SGN

INR901HE 28.01 18.54.

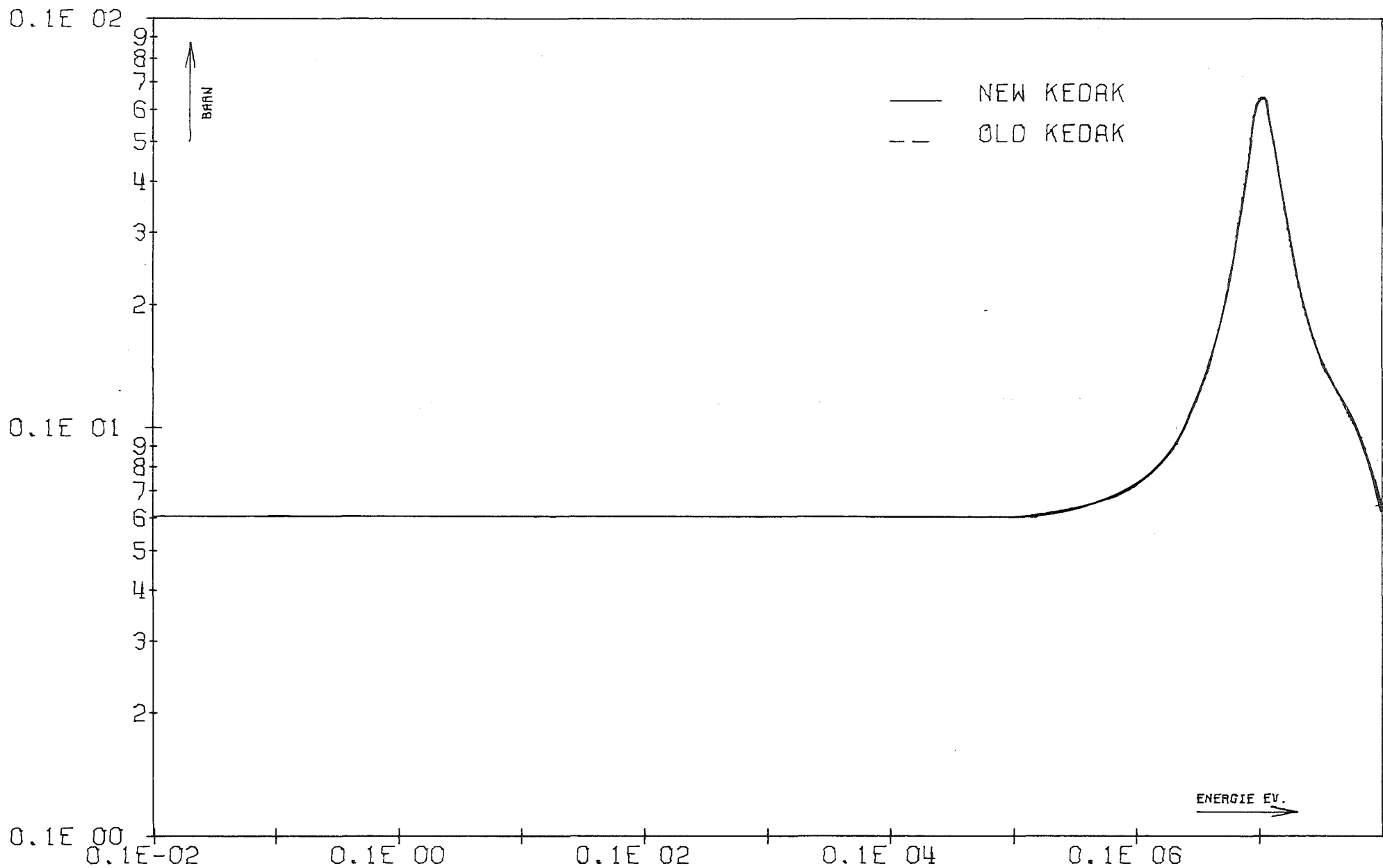


FIG. 4 HE 4 SGTR

INR901HE 28.01 18.54.

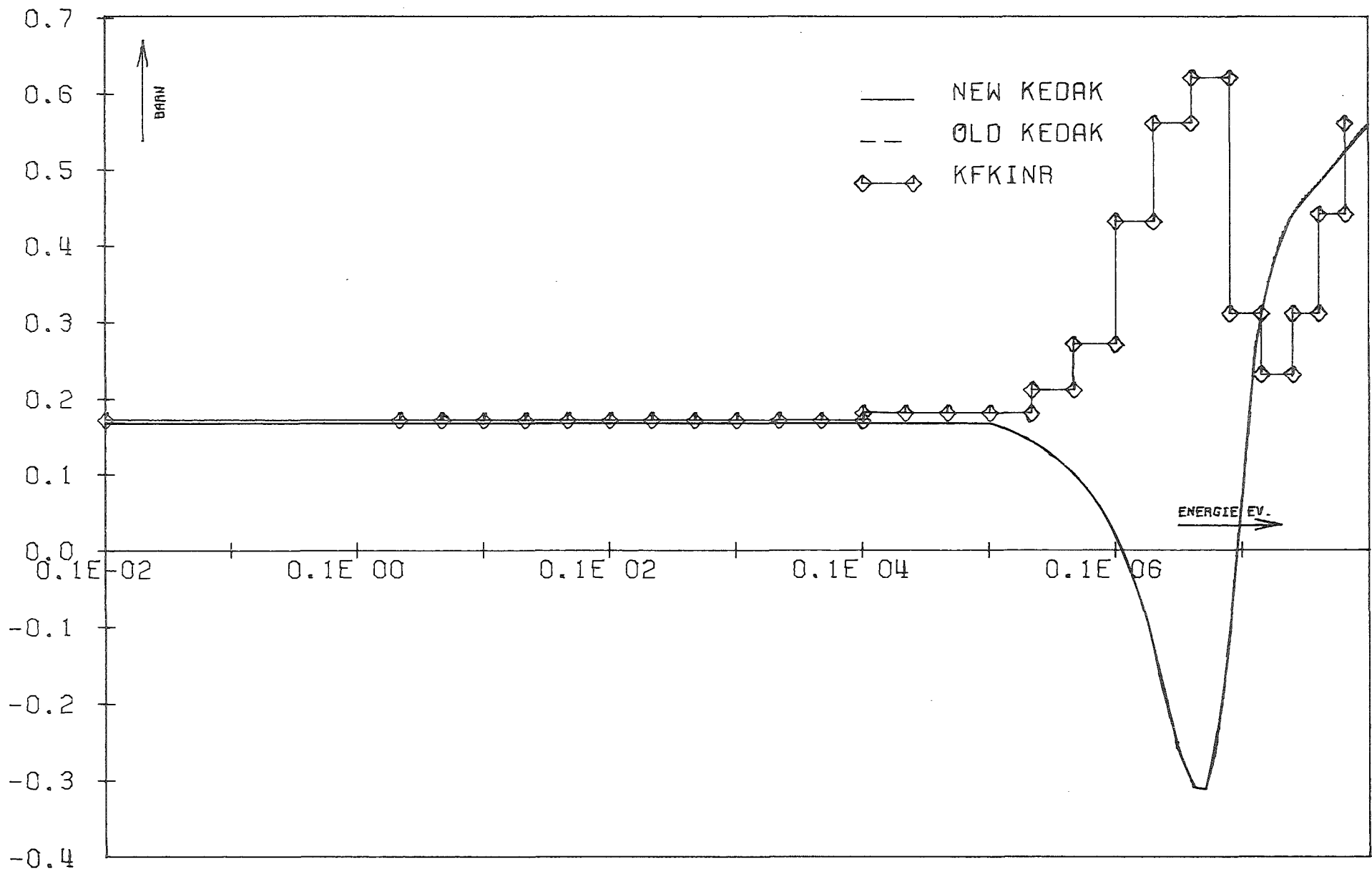


FIG. 5 HE 4 MUEL

INR901HE 28.01 18.54.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 1 MeV	C 12
2	SGG	''	
3	SGN	''	
4	SGTR	''	
5	MUEL	''	
6	SGT	1 MeV to 15 MeV	
7	SGG	''	
8	SGA	''	
9	SGX	''	
10	SGN	''	
11	SGTR	''	
12	MUEL	''	
13	SGI	5 MeV to 15 MeV	
14	SGIZ		
	E*= 4.43 MeV	''	
15	E*= 7.65 MeV	''	
16	E*= 9.56 MeV	''	
17	E*= 10.8 MeV	''	
18	E*= 11.8 MeV	''	
19	SGALP	6 MeV to 15 MeV	
20	SGI3A	9 MeV to 15 MeV	

C

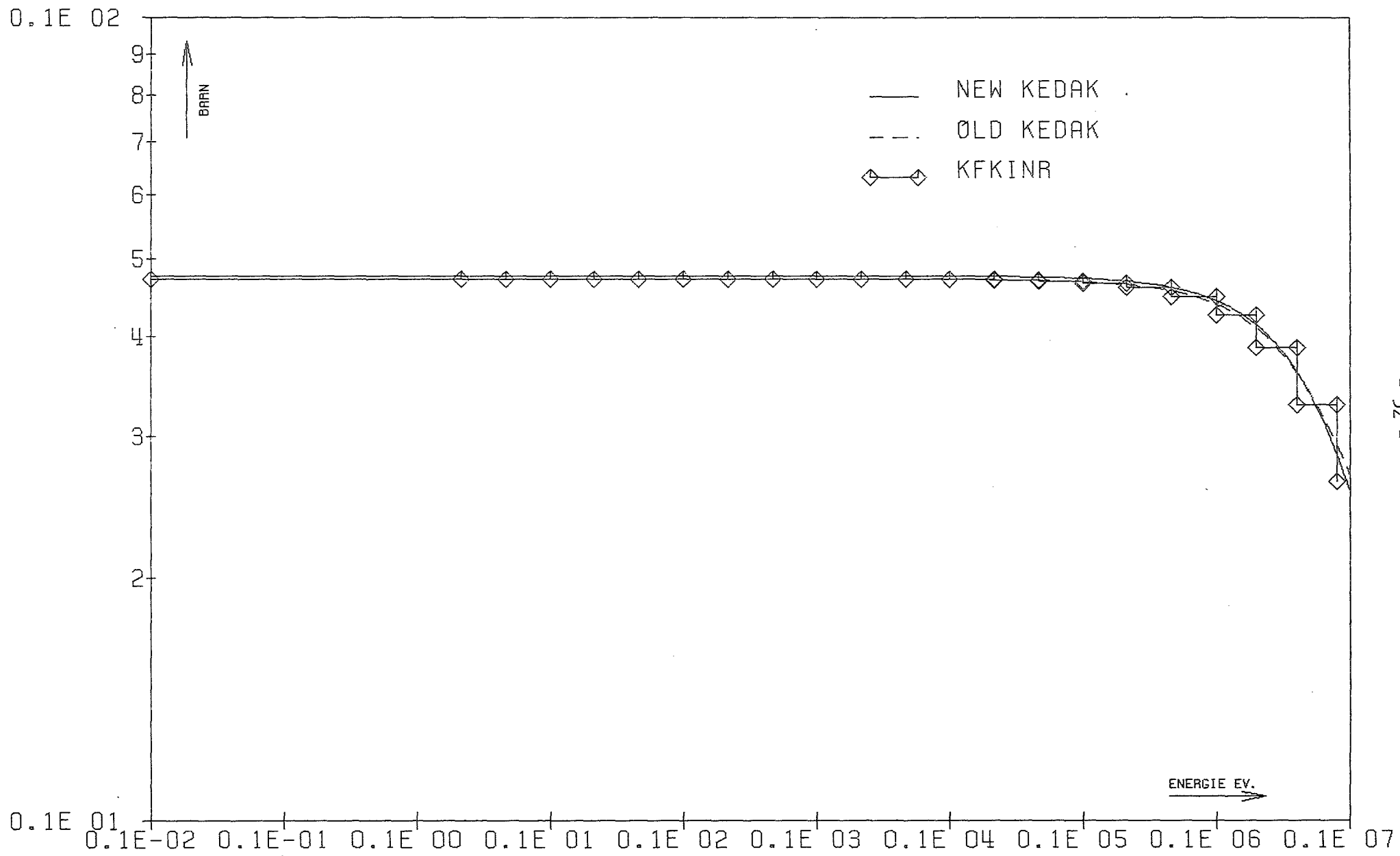
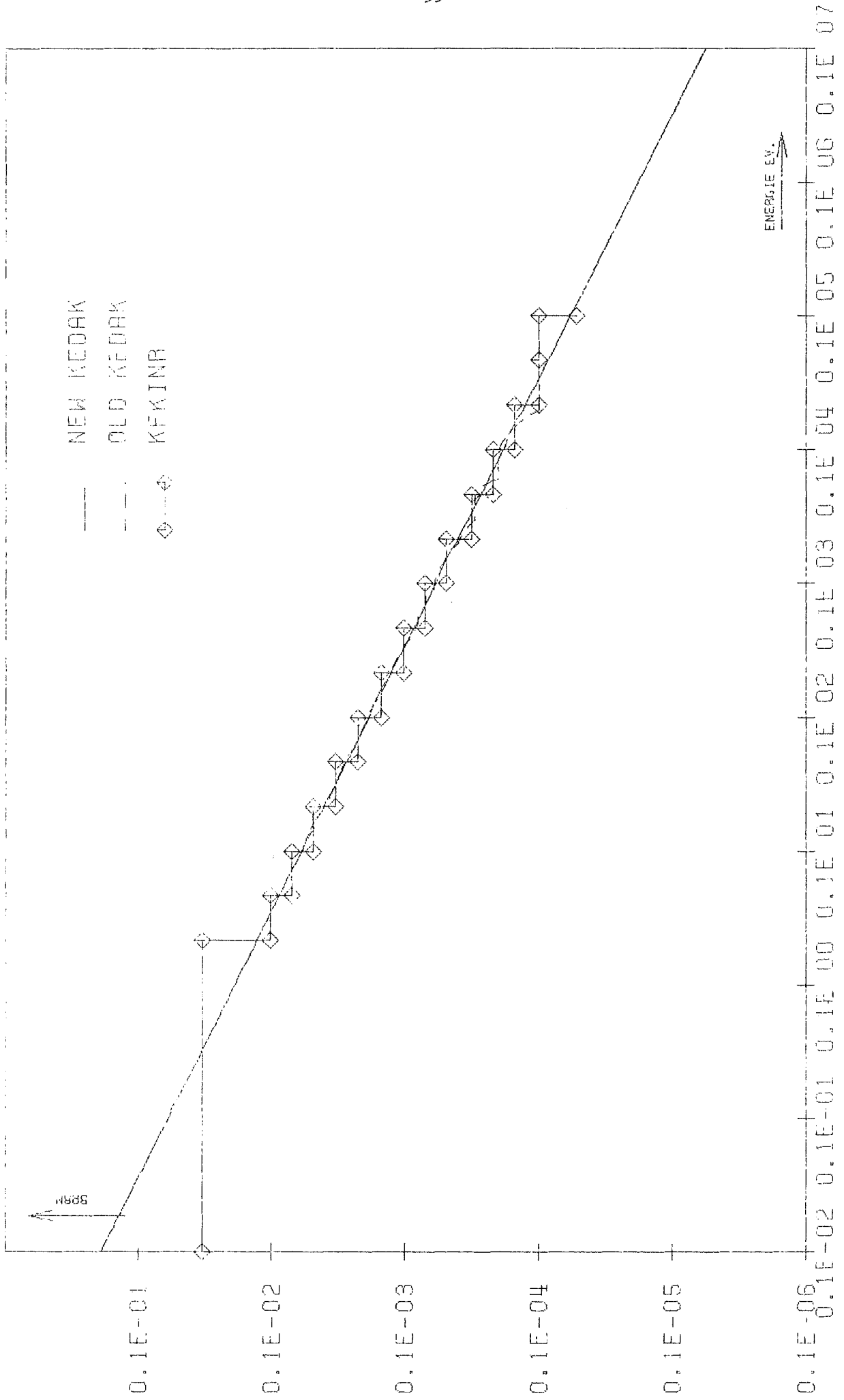


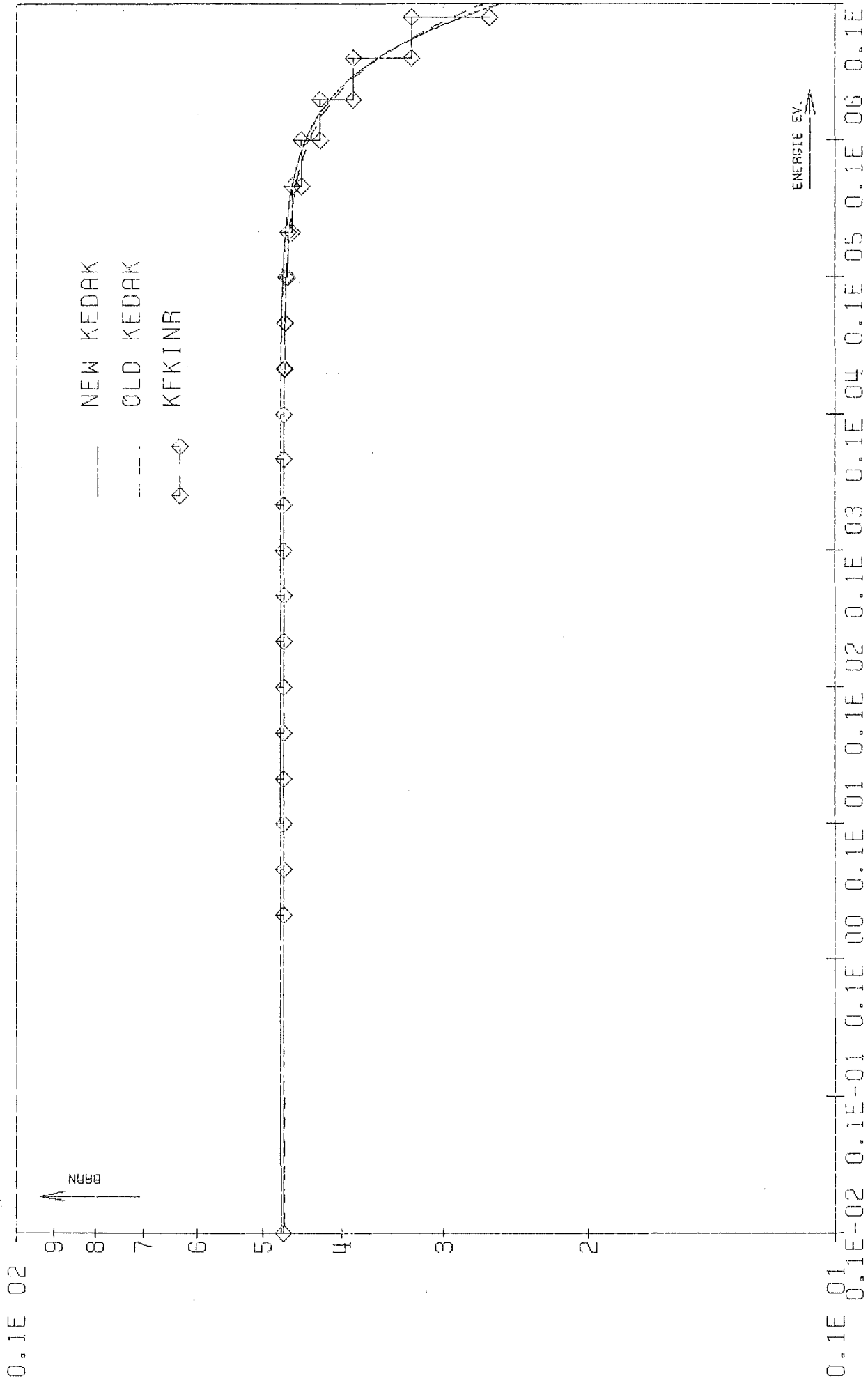
FIG. 1 C 12 SGT

INR901C 28.07 18.32.



INR901C 05.08 18.44.

FIG. 2 C 12 SGG



INR901C 05.08 18.44.

FIG. 3 C 12 SGN

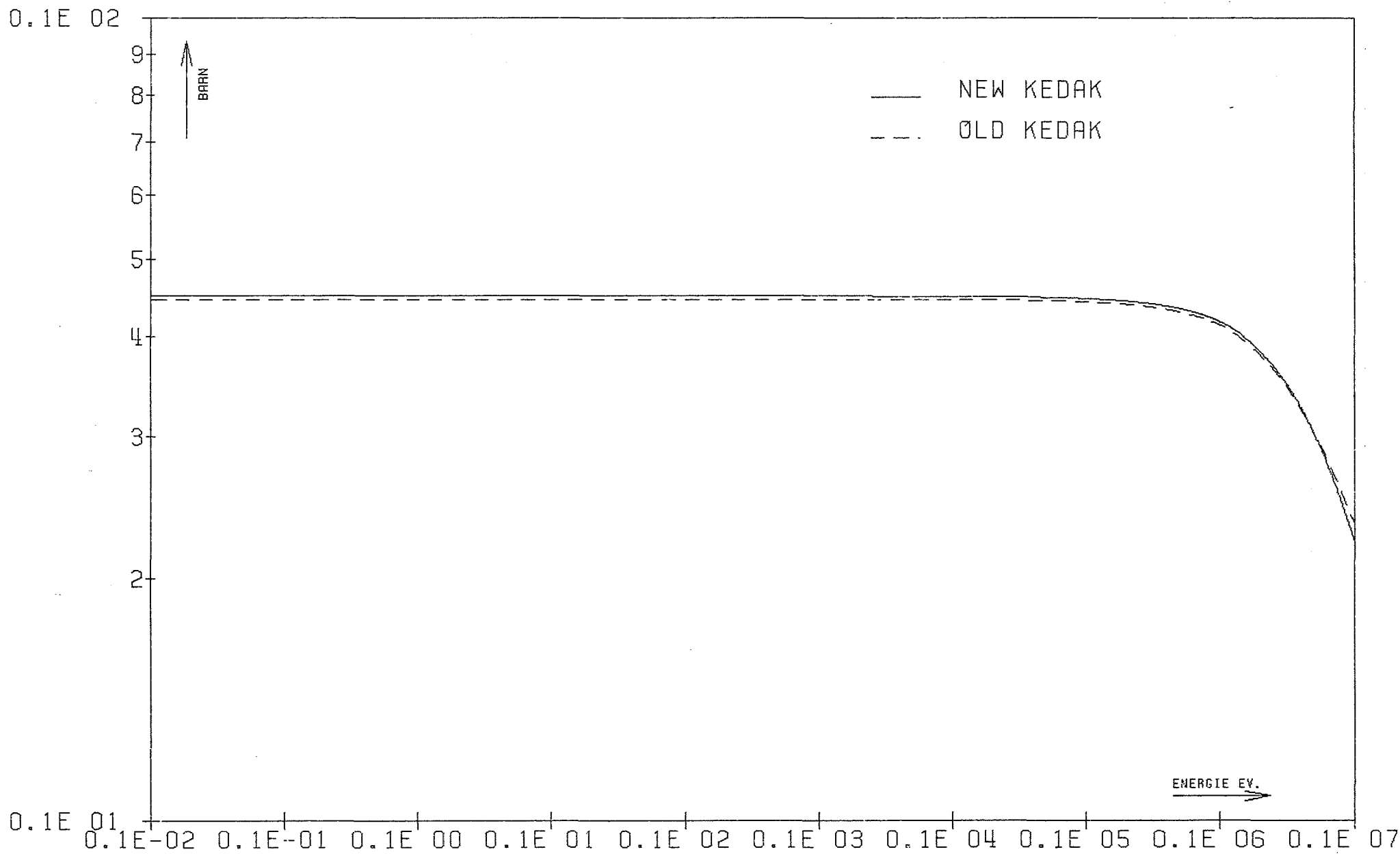


FIG. 4 C 12 SGTR

INR901C 05.08 18.44.

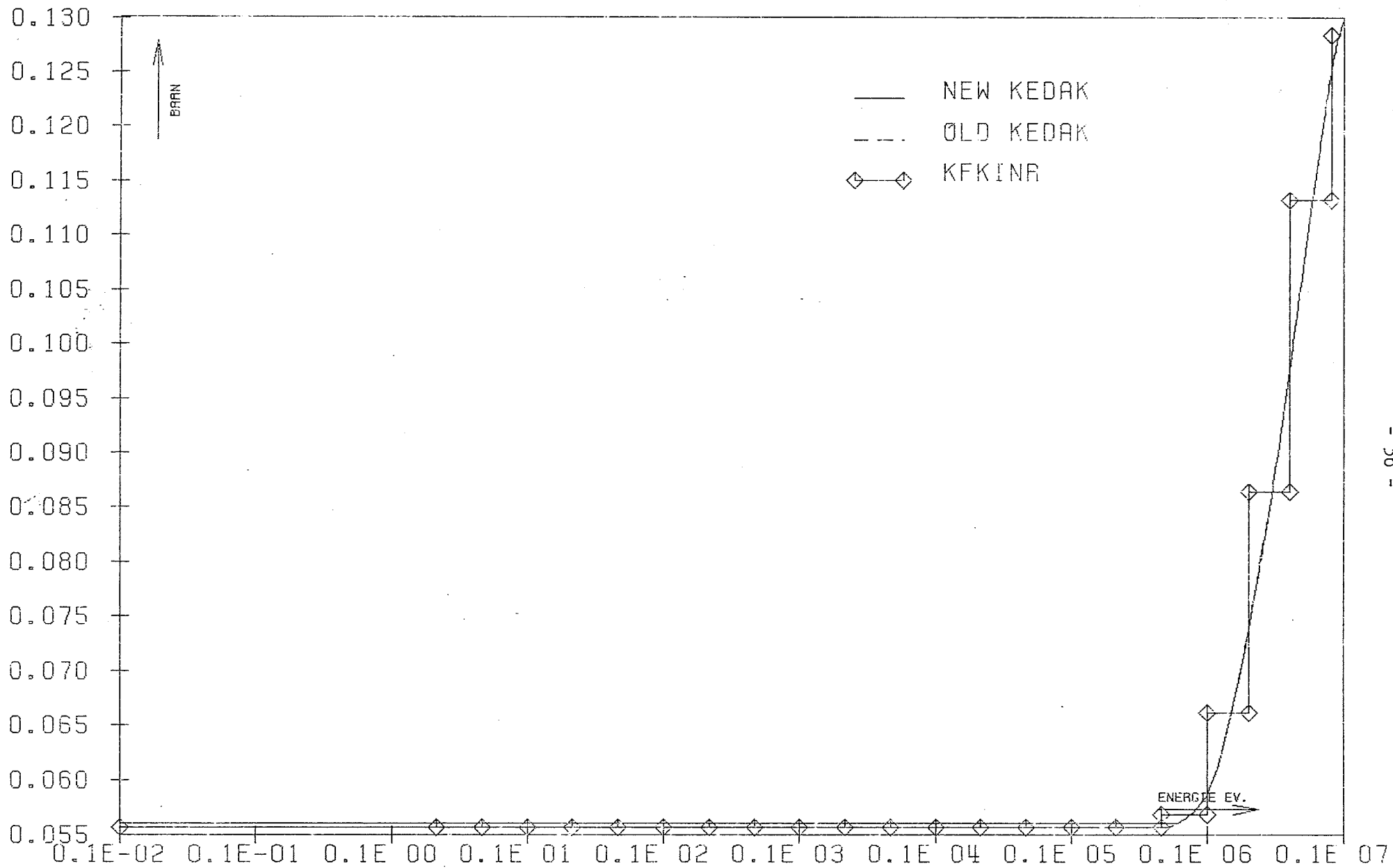


FIG. 5 C 12 MUEL

INR901C0 28.07 15.45.

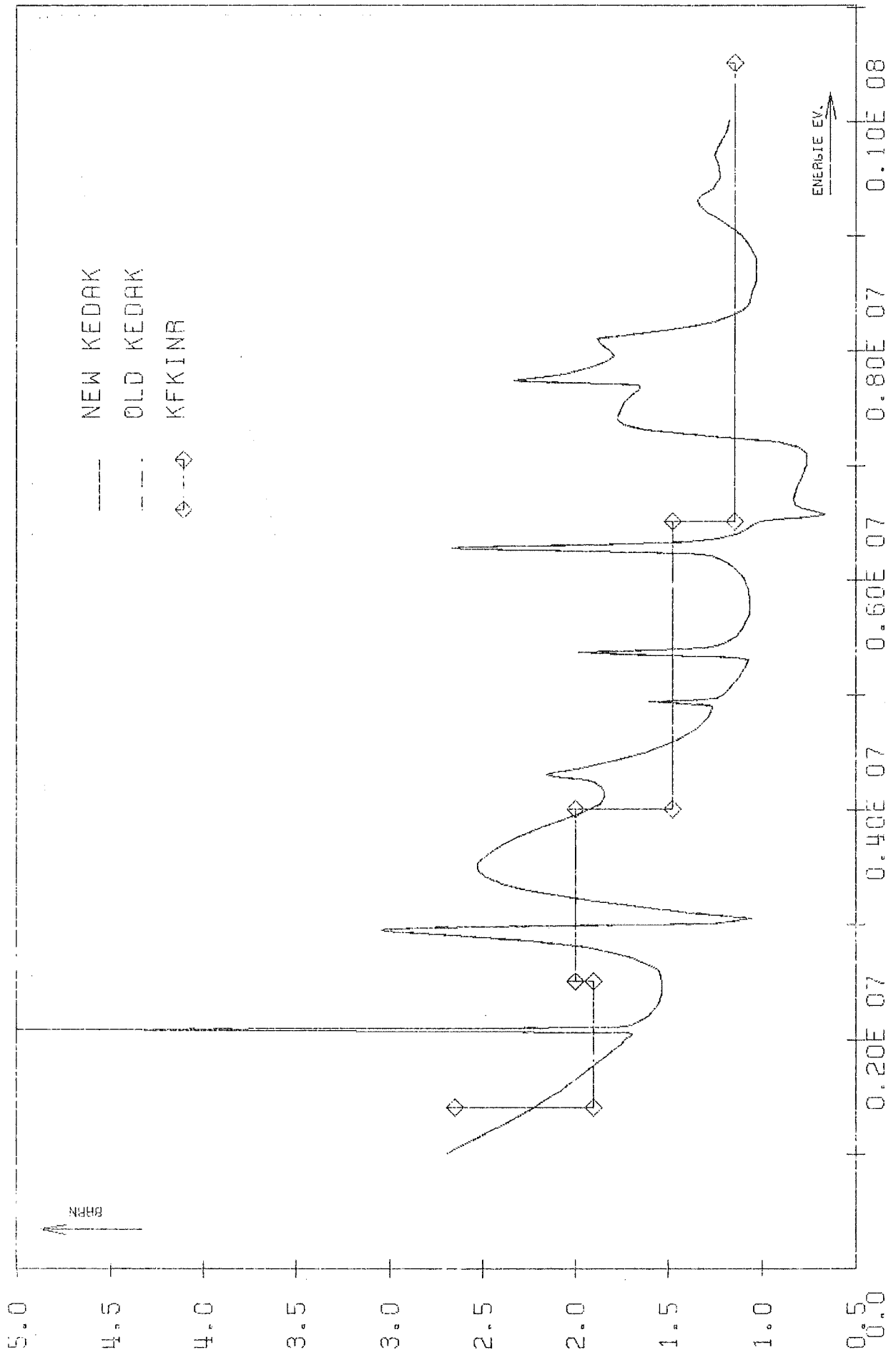


FIG. 6 C 12 SGT INR901C 05.08 18.44.

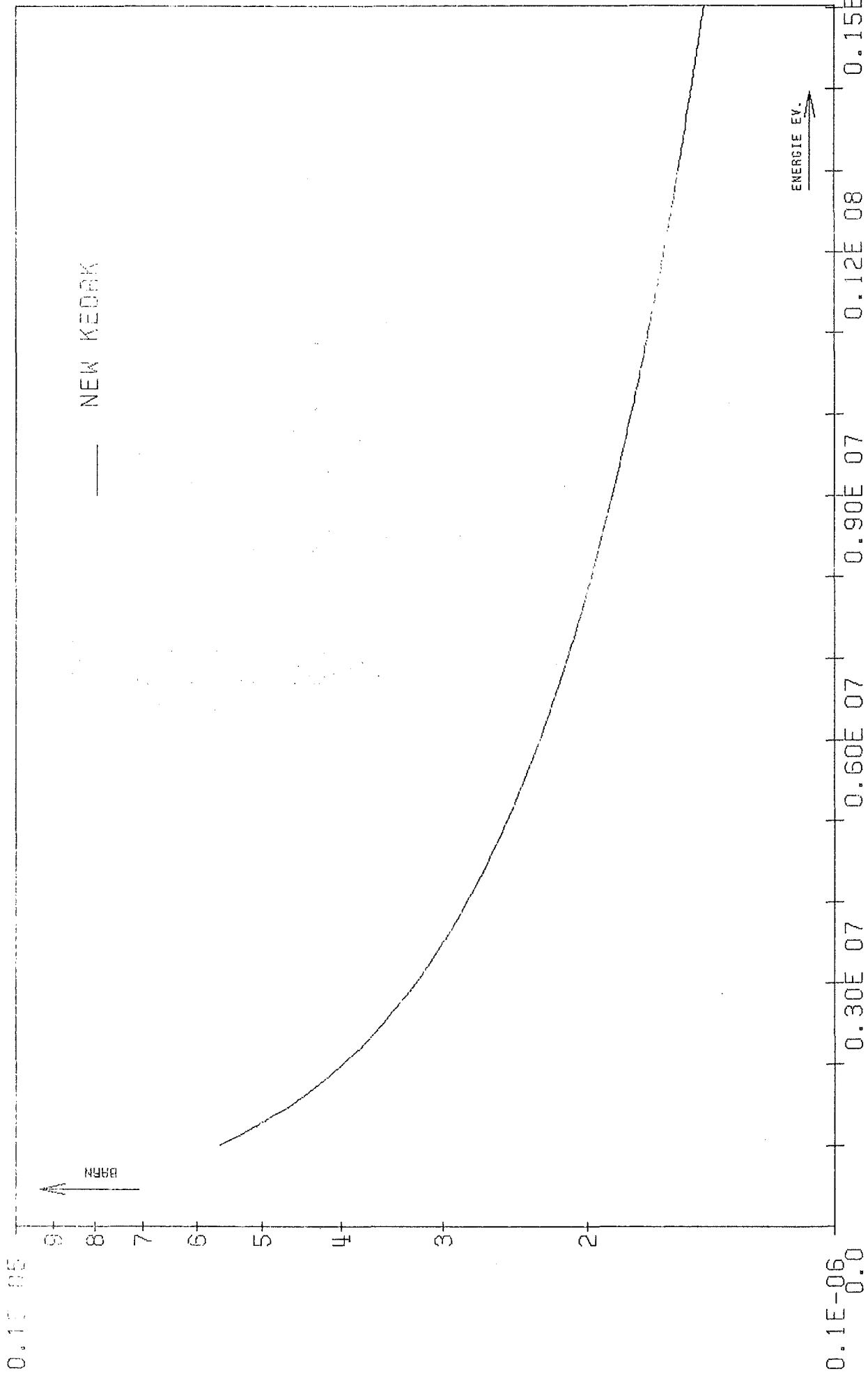


FIG. 7 C 12 SGG

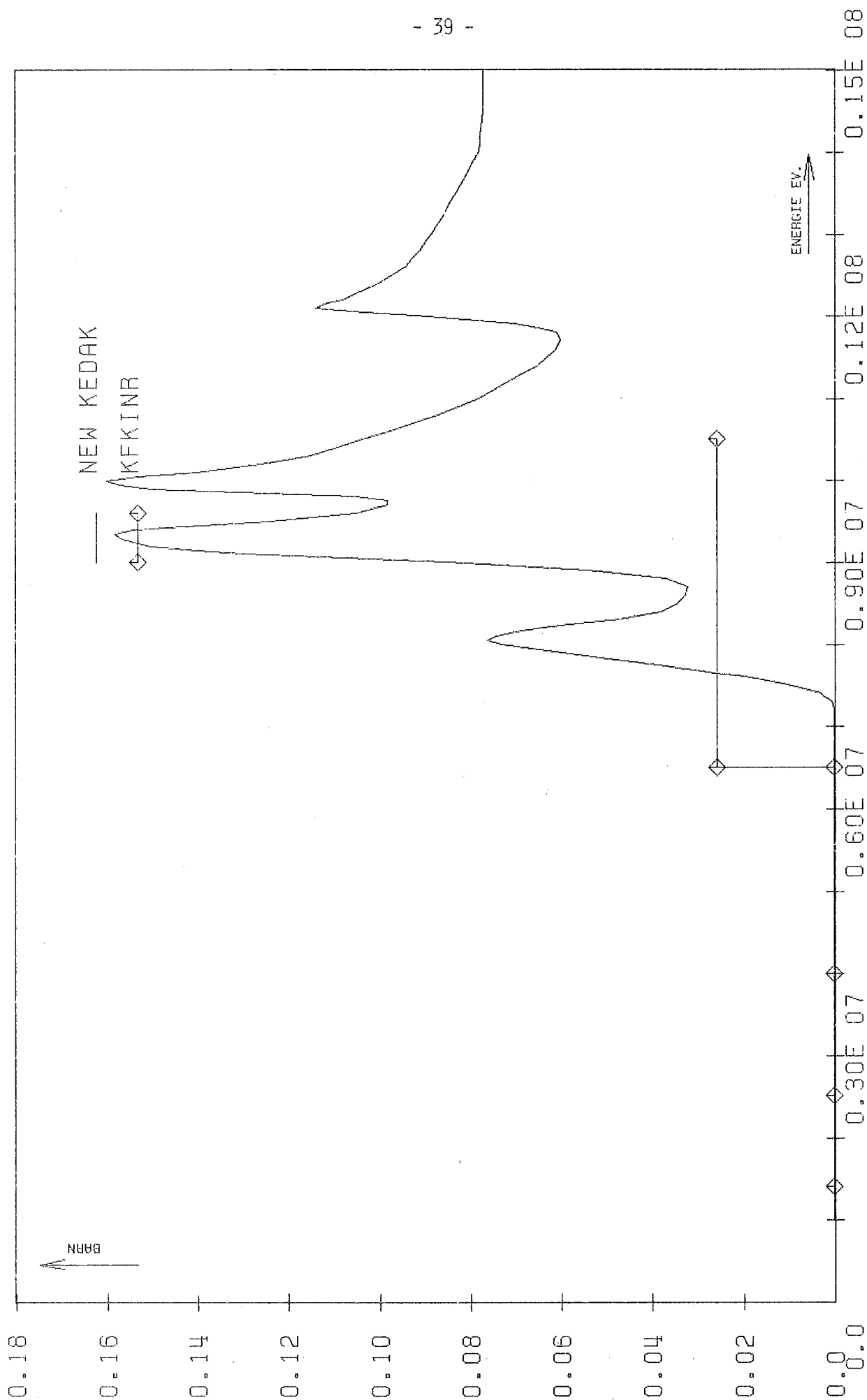


FIG. 8 C 12 SGA

INR901C 05.08 18.44.

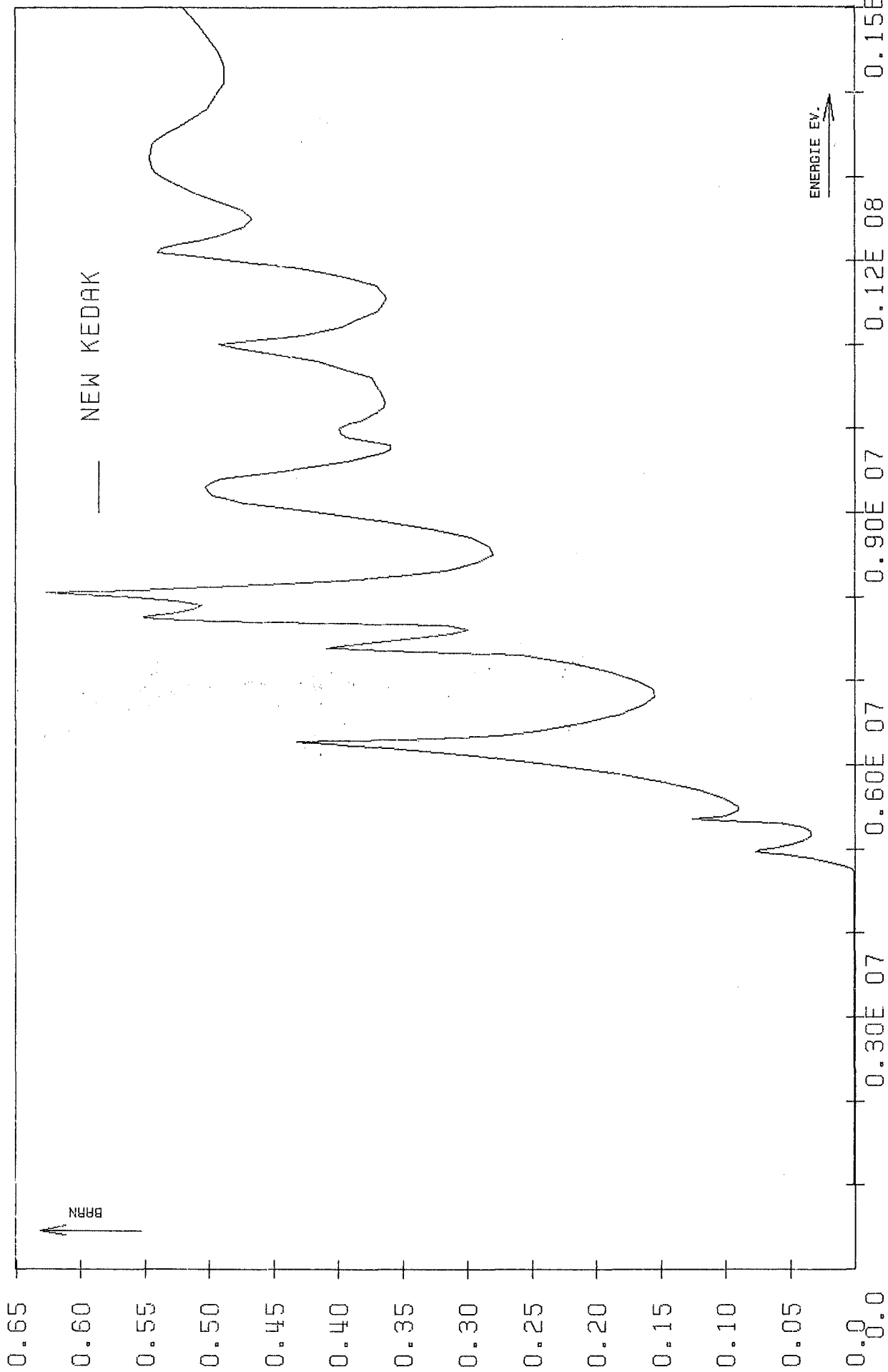
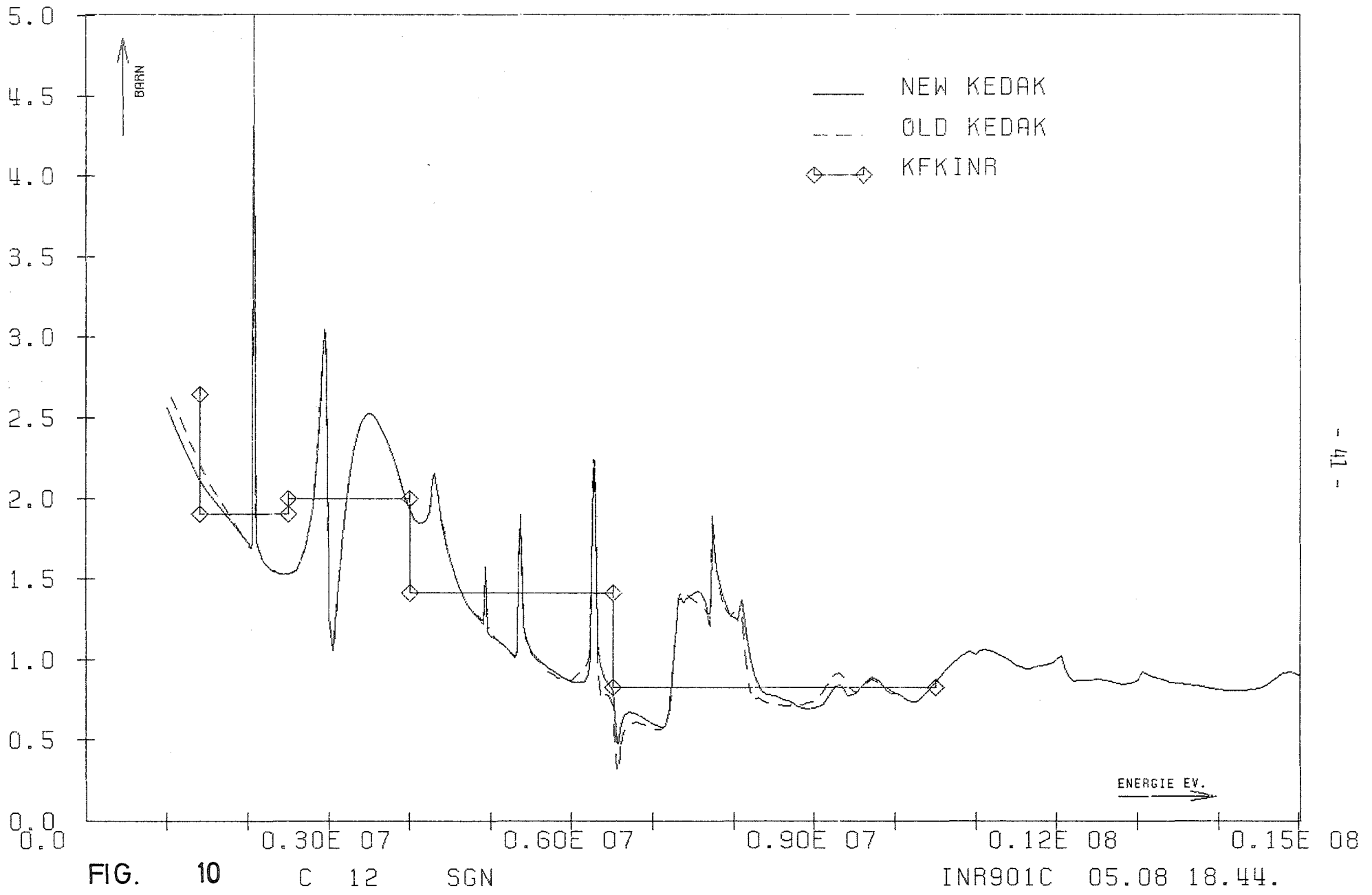


FIG. 9 C 12 SGX

INR901C 05.08 18.44.



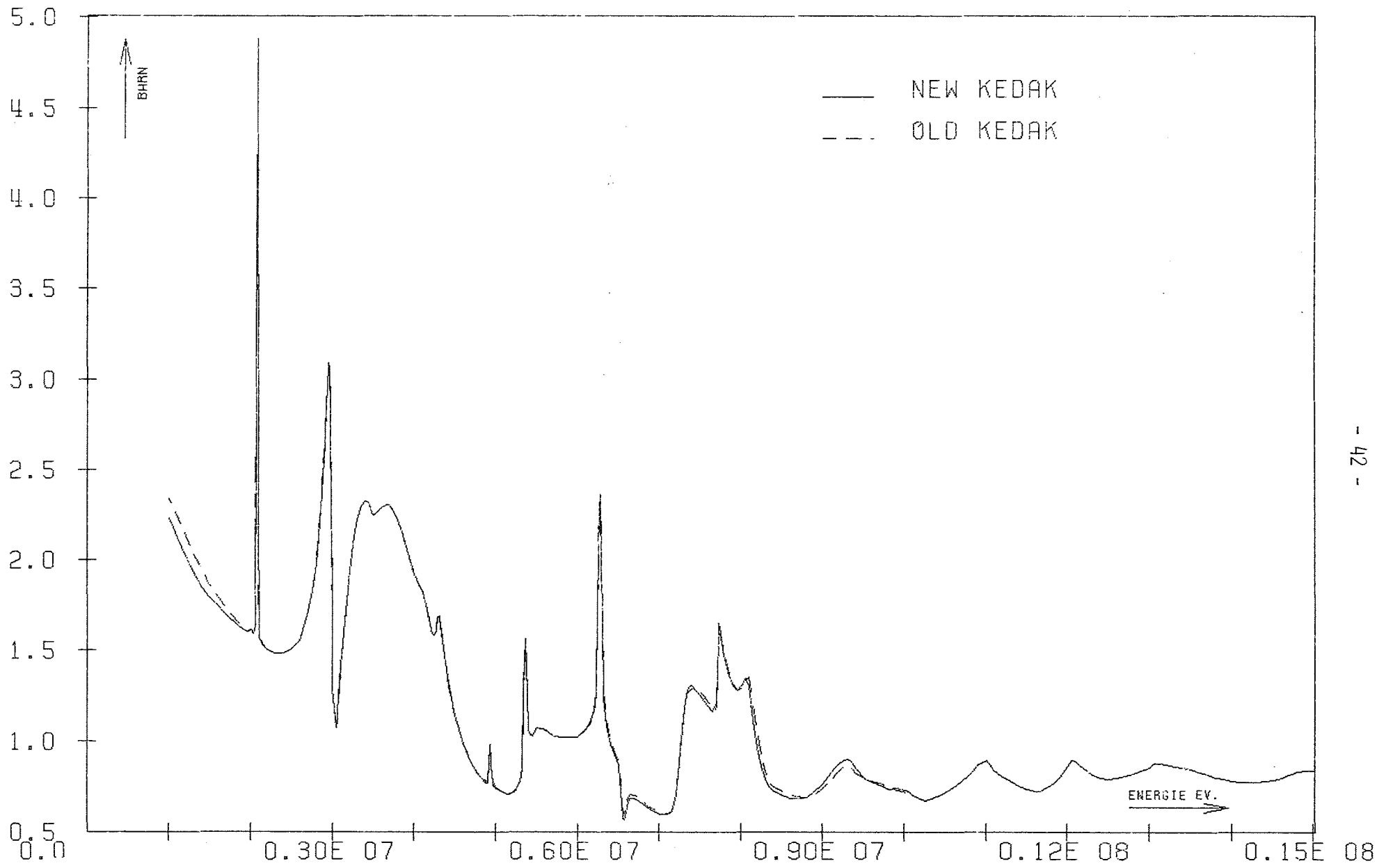


FIG. 11 C 12 SGTR

INR901C 05.08 18.44.

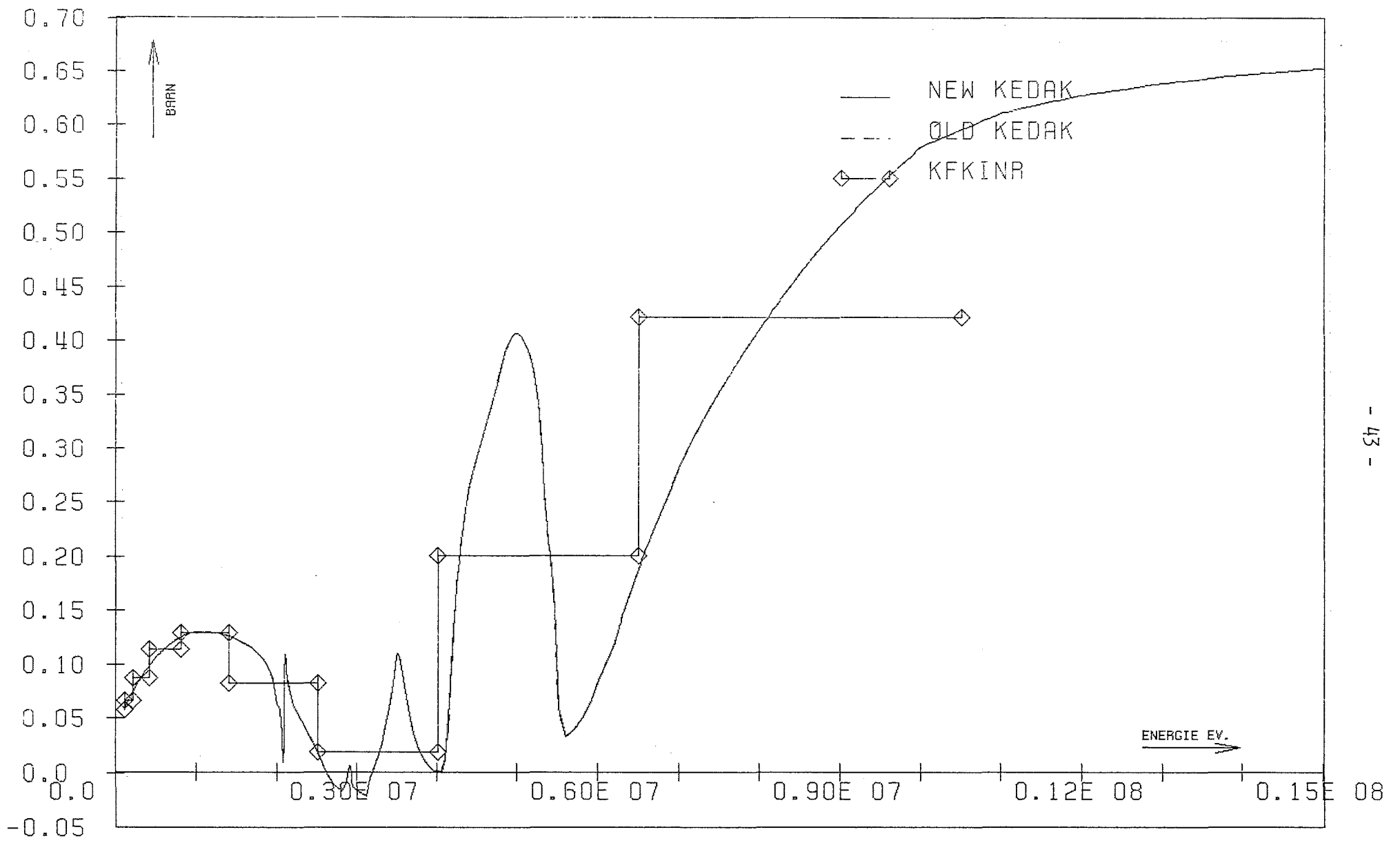


FIG. 12 C 12 MUEL

INR901C 28.07 18.32.

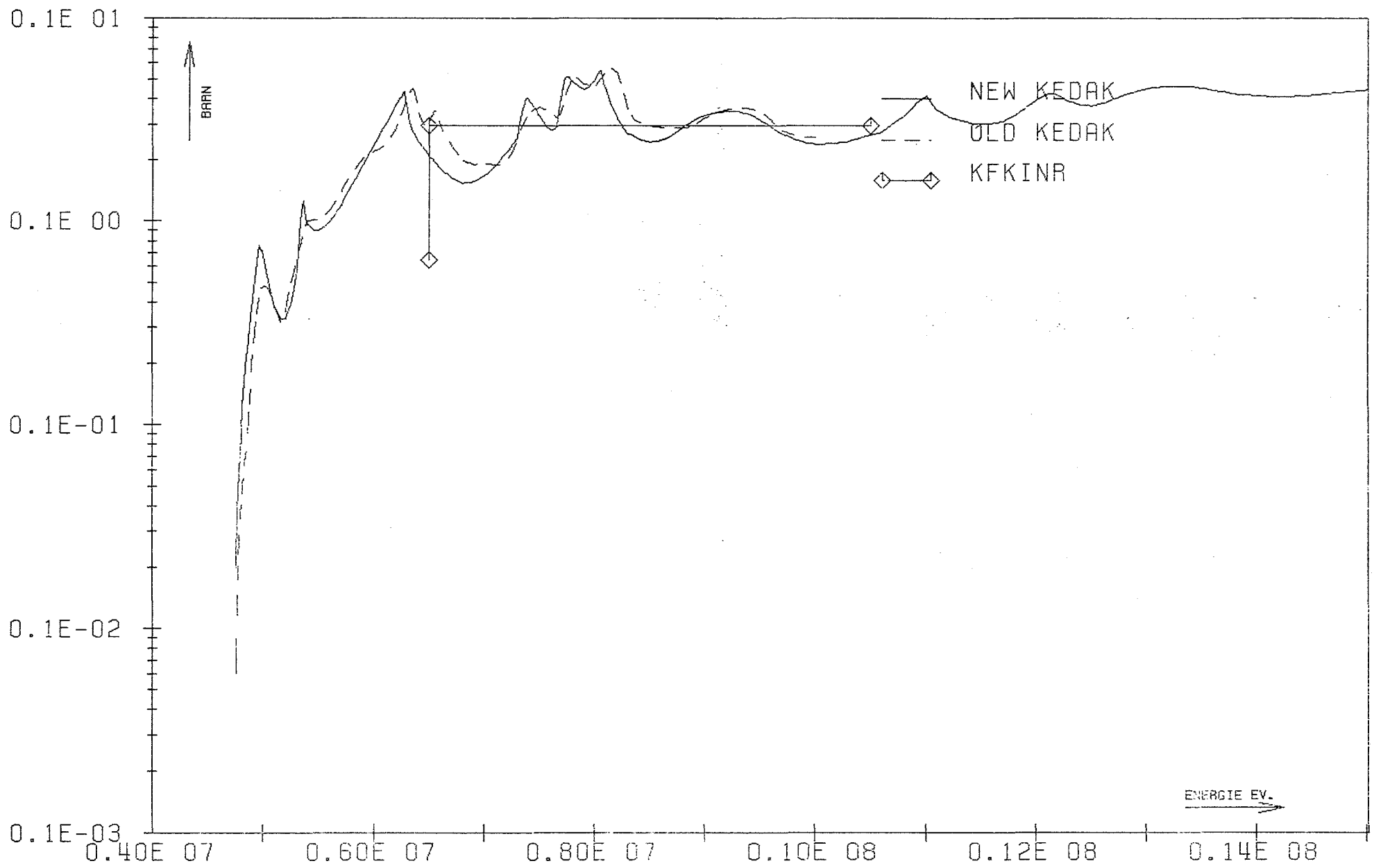


FIG. 13 C 12 SGI INR901C 28.07 18.32.

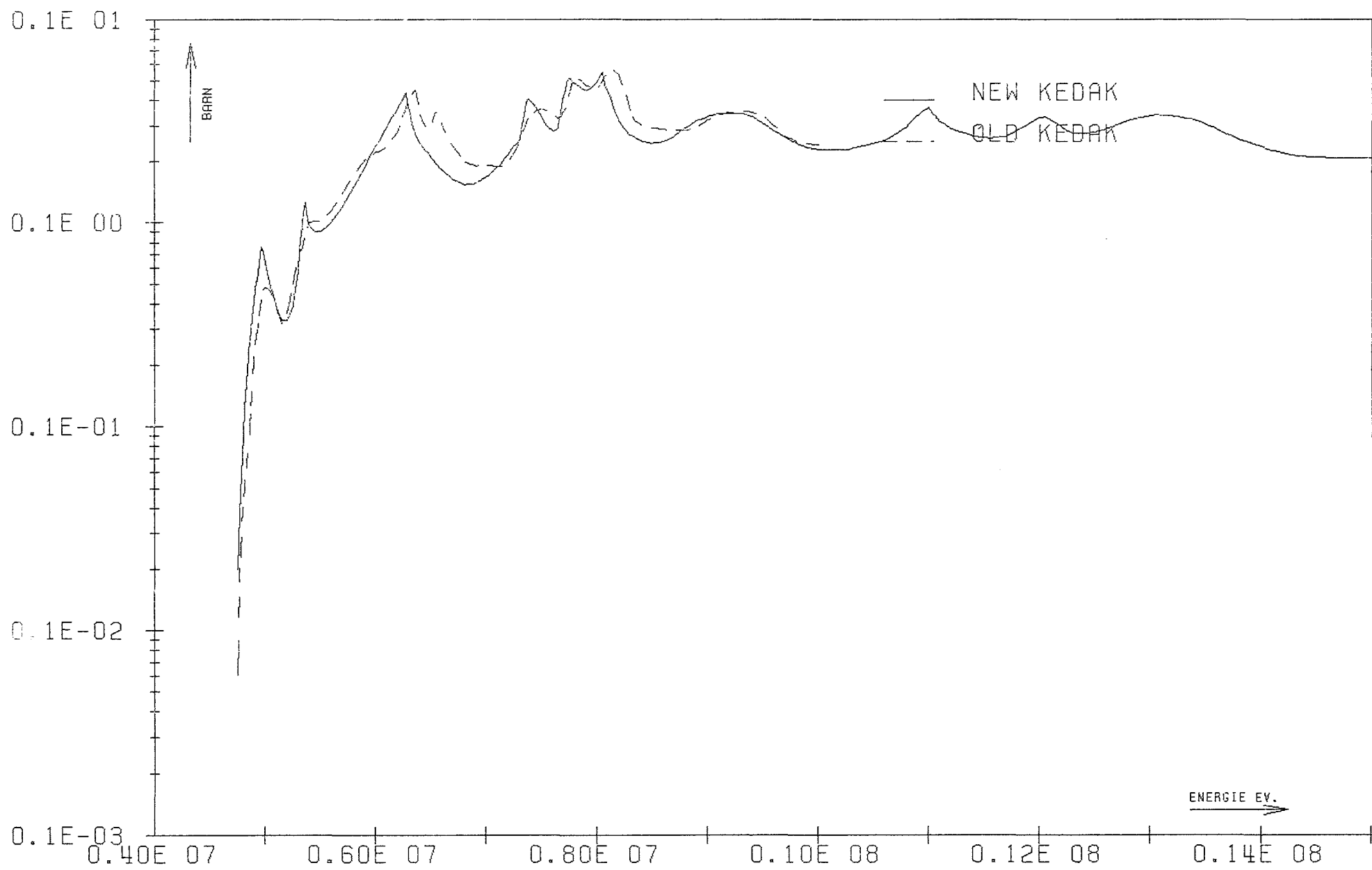


FIG. 14 C 12 SGIZ 0.443D+07 INR901C 28.07 18.32.

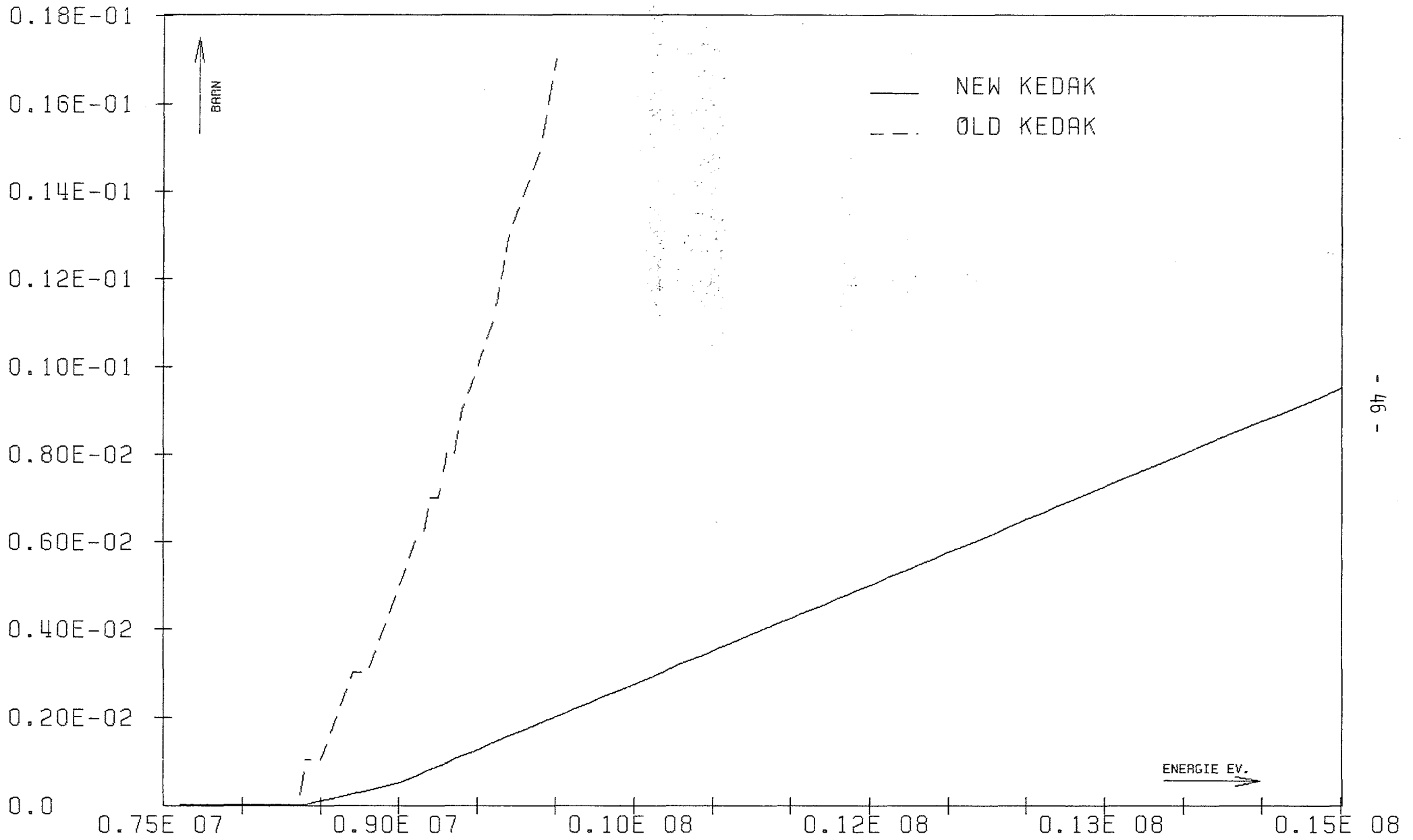


FIG. 15 C 12 SGIZ 0.765D+07 INR901C 29.07 16.51.

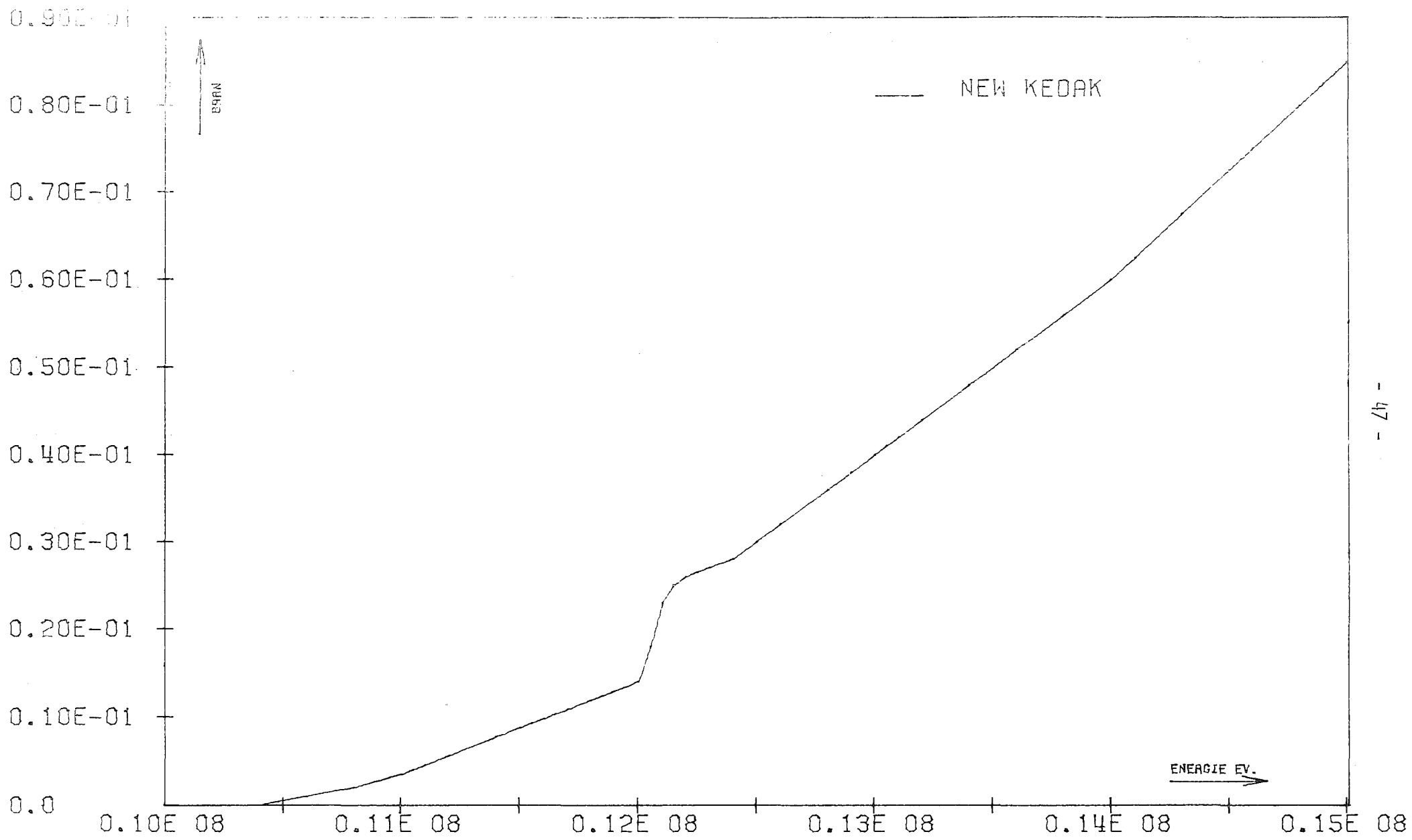


FIG. 16 C 12 SGIZ 0.9660+07 INR901C 08.01 18.21.

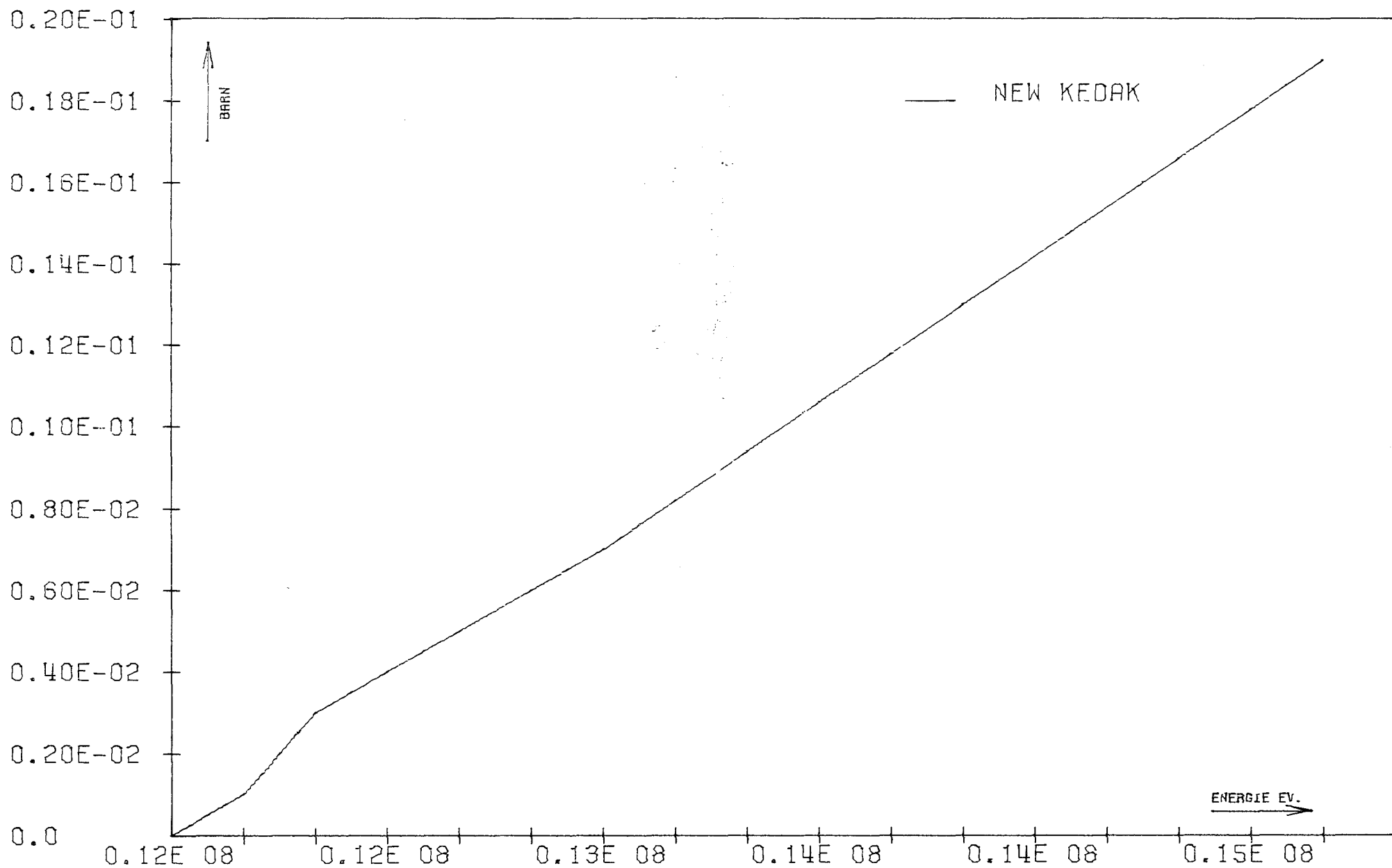


FIG.

17

C 12

SGIZ

0.1080+08

INR901C

08.01 18.21.

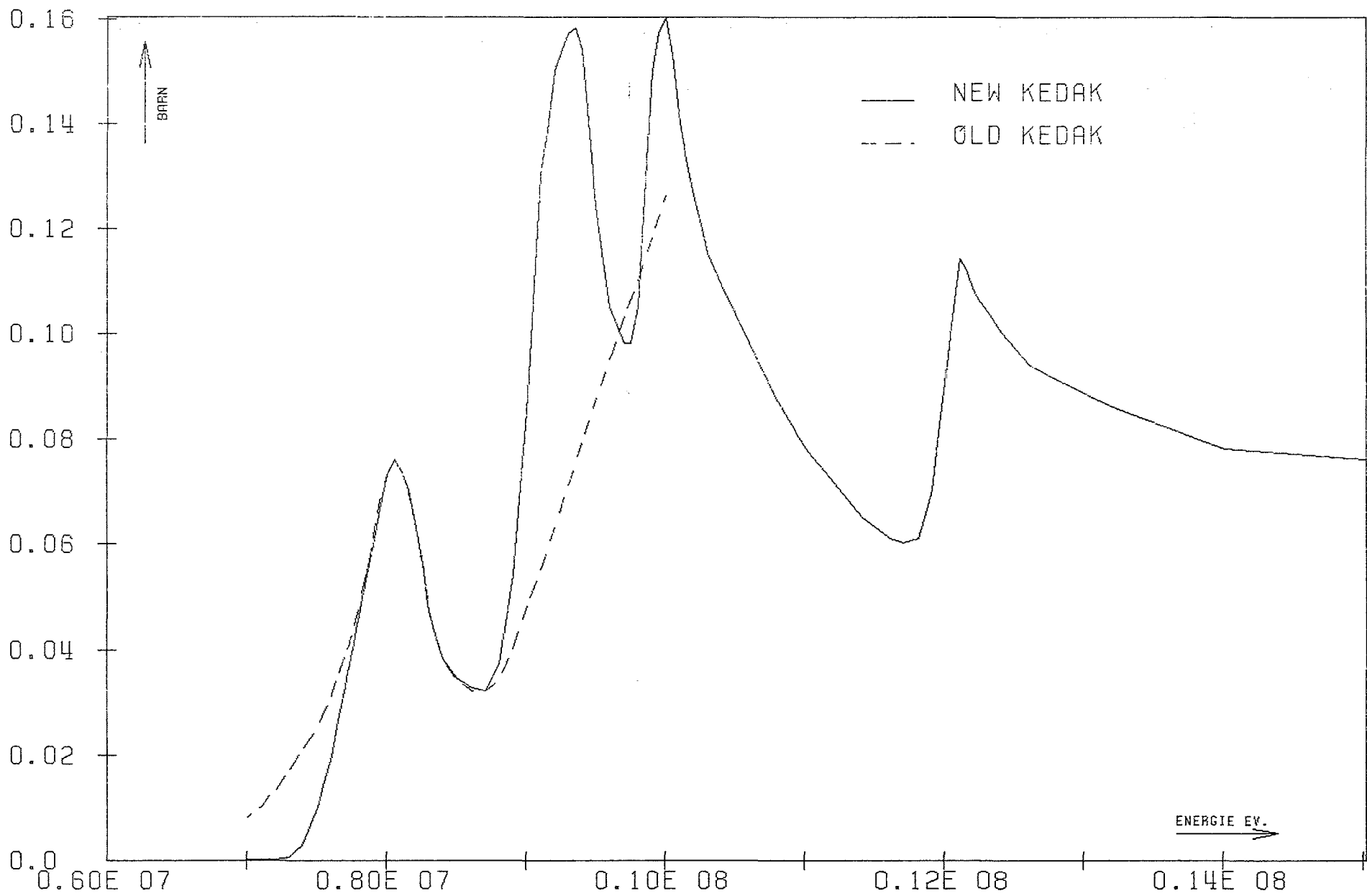


FIG. 19 C 12 SGALP INR901C 28.07 18.32.

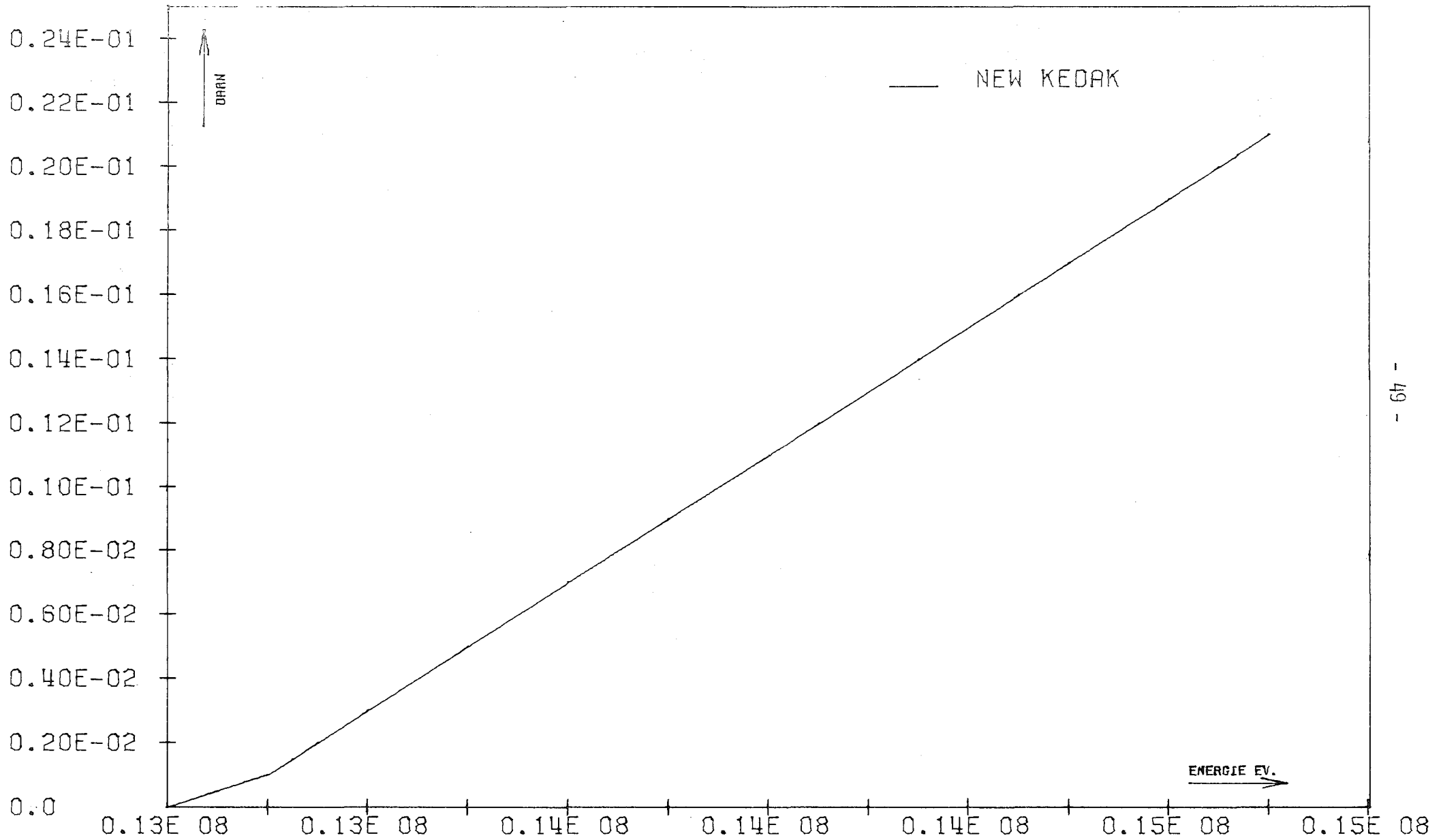


FIG. 18

C 12

SGIZ

0.1180+08

INR901C

08.01 18.21.

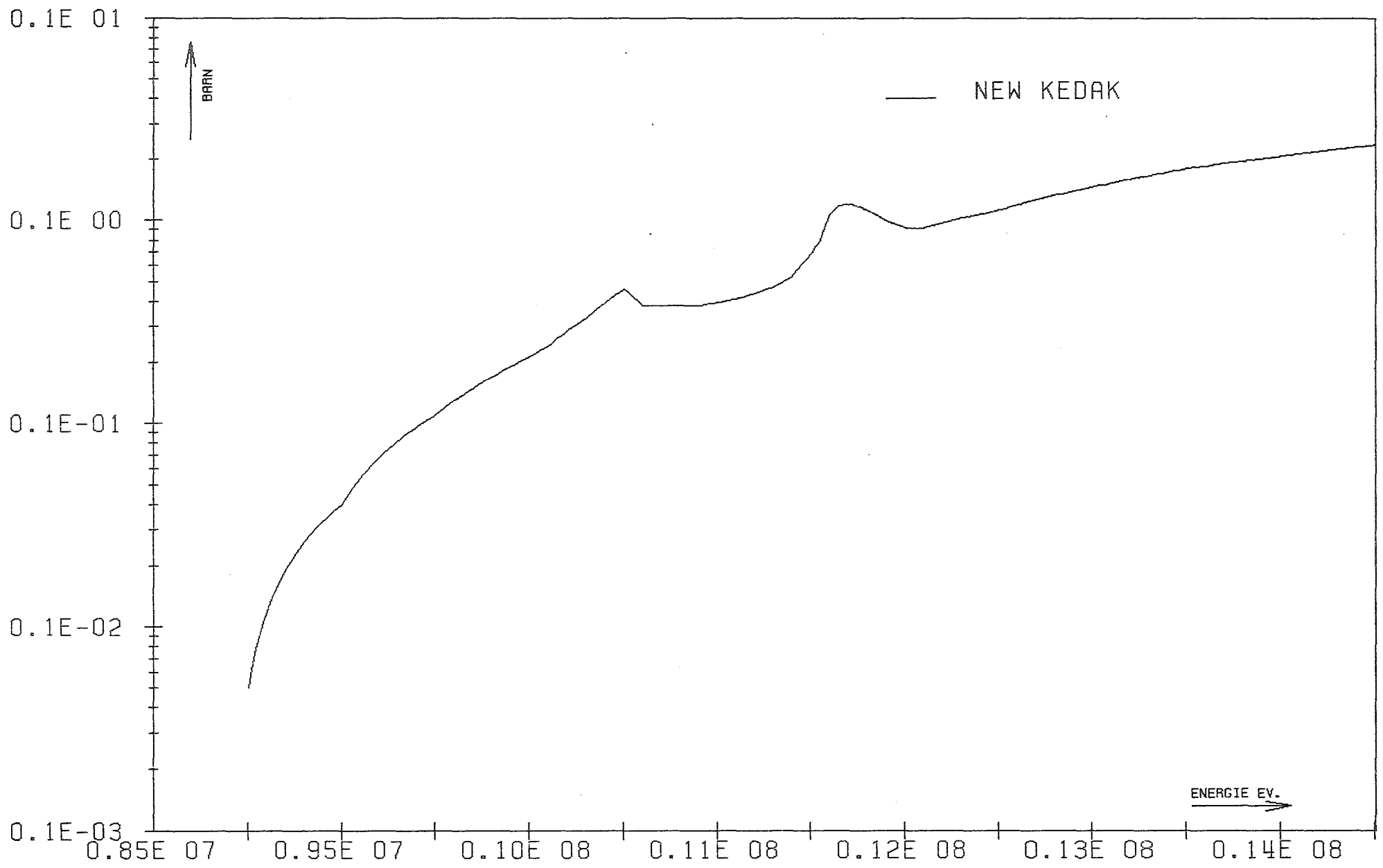
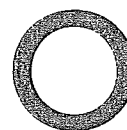


FIG. 20 C 12 SGI3A

INR901C 05.08 18.44.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 1 MeV	0 16
2	SGG	0.001 eV to 15 MeV	
3	SGN	0.001 eV to 1 MeV	
4	SGTR	" "	
5	SGT	0.5 MeV to 15 MeV	
6	SGA	" "	
7	SGX	" "	
8	SGN	" "	
9	SGTR	" "	
10	MUEL	0.1 MeV to 15 MeV	
11	SGI	5.0 MeV to 15 MeV	
12	SGIZ		
	E*= 6.065 MeV	" "	
13	E*= 6.131 MeV	" "	
14	E*= 6.917 MeV	" "	
15	E*= 7.119 MeV	" "	
16	E*= 8.872 MeV	" "	
17	E*= 9.597 MeV	10 MeV to 15 MeV	
18	E*= 9.847 MeV	" "	
19	E*=10.354 MeV	" "	
20	E*=10.952 MeV	" "	
21	E*=11.080 MeV	" "	
22	E*=11.260 MeV	" "	
23	E*=11.440 MeV	" "	
24	SGP	10 MeV to 15 MeV	
25	SGD	" "	
26	SGALP	6 MeV to 15 MeV	



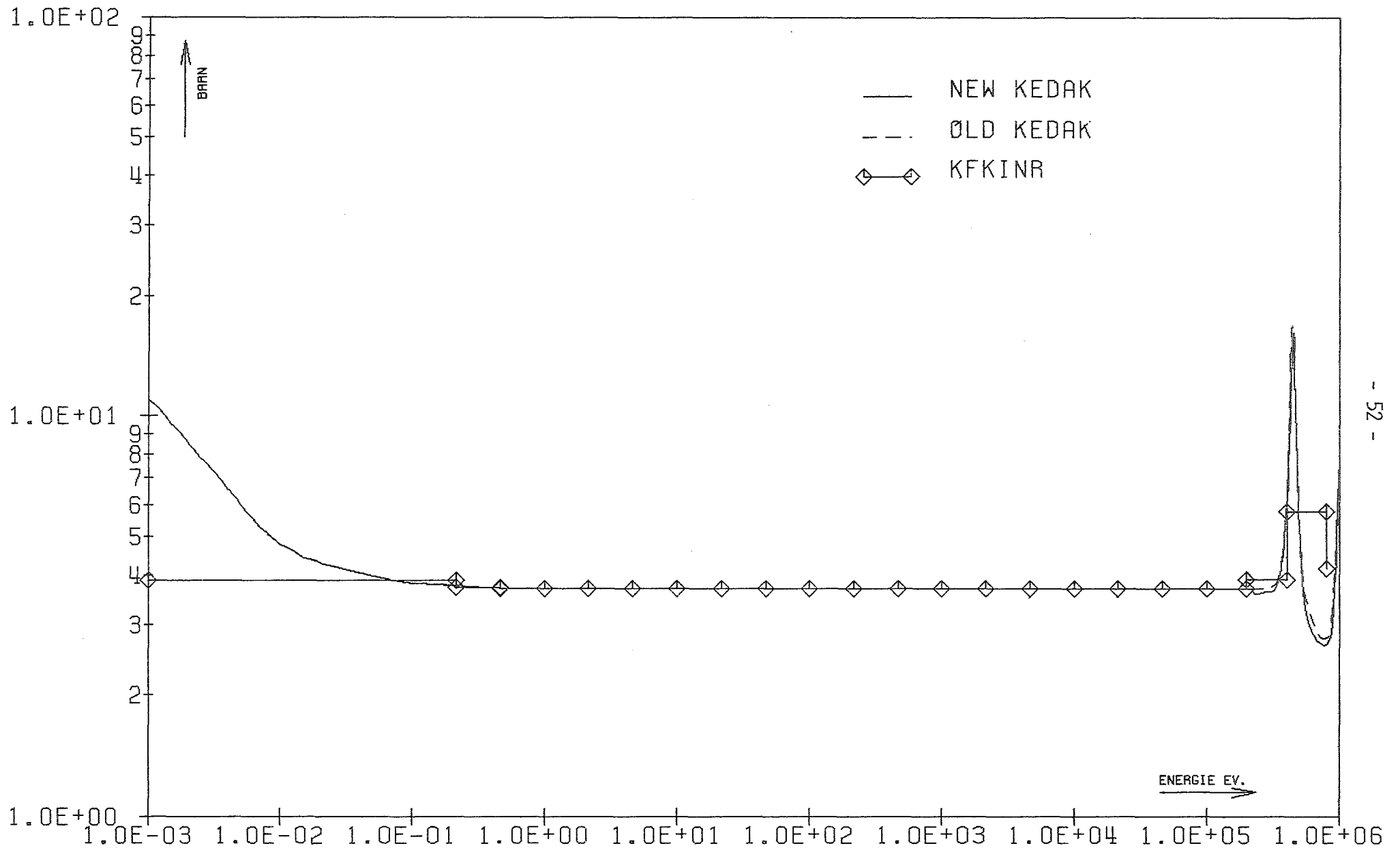


FIG. 1 0 16 SGT

INR9010 26.09 11.32.

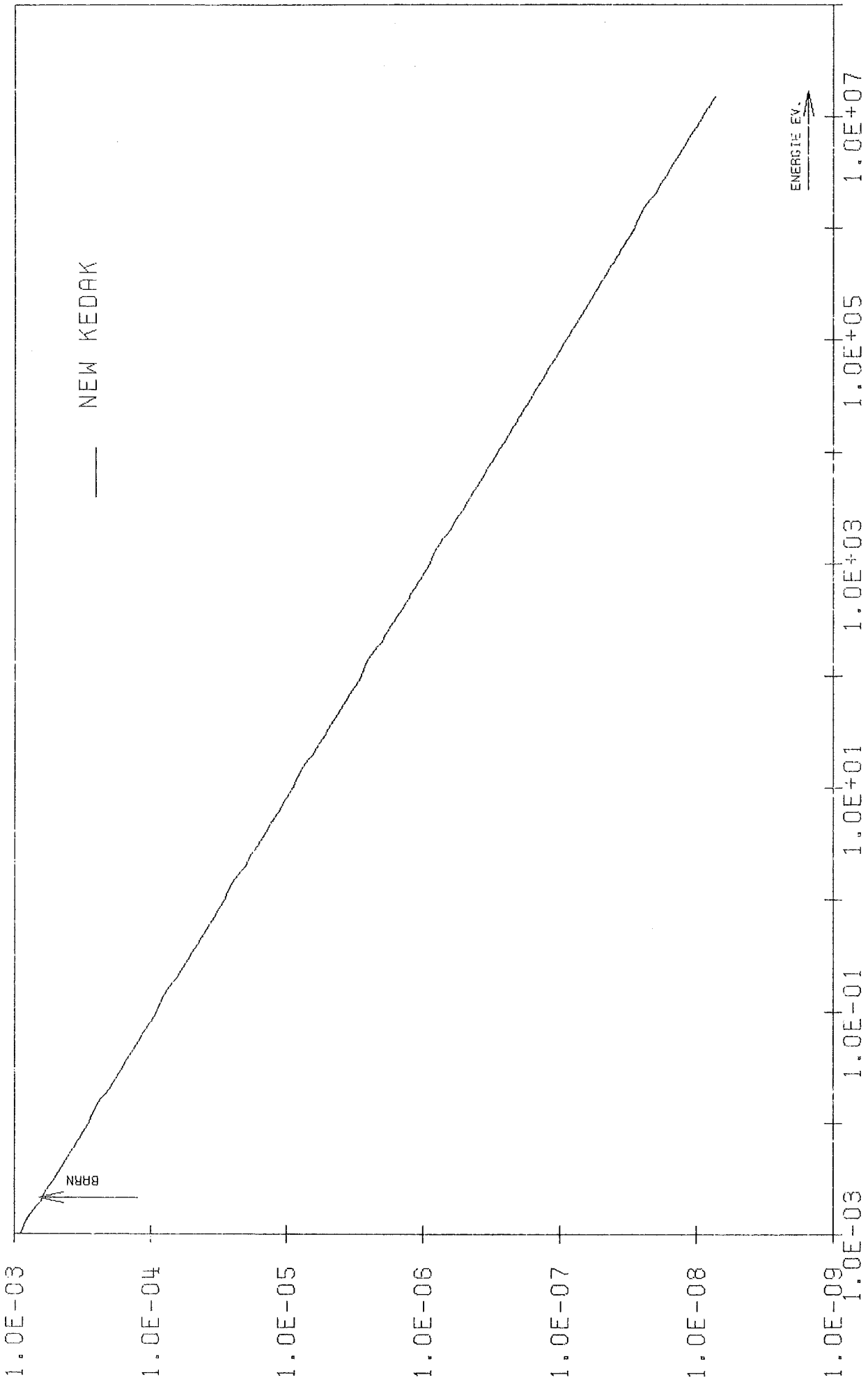


FIG. 2 0 16 SGG INR9010 01.10 12.04.

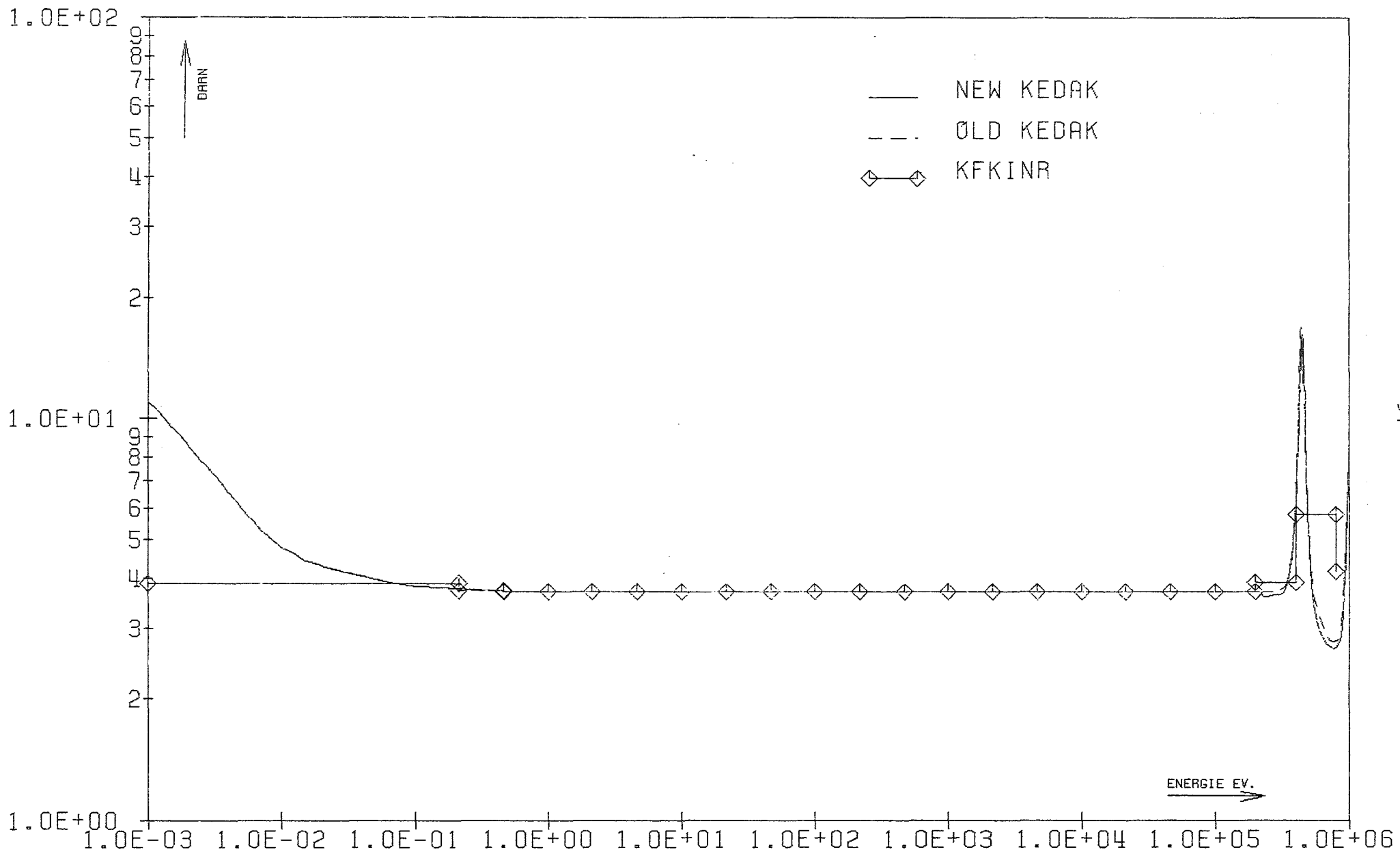


FIG. 3 0 16 SGN

INR9010 30.09 17.28.

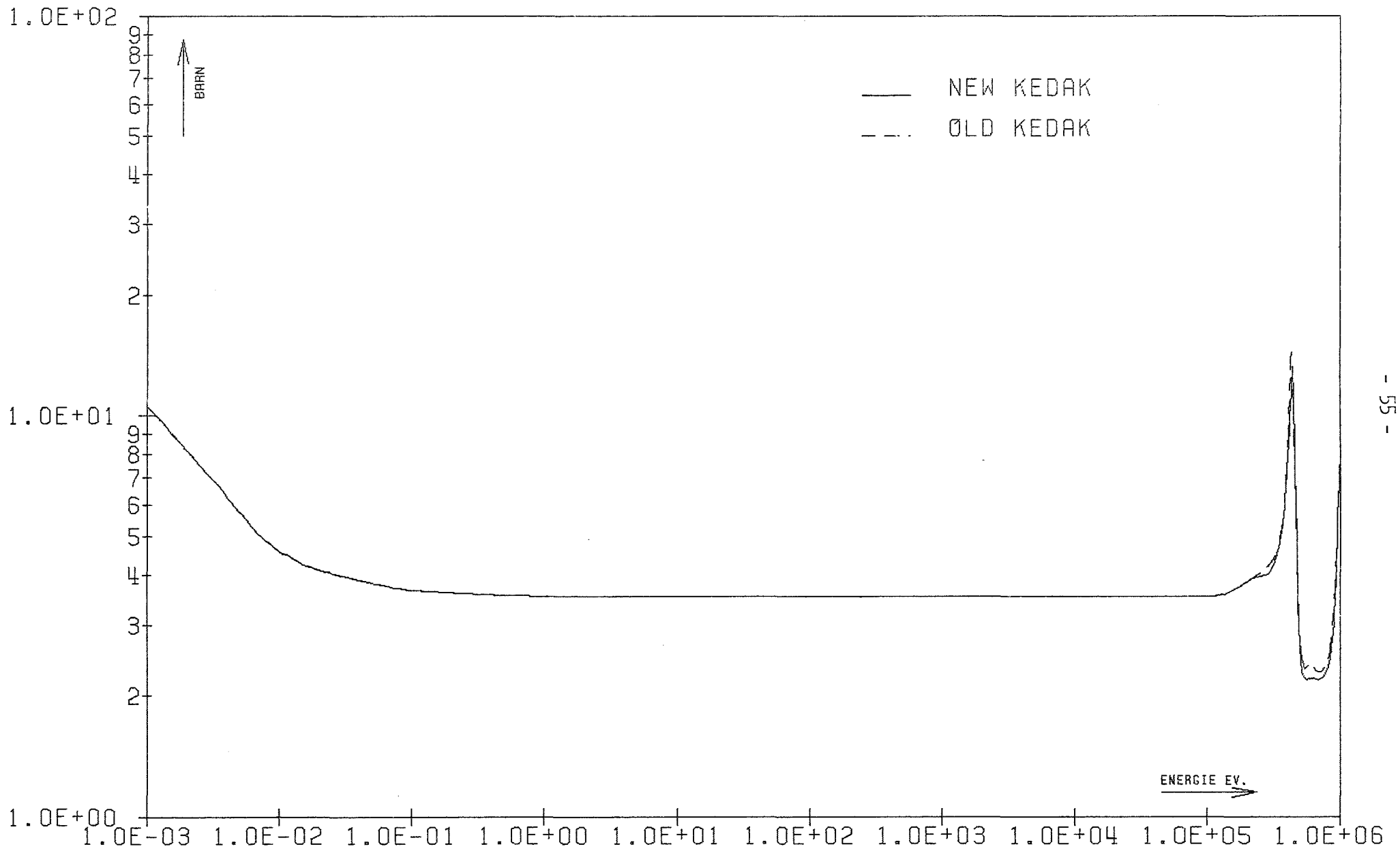


FIG. 4 0 16 SGTR

INR9010 26.09 11.32.

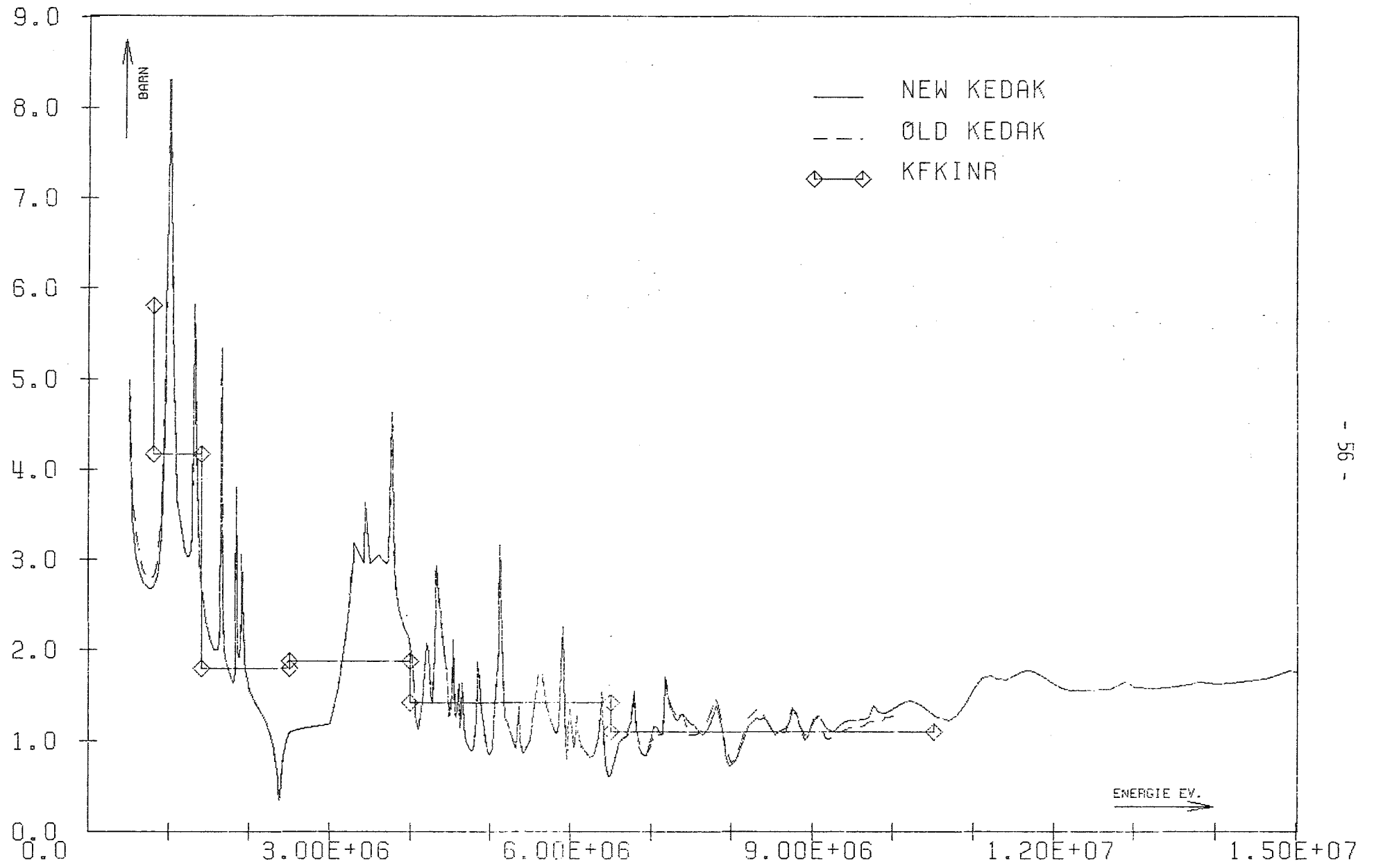


FIG. 5 0 16 SGT

INR9010 29.09 21.43.

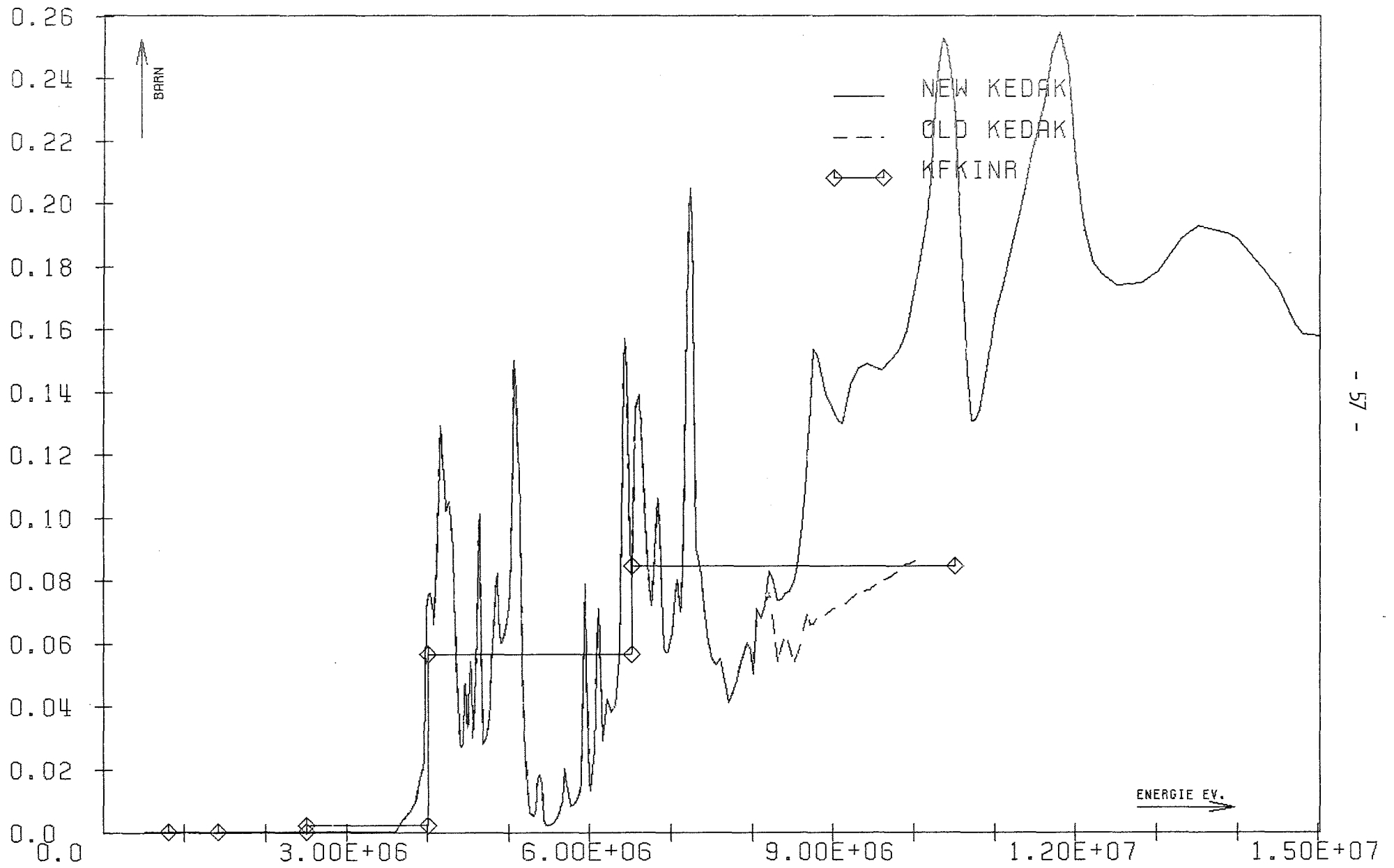


FIG. 6 0 16 SGA

INR9010 29.09 21.43.

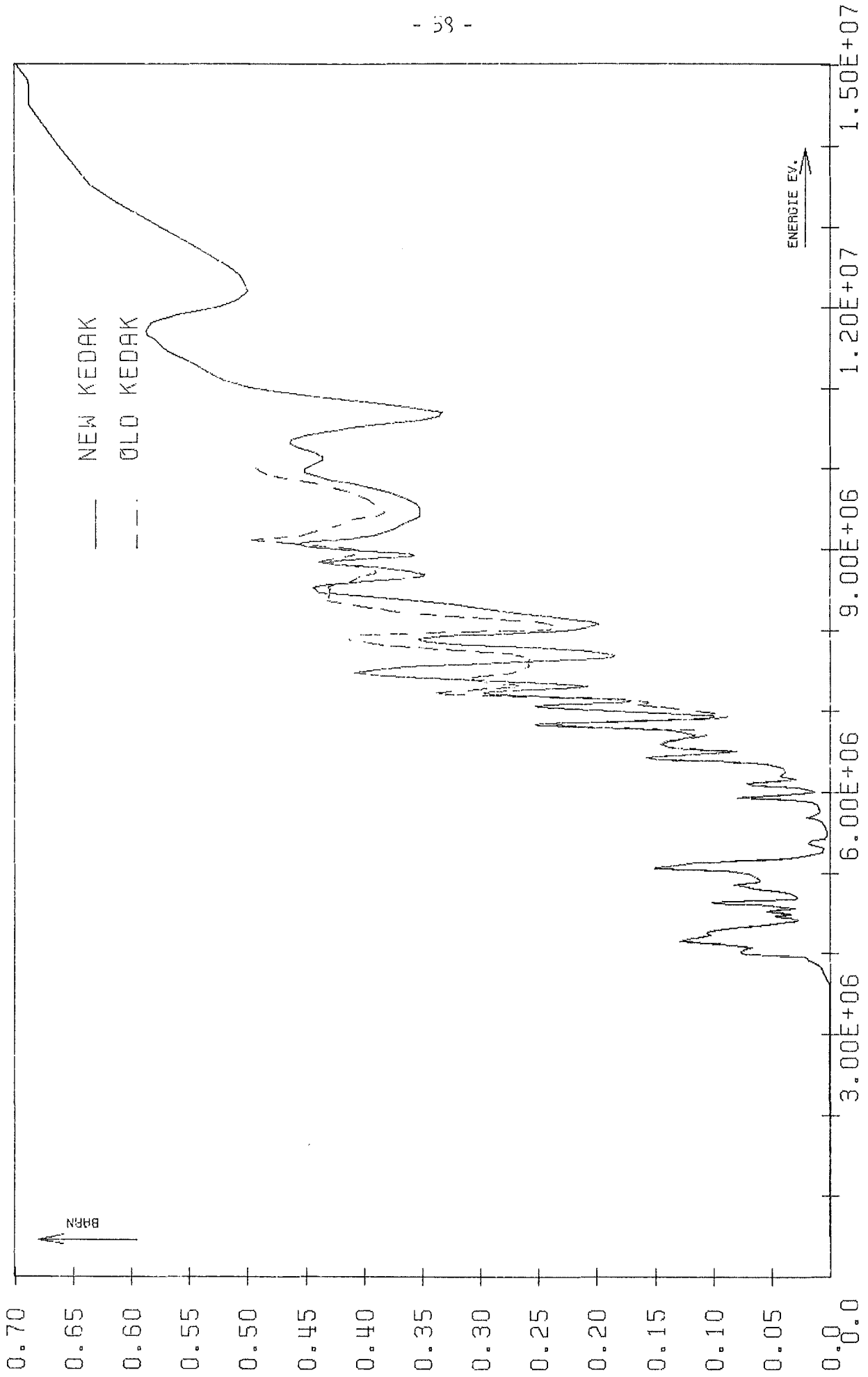


FIG. 7 0 16 SGX
INR9010 29.09 21.43.

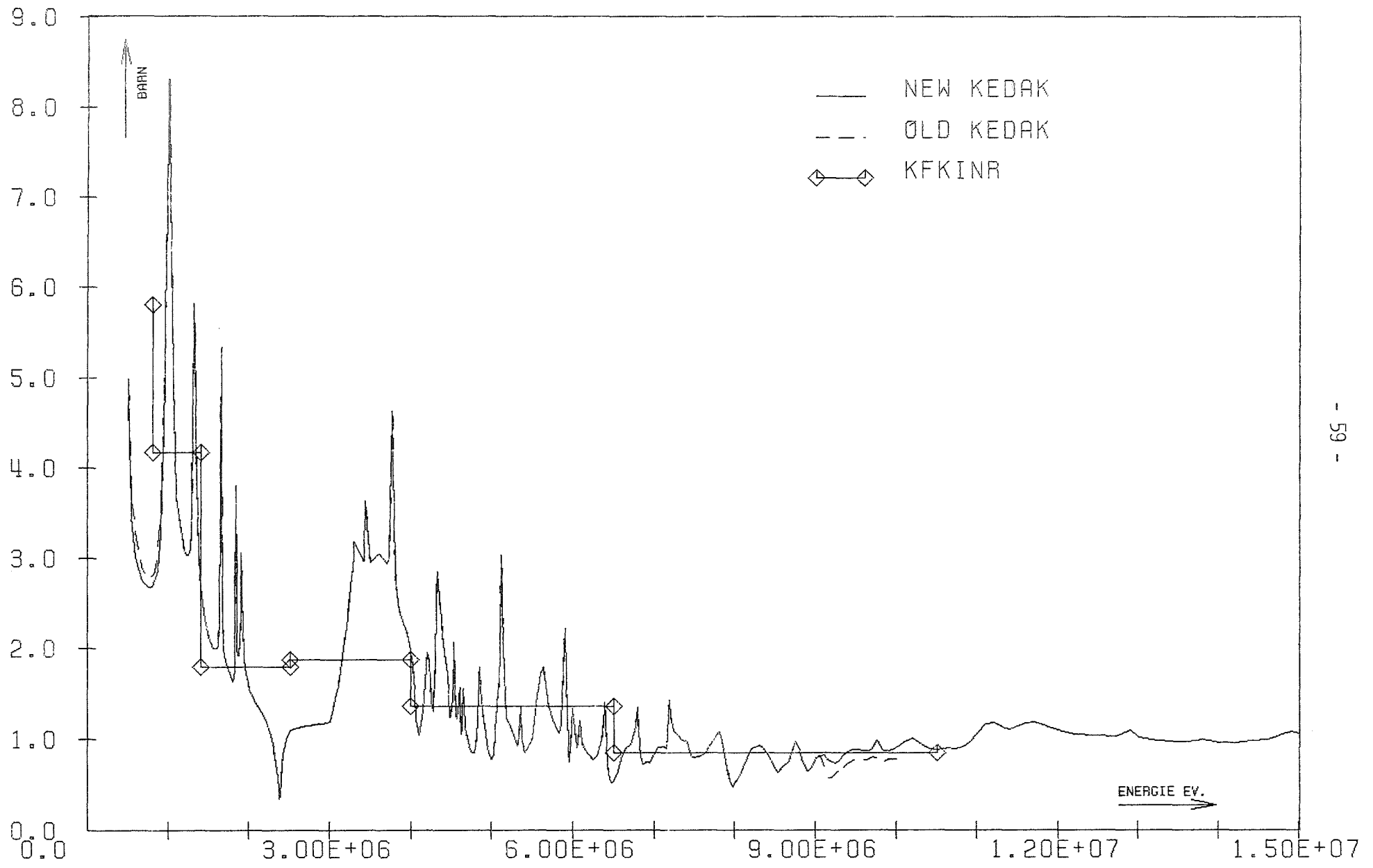


FIG. 8 0 16 SGN

INR9010 26.09 11.32.

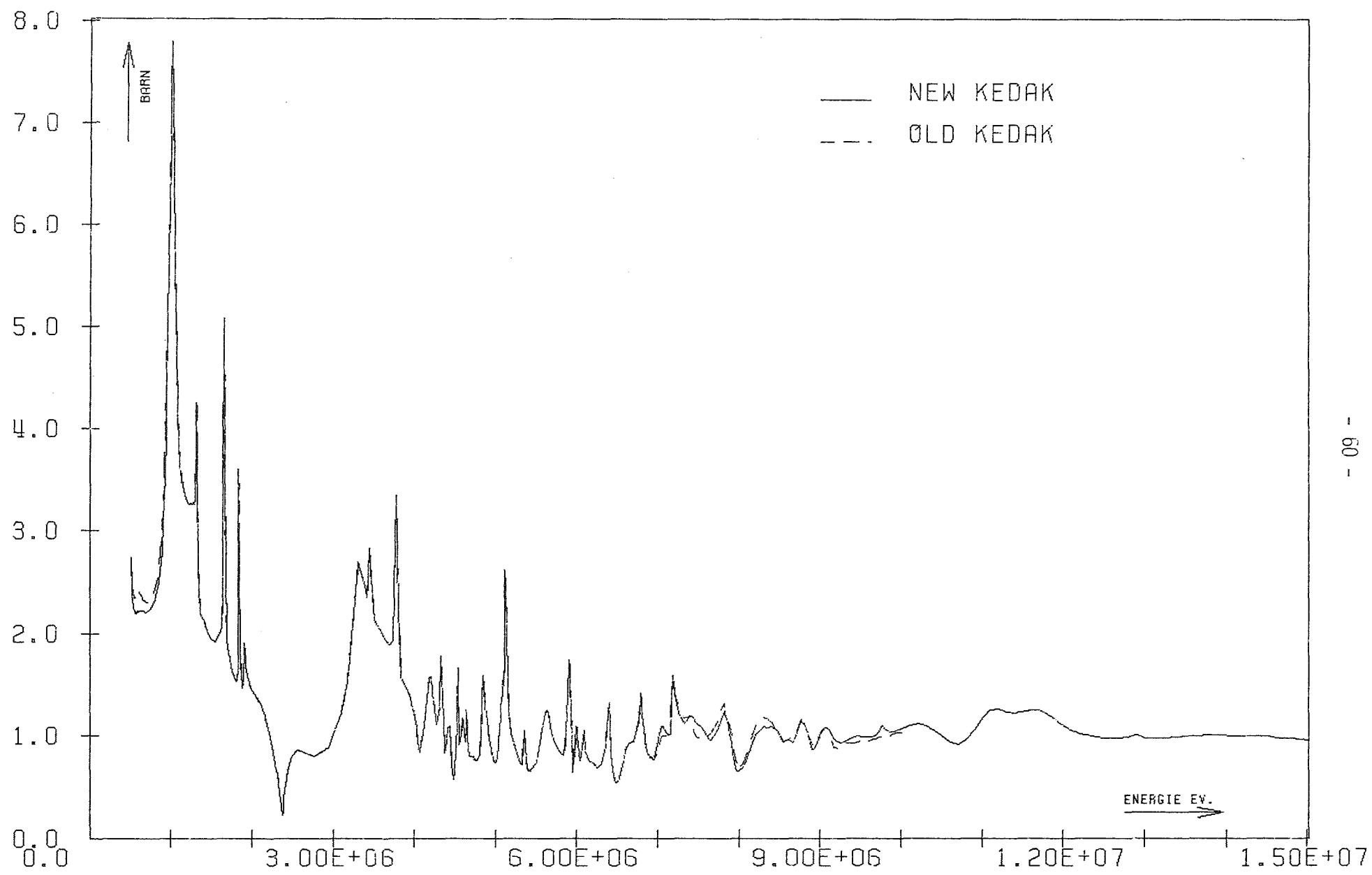


FIG. 9 0 16 SGTR

INR9010 26.09 11.32.

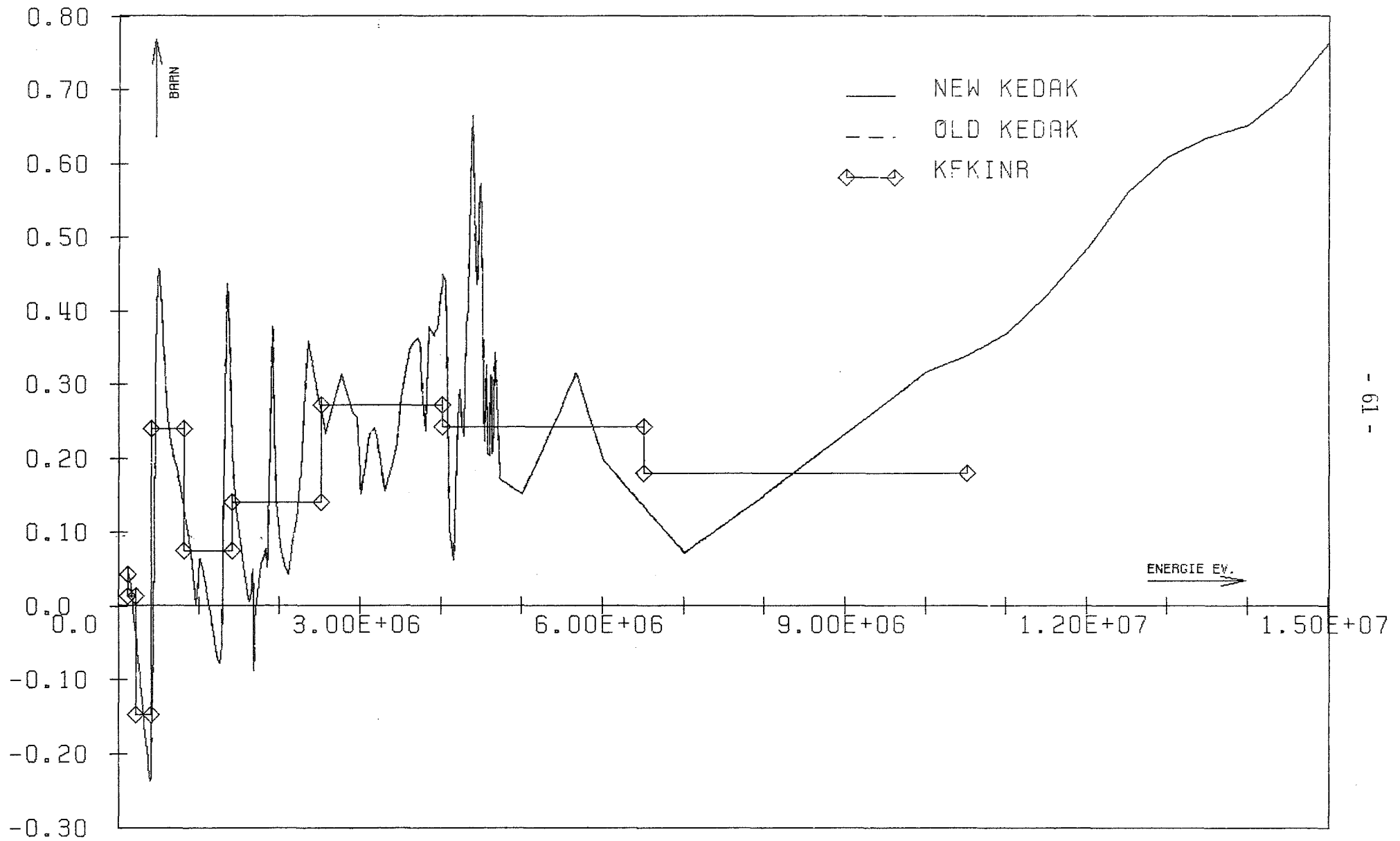


FIG. 10 0 16 MUEL

INR9010 26.09 11.32.

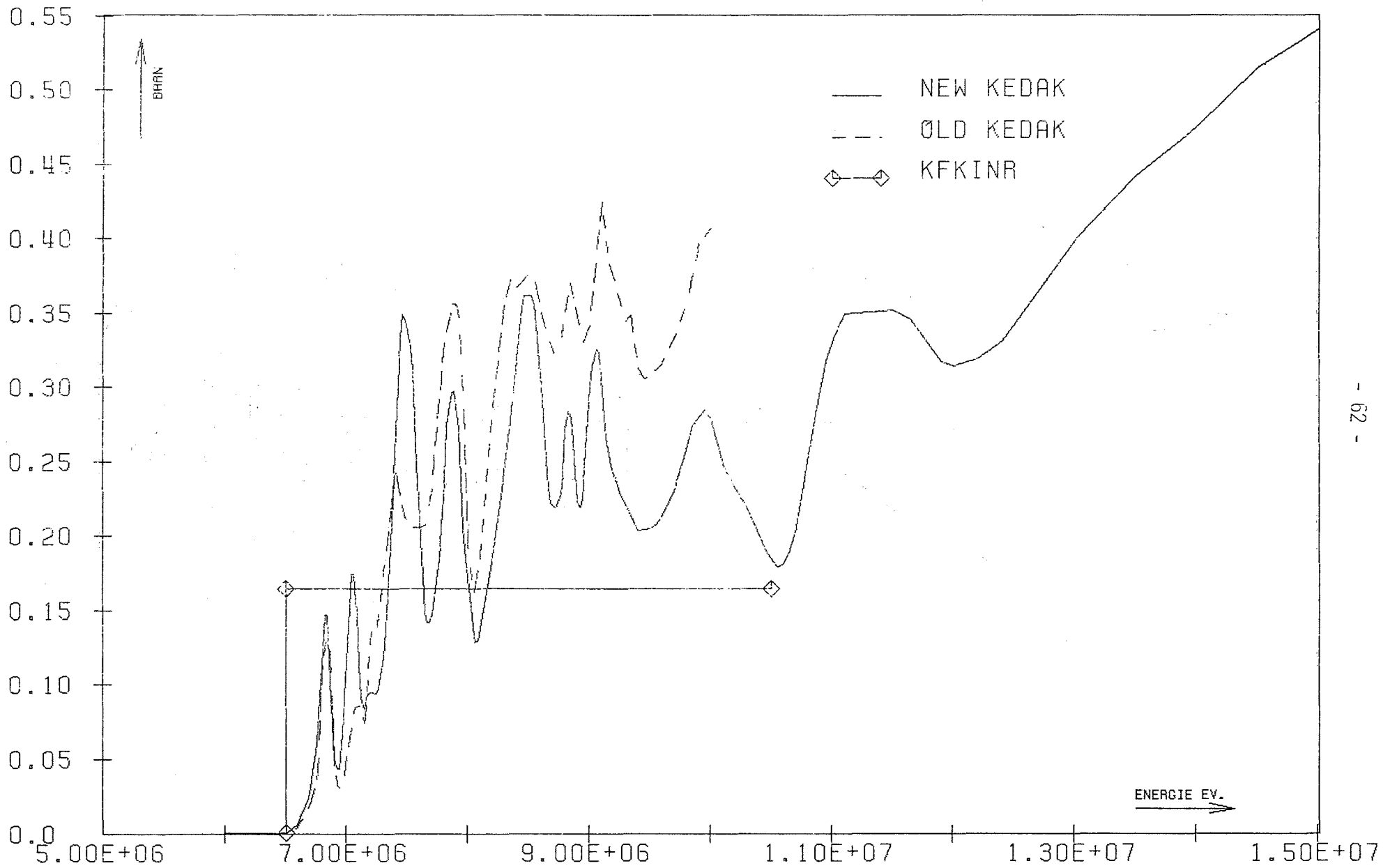


FIG. 11 0 16 SGI

INR9010 26.09 11.33.

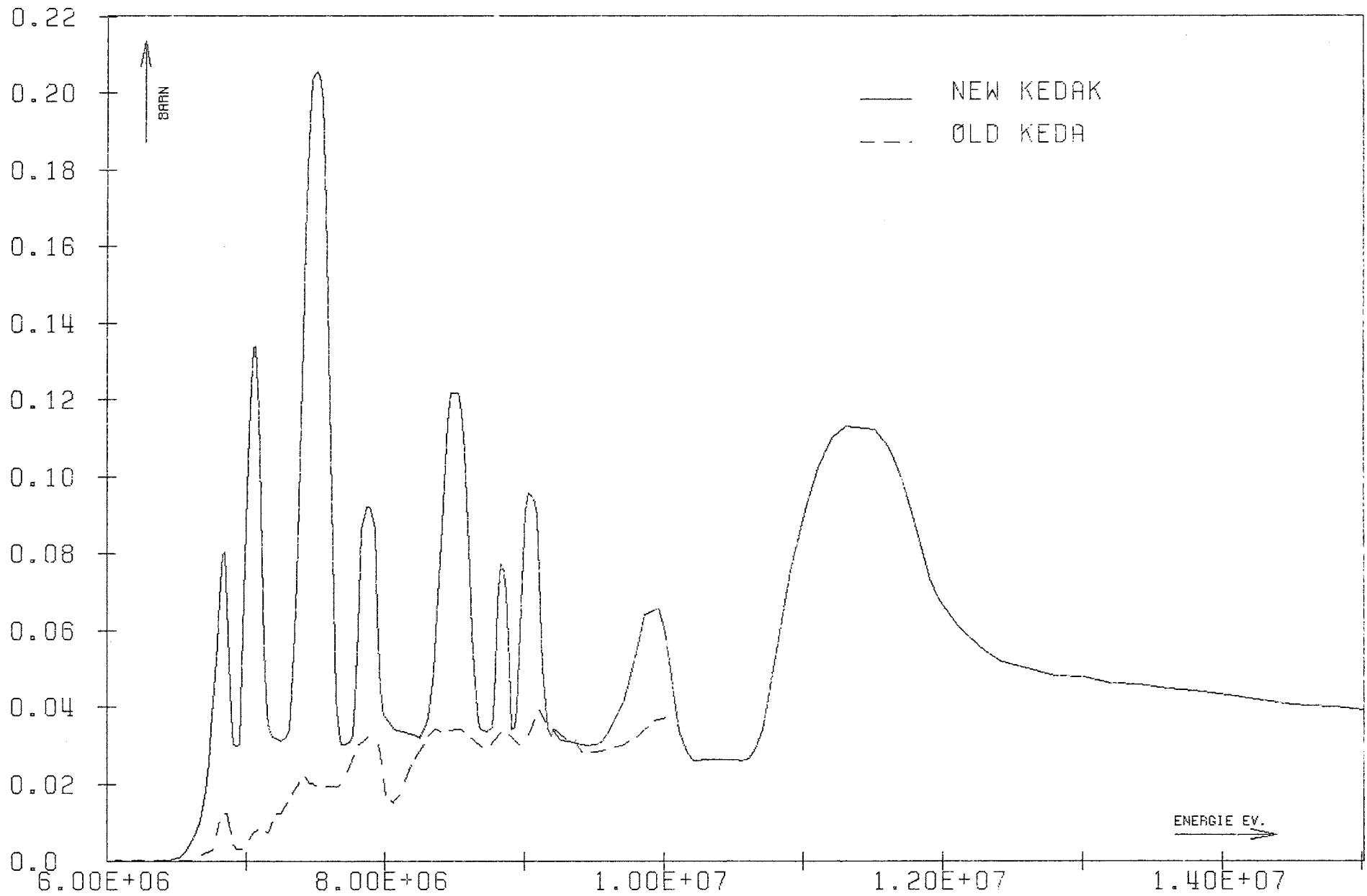


FIG. 12

0 16

SGIZ

0.6050+07

INR9010I 29.09 21.52.

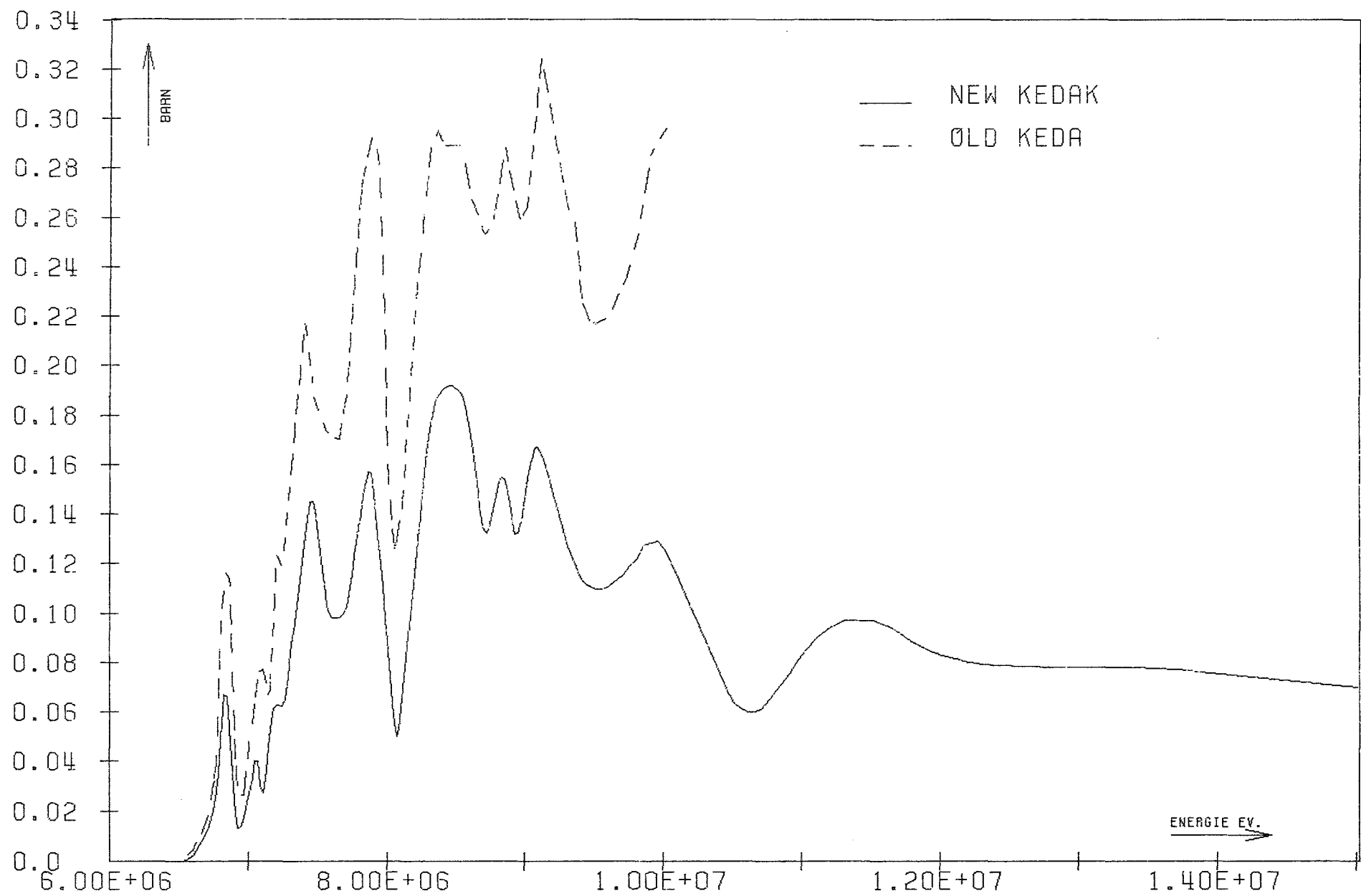


FIG. 13 0 16 SGIZ 0.6130+07 INR9010I 29.09 21.52.

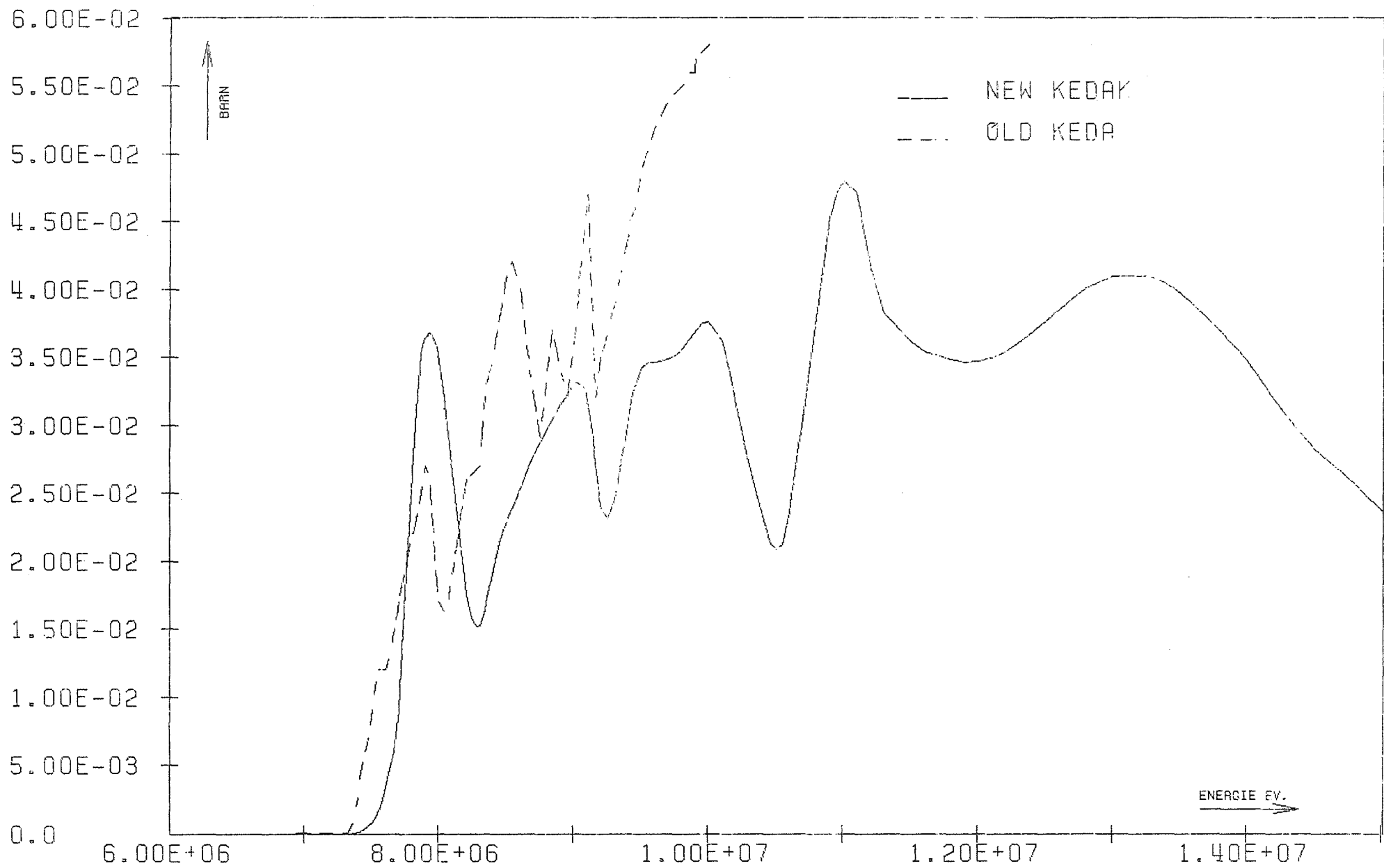


FIG. 14 0 16 SGIZ 0.692D+07 INR90101 29.09 21.52.

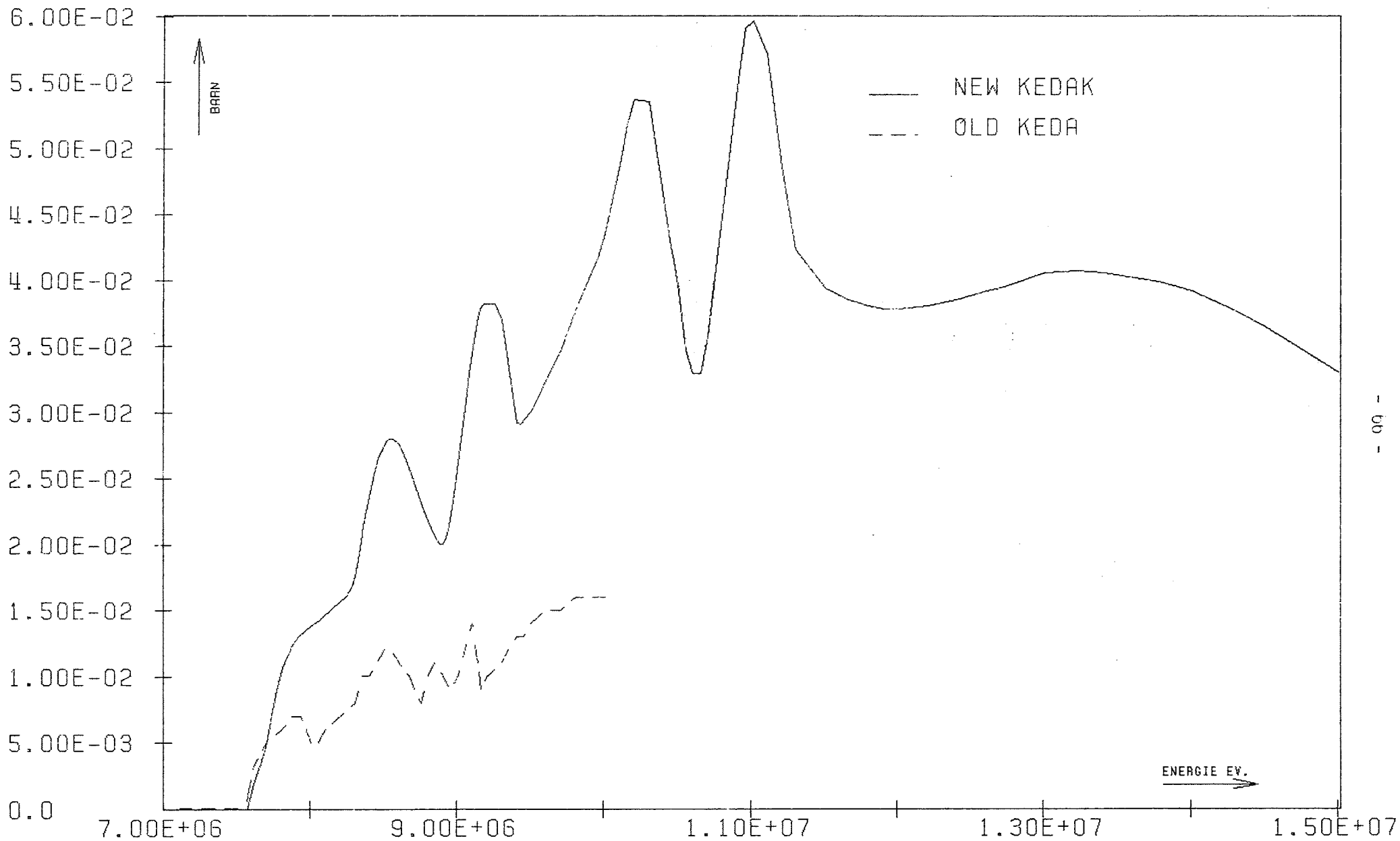


FIG. 15

0 16 SGIZ

0.7120+07

INR9010I 29.09 21.52.

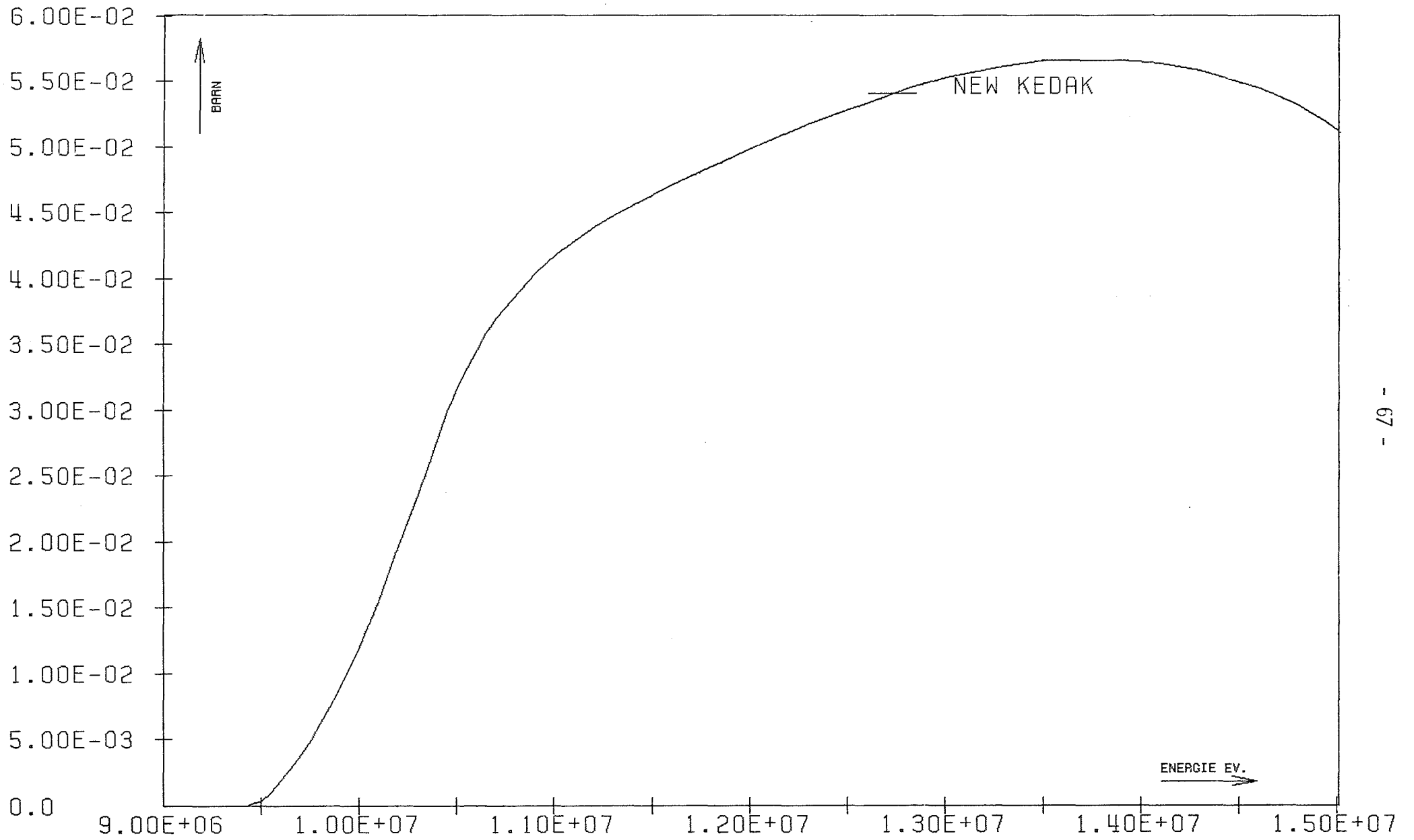


FIG. 16 0 16 SGIZ 0.887D+07 INR9010I 29.09 21.52.

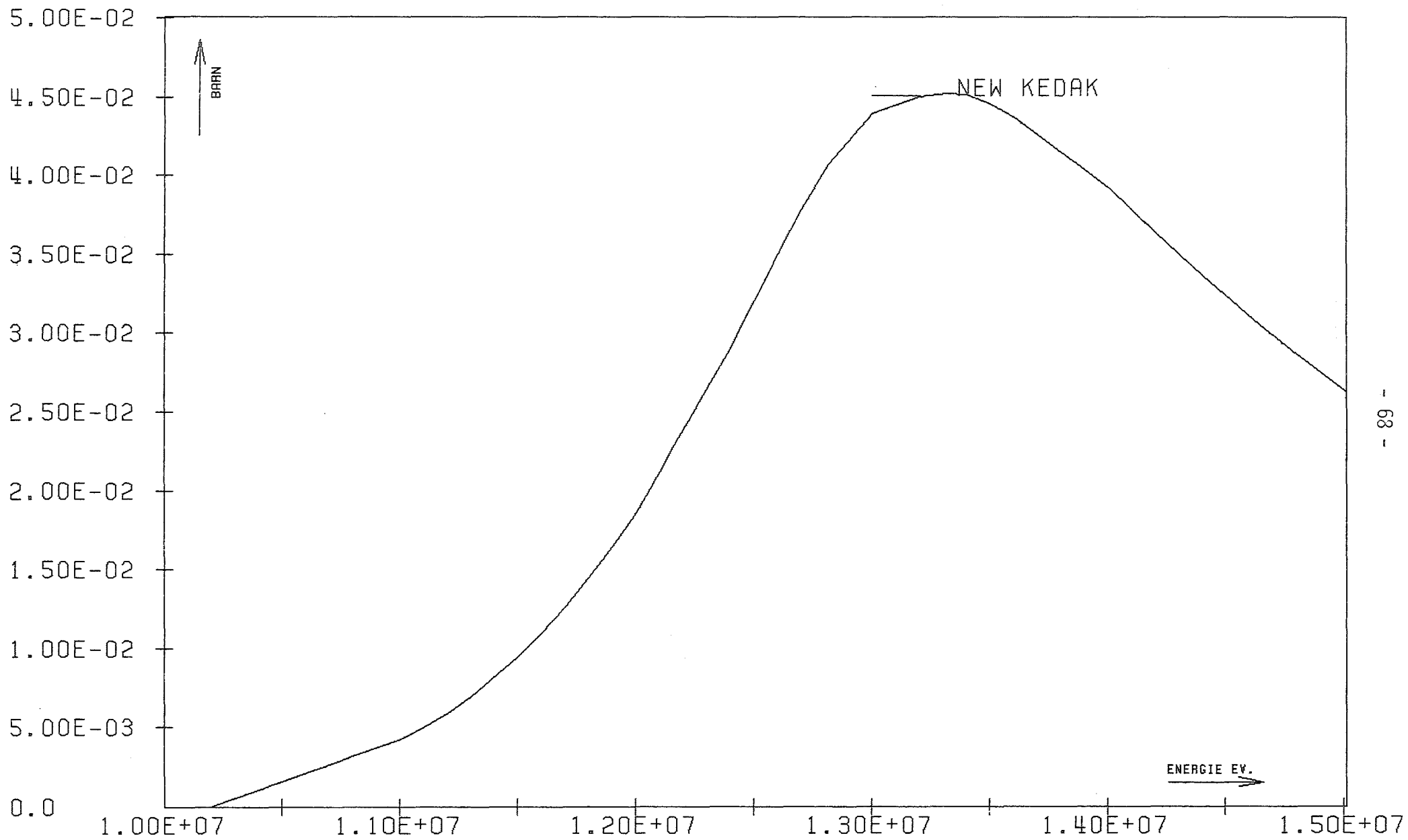


FIG. 17 0 16 SGIZ 0.9600+07 INR9010 30.09 17.28.

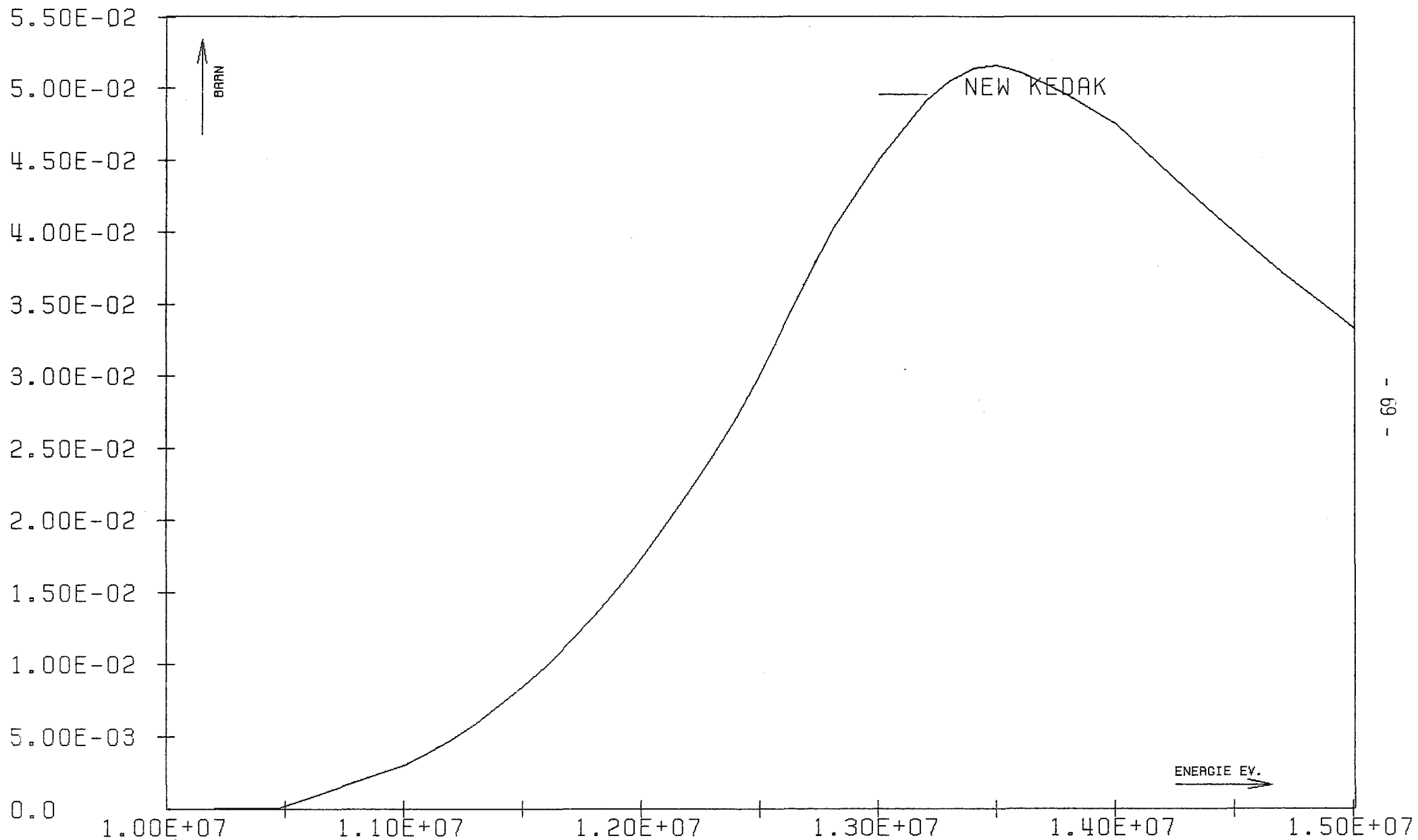


FIG. 18 0 16 SGIZ 0.9850+07 INR9010 30.09 17.28.

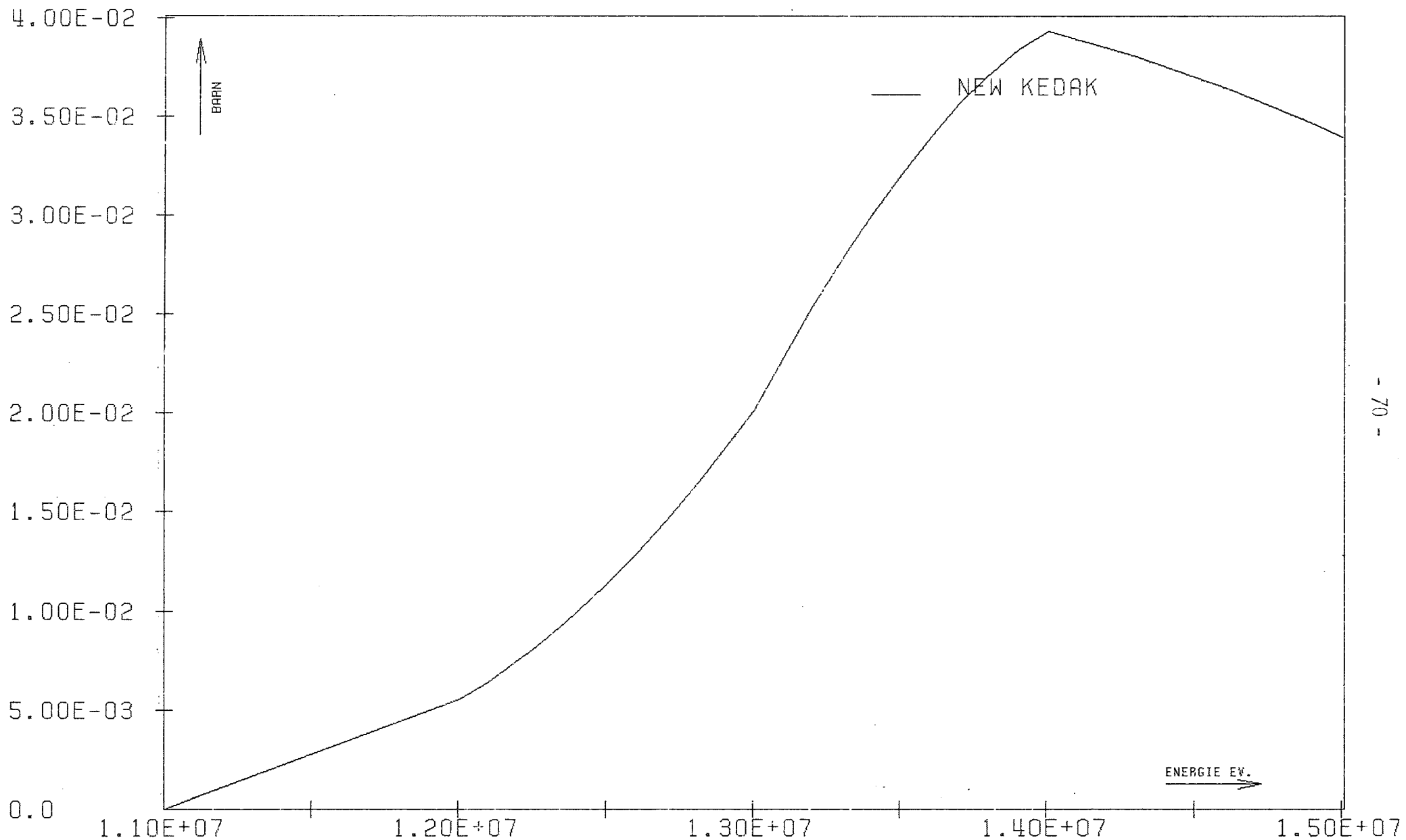


FIG. 19

0 16 SGIZ

0.1040+08

INR9010I 29.09 21.52.

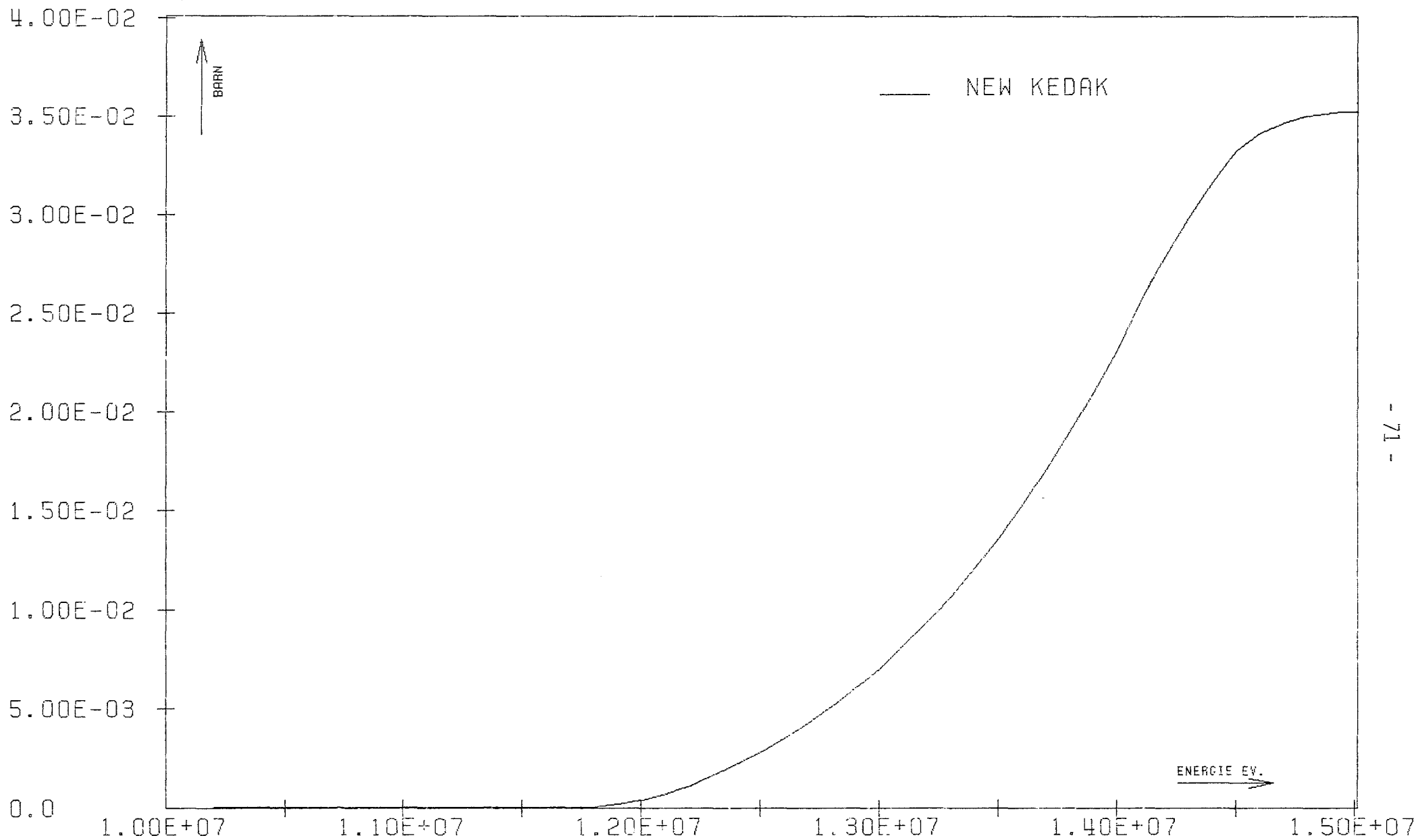


FIG. 20 0 16 SGIZ 0.111D+08 INR9010 01.10 12.05.

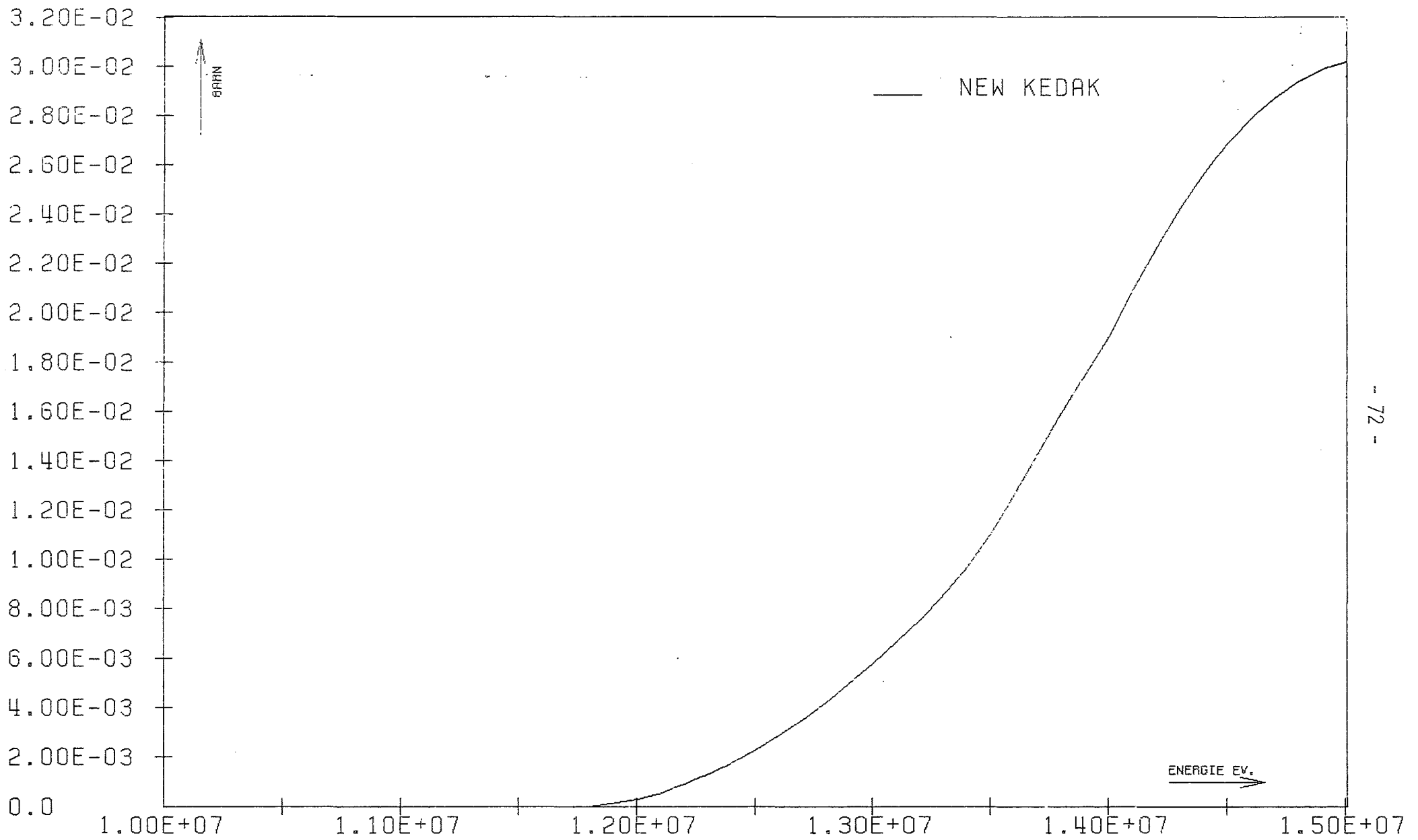


FIG. 21

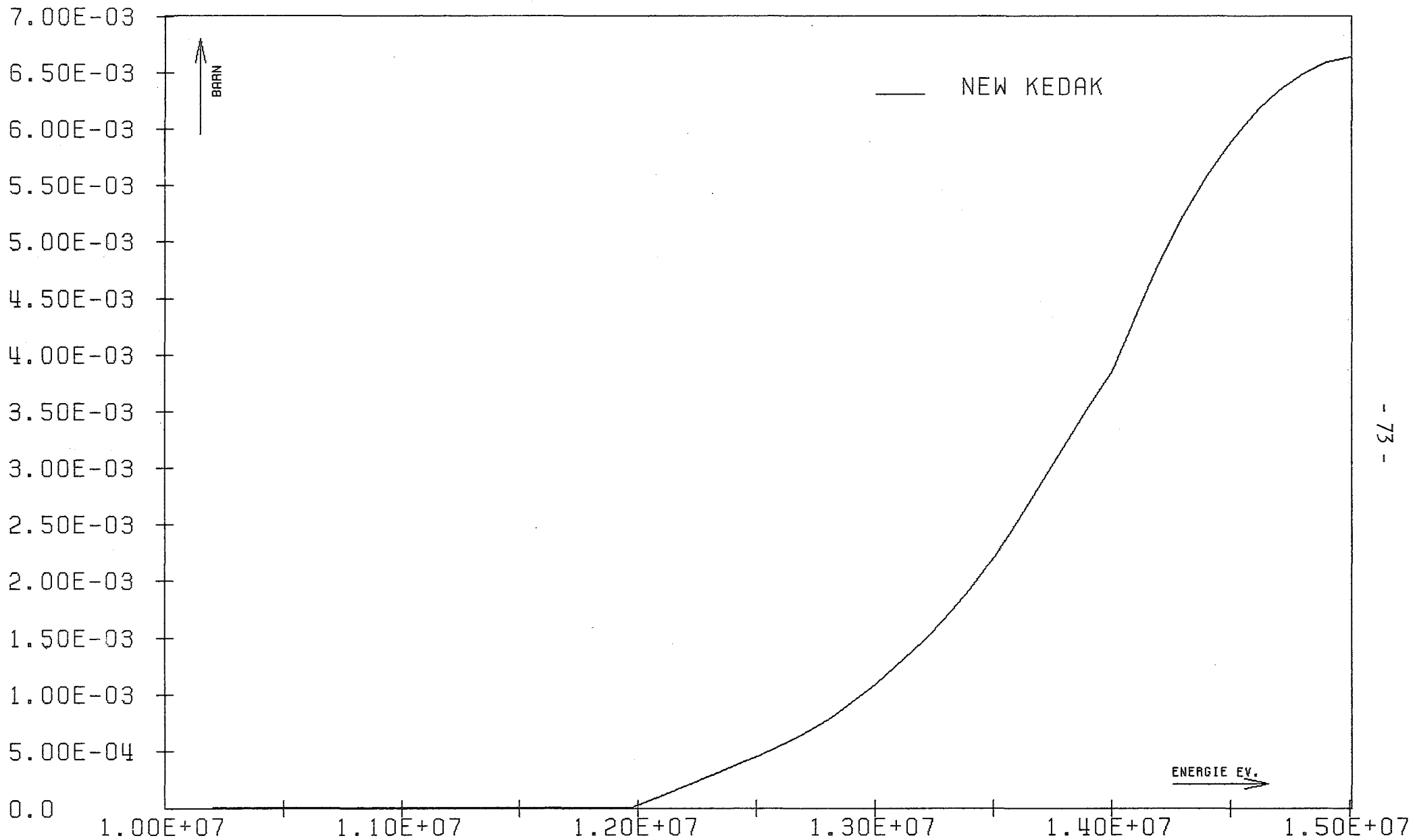
Ø 16

SGIZ

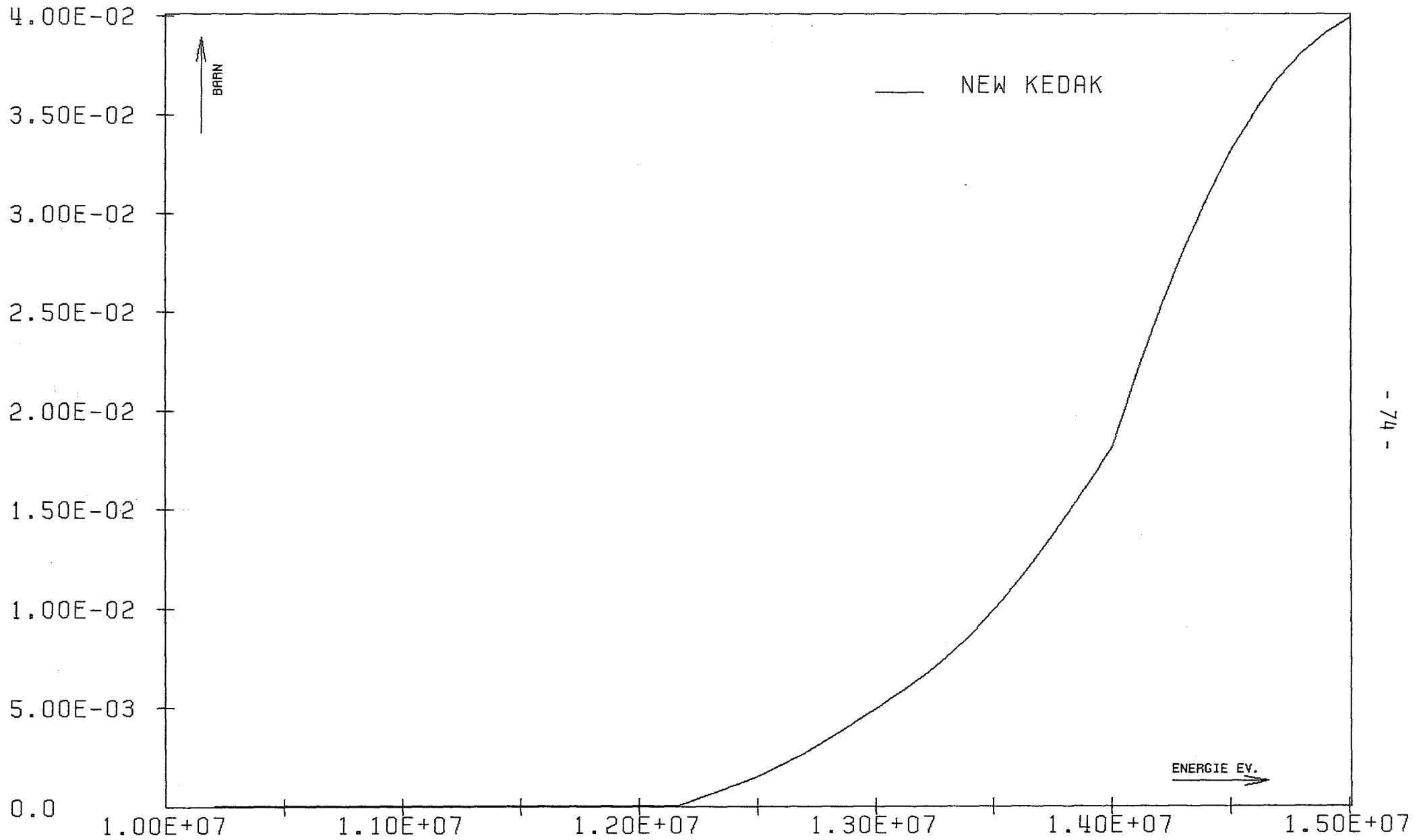
0.1110+08

INR9010

30.09 17.28.



- 73 -



- 74 -

FIG. 23 0 16 SGIZ 0.1140+08 INR9010 30.09 17.28.

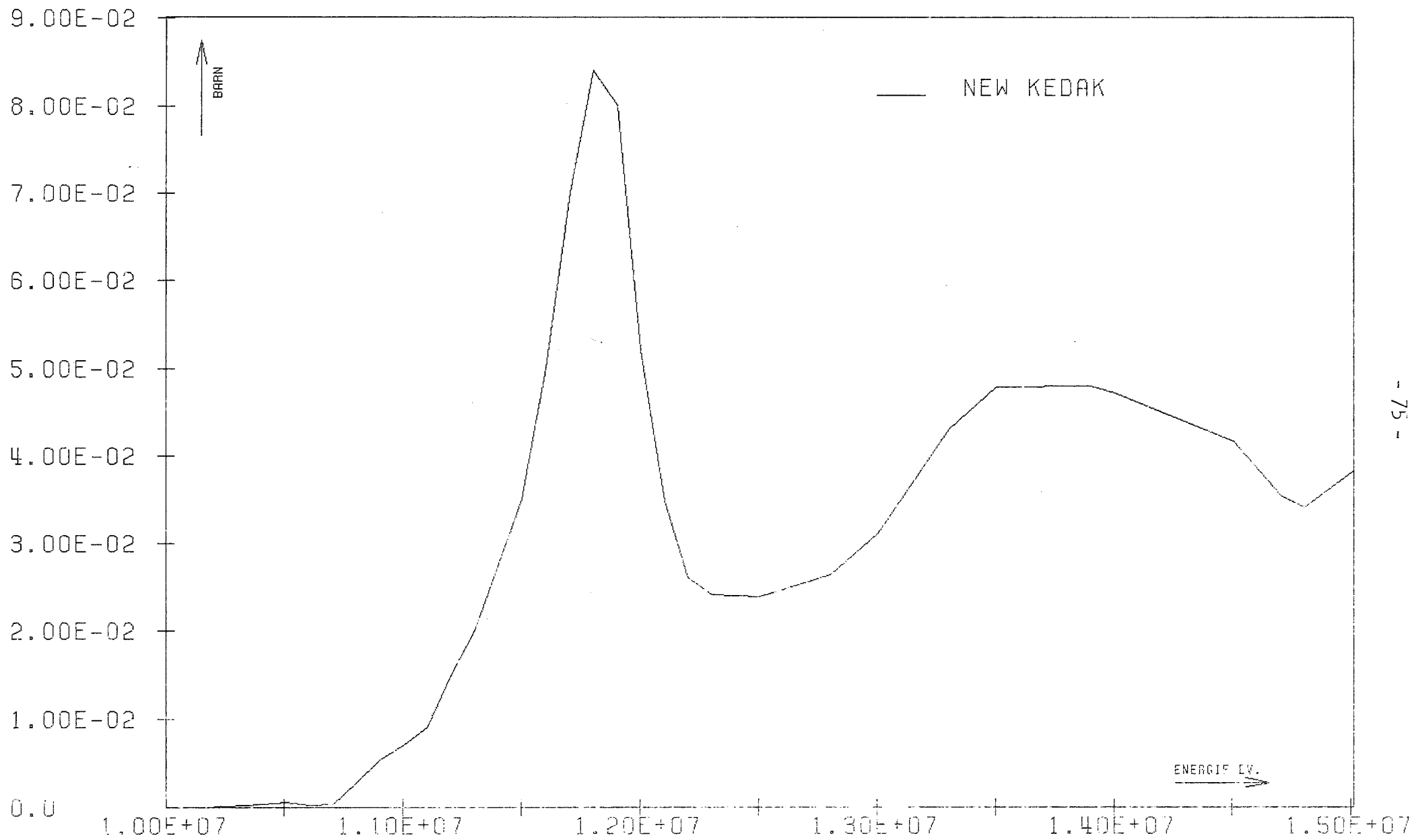


FIG. 24 0 16 SGP

INR9010 01.10 12.04.

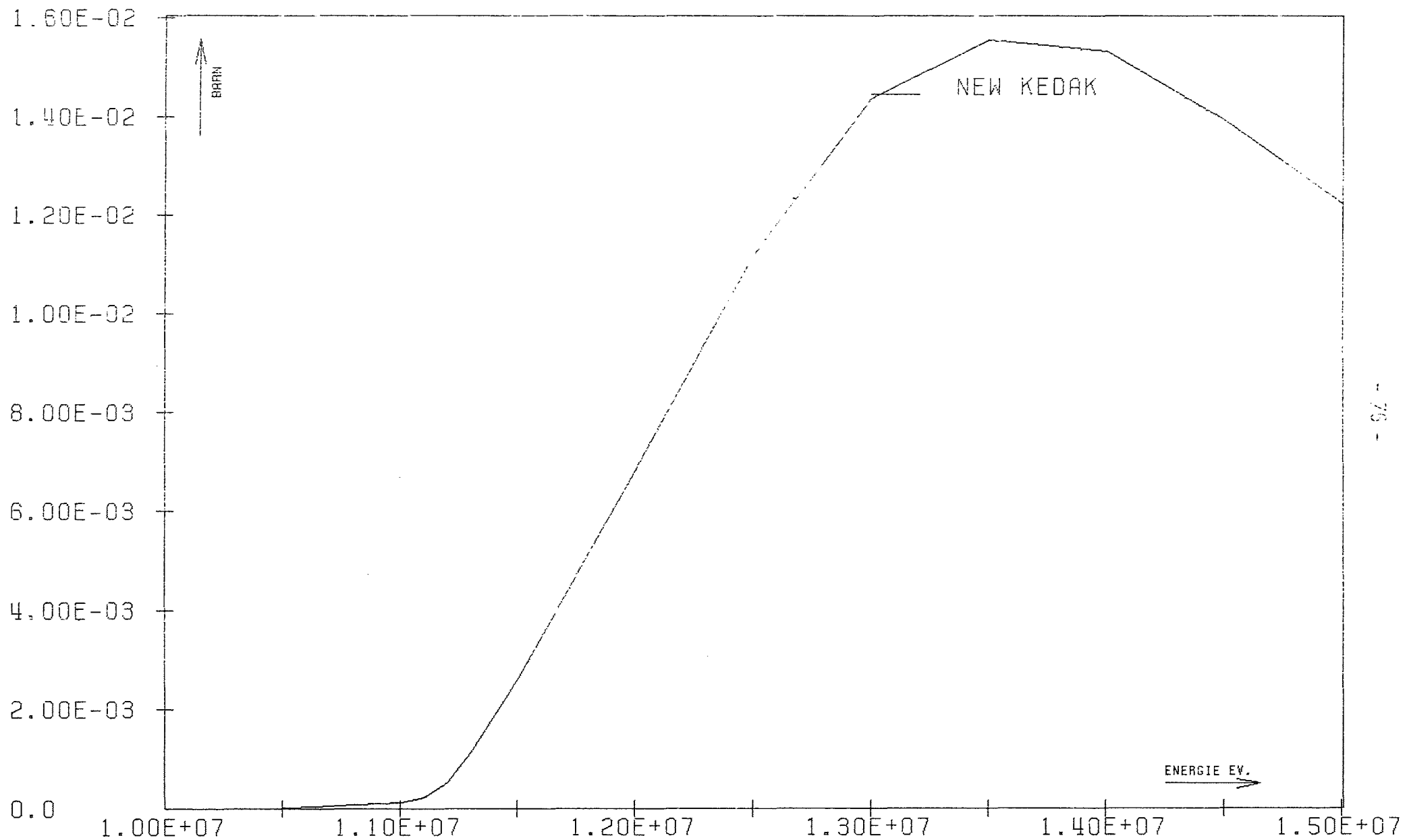


FIG. 25 0 16 SGD

INR9010 26.09 11.33.

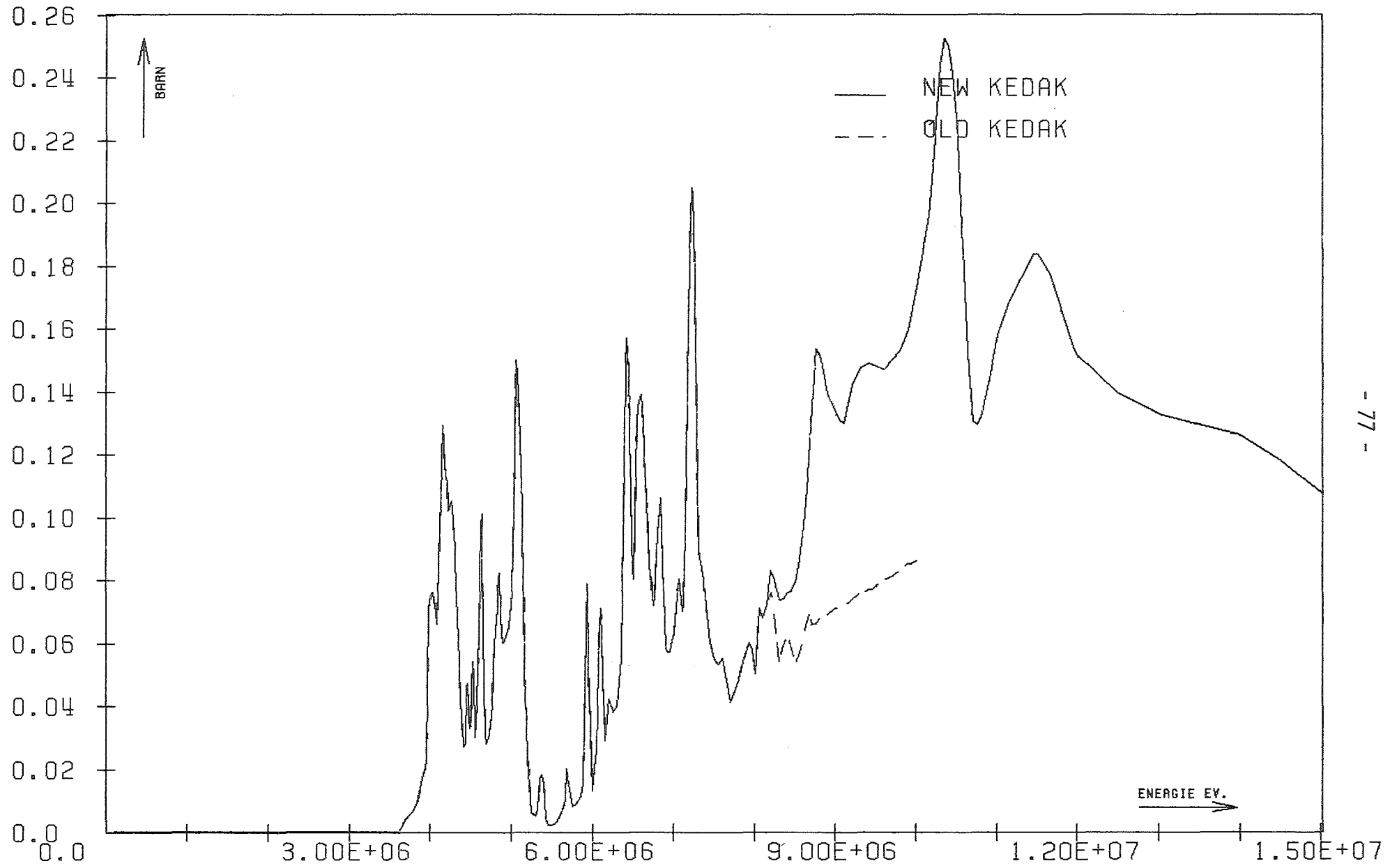


FIG. 26

0 16 SGALP

INR9010 26.09 11.32.

Flgiure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 1 keV	NA 23
2	SGG	''	
3	SGN	''	
4	SGTR	''	
5	SGT	1 keV to 1 MeV	
6	SGG	''	
7	SGX	''	
8	SGN	''	
9	SGTR	''	
10	MUEL	''	
11	SGT	1 keV to 10 keV	
12	SGG	''	
13	SGN	''	
14	SGT	10 keV to 0.1 MeV	
15	SGG	''	
16	SGN	''	
17	SGTR	''	
18	MUEL	''	
19	SGT	0.1 MeV to 1 MeV	
20	SGG	''	
21	SGX	''	
22	SGN	''	
23	SGT	1 MeV to 15 MeV	
24	SGG	''	
25	SGA	''	
26	SGX	''	
27	SGN	''	
28	SGTR	''	
29	MUEL	''	
30	SGI	''	
31	SGIZ		
	E*= 0.439 MeV	Thr. to 4 MeV	
32	E*= 2.080 MeV	''	
33	E*= 2.390 MeV	''	
34	E*= 2.640 MeV	''	
35	E*= 2.710 MeV	''	
36	E*= 2.980 MeV	''	
37	E*= 3.380 MeV	''	
38	SGP	4 MeV to 15 MeV	
39	SGALP	6 MeV to 15 MeV	

Na

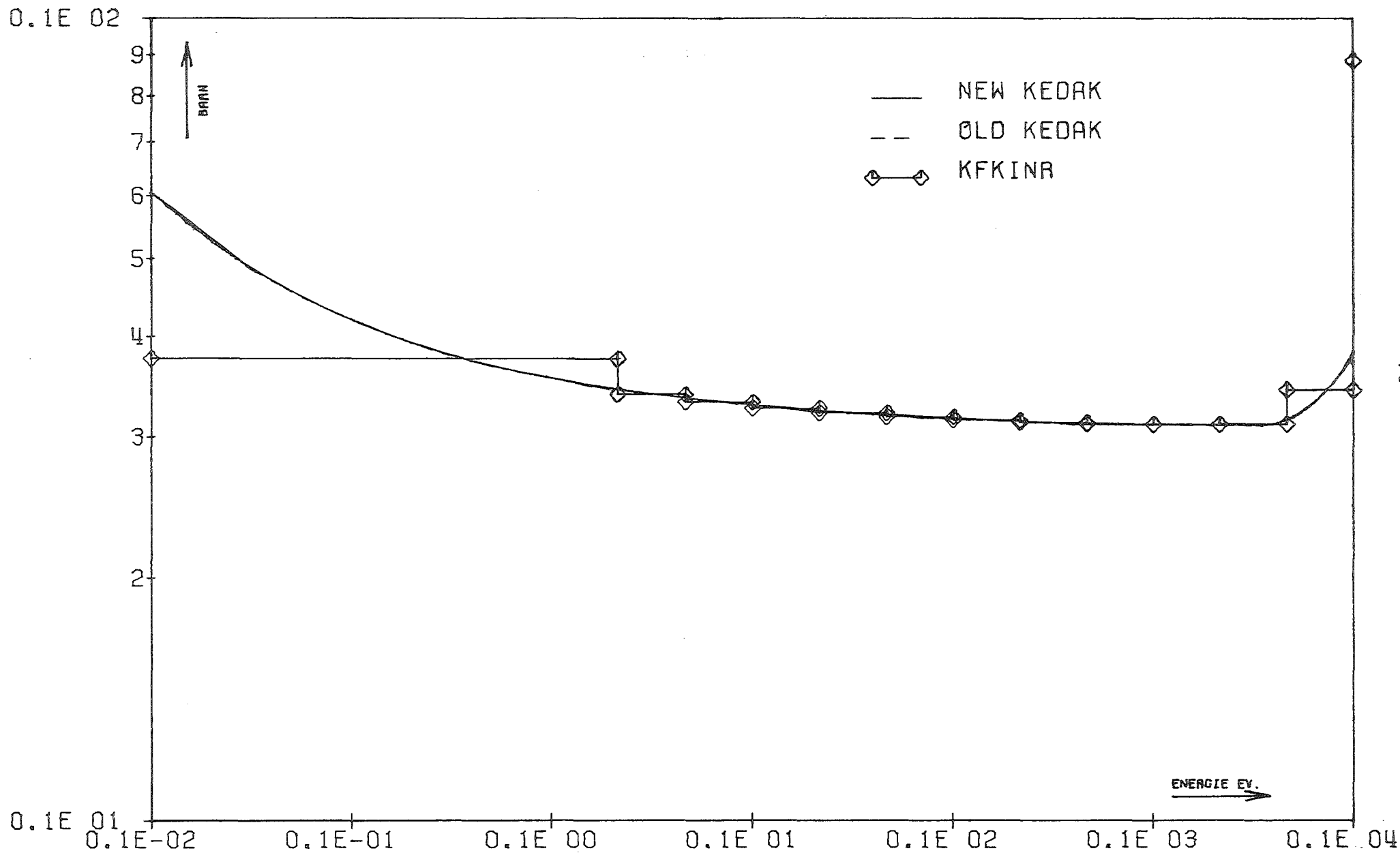
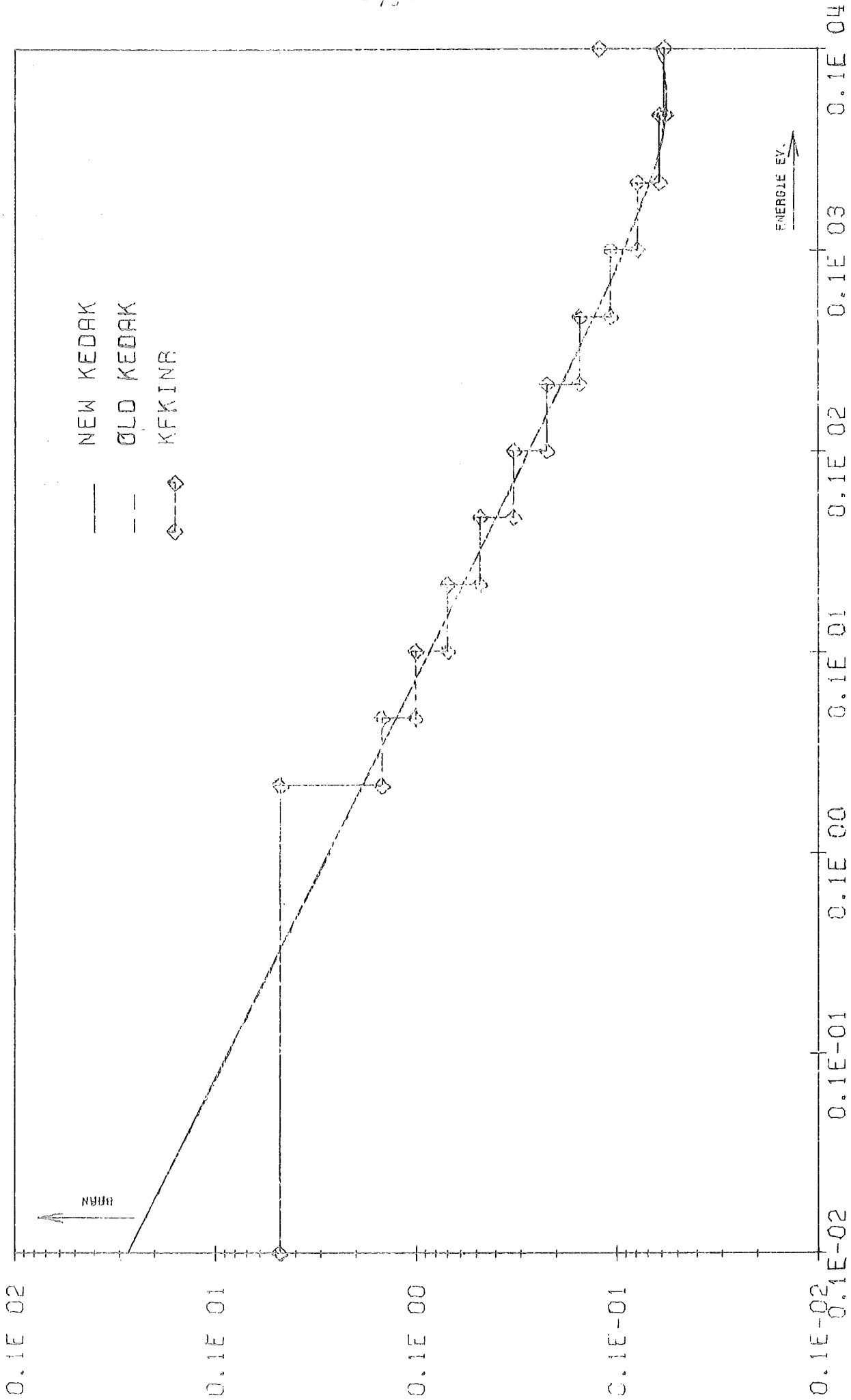


FIG. 1 NA 23 SGT

INR901NA 14.01 16.19.



INR901NA 19.01 16.28.

FIG. 2 NA 23 SGG

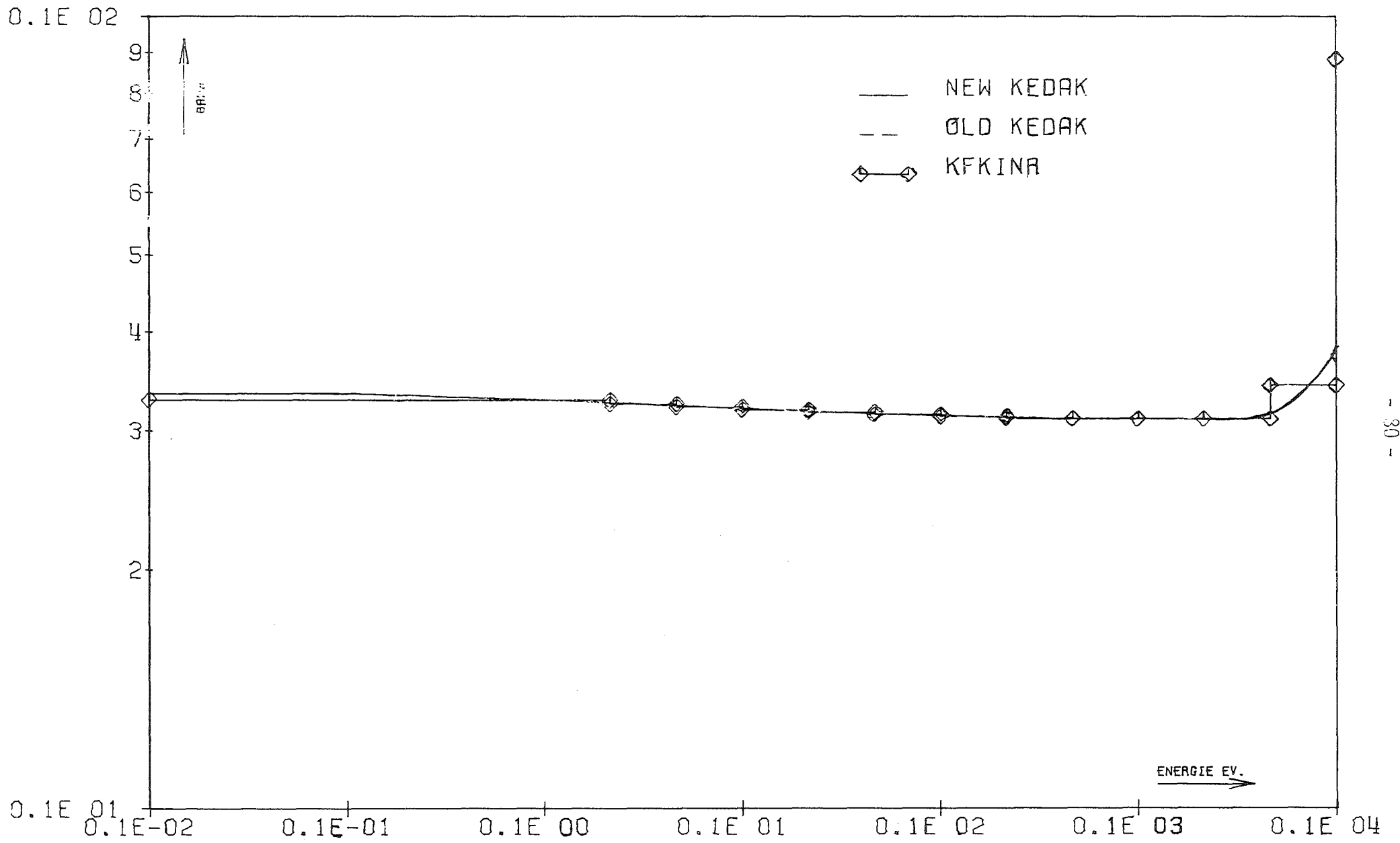


FIG. 3 NA 23 SGN

INR901NA 19.01 16.28.

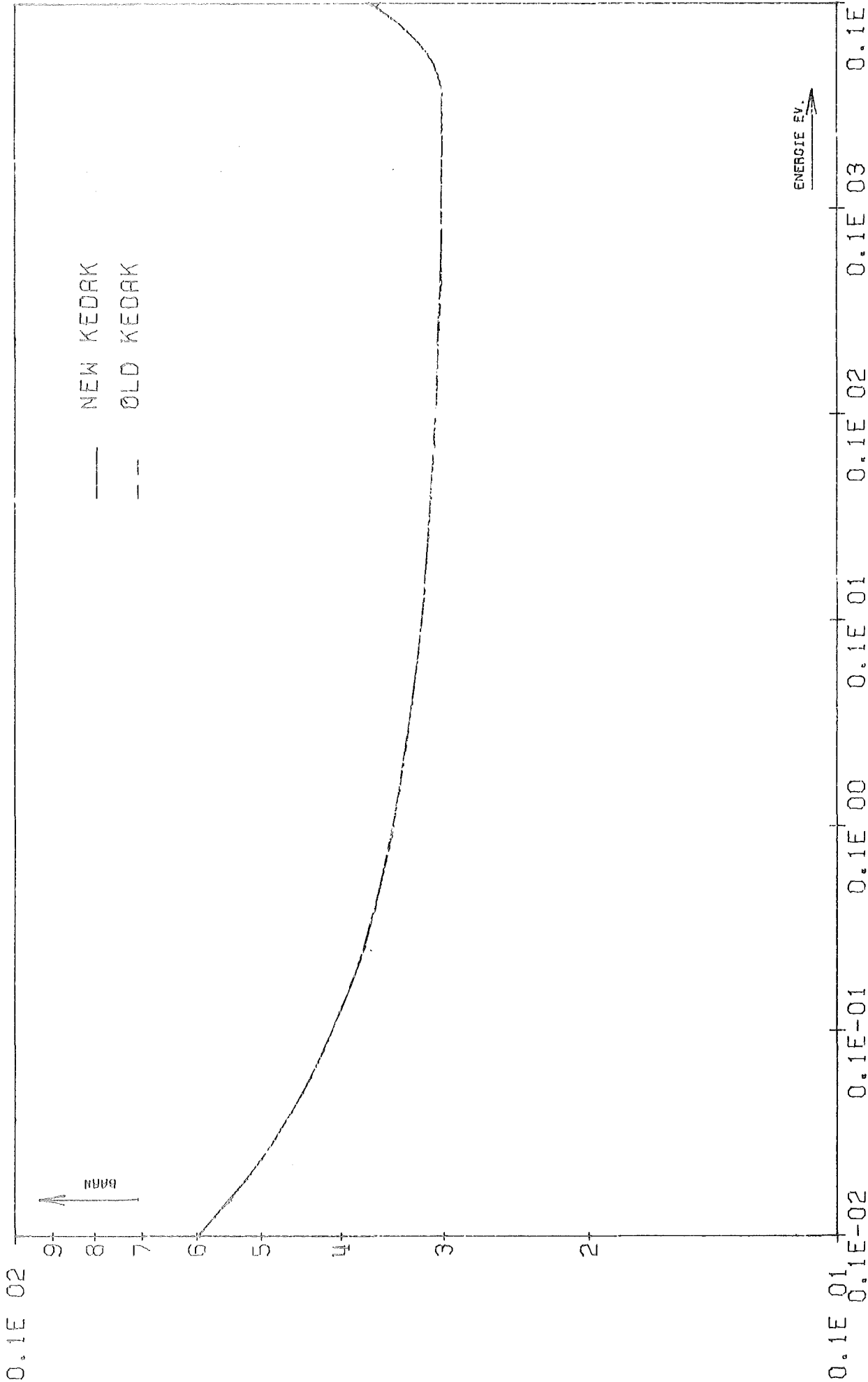


FIG. 4 NA 23 SCTR
INR901NA 14.01 16.19.

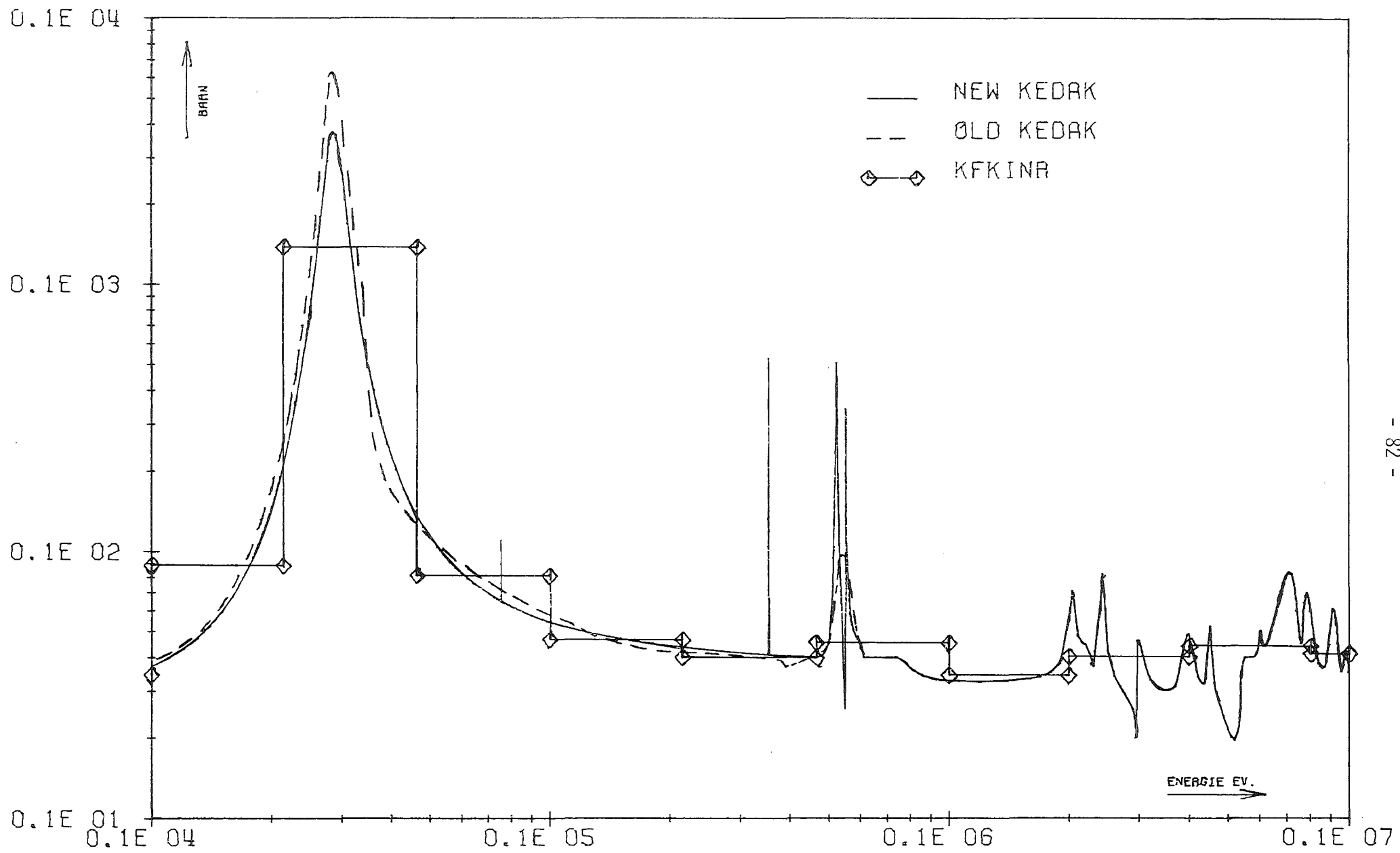


FIG. 5 NA 23 SGT INR901NA 14.01 16.19.

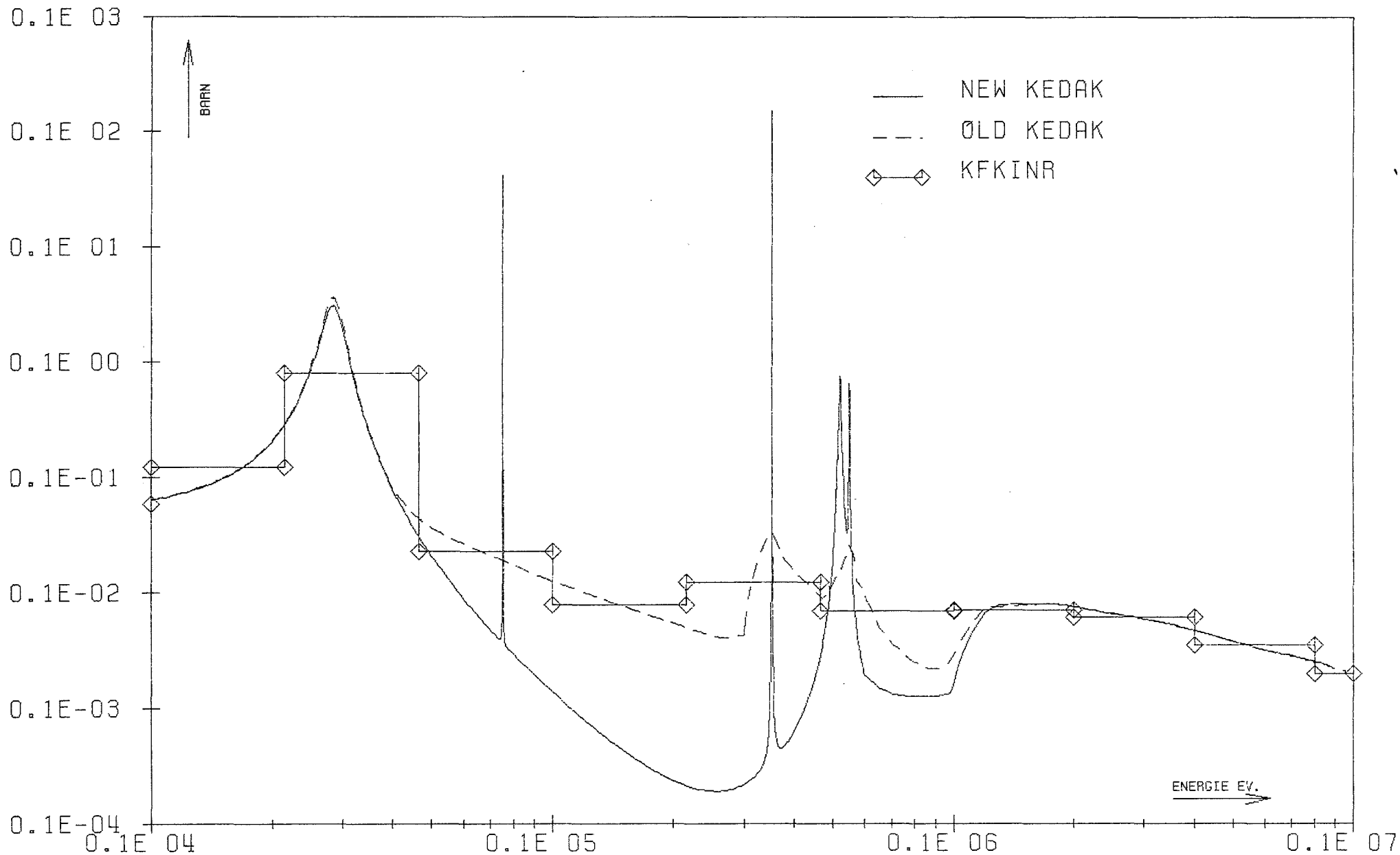


FIG.

6

NA 23

SGG

INR901NA 29.07 14.13.

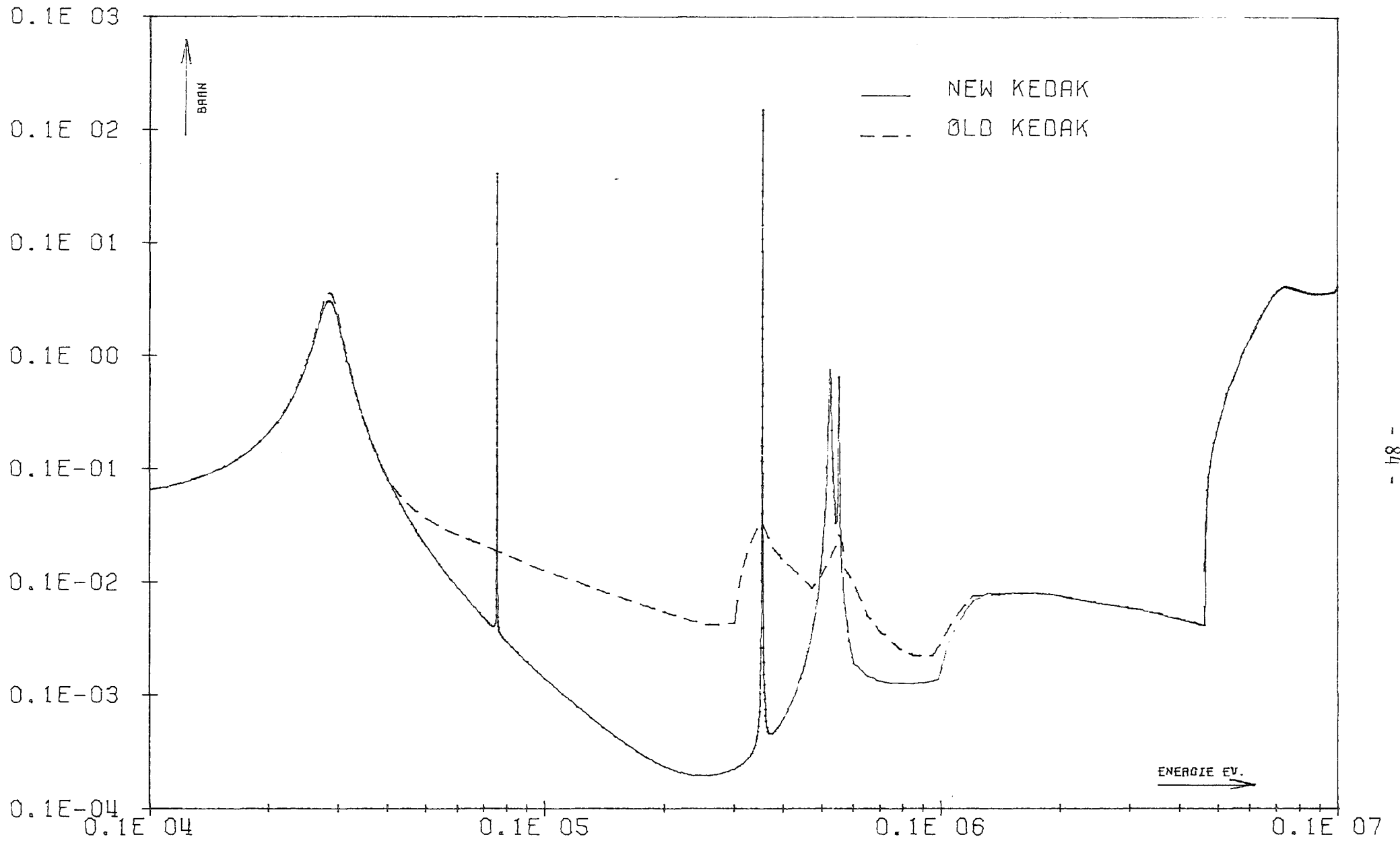


FIG. 7 NA 23 SGX INR901S0 06.08 12.33.

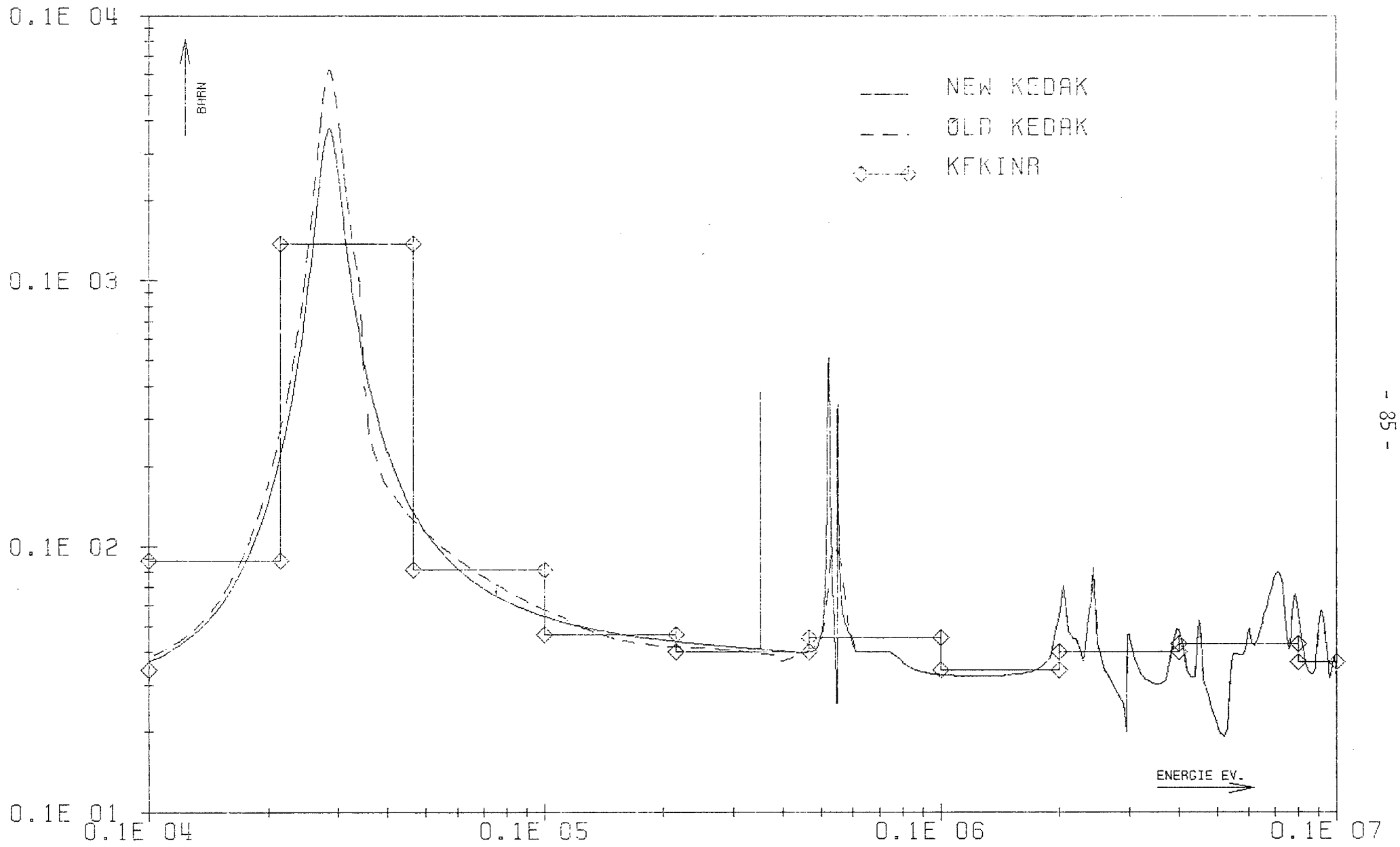


FIG.

8

NA 23

SGN

INR901NA 29.07 14.13.

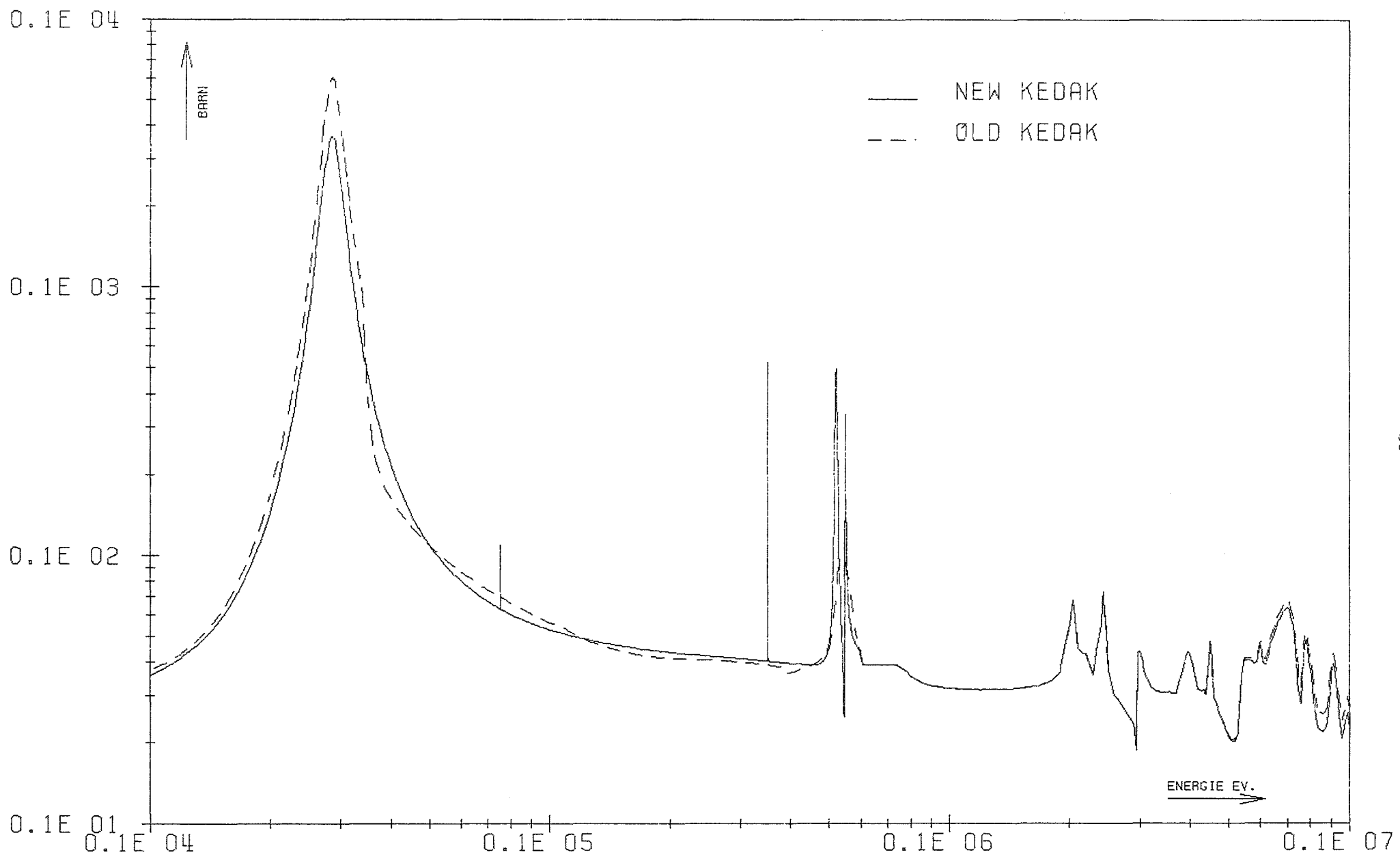


FIG. 9 NA 23 SGTR INR901NA 30.07 17.55.

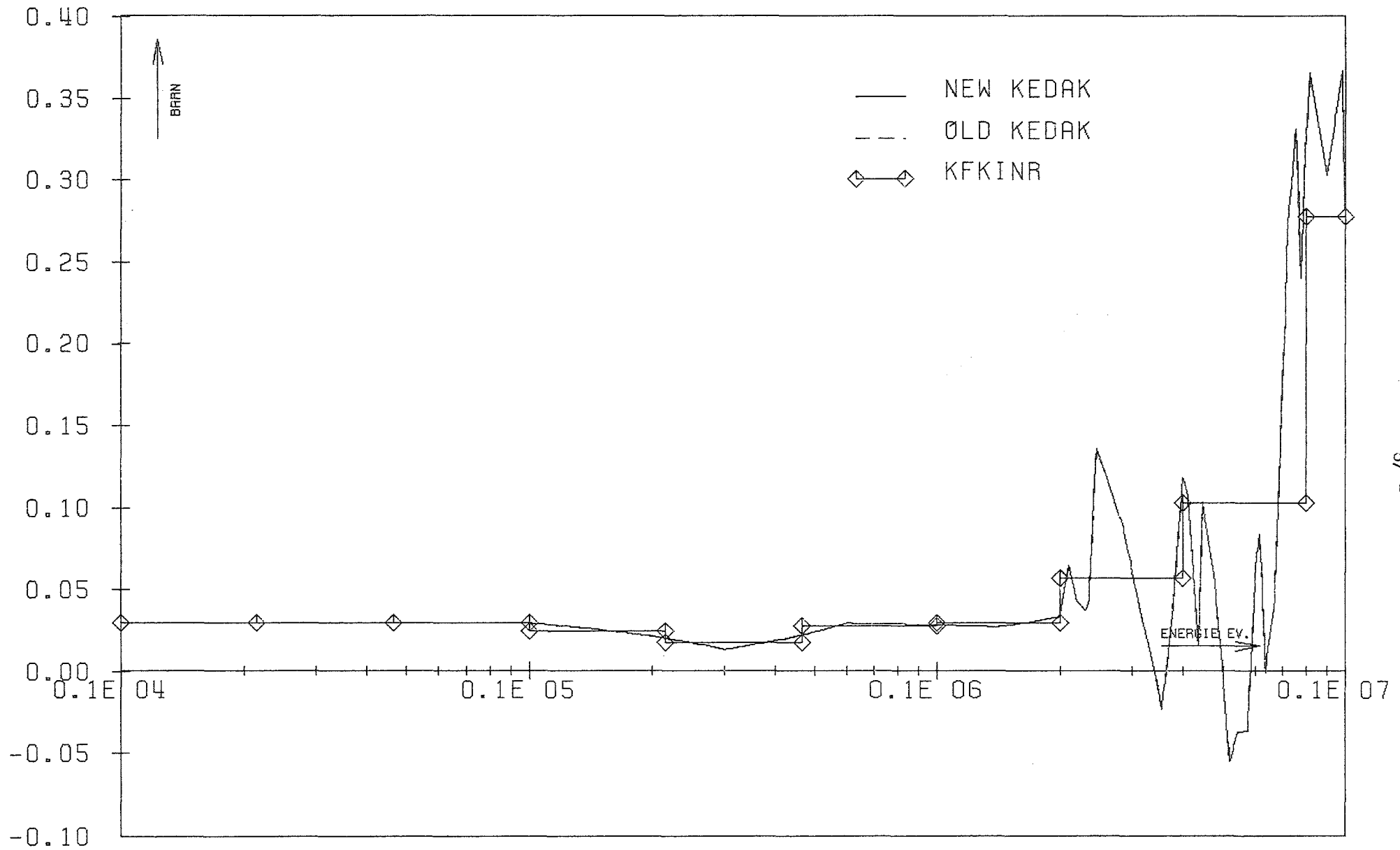


FIG. 10 NA 23 MUEL

INR901NA 30.07 17.55.

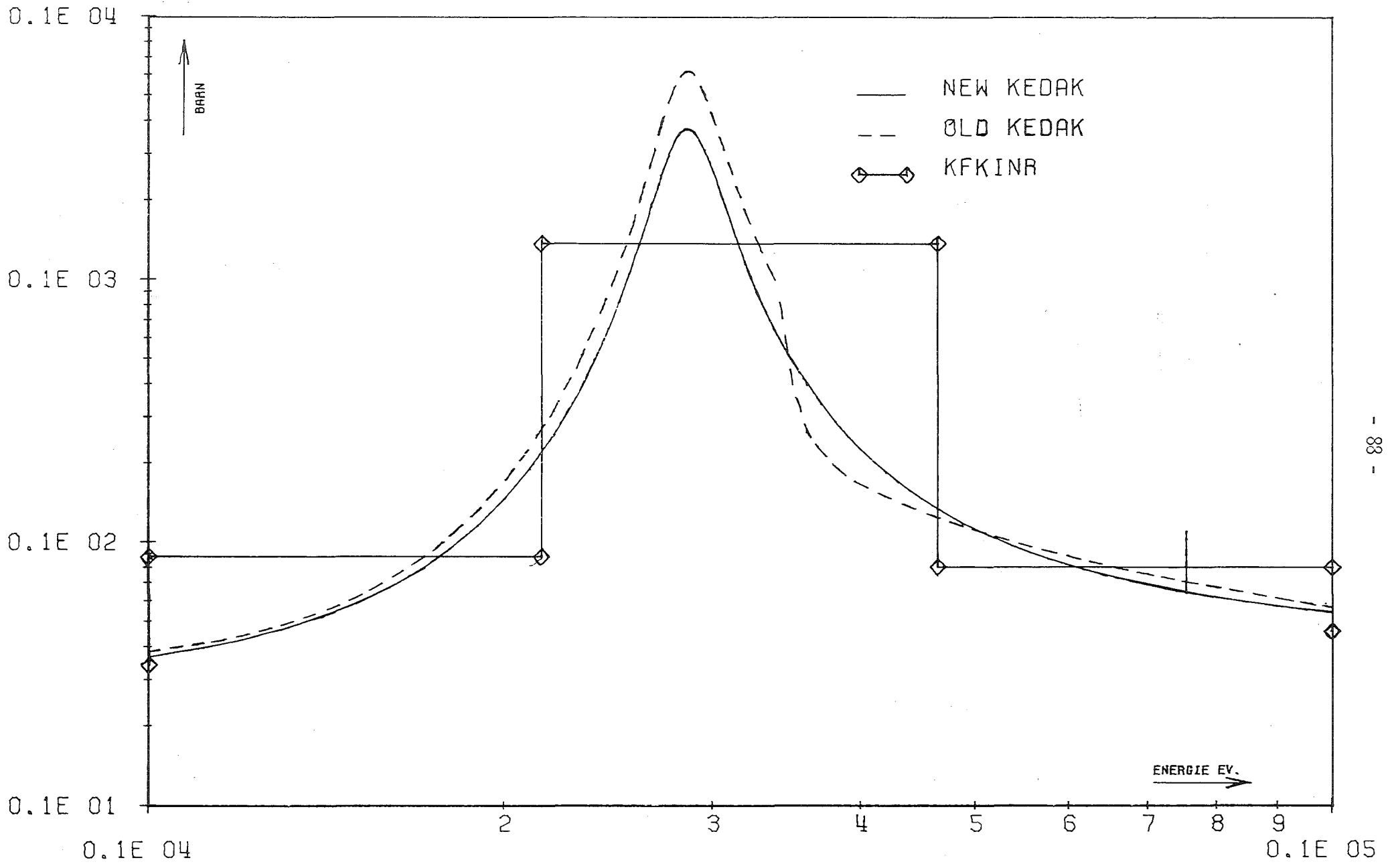


FIG. 11 NA 23 SGT

INR901NA 19.01 16.28.

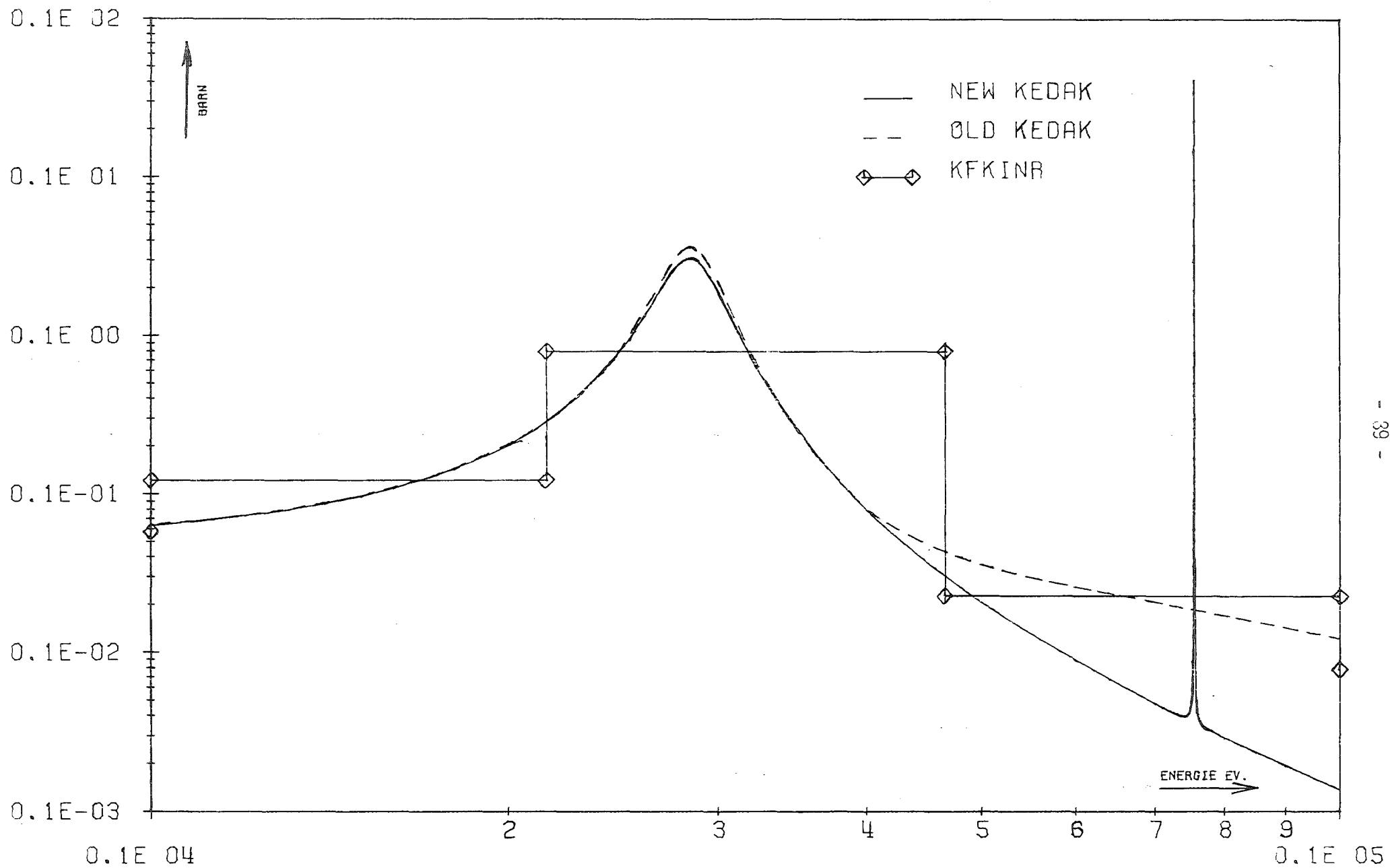


FIG. 12 NA 23 SGG

INR901NA 19.01 16.28.

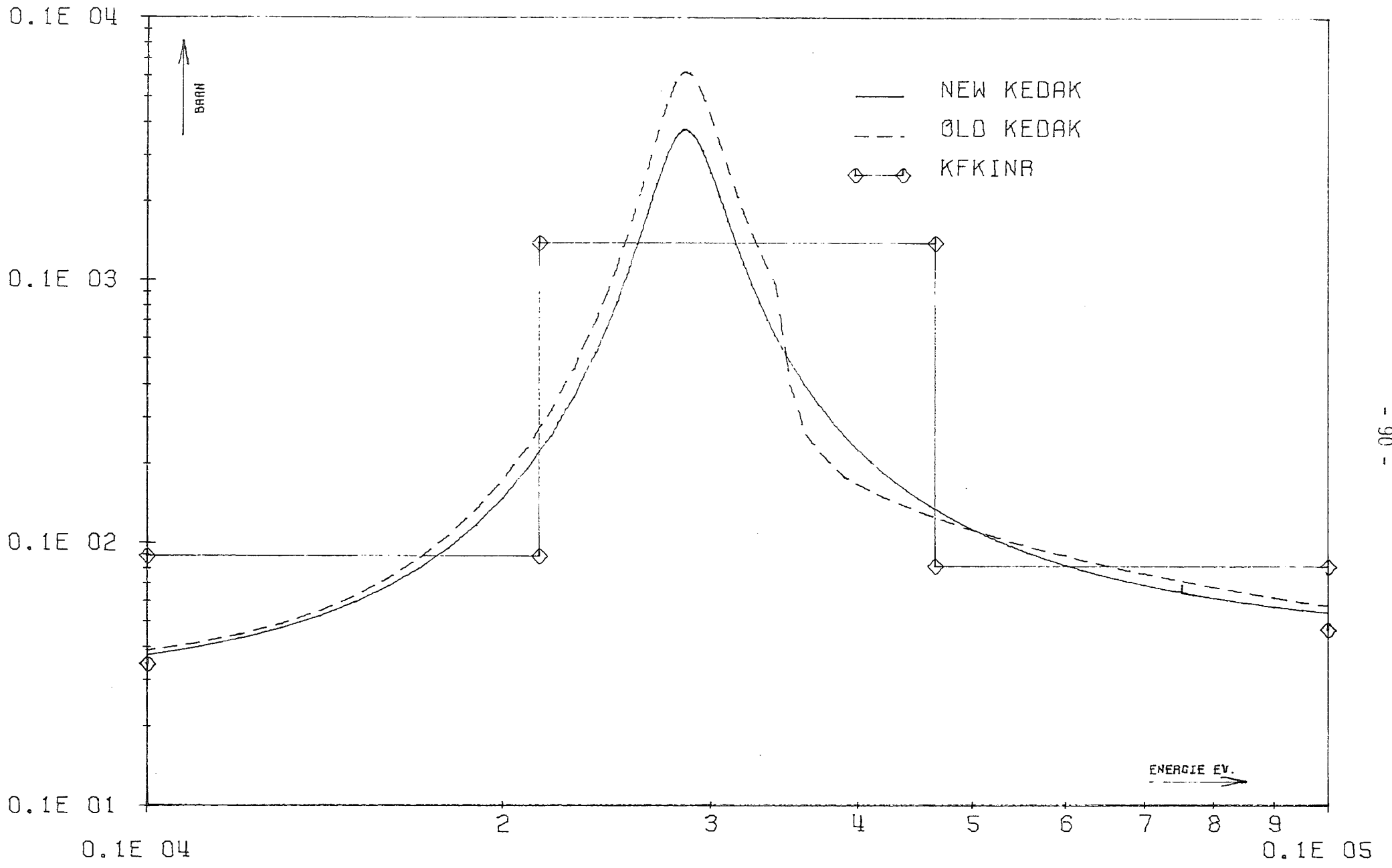


FIG. 13

NA 23 SGN

INR901S0 06.08 12.33.

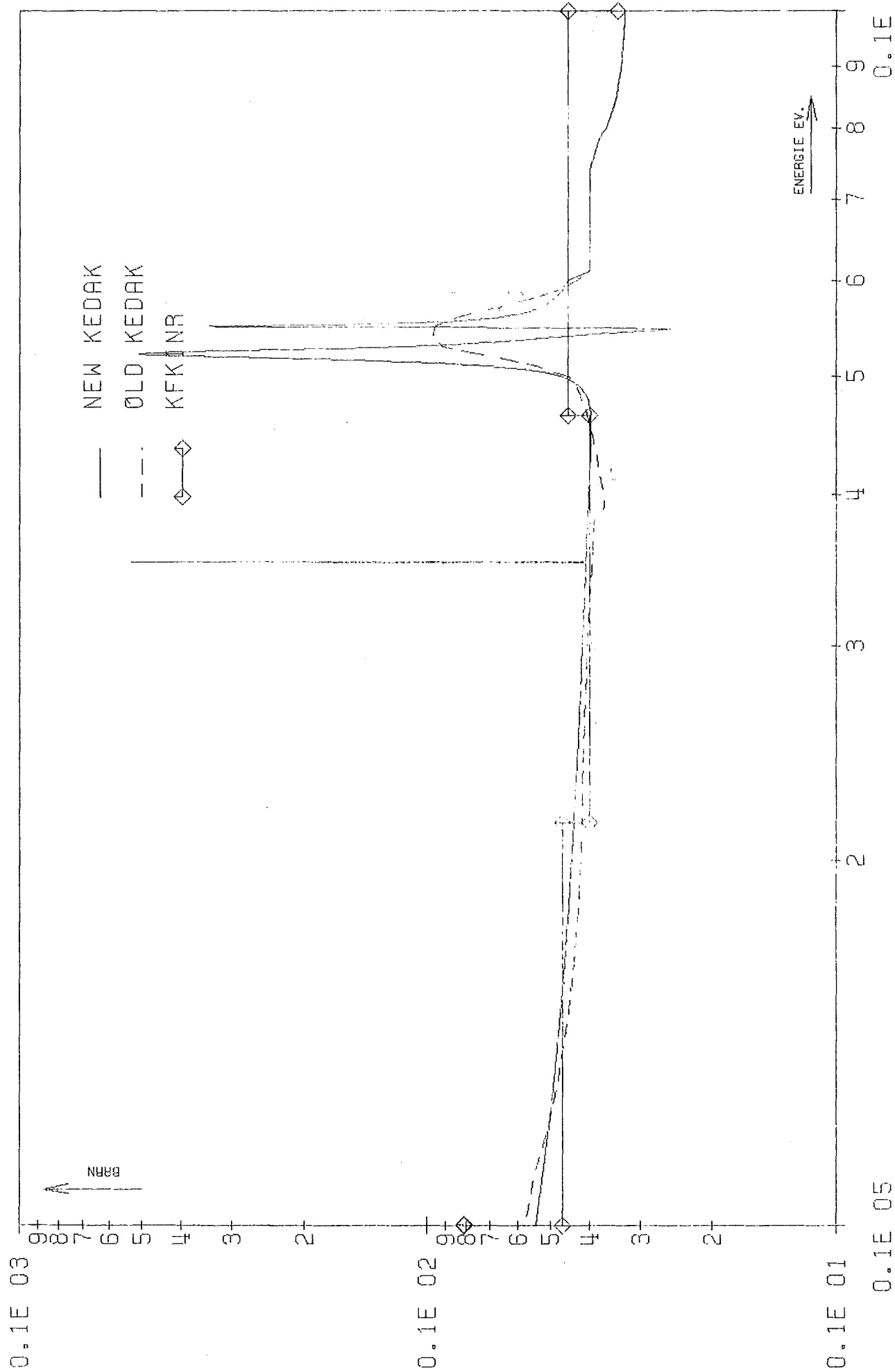


FIG. 14

NA 23

SGT

INR901NA 29.07 14.12.

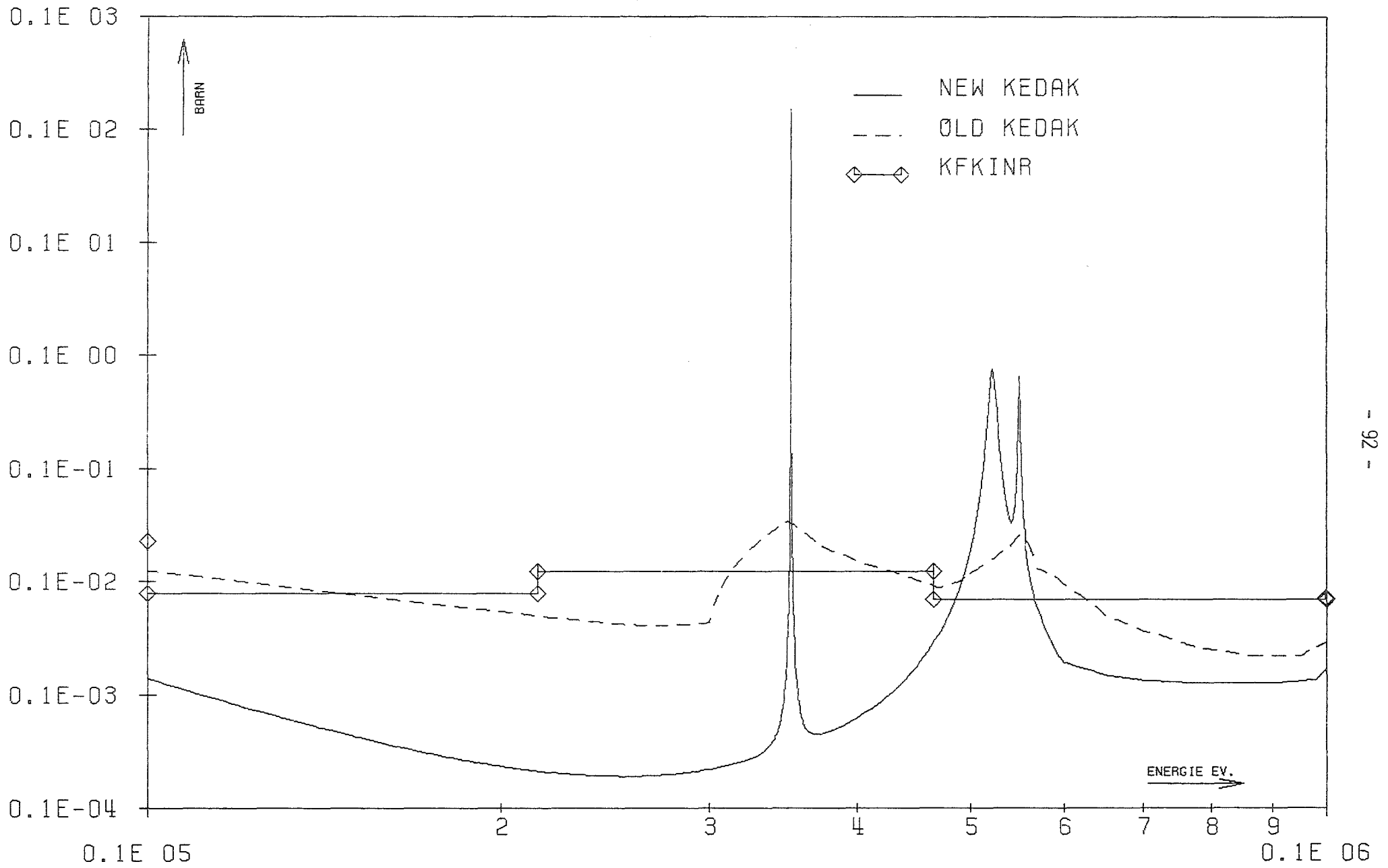


FIG. 15

NA 23

SGG

INR901NA 29.07 14.12.

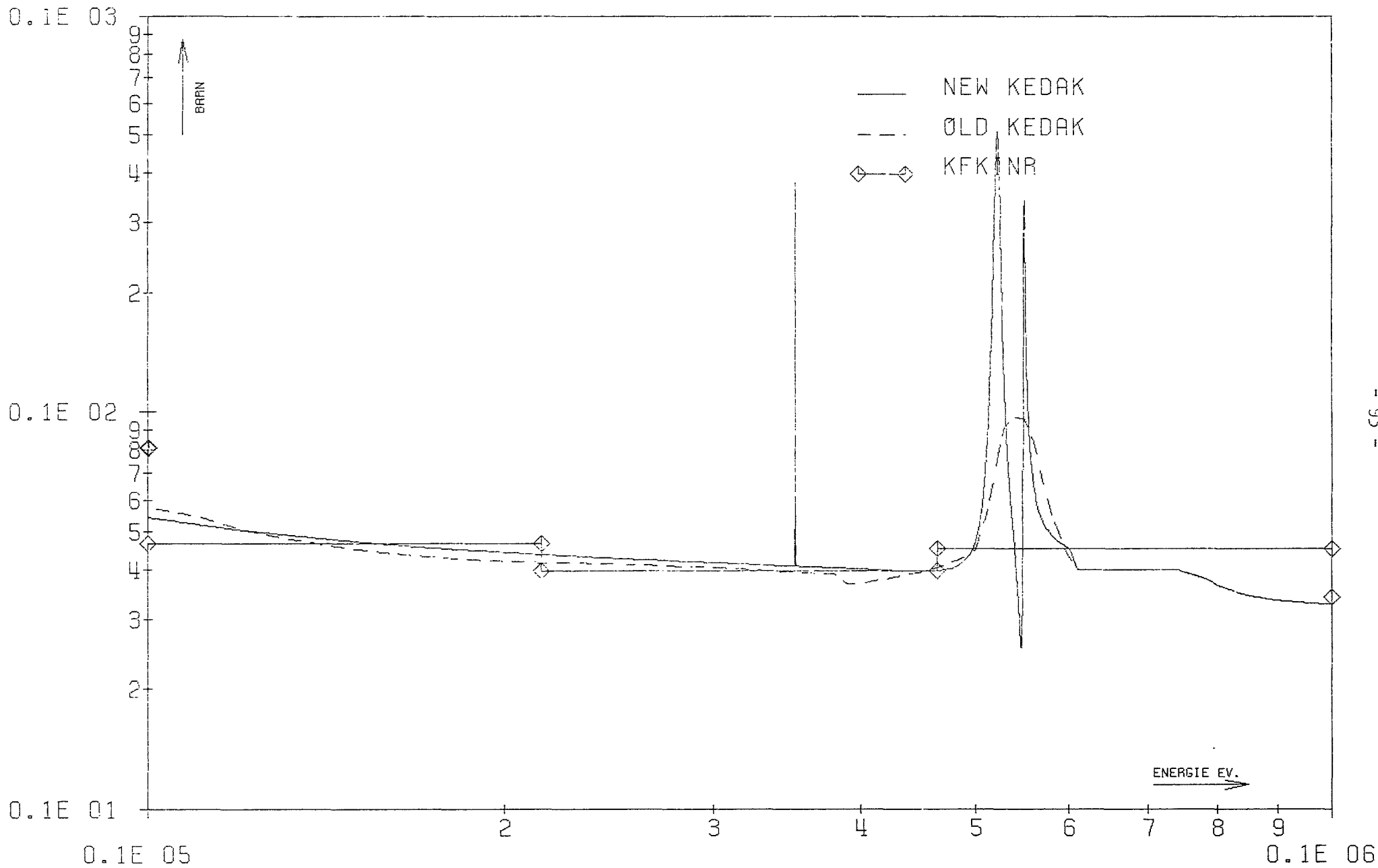


FIG. 16

NA 23

SGN

INR901NA 29.07 14.12.

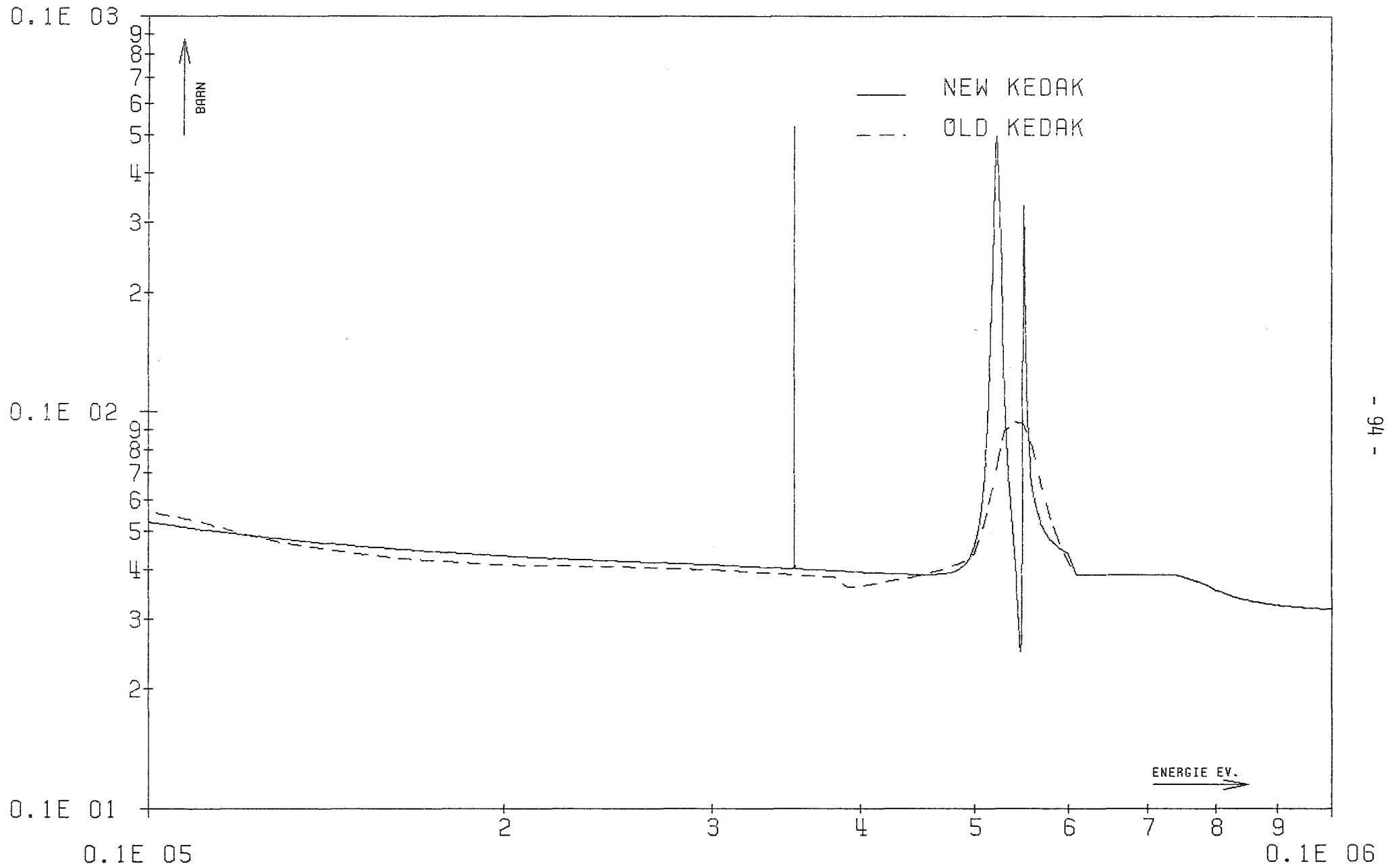


FIG. 17 NA 23 SGTR

INR901NA 29.07 14.12.

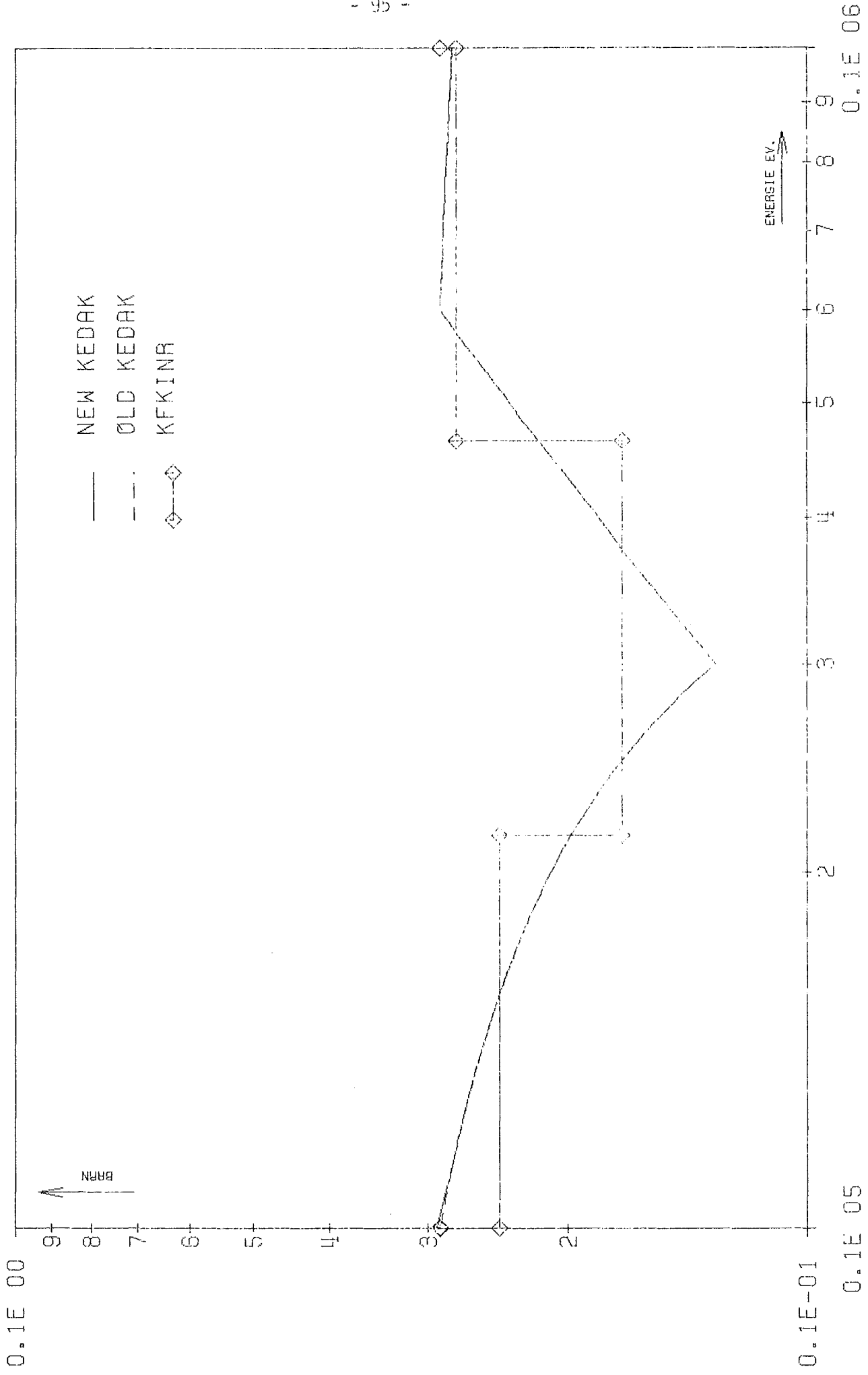


FIG. 18 NA 23 MUEL INR901NA 29.07 14.12.

0.1E 05

0.1E 06

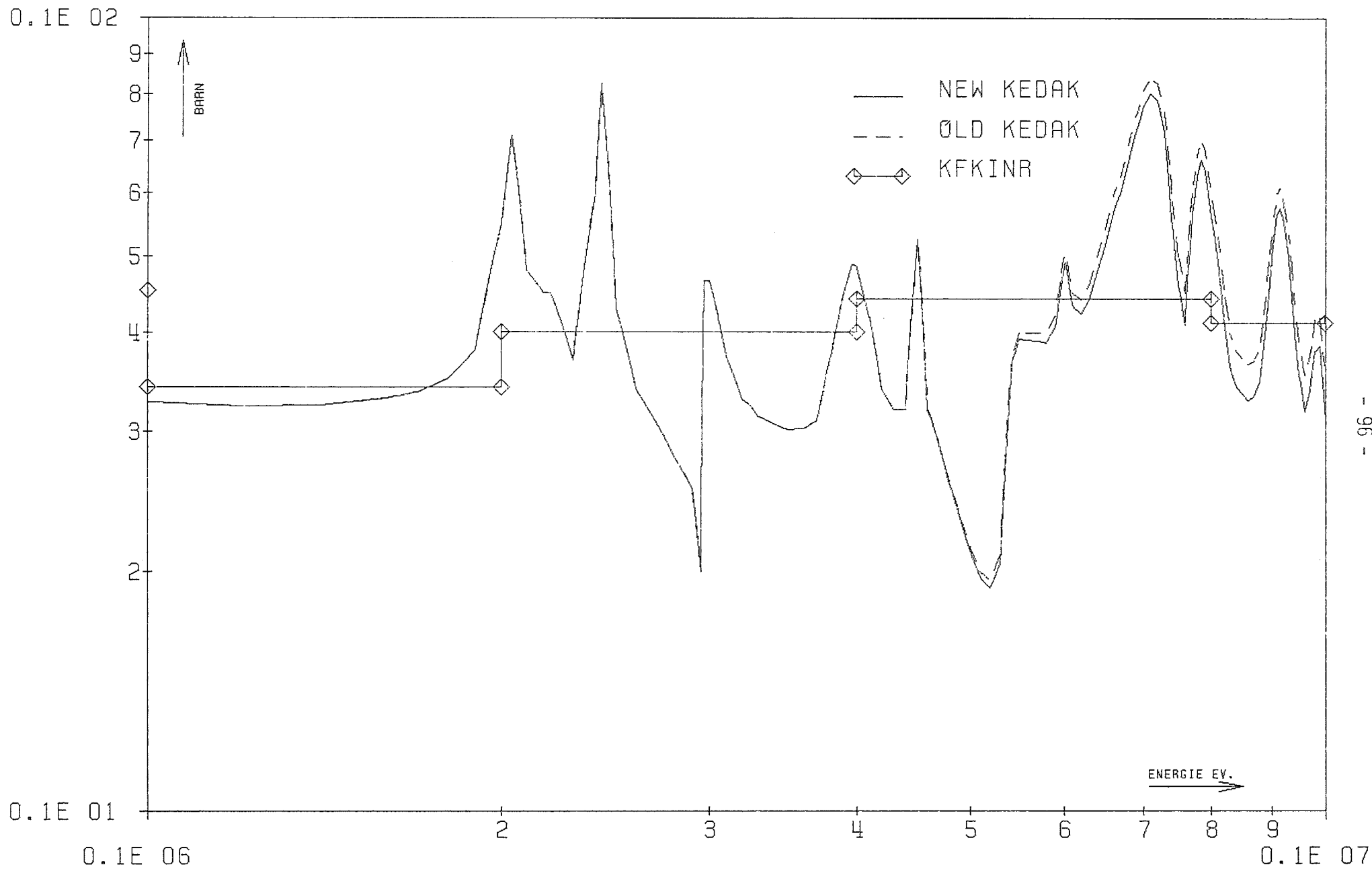


FIG. 19

NA 23

SGT

INR901NA 29.07 14.13.

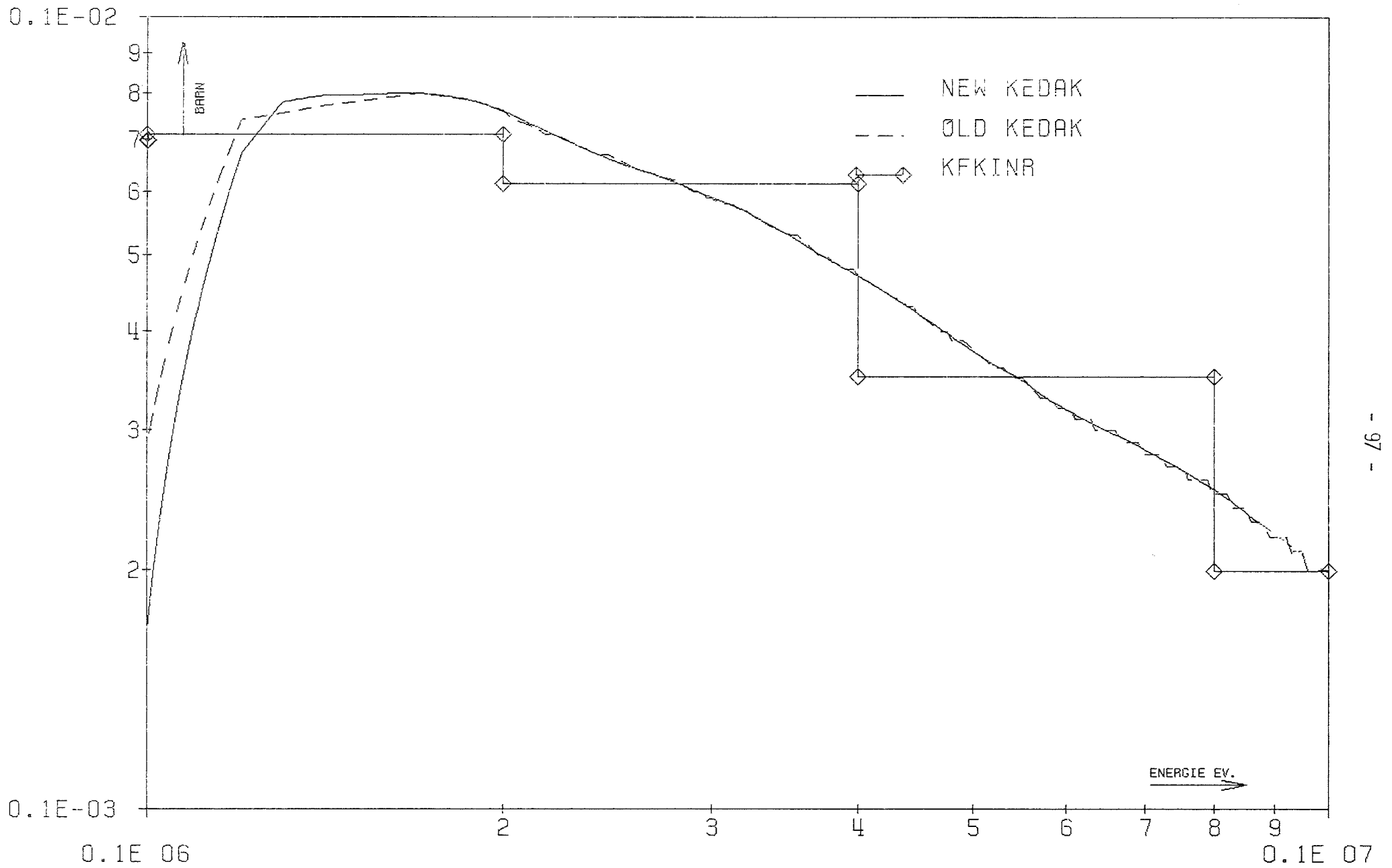


FIG. 20

NA 23

SGG

INR901NA 29.07 14.13.

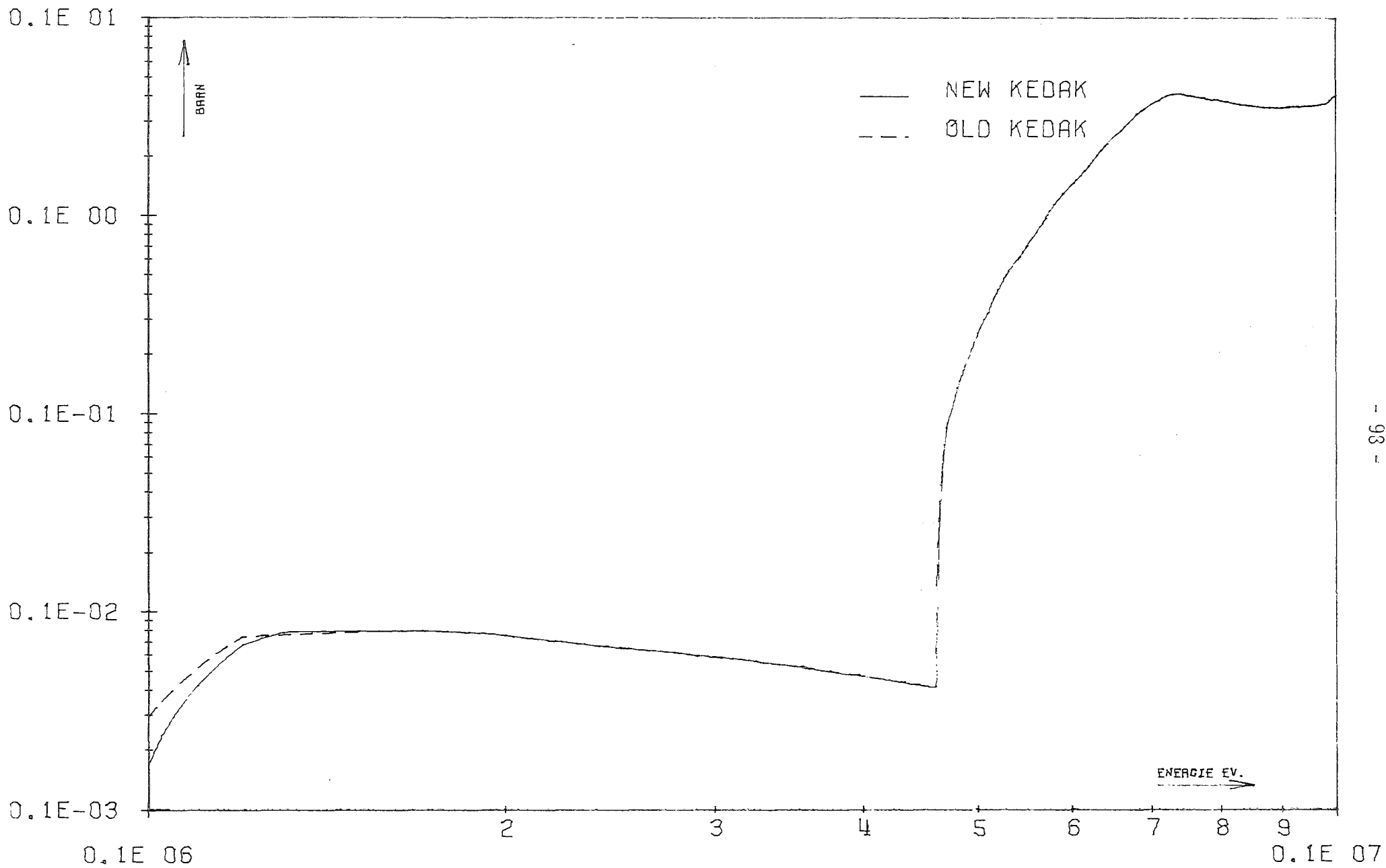


FIG. 21 NA 23 SGX

INR901S0 06.08 12.33.

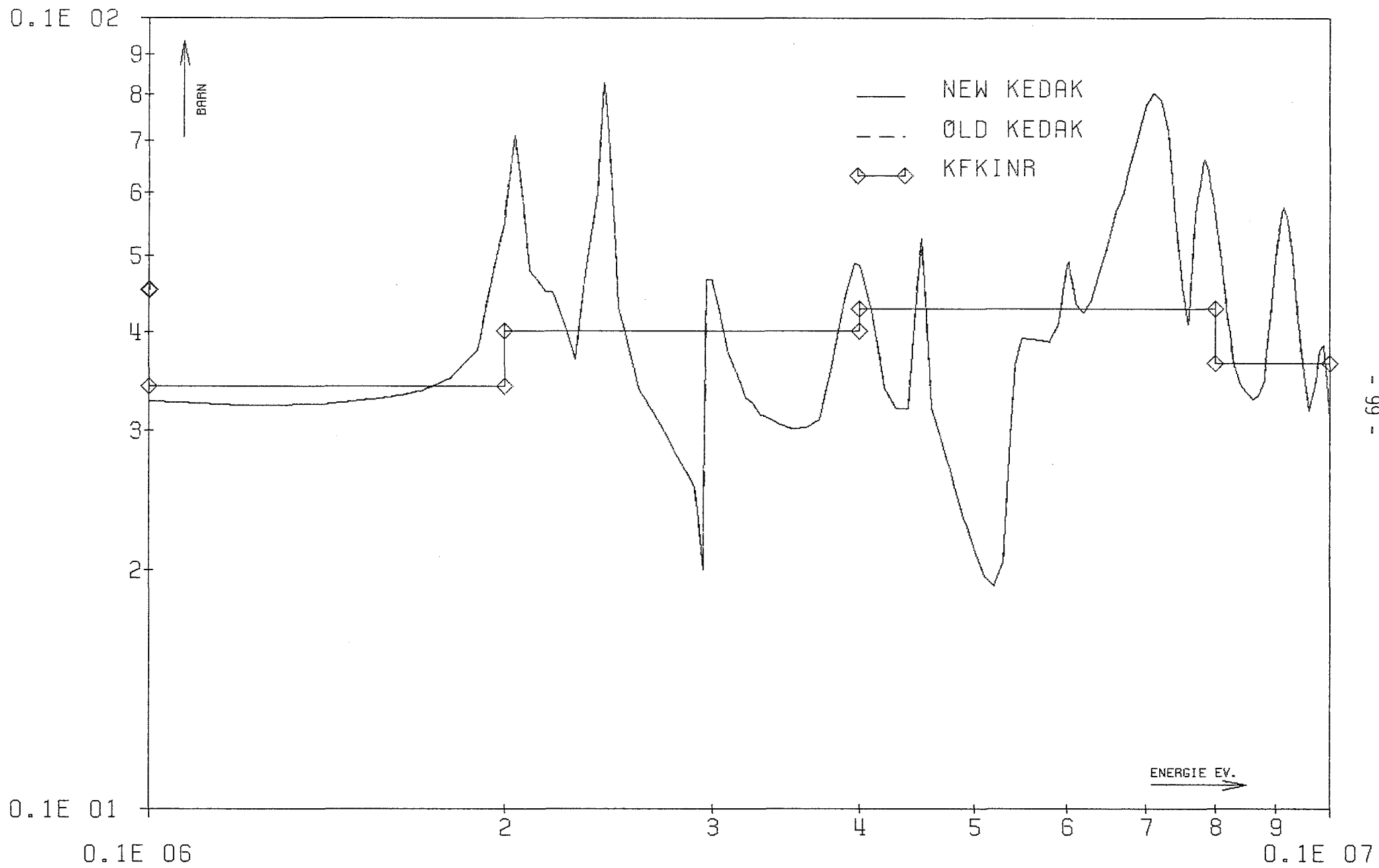


FIG. 22 NA 23 SGN

INR901NA 30.07 17.55.

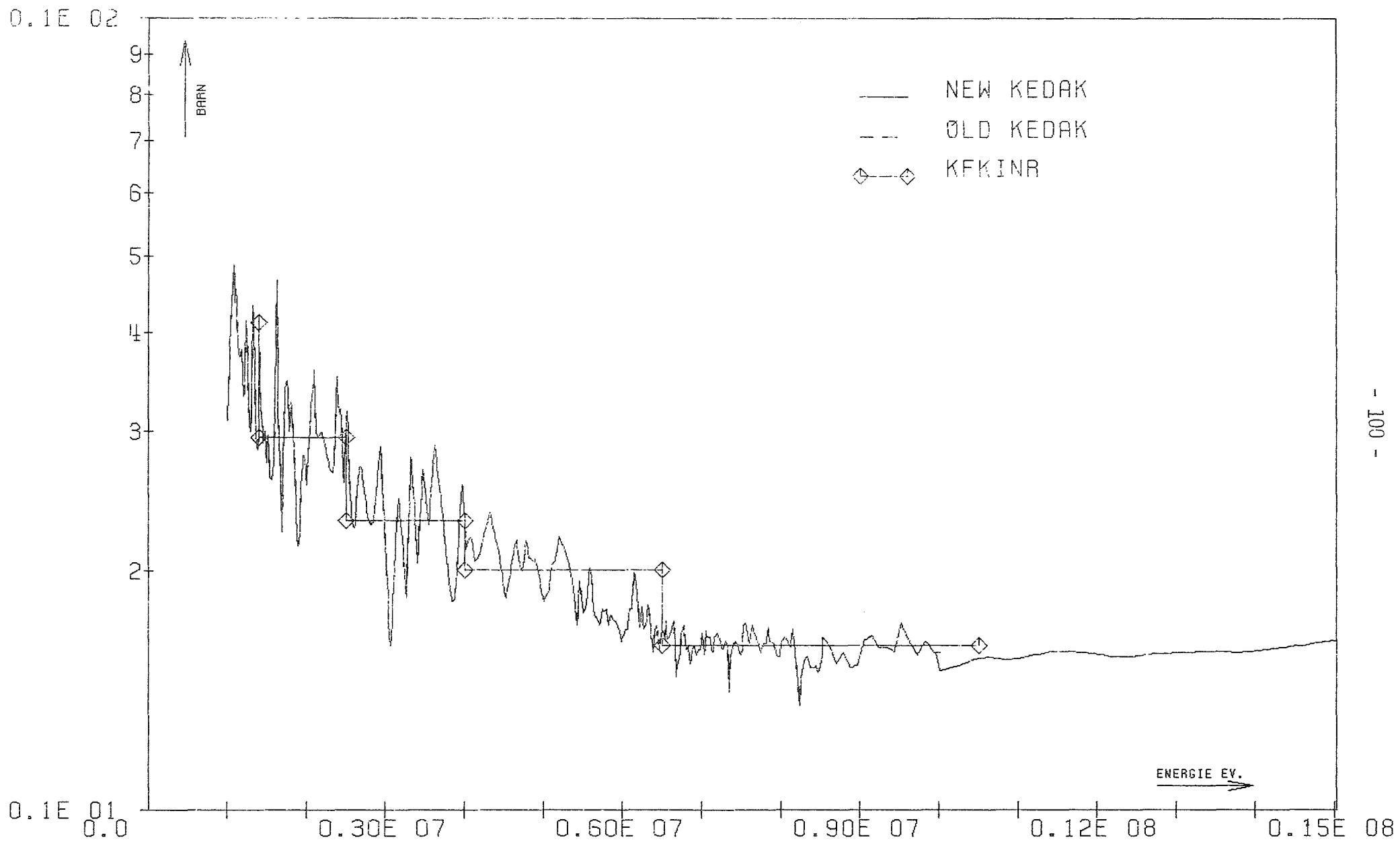


FIG. 23 NA 23 SGT

INR901NA 05.08 14.34.

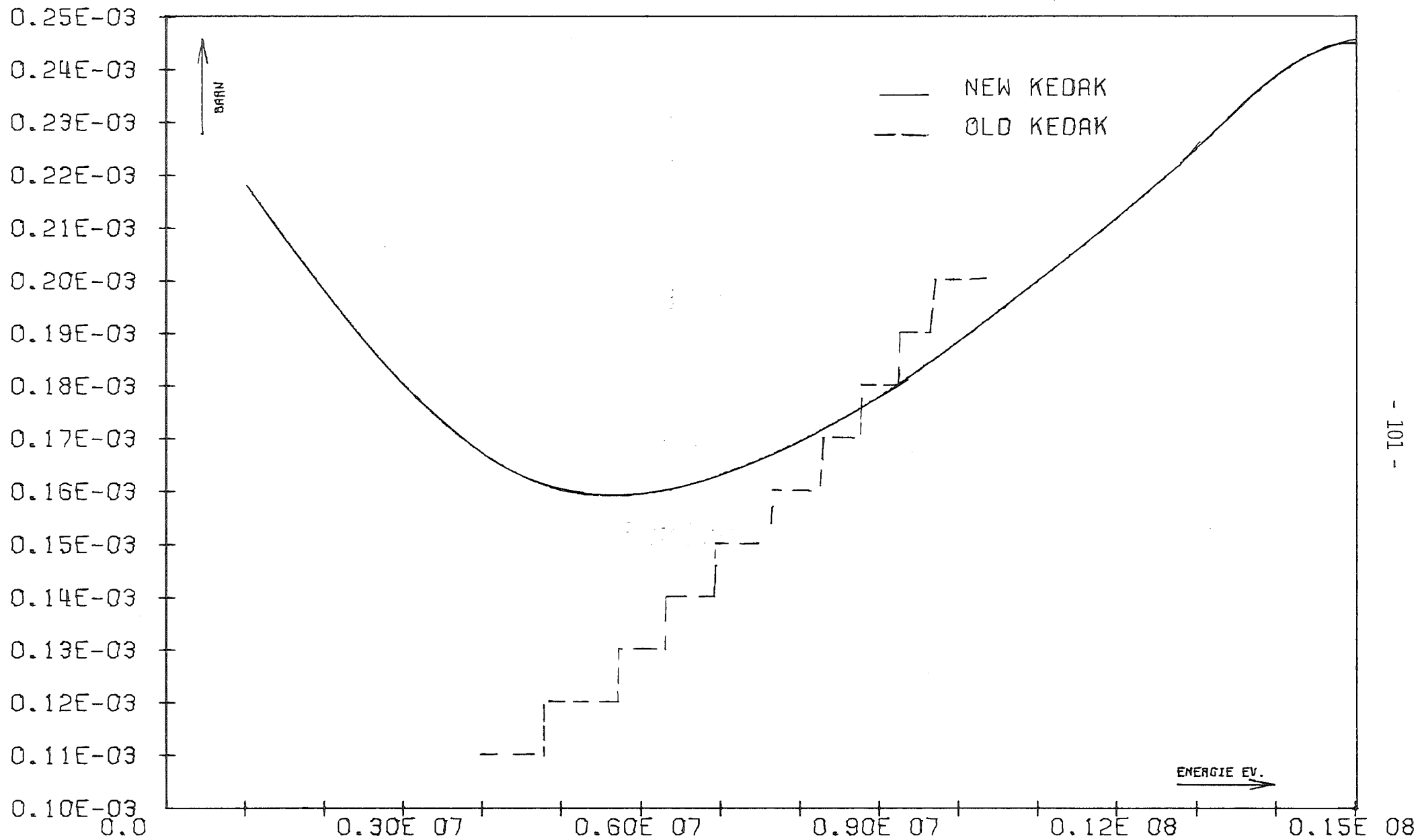


FIG. 24 NA 23 SGG INR901SX 28.01 18.58.

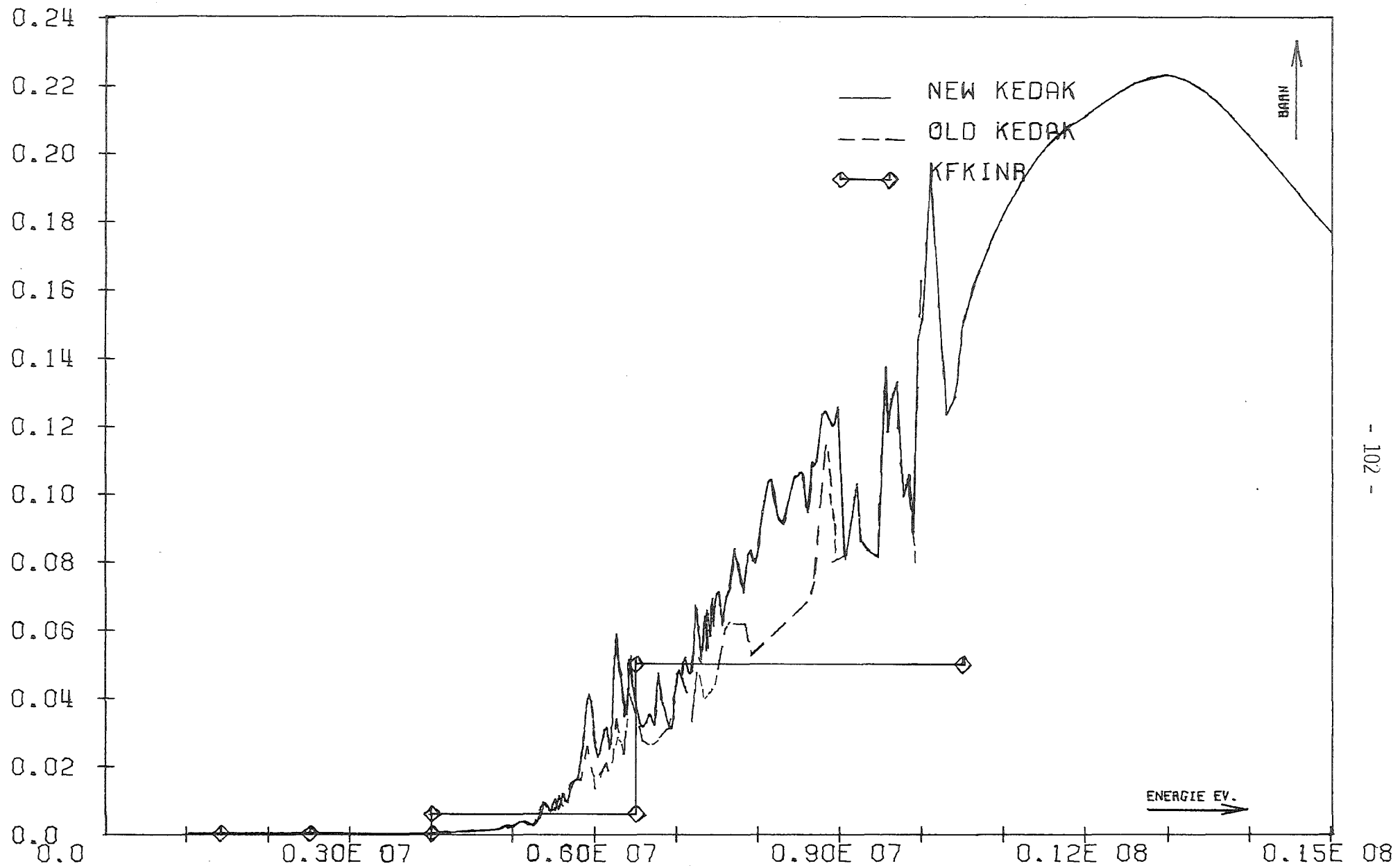


FIG. 25 NA 23 SGA

INR901SA 26.01 20.15.

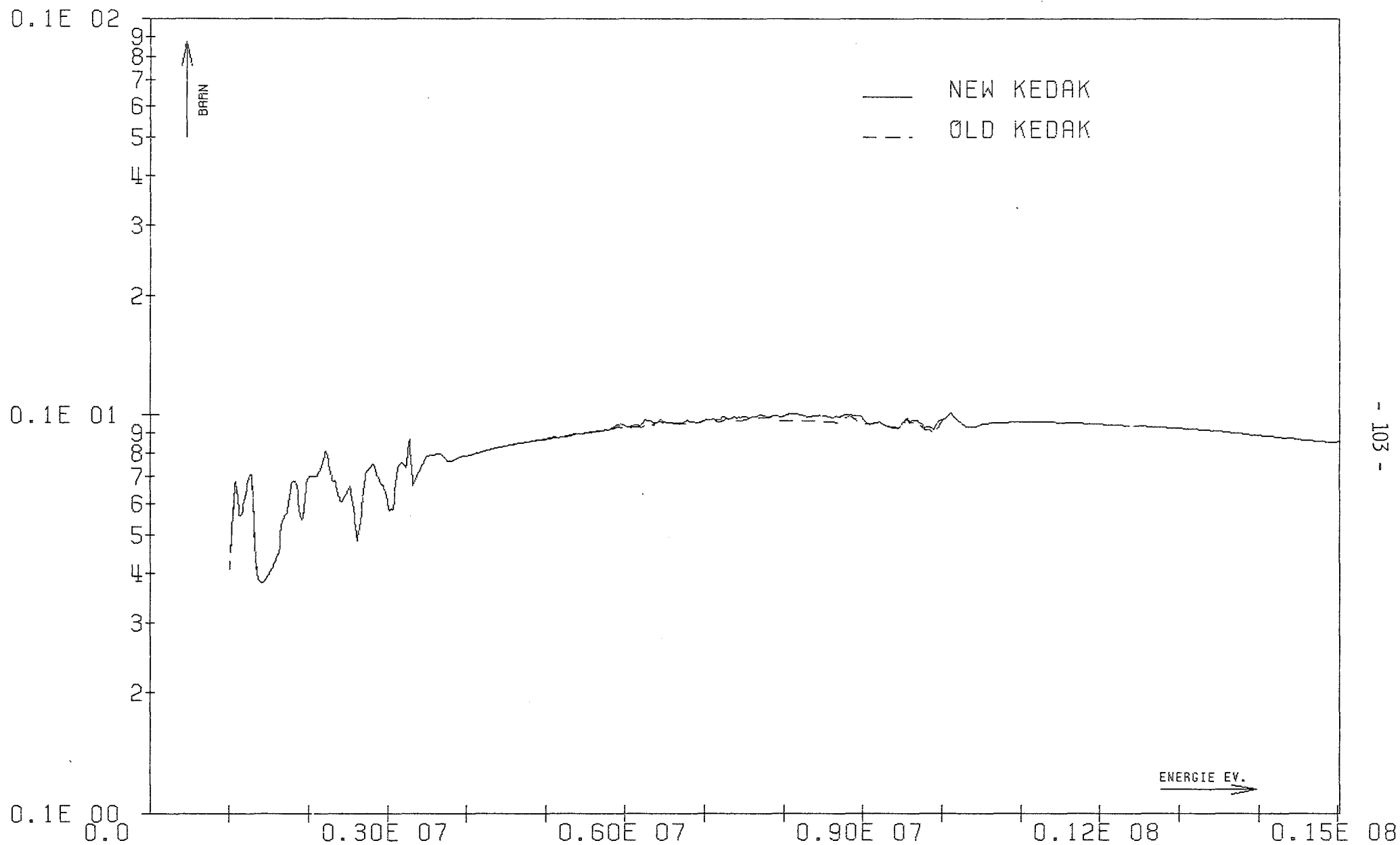


FIG. 26 NA 23 SGX

INR901NA 30.07 17.55.

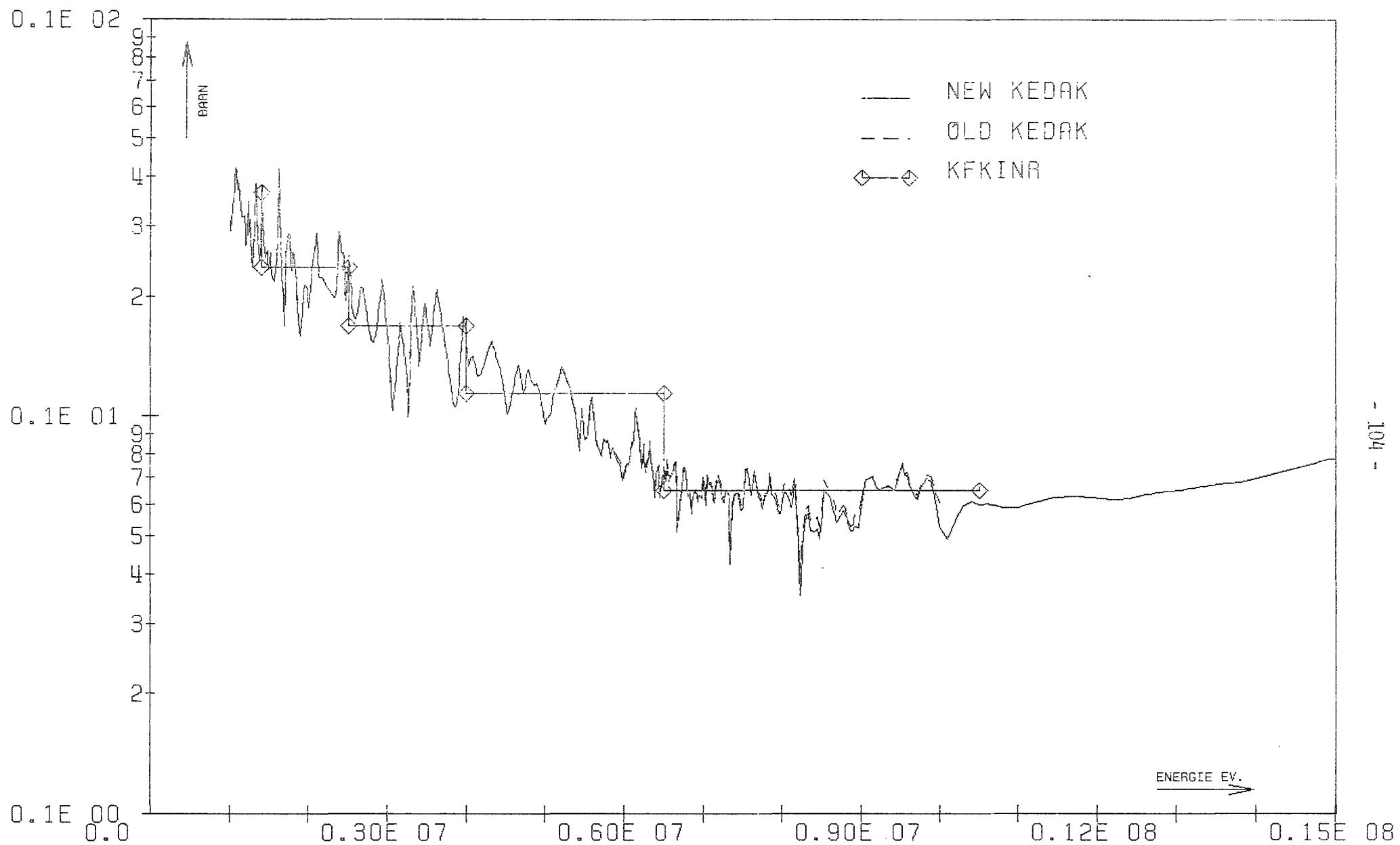


ABB.

FIG. 27

SGN

INR901NA 30.07 17.55.

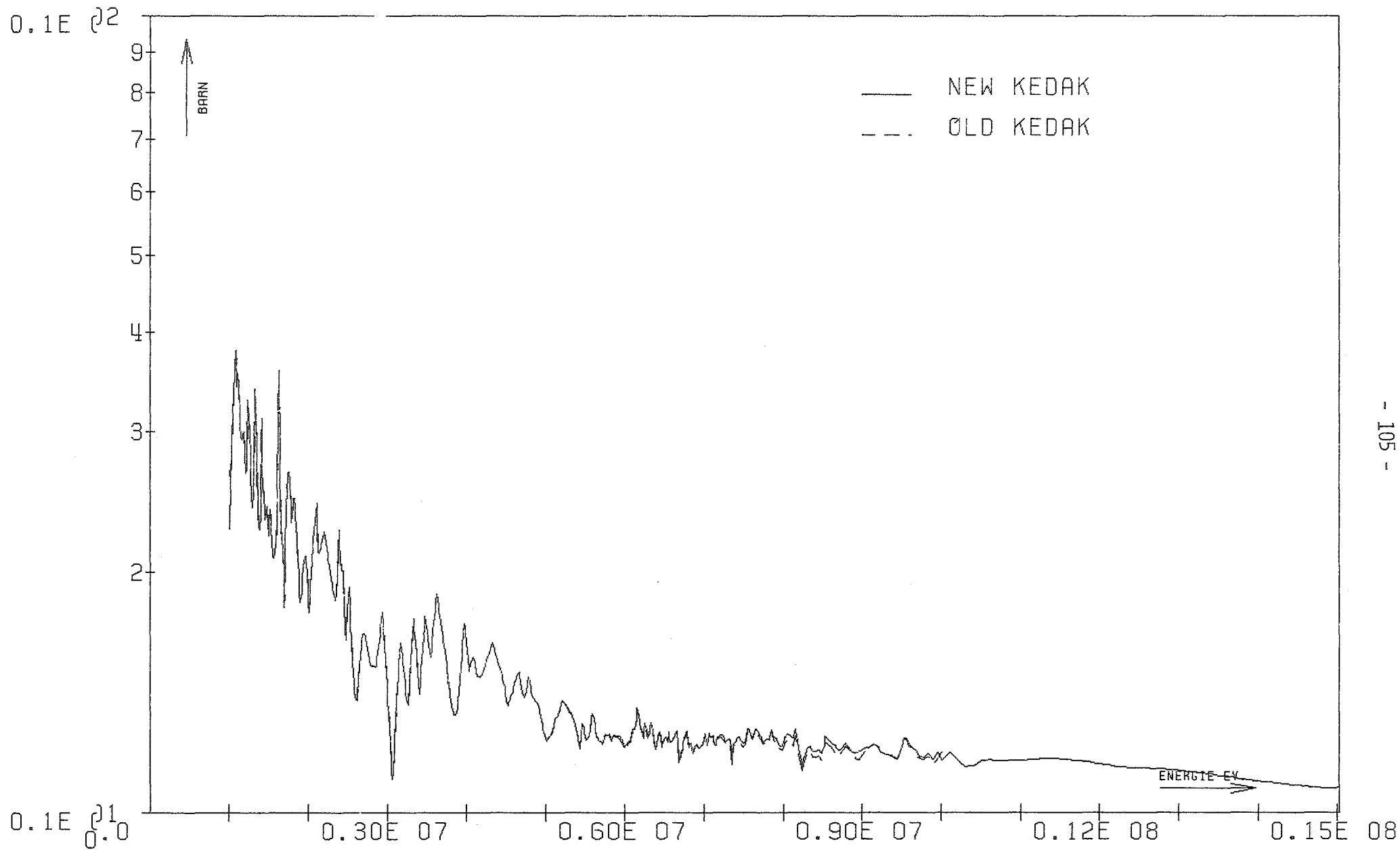


FIG. 28 NA 23 SGTR INR901NA 30.07 17.55.

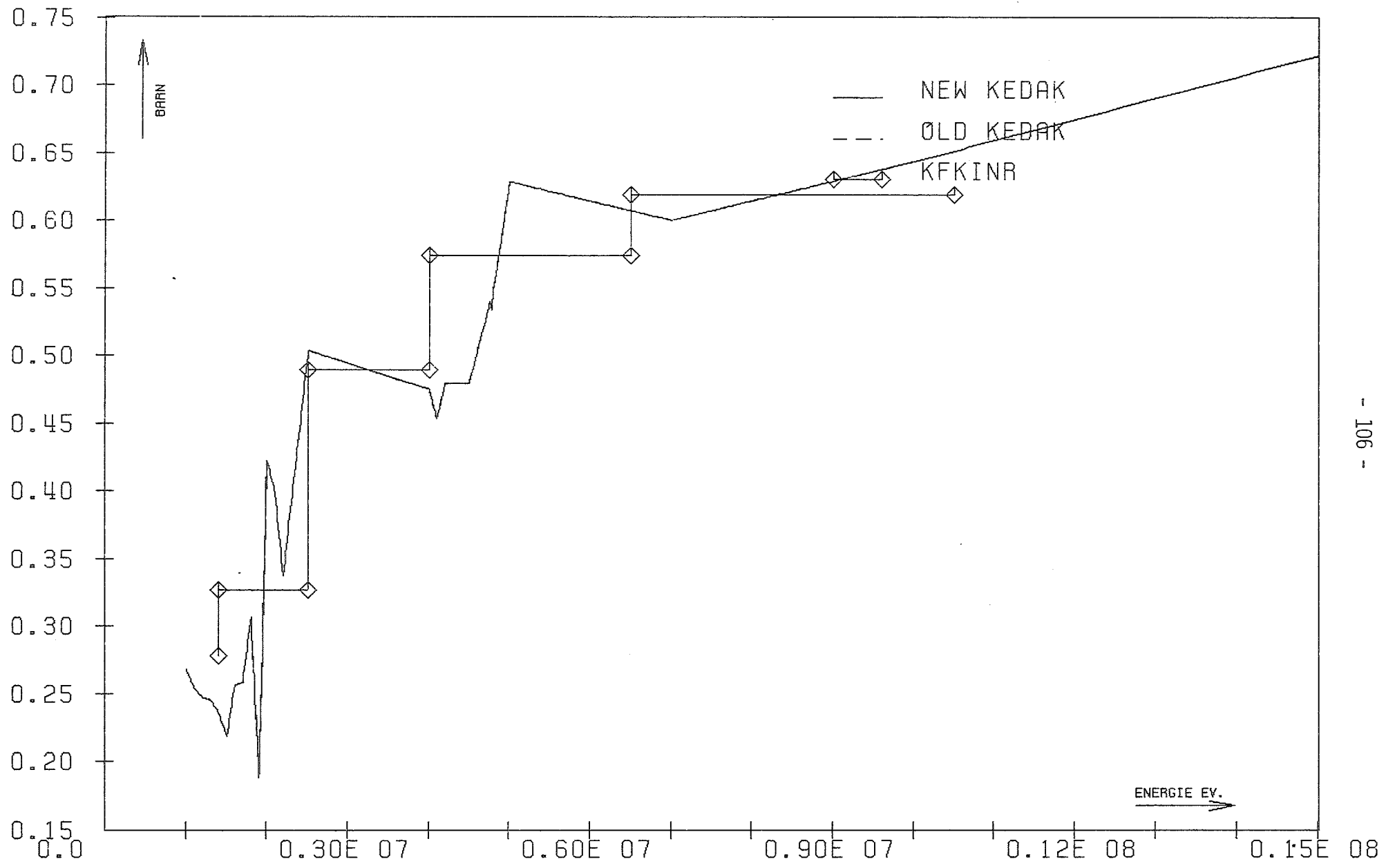


FIG. 29 NA 23 MUEL

INR901NA 30.07 17.56.

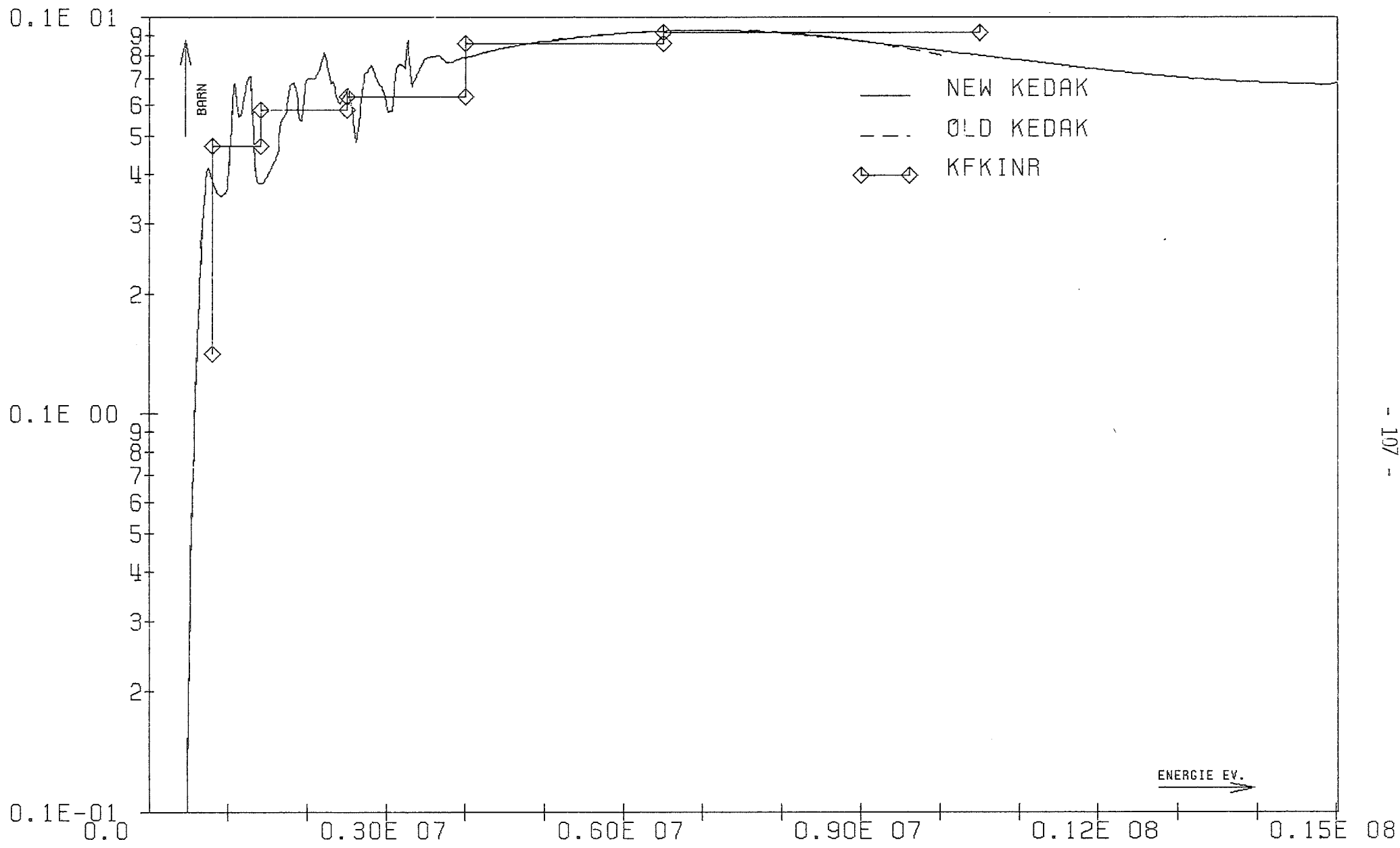


FIG. 30 NA 23 SGI

INR901NA 30.07 17.56.

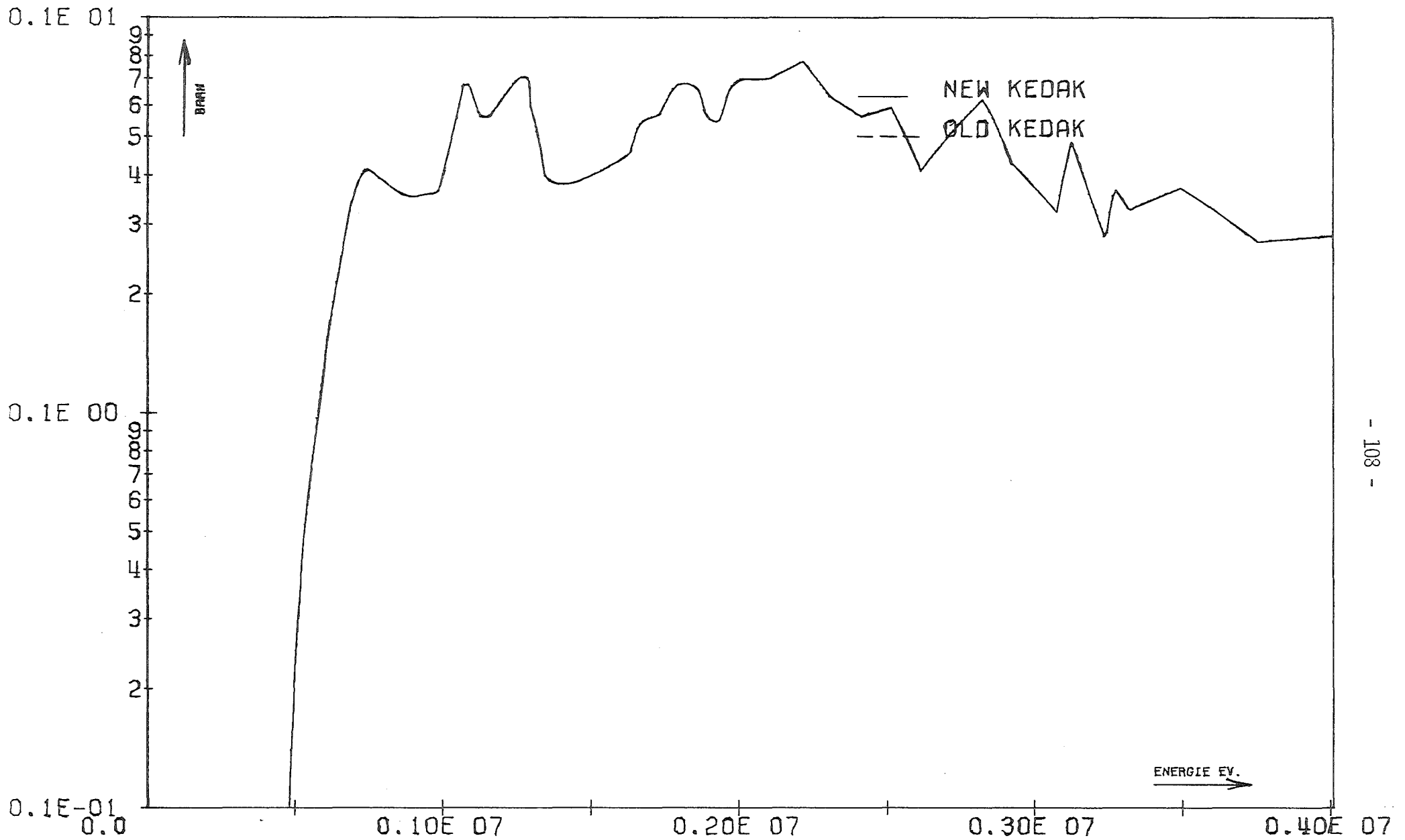


FIG. 31 NA 23 SGIZ 0.4390+06 INR901NA 19.01 16.29.

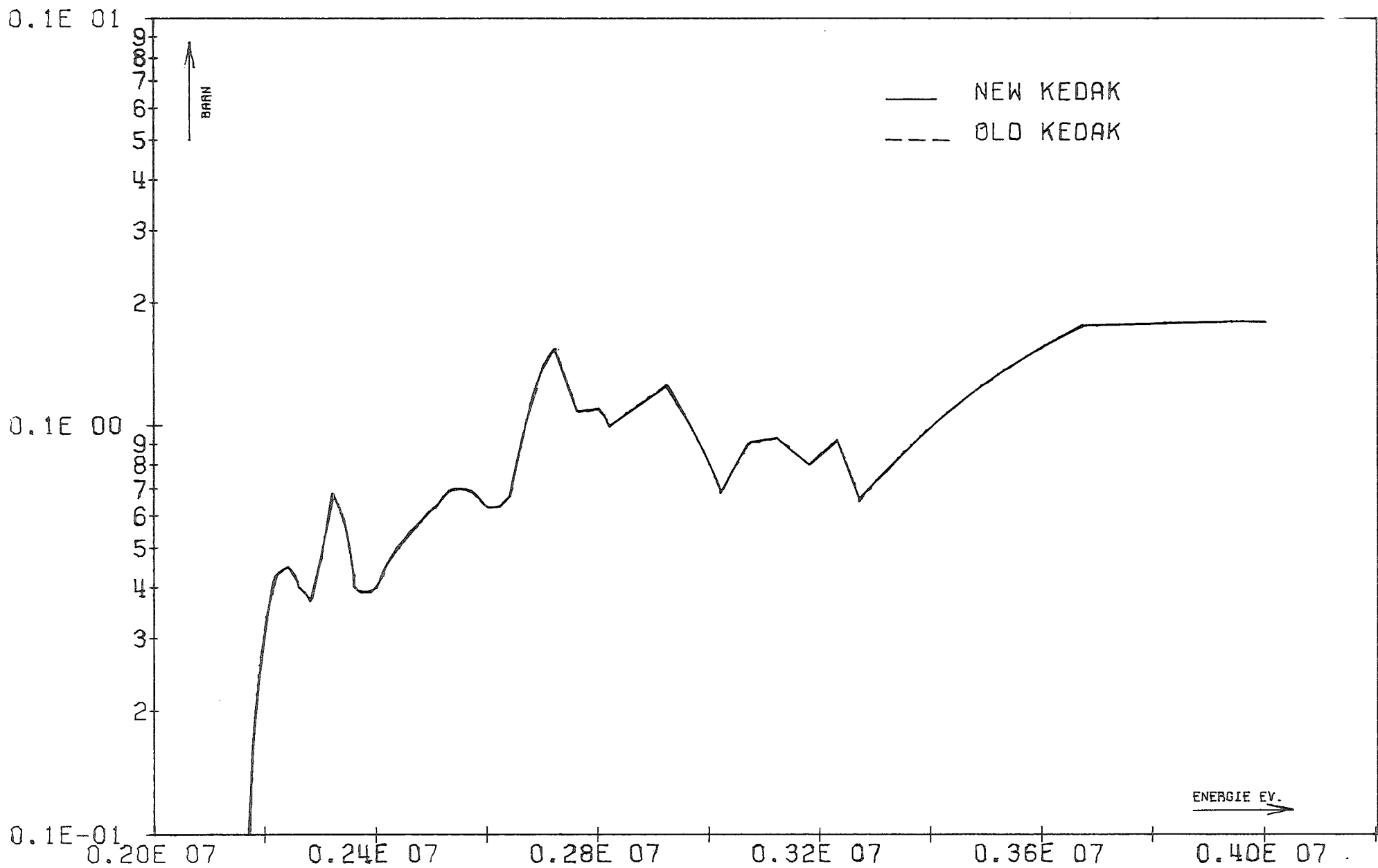


FIG. 32 NA 23 SGIZ 0.2080+07 INR901NA 19.01 16.29.

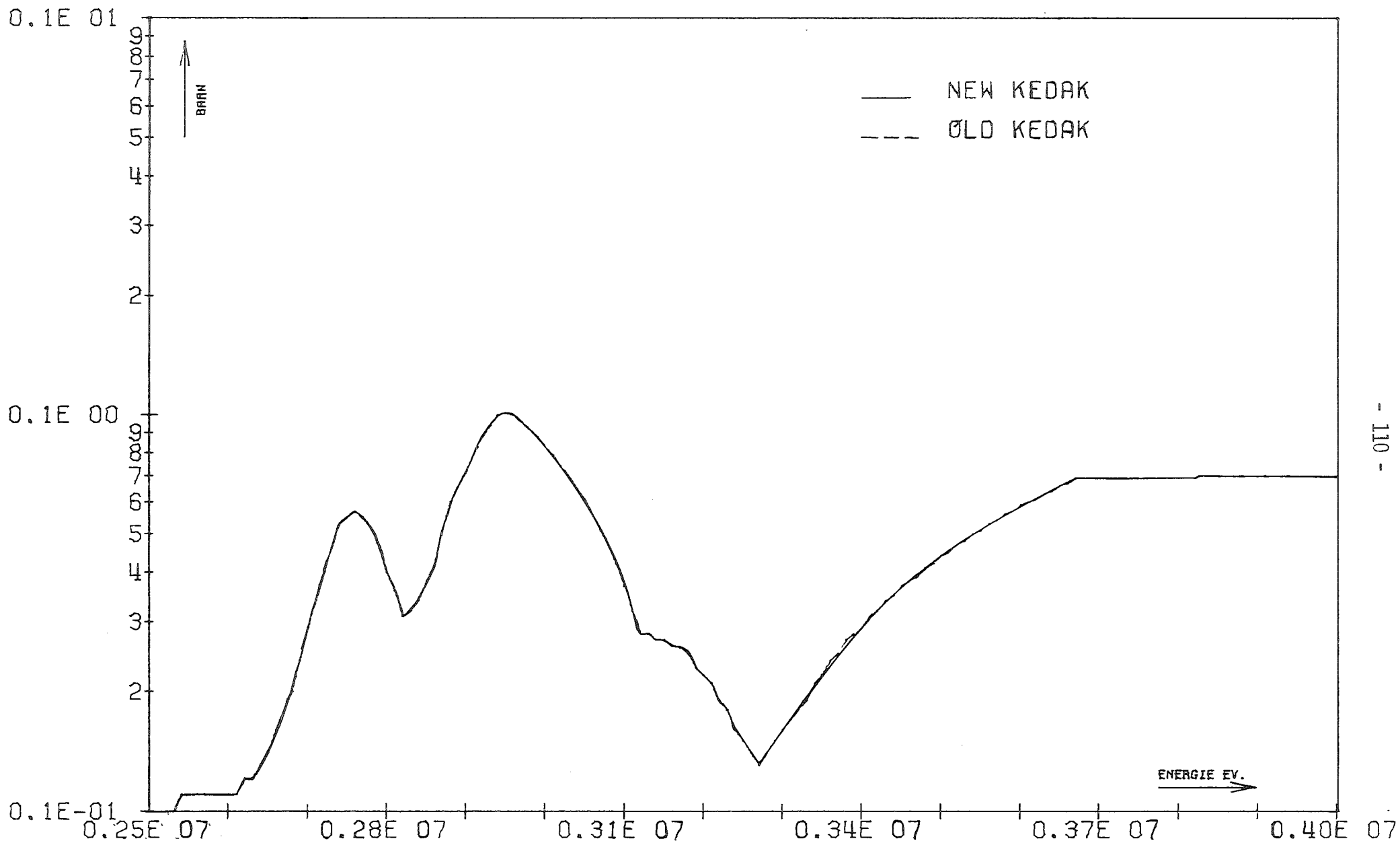


FIG. 33

NA 23

SGIZ

0.2390+07

INR901NA 19.01 16.29.

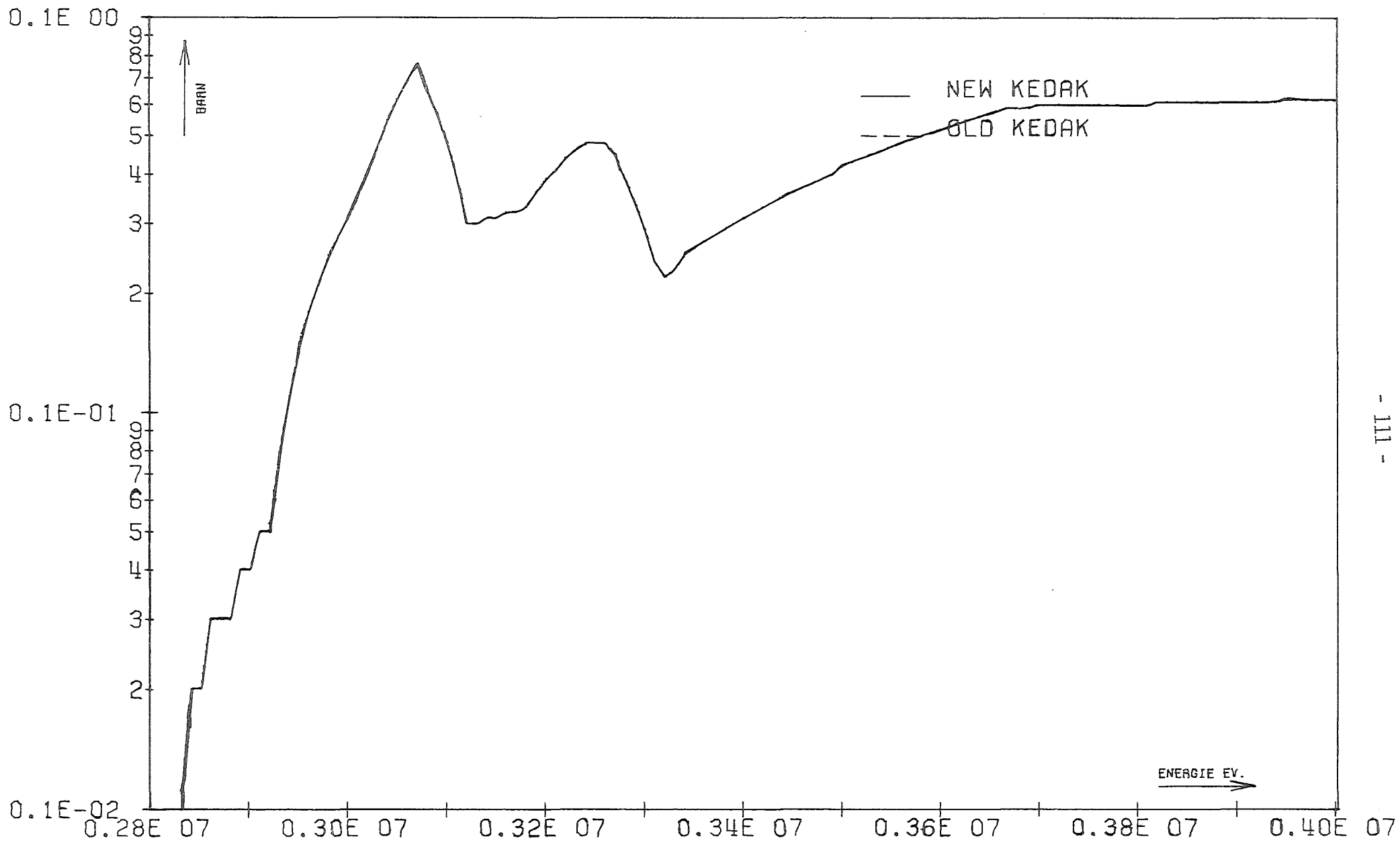


FIG. 34 NA 23 SGIZ 0.264D+07 INR901NA 19.01 16.29.

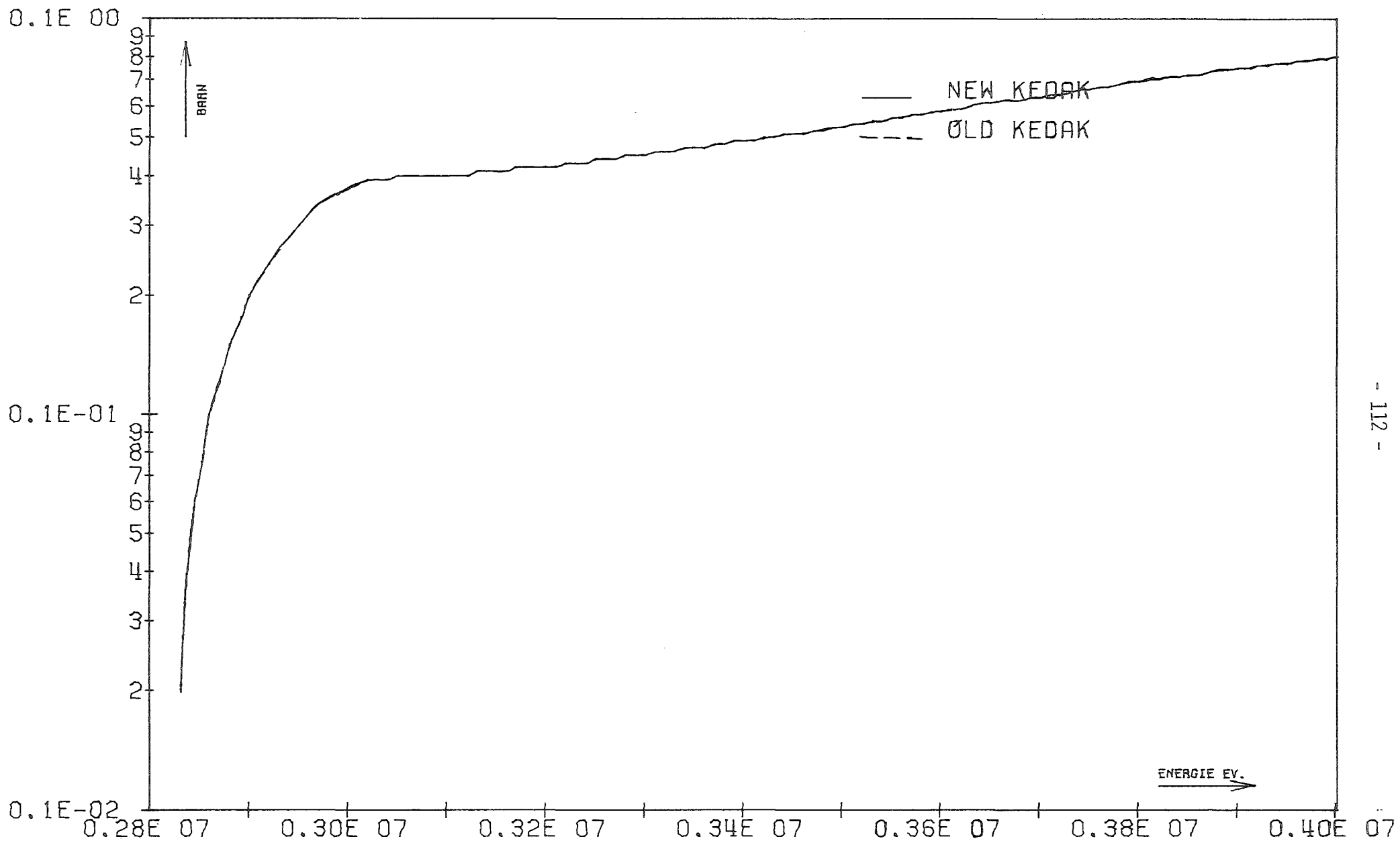


FIG. 35 NA 23 SGIZ 0.2710+07 INR901NA 19.01 16.29.

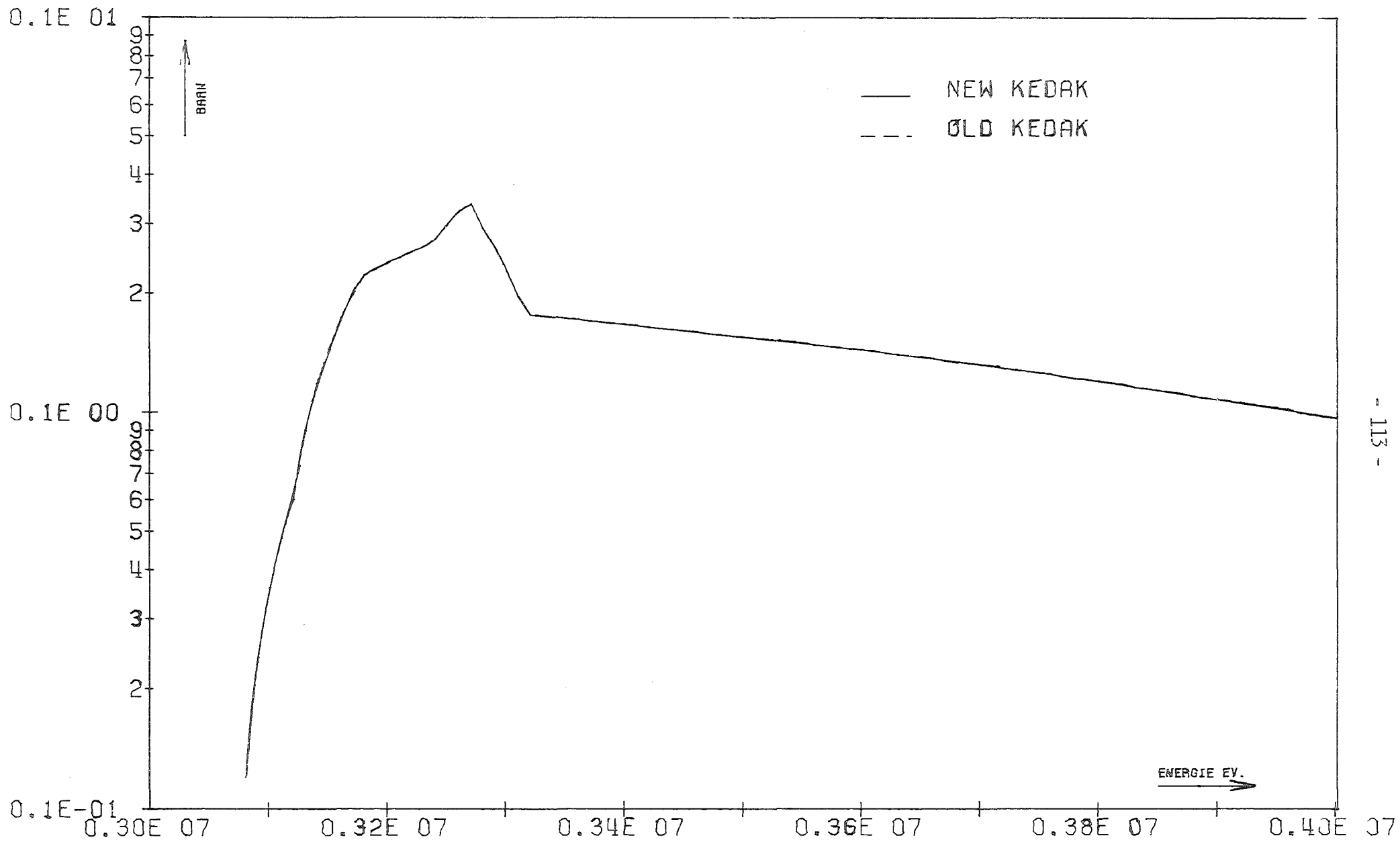


FIG. 36 NA 23 SGIZ 0.2980+07 INR901NA 19.01 16.29.

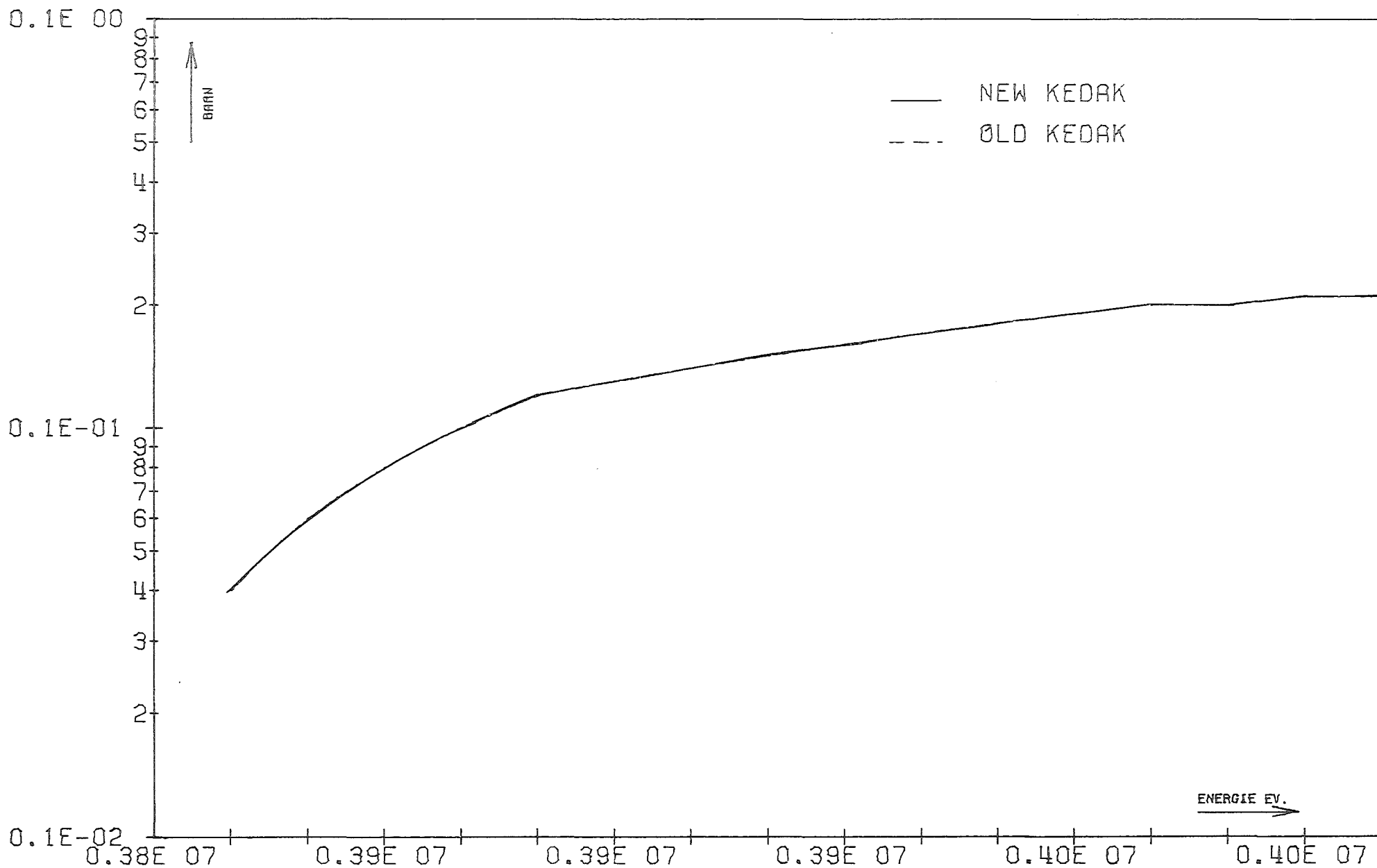


FIG. 37 NA 23 SGIZ 0.3680+07 INR901NA 19.01 16.29.

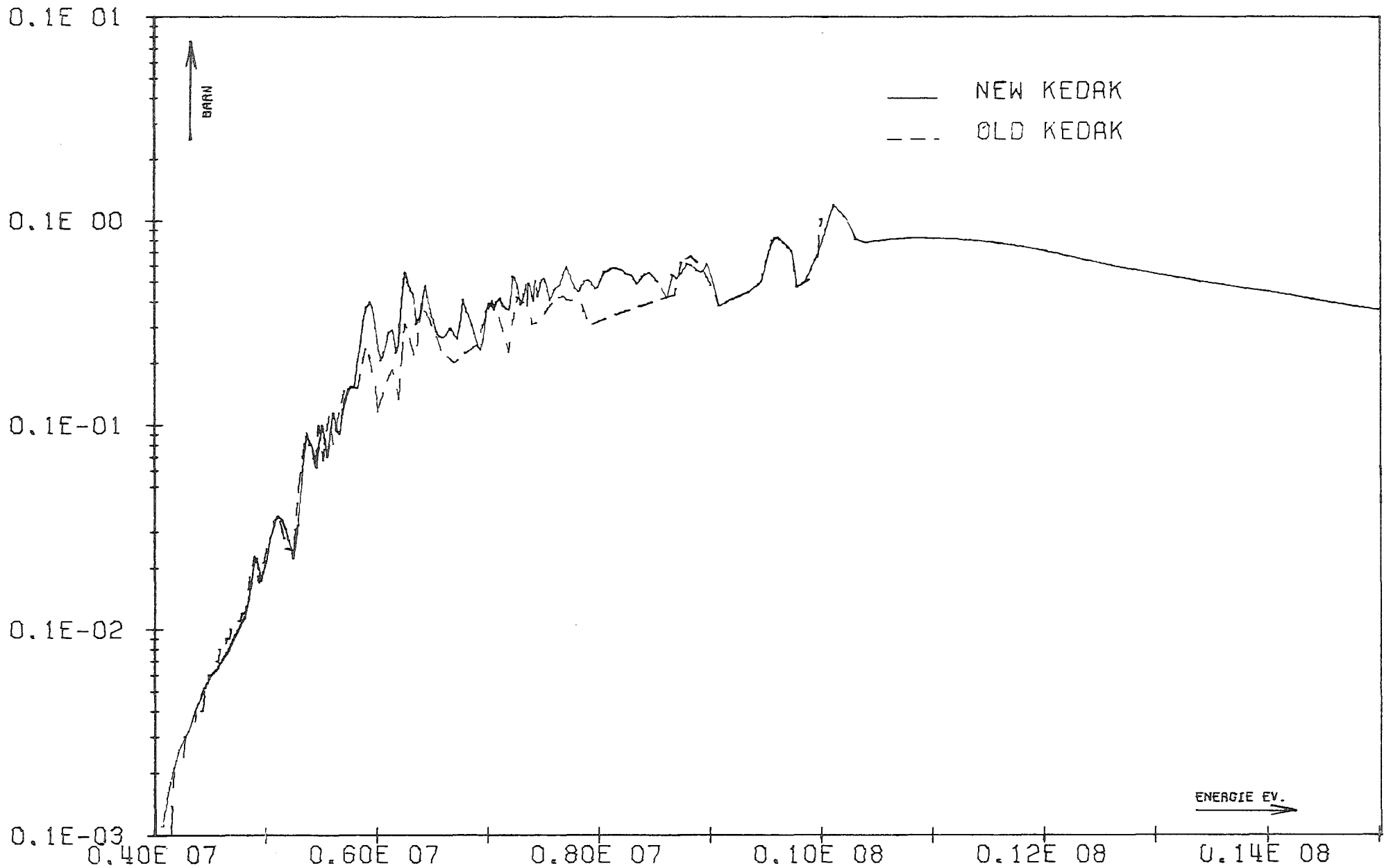


FIG. 38 NA 23 SGP INR901NA 14.01 16.20.

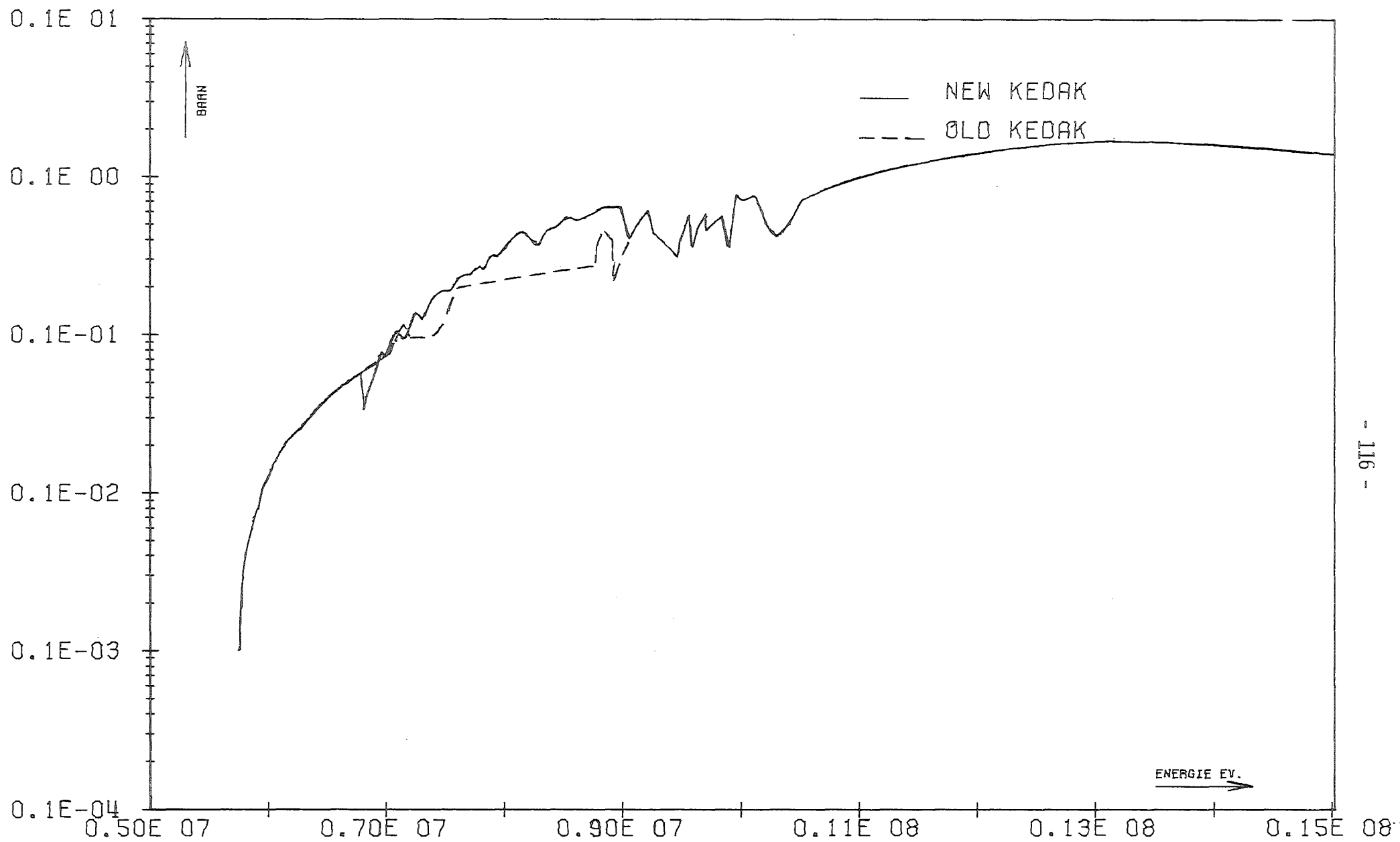


FIG. 39 NA 23 SGALP INR901NA 19.01 16.29.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 1 keV	AL 27
2	SGG	''	
3	SGN	''	
4	SGTR	''	
5	SGT	1 keV to 1 MeV	
6	SGG	''	
7	SGN	''	
8	SGTR	''	
9	MUEL	''	
10	SGT	1 MeV to 15 MeV	
11	SGA	''	
12	SGX	''	
13	SGN	''	
14	SGTR	''	
15	MUEL	''	
16	SGI	''	
17	SGIZ		
	E*=0.812 MeV	1 MeV to 4.5 MeV	
18	E*= 1.010 MeV	''	
19	E*= 2.21 MeV	''	
20	E*= 2.730 MeV	''	
21	E*= 2.980 MeV	''	
22	E*= 3.580 MeV	''	
23	E*= 3.950 MeV	4 MeV to 4.5 MeV	
24	E*= 4.050 MeV	''	
25	SGP	2 MeV to 15 MeV	
26	SGALP	6 MeV to 15 MeV	

Al

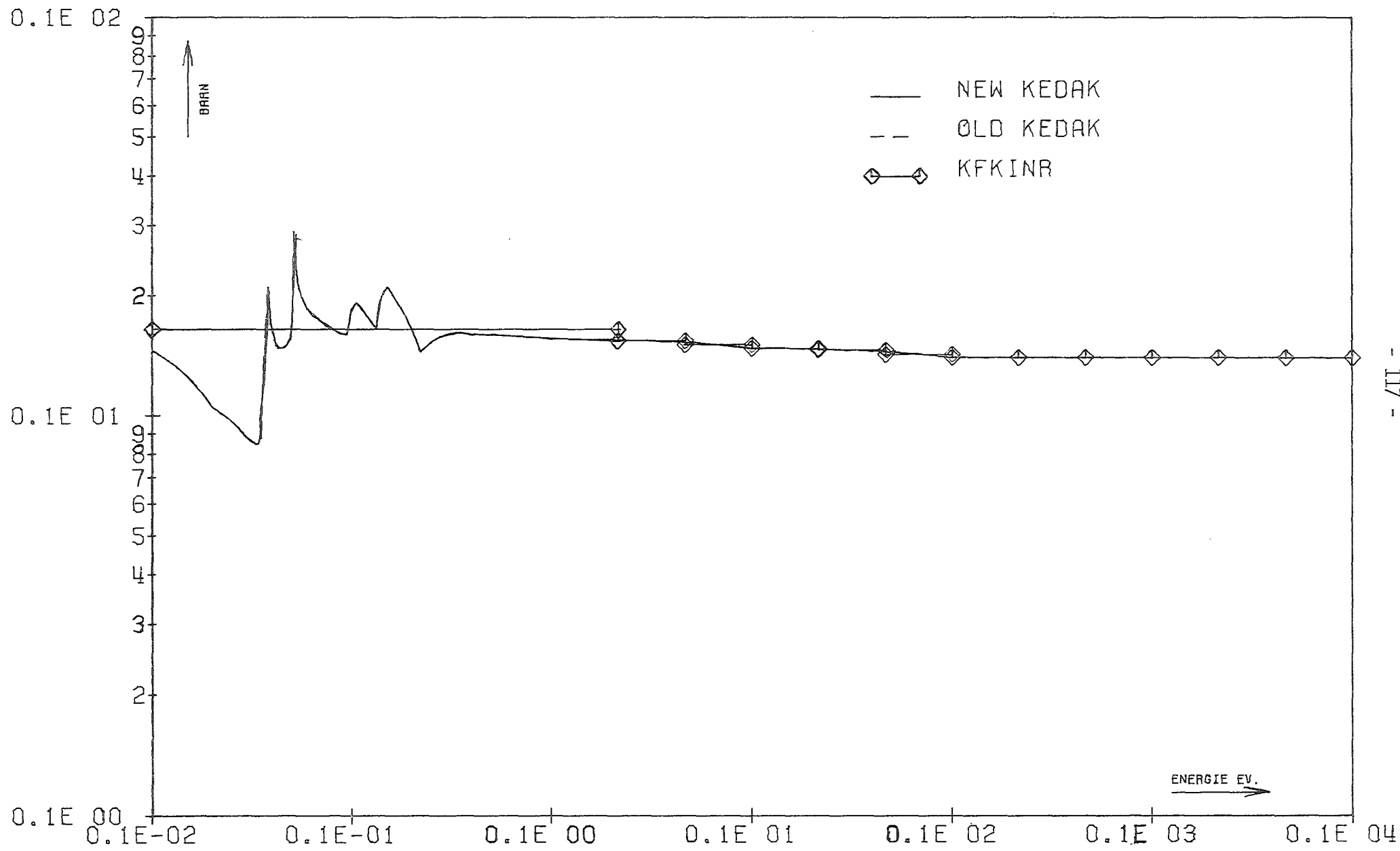


FIG. 1 AL 27 SGT

INR901AL 19.01 19.48.

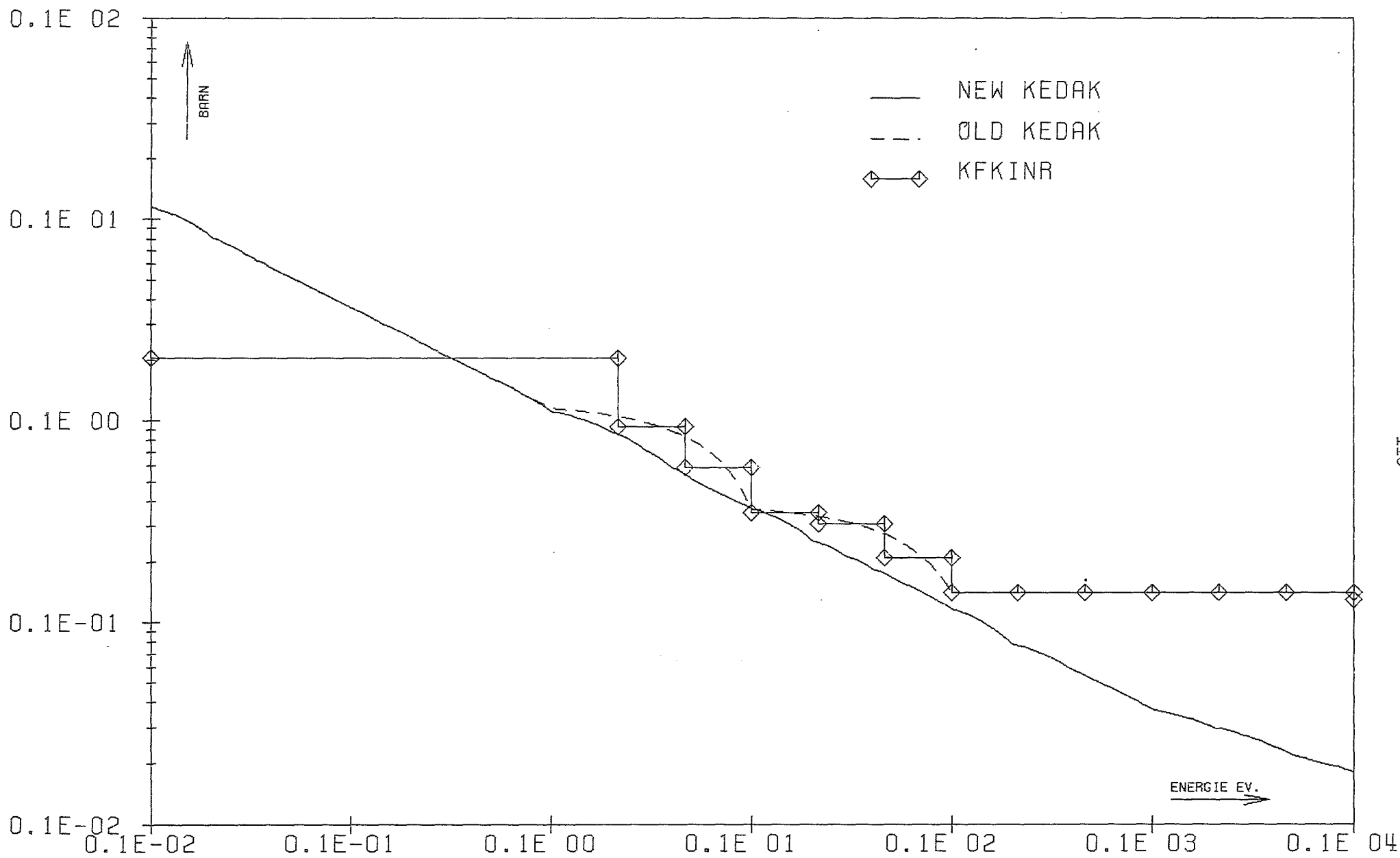


FIG. 2 AL 27 SGG

INR901AL 28.07 17.17.

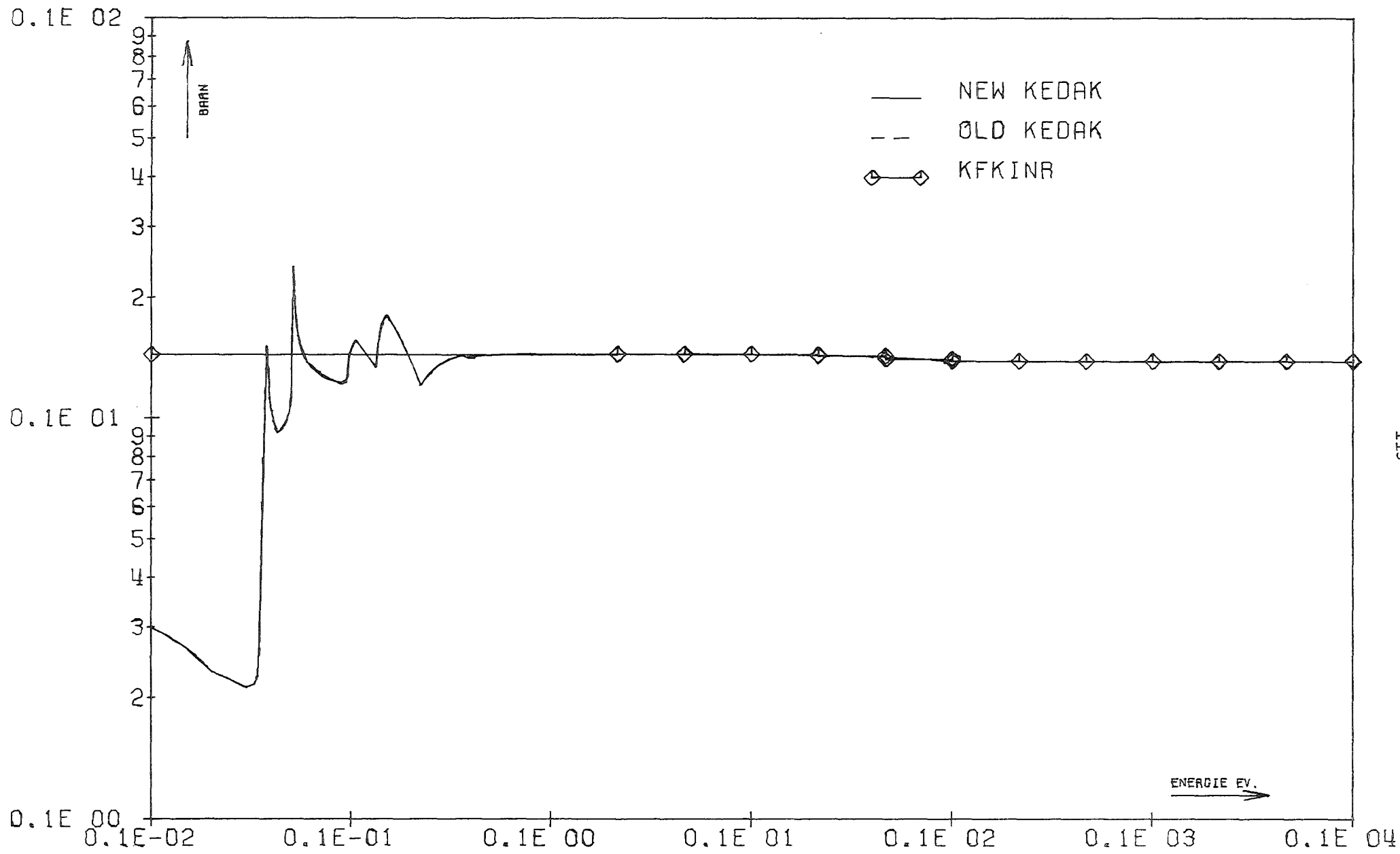


FIG. 3 AL 27 SGN

INR901AL 19.01 19.48.

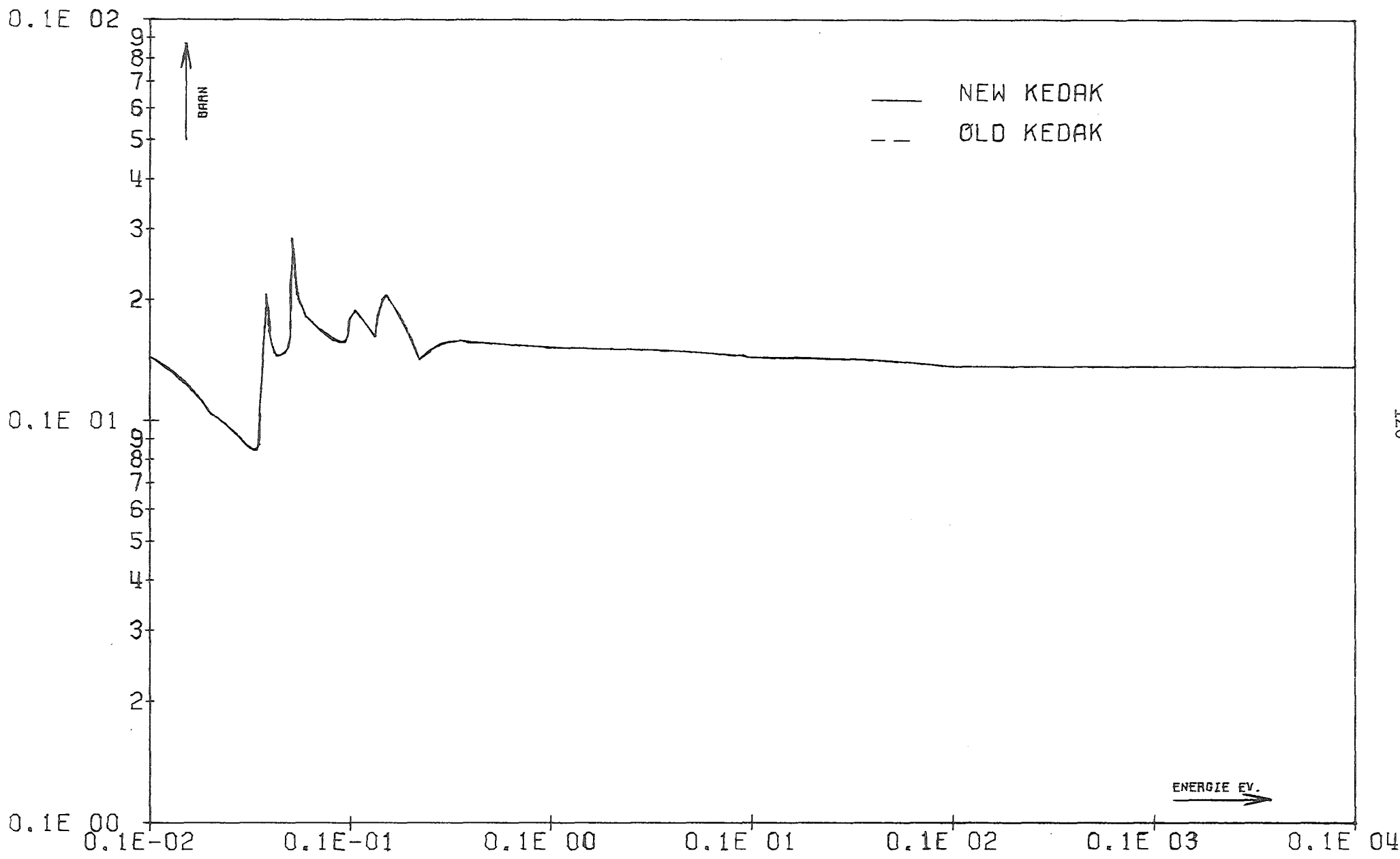


FIG. 4 AL 27 SGTR

INR901AL 19.01 19.48.

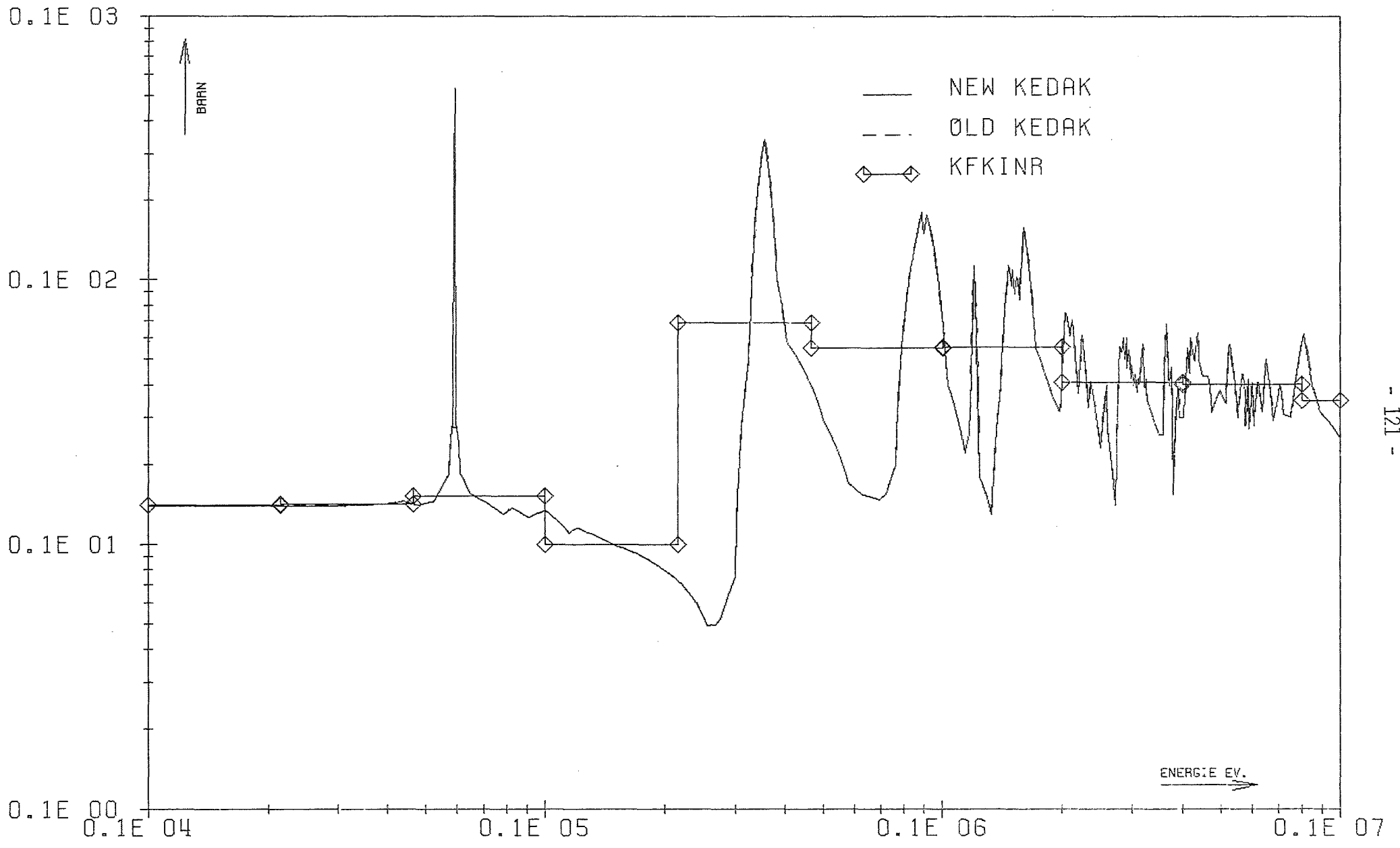


FIG. 5 AL 27 SGT

INR901AL 02.08 21.45.

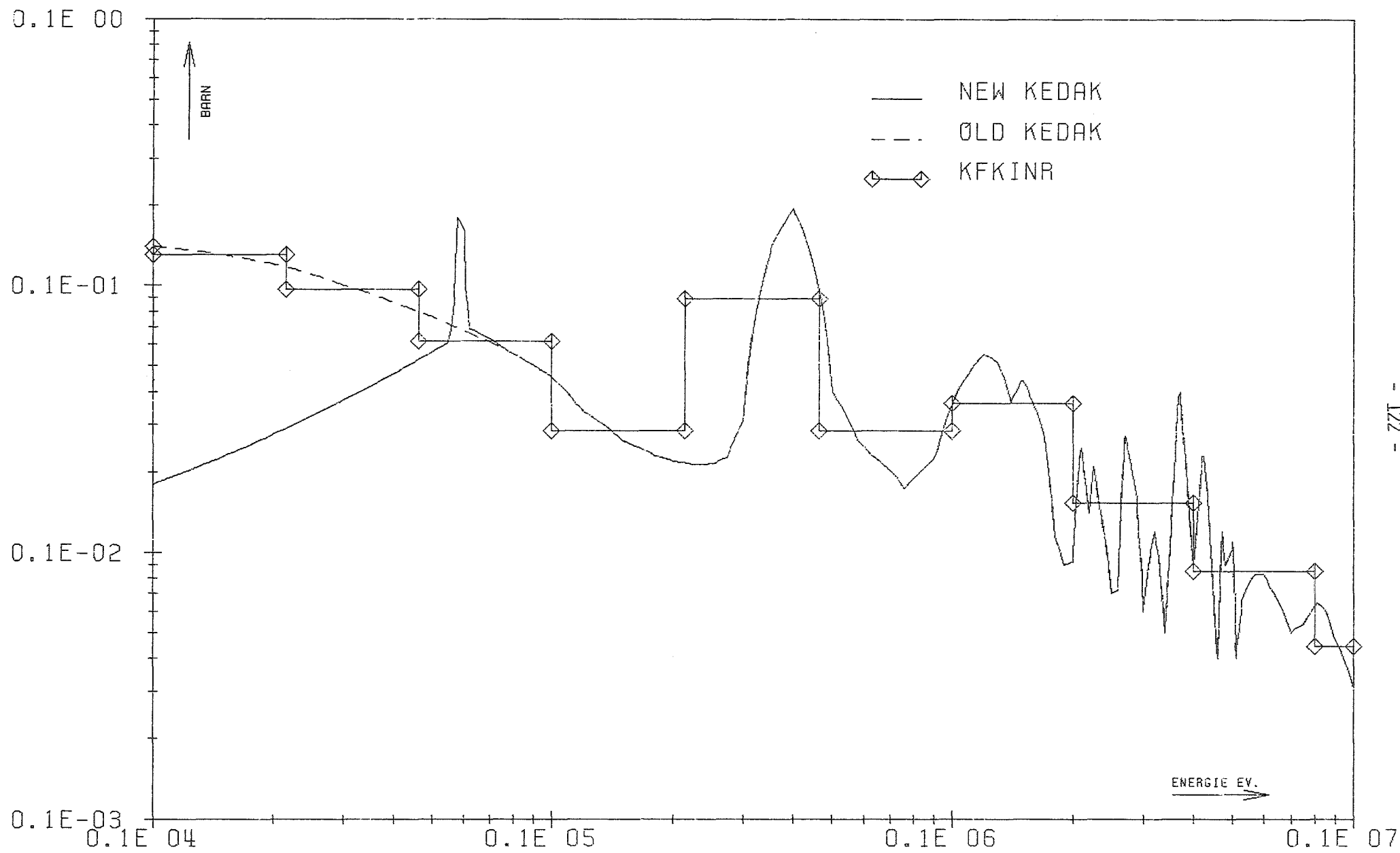


FIG. 6 AL 27 SGG

INR901AL 02.08 21.45.

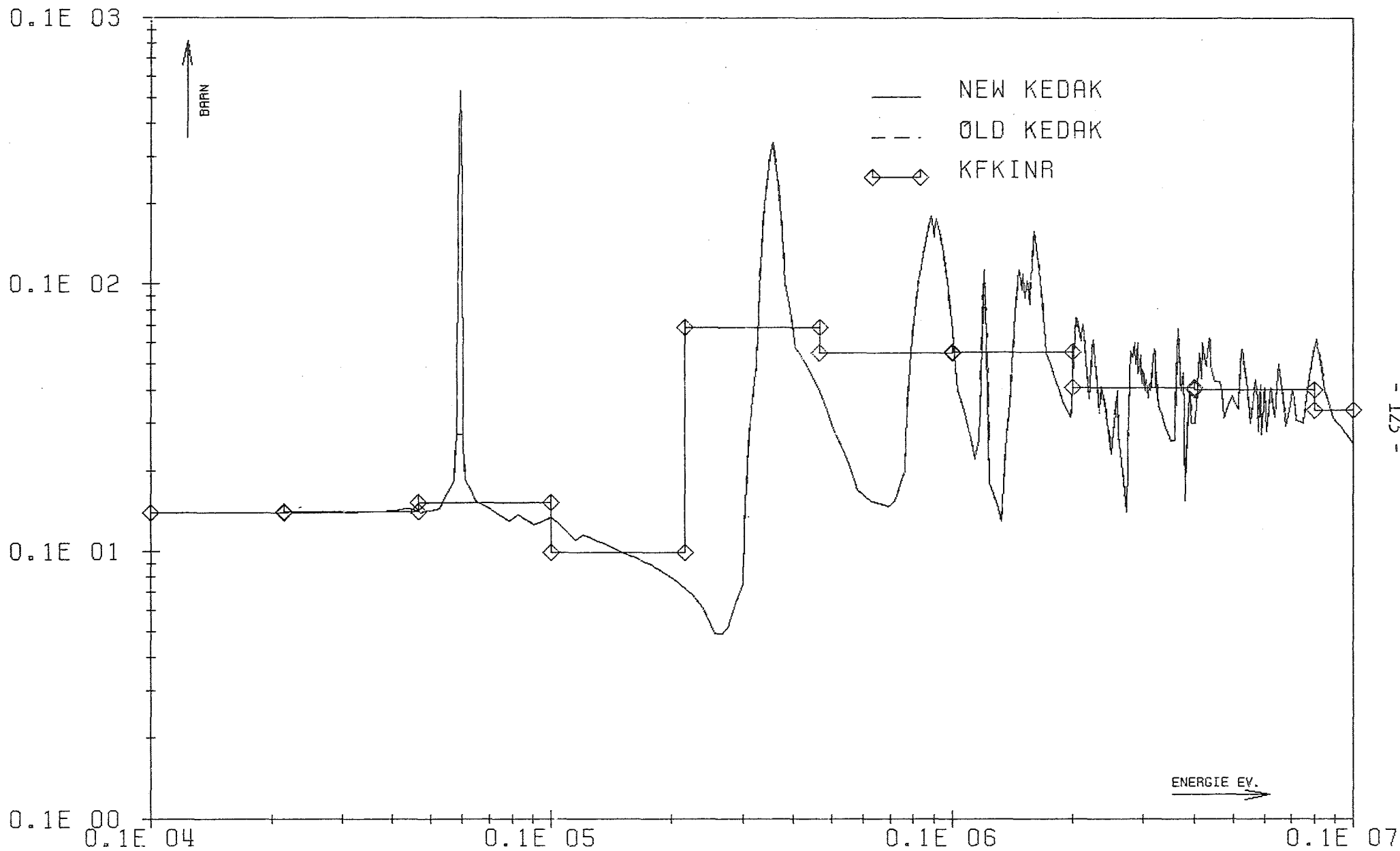


FIG. 7 AL 27 SGN INR901AL 02.08 21.45.

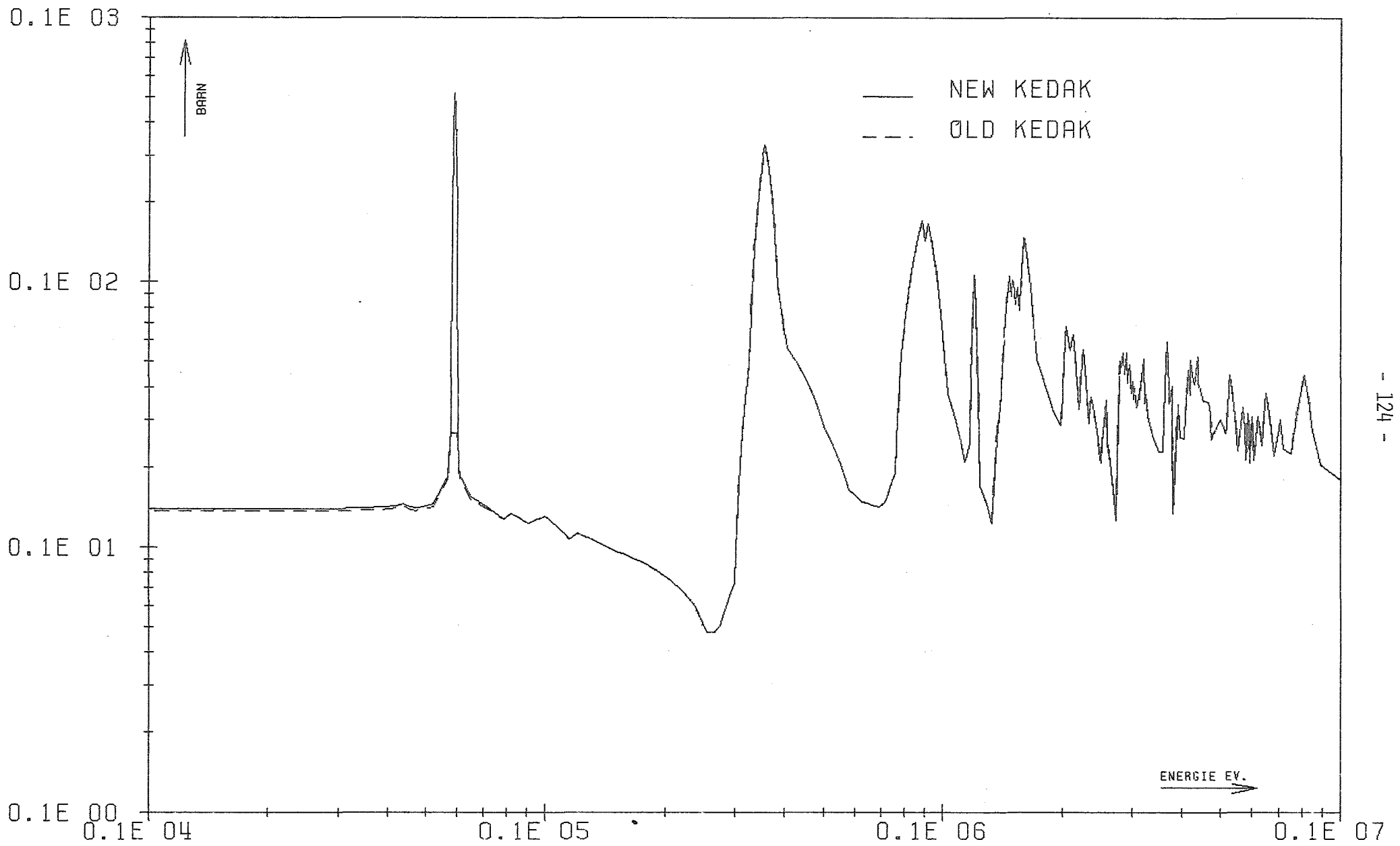


FIG. 8 AL 27 SGTR

INR901AL 02.08 21.46.

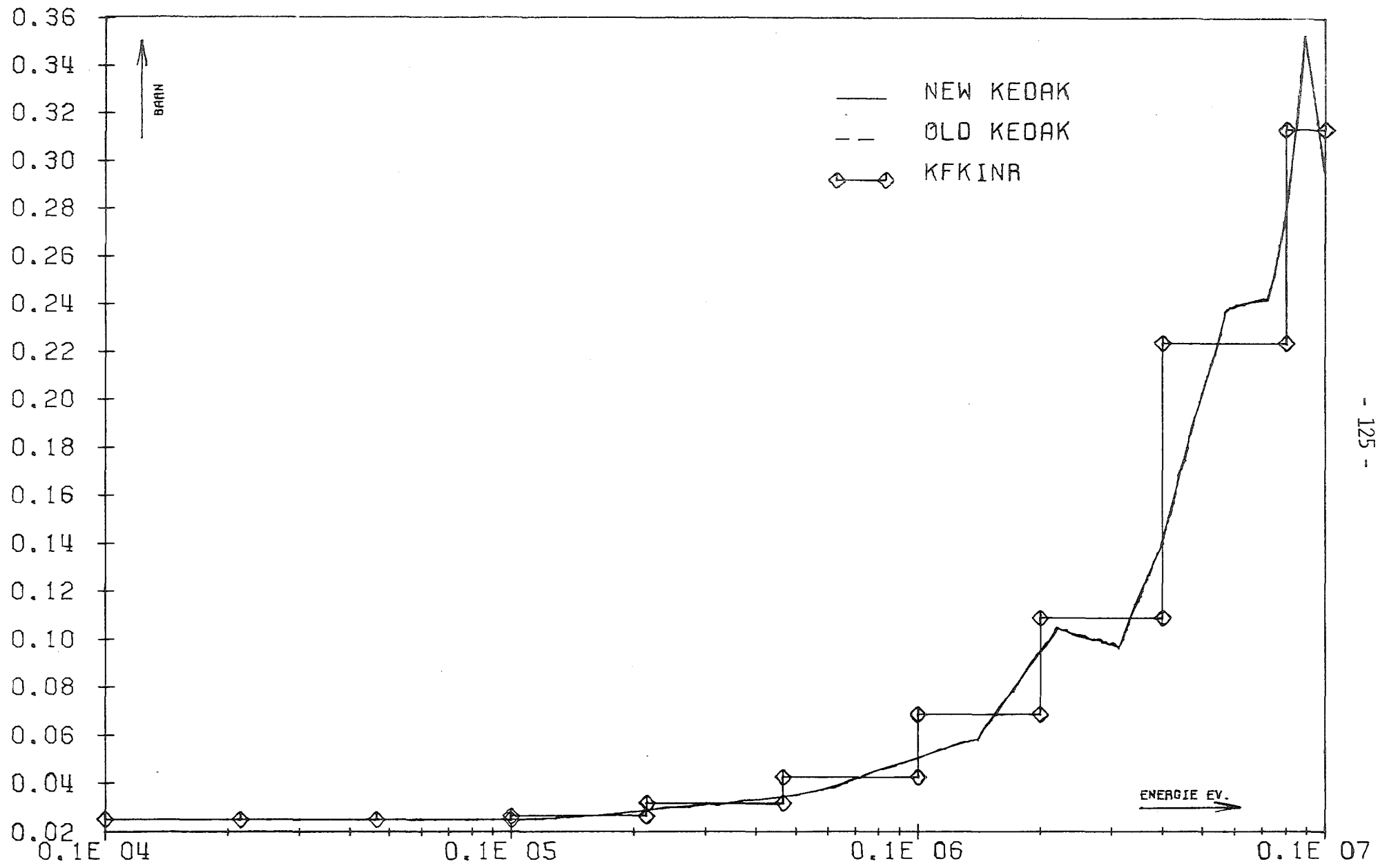
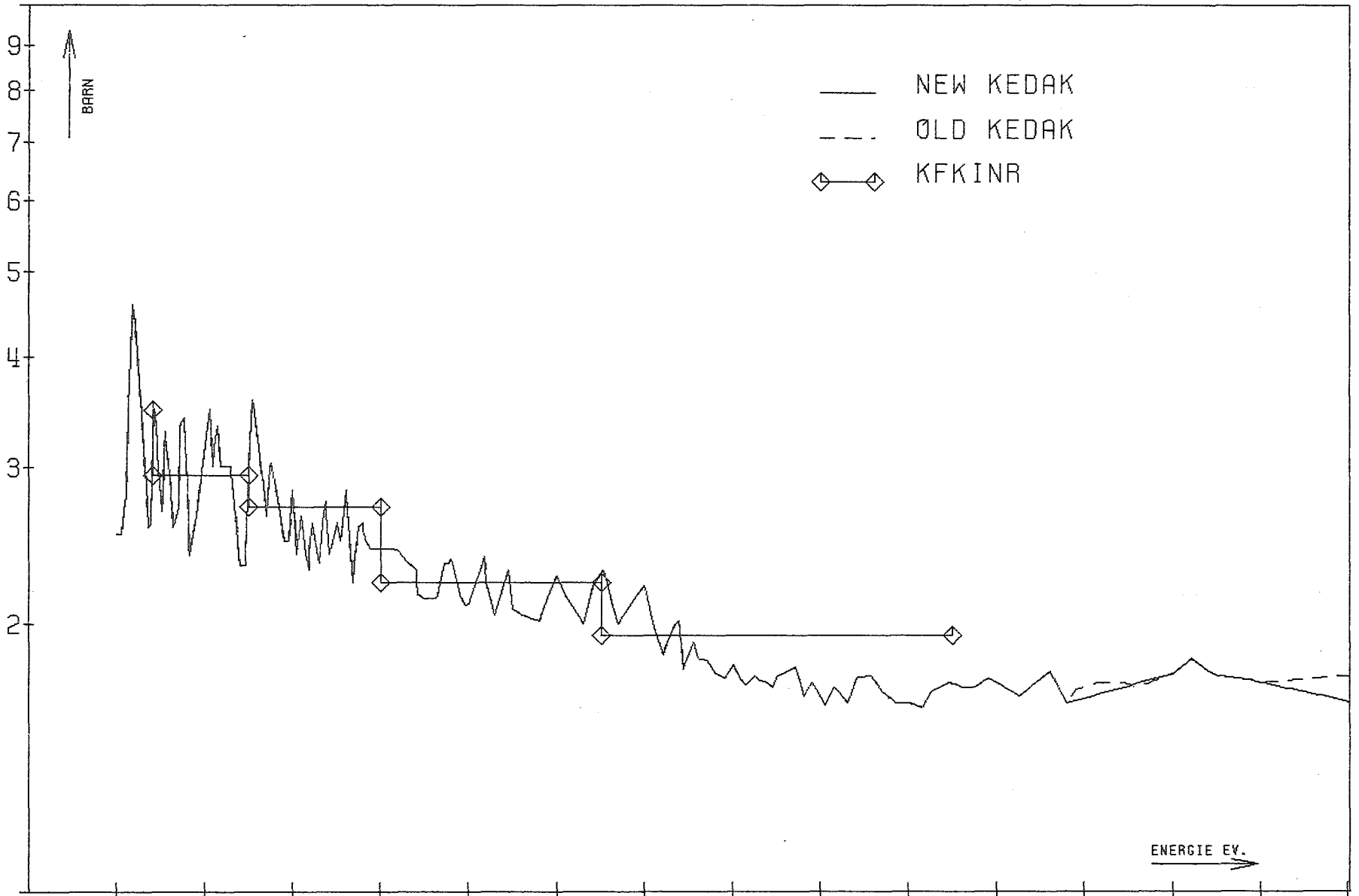


FIG. 9 AL 27 MUEL INR901AL 19.01 19.48.

0.1E 02



0.1E 01
0.0

FIG. 10 AL 27 SGT

INR901AL 28.07 17.18.

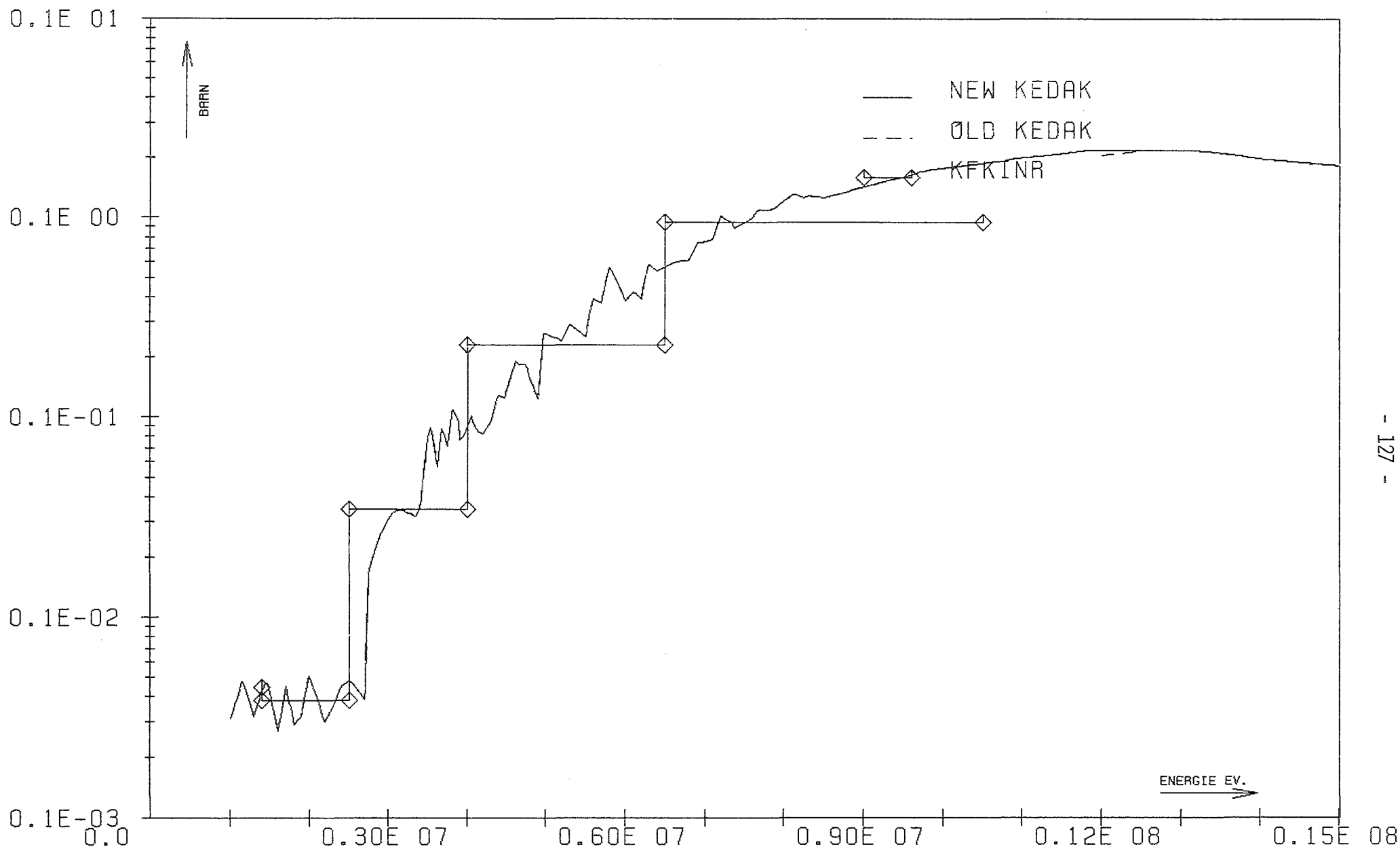


FIG. 11 AL 27 SGA

INR901AL 28.07 17.18.

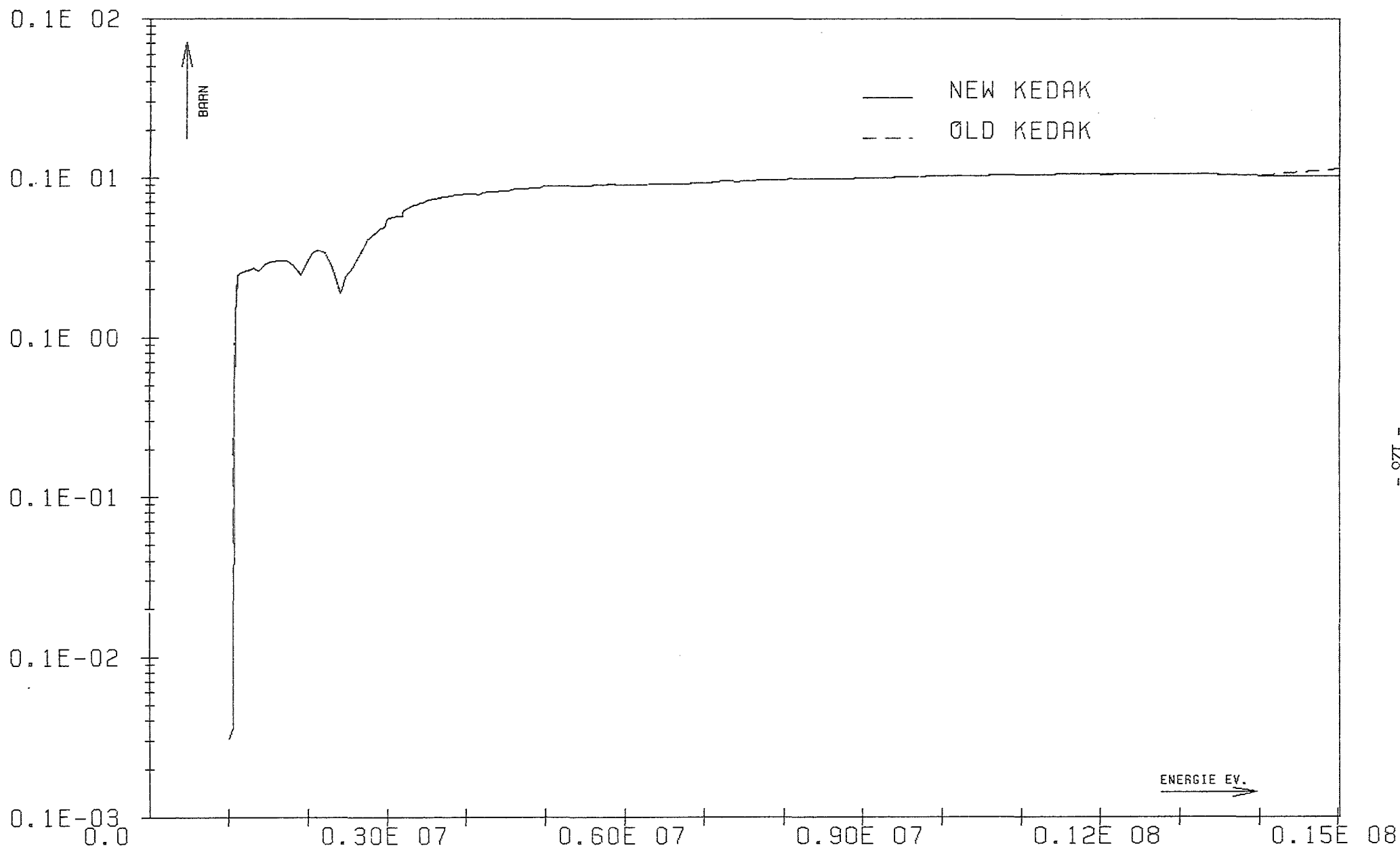


FIG. 12 AL 27 SGX

INR901AL 28.07 17.18.

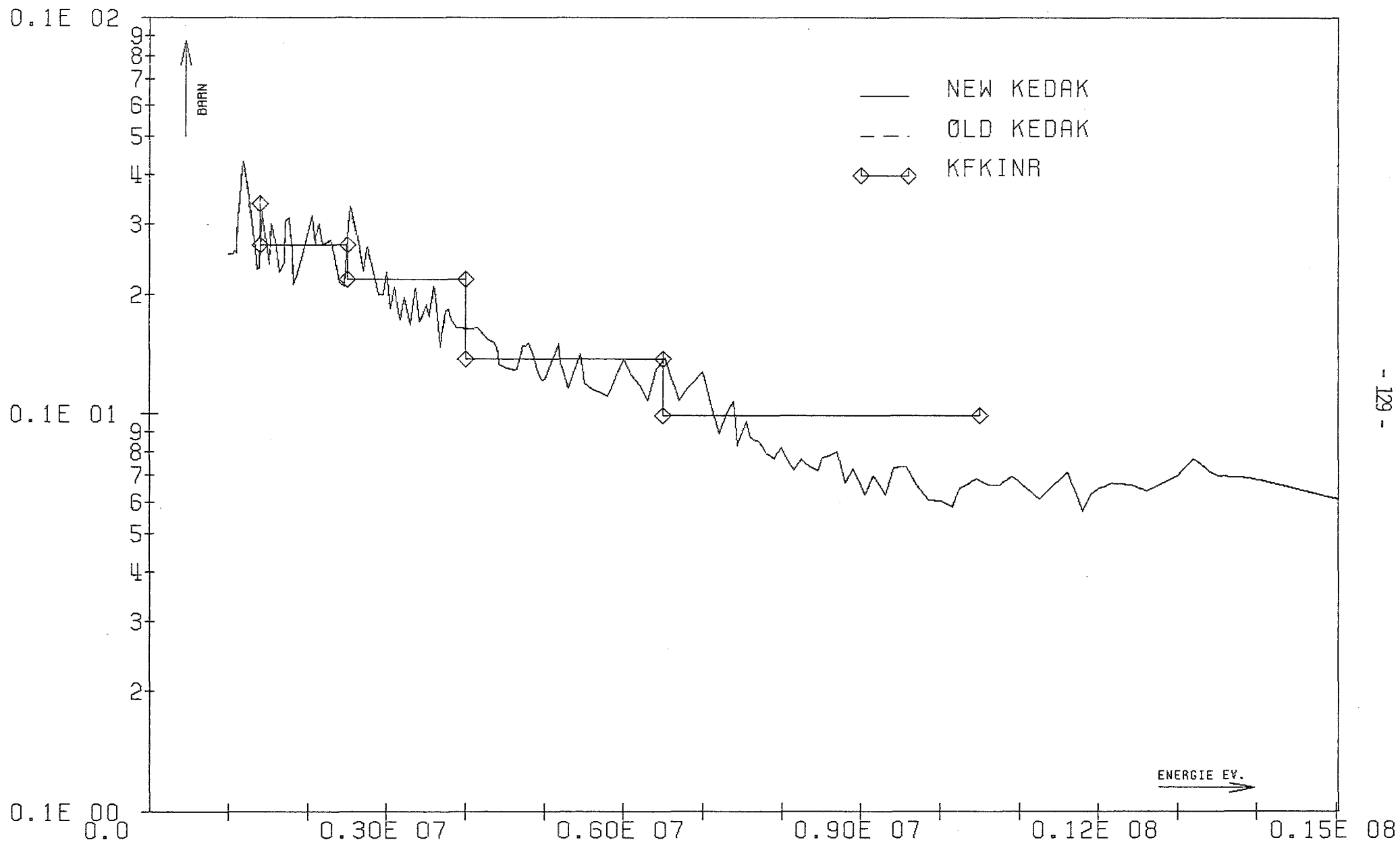


FIG. 13 AL 27 SGN

INR901AL 30.07 13.54.

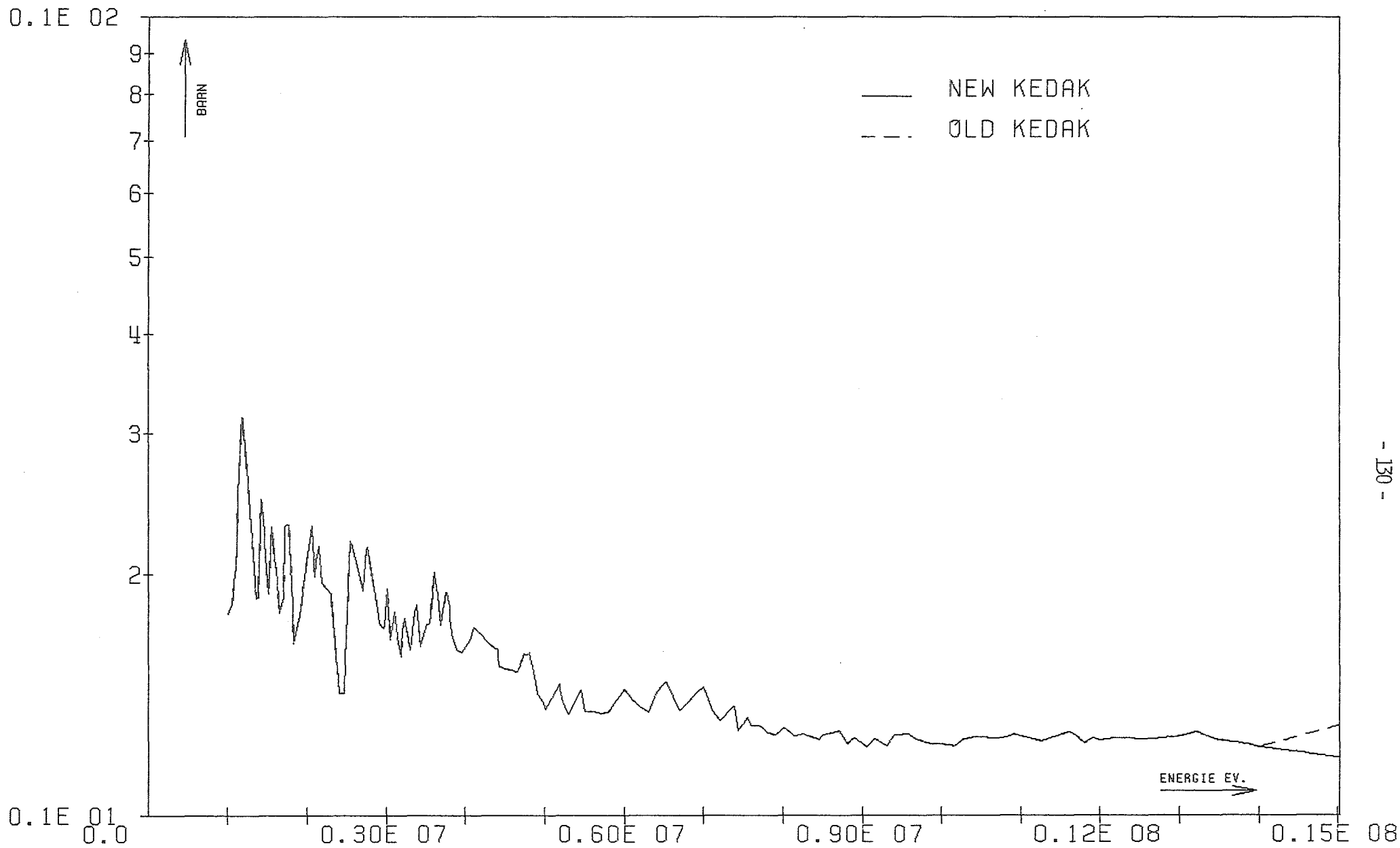


FIG. 14 AL 27 SGTR

INR901AL 28.07 17.18.

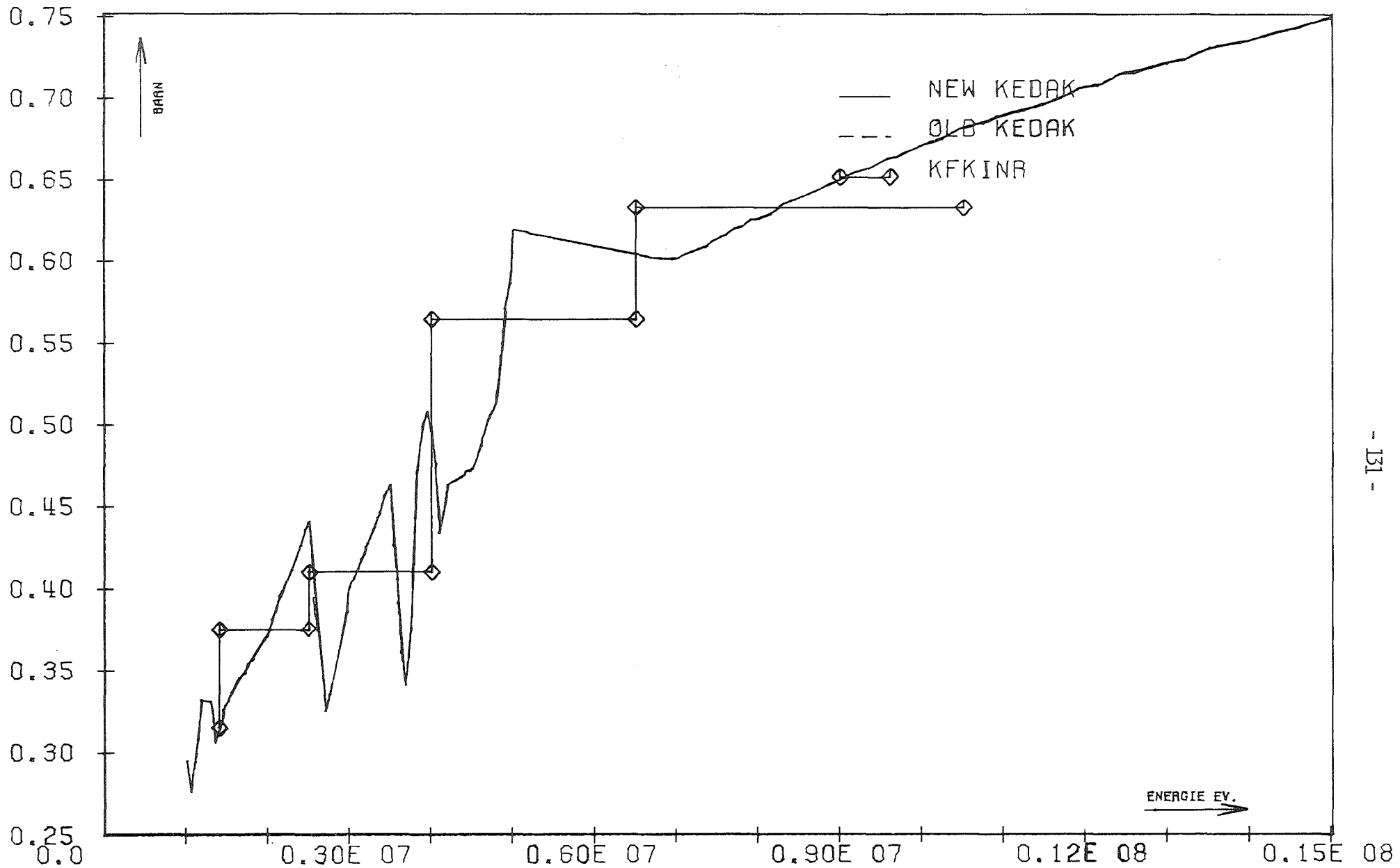


FIG. 15 AL 27 MUEL

INR901AL 19.01 19.48.

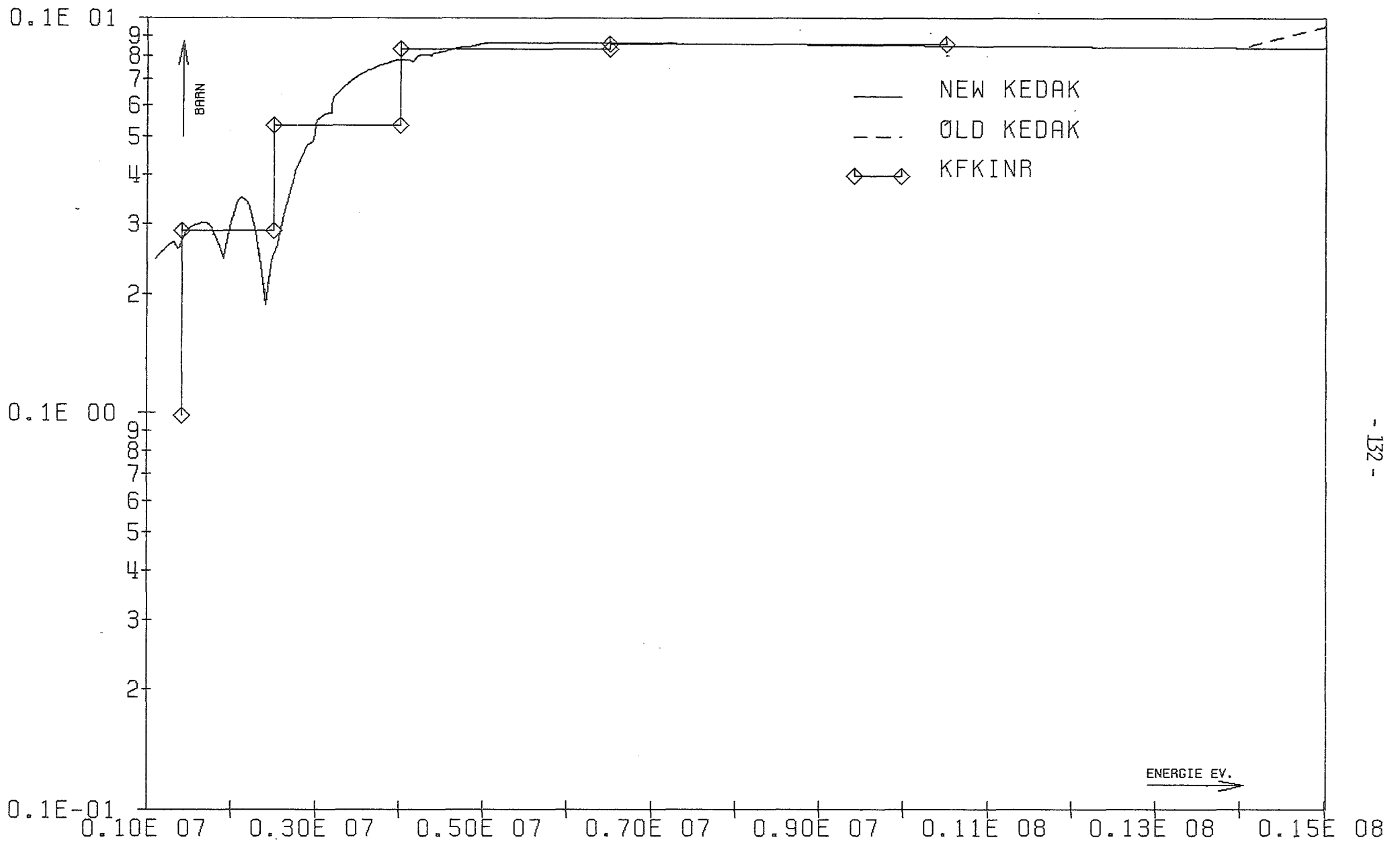


FIG. 16 AL 27 SGI

INR901AL 29.07 16.30.

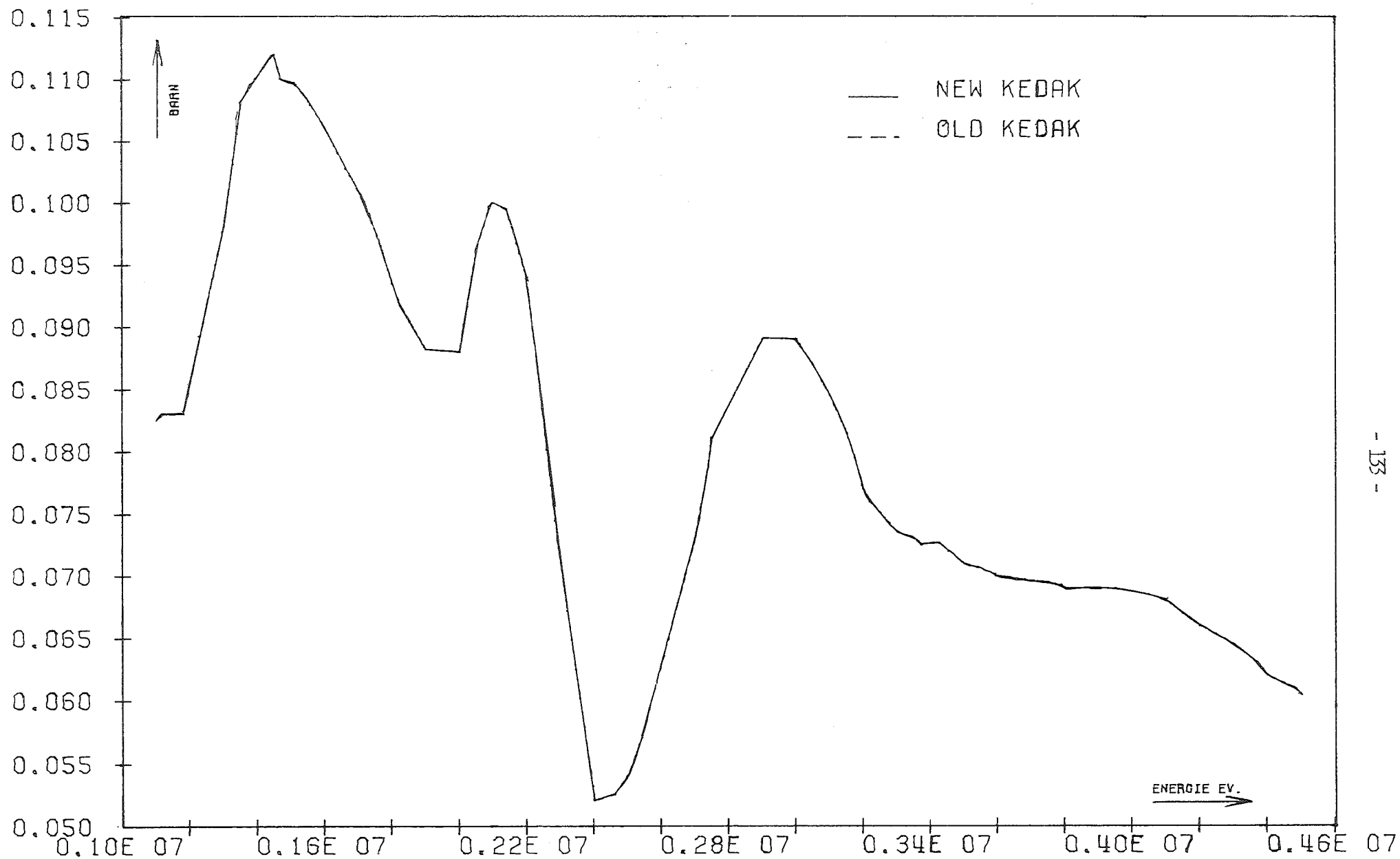


FIG. 17 AL 27 SGIZ 0.842D+06 INR901AL 19.01 19.48.

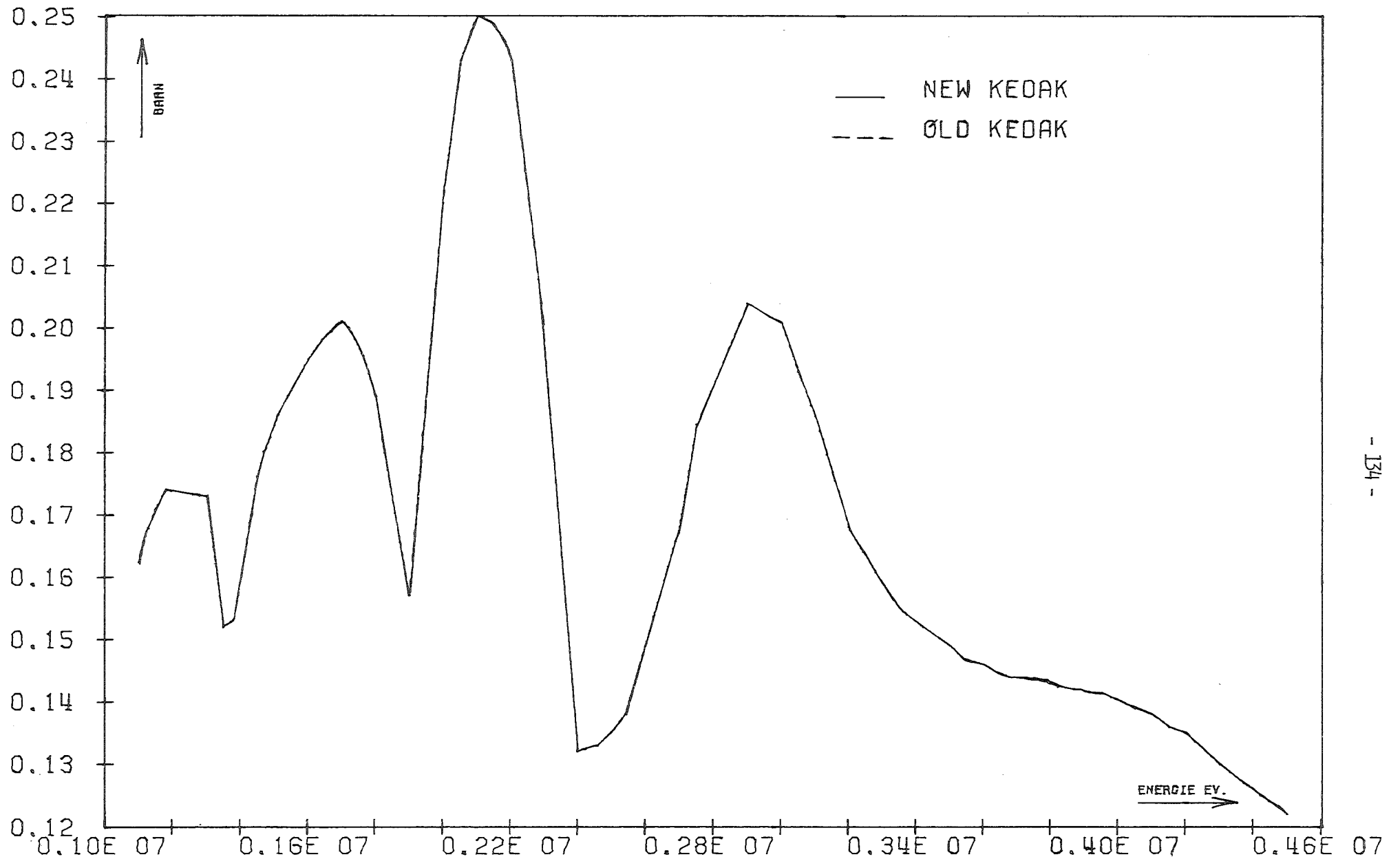


FIG. 18 AL 27 SGIZ 0.1010+07 INR901AL 19.01 19.48.

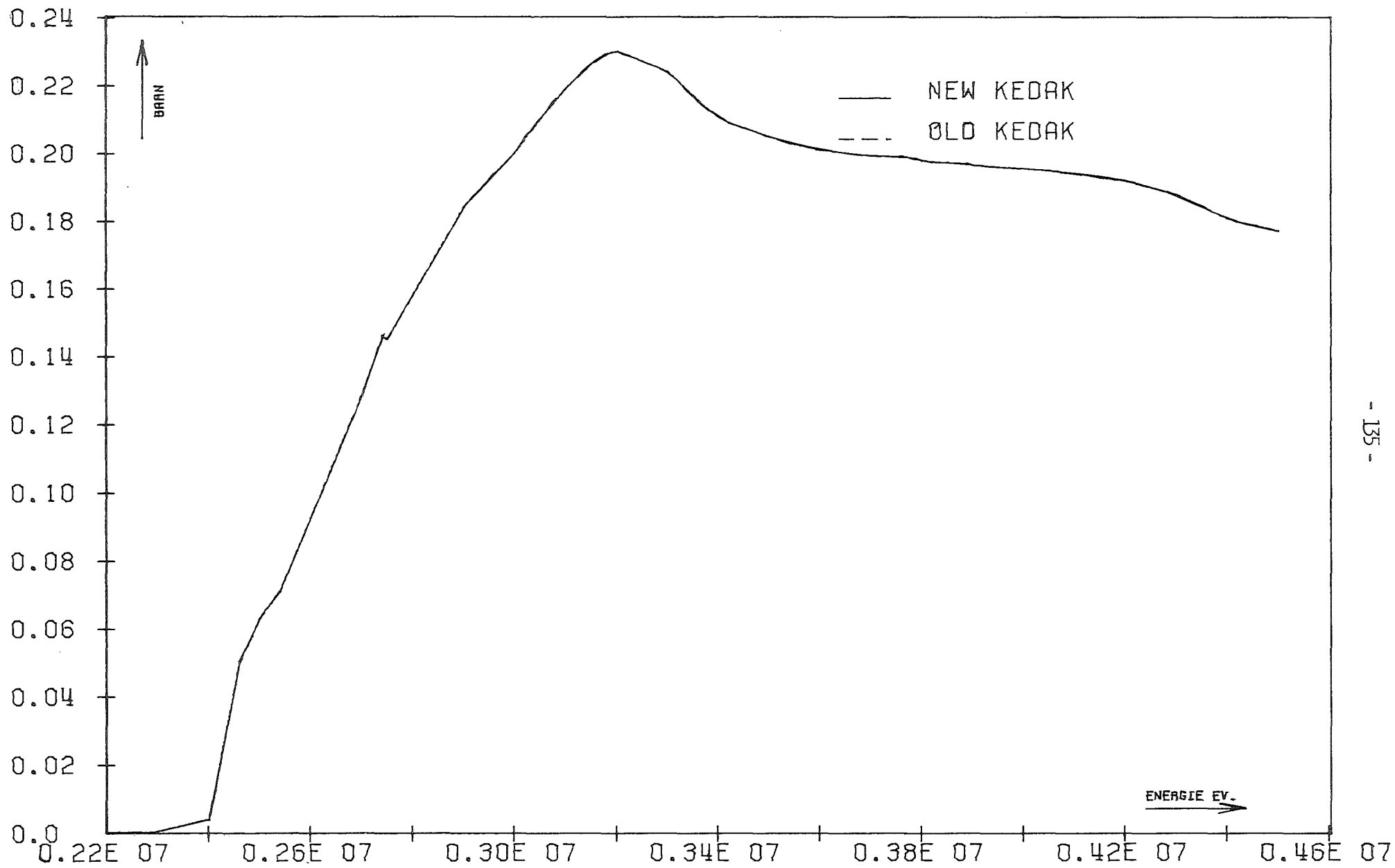


FIG. 19 AL 27 SGIZ 0.221D+07 INR901AL 22.01 11.13.

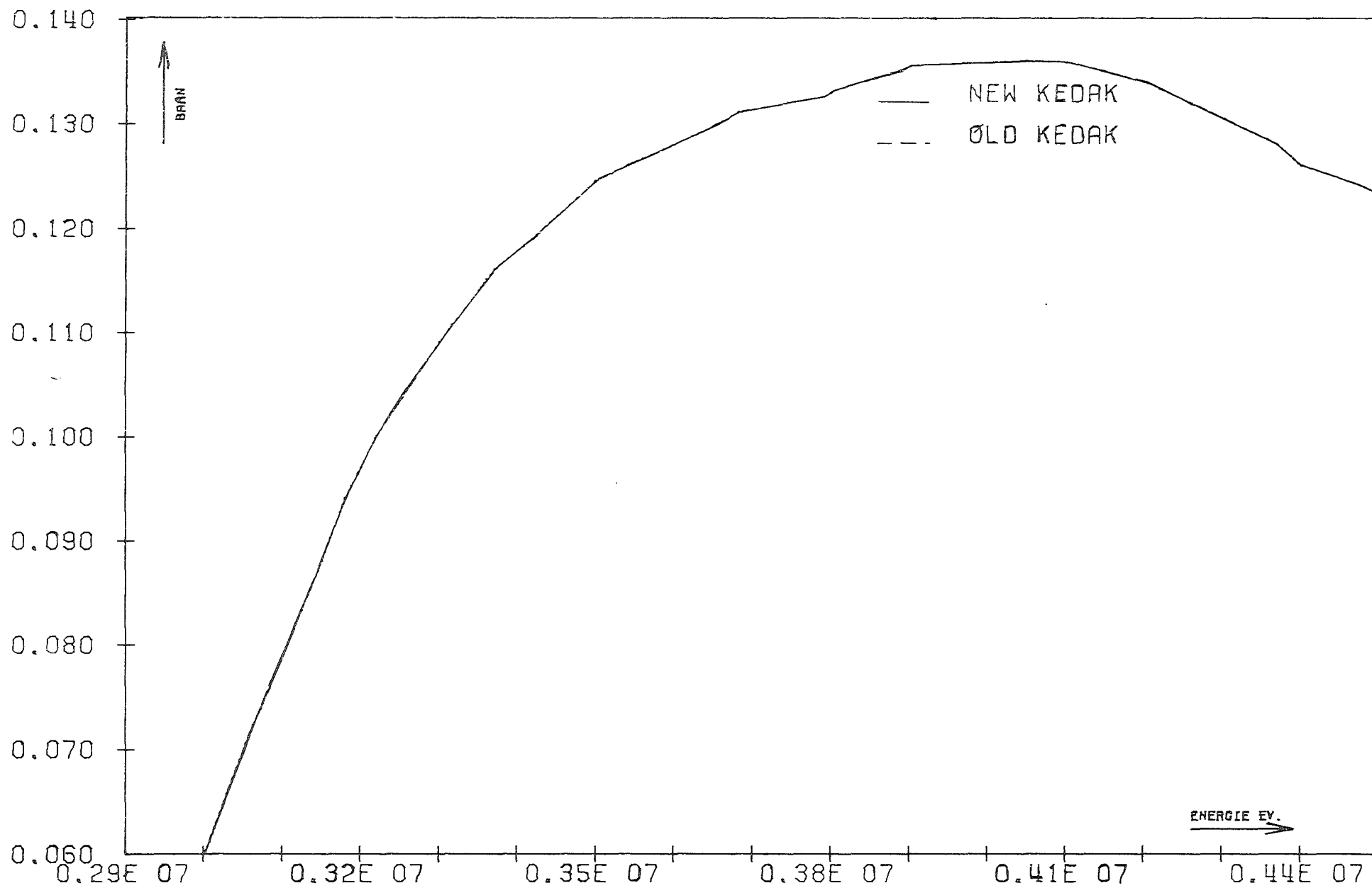


FIG. 20

AL 27

SGIZ

0.2730+07

INR901AL 19.01 19.48.

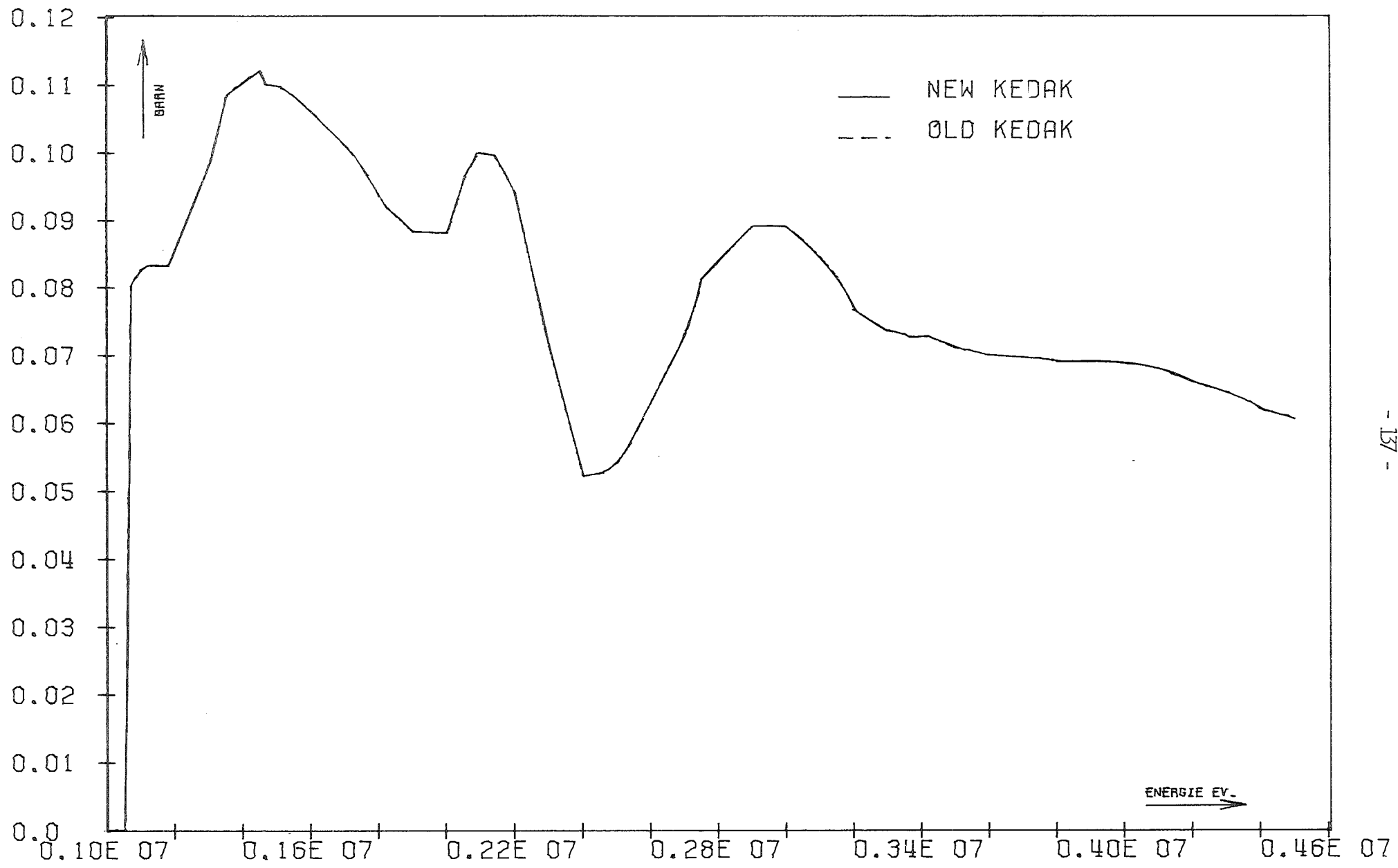


FIG. 21 AL 27 SGIZ 0.2980+01 INR901AL 22.01 11.13.

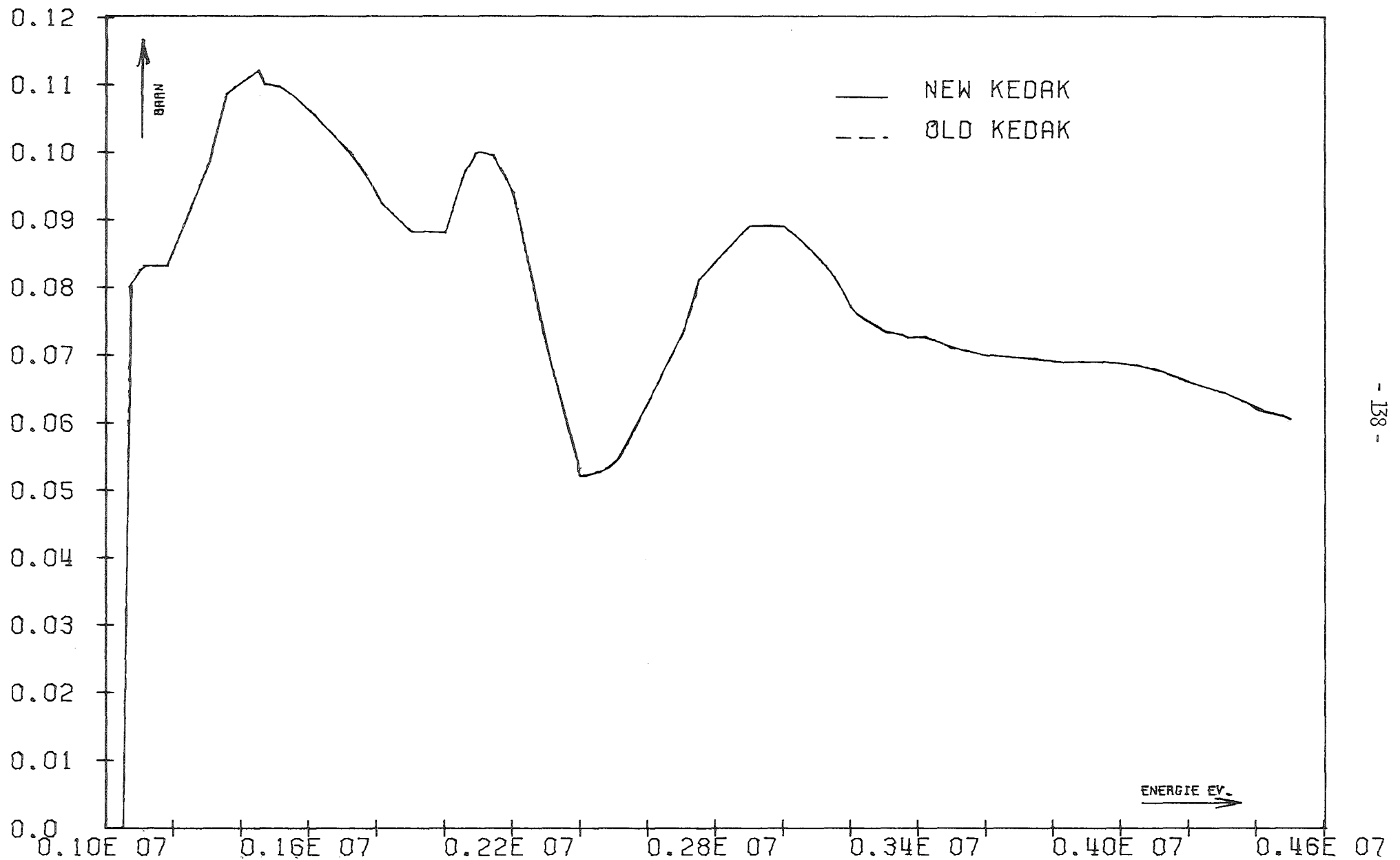


FIG. 22 AL 27 SGIZ 0.3680+01 INR901AL 22.01 11.13.

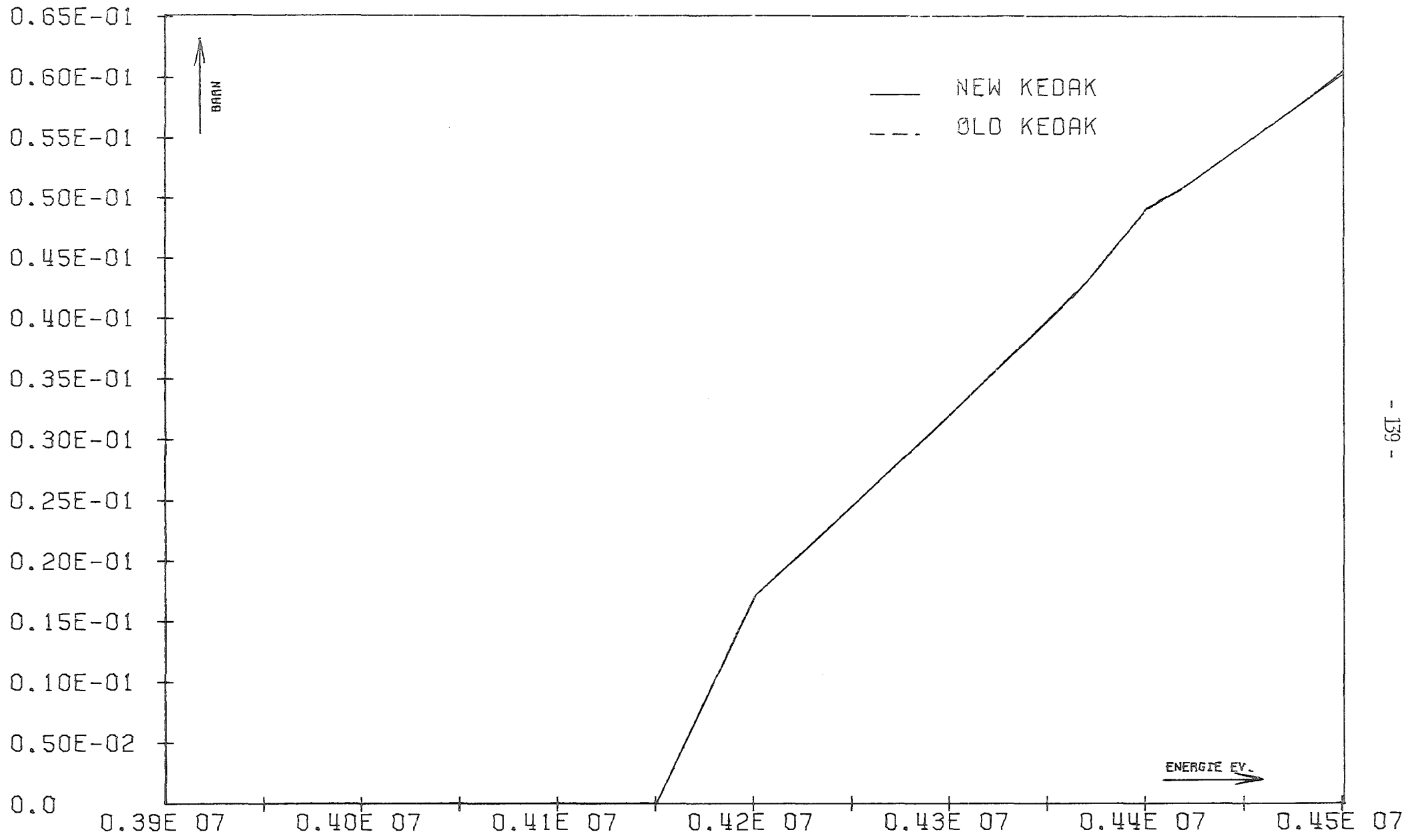


FIG. 23 AL 27 SGIZ 0.3950+07 INR901AL 22.01 11.13.

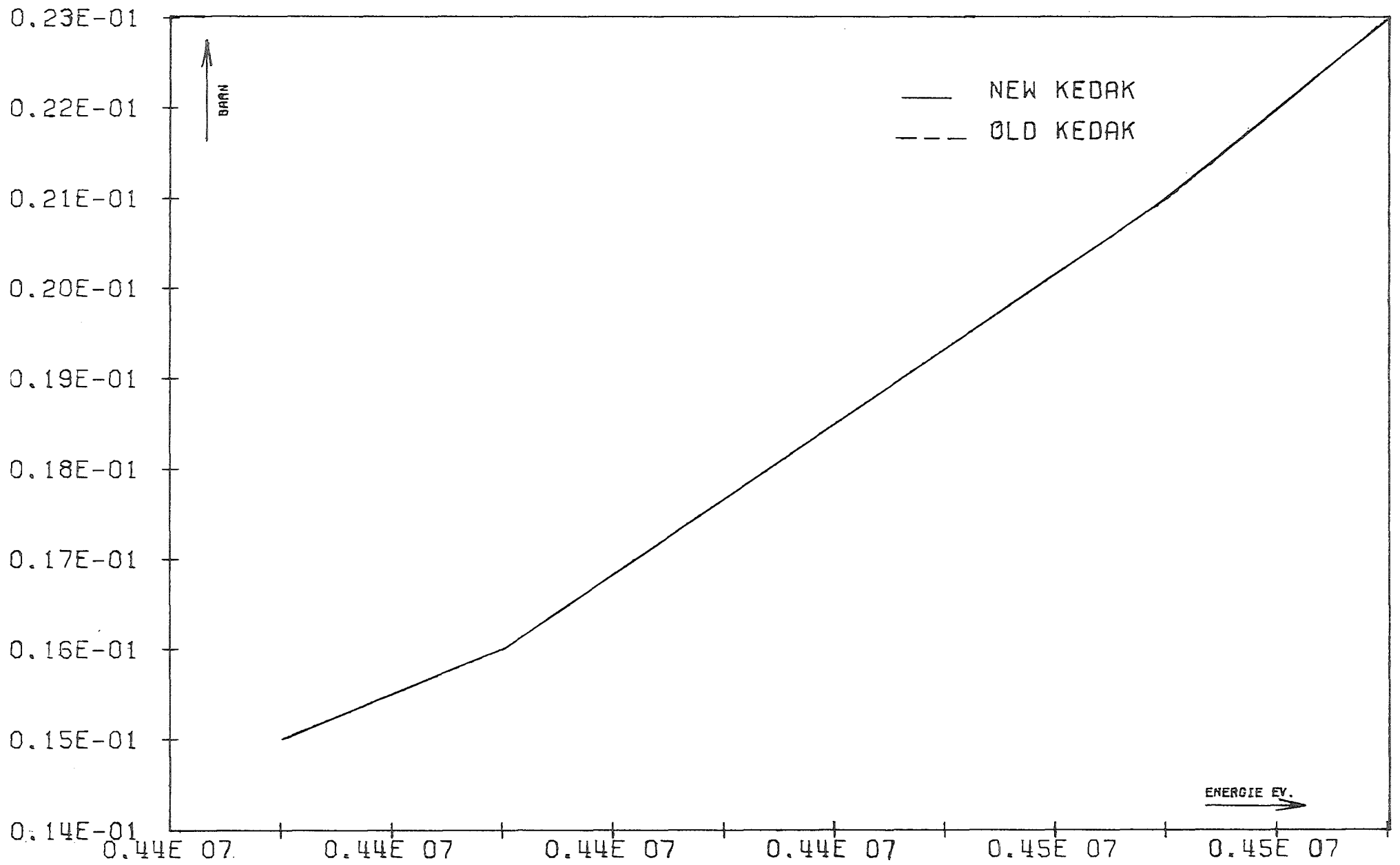


FIG. 24 AL 27 SGIZ 0.4050+07 INR901AL 19.01 19.48.

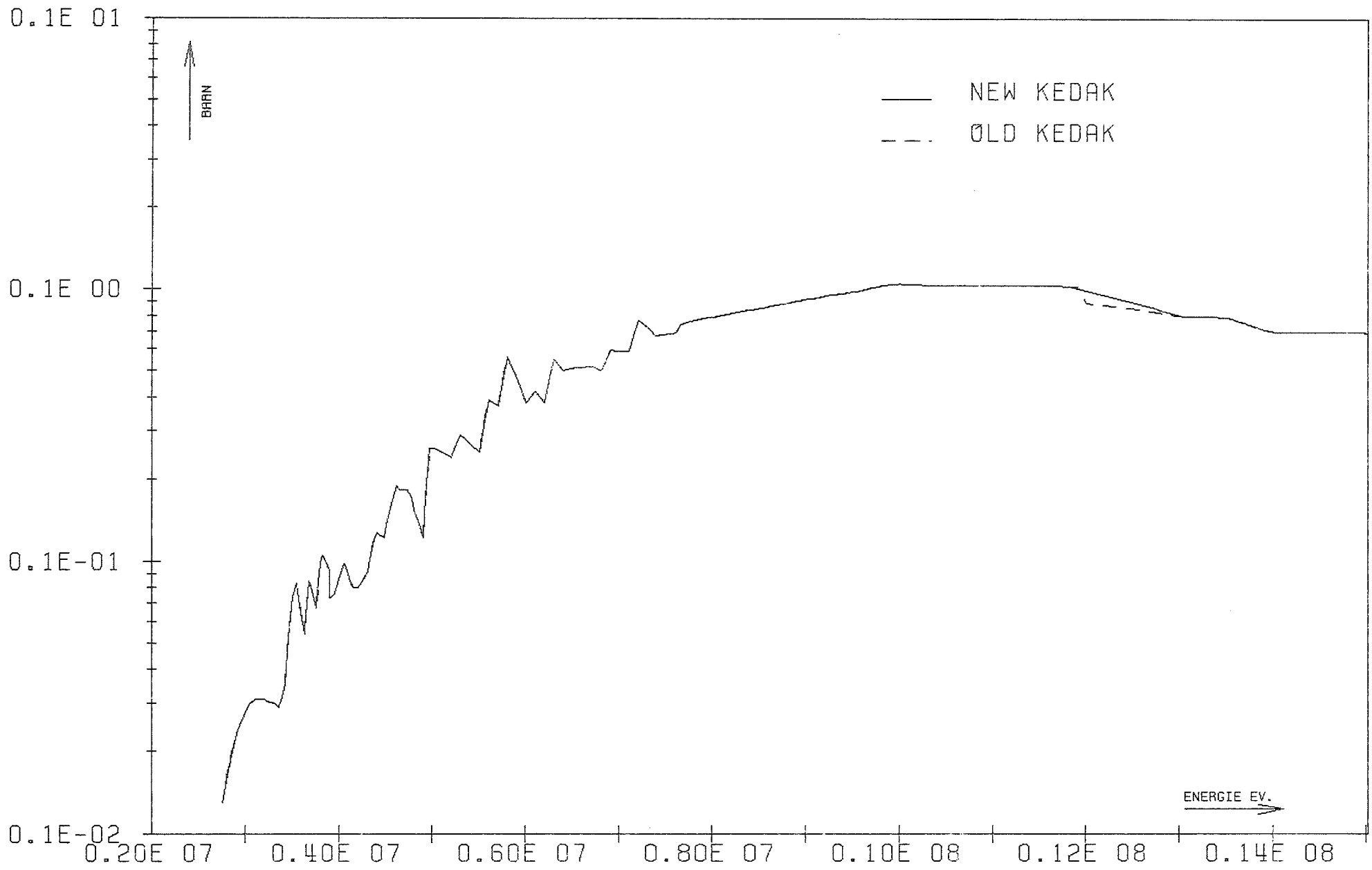


FIG. 25 AL 27 SGP

INR901AL 30.07 13.54.

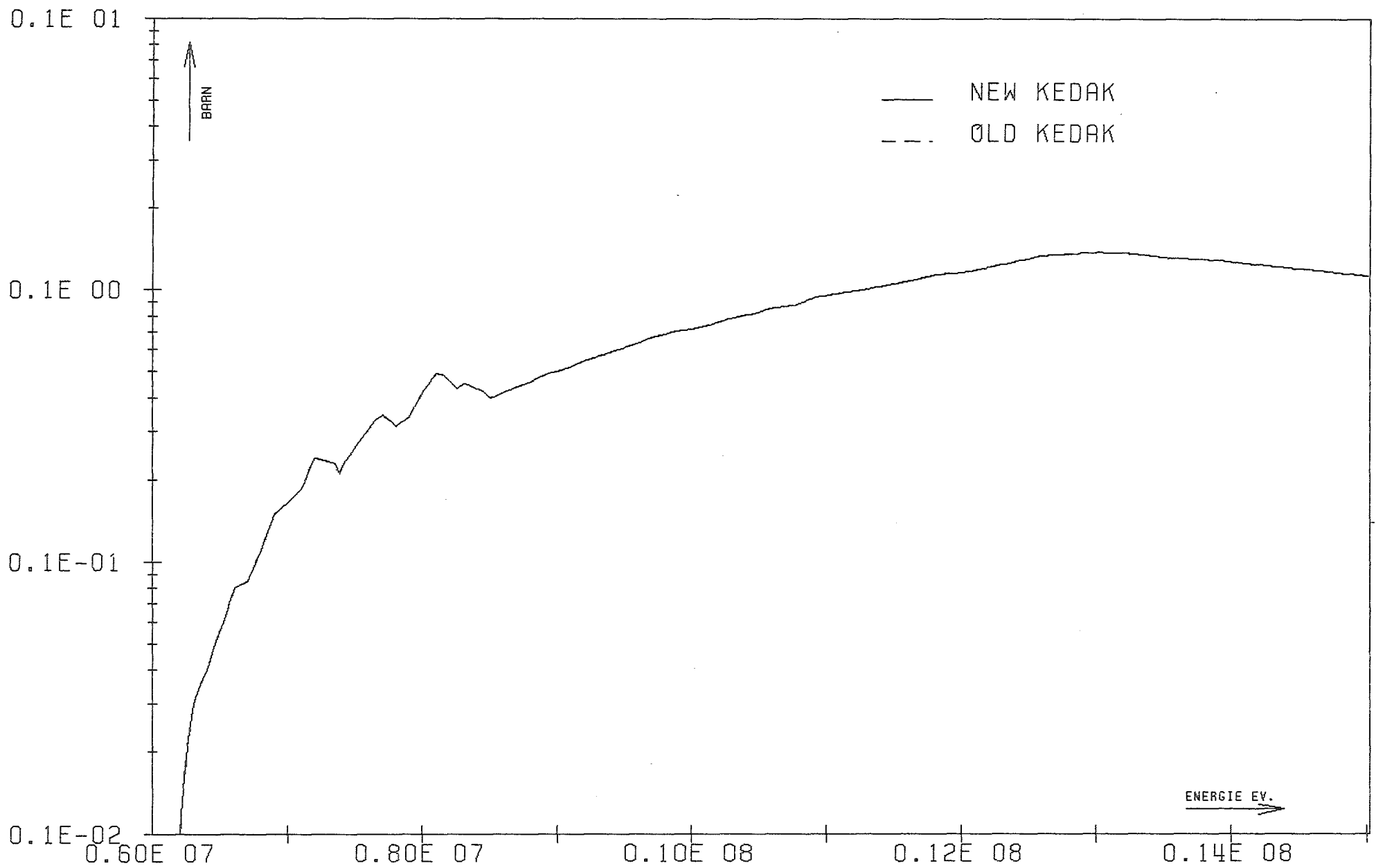


FIG. 26 AL 27 SGALP

INR901AL 30.07 13.54.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 1 keV	CL
2	SGA	''	
3	SGP	''	
4	SGN	''	
5	SGTR	''	
6	SGT	1 keV to 1 MeV	
7	SGA	''	
8	SGG	''	
9	SGP	''	
10	SGN	''	
11	SGTR	''	
12	MUEL	''	
13	SGT	1 MeV to 15 MeV	
14	SGA	''	
15	SGX	''	
16	SGP	''	
17	SGN	''	
18	SGTR	''	
19	MUEL	''	
20	SGI	''	
21	SGALP	''	
22	SG2N	12 MeV to 15 MeV	

Cl

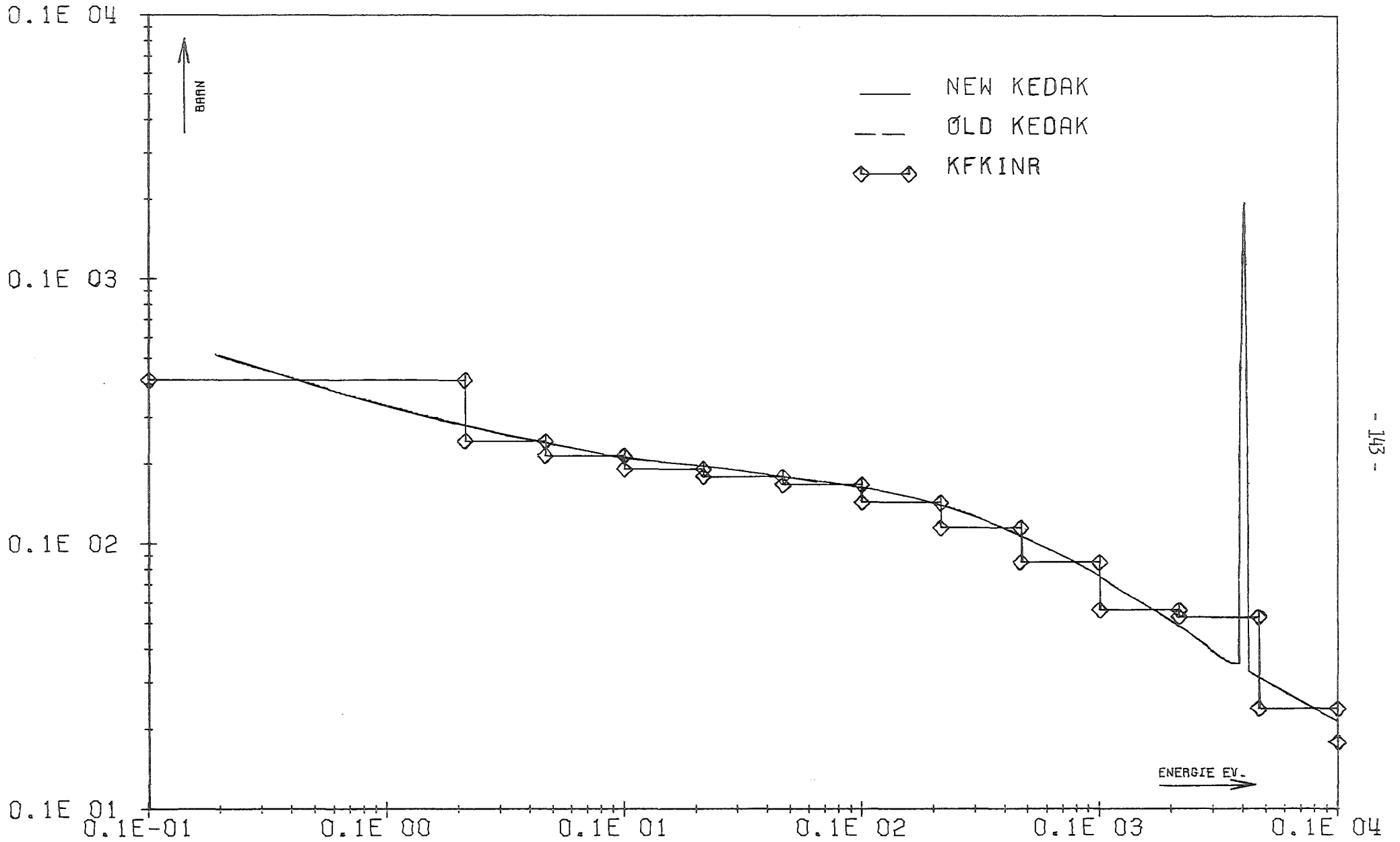


FIG. 1 CL UNC SGT

INR901CL 25.01 17.34.

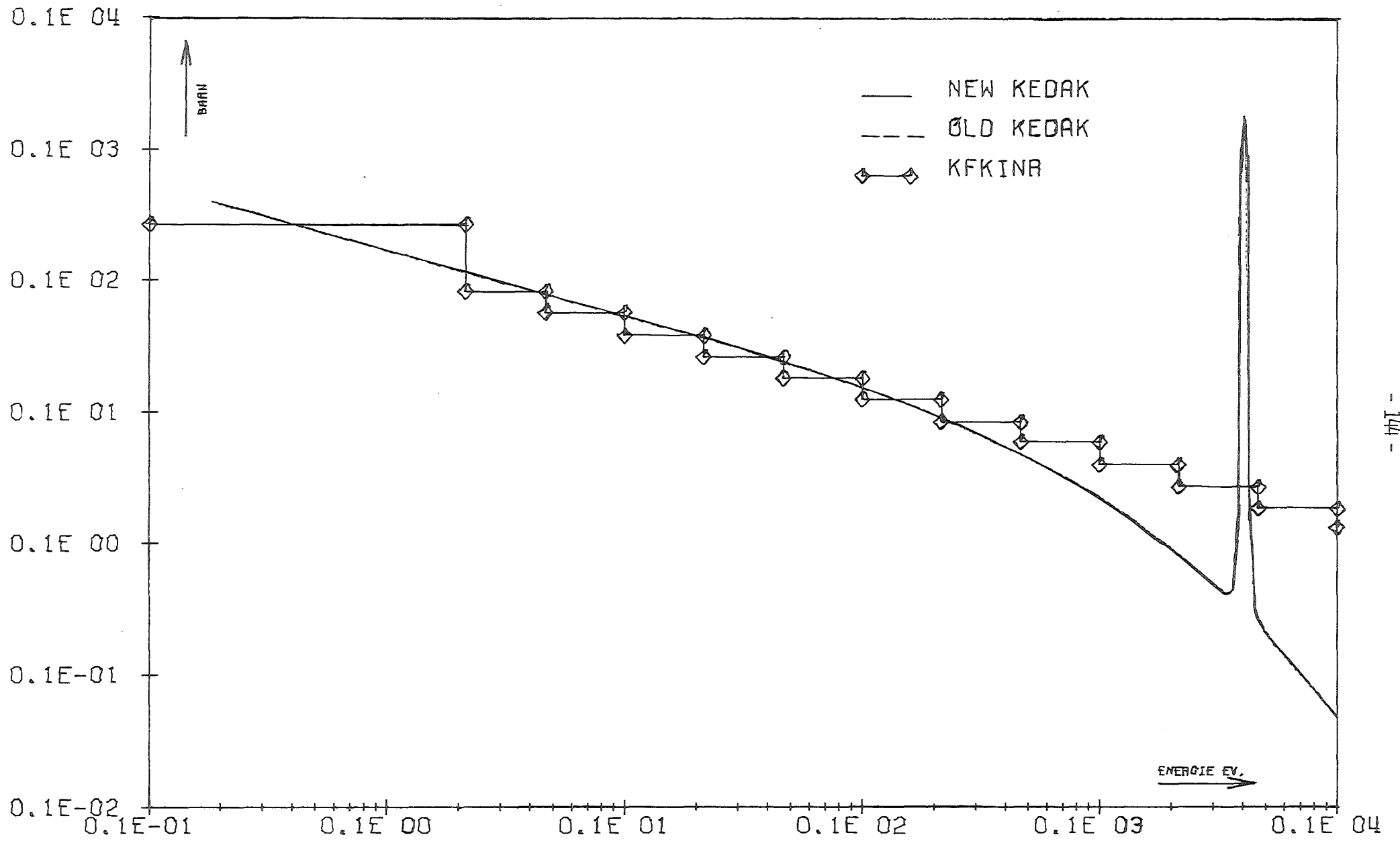


FIG. 2 CL UNC SGA

INR901CL 17.07 18.53.

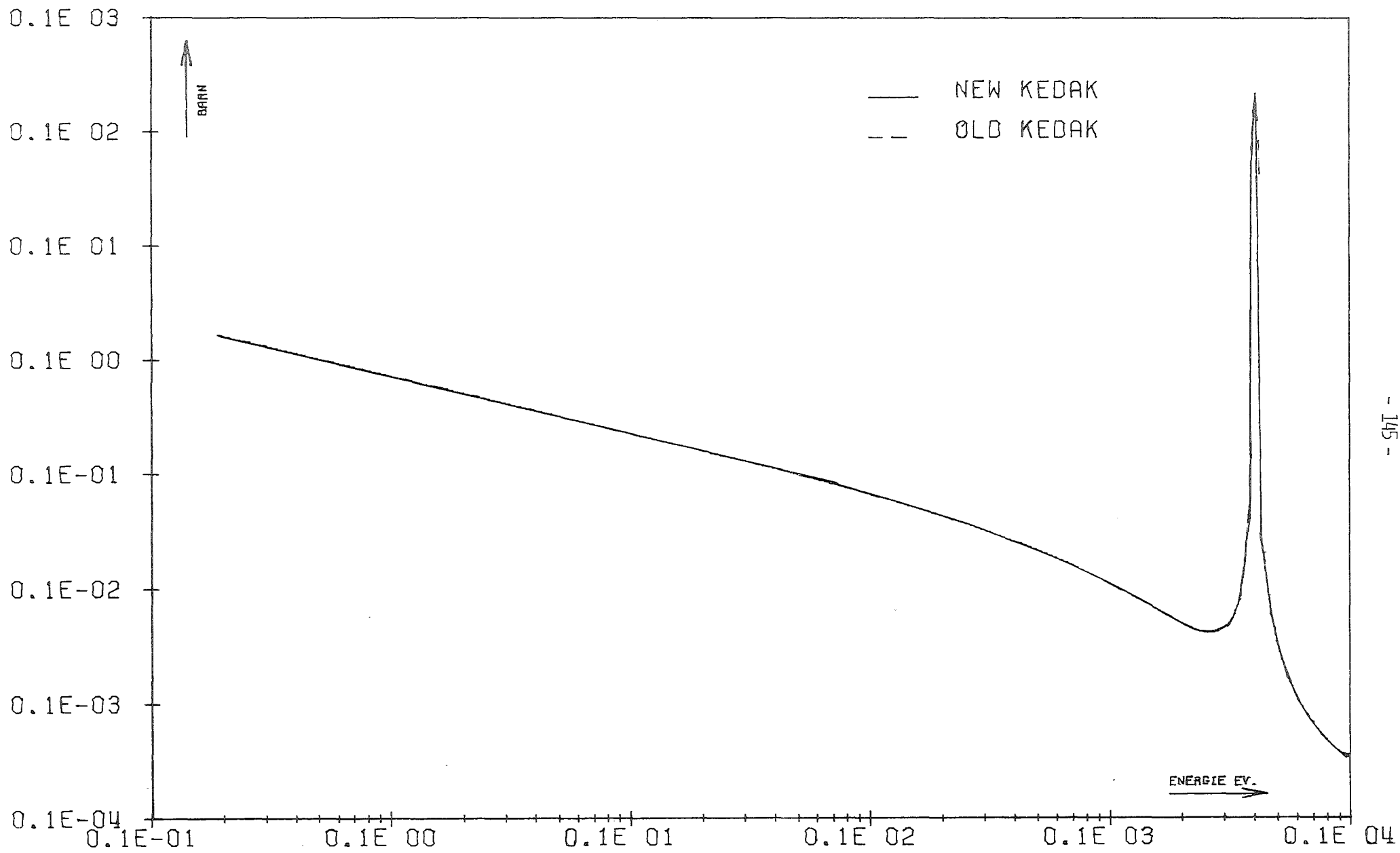


FIG. 3 CL UNC SGP

INR901CL 25.01 17.35.

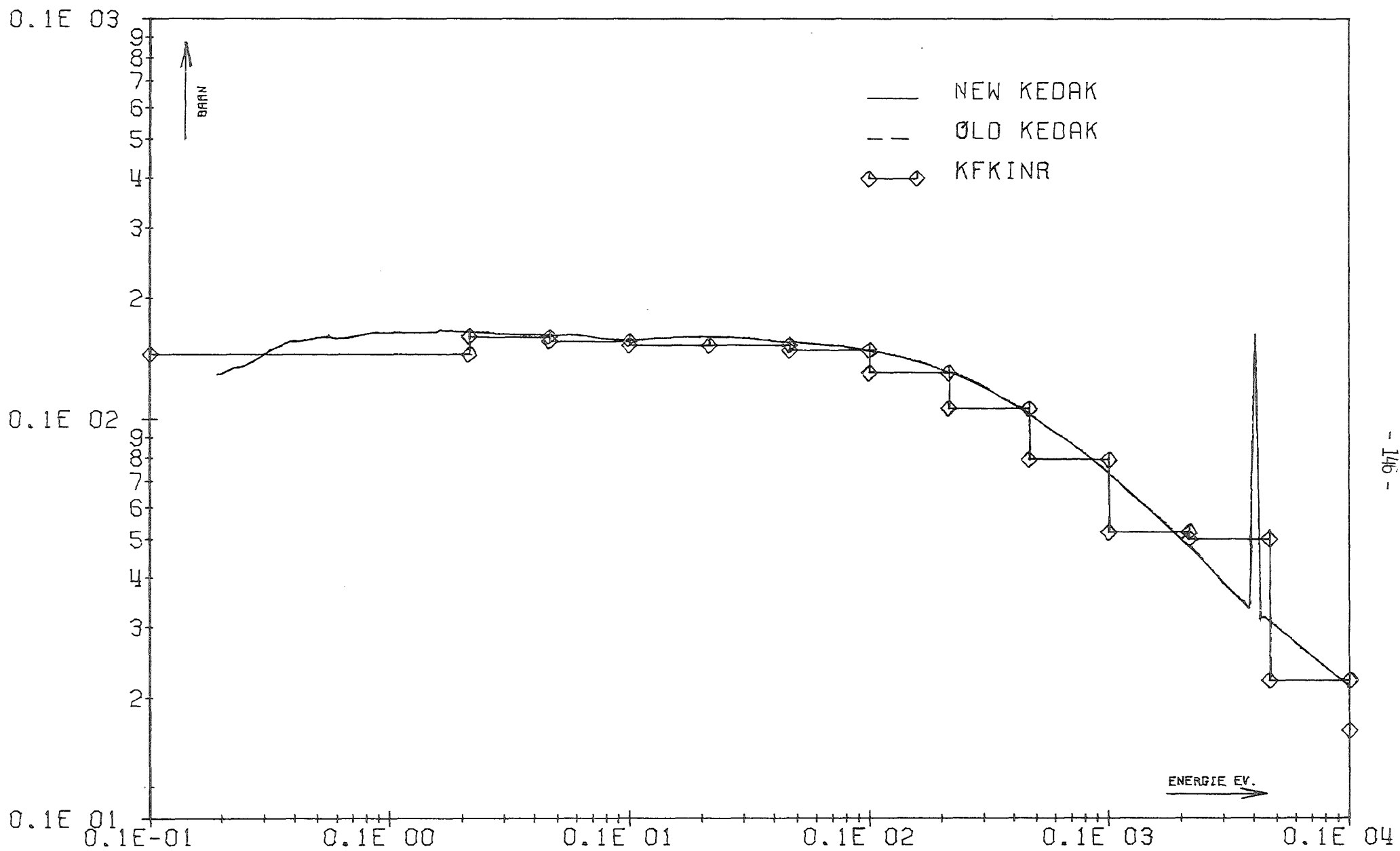


FIG. 4 CL UNC SGN

INR901CL 25.01 17.35.

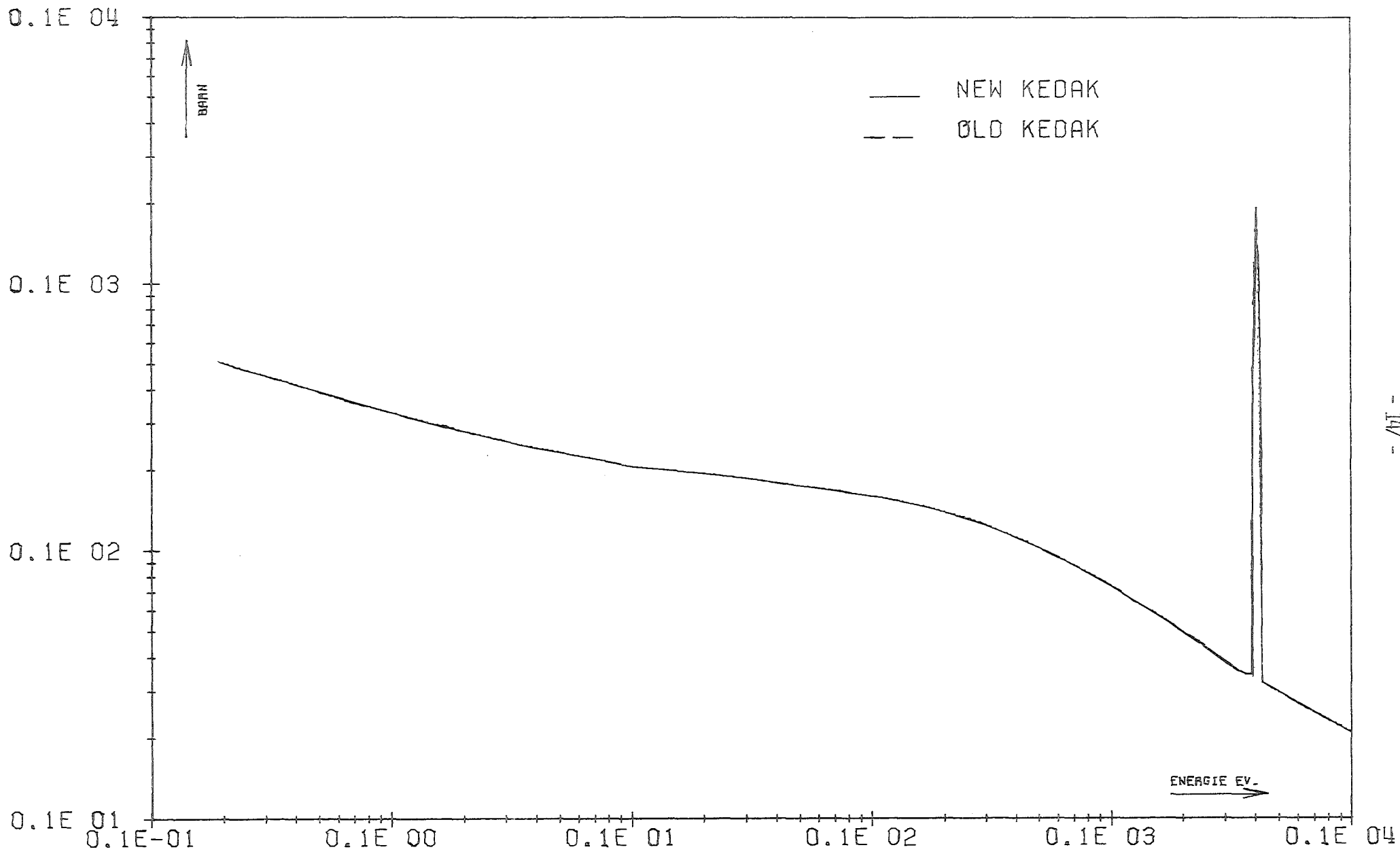


FIG. 5 CL UNC SGTR

INR901CL 25.01 17.35.

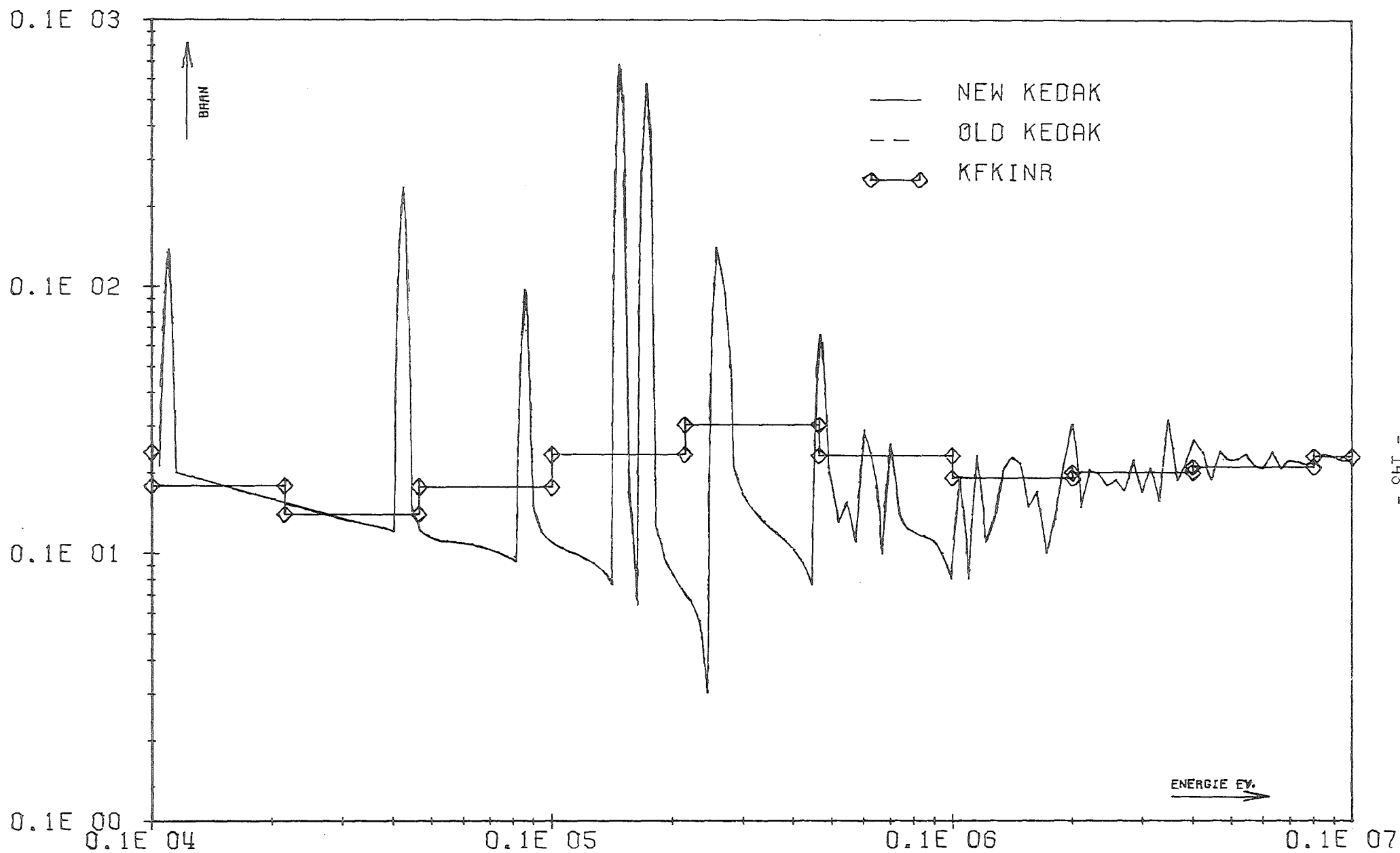


FIG. 6 CL UNC SGT

INR901CL 25.01 17.35.

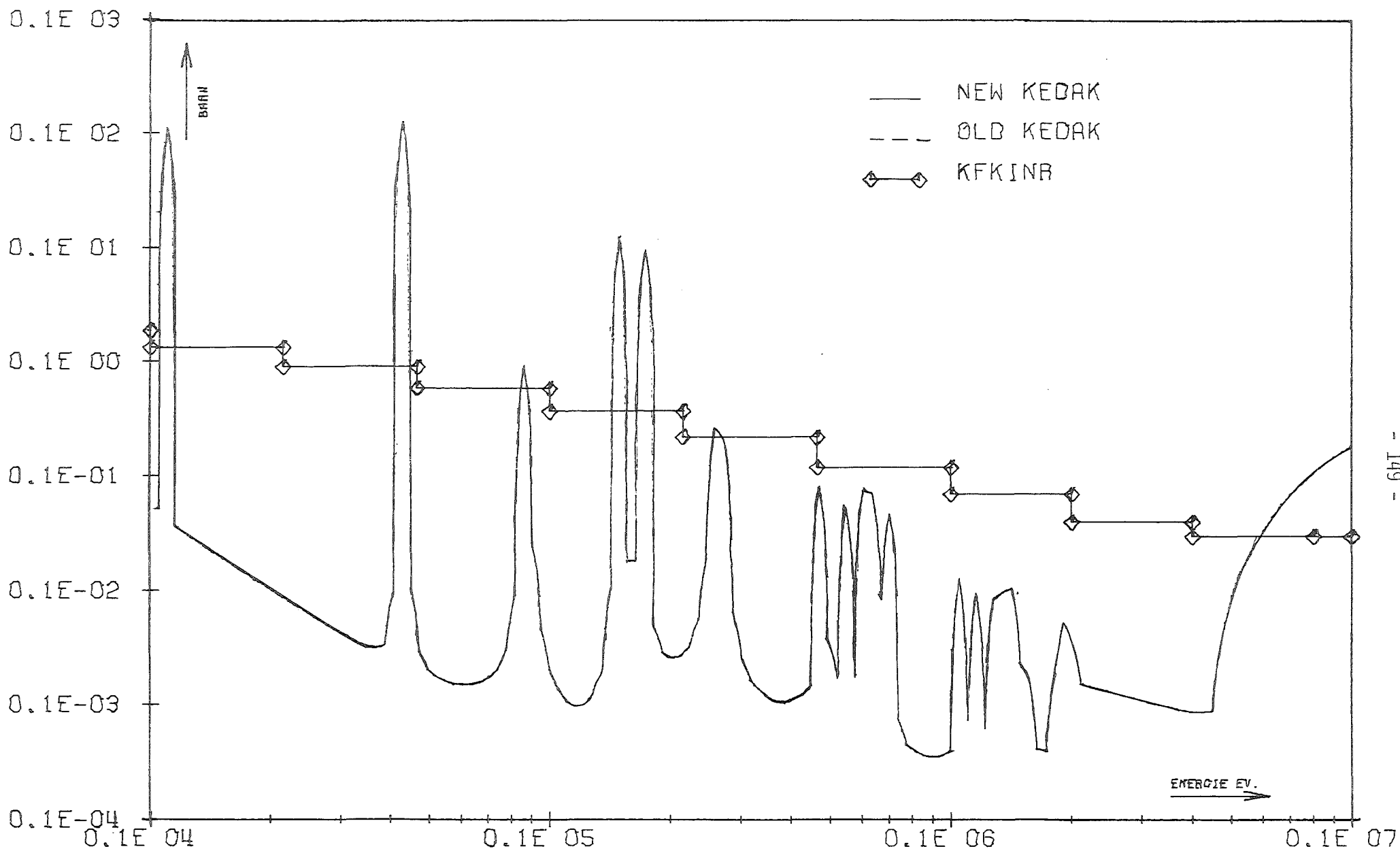
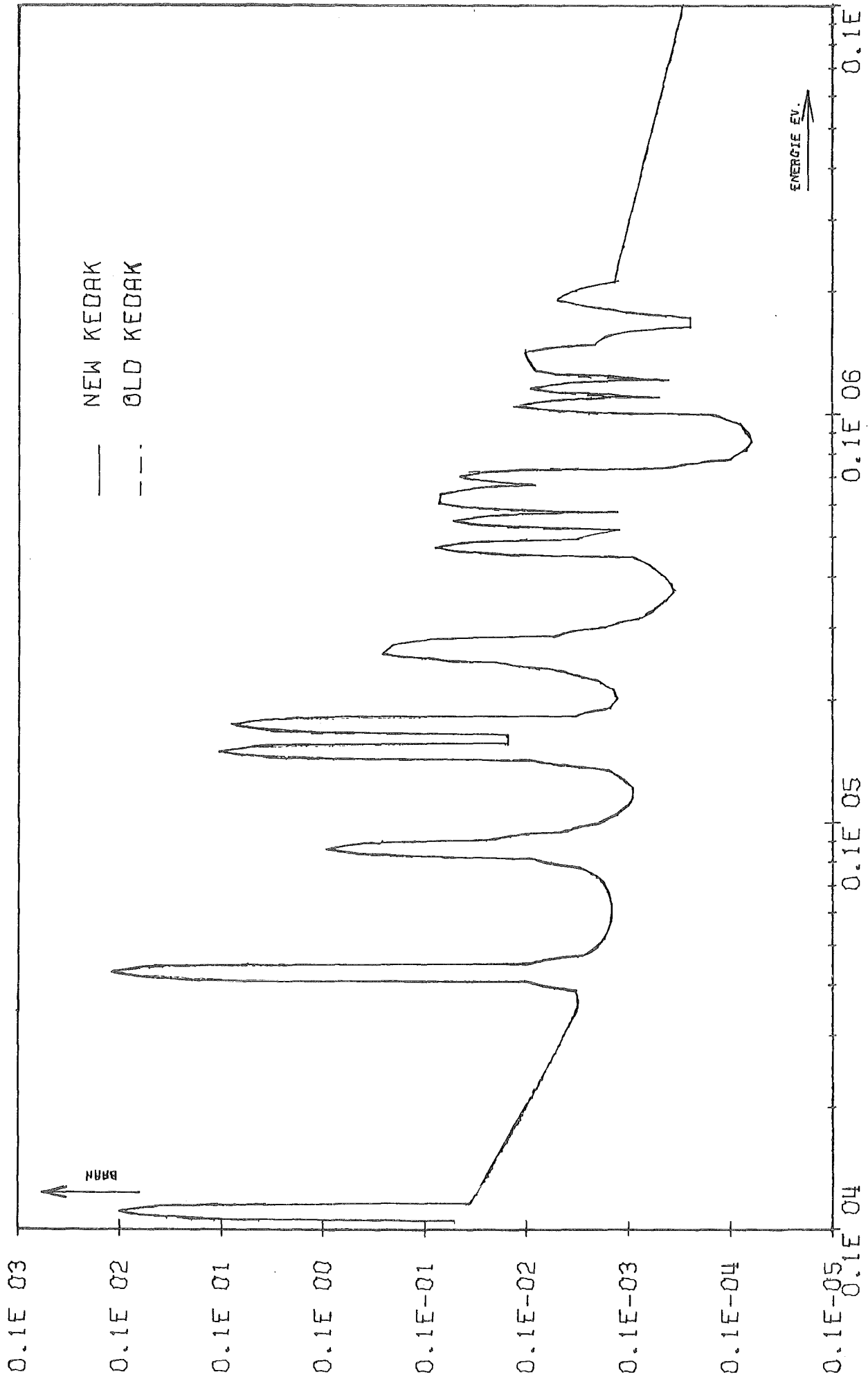


FIG. 7 CL UNC SGA

INR901CL 17.07 18.53.



INR901CL 17.07 18.53.

FIG. 8 CL UNC SGG

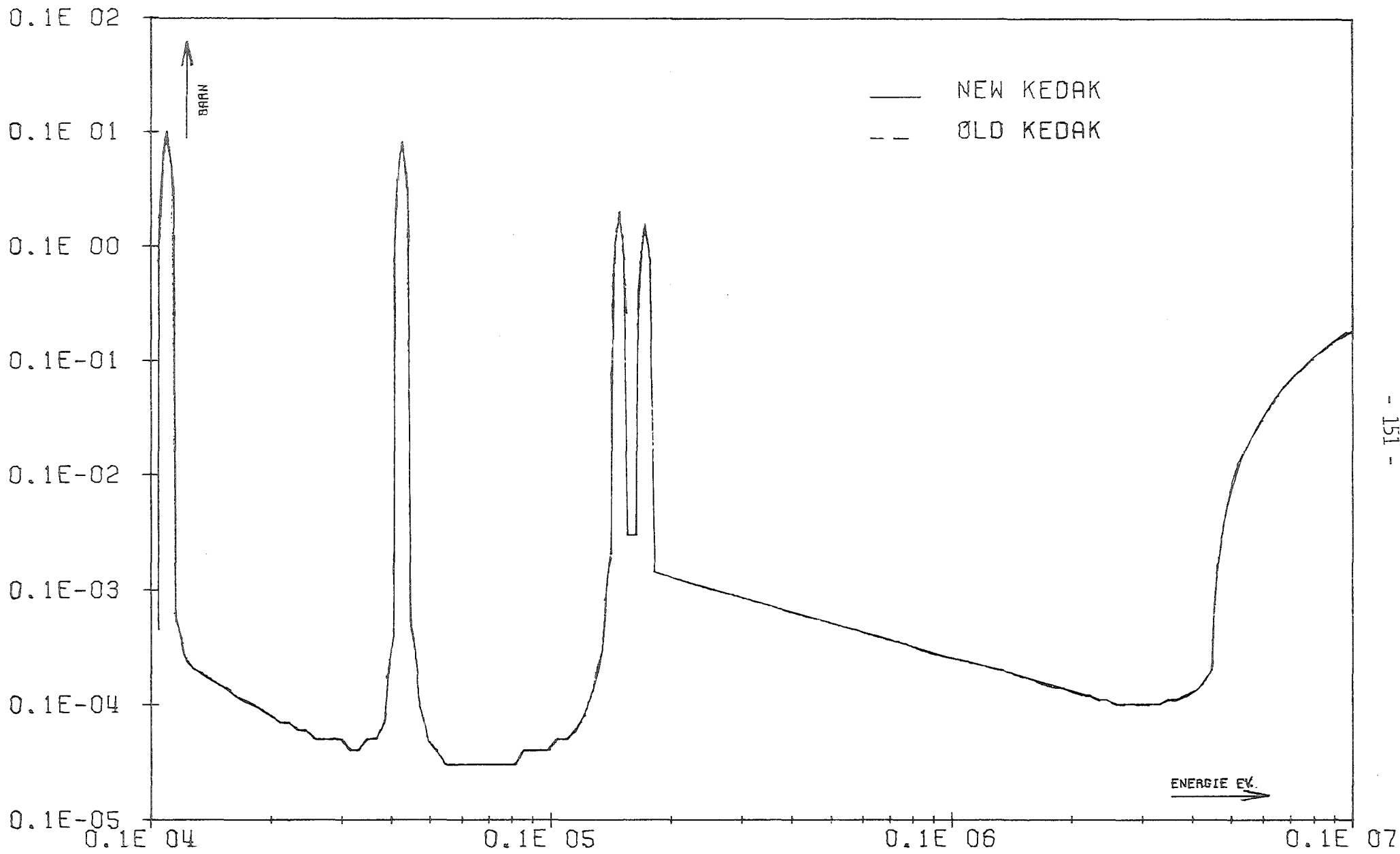


FIG. 9 CL UNC SGP

INR901CL 25.01 17.35.

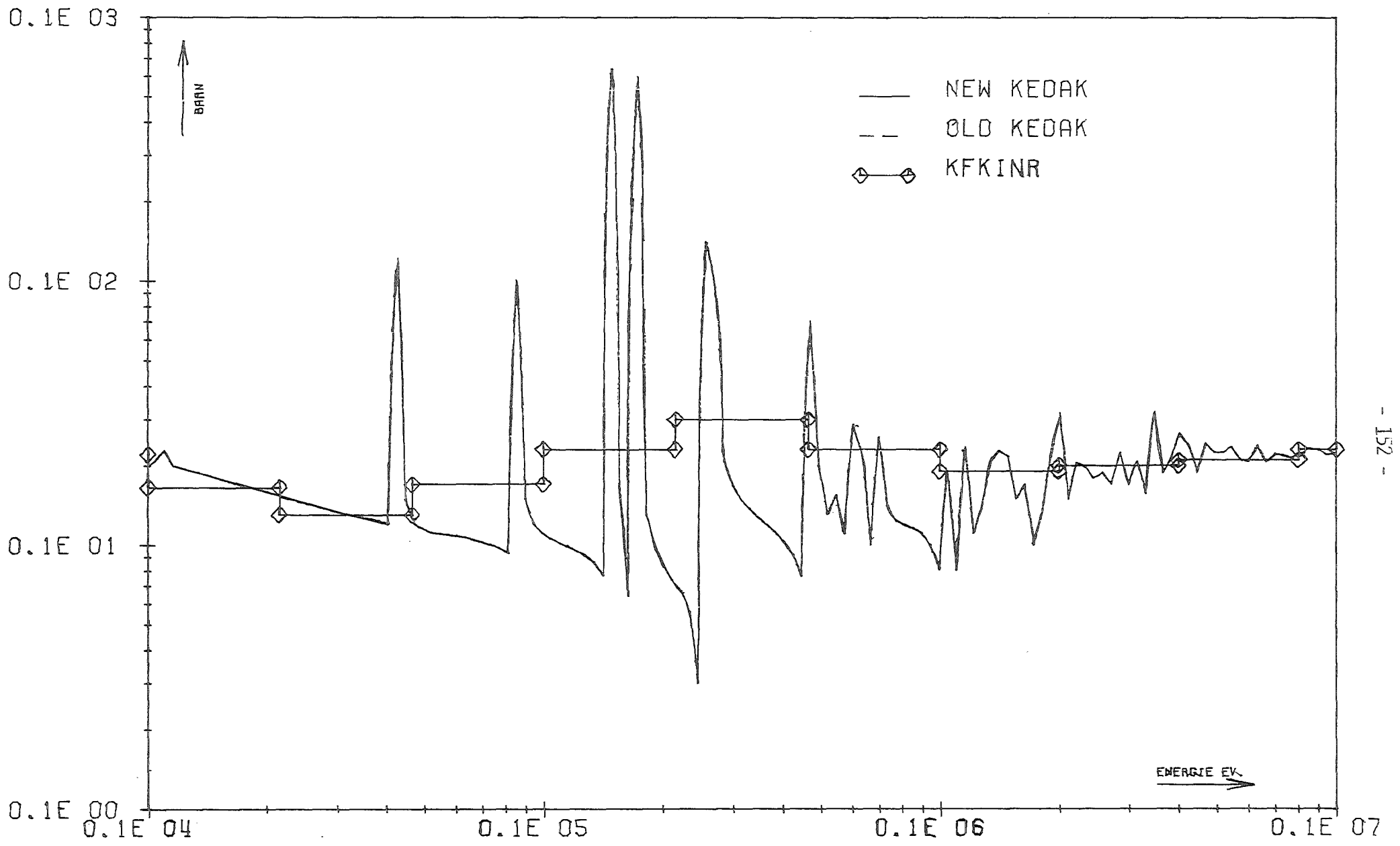


FIG. 10 CL UNC SGN INR901CL 25.01 17.35.

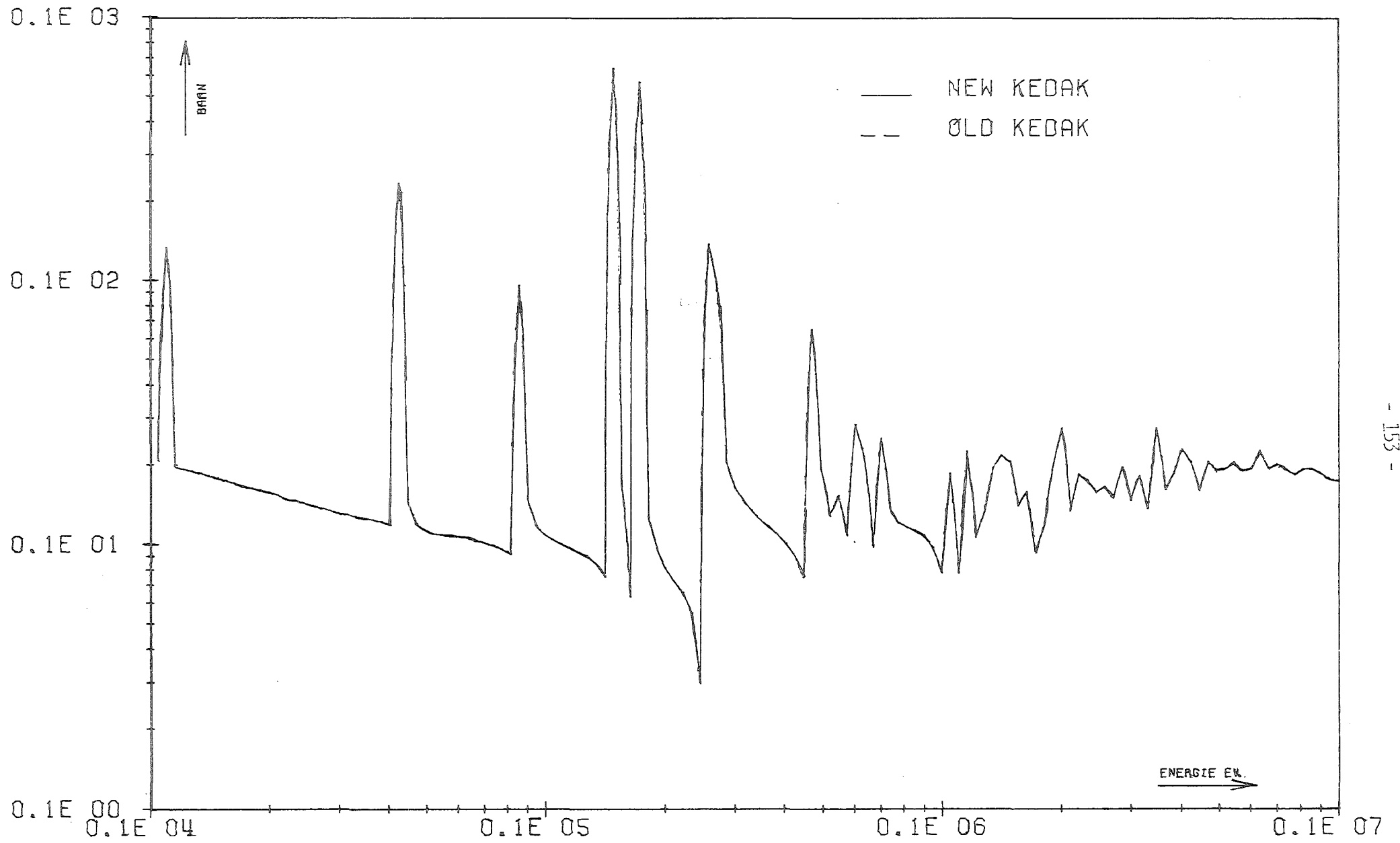


FIG. 11 CL UNC SGTR

INR901CL 25.01 17.35.

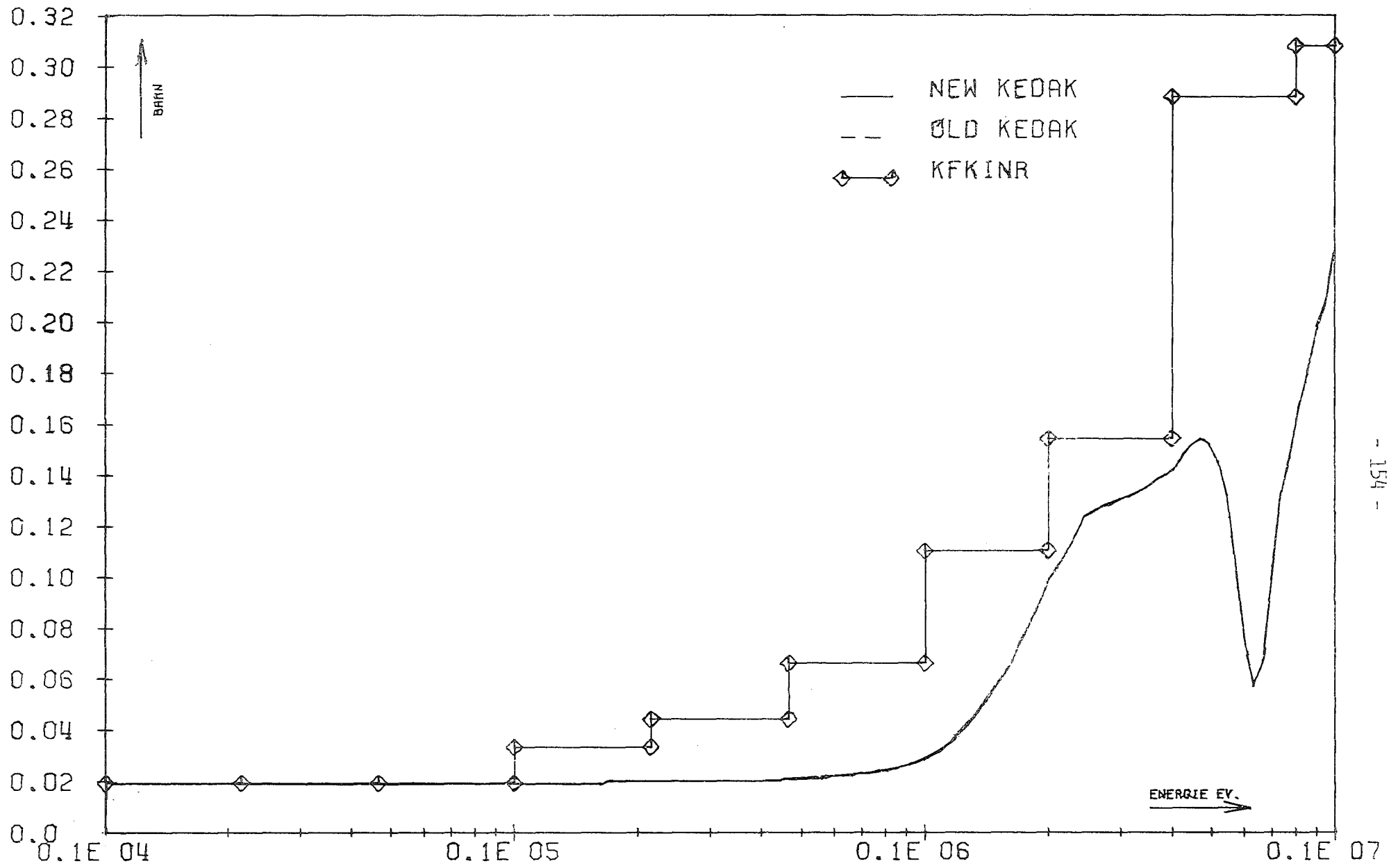


FIG. 12 CL UNC MUEL

INR901CL 25.01 17.35.

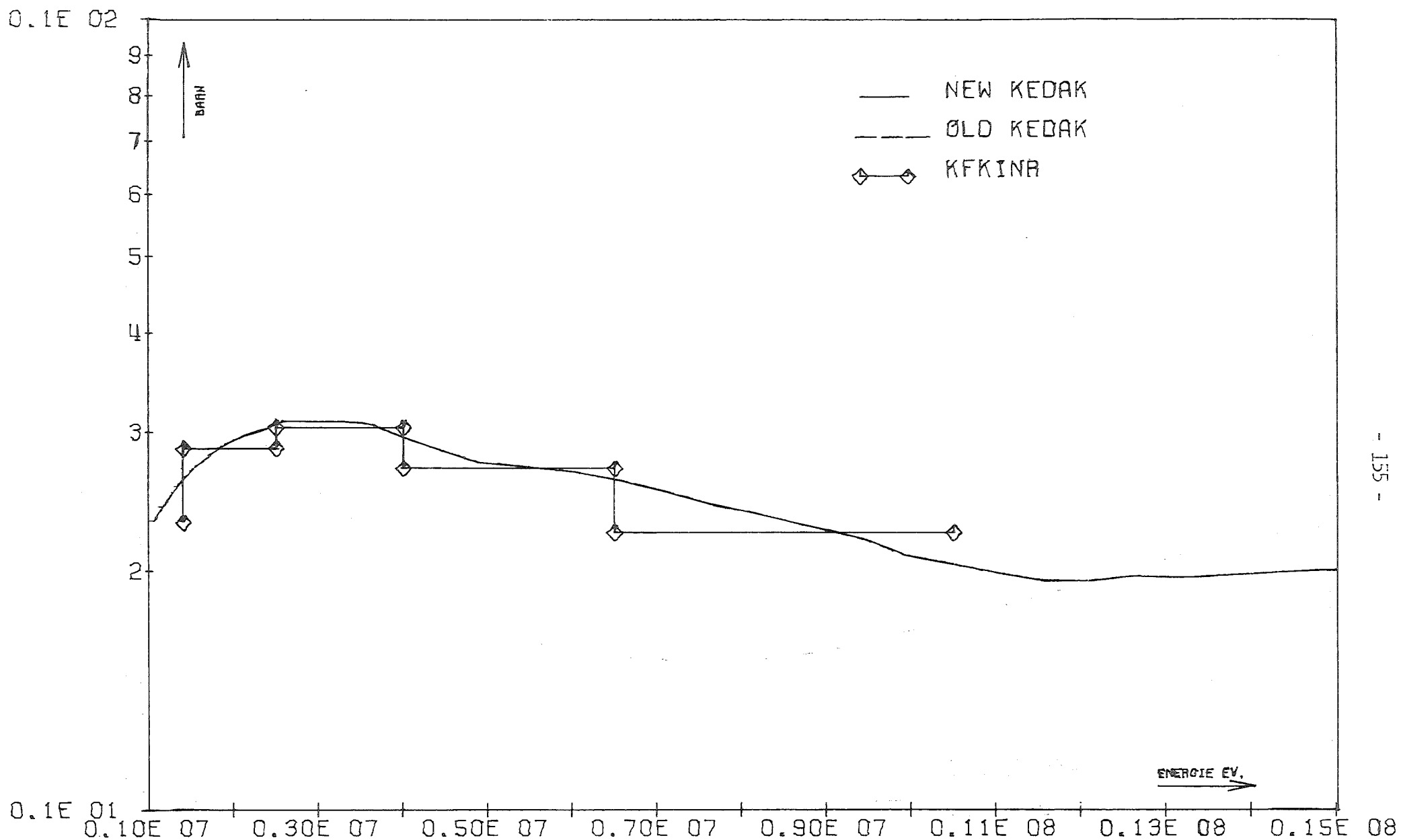


FIG. 13 CL UNC SGT

INR901CL 17.07 18.53.

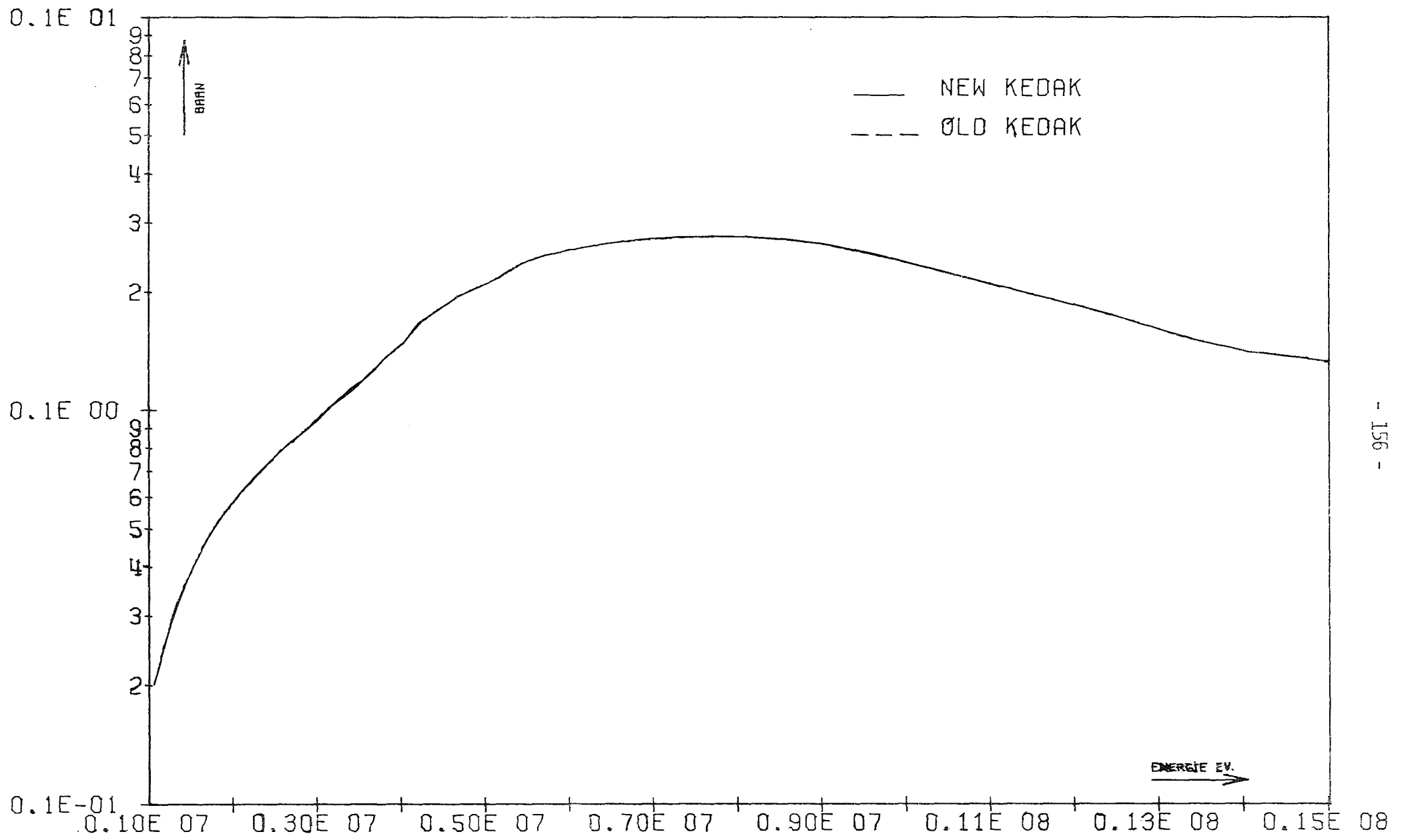


FIG. 14 CL UNC SGA

INR901CL 25.01 17.35.

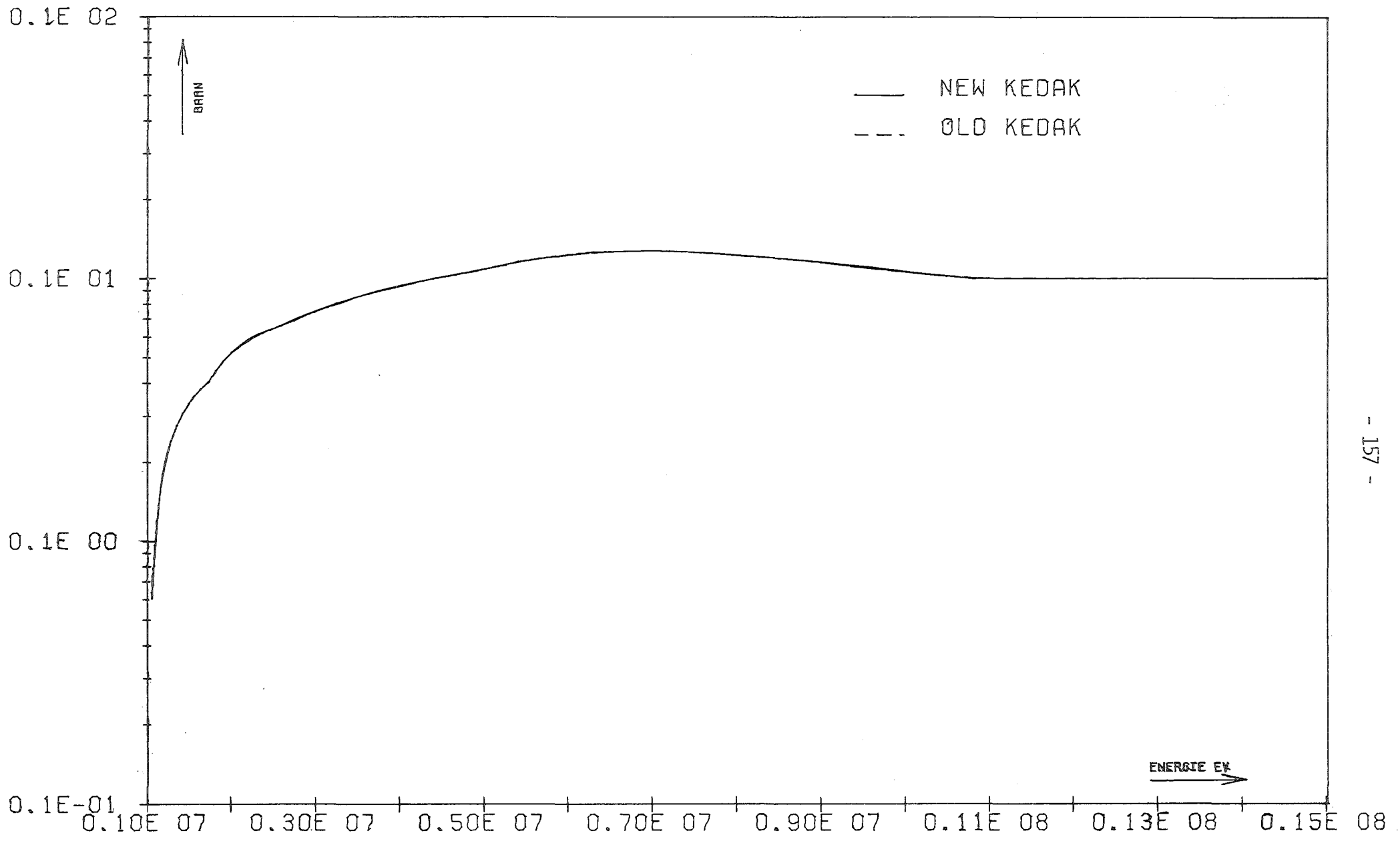


FIG. 15 CL UNC SGX

INR901CL 25.01 17.35.

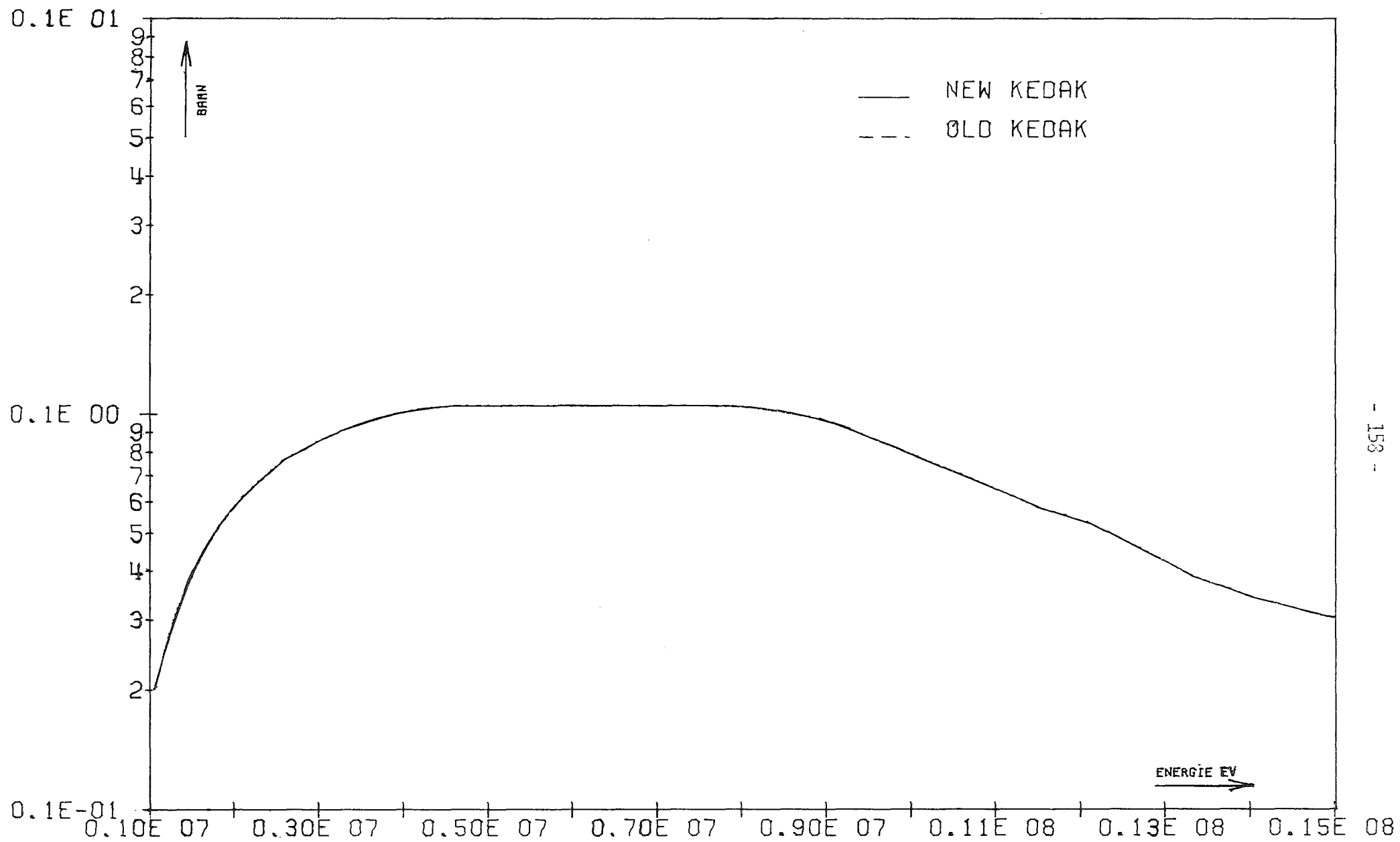


FIG. 16 CL UNC SGP

INR901CL 25.01 17.35.

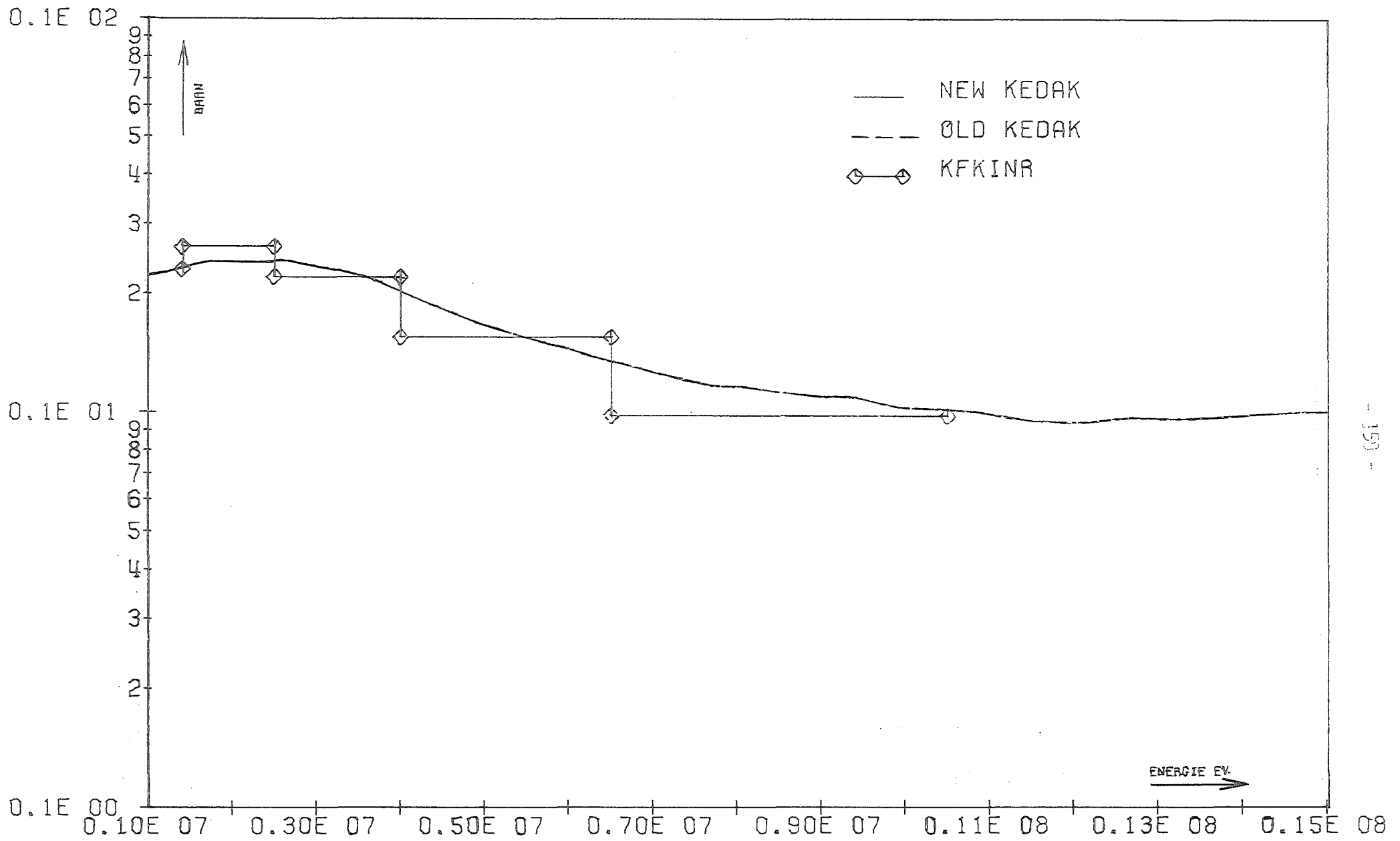


FIG. 17 CL UNC SGN

INR901CL 25.01 17.35.

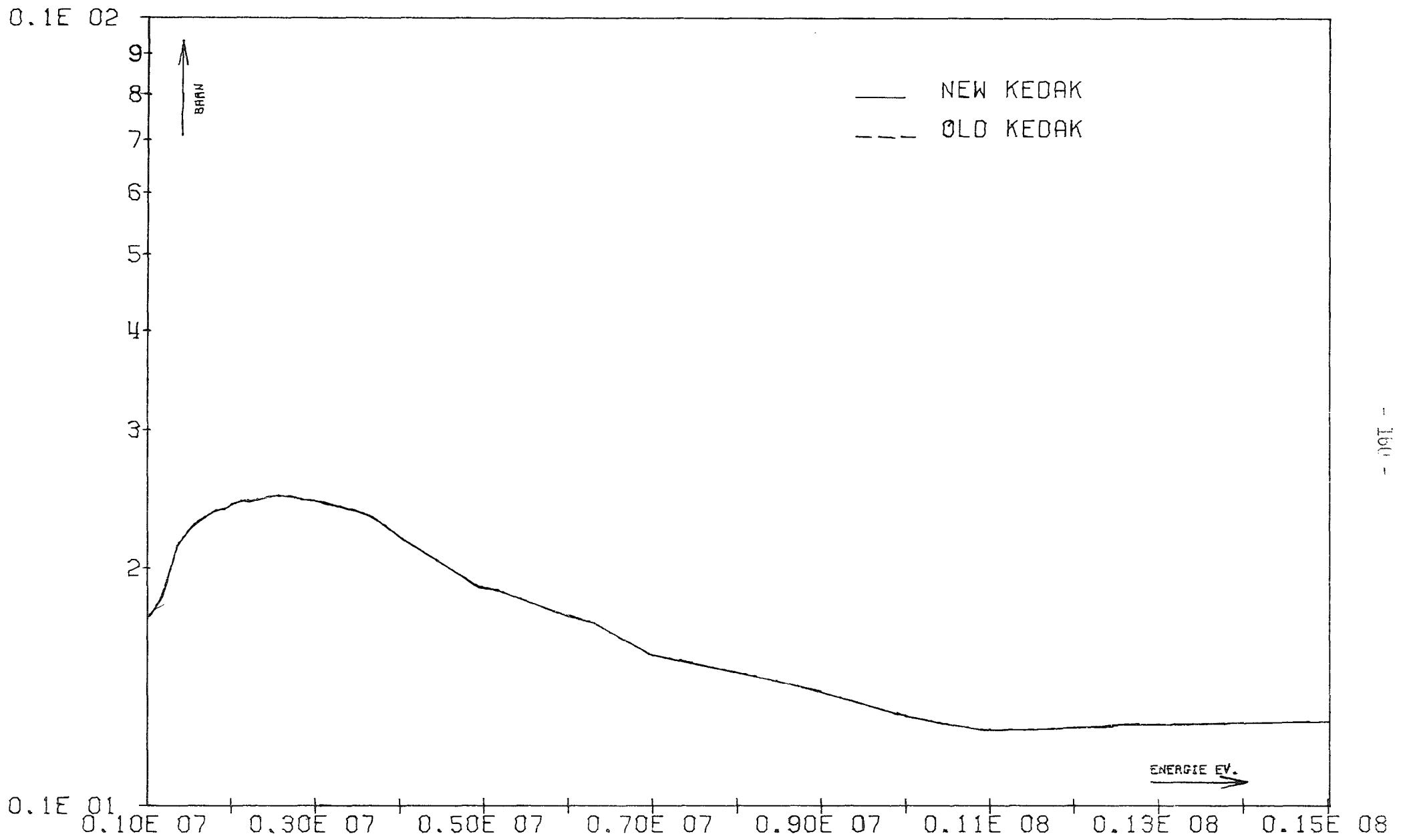


FIG. 18 CL UNC SGTR

INR901CL 25.01 17.36.

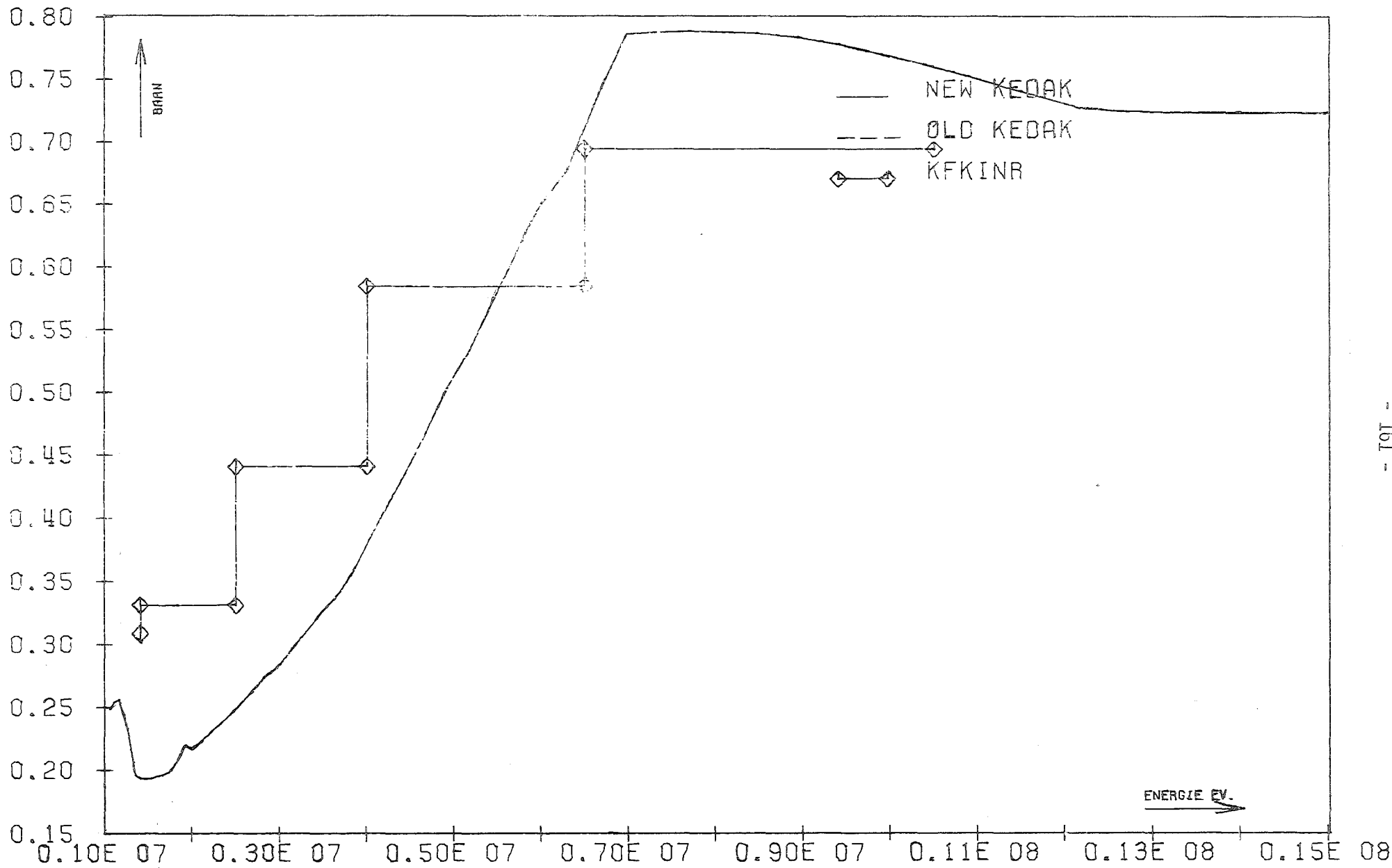


FIG. 19 CL UNC MUEL

INR901CL 25.01 17.36.

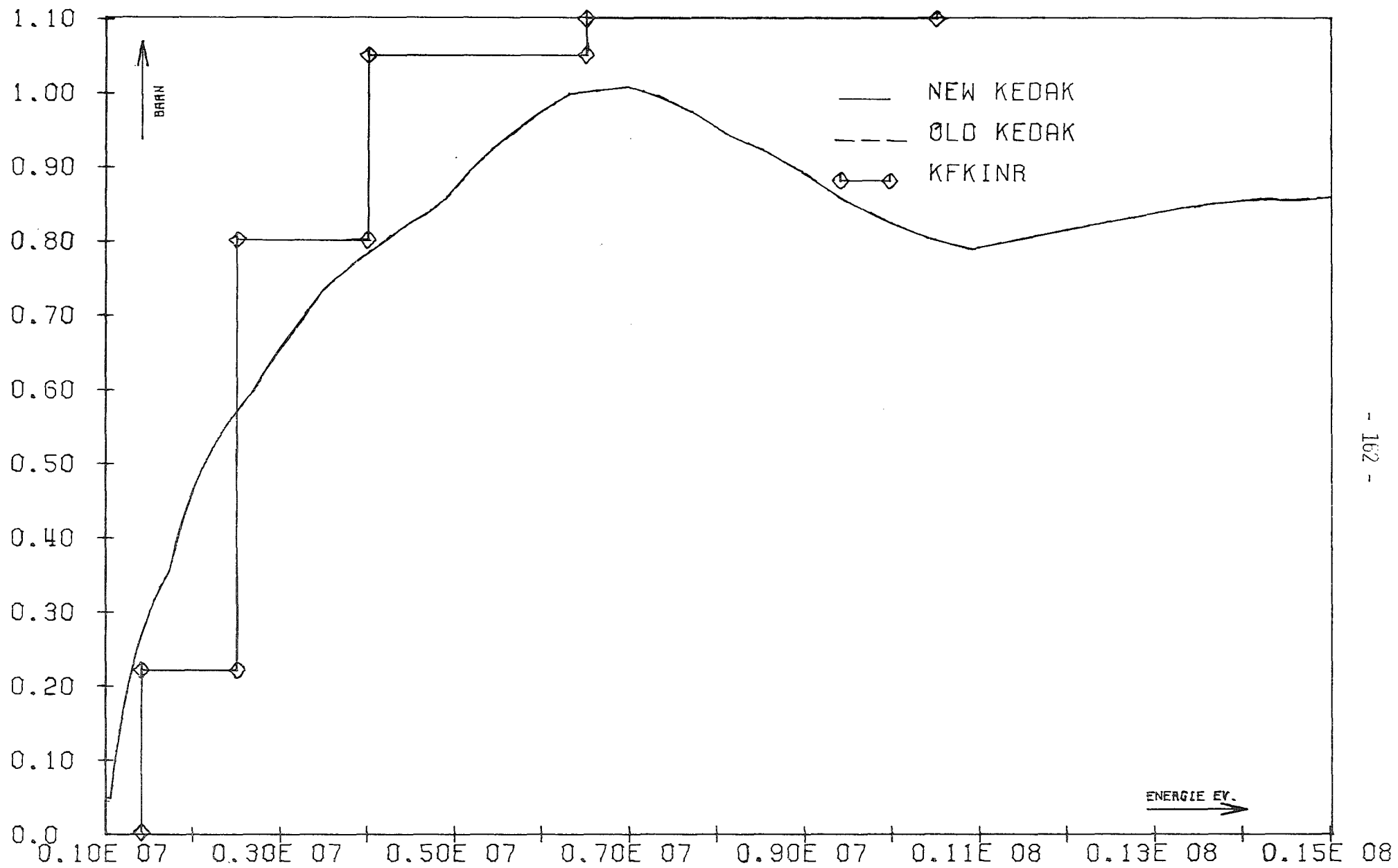


FIG. 20 CL UNC SGI

INR901CL 25.01 17.36.

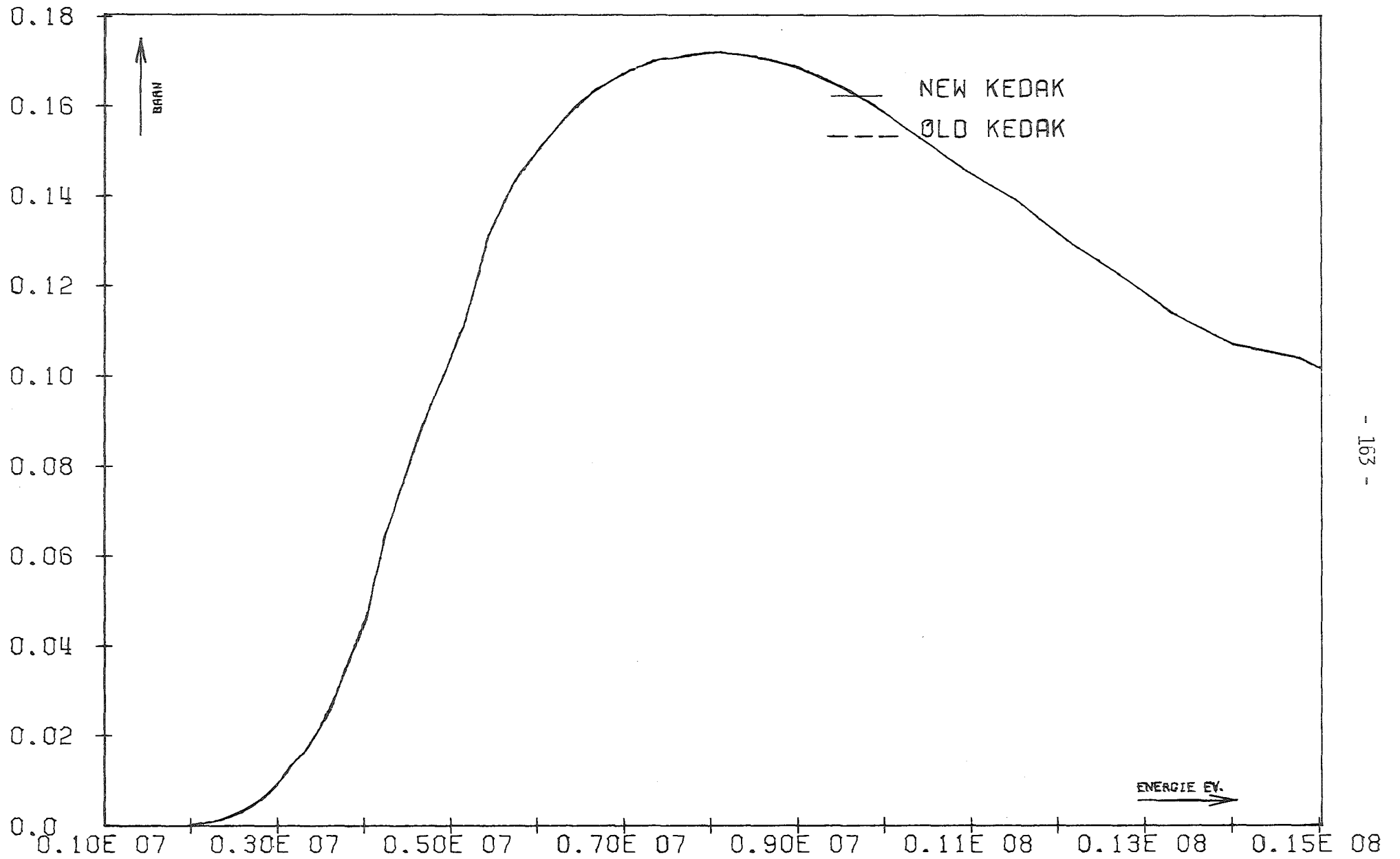


FIG. 21 CL UNC SGALP

INR901CL 25.01 17.36.

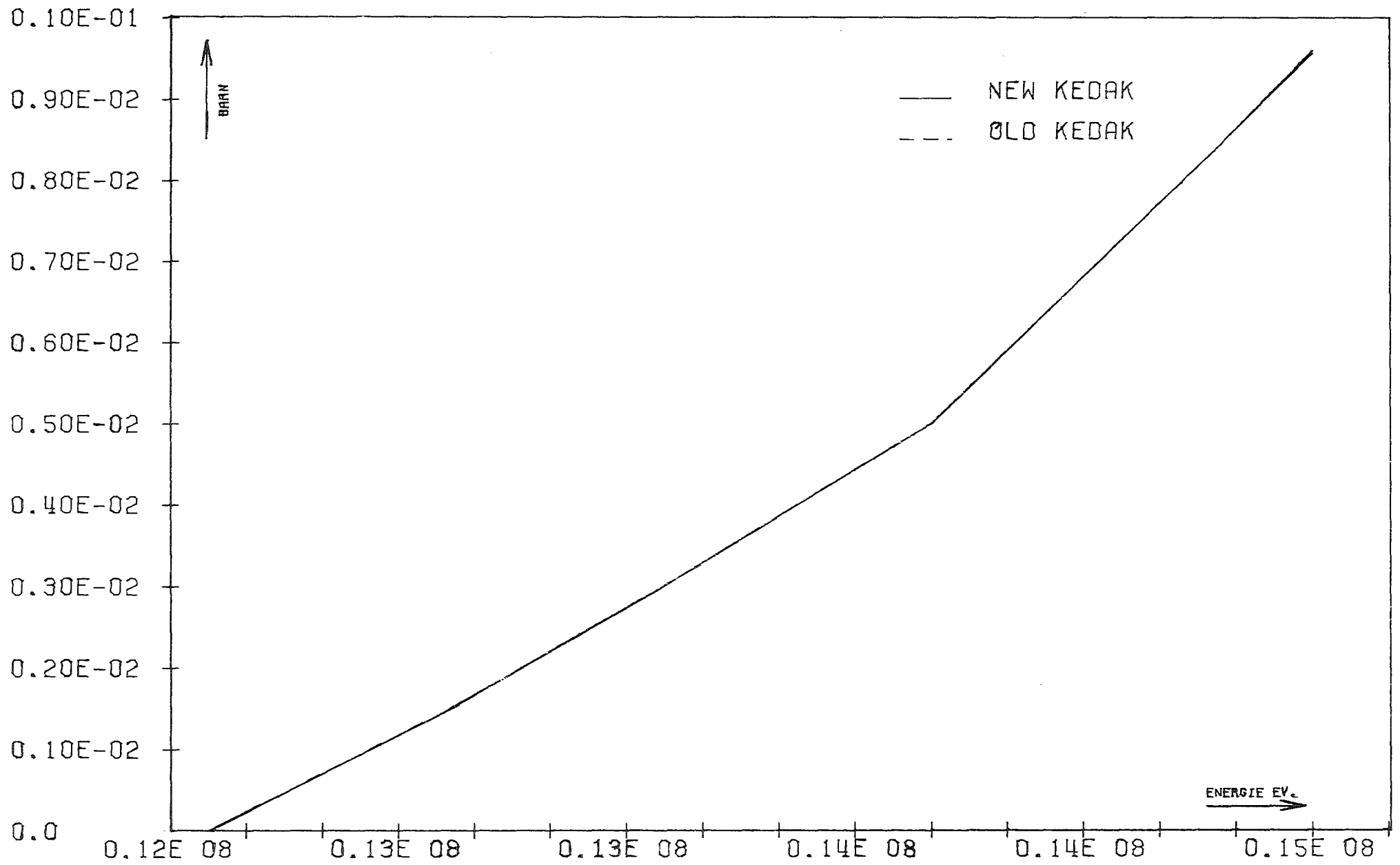


FIG. 22 CL UNC SG2N

INR901CL 25.01 17.36.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 1 keV	CR
2	SGG	" "	
3	SGTR	" "	
4	SGT	1 keV to 100 keV	
5	SGG	" "	
6	SGN	" "	
7	SGTR	" "	
8	MUEL	" "	
9	SGT	1 keV to 100 keV	
10	SGG	" "	
11	SGN	" "	
12	SGTR	" "	
13	MUEL	" "	
14	SGG	0.1 MeV to 1 MeV	
15	SGX	" "	
16	SGT	0.1 MeV to 0.3 MeV	
17	SGN	" "	
18	SGTR	" "	
19	MUEL	" "	
20	SGT	0.3 MeV to 0.6 MeV	
21	SGN	" "	
22	SGTR	" "	
23	MUEL	" "	
24	SGT	0.6 MeV to 1 MeV	
25	SGX	" "	
26	SGN	" "	
27	SGTR	" "	
28	MUEL	" "	
29	SGT	1 MeV to 15 MeV	
30	SGG	" "	
31	SGA	" "	
32	SGX	" "	
33	SGTR	" "	
34	MUEL	" "	
35	SGI	" "	
36	SGIZ		
	E* = 1.01 MeV	Thr. to 3.2 MeV	
37	E* = 0.565 MeV	" "	
38	E* = 0.782 MeV	" "	
39	E* = 1.010 MeV	" "	
40	E* = 1.430 MeV	" "	
41	E* = 1.840 MeV	" "	
42	E* = 2.370 MeV	" "	
43	E* = 2.620 MeV	" "	
44	E* = 2.970 MeV	" "	
45	SGP	2 MeV to 15 MeV	
46	SGALP	4 MeV to 15 MeV	
47	SG2N	8 MeV to 15 MeV	
48	SGP	2 MeV to 15 MeV	
49	SGALP	4 MeV to 15 MeV	CR 50
50	SG2N	13 MeV to 15 MeV	

Cr

Figure	Reaction type	Energy range	Material name
51	SGP	5 MeV to 15 MeV	CR 52
52	SGALP	" "	
53	SG2N	12 MeV to 15 MeV	
54	SGP	4 MeV to 15 MeV	CR 53
55	SGALP	" "	
56	SG2N	8 MeV to 15 MeV	
57	SGP	10 MeV to 15 MeV	CR 54
58	SGALP	7 MeV to 15 MeV	
59	SG2N	10 MeV to 15 MeV	

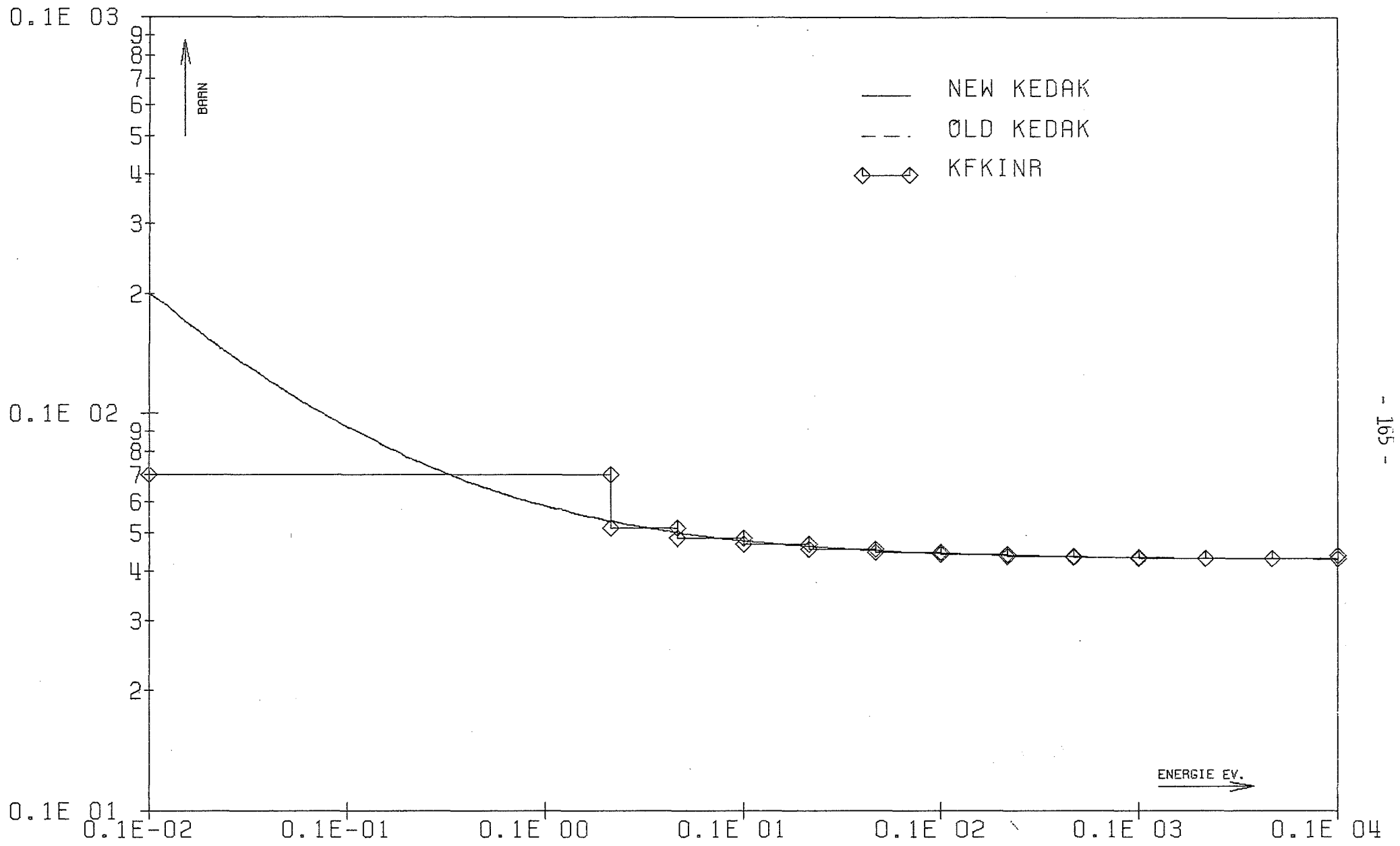


FIG. 1 CR SGT INR901CR 24.07 17.23.

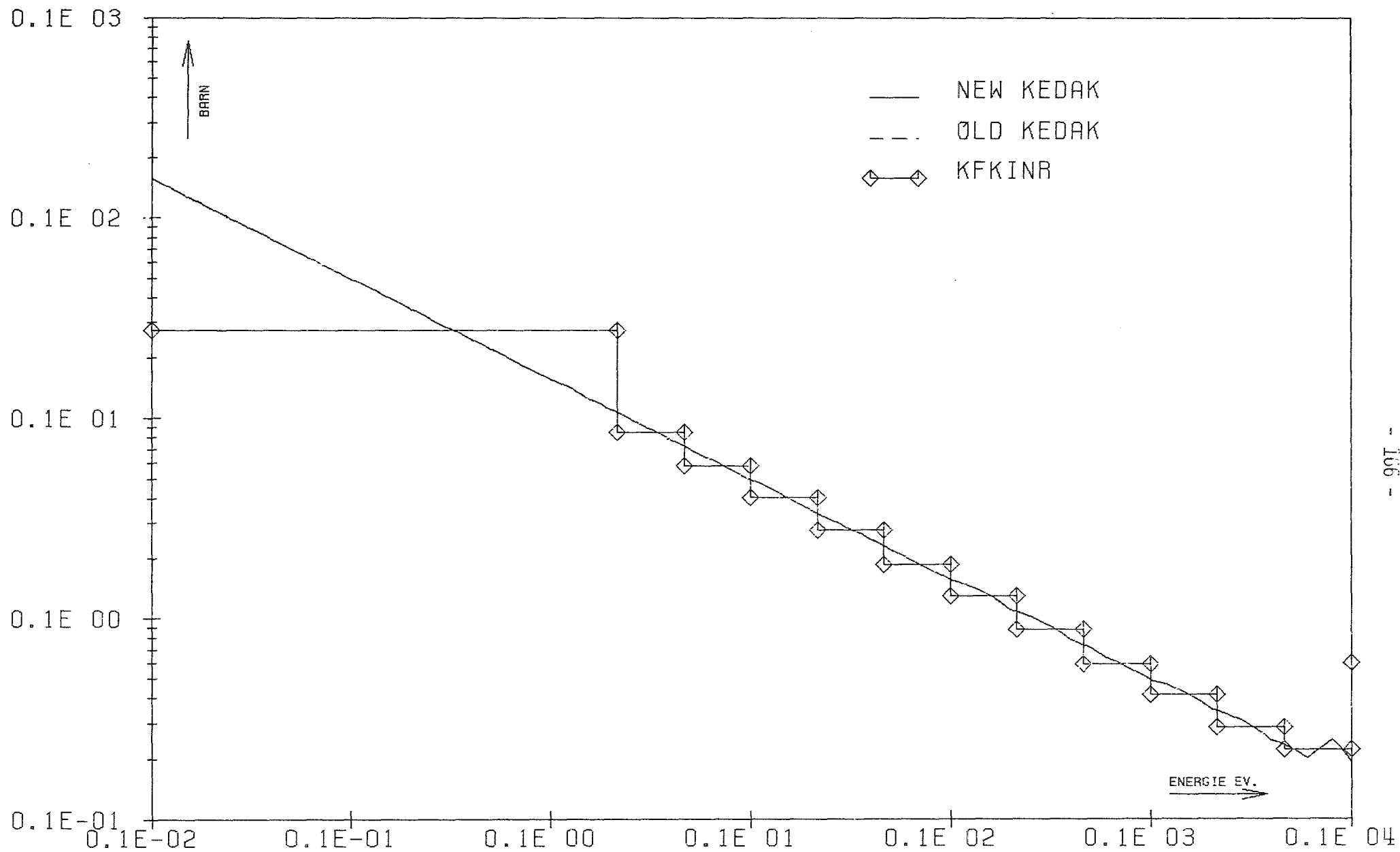
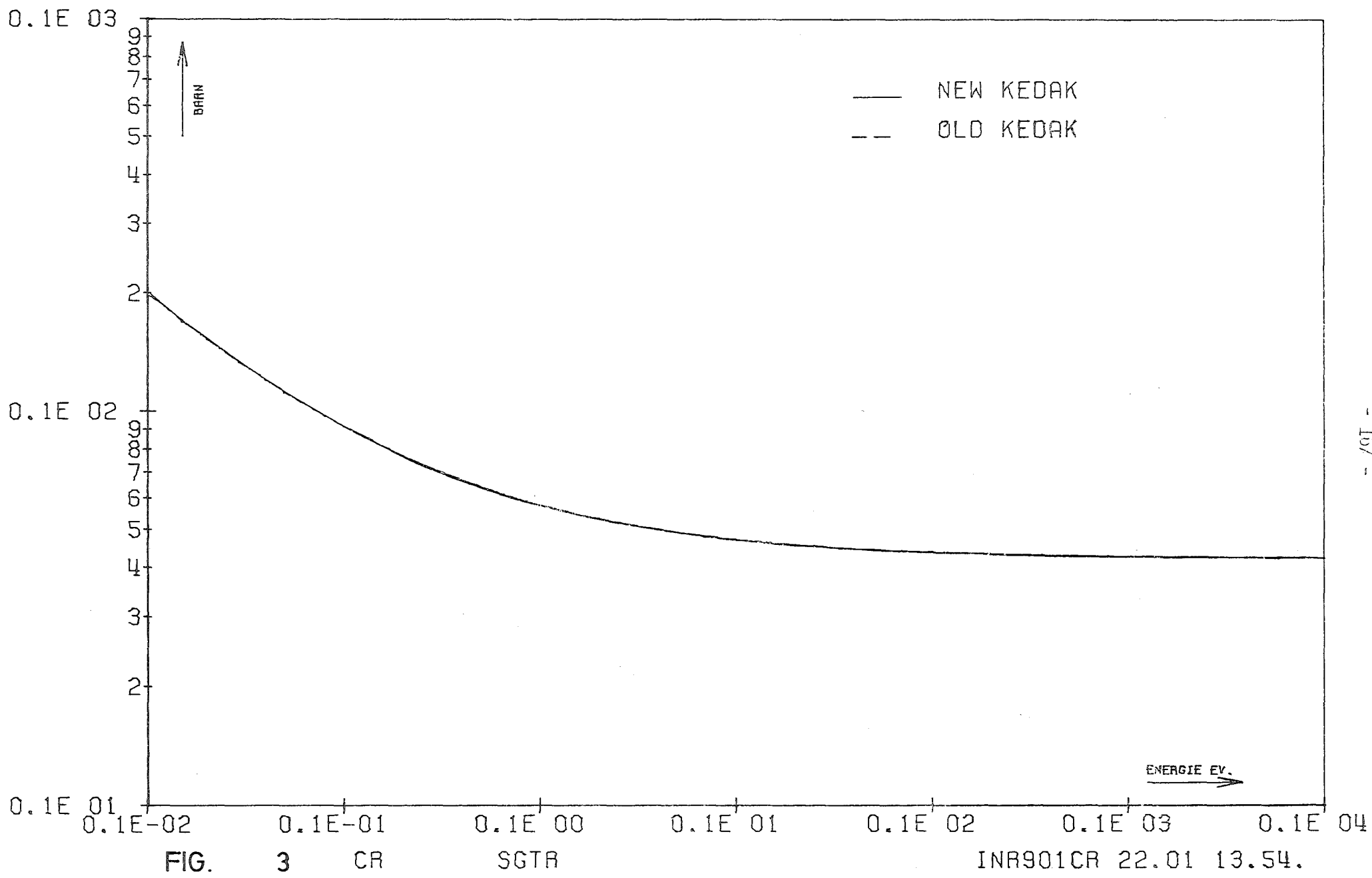


FIG. 2 CR

SGG

INR901CR 24.07 17.24.



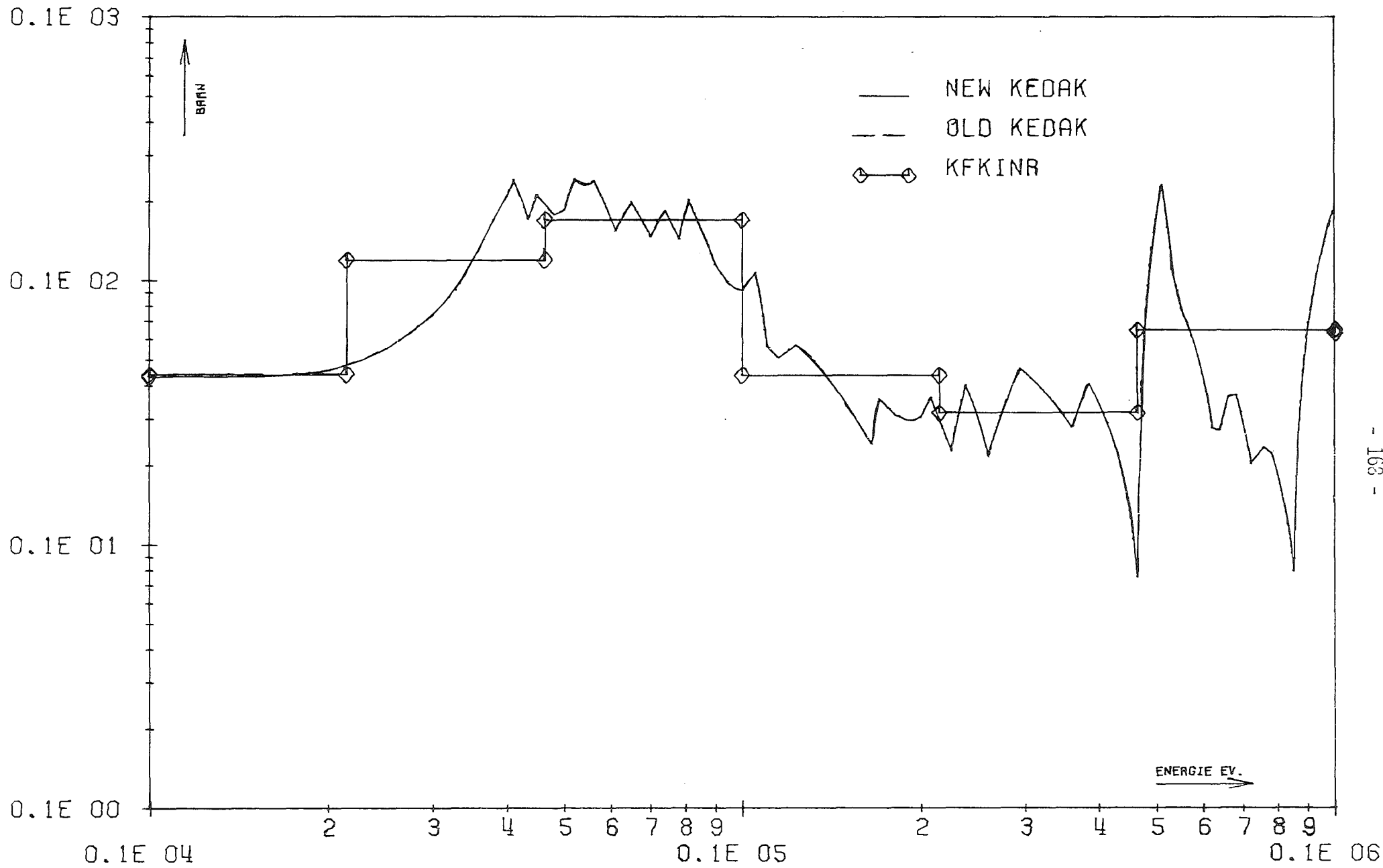


FIG. 4 CB SGT

INR901CR 29.01 14.44.

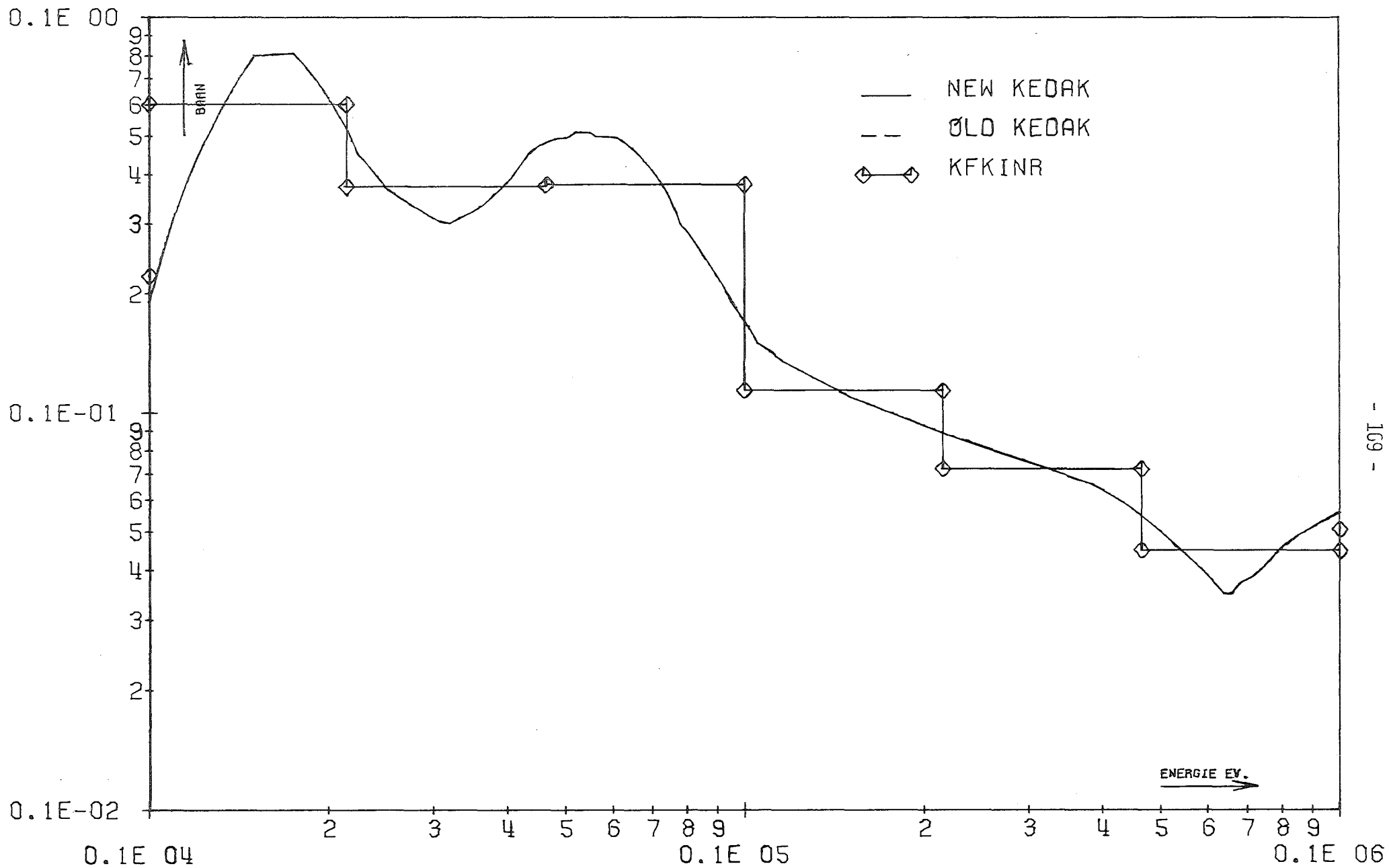


FIG. 5 CR SGG

INR901CR 29.01 14.44.

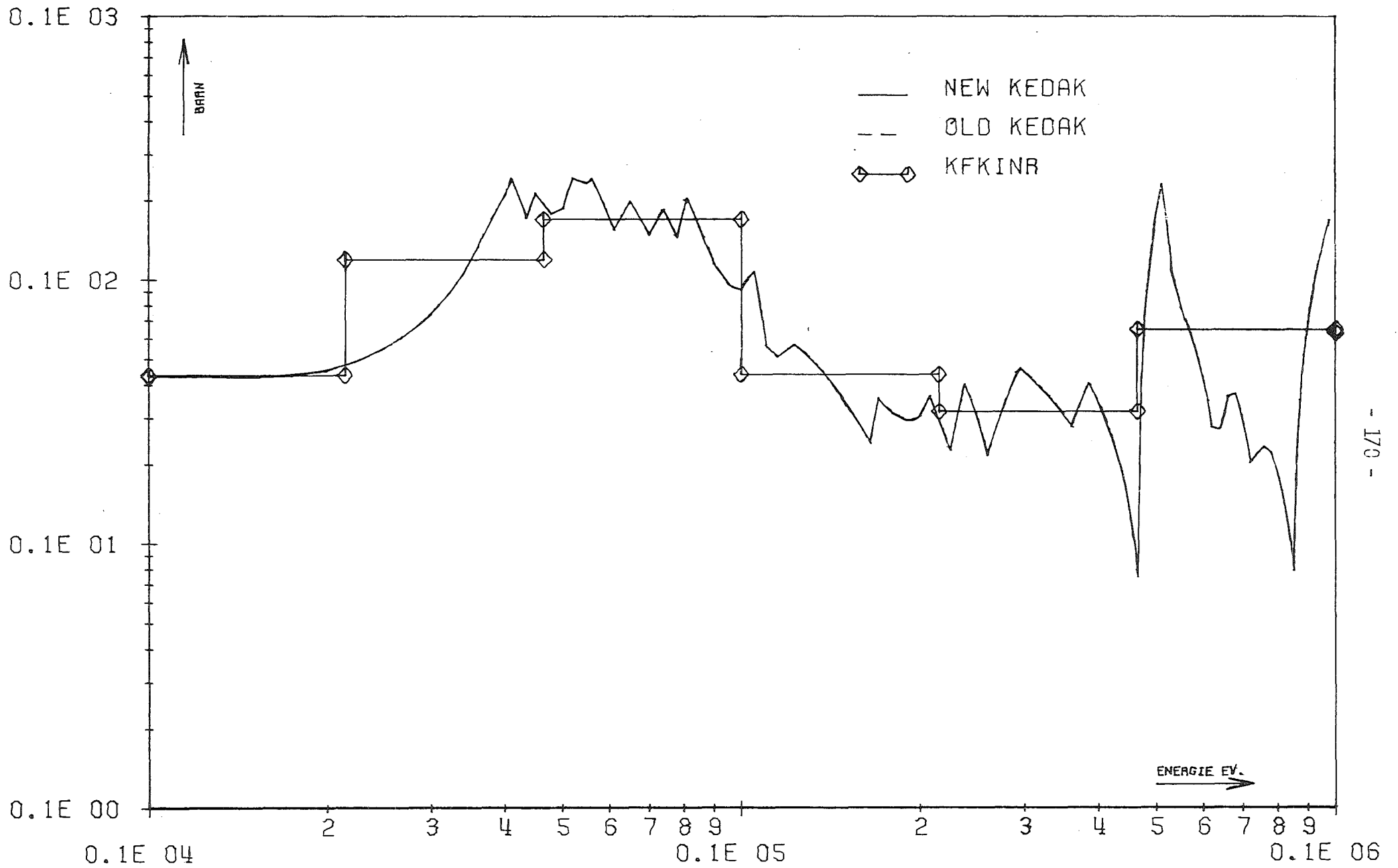


FIG. 6 CR SGN

INR901CR 29.01 14.44.

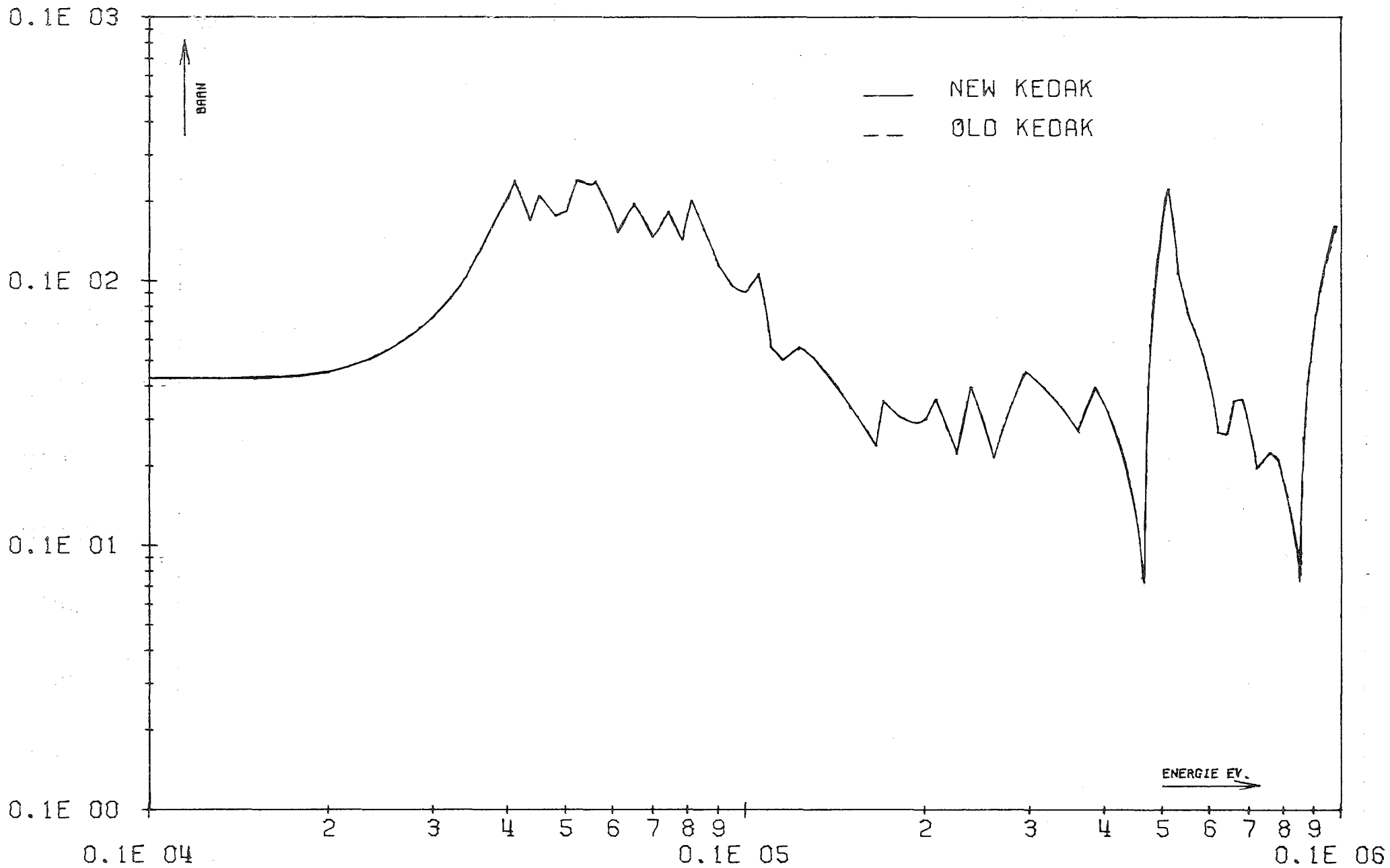


FIG. 7 CR SGTR

INR901CR 29.01 14.44.

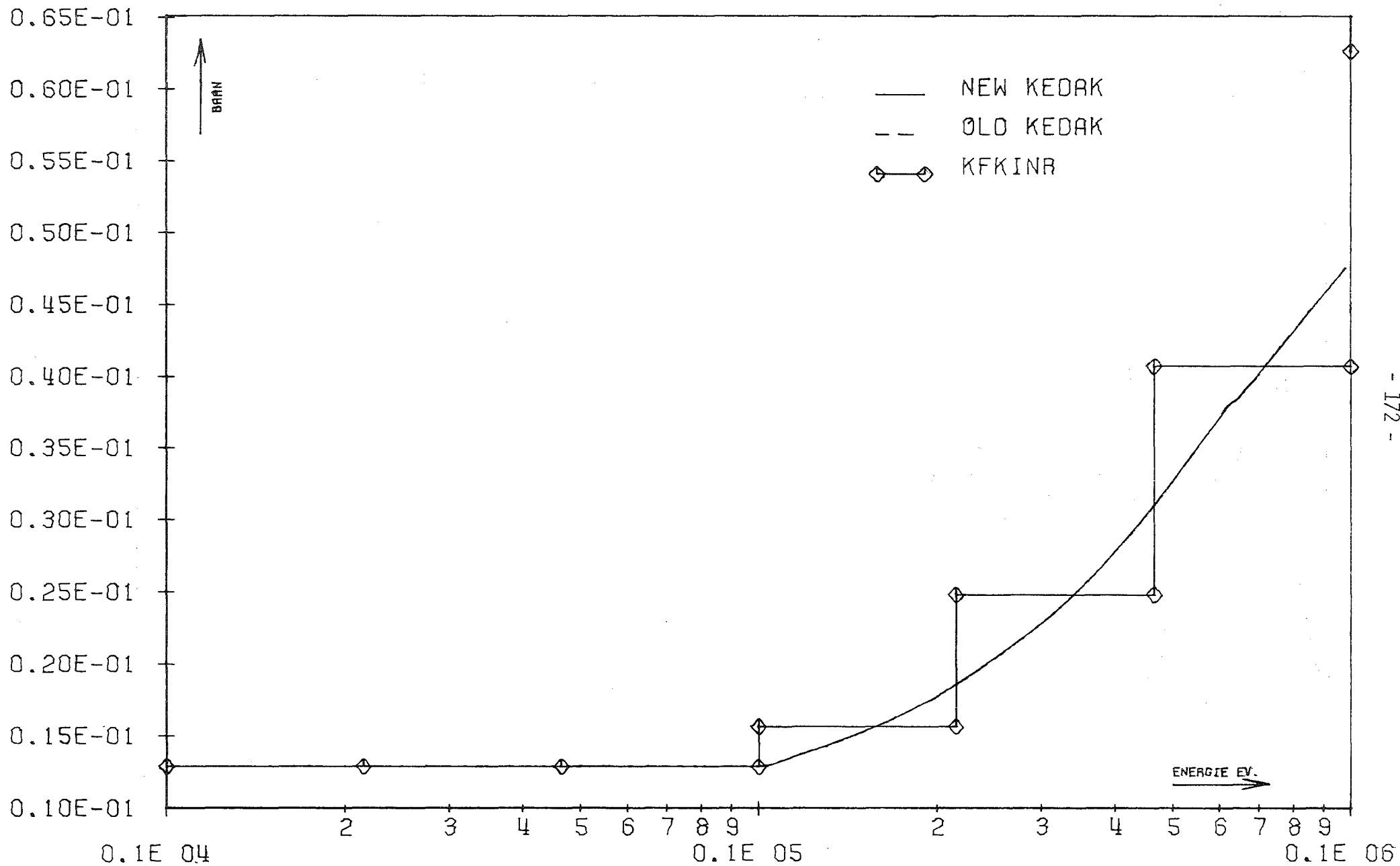
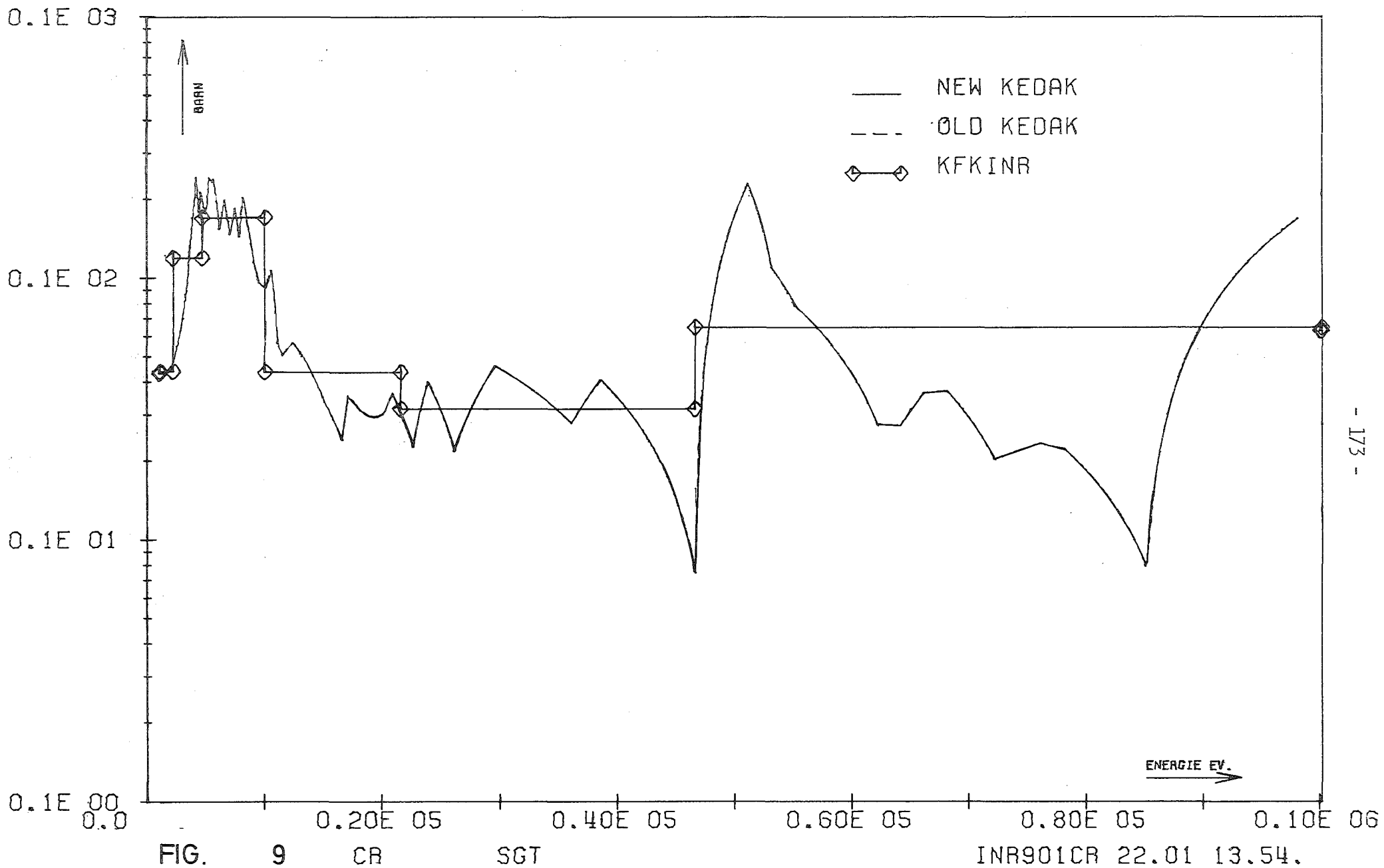
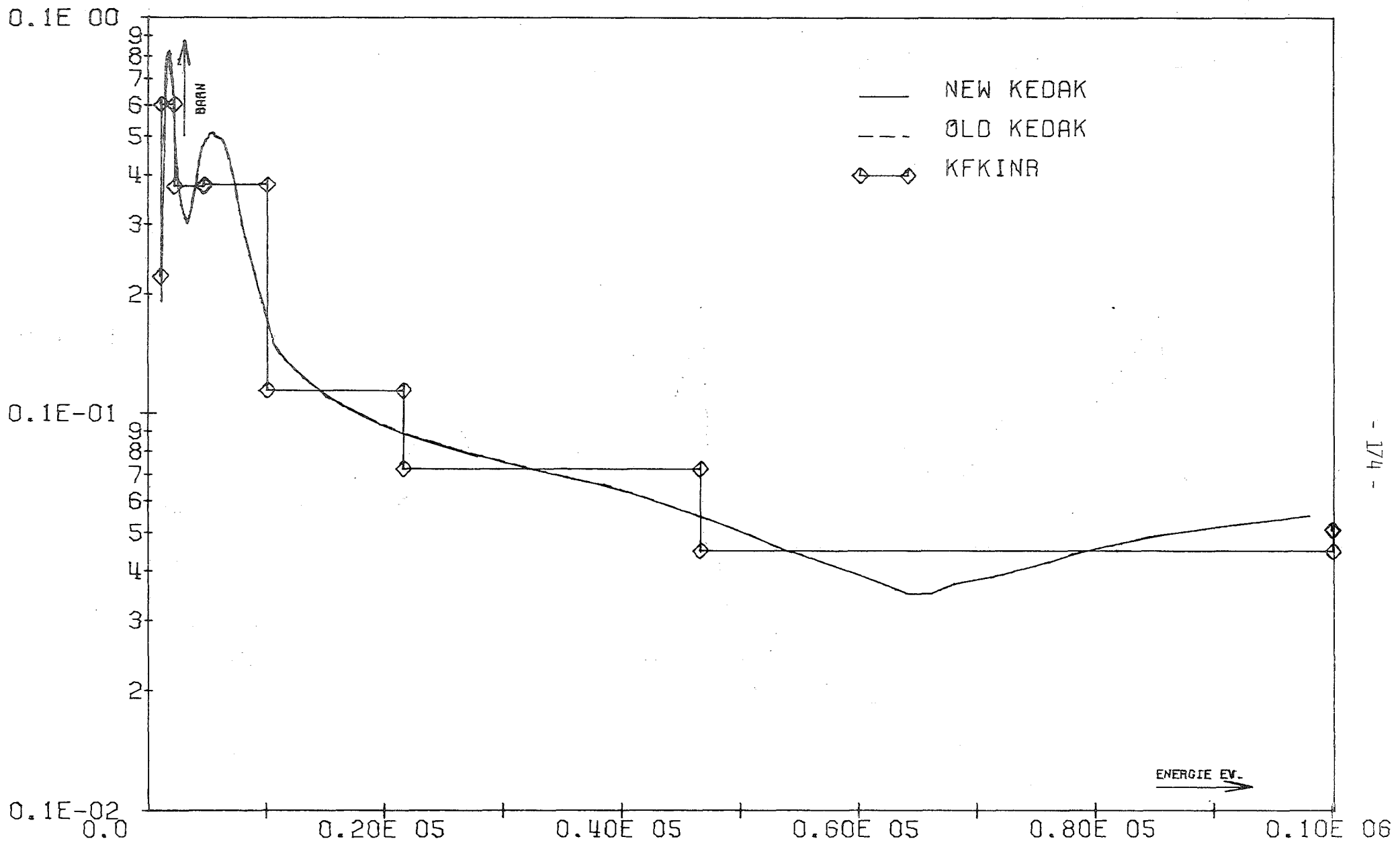


FIG. 8 CR MUEL

INR901CR 29.01 14.44.





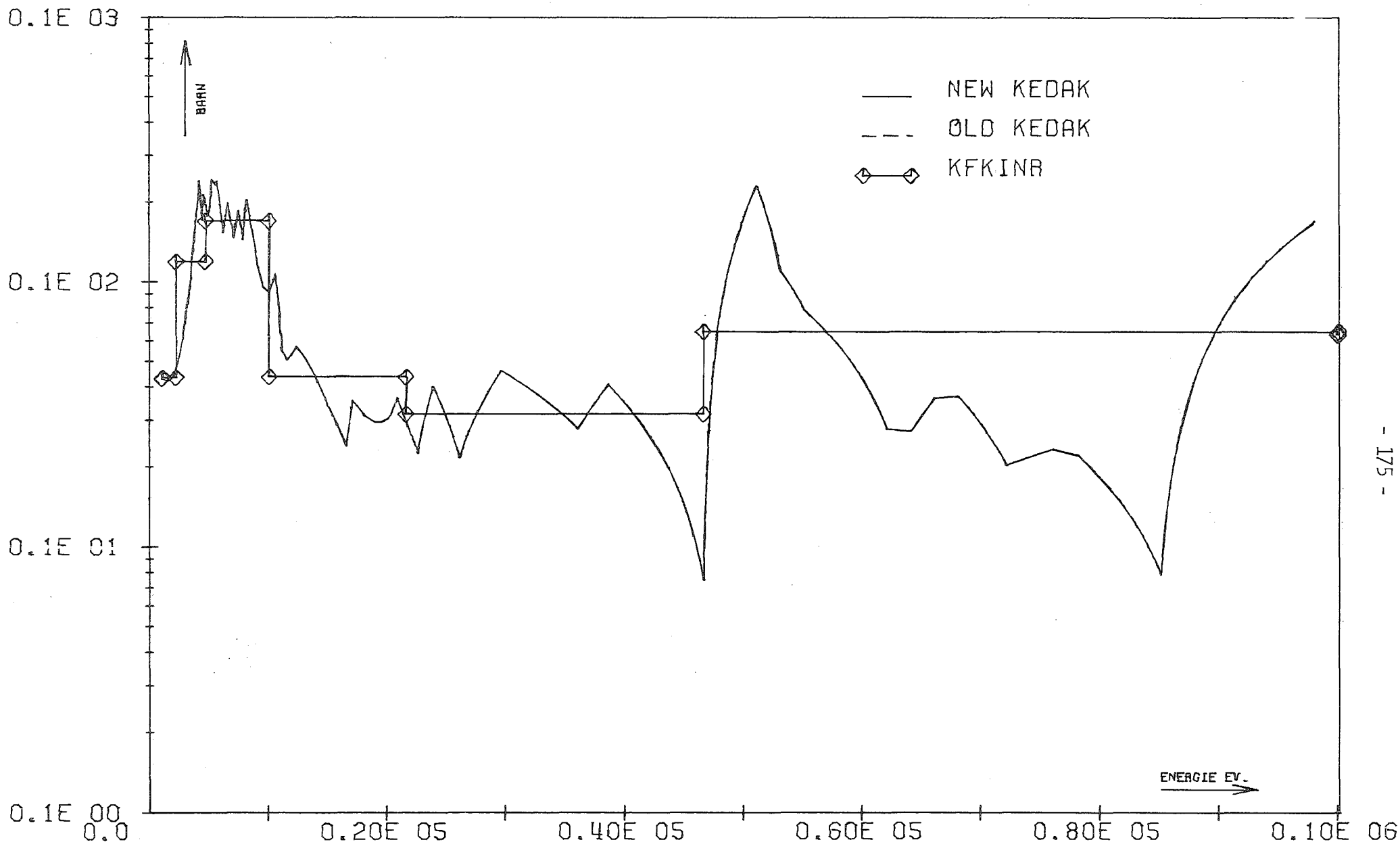


FIG. 11 CR SGN

INR901CR 22.01 13.54.

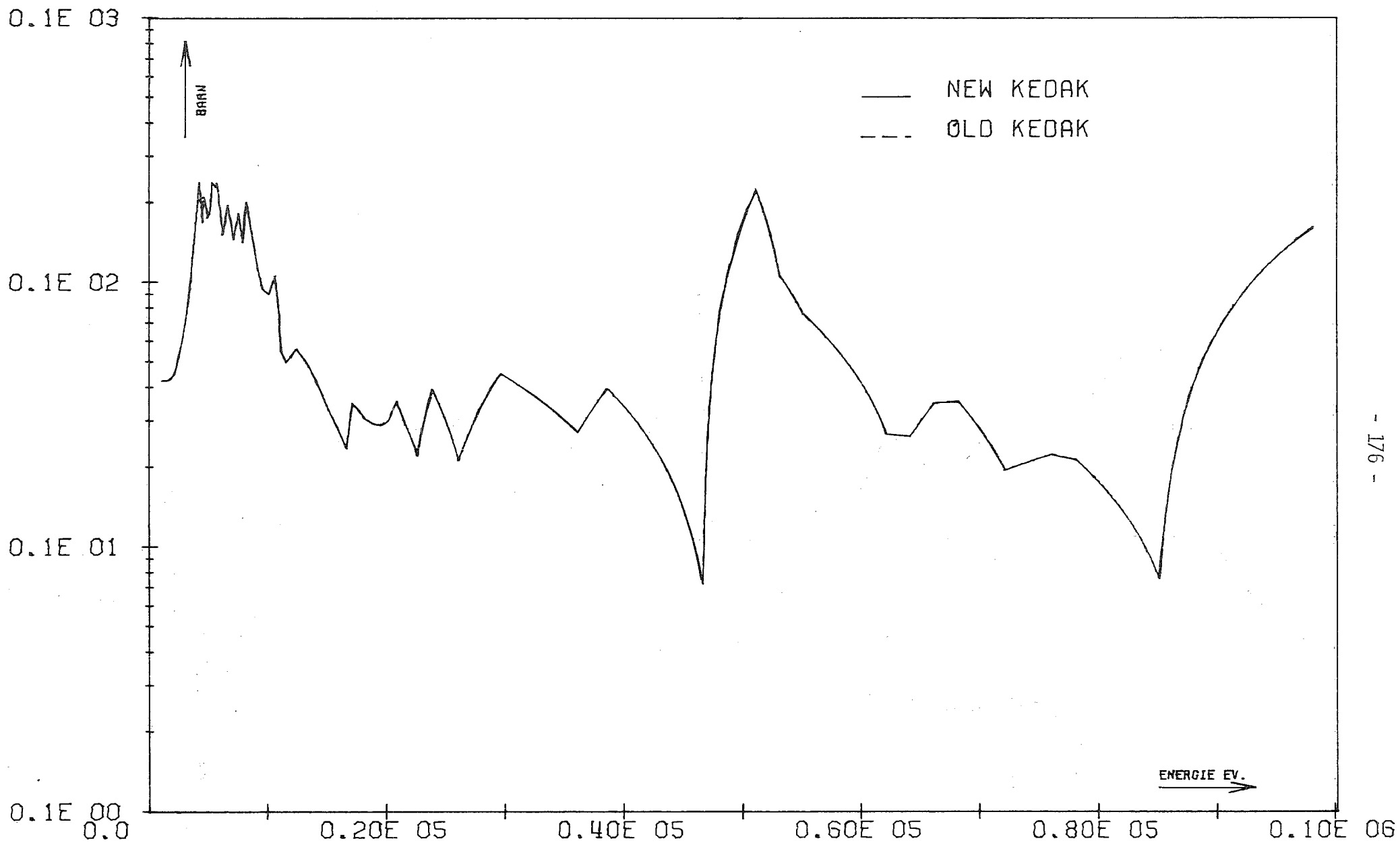


FIG. 12 CR SGTR INR901CR 22.01 13.54.

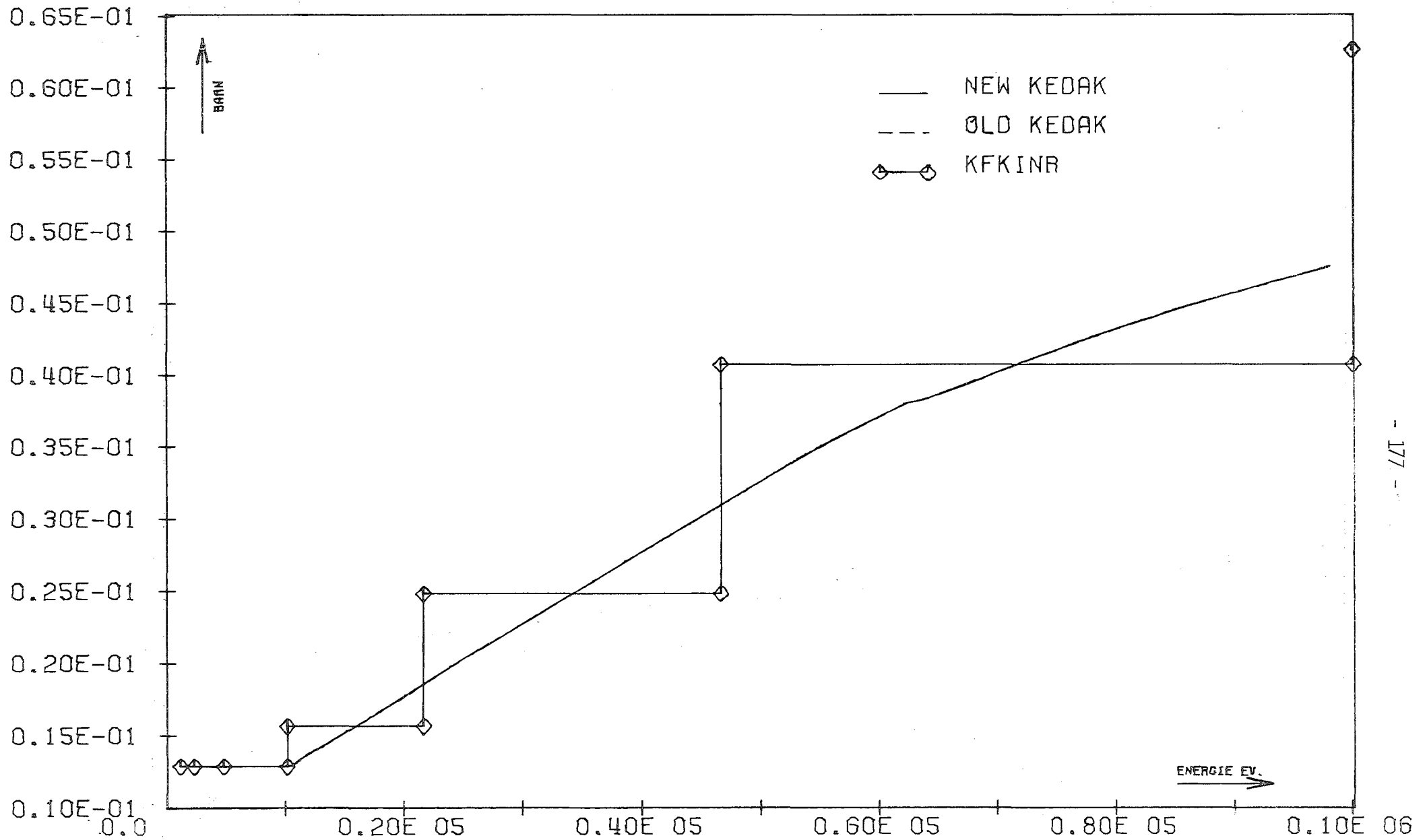


FIG. 13

CR MUEL

INR901CR 22.01 13.54.

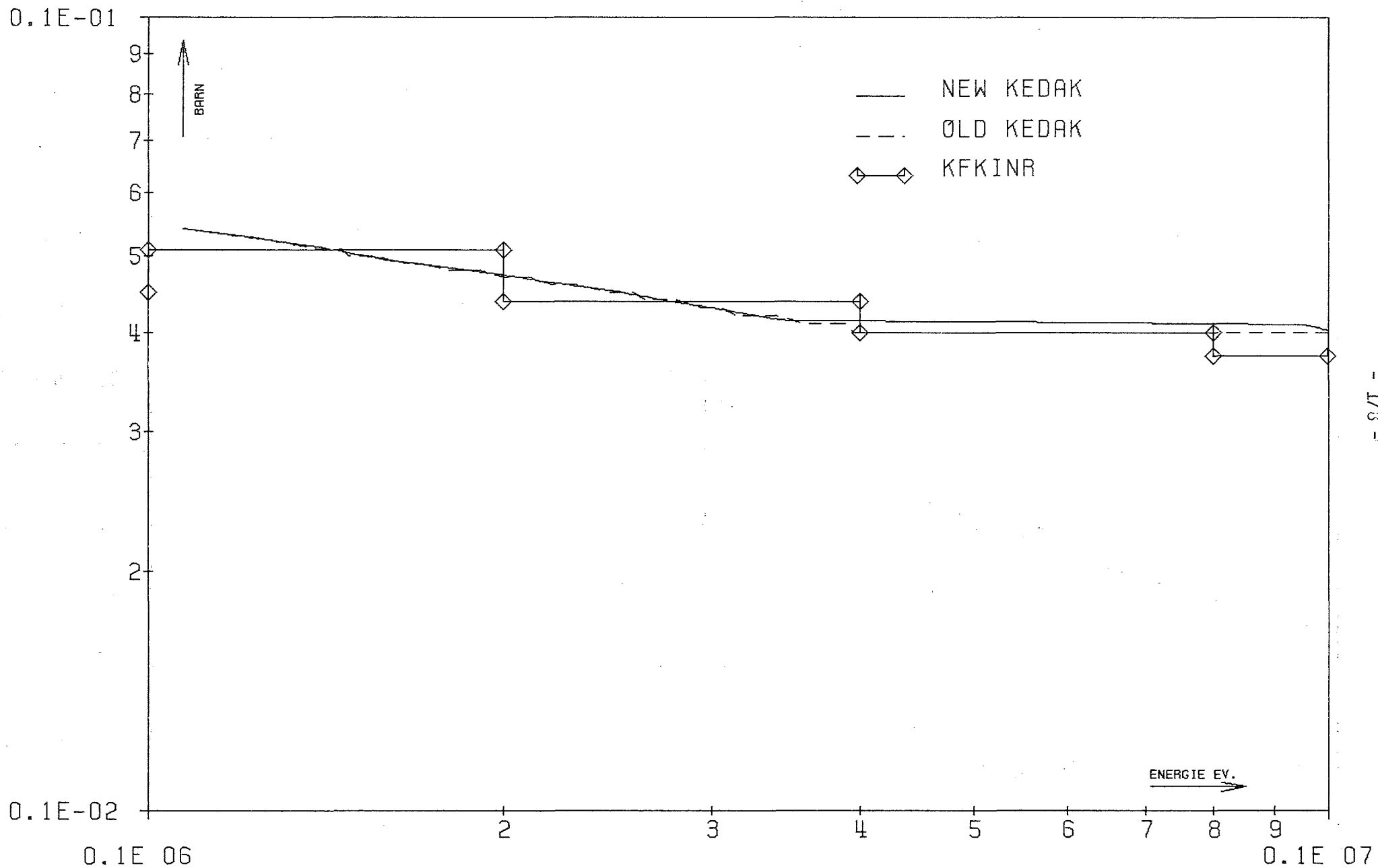


FIG. 14 CR SGG

INR901CR 28.07 17.34.

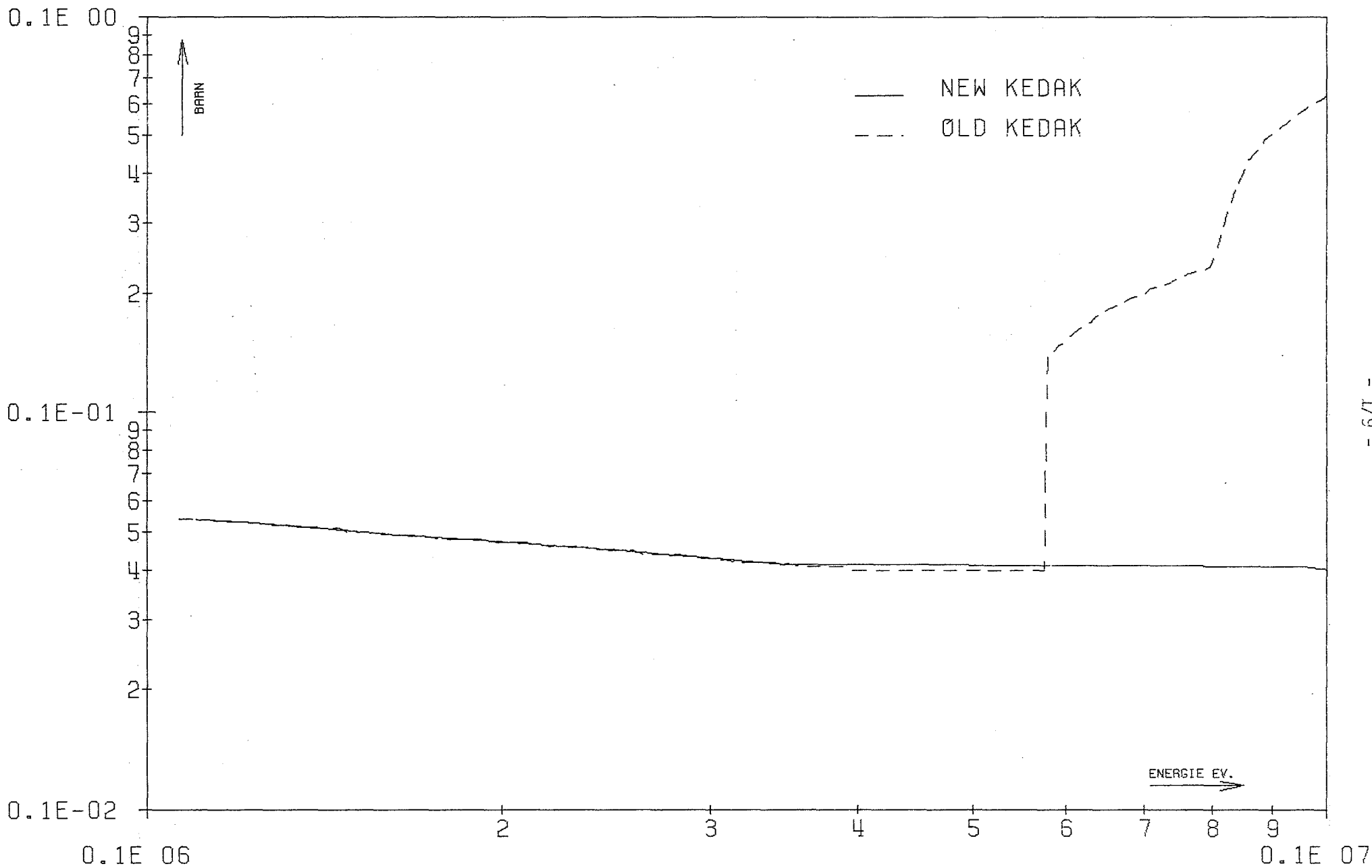


FIG. 15 CR SGX

INR901CR 28.07 17.34.

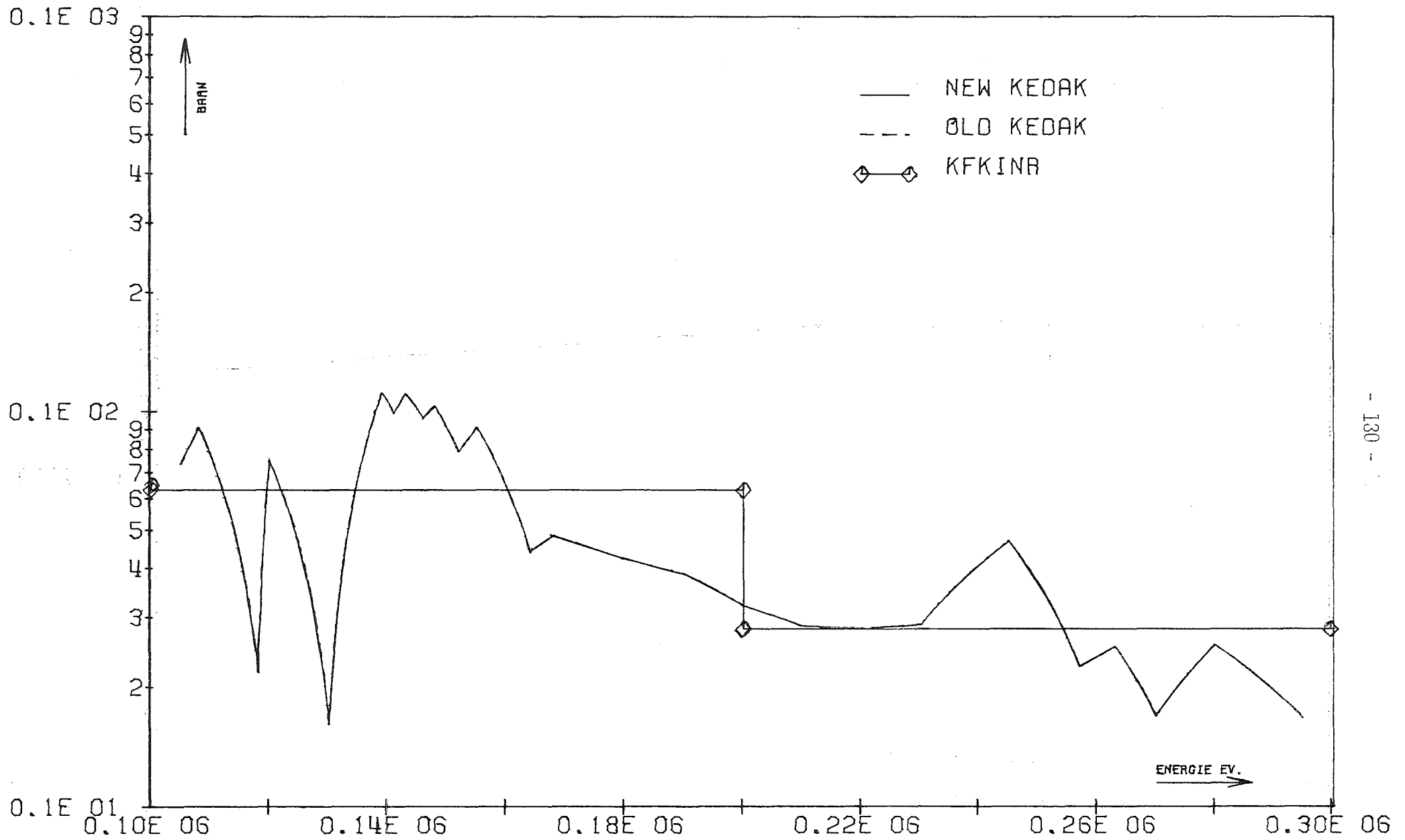
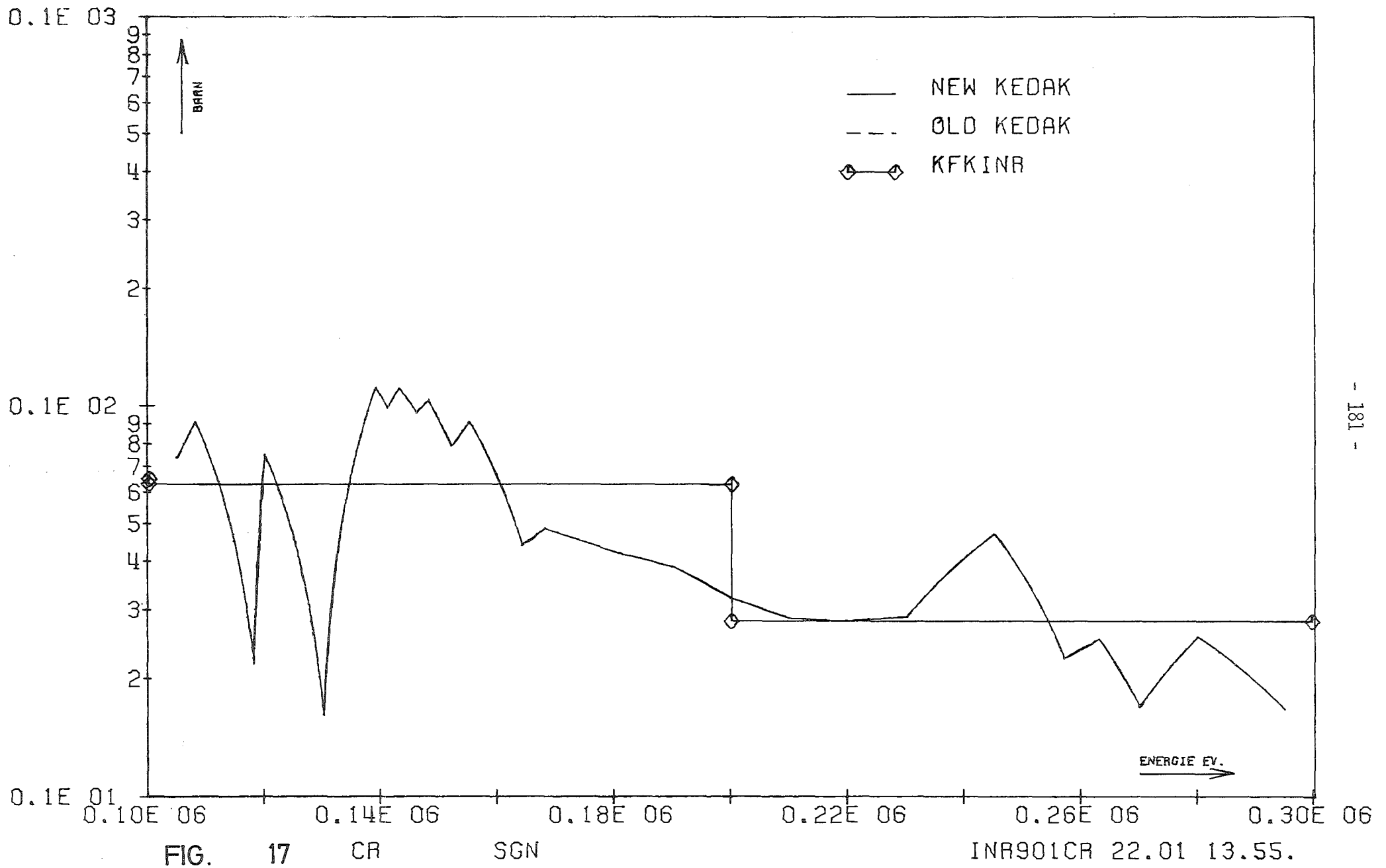
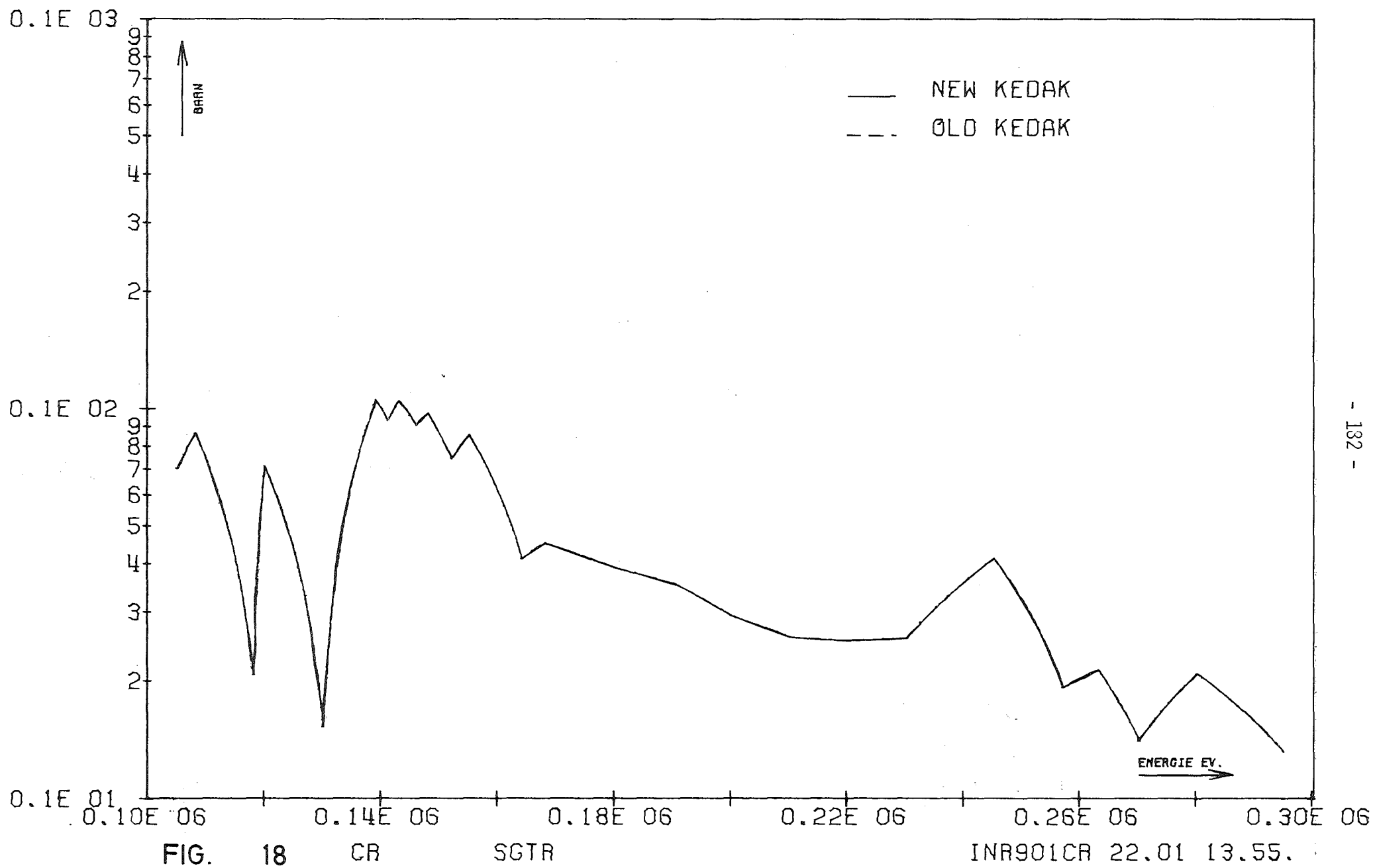
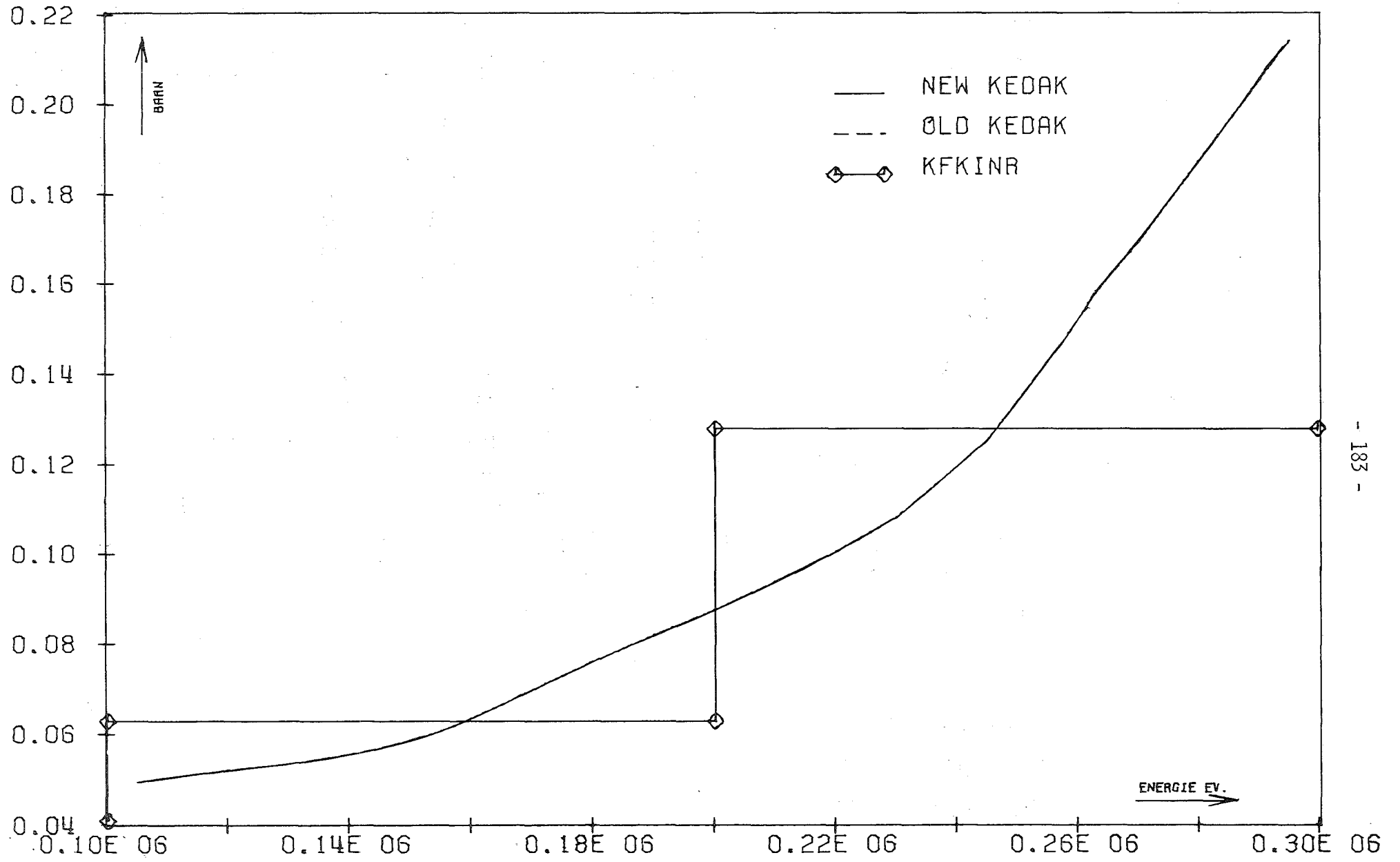


FIG. 16 CR SGT

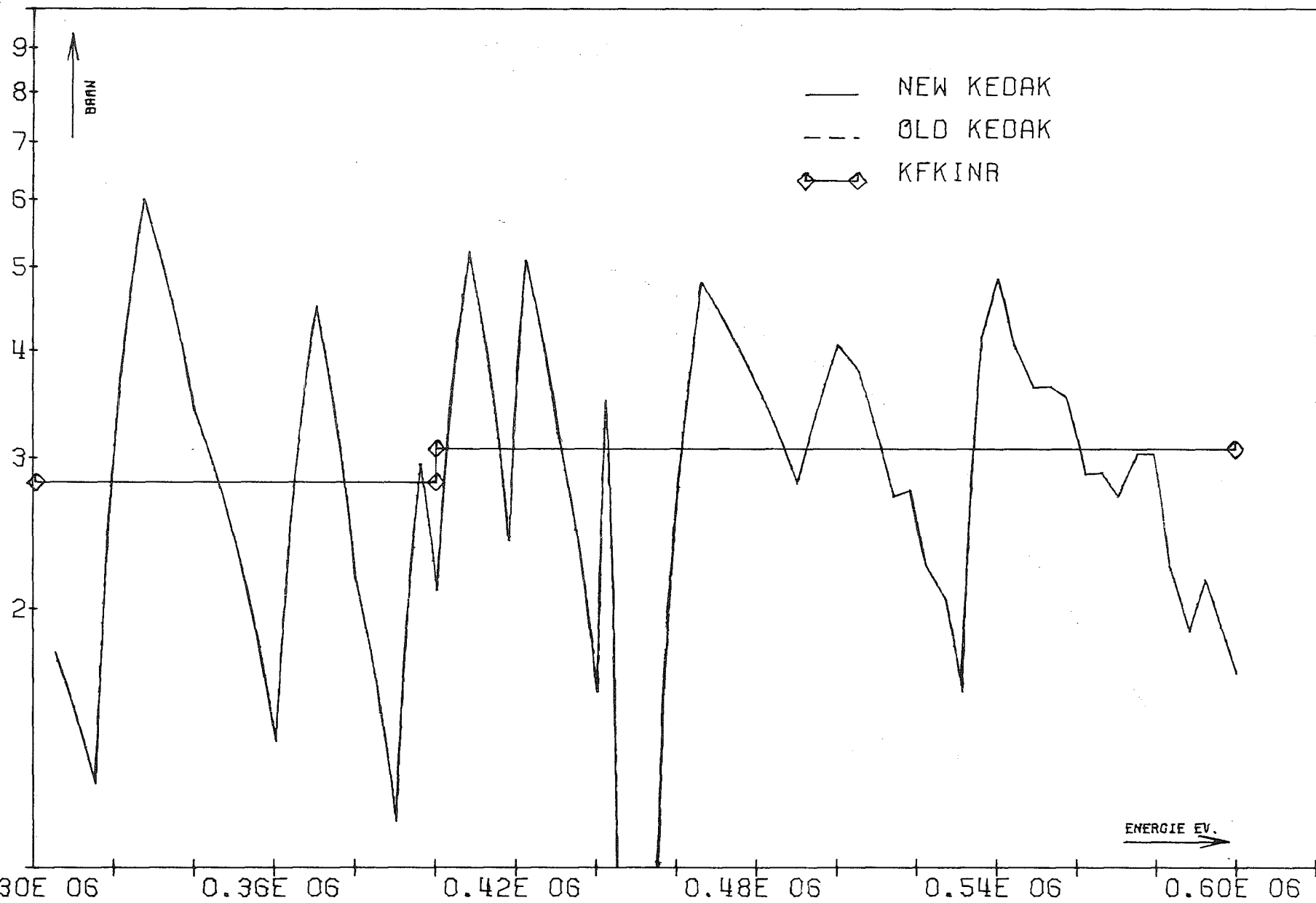
INR901CR 22.01 13.54.







0.1E 02



0.1E 01

FIG. 20

CR

SGT

INR901CR 22.01 13.55.

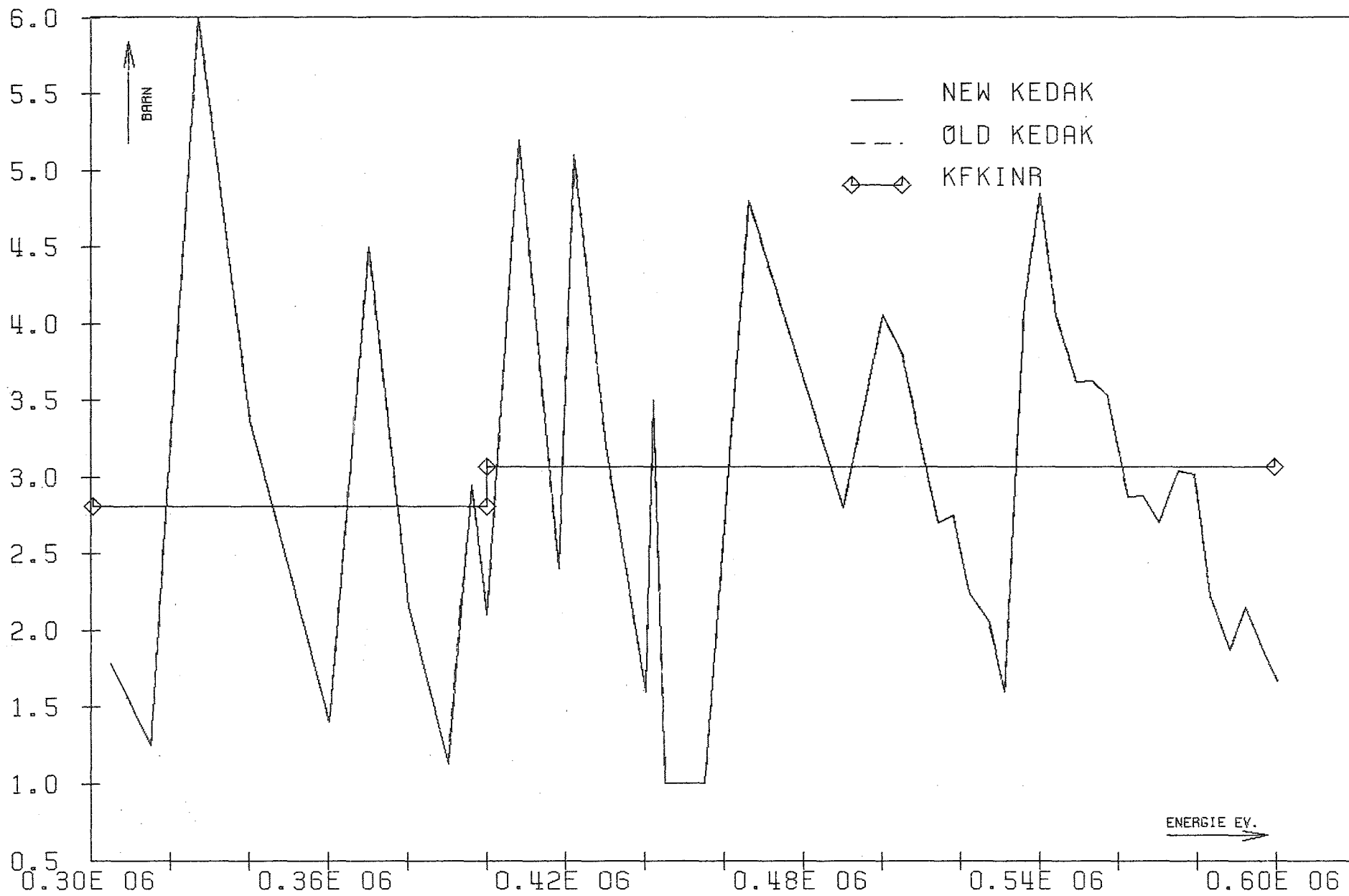


FIG. 21 CR SGN INR901CR 01.08 12.40.

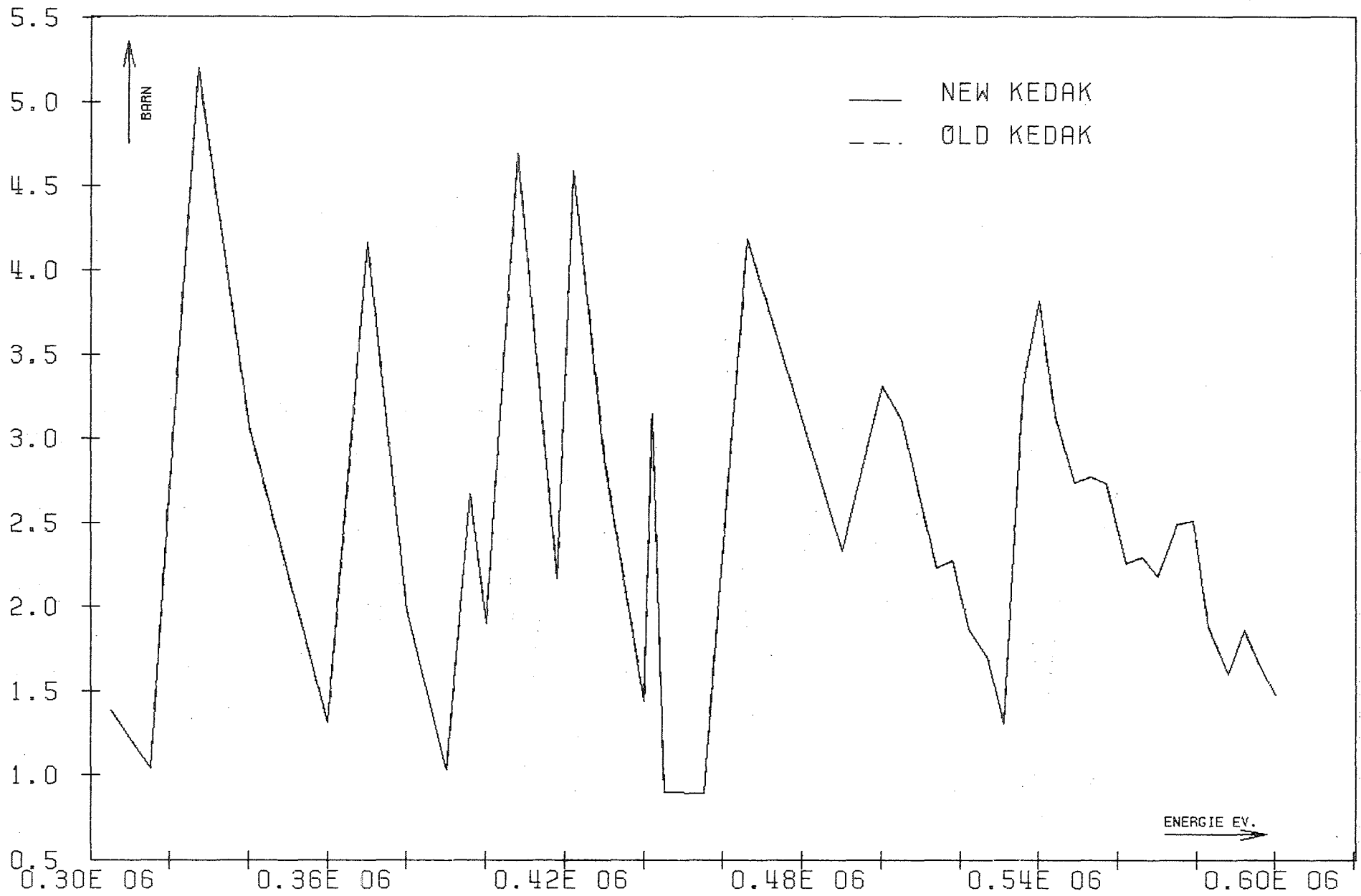


FIG. 22 CR SGTR INR901CR 01.08 12.40.

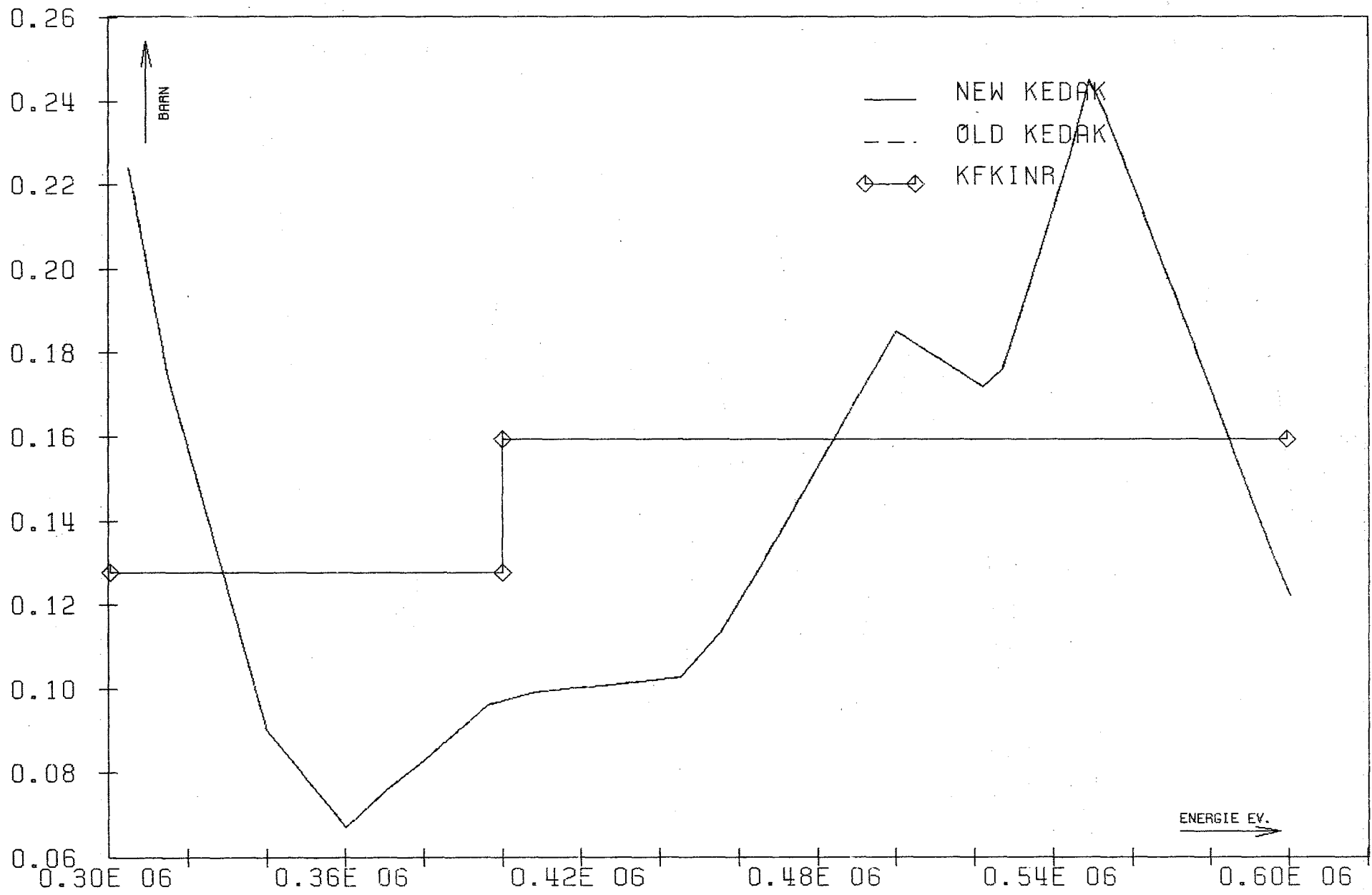


FIG. 23 CR MUEL INR901CR 01.08 12.40.

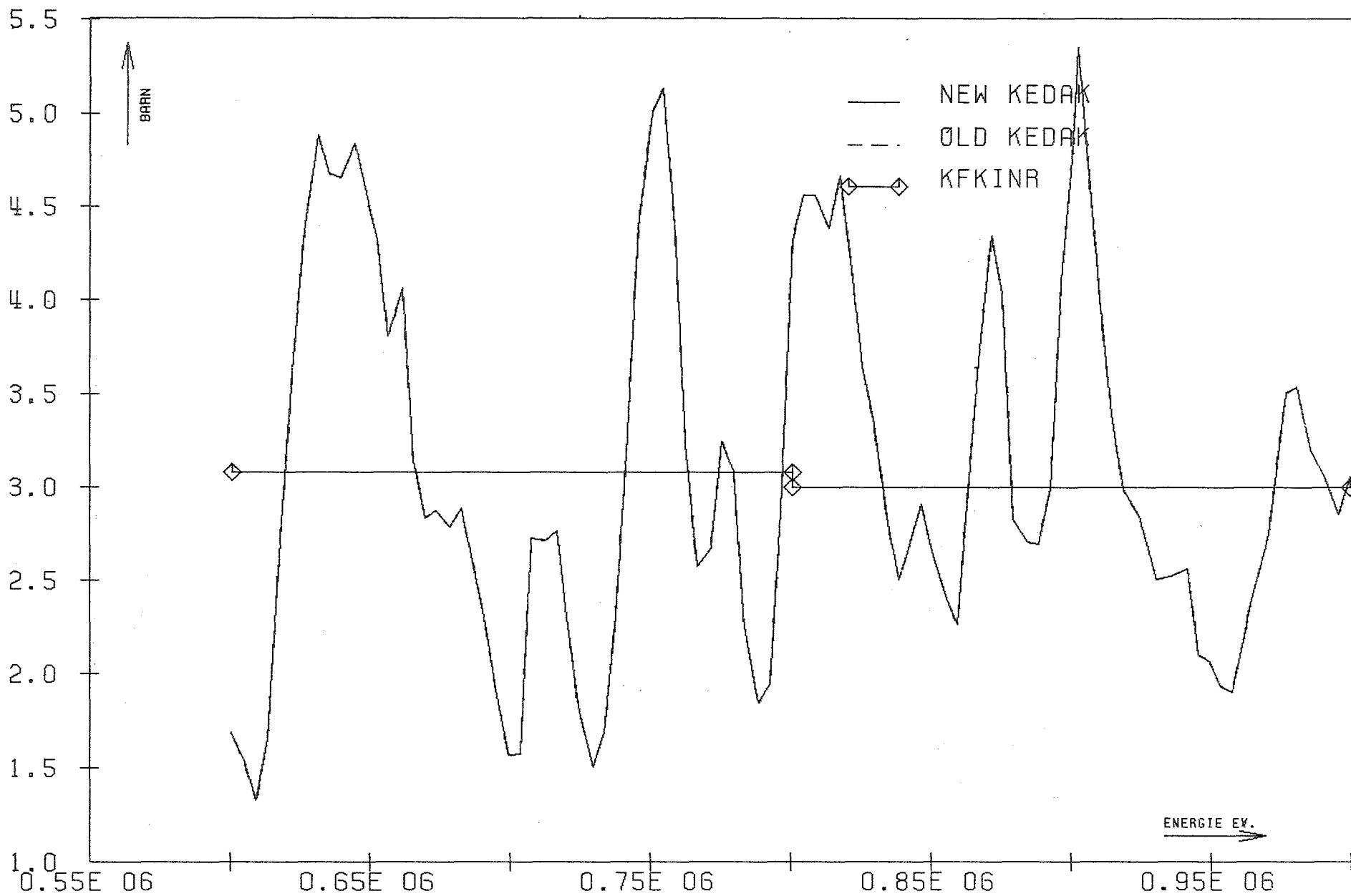


FIG. 24

CR

SGT

INR901CR 01.08 12.40.

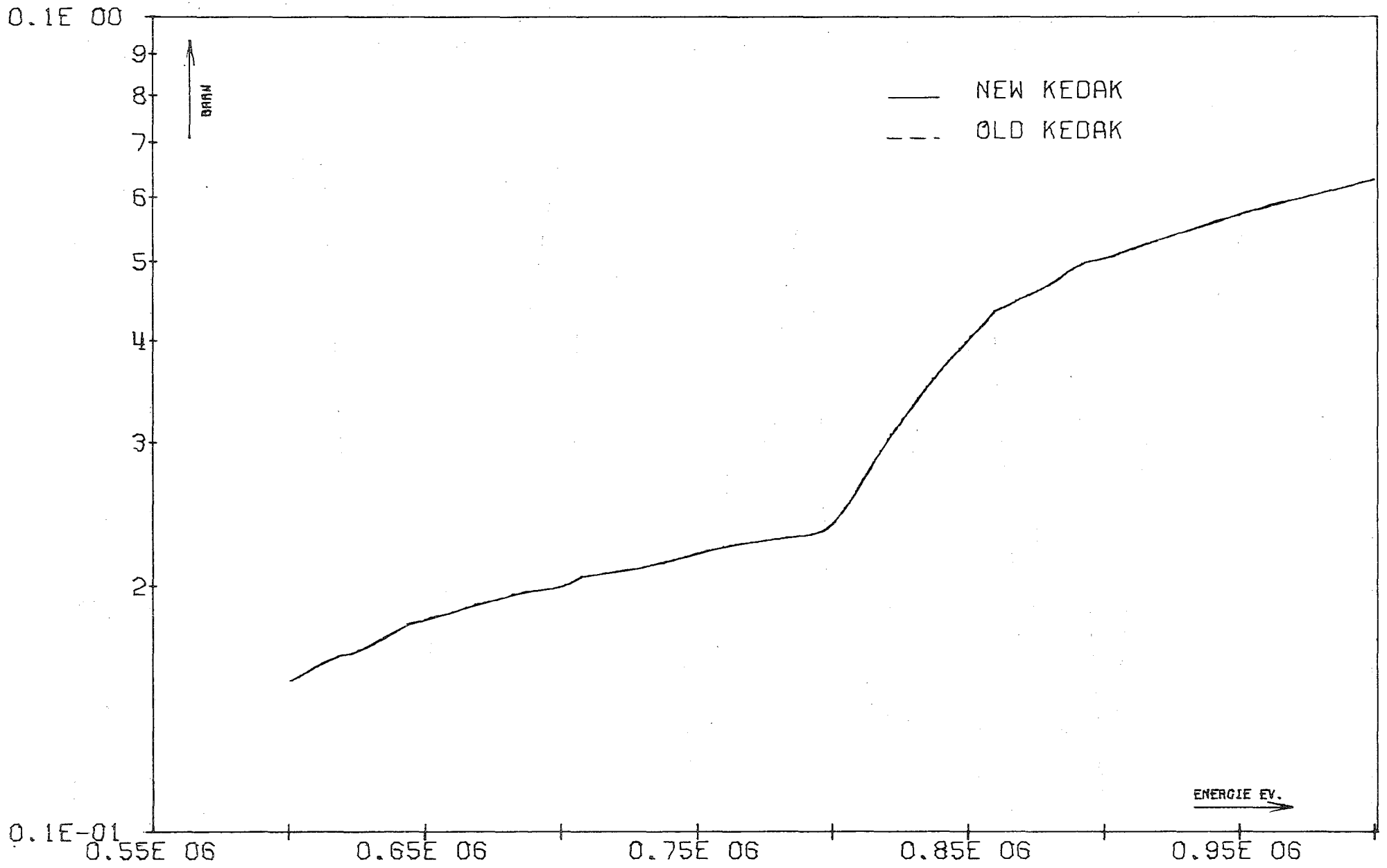


FIG. 25 CB SGX

INR901CR 22.01 13.55.

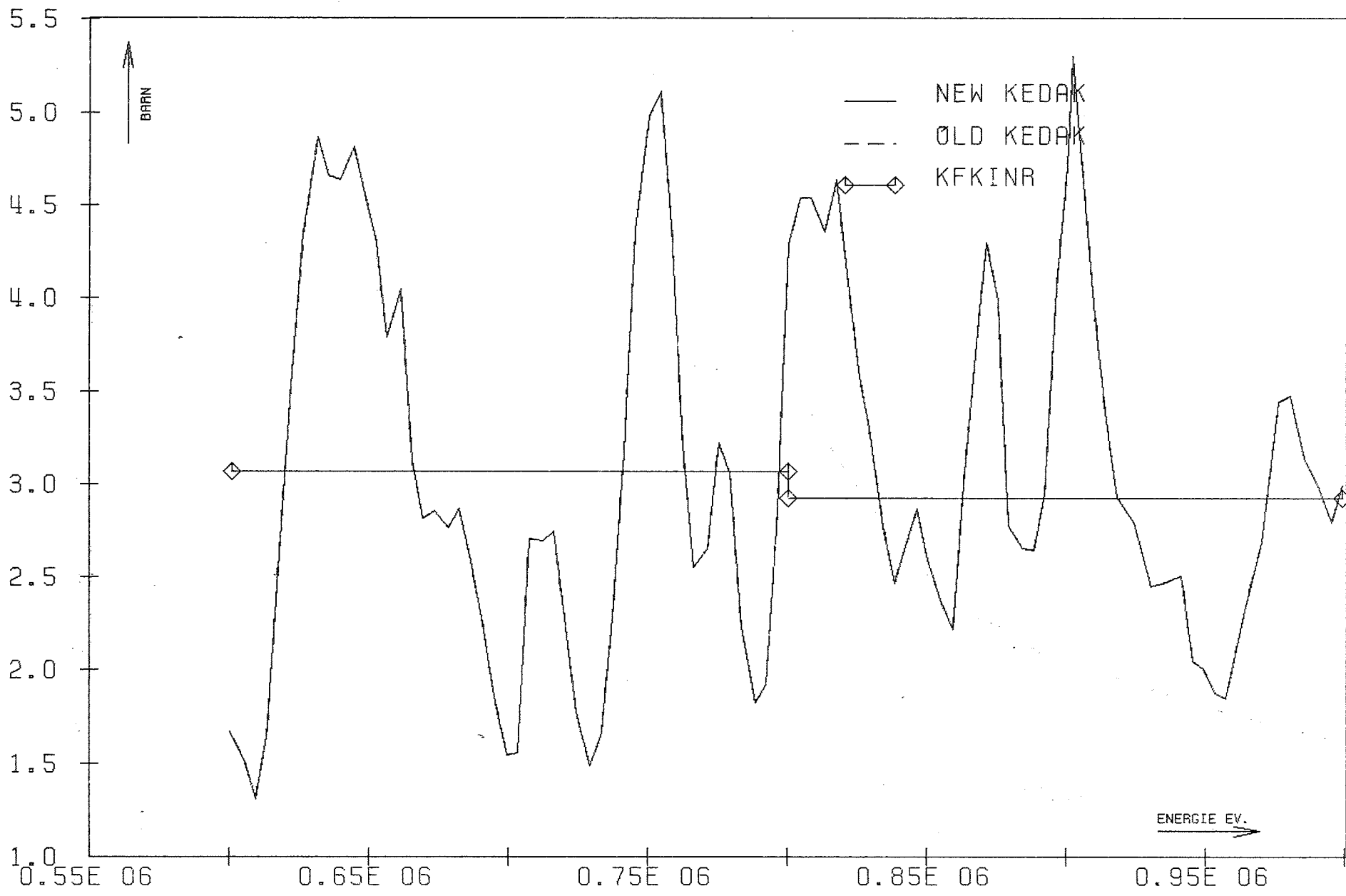


FIG 26 CR SGN INR901CR 01.08 12.40.

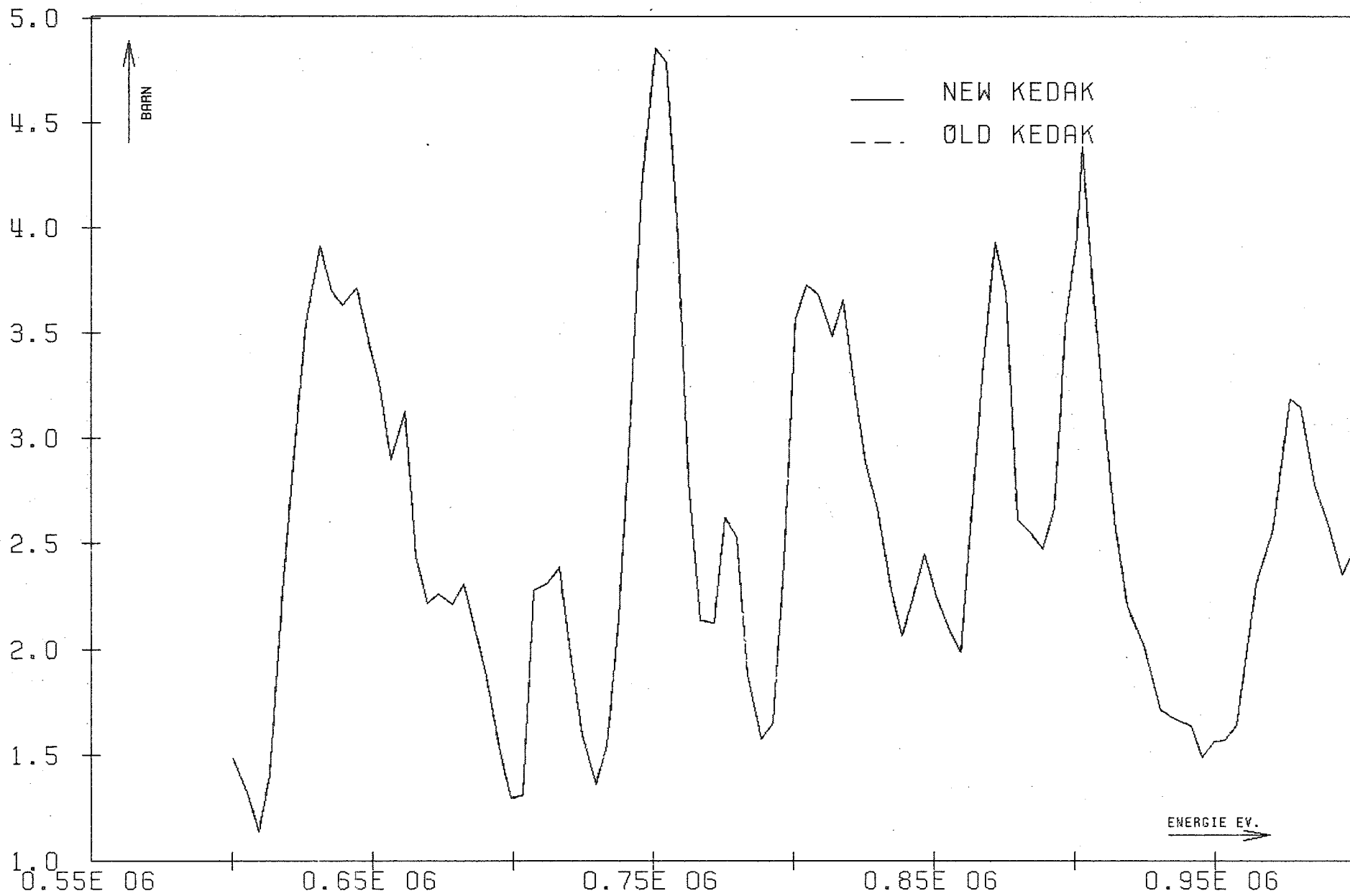


FIG. 27 CR SGTR INR901CR 01.08 12.40.

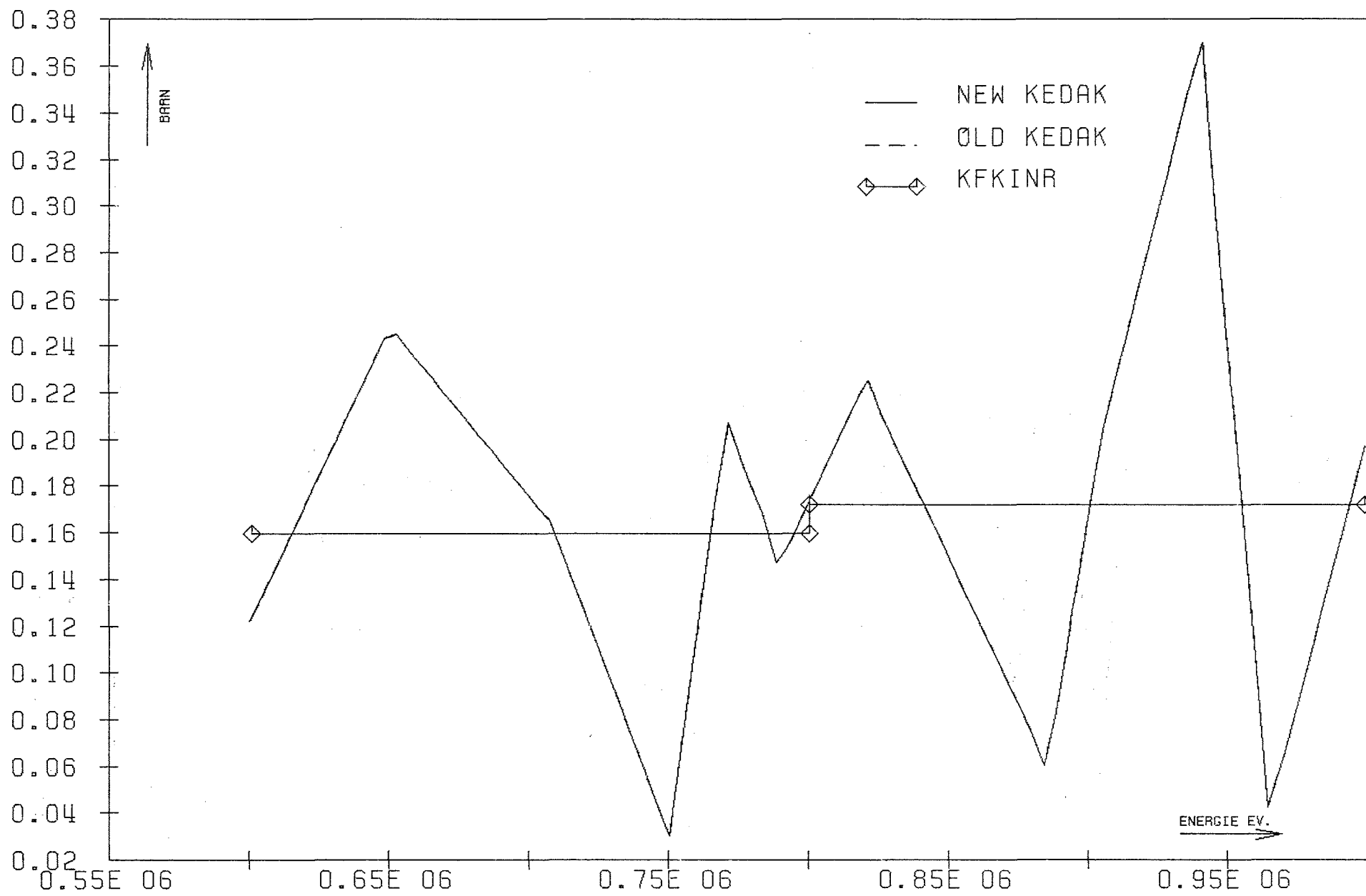
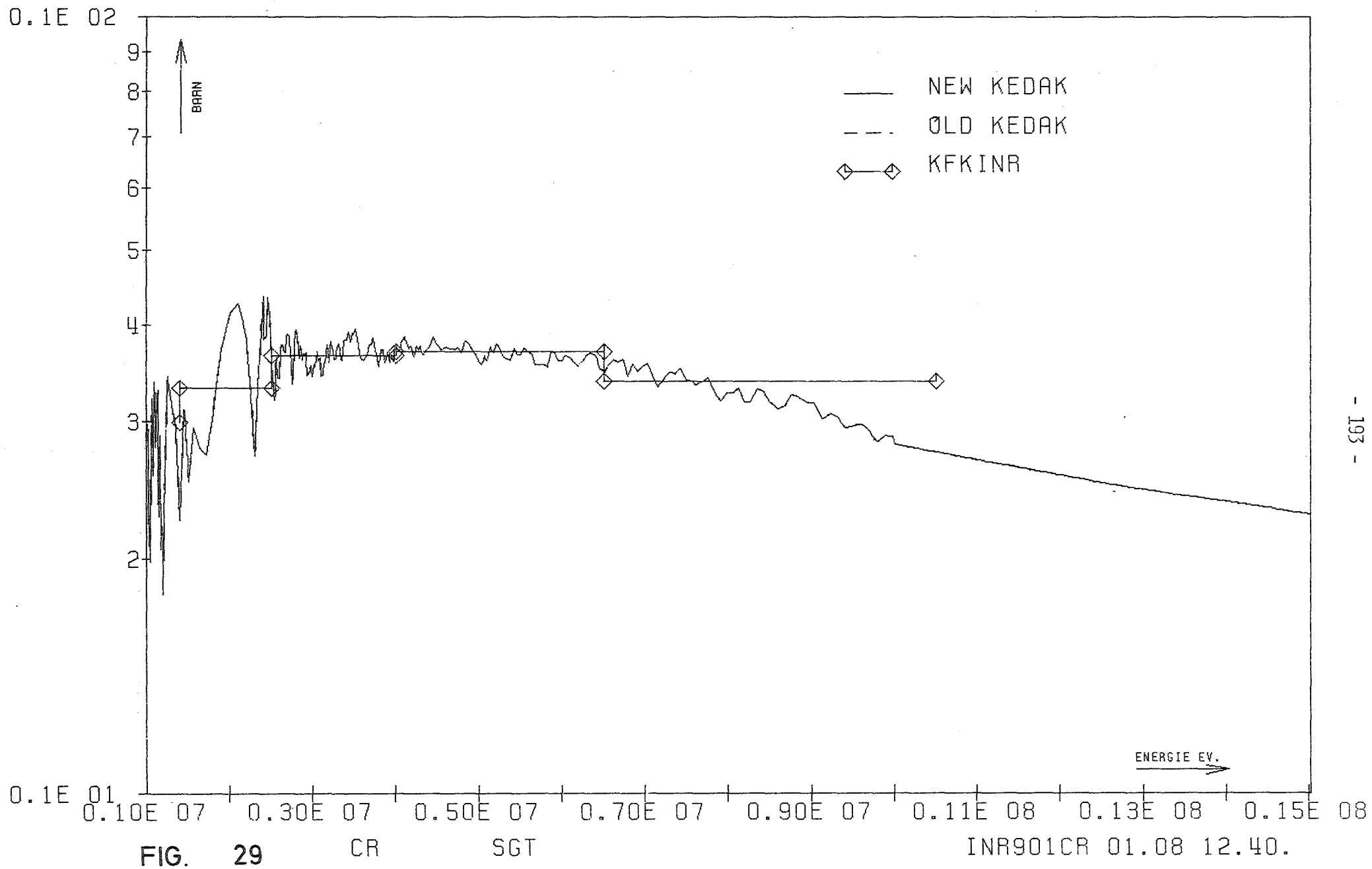


FIG. 28

CR MUEL

INR901CR 01.08 12.40.



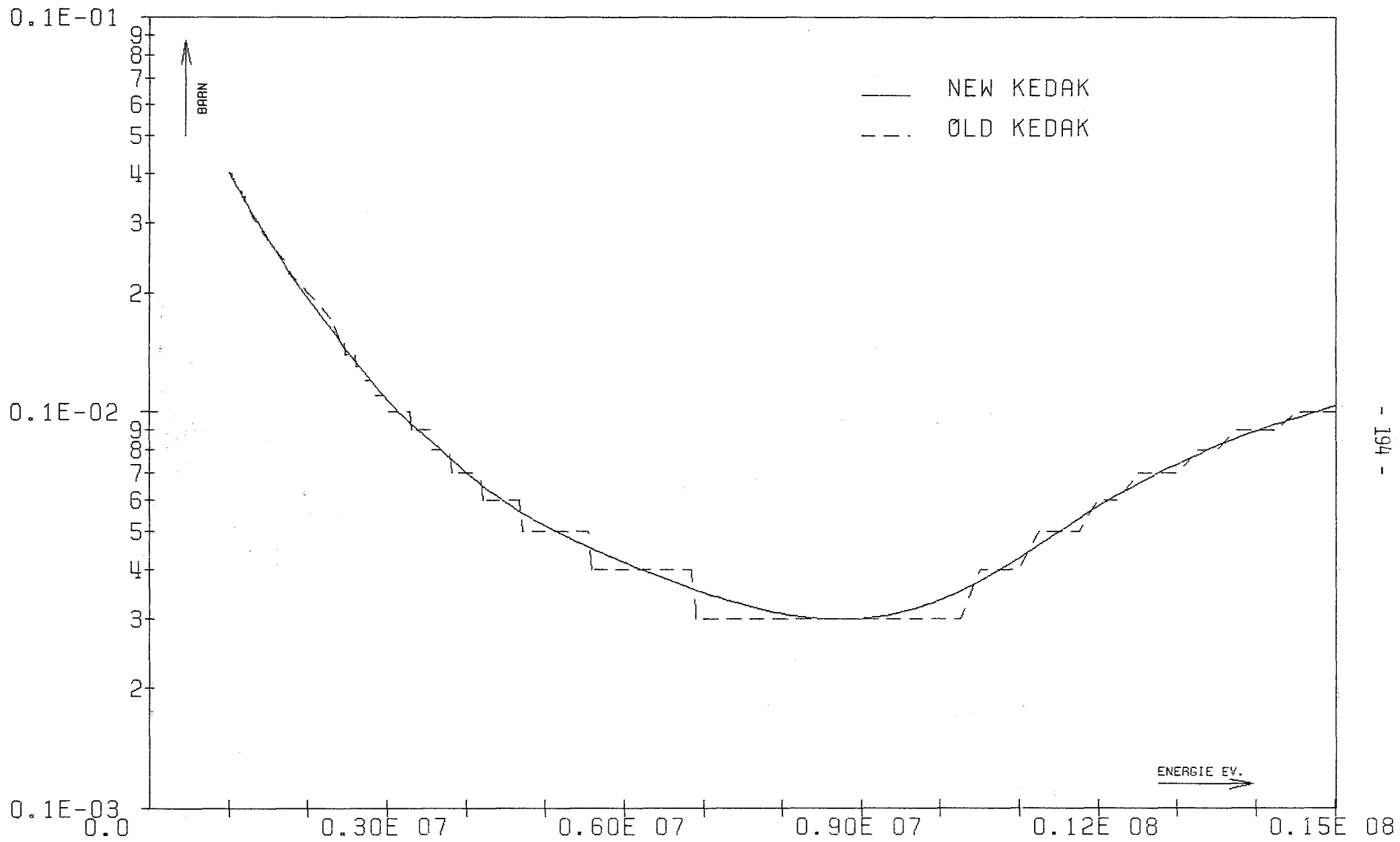


FIG. 30 CR SGG

INR901CR 05.08 15.31.

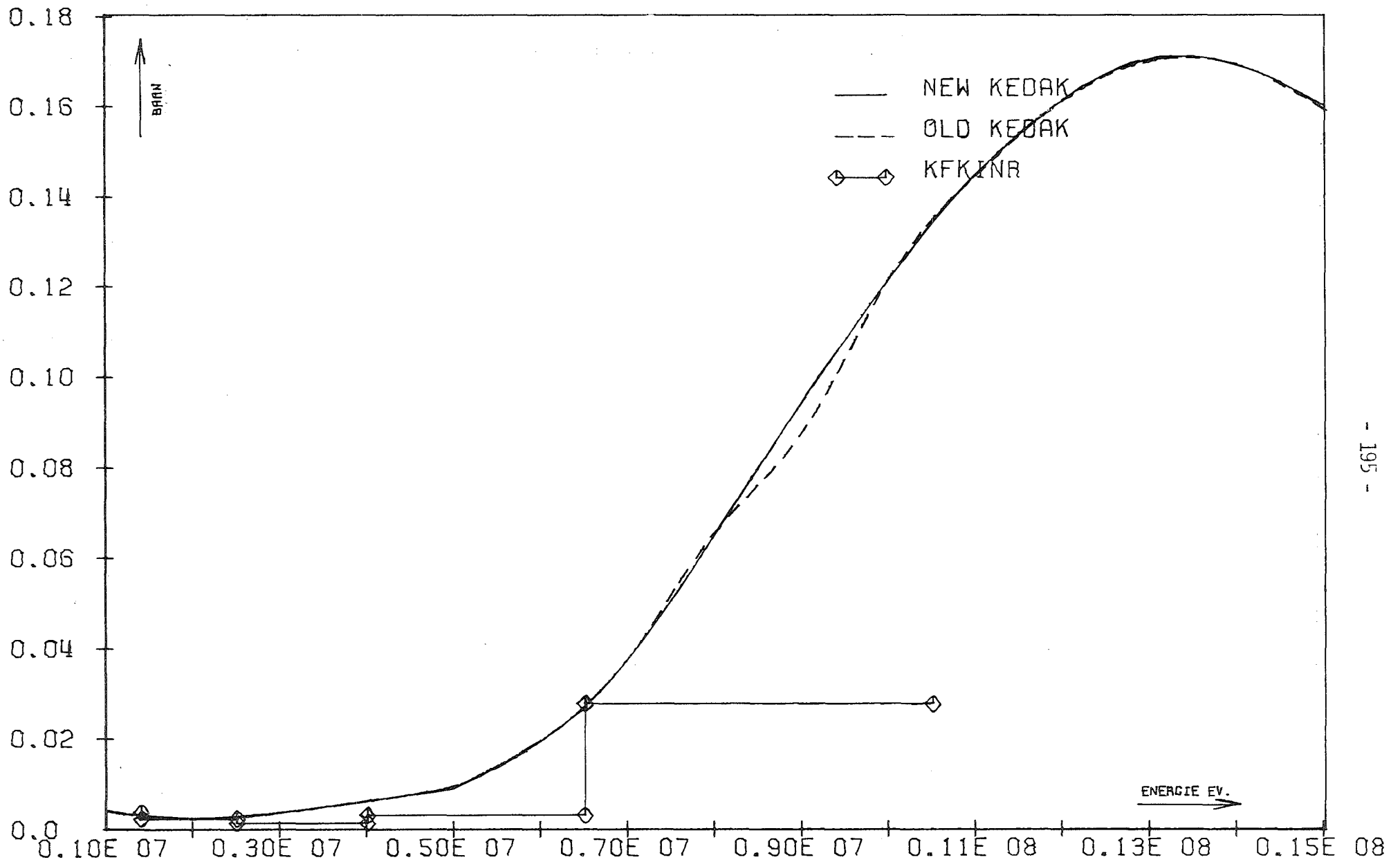


FIG. 31 CR SGA

INR901SA 26.01 20.15.

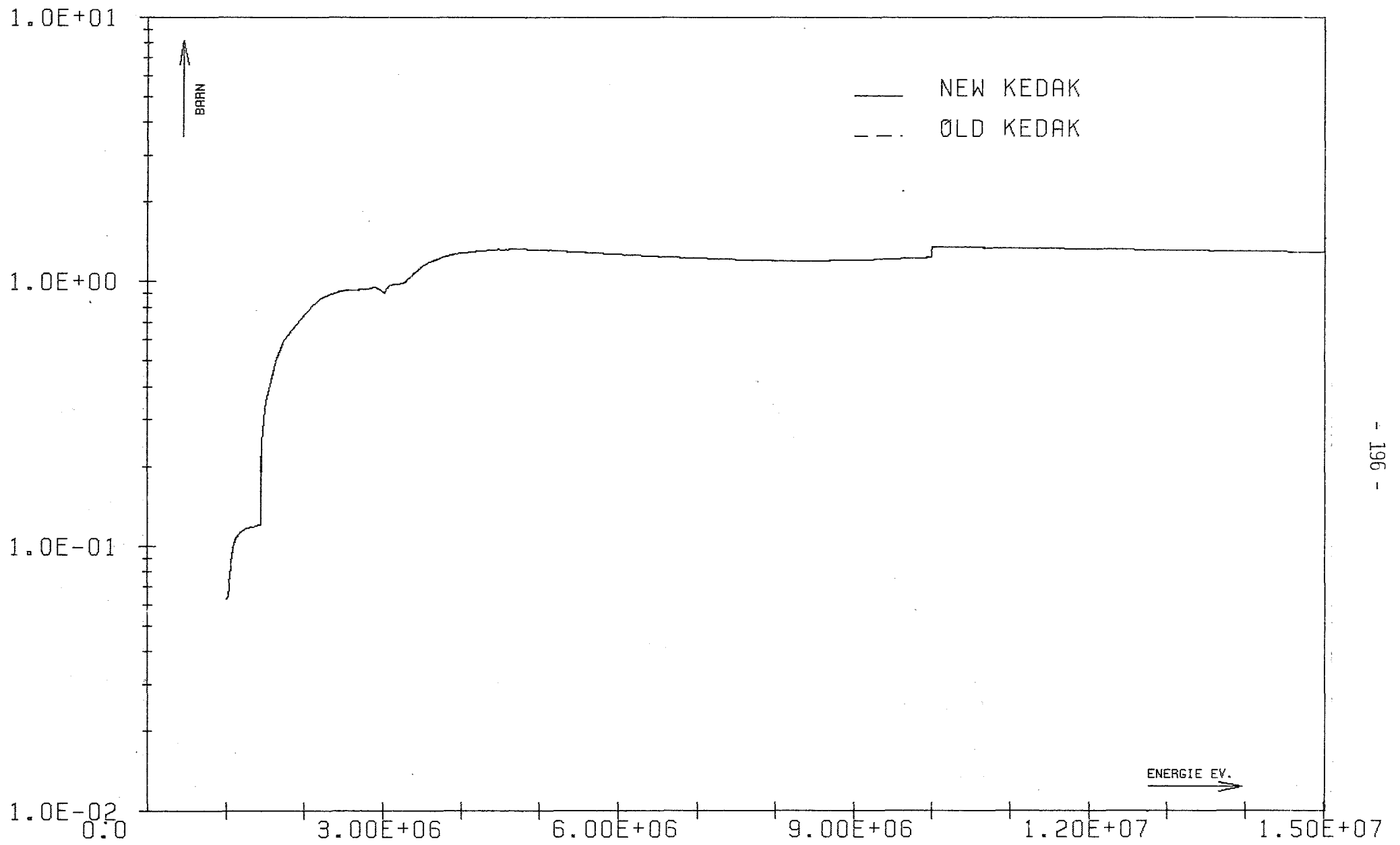


FIG. 32 CR SGX

INR9010I 29.09 21.52.

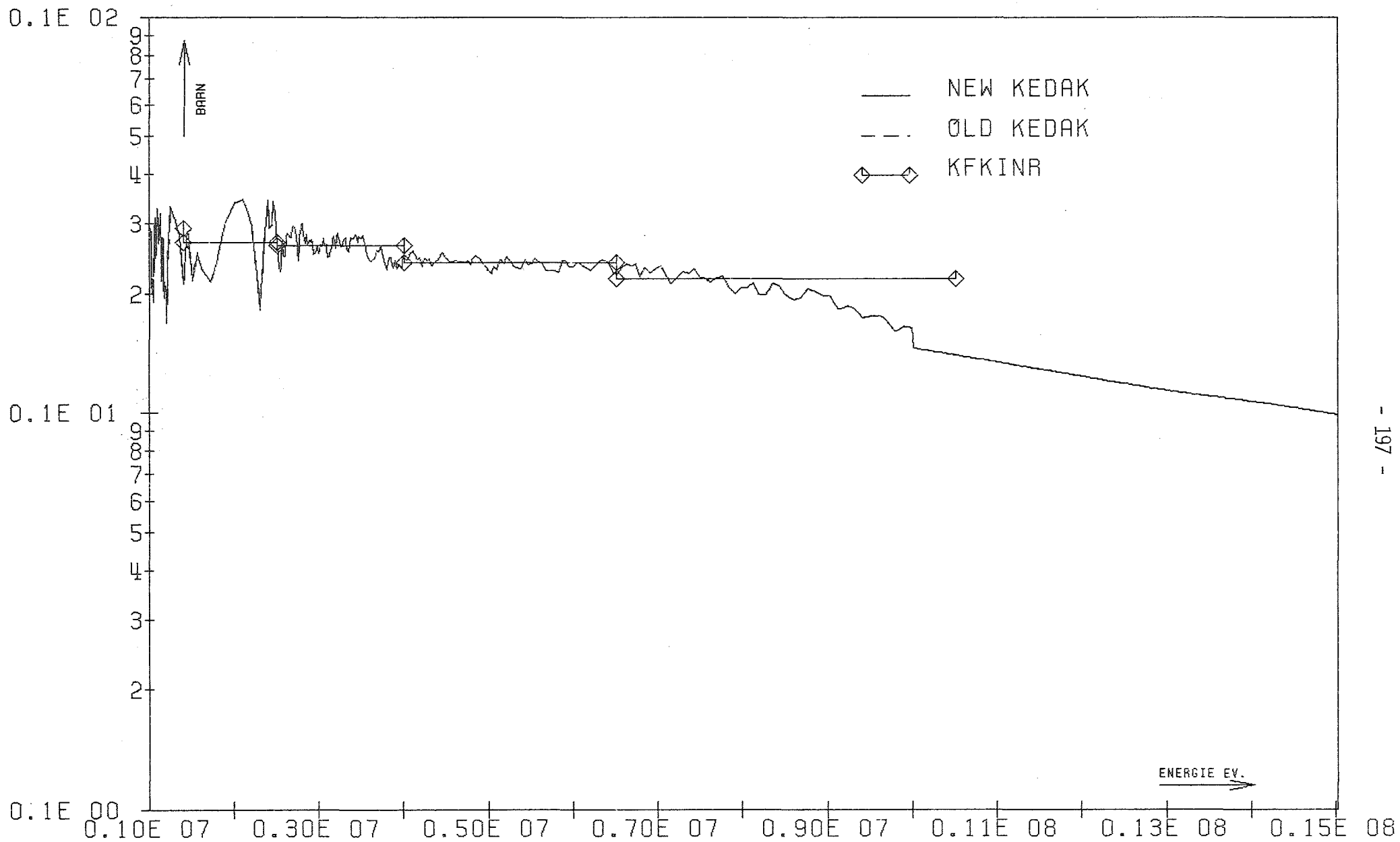


FIG.

33

CR

SGN

INR901CR 05.08 15.31.

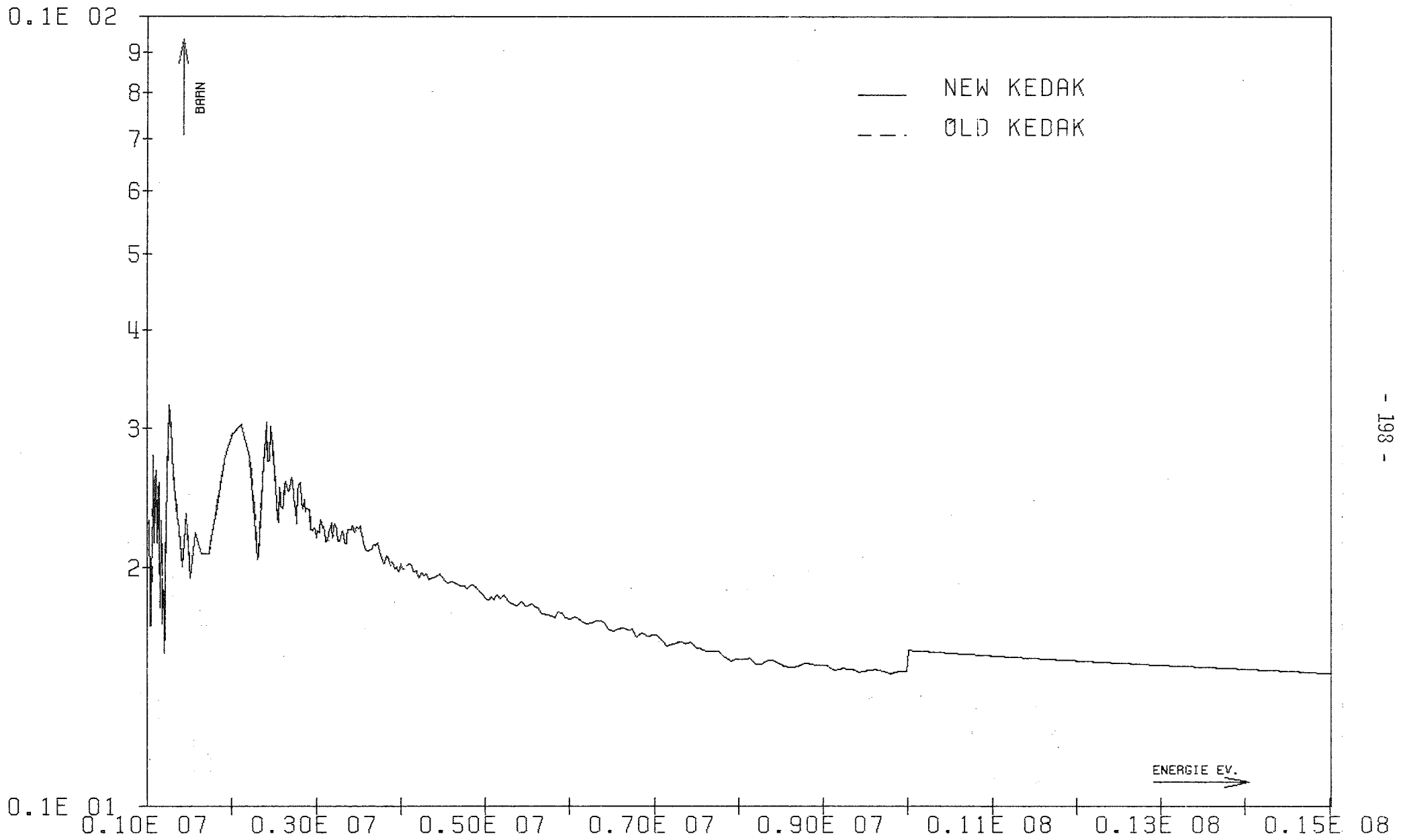


FIG. 34 CR SGTR

INR901CR 05.08 15.31.

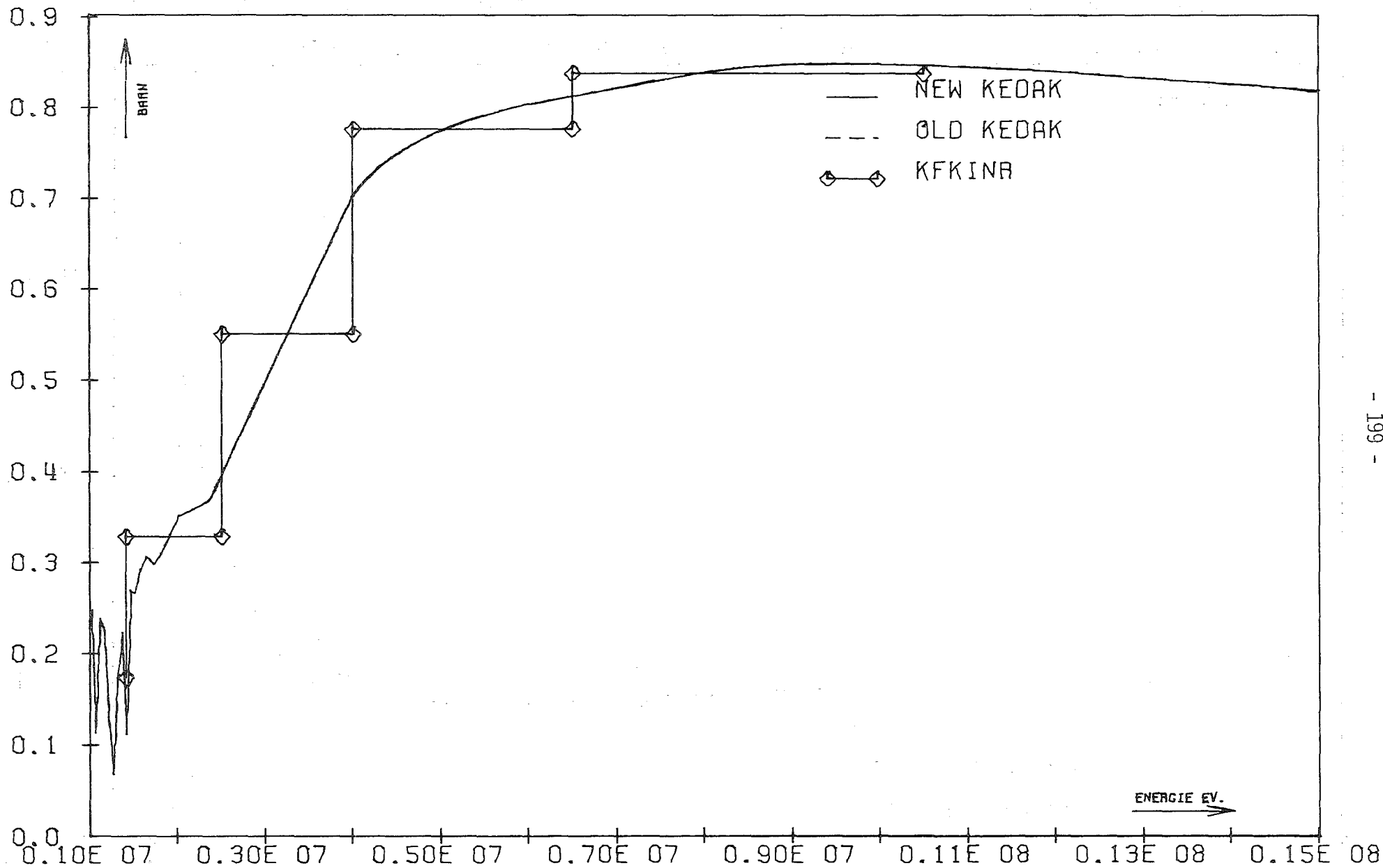


FIG. 35 CR MUEL INR901CR 22.01 13.55.

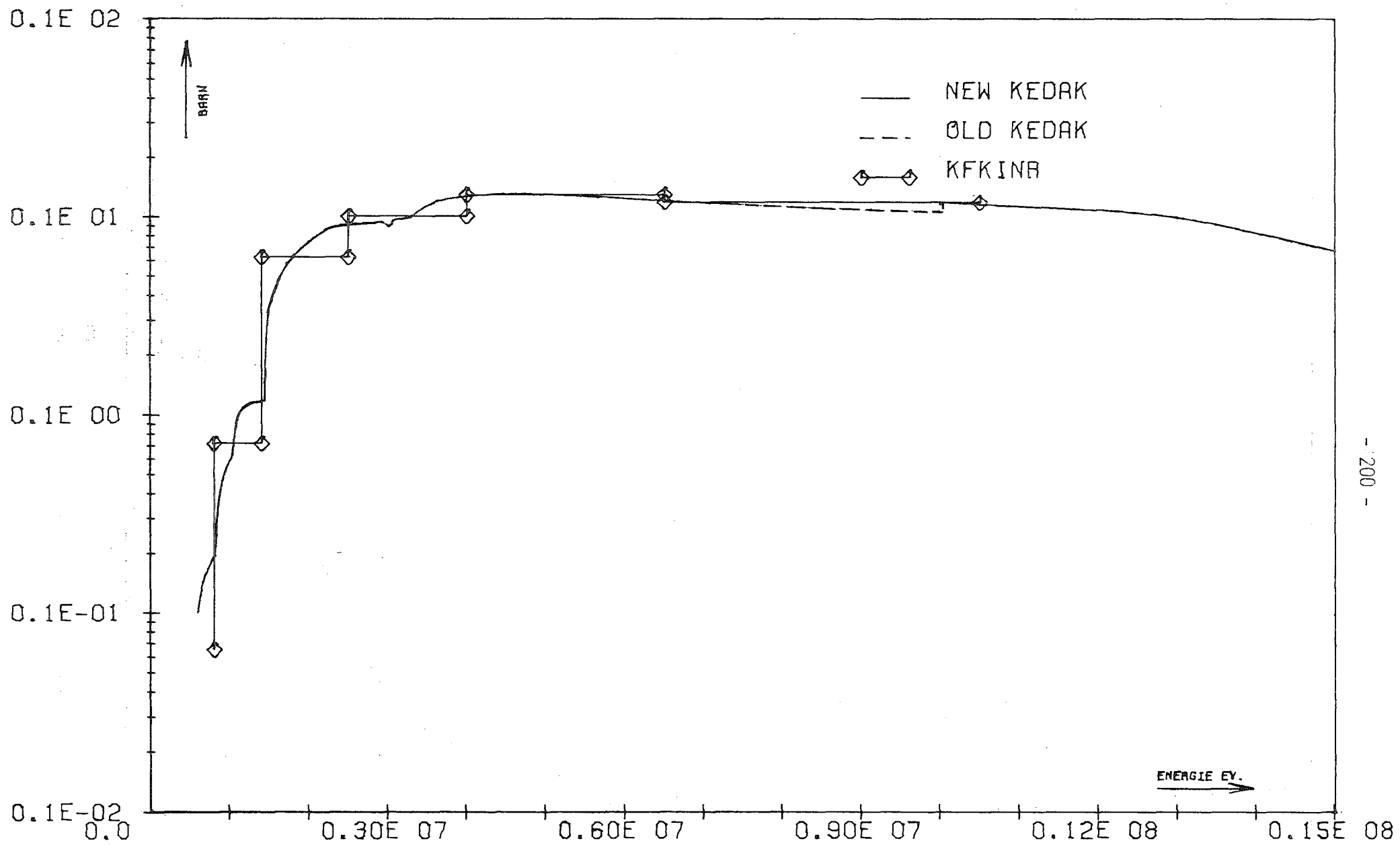


FIG. 36 CR SGI

INR901CR 22.01 13.55.

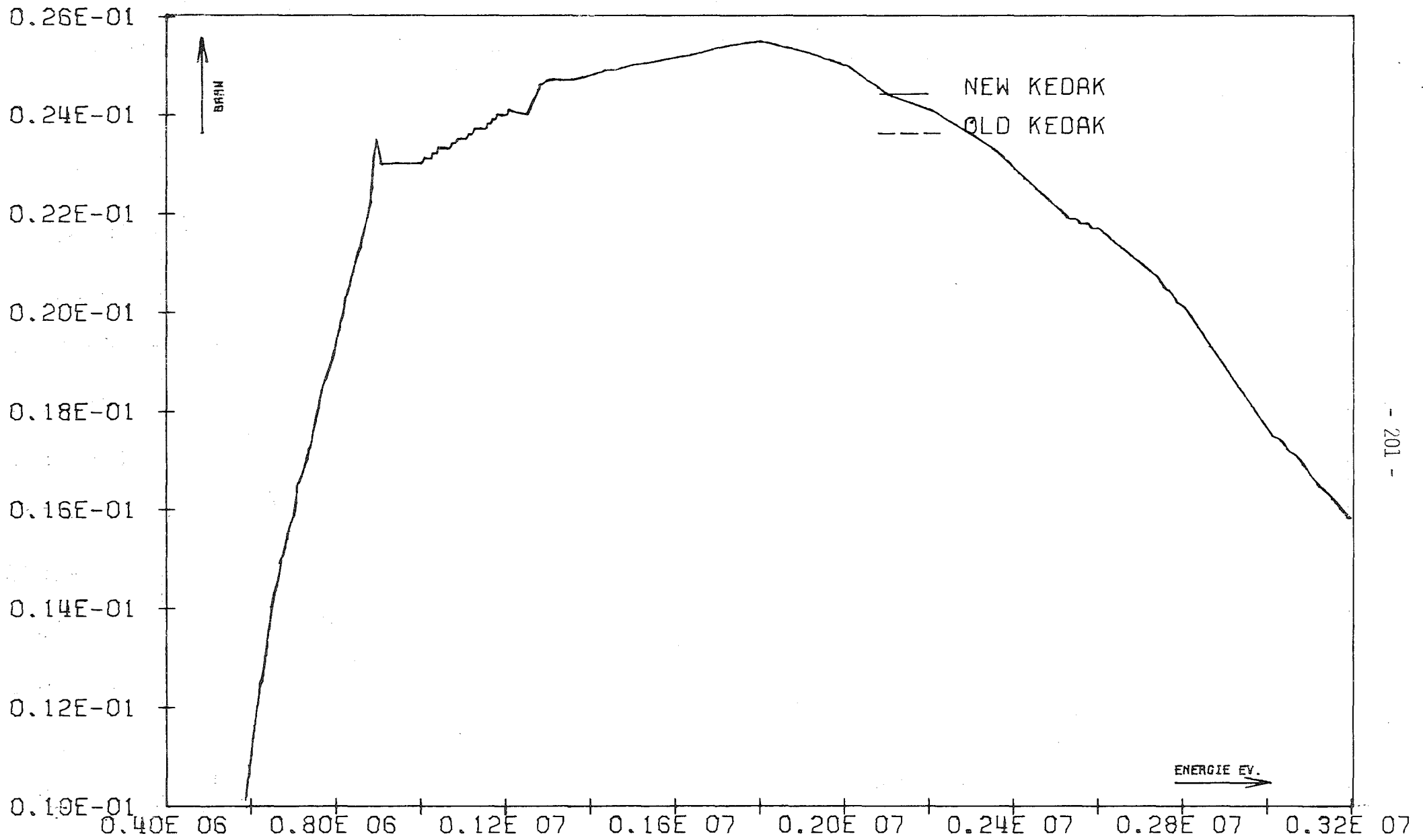


FIG. 37 CR SGIZ 0.5650+06 INR901CR 22.01 13.55.

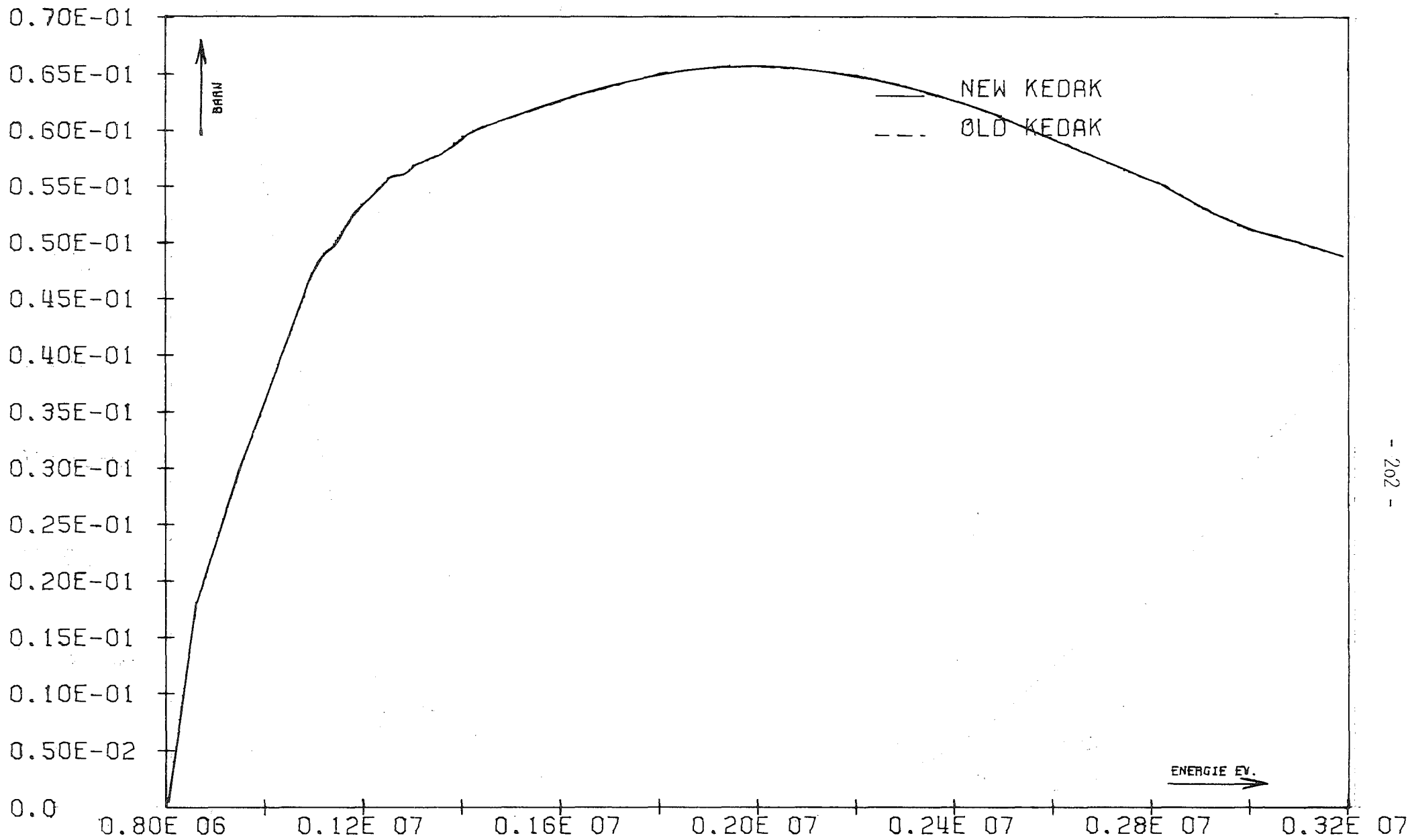


FIG.

38

CR

SGIZ

0.782D+06

INR901CR 22.01 13.55.

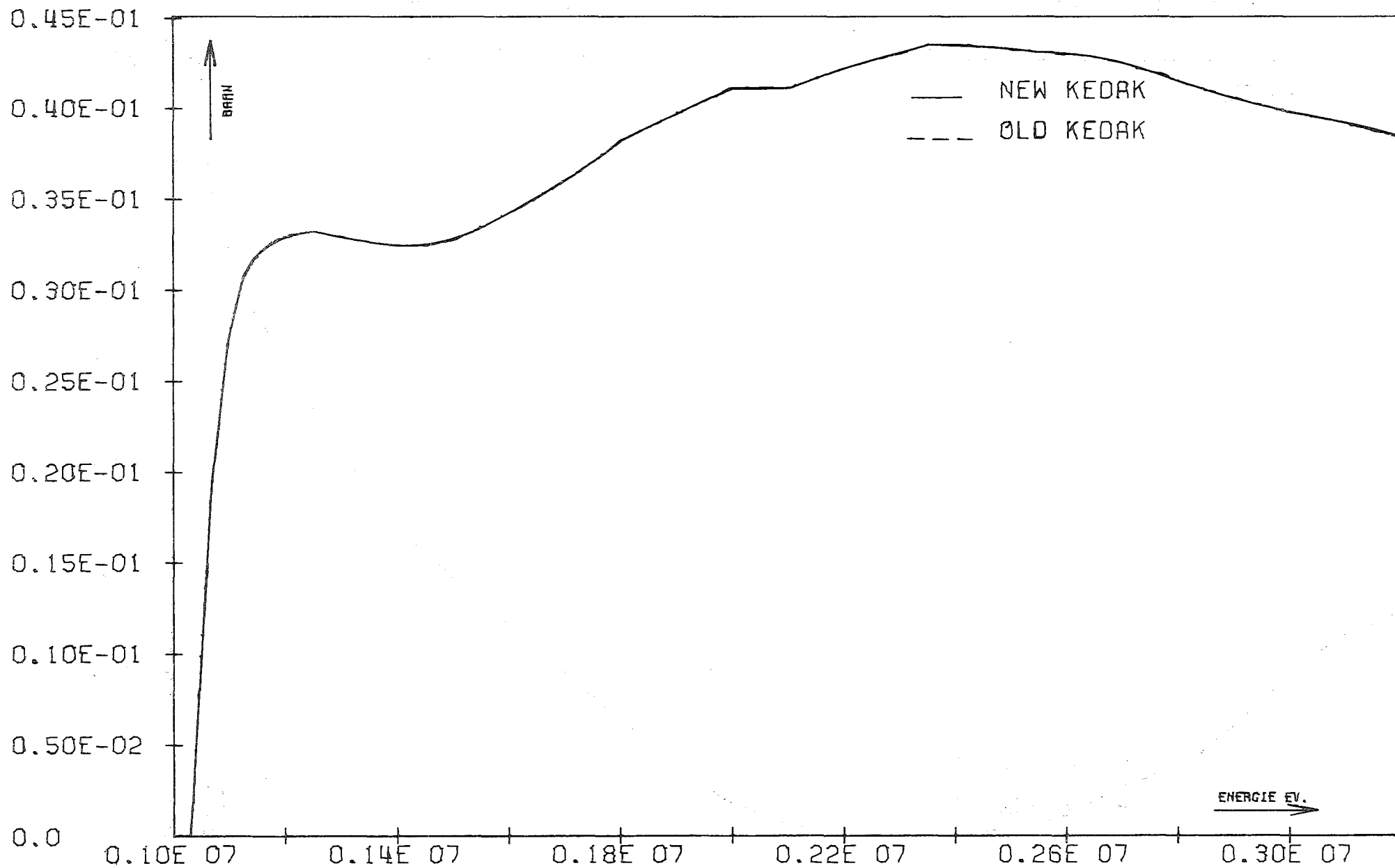


FIG. 39 CR SG1Z 0.1010+07 INR901CA 22.01 13.55.

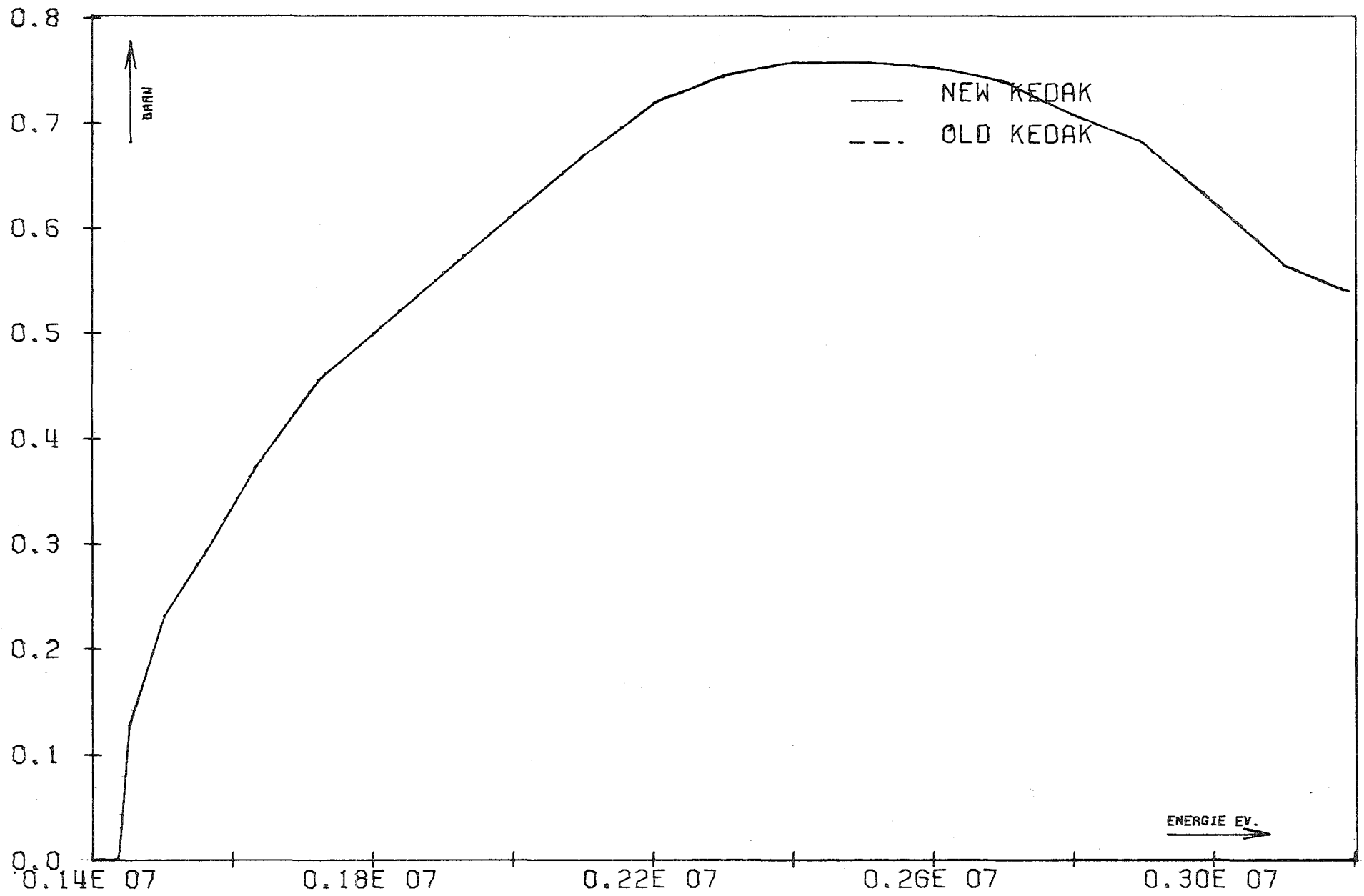


FIG.

40

CR

SGIZ

0.1430+07

INR901CR 22.01 13.56.

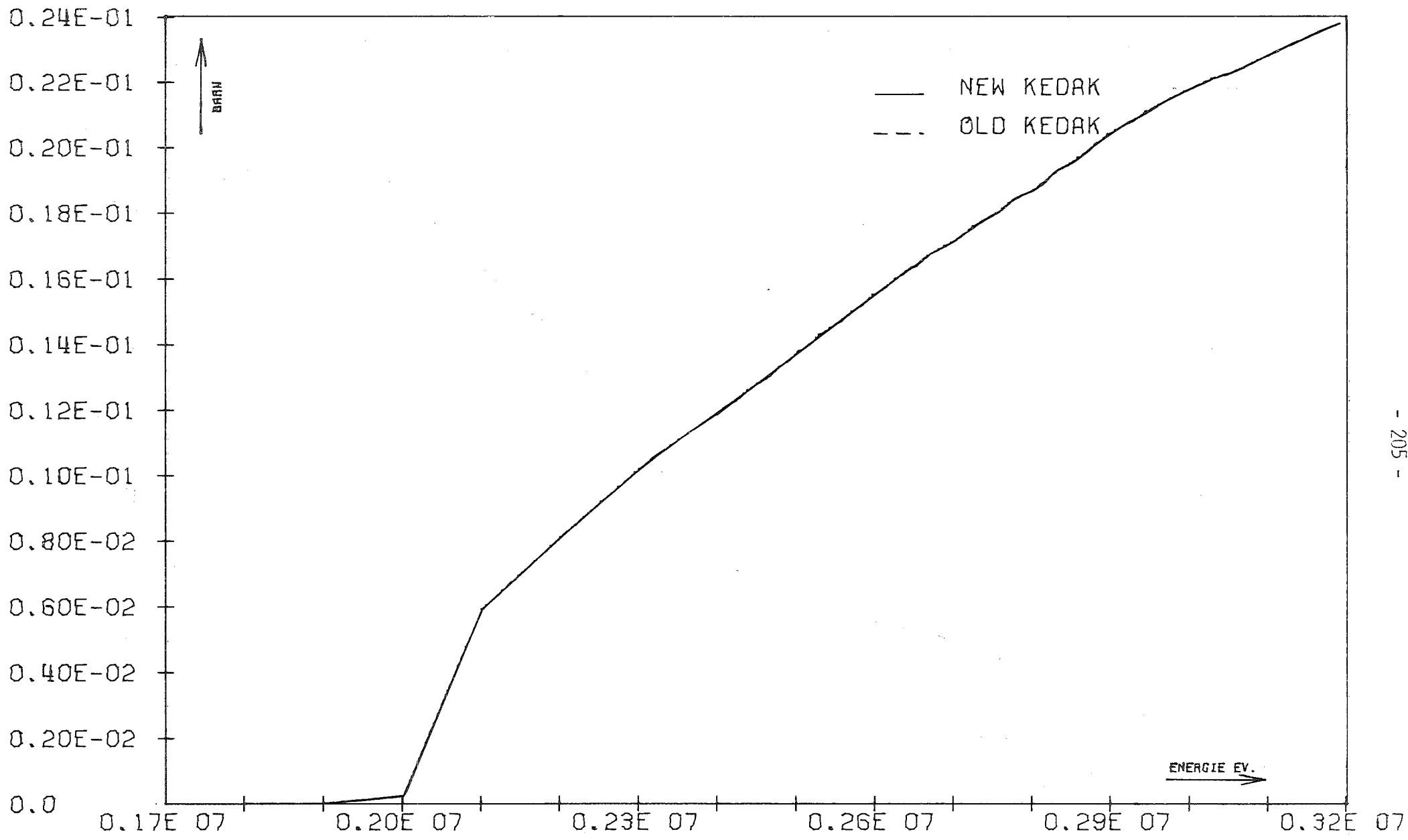


FIG.

41

CR

SGIZ

0.184D+07

INR901CR 22.01 13.56.

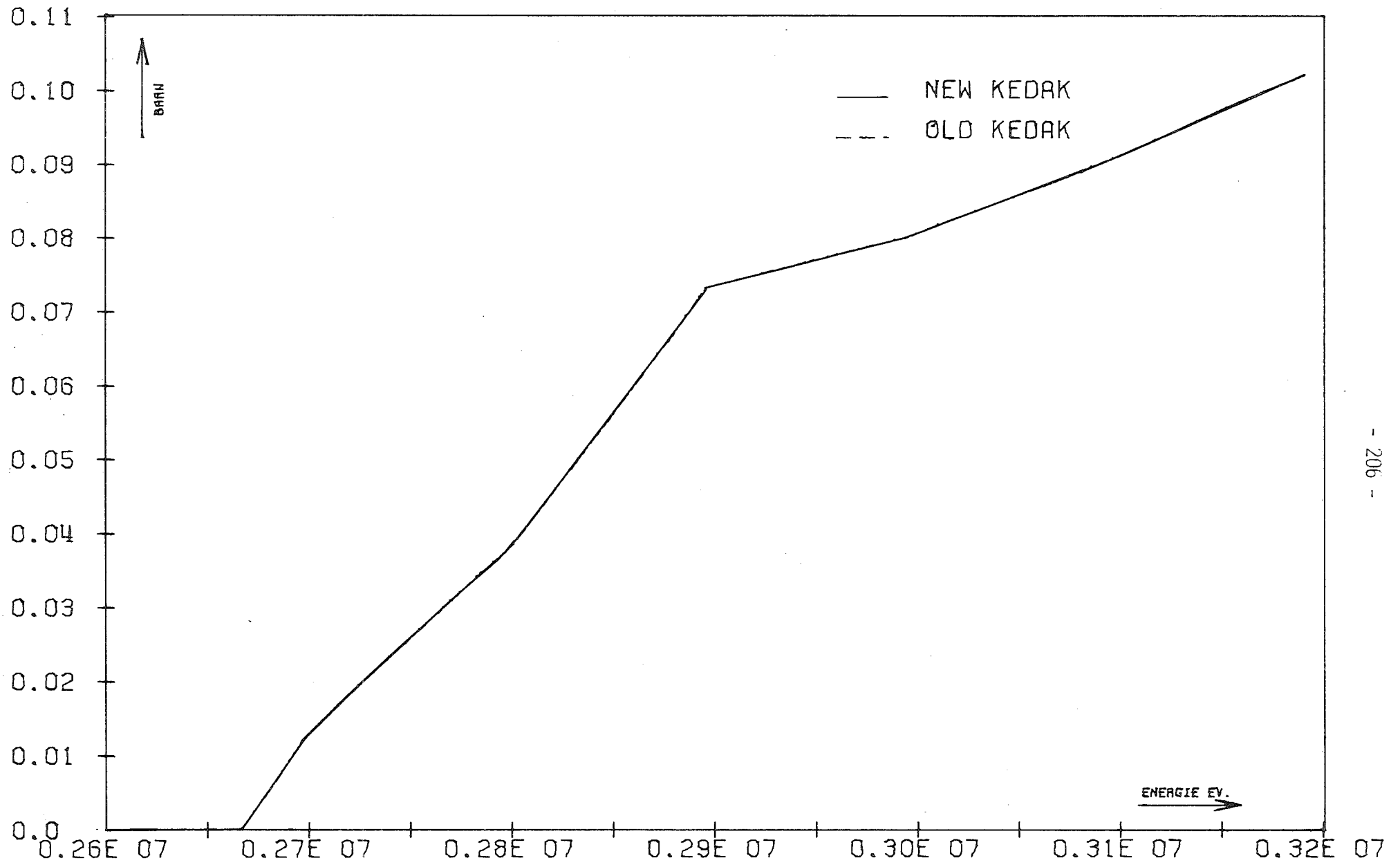


FIG. 42 CR SGIZ 0.2370+07 INR901CR 22.01 13.56.

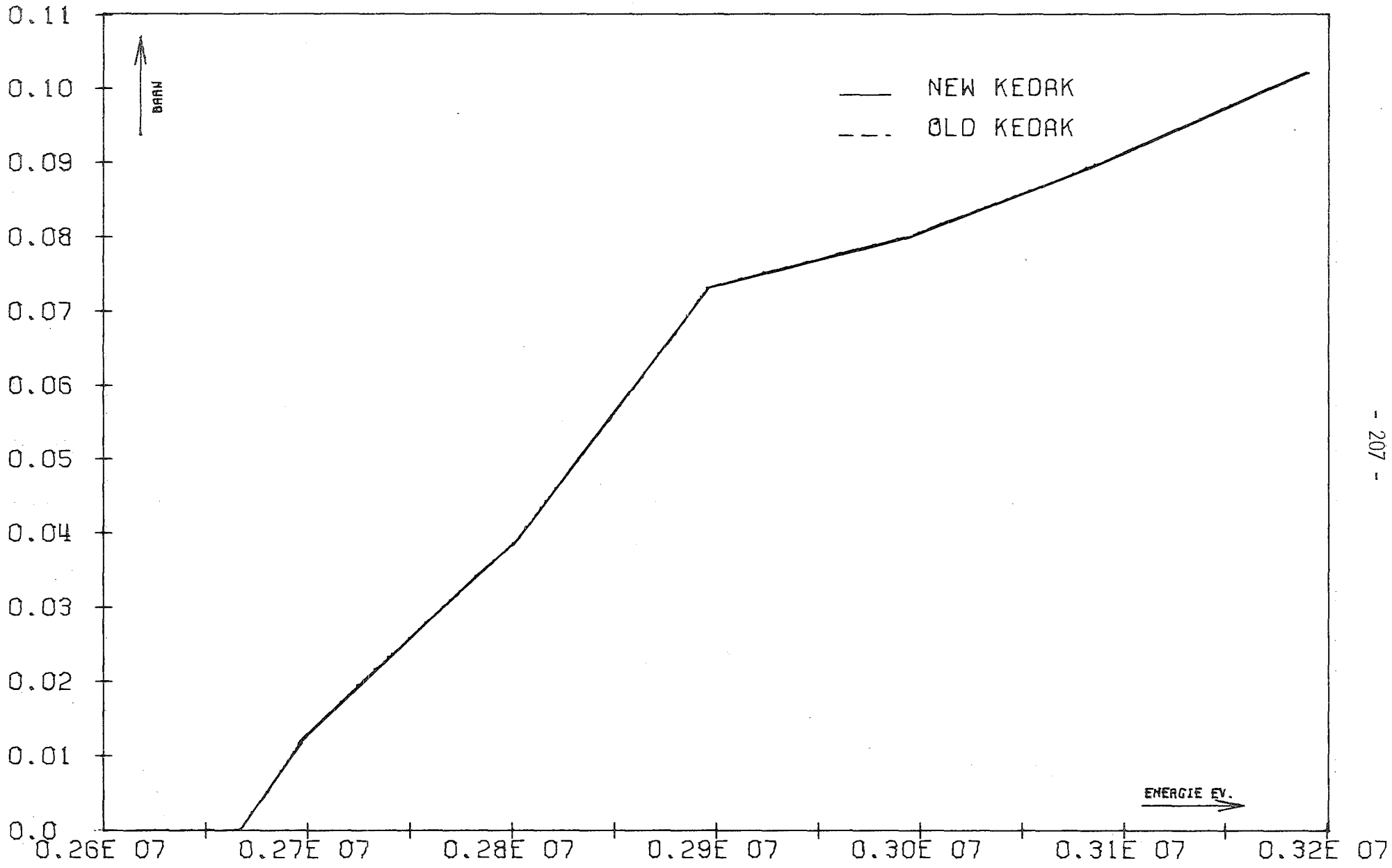


FIG. 43 CR SGIZ 0.262D+07 INR901CR 22.01 13.56.

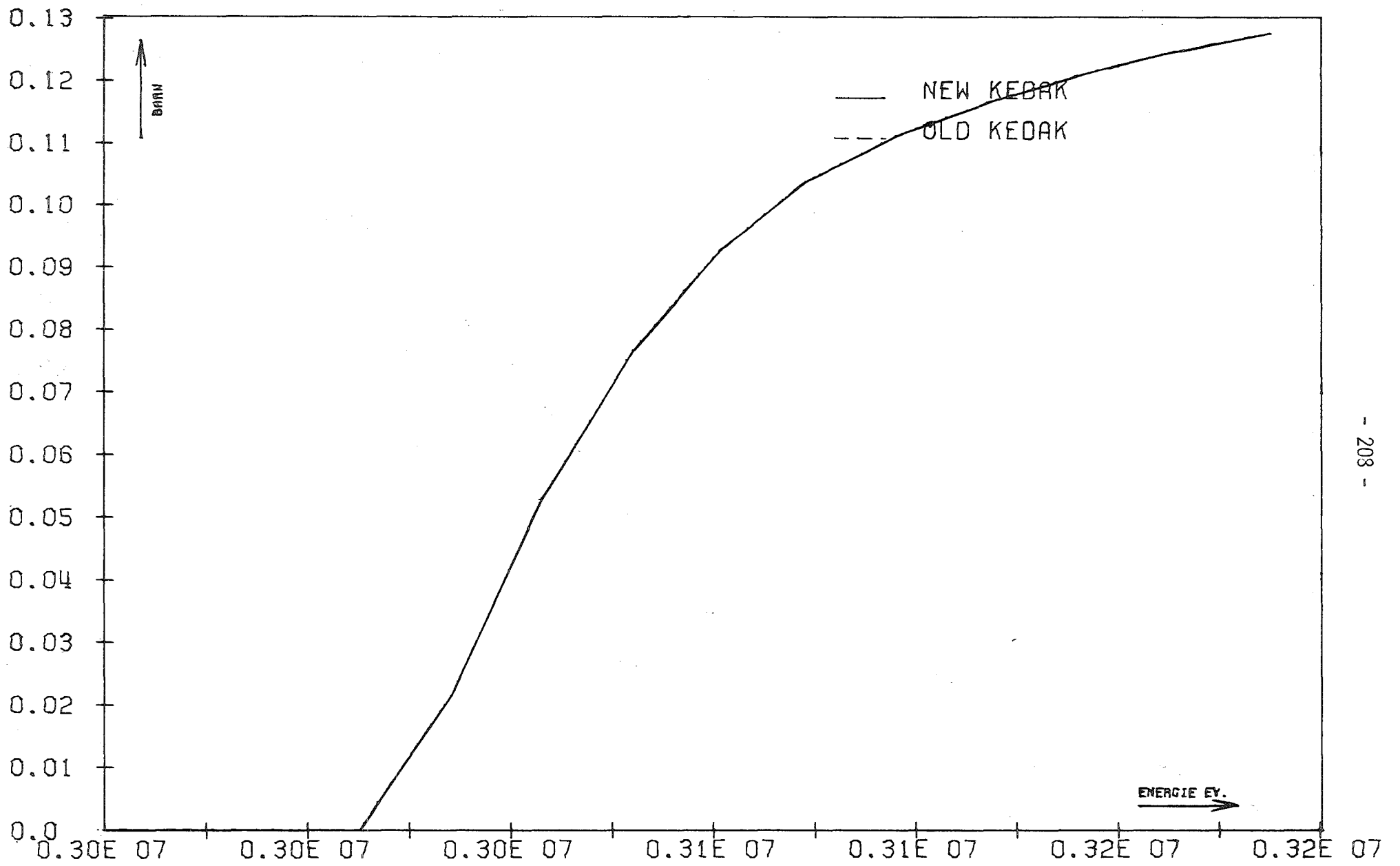


FIG. 44 CR SGIZ 0.2970+07 INR901CR 22.01 13.56.

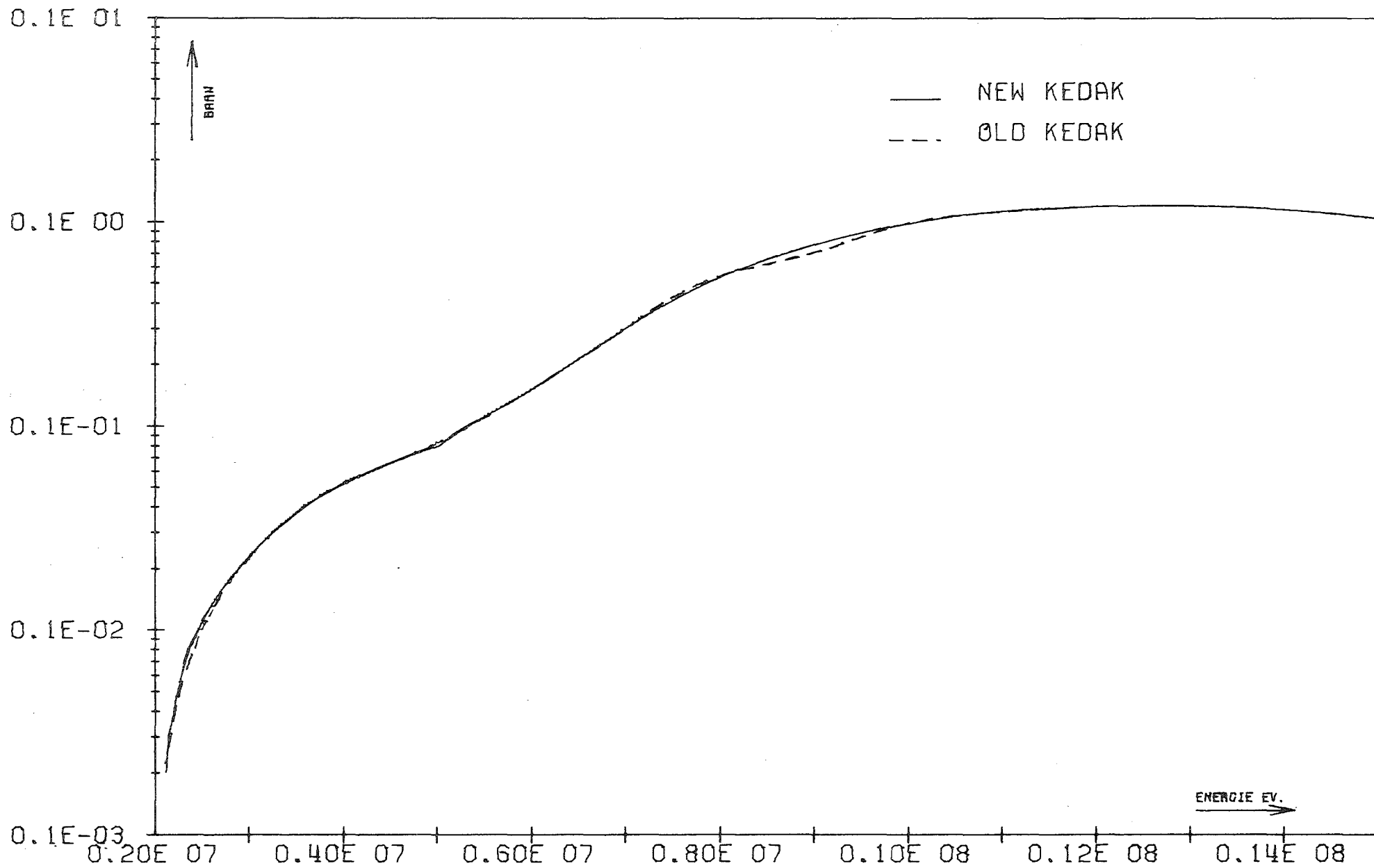


FIG. 45 CB SGP INR901CR 22.01 13.55.

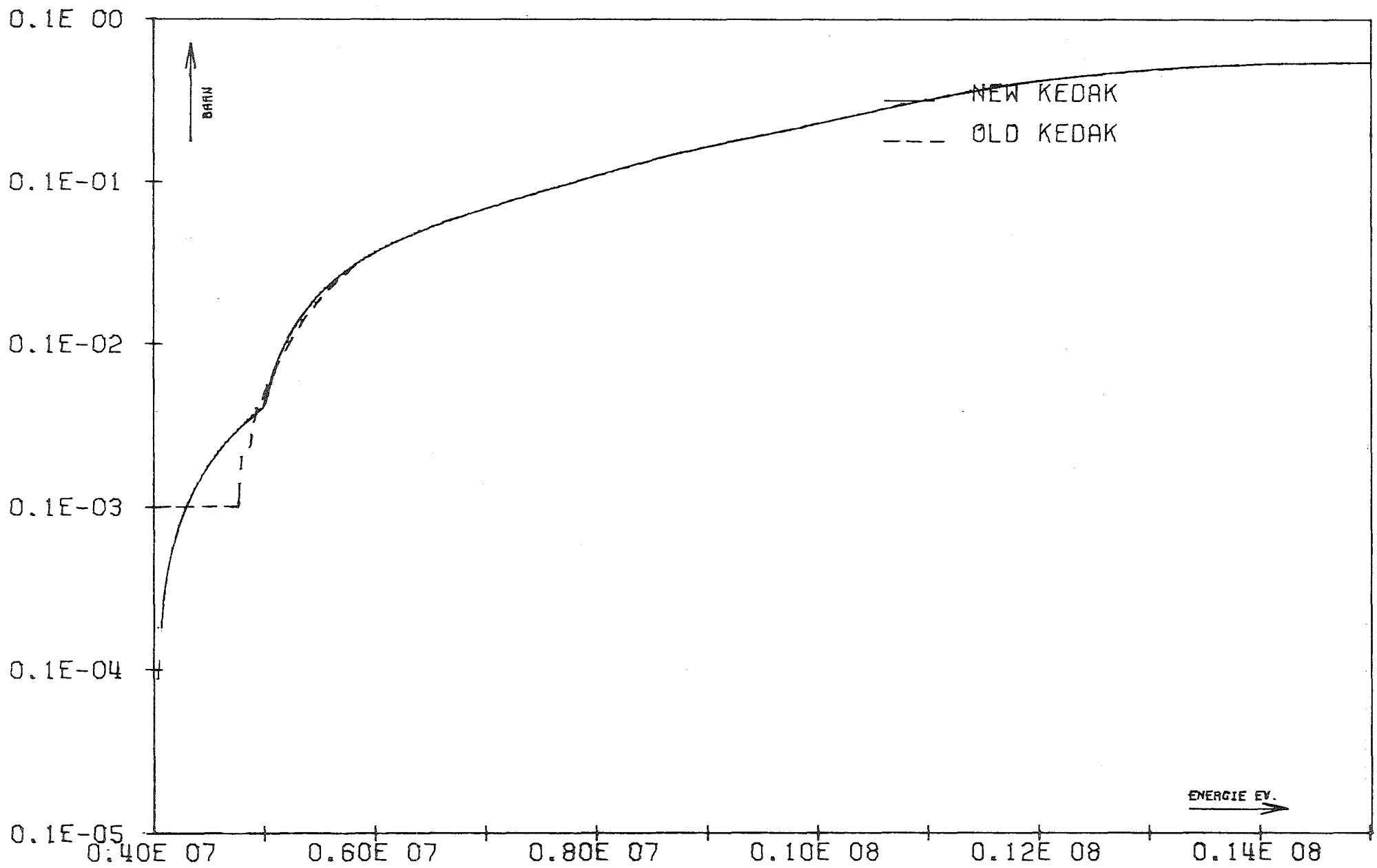


FIG. 46 CB SGALP INR901CR 22.01 13.55.

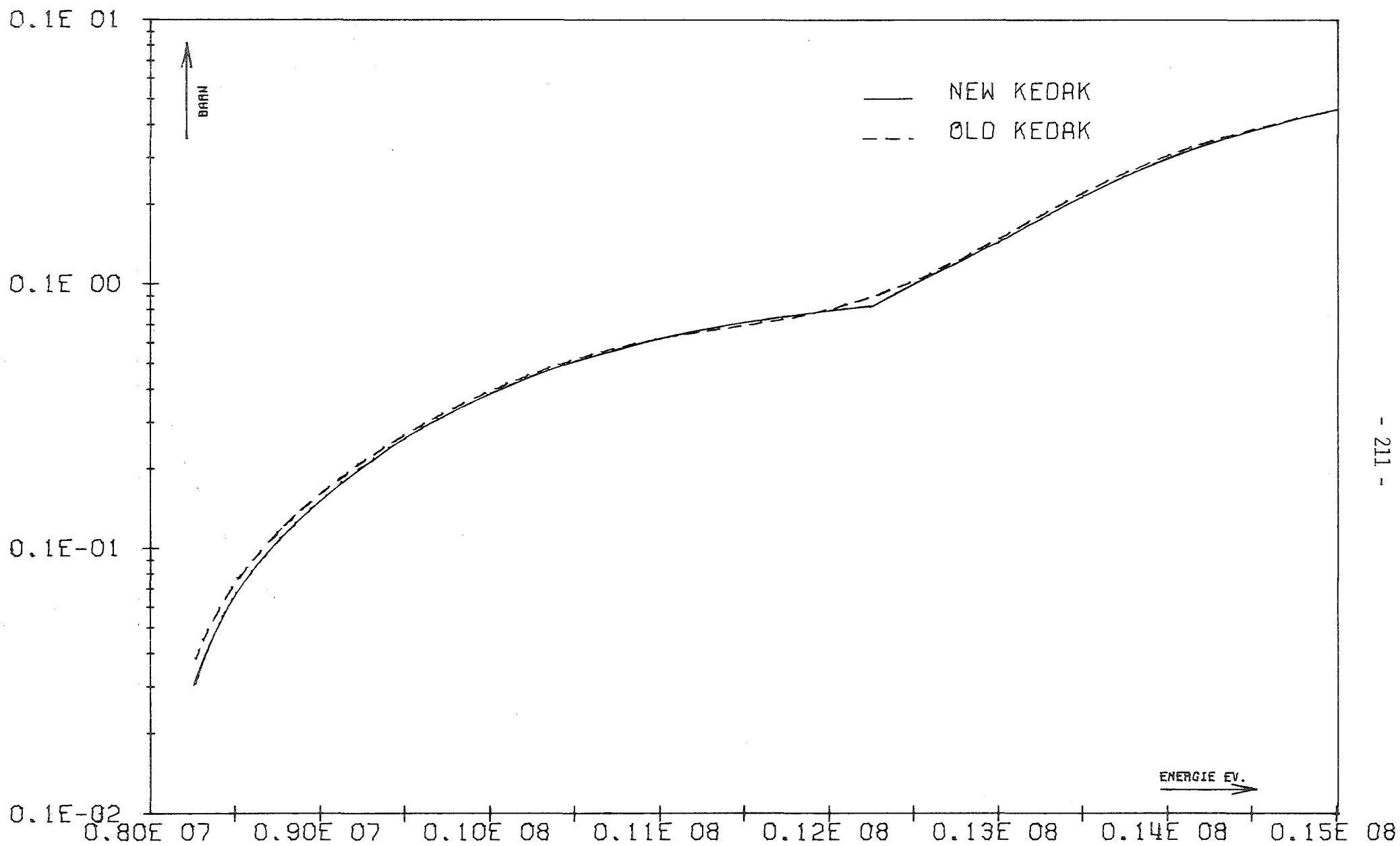


FIG. 47 CB

SG2N

INR901CR 22.01 13.55.

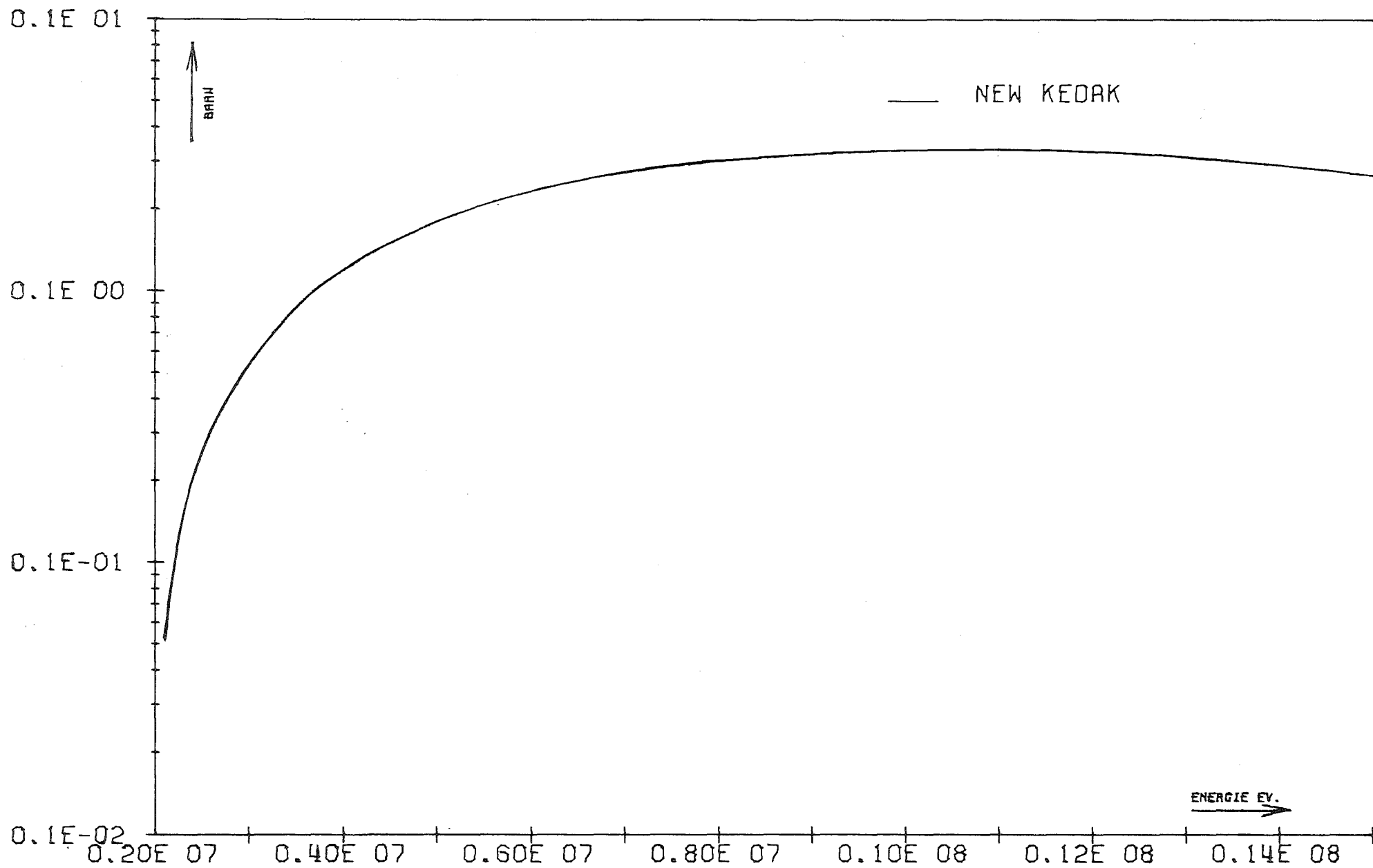


FIG. 48 CR 50 SGP

INR901CR 22.01 13.56.

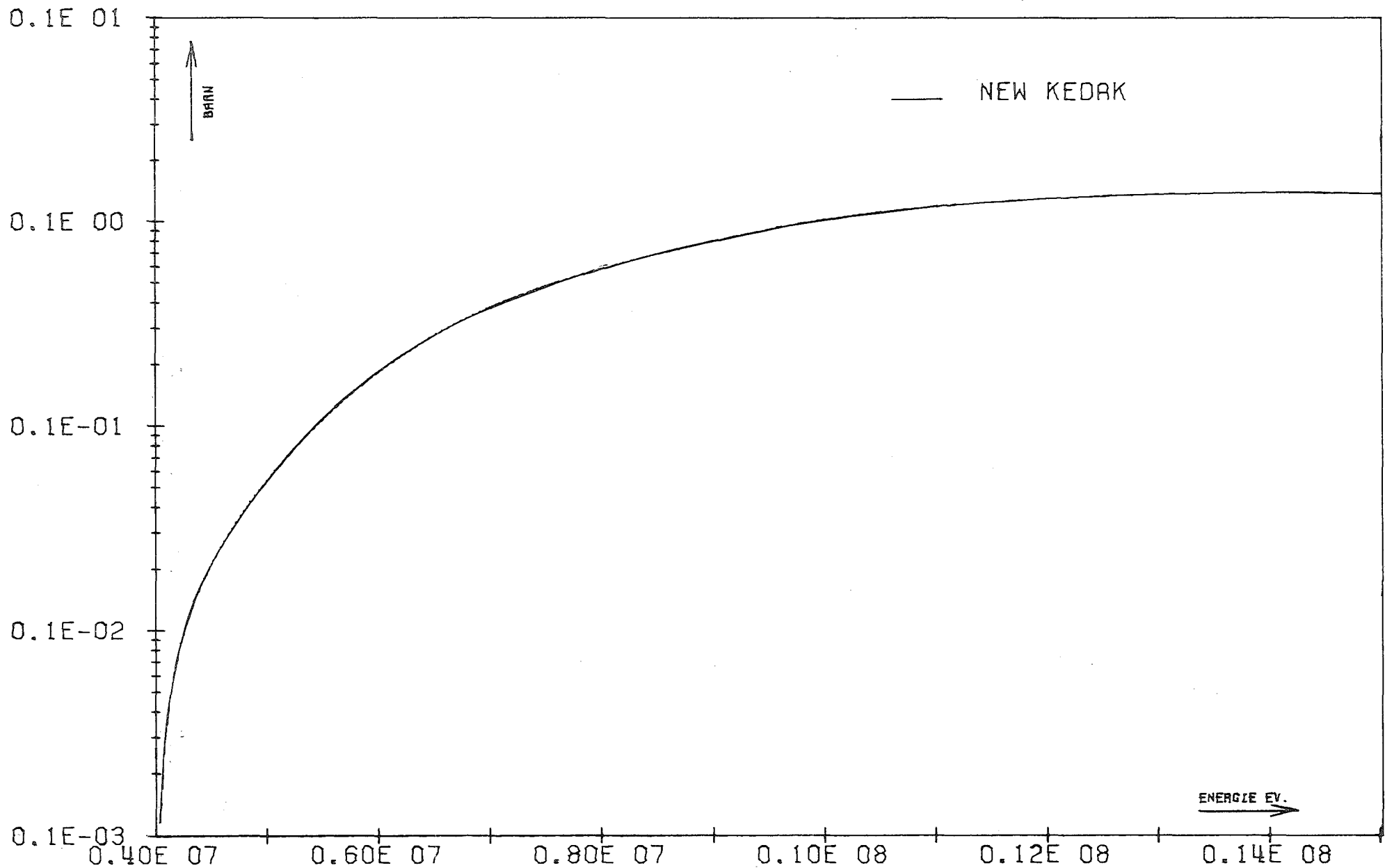


FIG. 49 CR 50 SGALP INR901CR 22.01 13.56.

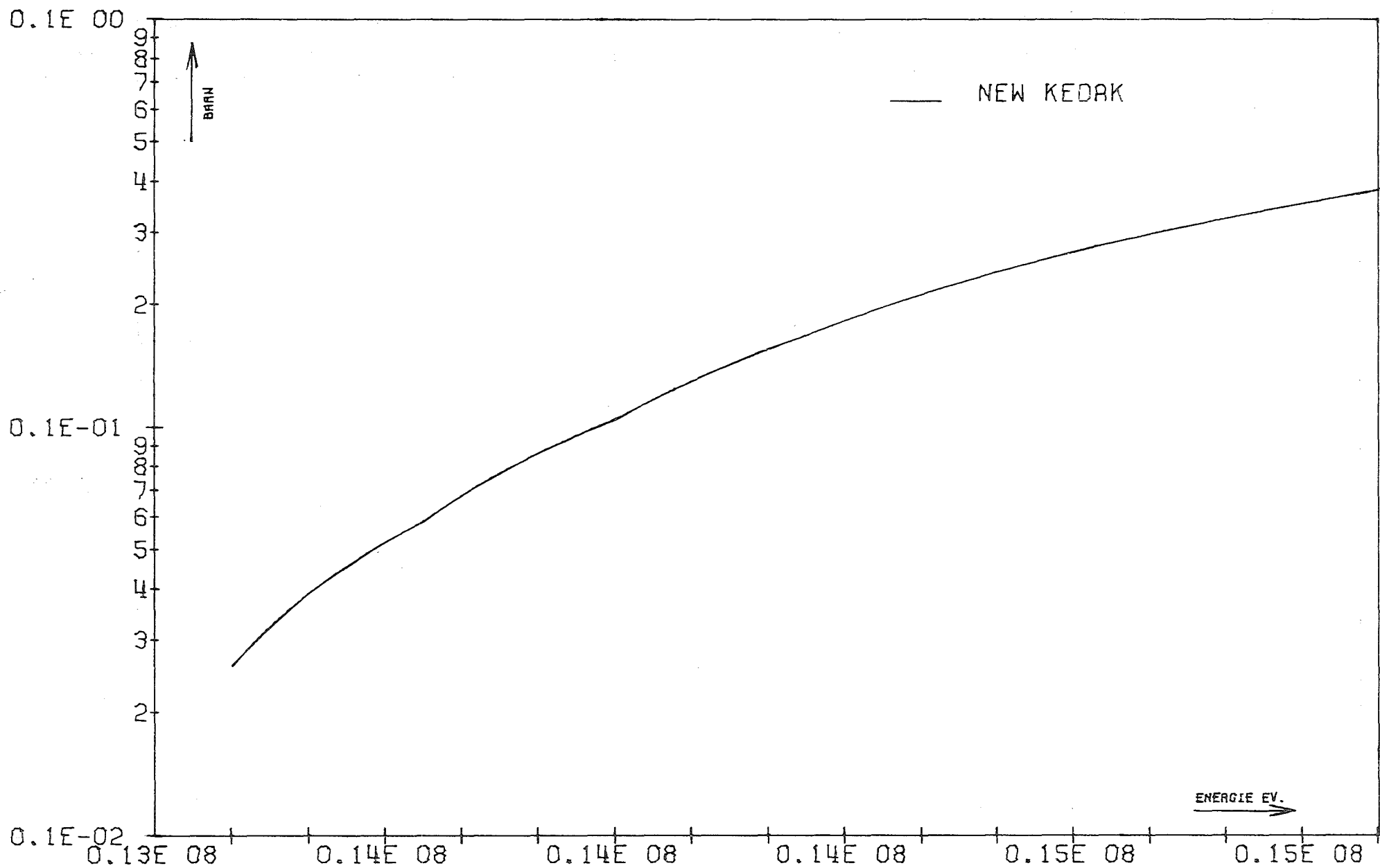


FIG. 50 CR 50 SG2N

INR901CR 22.01 13.56.

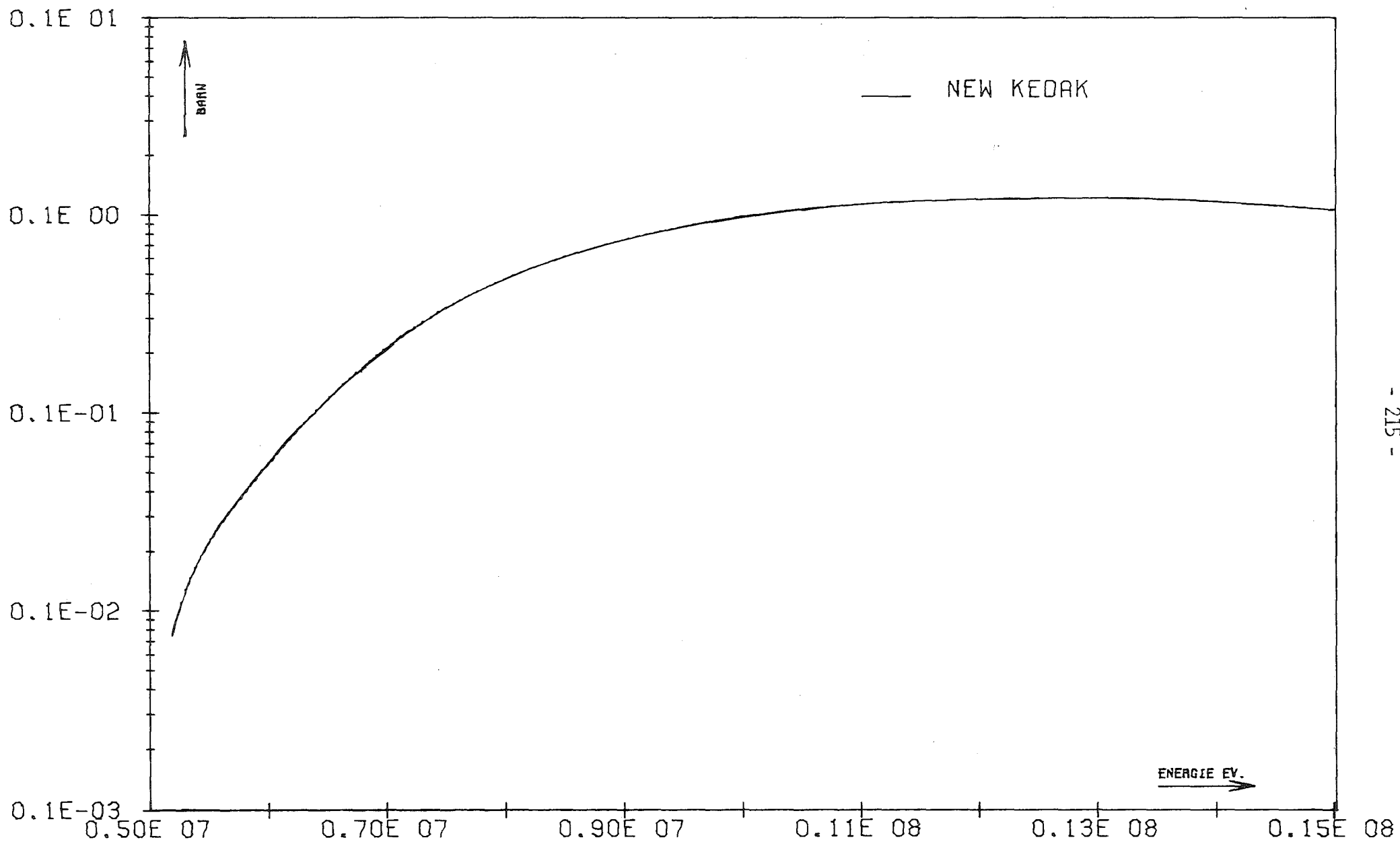


FIG. 51 CR 52 SGP

INR901CR 22.01 13.56.

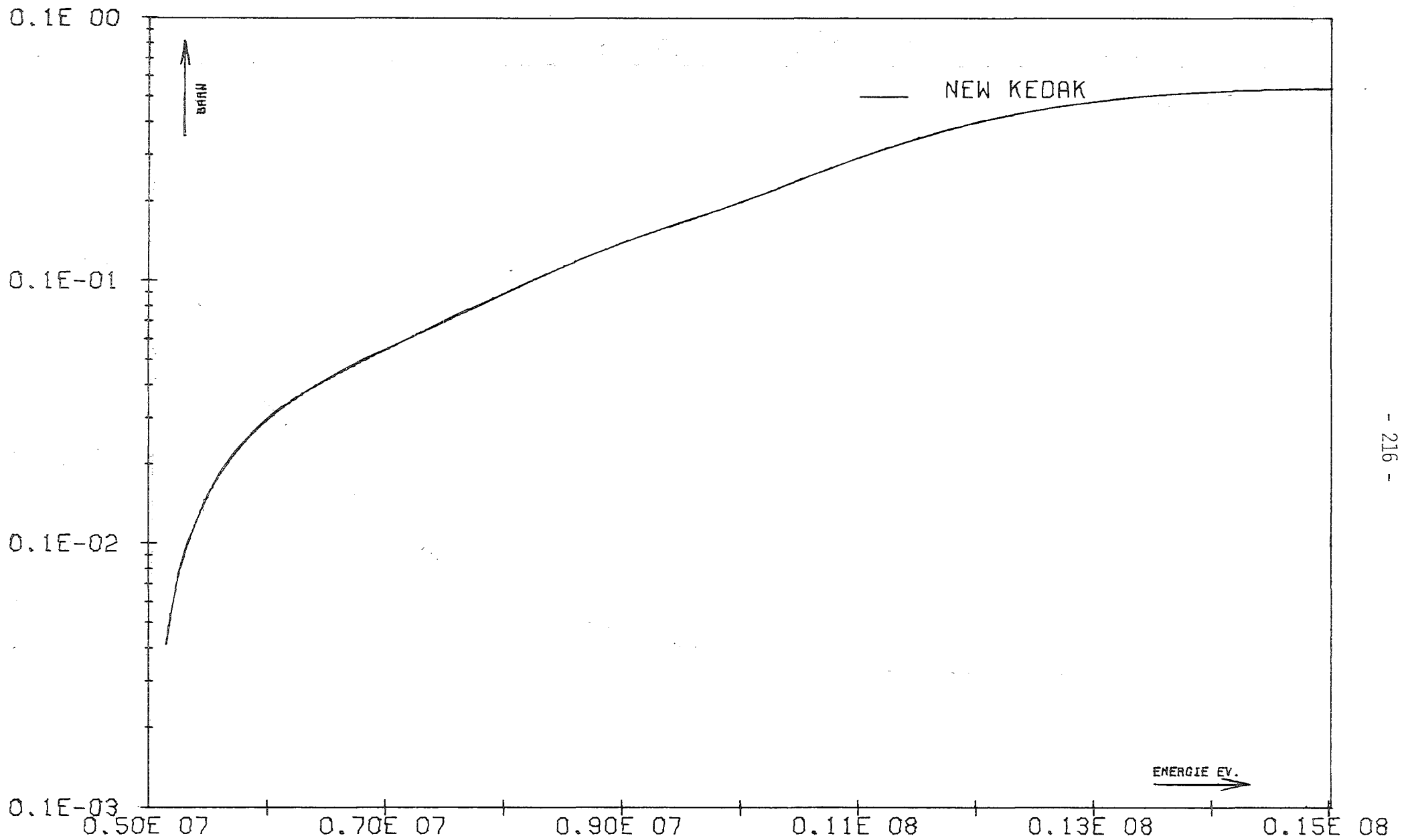


FIG. 52 CR 52 SGALP

INR901CR 22.01 13.56.

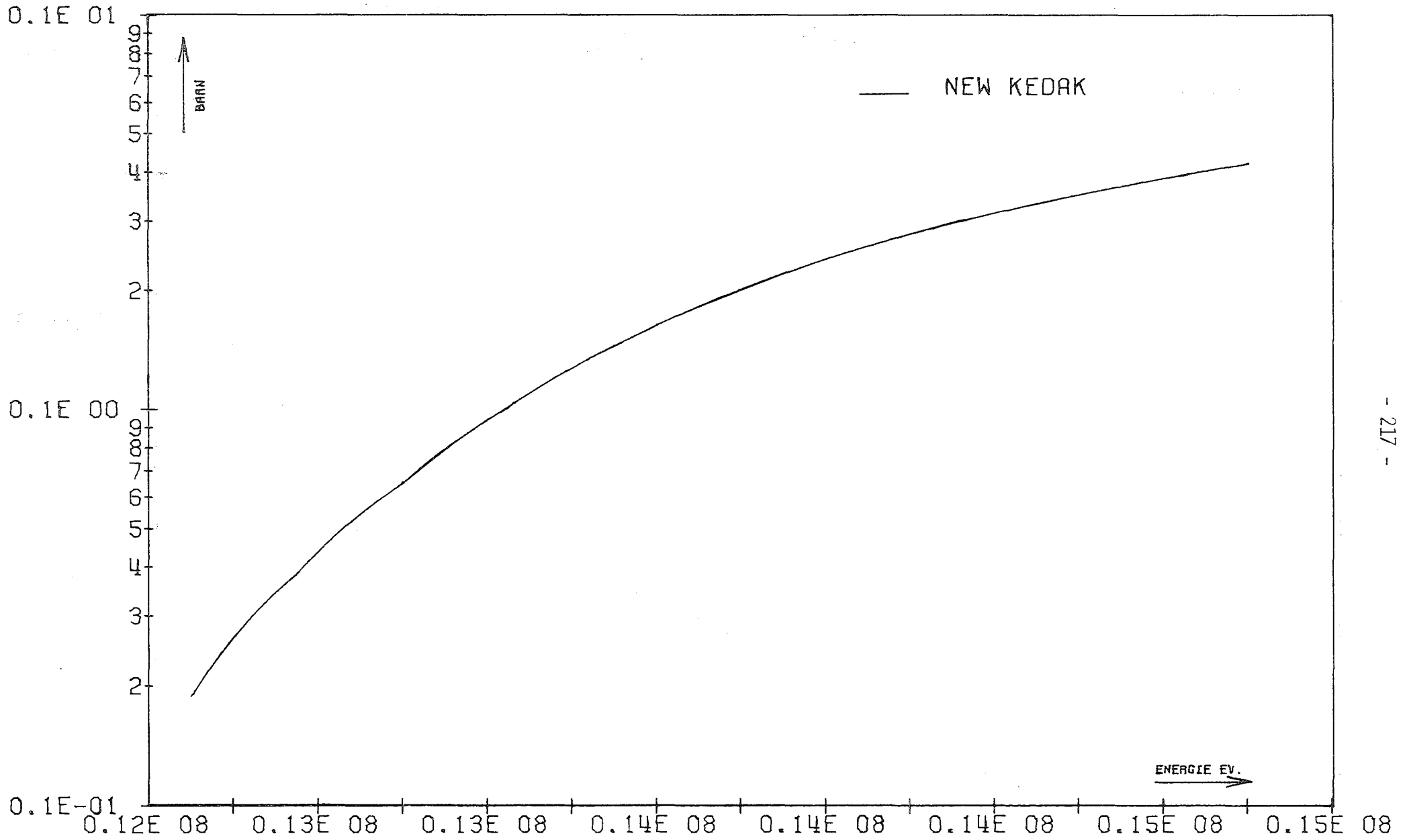


FIG. 53 CR 52 SG2N

INR901CR 22.01 13.56.

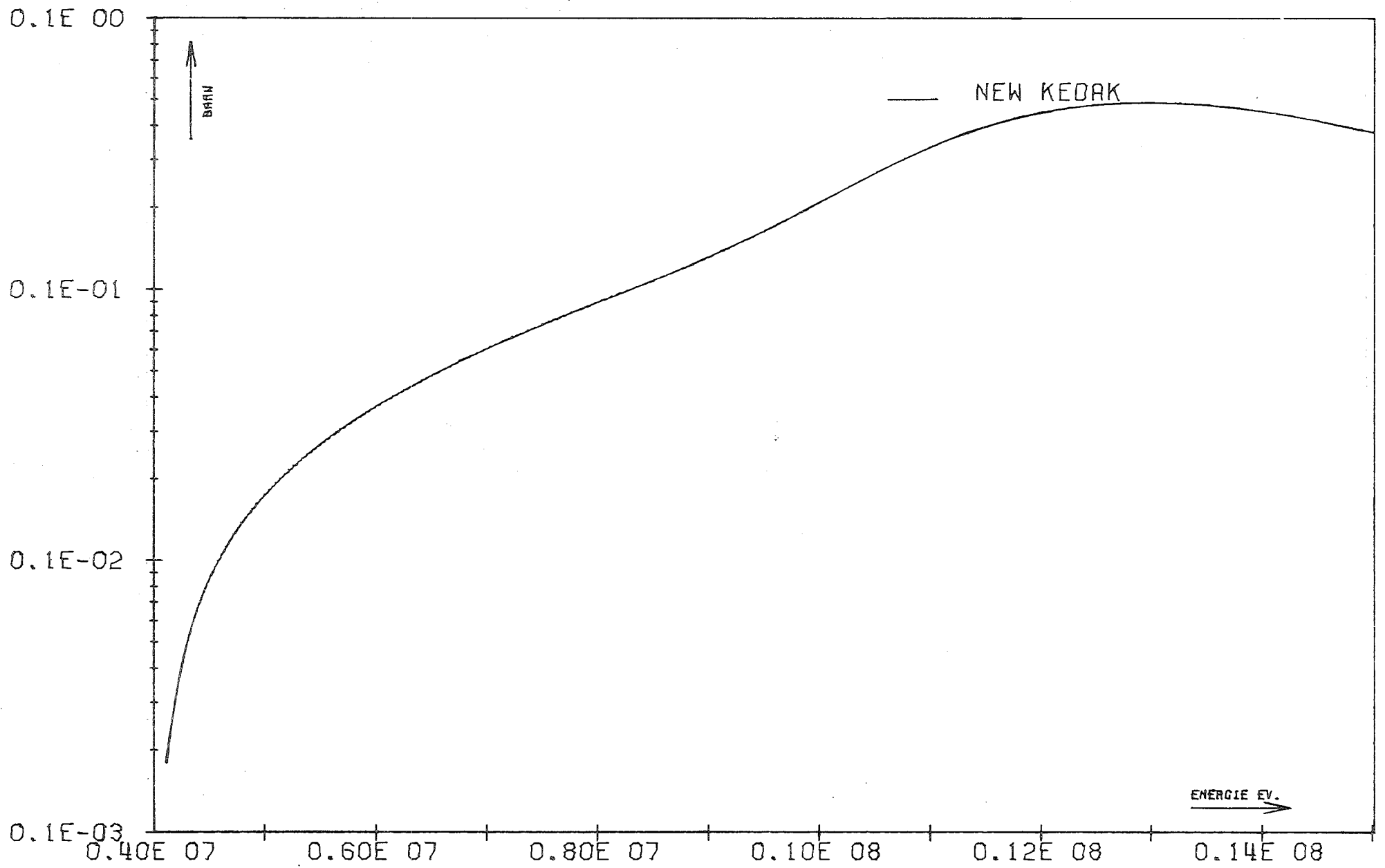


FIG. 54 CR 53 SGP INR901CR 22.01 13.56.

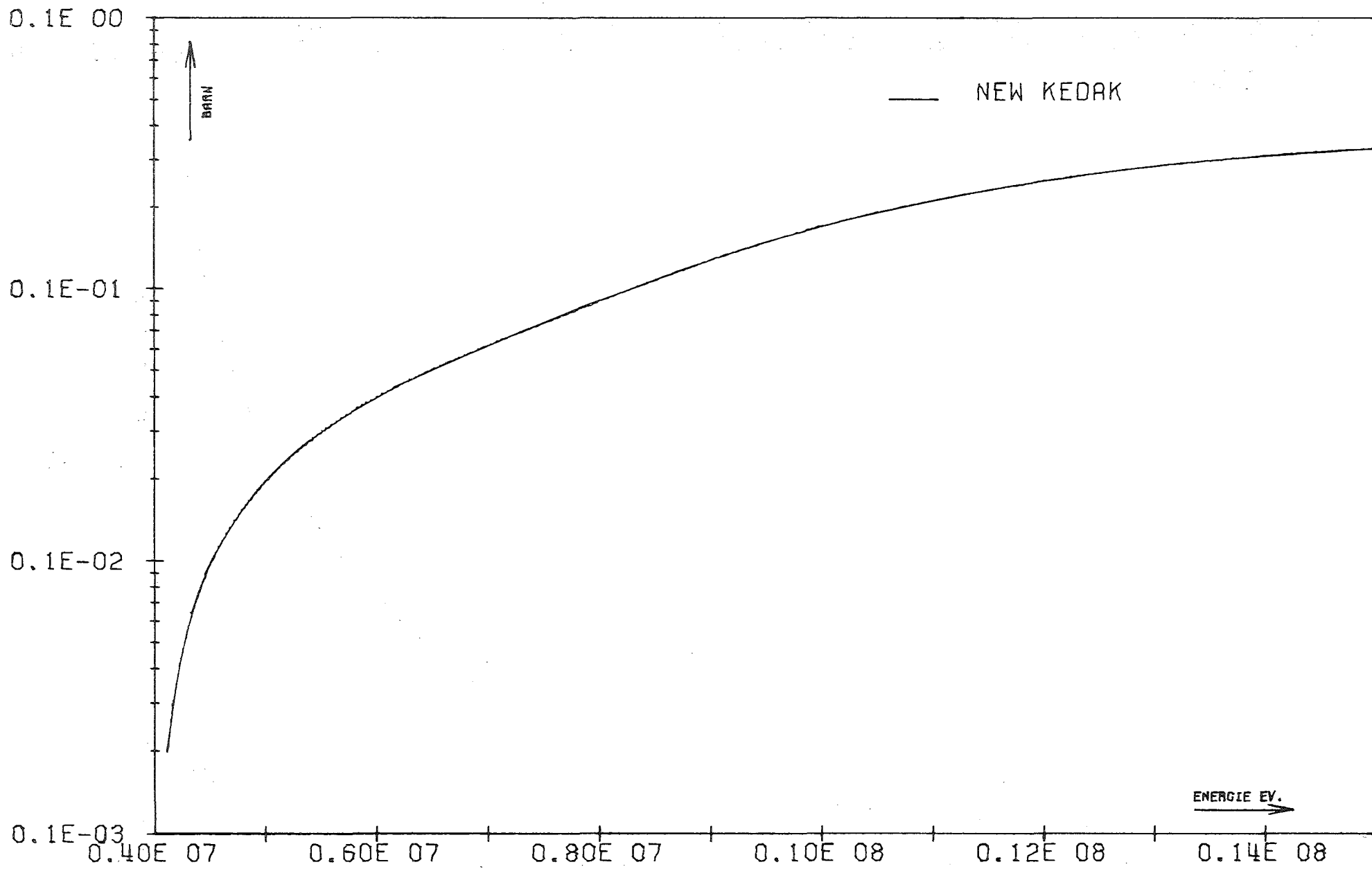


FIG. 55 CR 53 SGALP INR901CR 22.01 13.56.

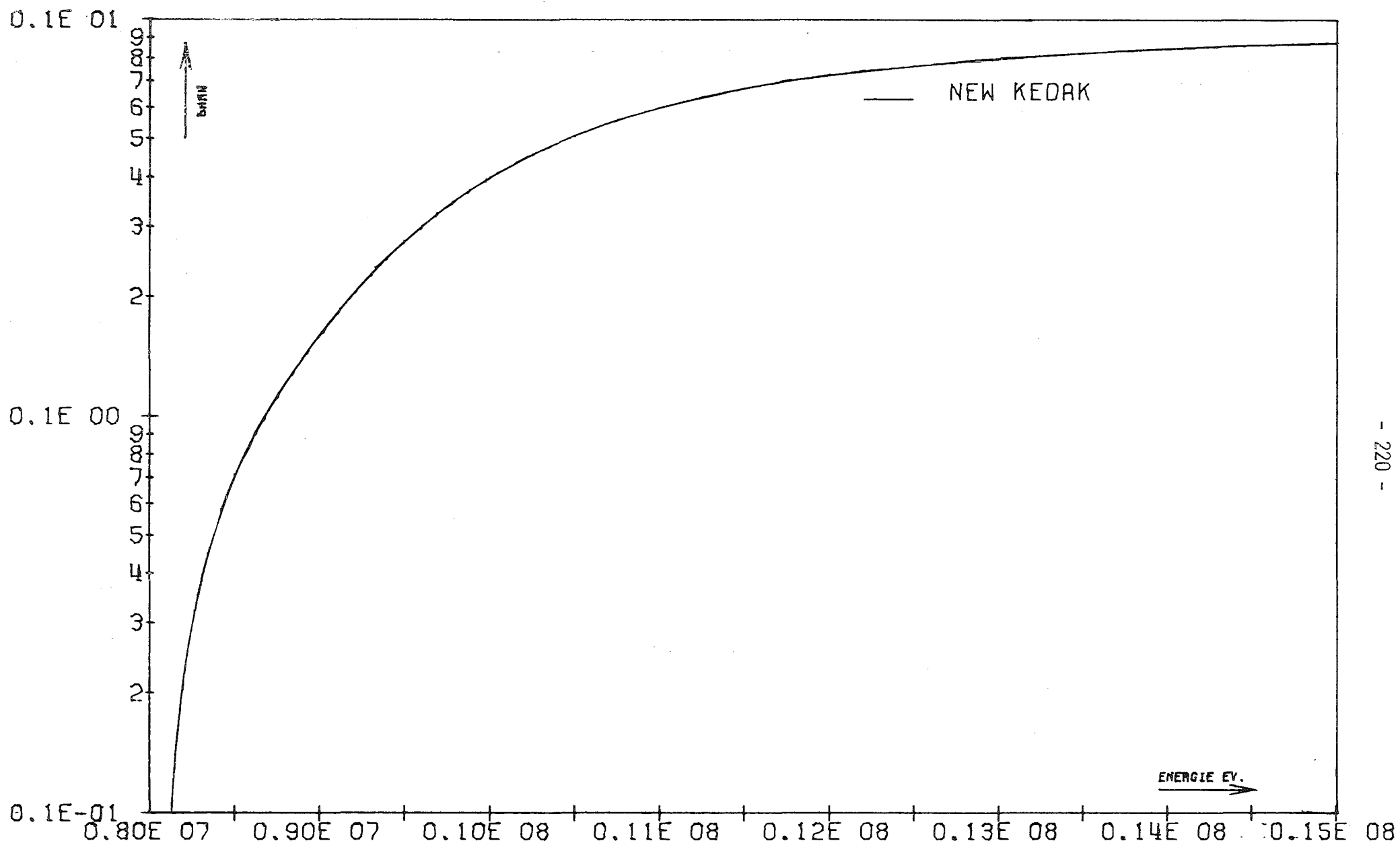


FIG. 56 CR 53 SG2N

INR901CR 22.01 13.56.

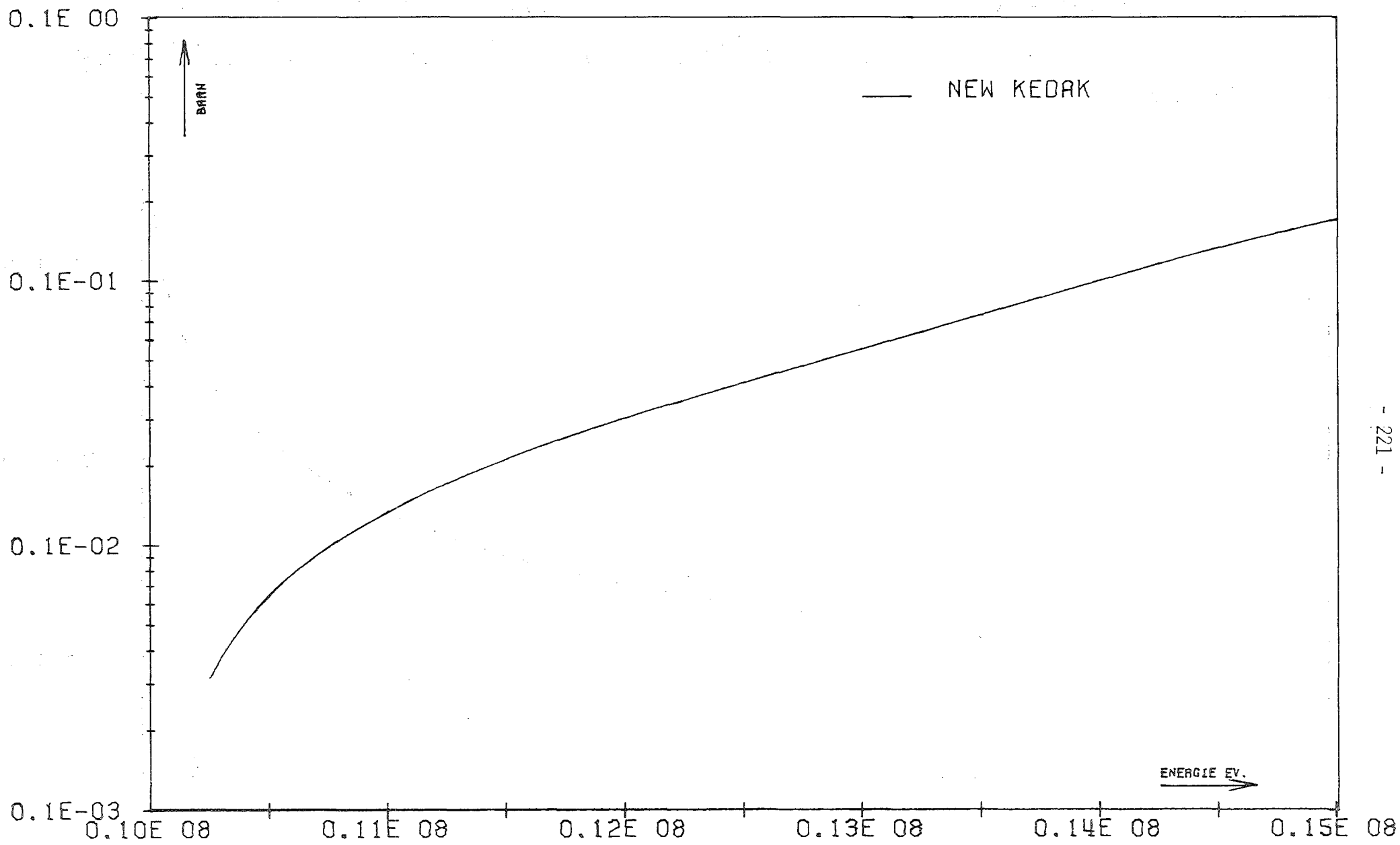


FIG. 57 CR 54 SGP

INR901CR 22.01 13.56.

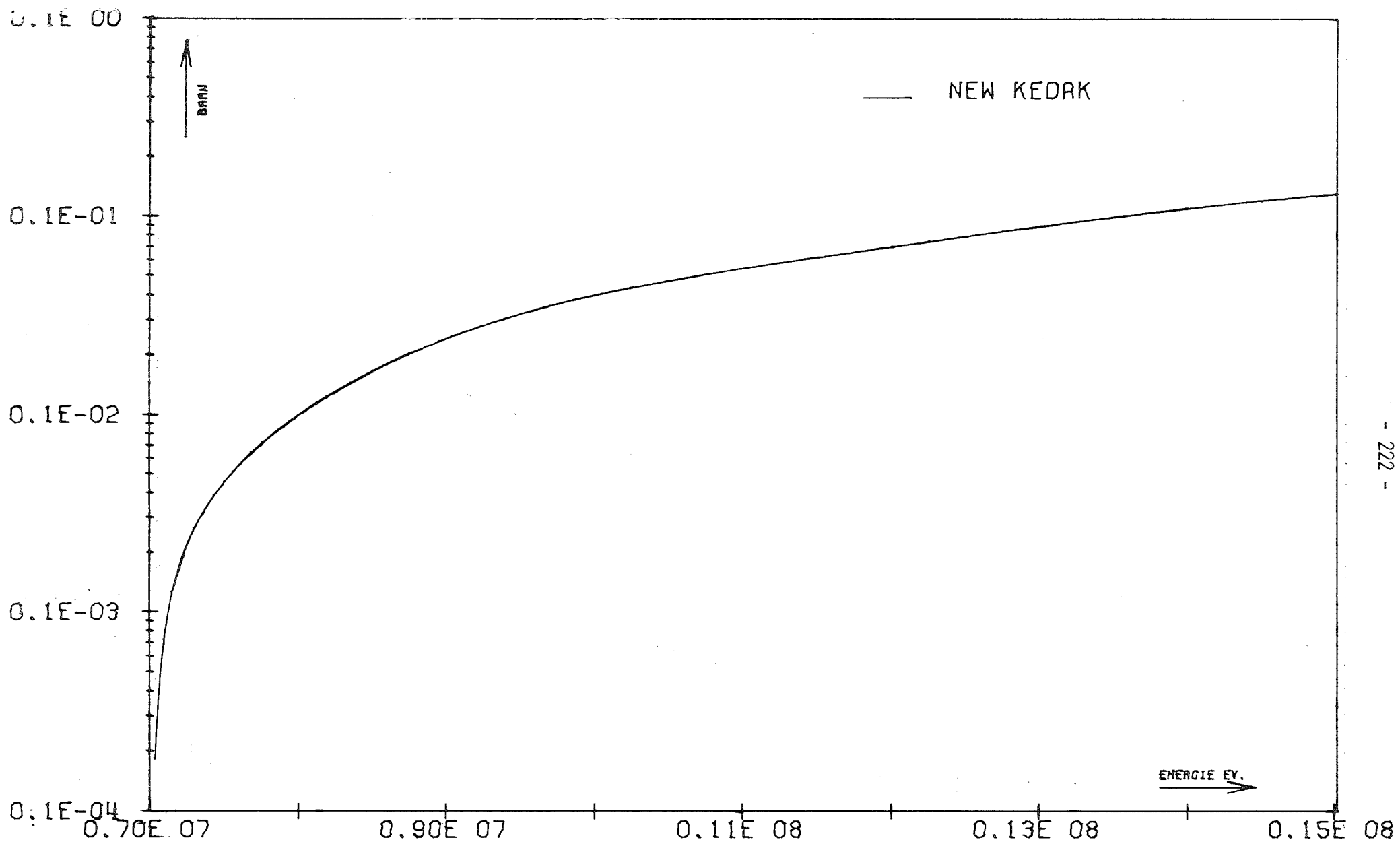


FIG. 58 CR 54 SGALP

INR901CR 22.01 13.56.

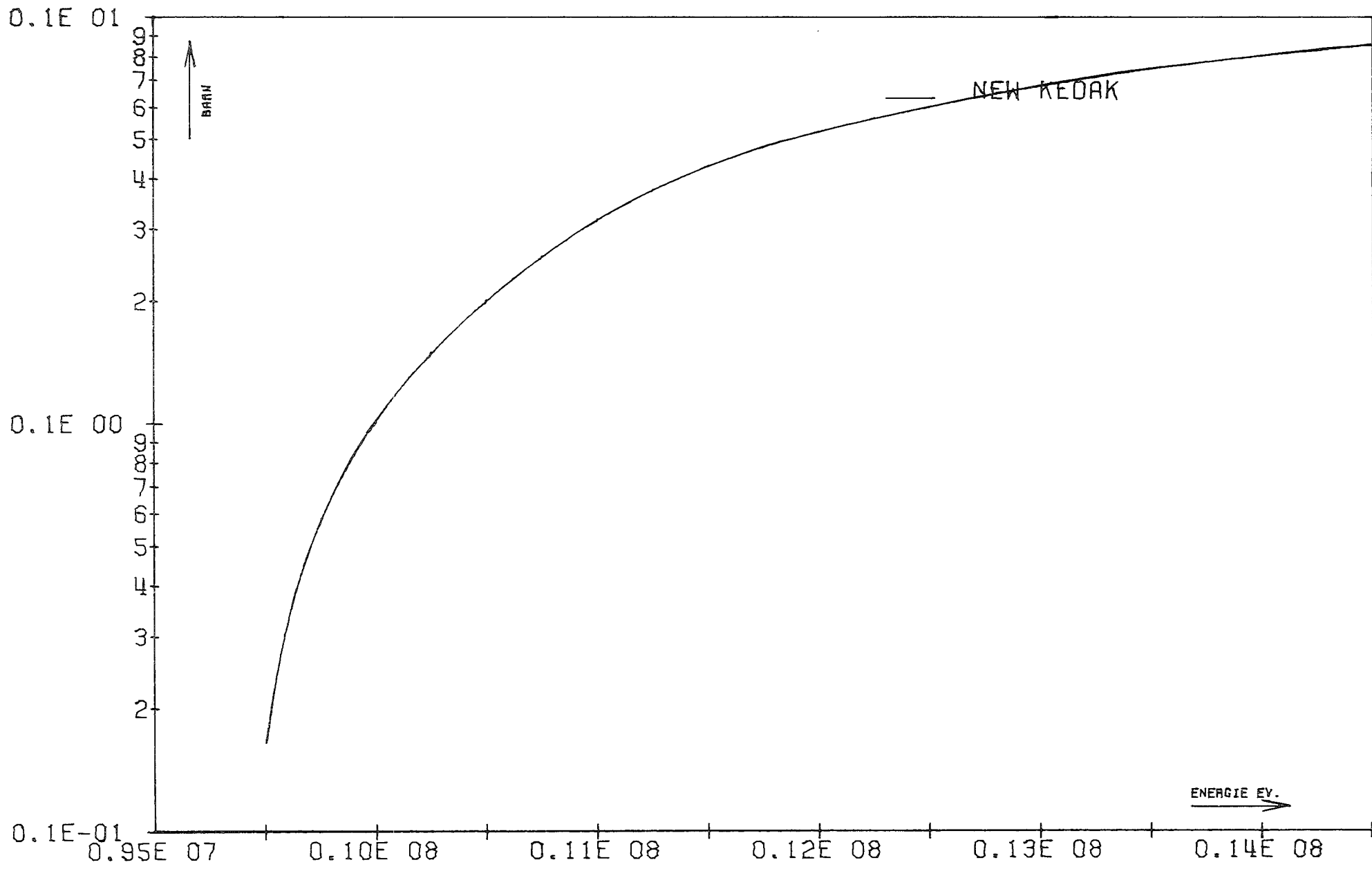


FIG. 59 CR 54 SG2N INR901CR 22.01 13.56.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 1 keV	FE
2	SGG	??	
3	SGN	??	
4	SGTR	??	
5	SGT	1 keV to 100 keV	
6	SGG	??	
7	SGN	??	
8	SGTR	??	
9	MUEL	??	
10	SGT	0.1 MeV to 1 MeV	
11	SGG	??	
12	SGX	??	
13	SGN	??	
14	SGTR	??	
15	MUEL	??	
16	SGT	0.1 MeV to 0.25 MeV	
17	SGG	??	
18	SGN	??	
19	SGTR	??	
20	SGT	0.25 MeV to 0.5 MeV	
21	SGN	??	
22	SGTR	??	
23	SGT	0.5 MeV to 0.75 MeV	
24	SGN	??	
25	SGTR	??	
26	SGT	0.75 MeV to 1 MeV	
27	SGG	??	
28	SGX	??	
29	SGN	??	
30	SGTR	??	
31	SGT	1 MeV to 10 MeV	
32	SGG	??	
33	SGA	??	
34	SGX	??	
35	SGN	??	
36	SGTR	??	
37	MUEL	??	
38	SGT	1 MeV to 2.5 MeV	
39	SGX	??	
40	SGN	??	
41	SGTR	??	
42	MUEL	??	
43	SGT	1 MeV to 15 MeV	
44	SGG	??	
45	SGA	??	
46	SGX	??	
47	SGN	??	
48	SGTR	??	
49	MUEL	??	
50	SGI	??	

Fe

Figure	Reaction type	Energy range	Material name
51	SGIZ E*= 0.845 MeV	Thr. to 5 MeV	FE
52	E*= 1.410 MeV	??	
53	E*= 2.080 MeV	??	
54	E*= 2.660 MeV	??	
55	E*= 2.940 MeV	??	
56	E*= 3.120 MeV	??	
57	E*= 3.370 MeV	??	
58	E*= 3.500 MeV	??	
59	E*= 3.830 MeV	??	
60	E*= 4.040 MeV	??	
61	SGP	??	
62	SGALP	??	
63	SG2N	??	
64	SGP	??	FE 54
65	SGALP	??	
66	SG2N	??	
67	SGP	??	FE 56
68	SGALP	??	
69	SG2N	??	
70	SGP	??	FE 57
71	SGALP	??	
72	SG2N	??	
73	SGP	??	FE 58
74	SGALP	??	

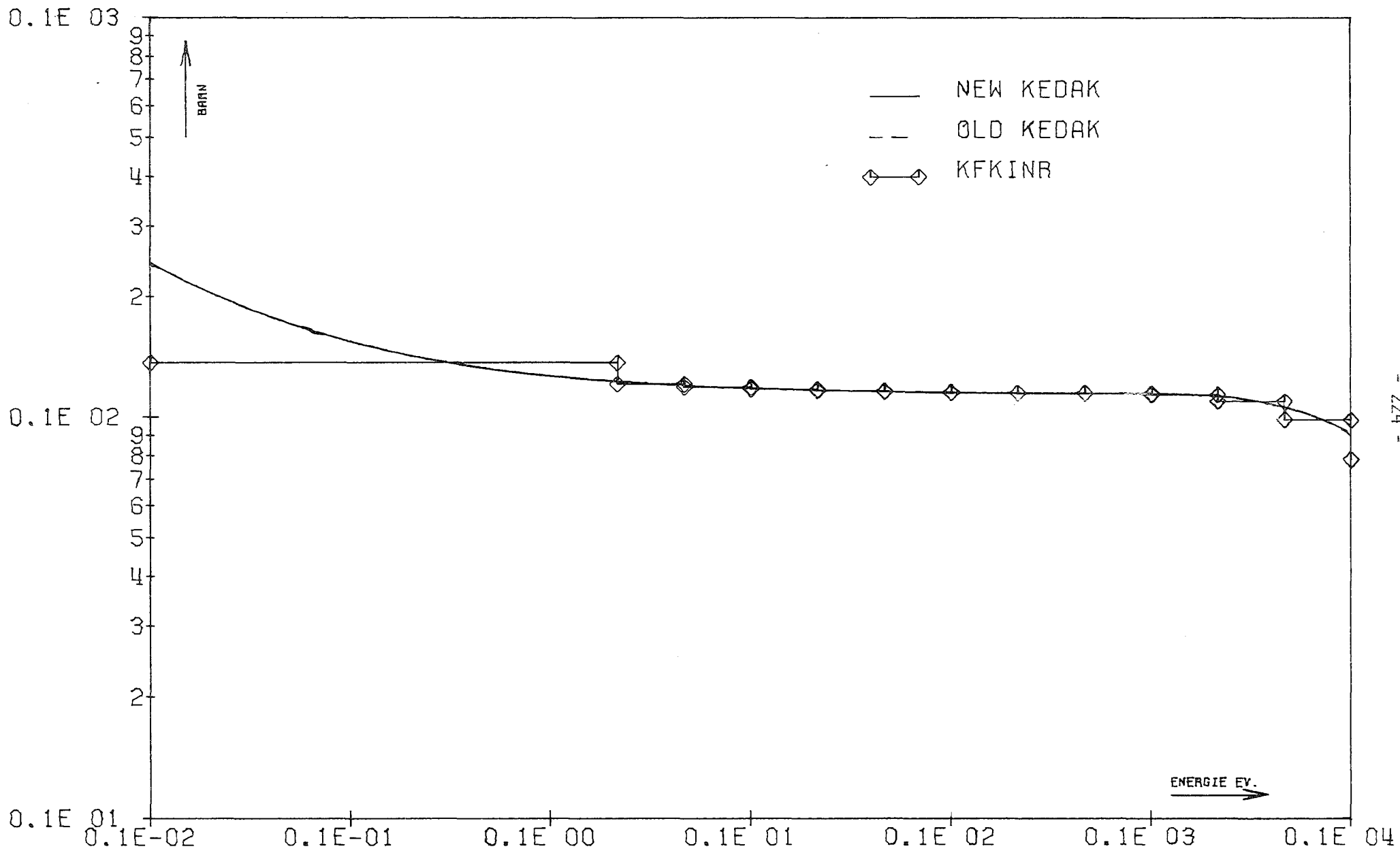
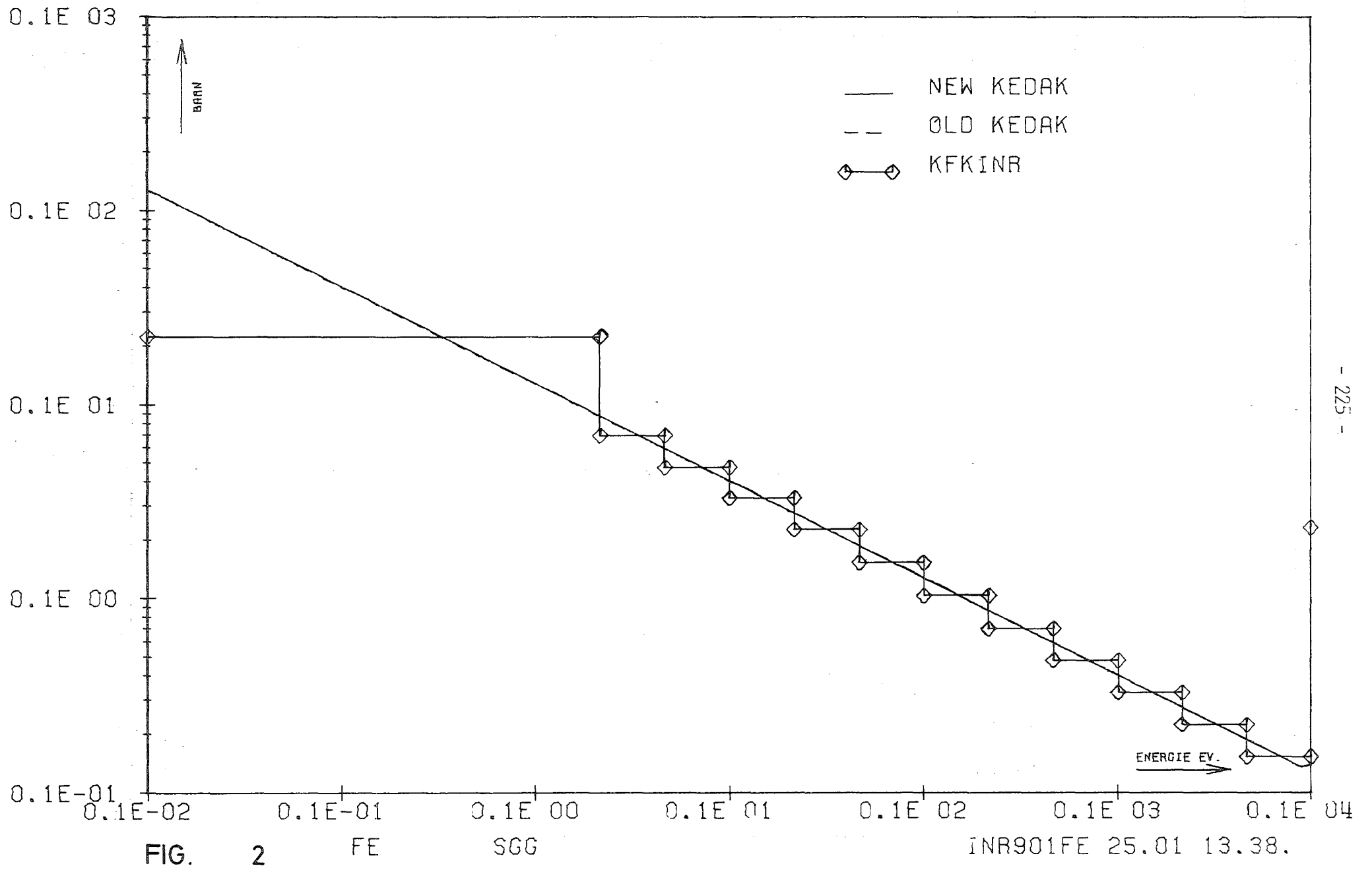


FIG. 1 FE SGT INR901FE 25.01 13.38.





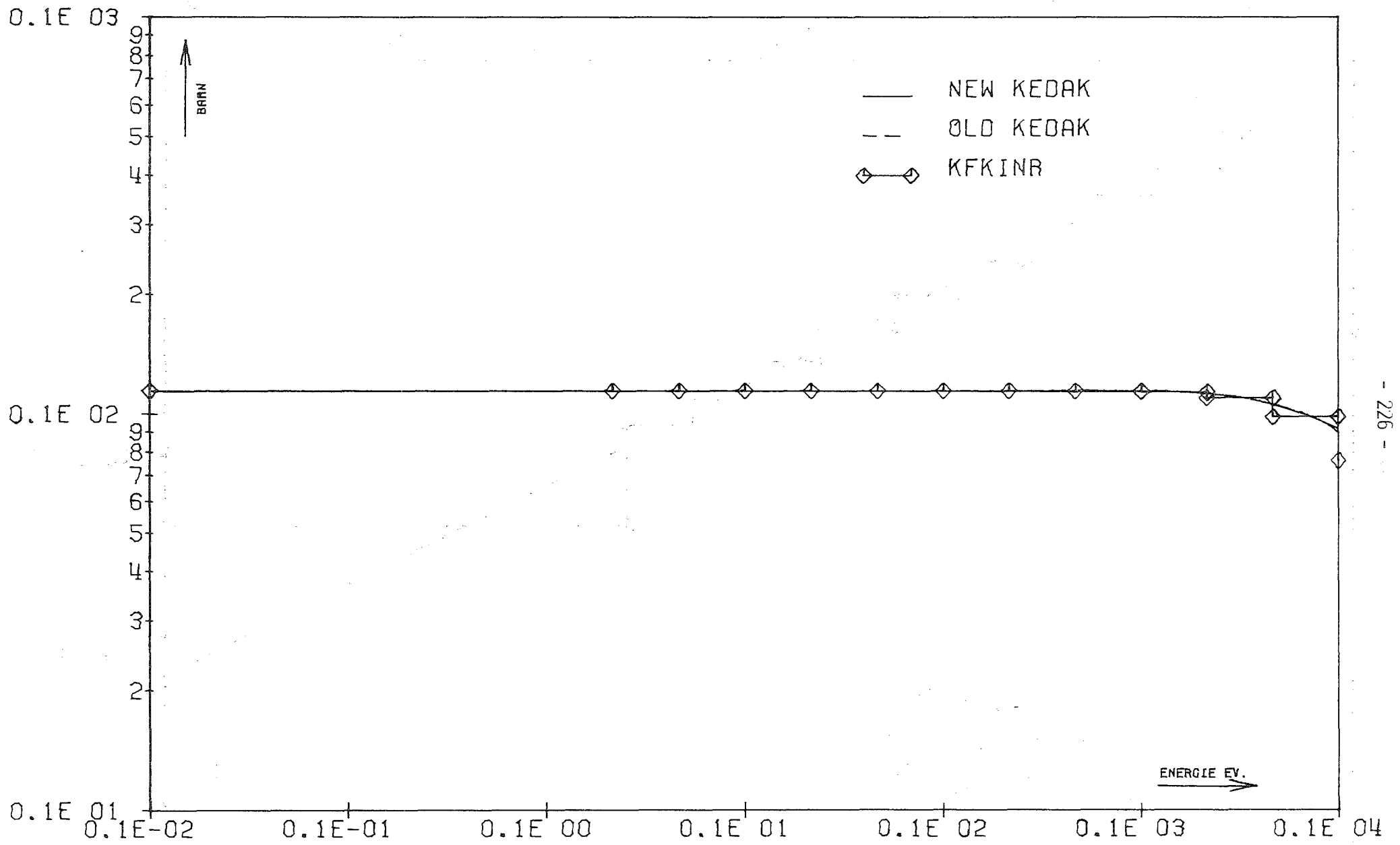


FIG. 3 FE

SGN

INR901FE 25.01 13.38.

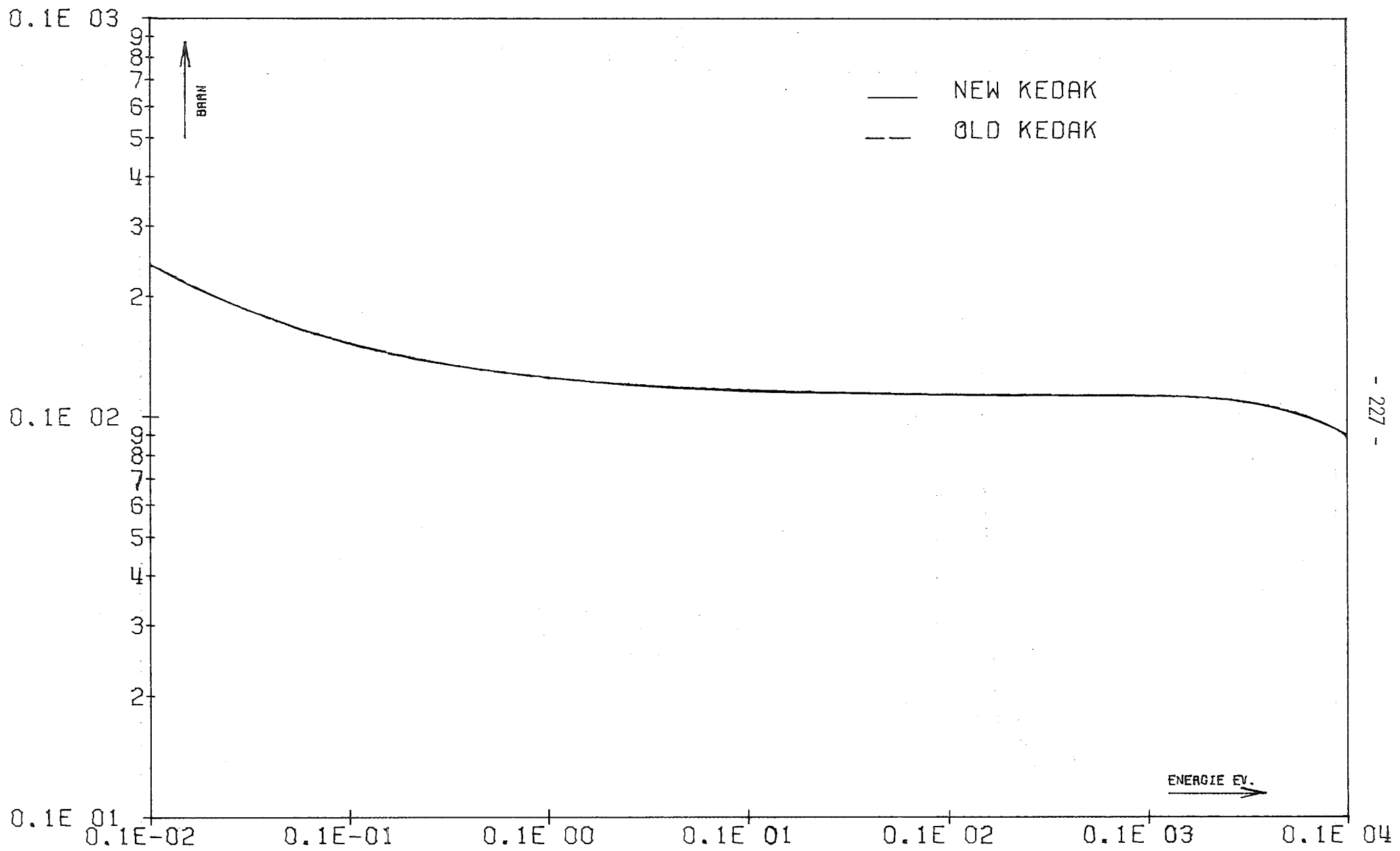


FIG. 4 FE SGTR INR901FE 25.01 13.38.

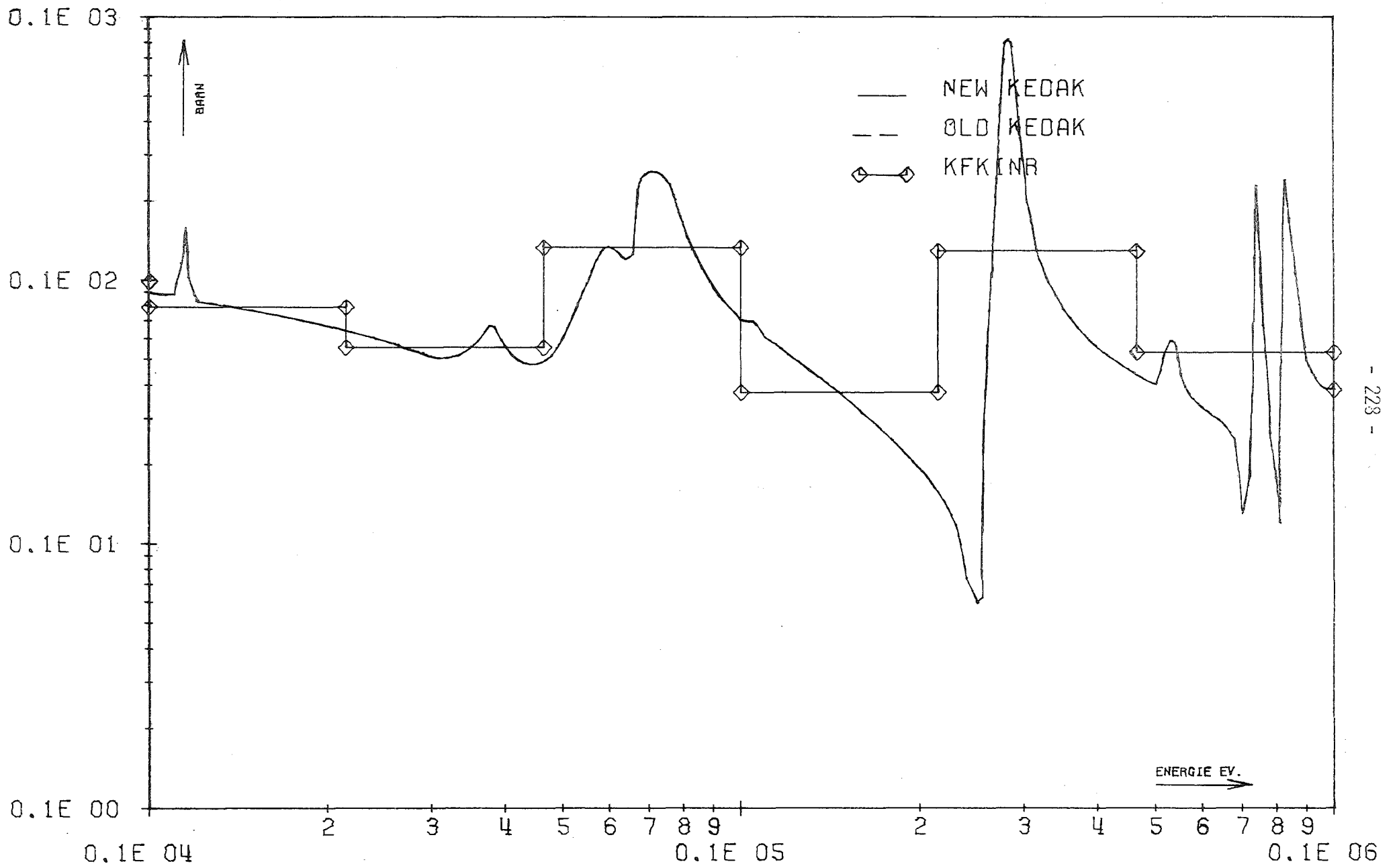


FIG. 5 FE SGT

INR901FF 25.01 13.38.

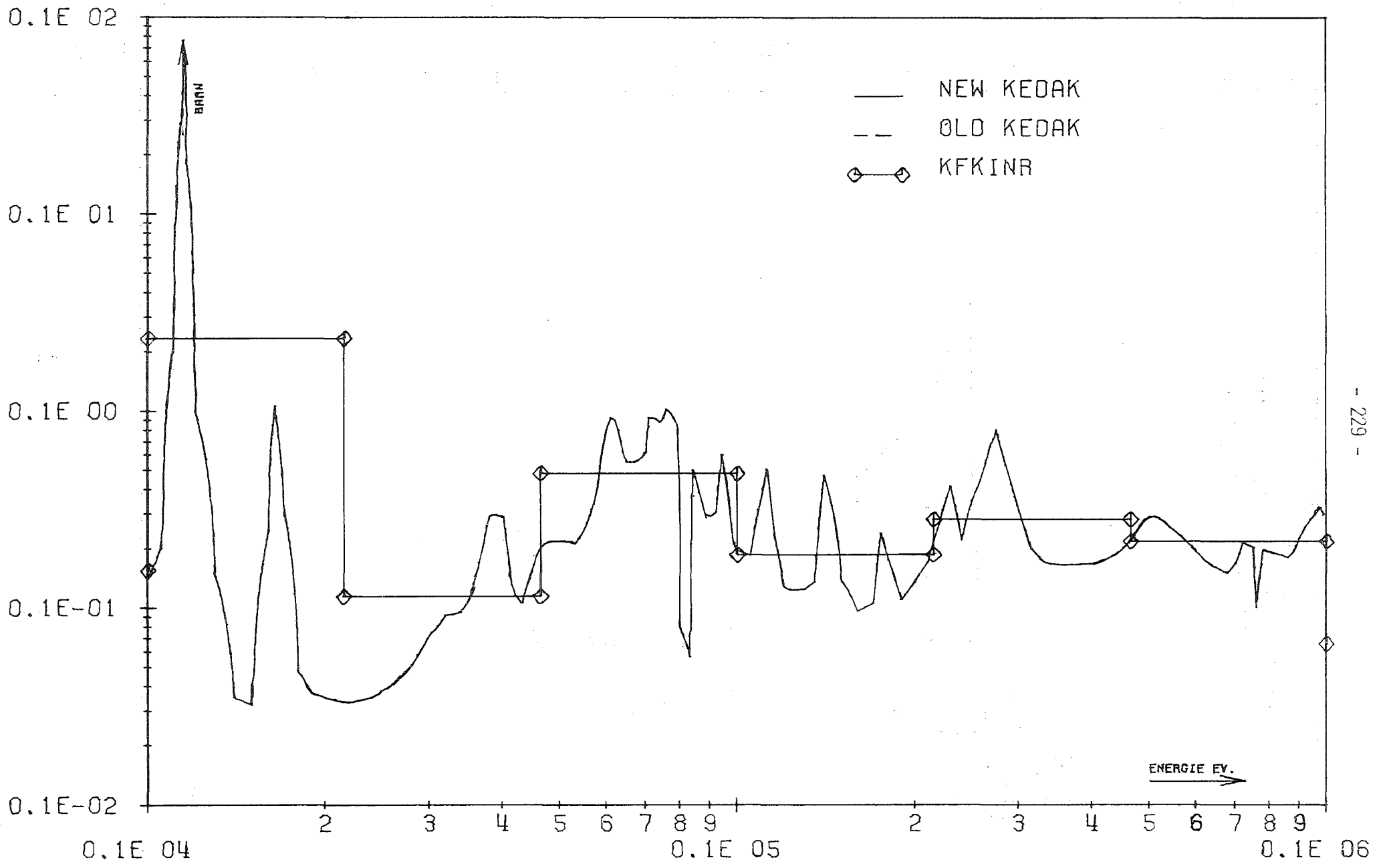


FIG. 6 FE SGG

INR901FE 25.01 13.38.

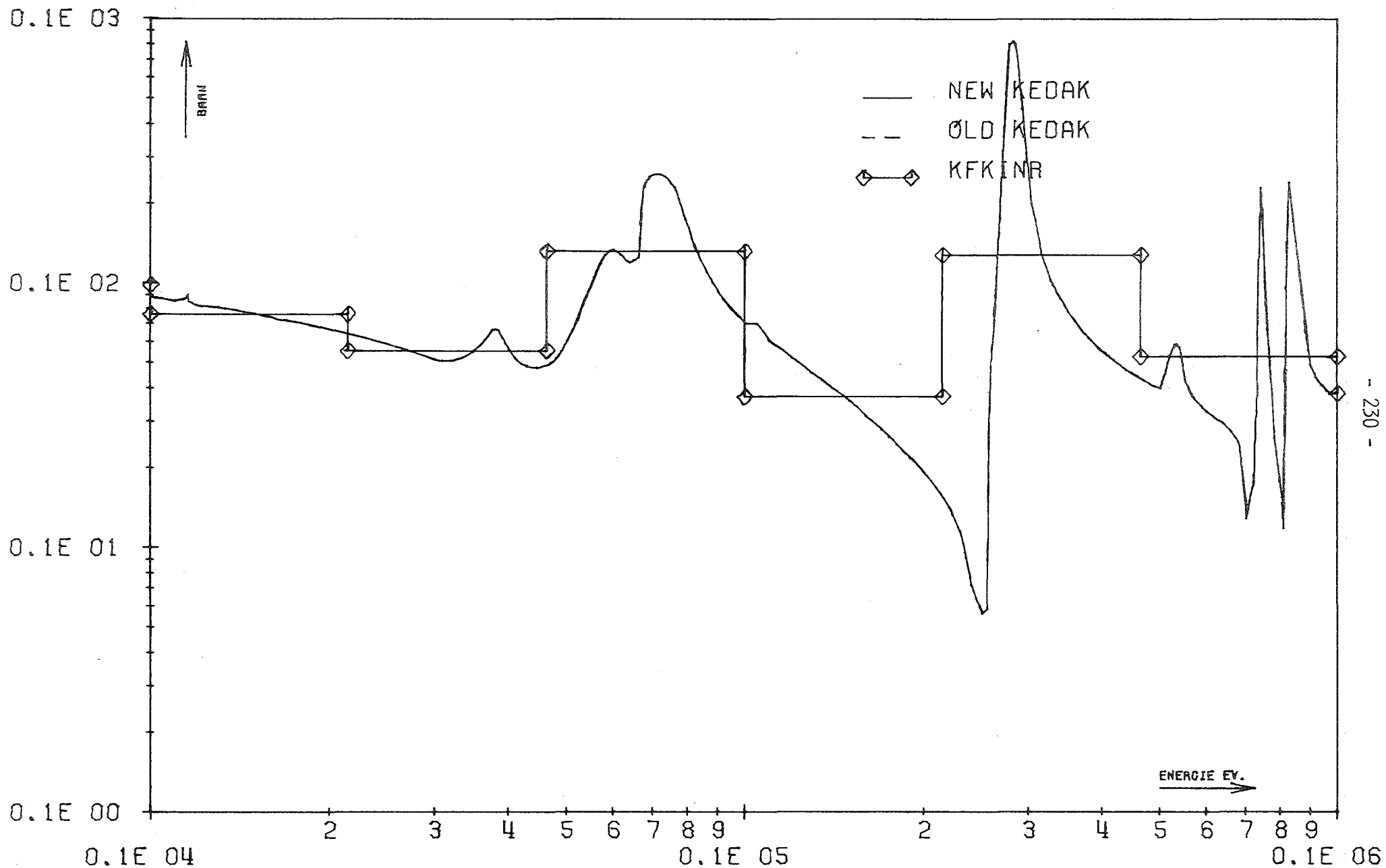


FIG. 7 FE SGN

INR901FE 25.01 13.38.

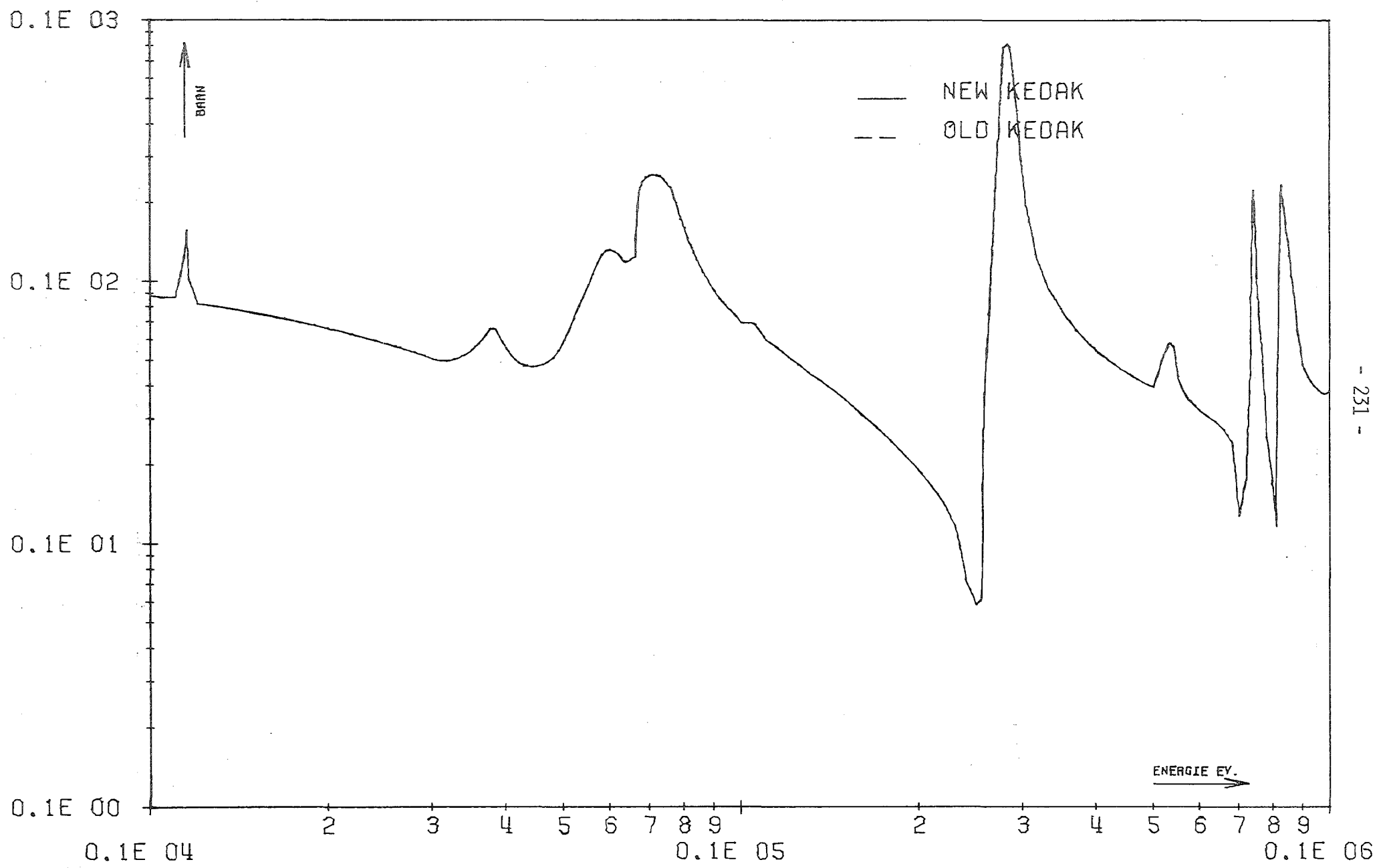


FIG. 8 FE SGTR INR901FE 25.01 13.38.

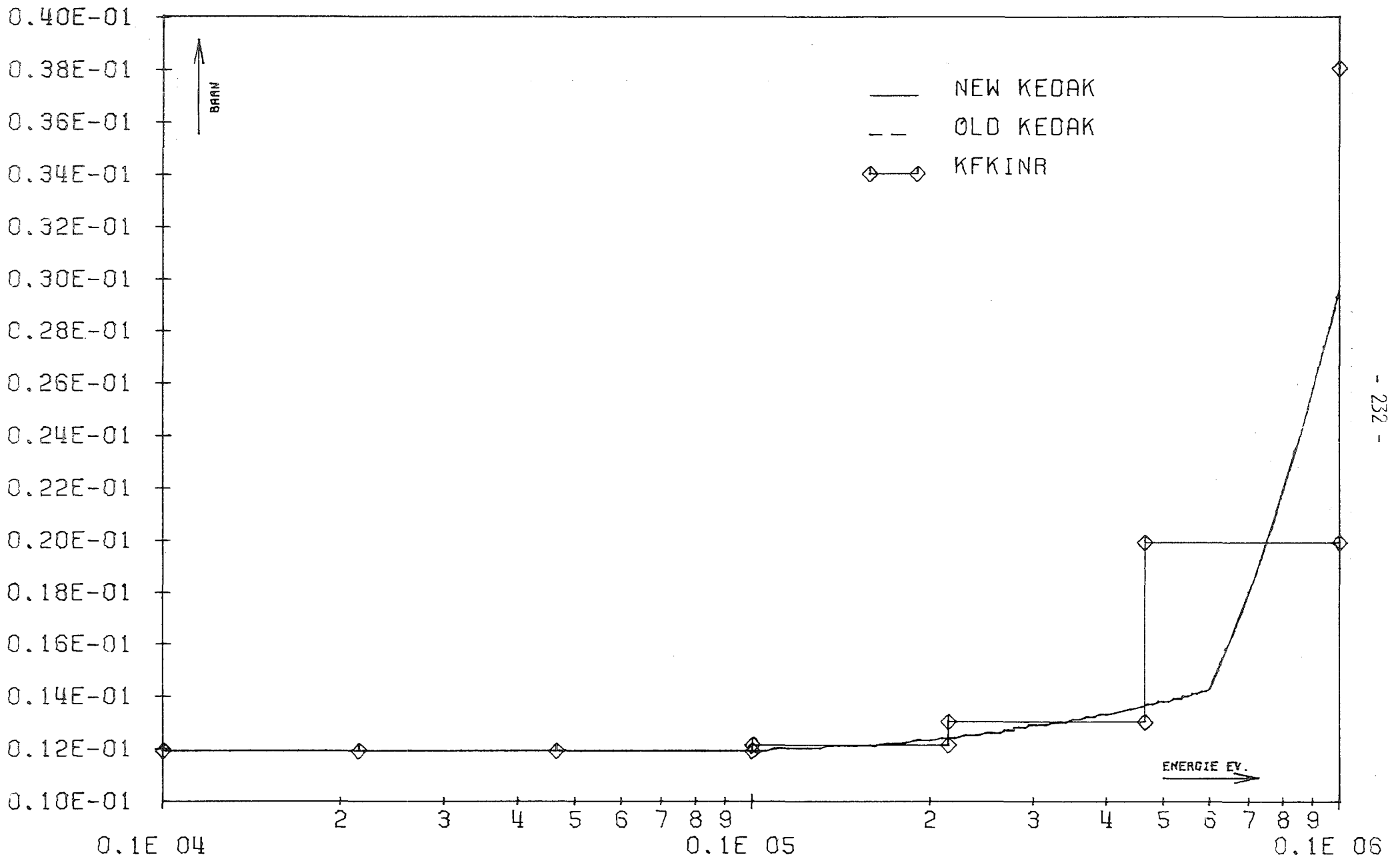
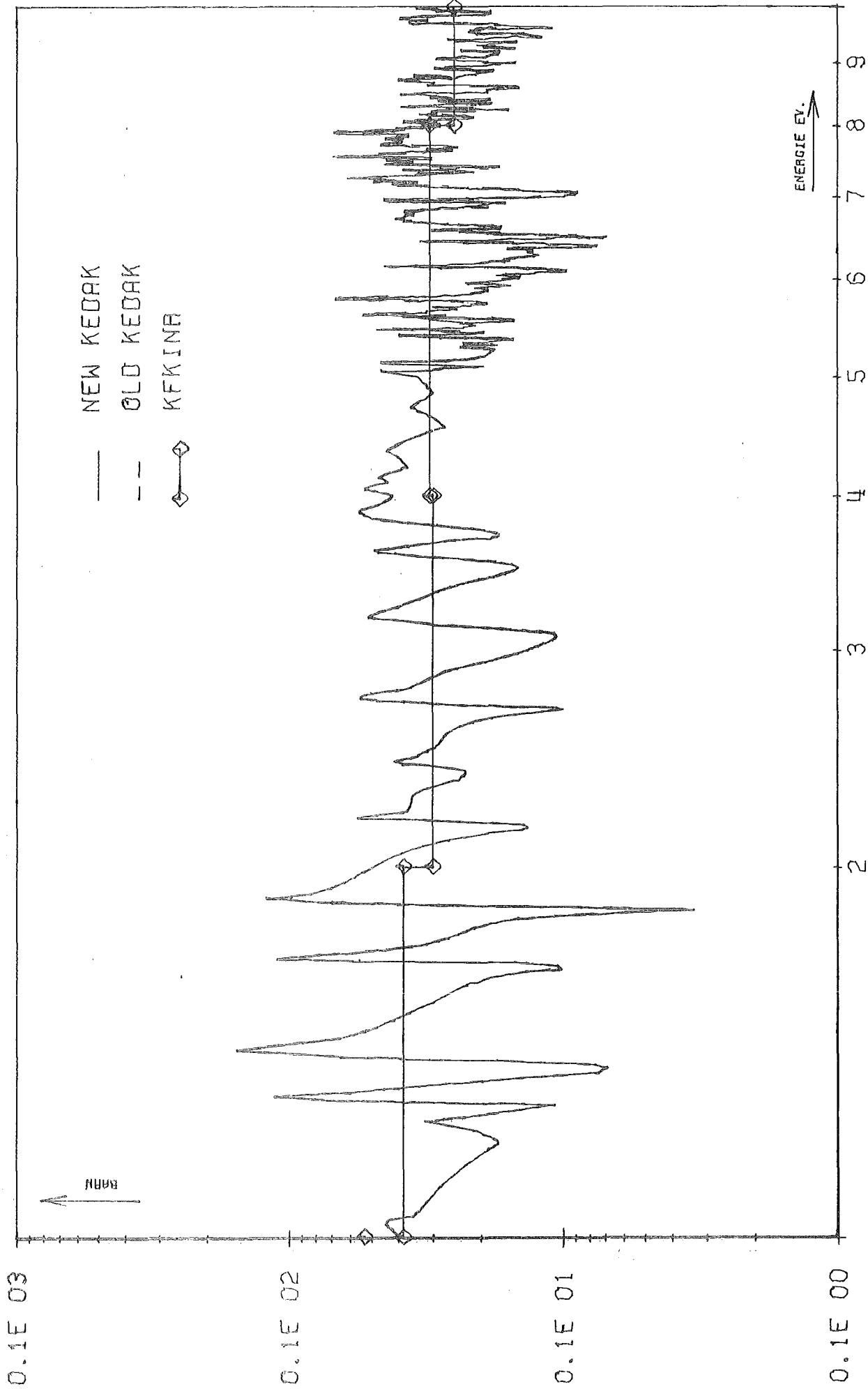


FIG. 9 FE MUEL

INR901FE 25.01 13.38.



0.1E 06

FE

SGT

0.1E 07

INR901FE 28.01 19.05.

FIG. 10

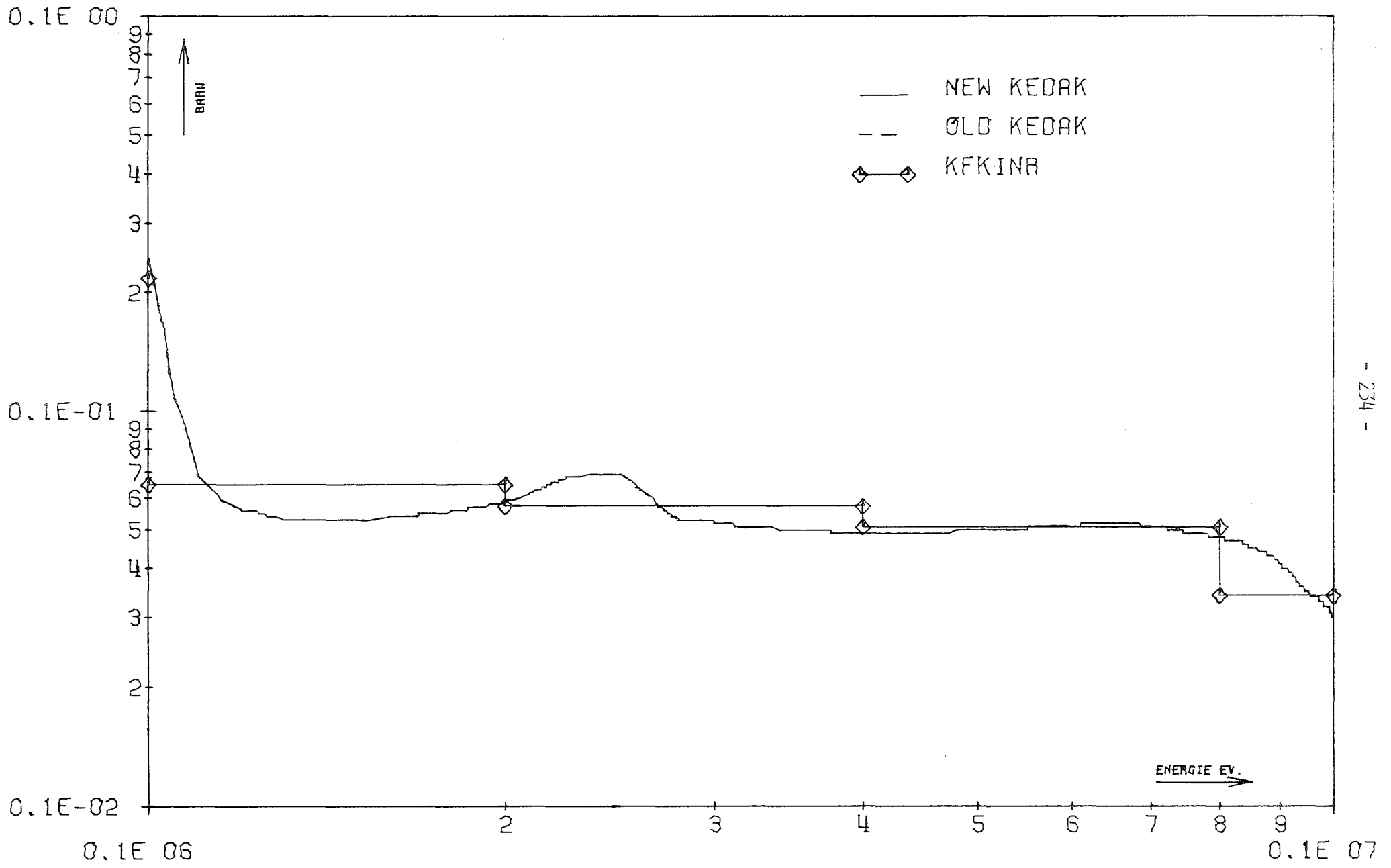


FIG. 11 FE SGG

INR901FE 28.01 19.06

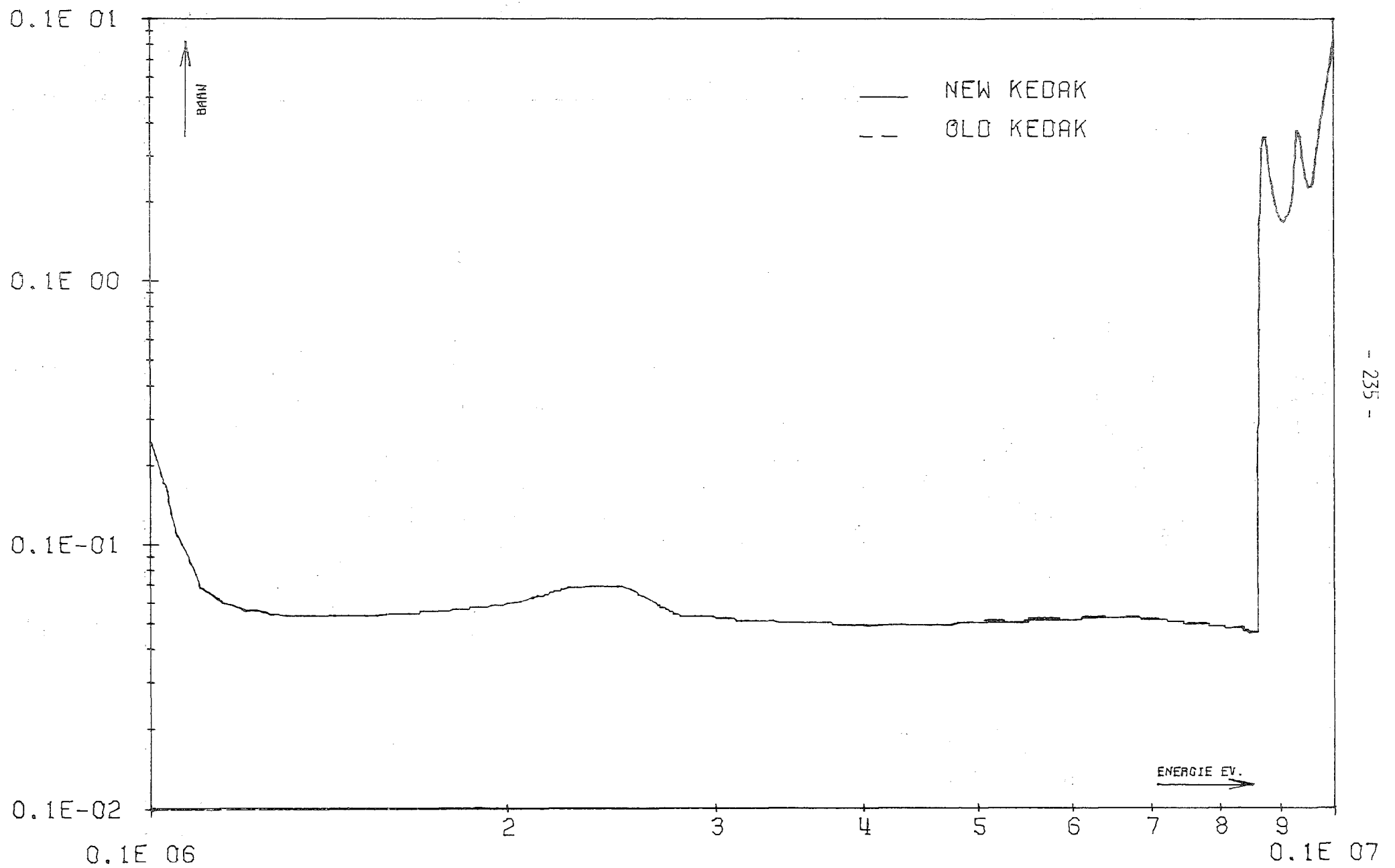
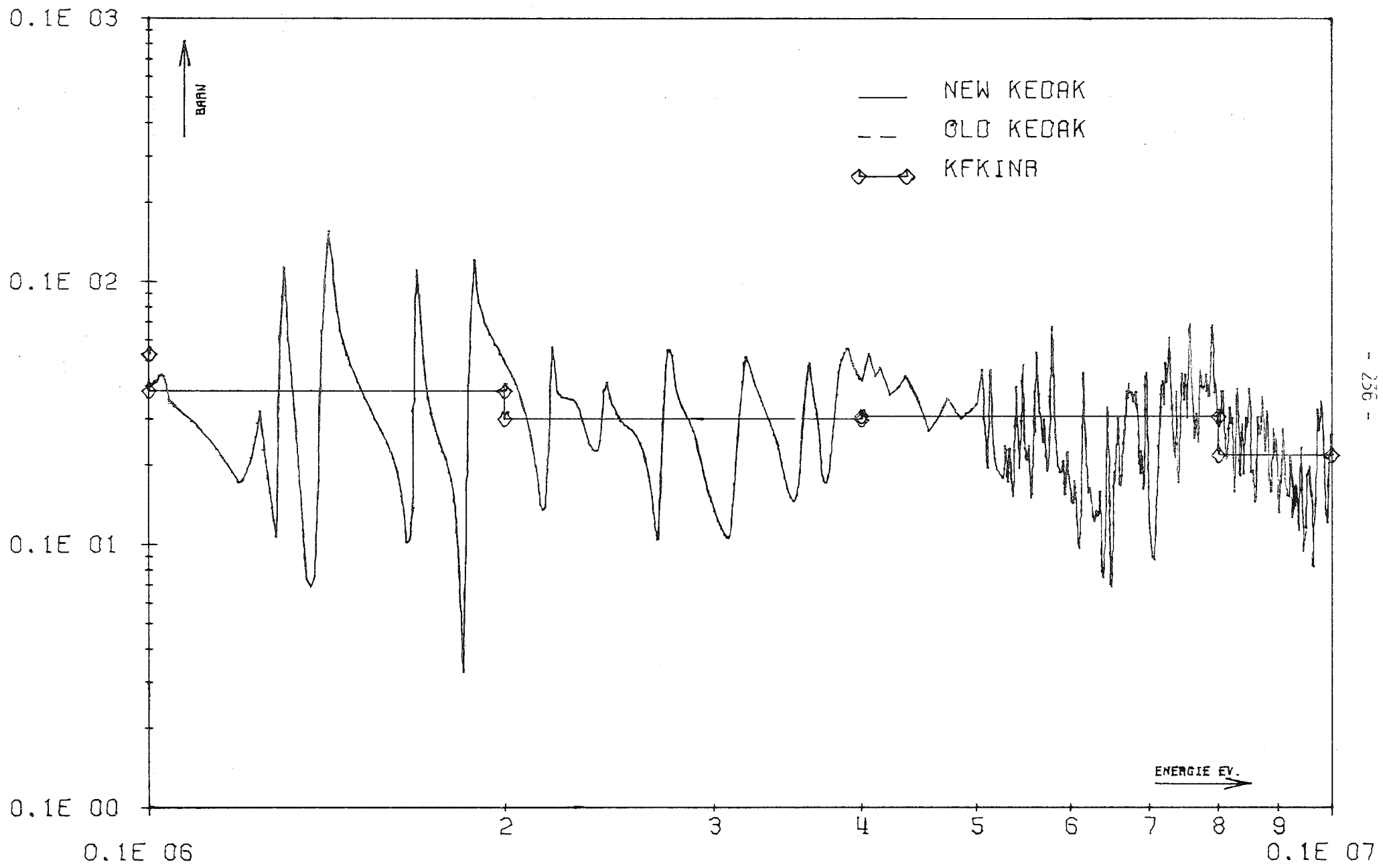


FIG. 12 FF SGX

INR901FE 28.01 19.06.



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FIG. 13 FE SGN

INR901FE 28.01 19.06.

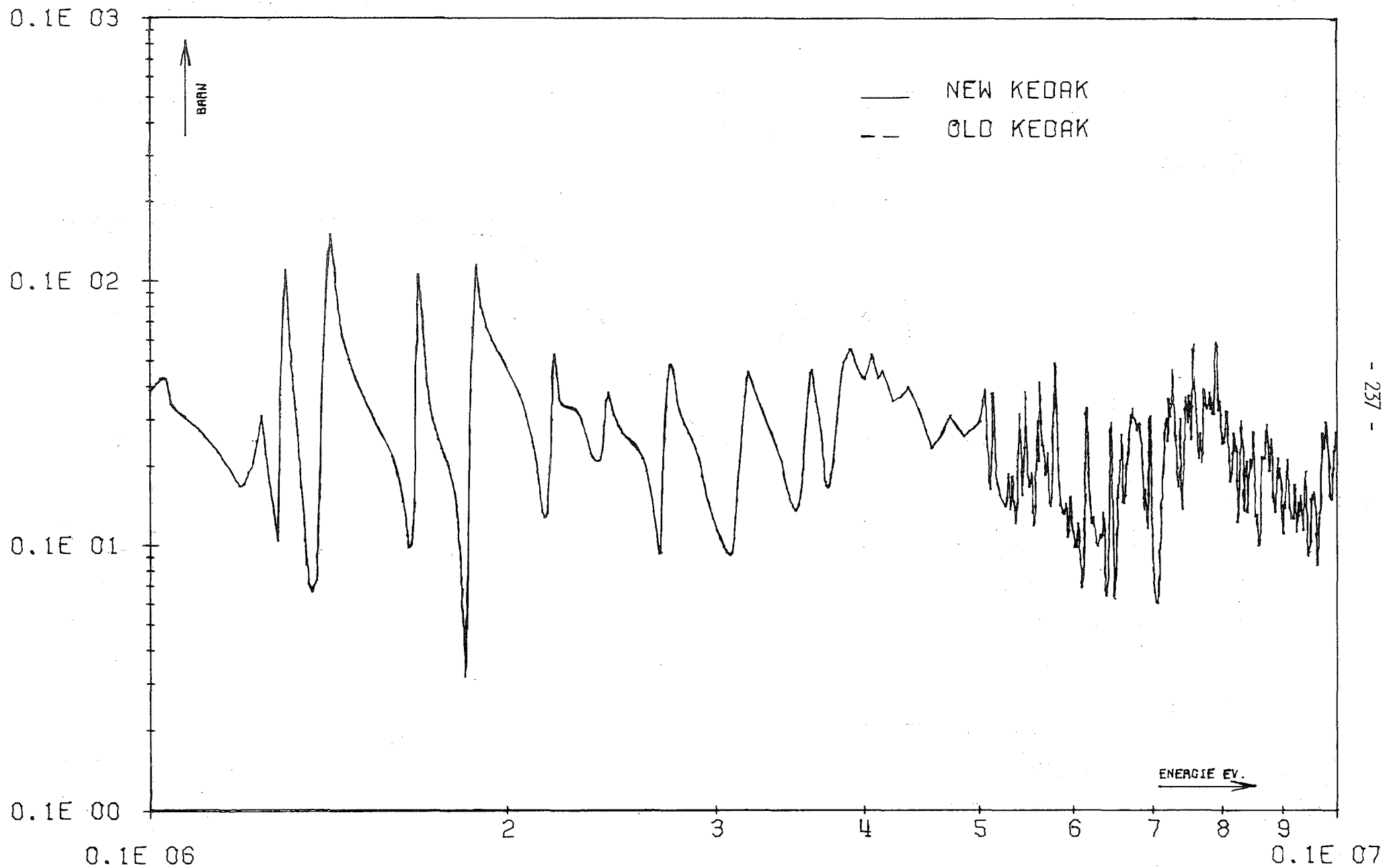


FIG. 14 FE SGTR

INR901FE 28.01 19.06.

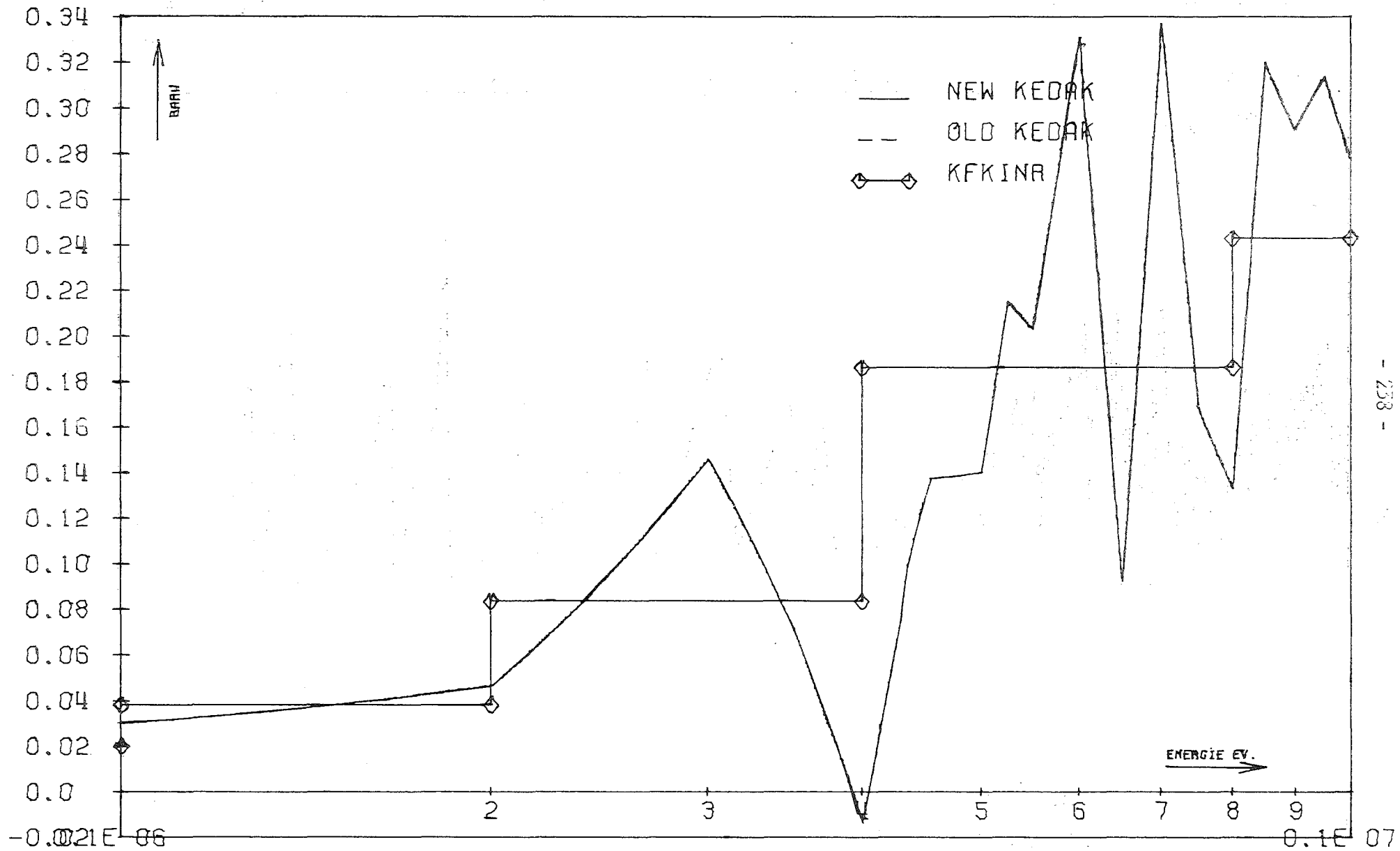


FIG. 15 FE MUEL

INR901FE 28.01 19.06.

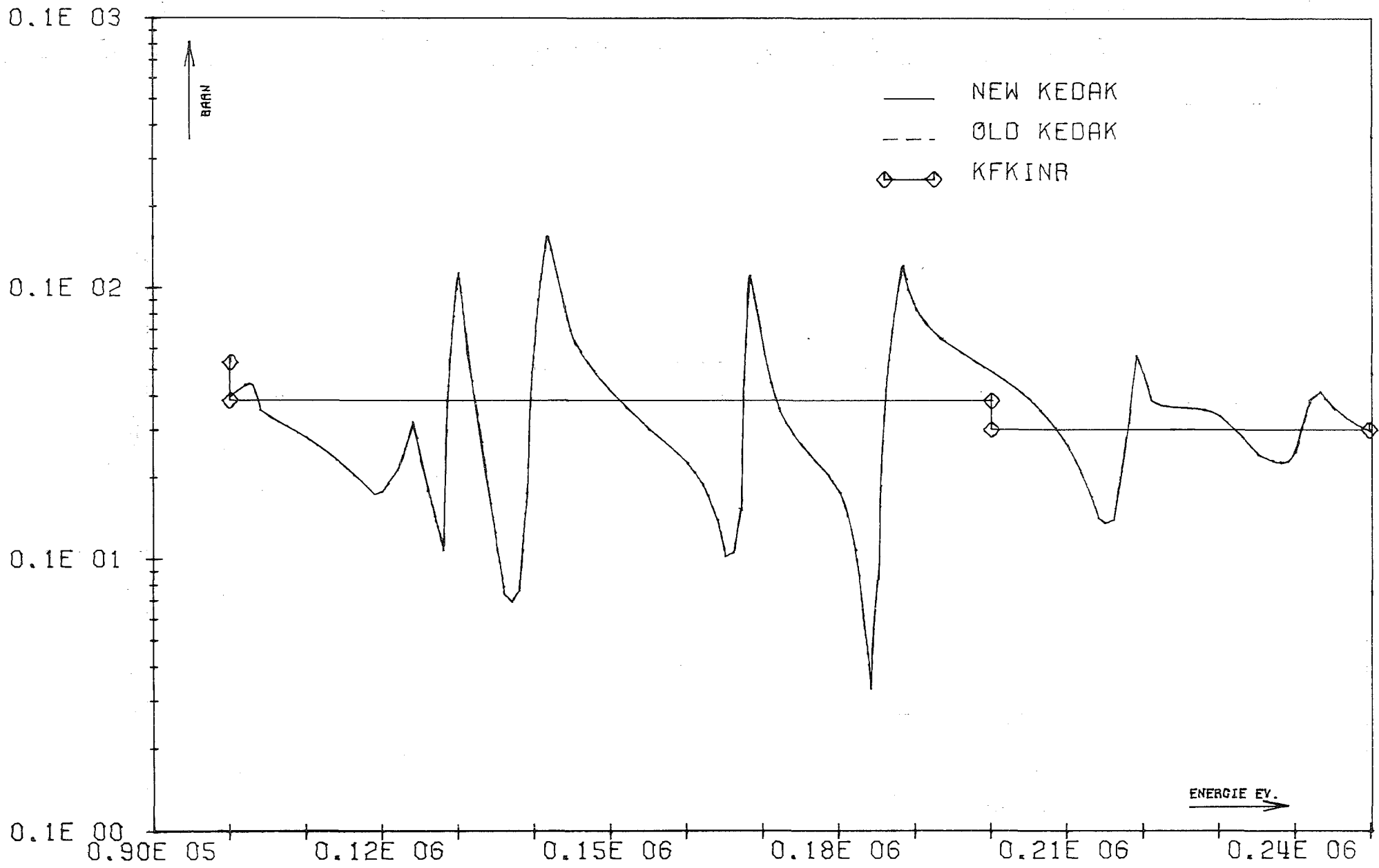


FIG. 16 FE SGT INR901FE 30.01 14.13.

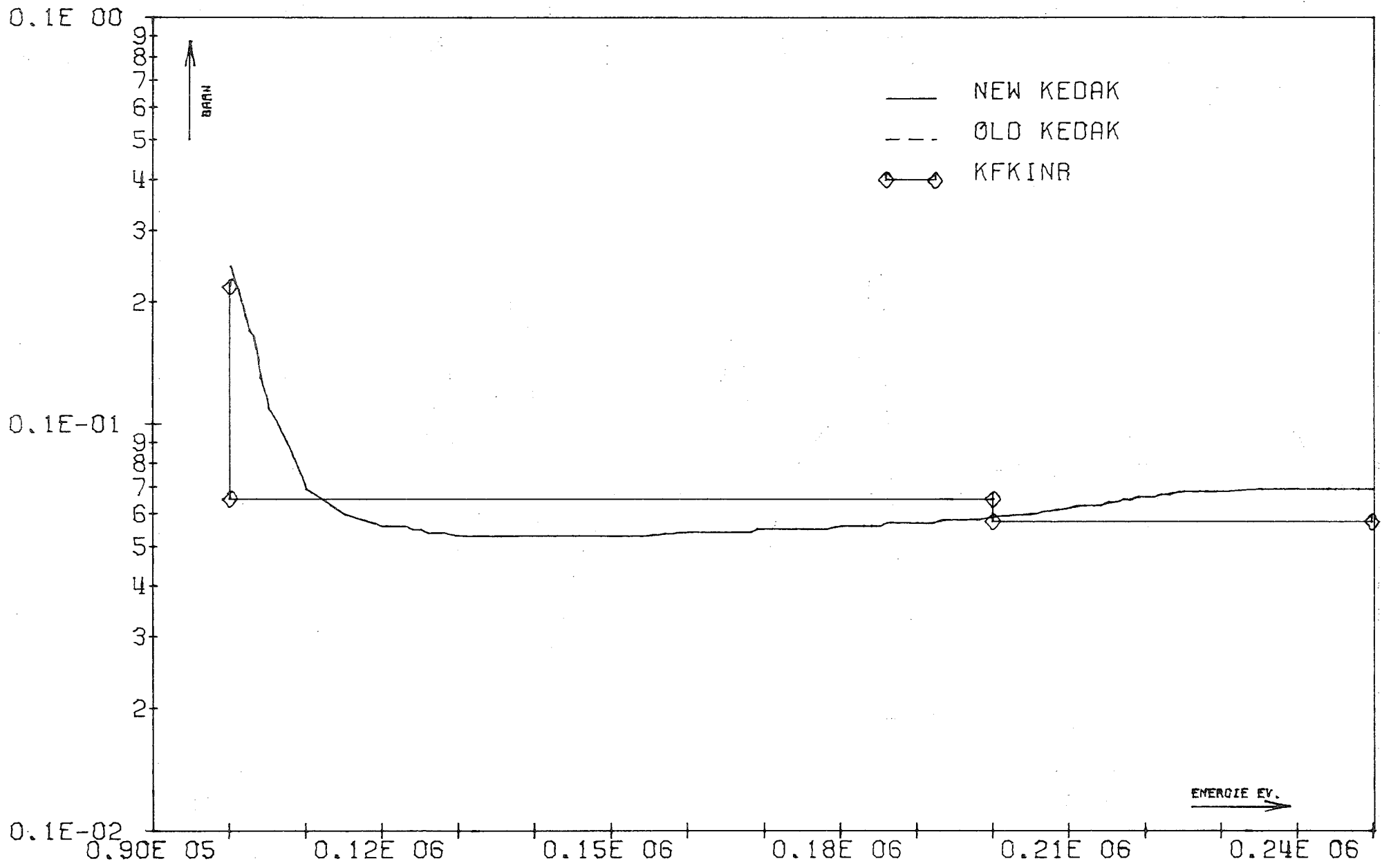


FIG. 17 FE SGG INR901FE 30.01 14.13.

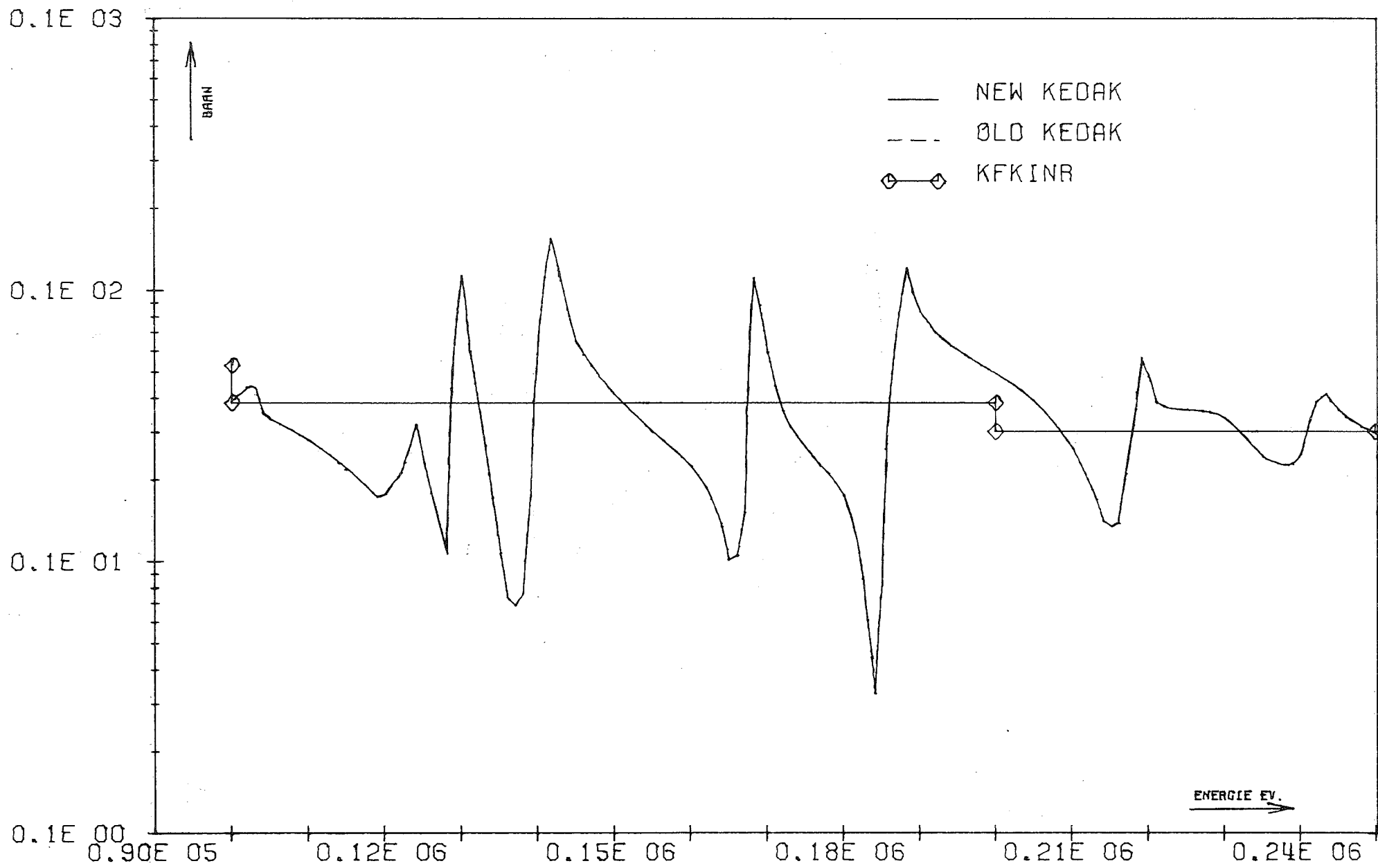


FIG. 18 FE SGN INR901FE 30.01 14.13.

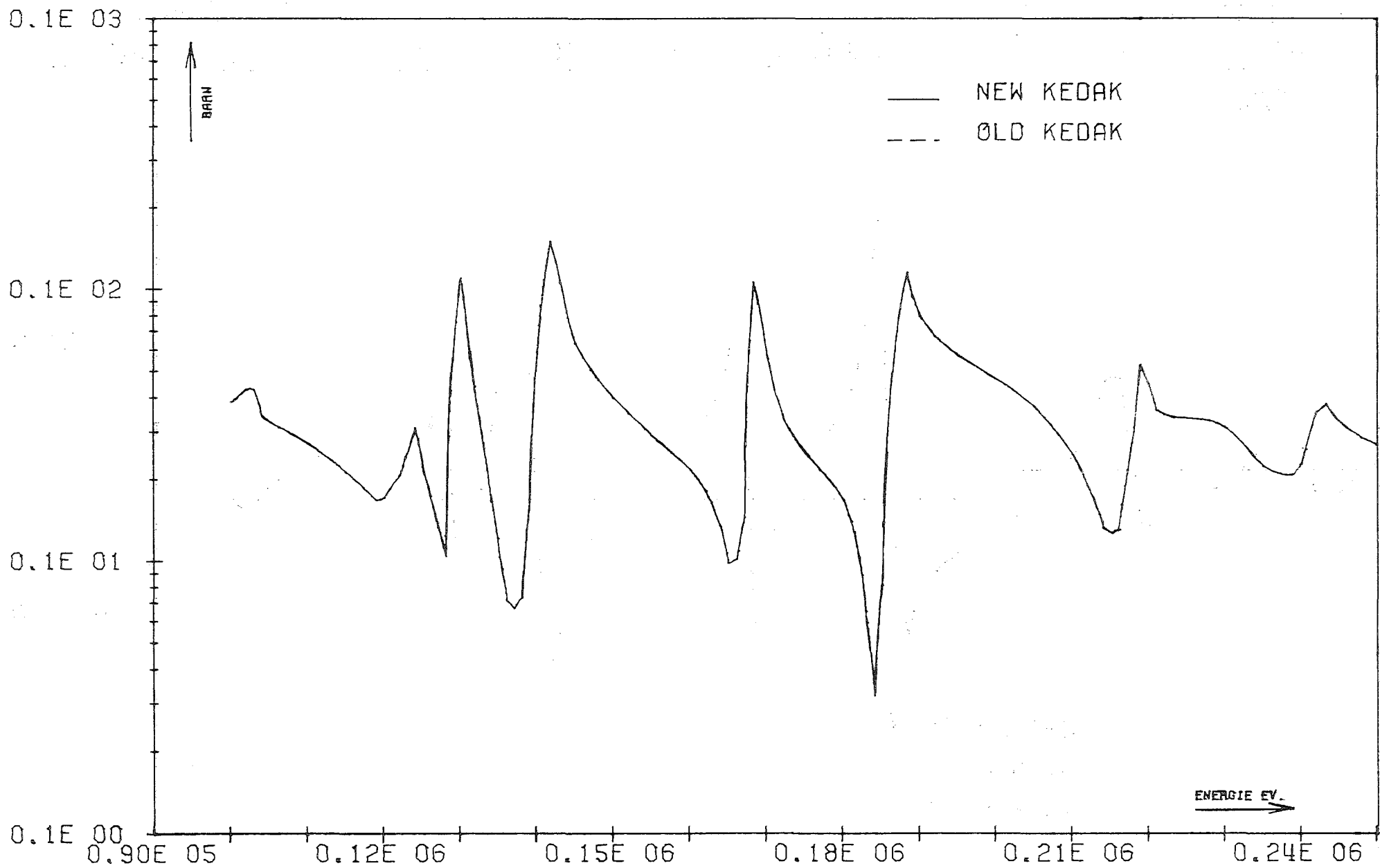


FIG. 19 FE SGTR

INR901FE 30.01 14.13.

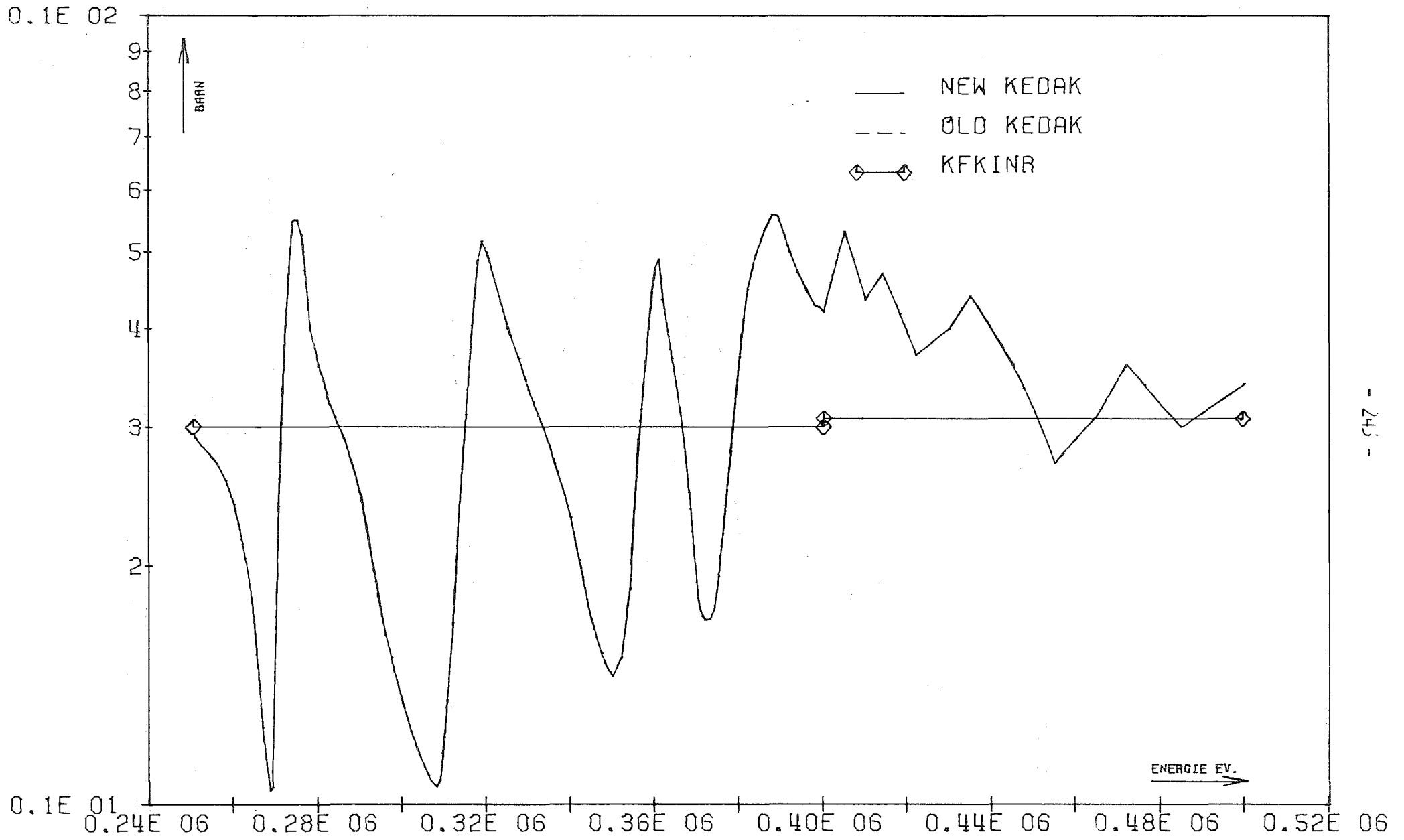


FIG. 20 FE SGT

INR901FE 25.01 13.38.

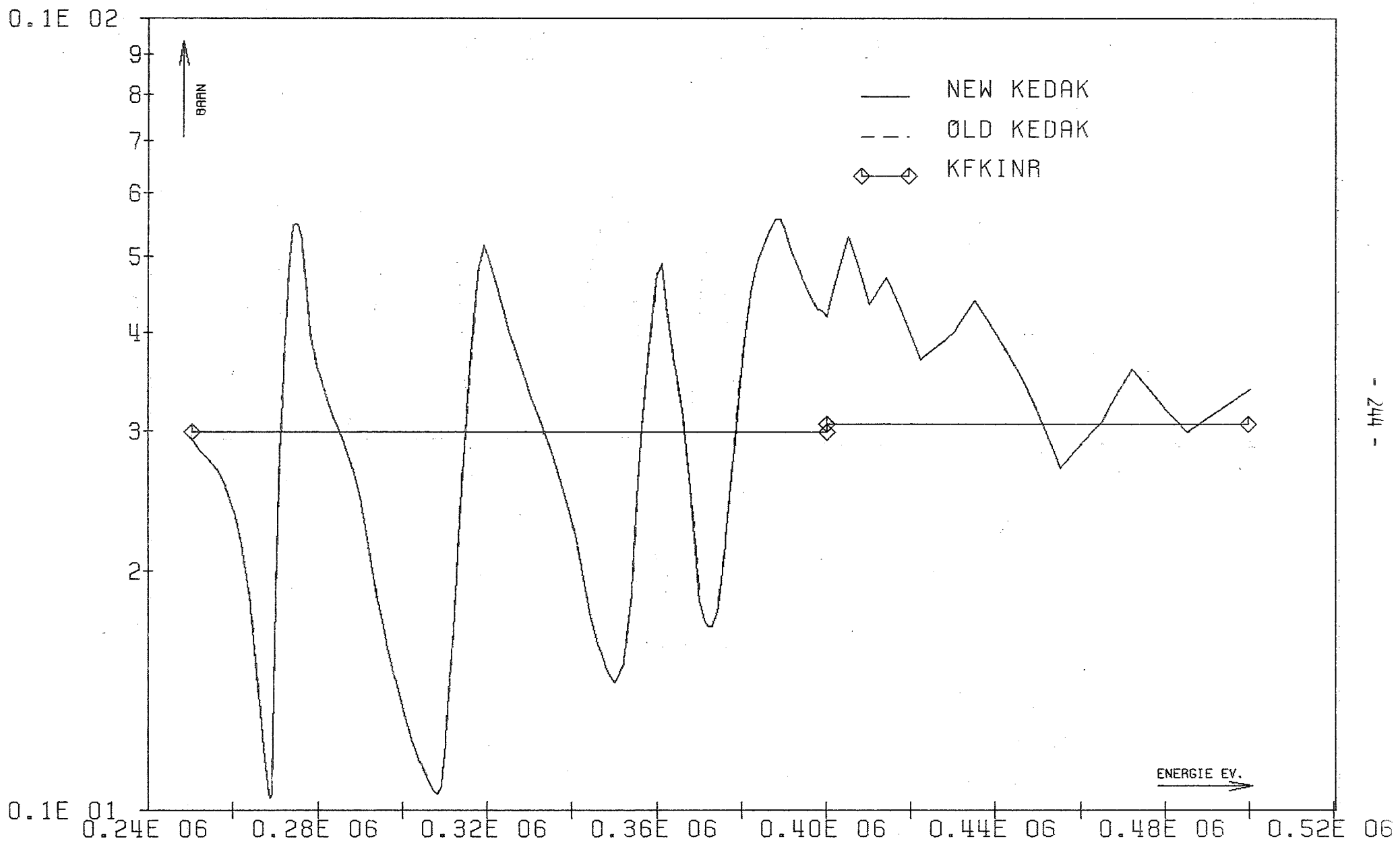


FIG. 21 FE SGN

INR901F1 05.08 17.43.

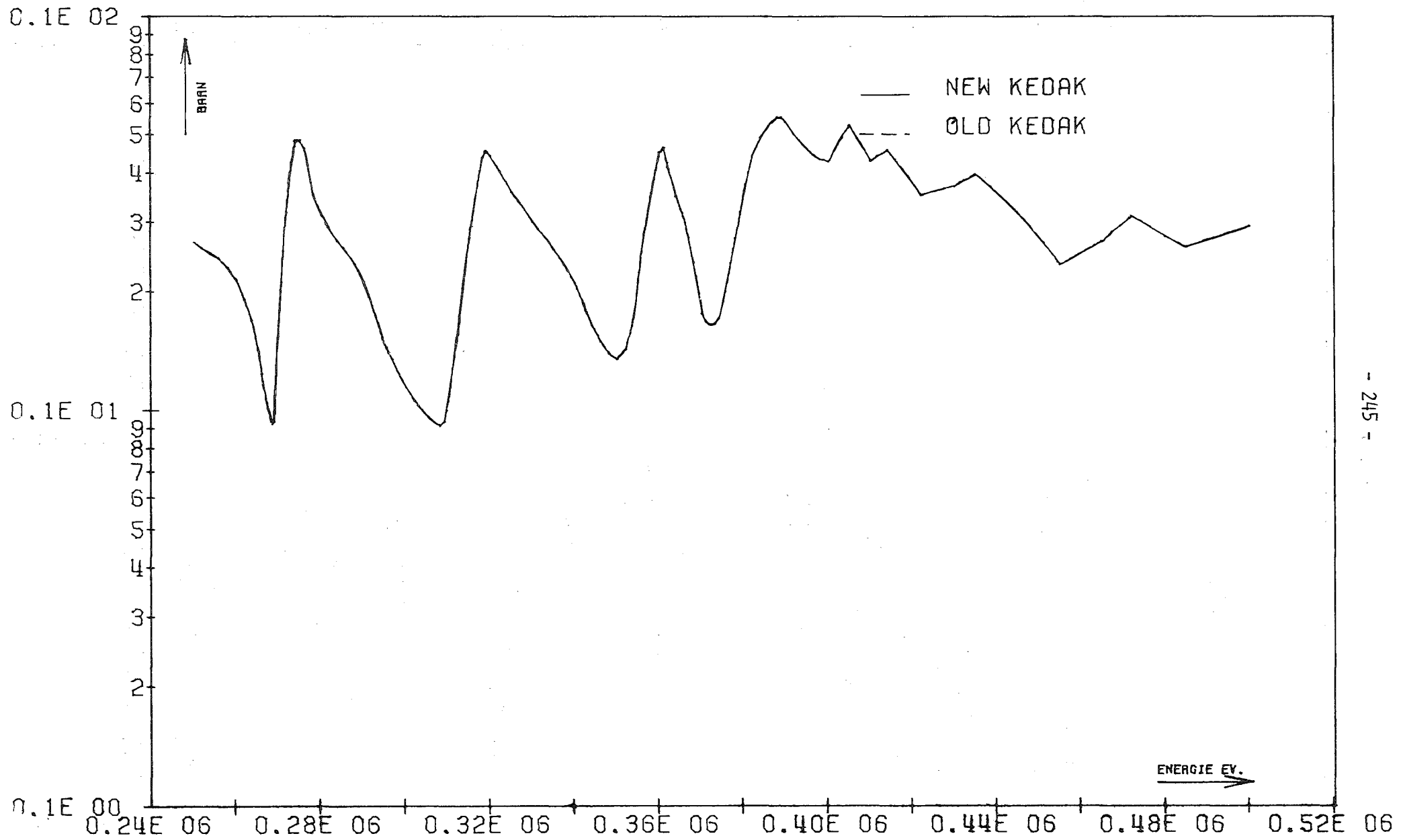


FIG. 22 FE SGTR

INR901FE 25.01 13.38.

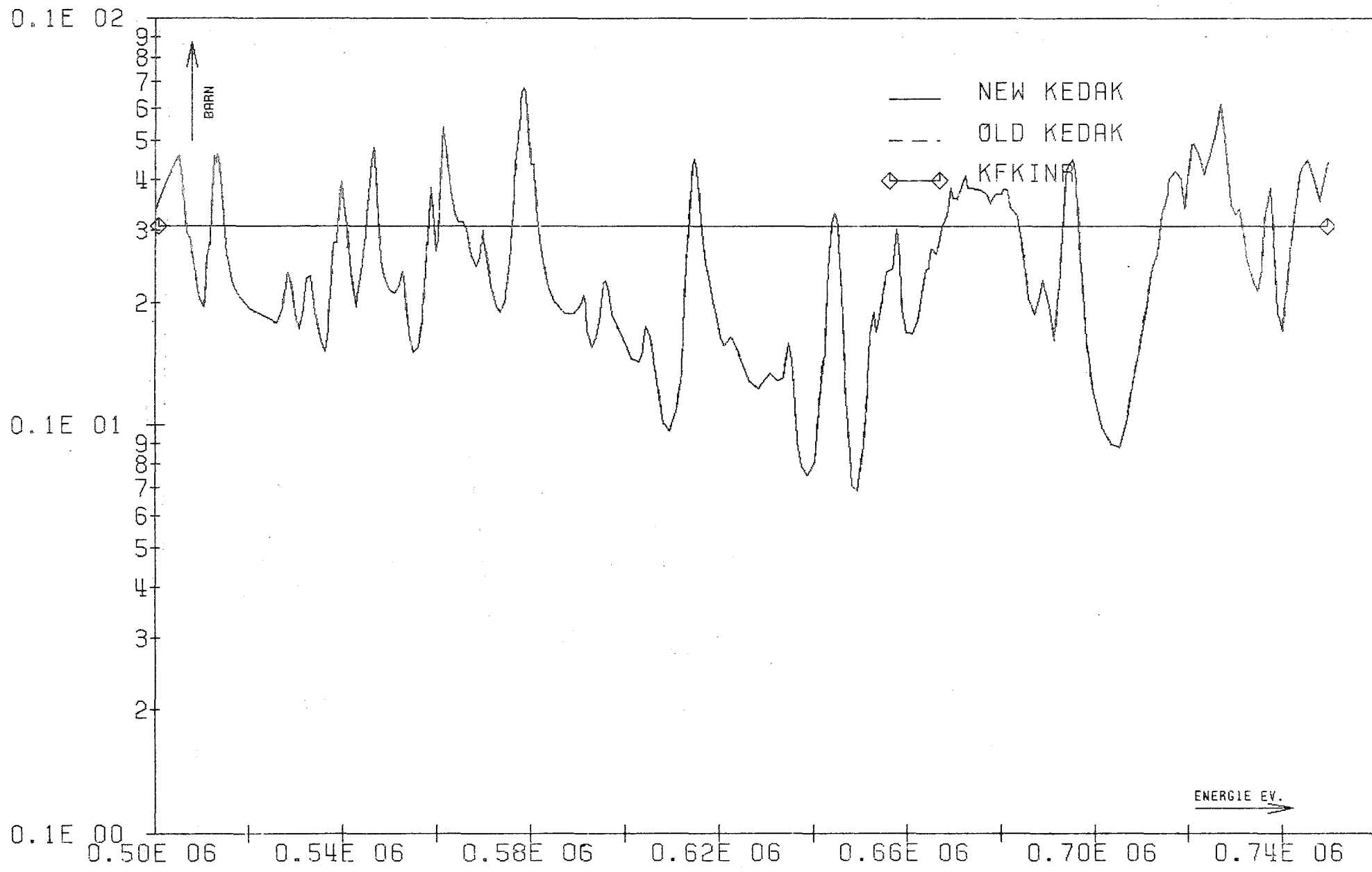


FIG. 23 FE SGT

INR901F1 05.08 17.43.

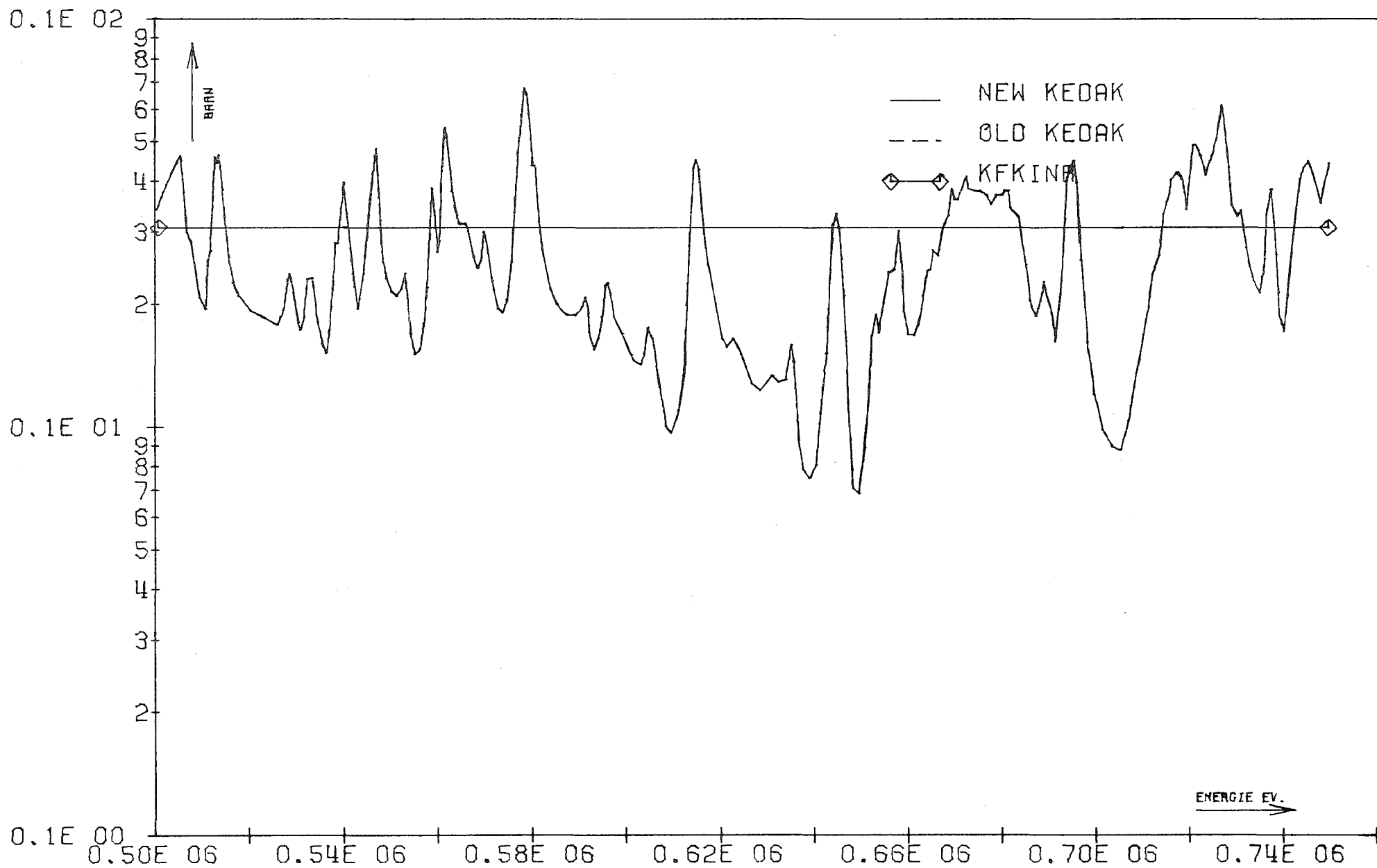


FIG. 24 FE SGN

INR901FE 25.01 13.38.

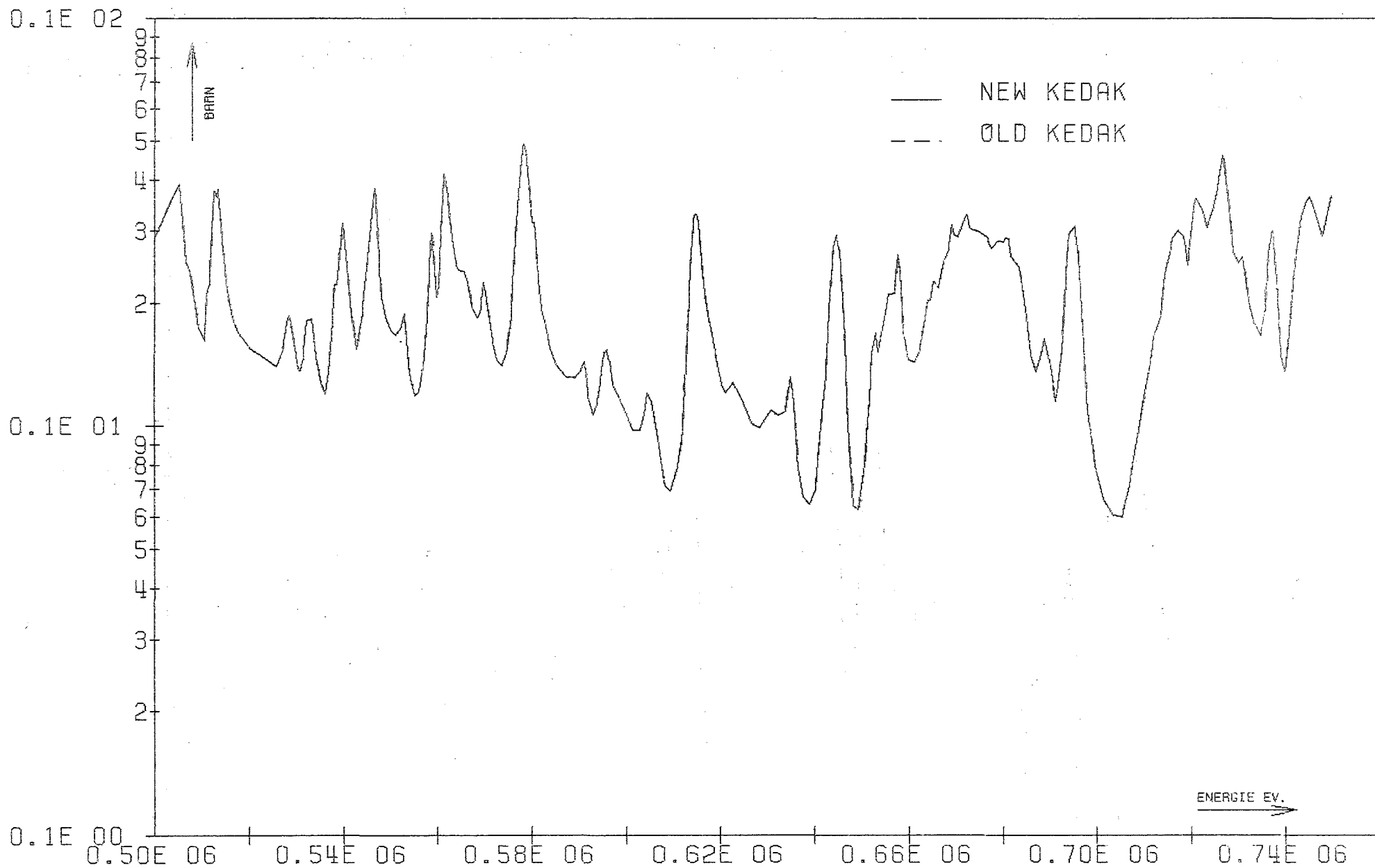


FIG. 25 FE SGTR

INR901F1 05.08 17.43.

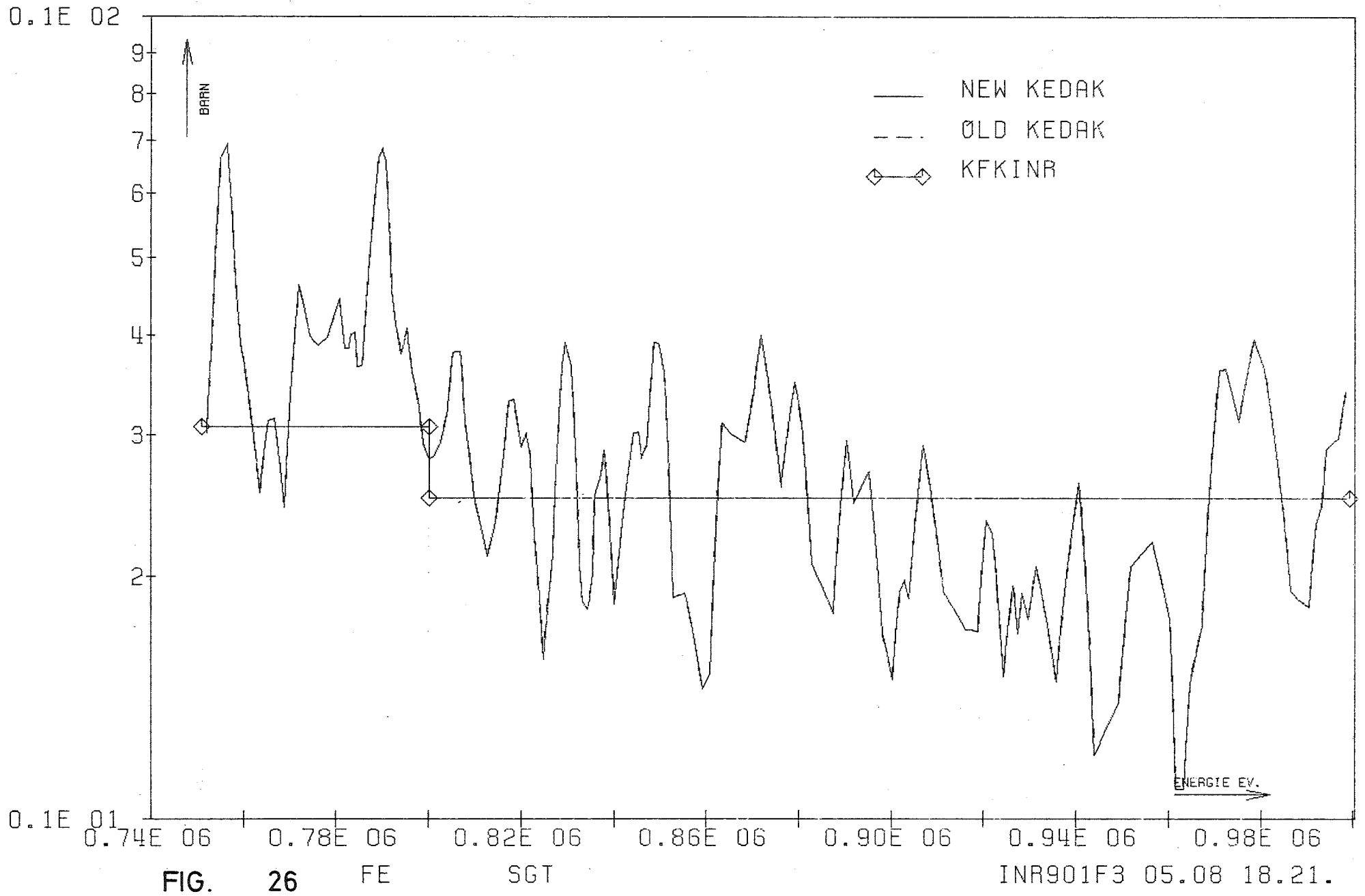


FIG. 26

FE

SGT

INR901F3 05.08 18.21.

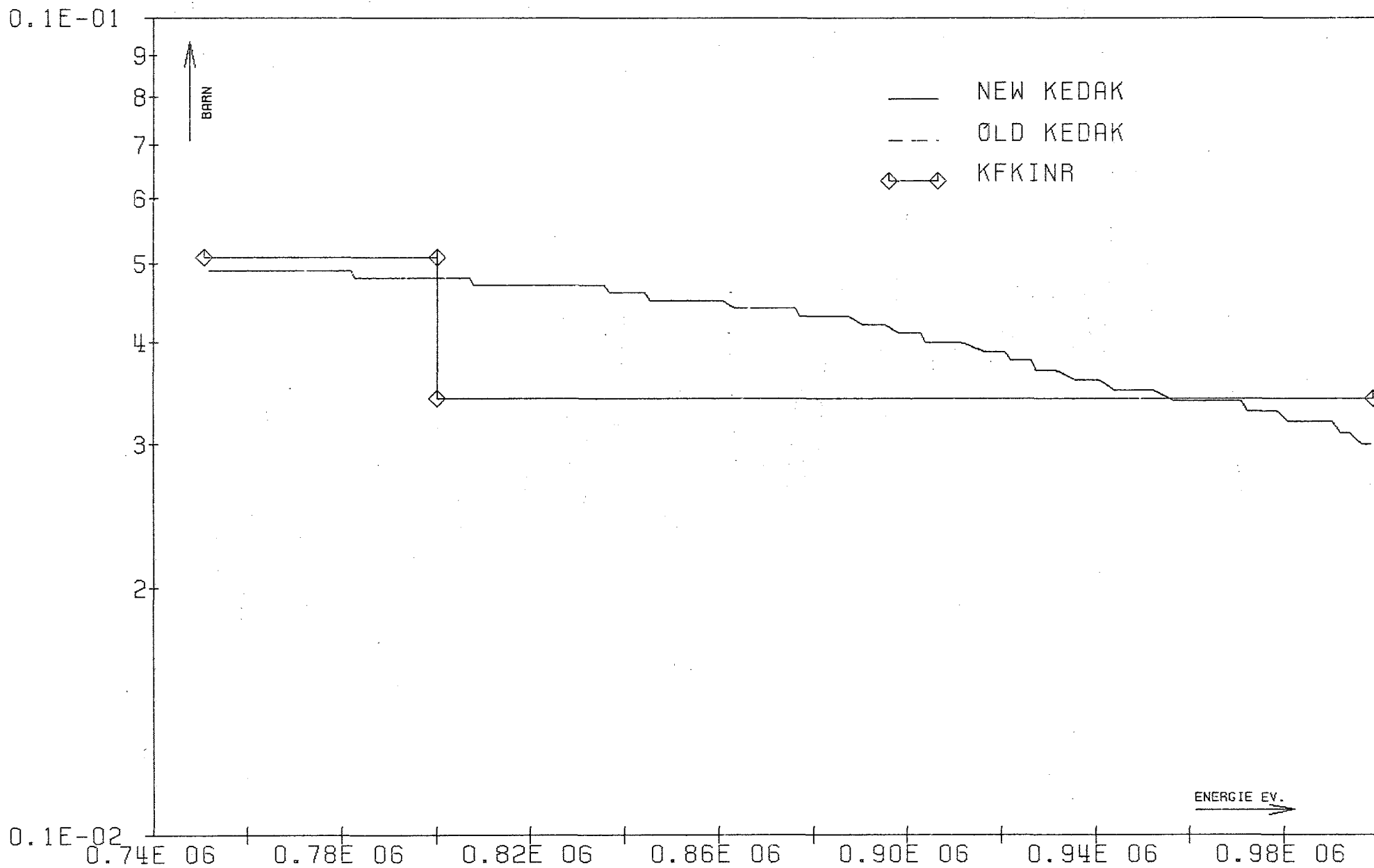


FIG. 27 FE SGG

INR901F3 05.08 18.22.

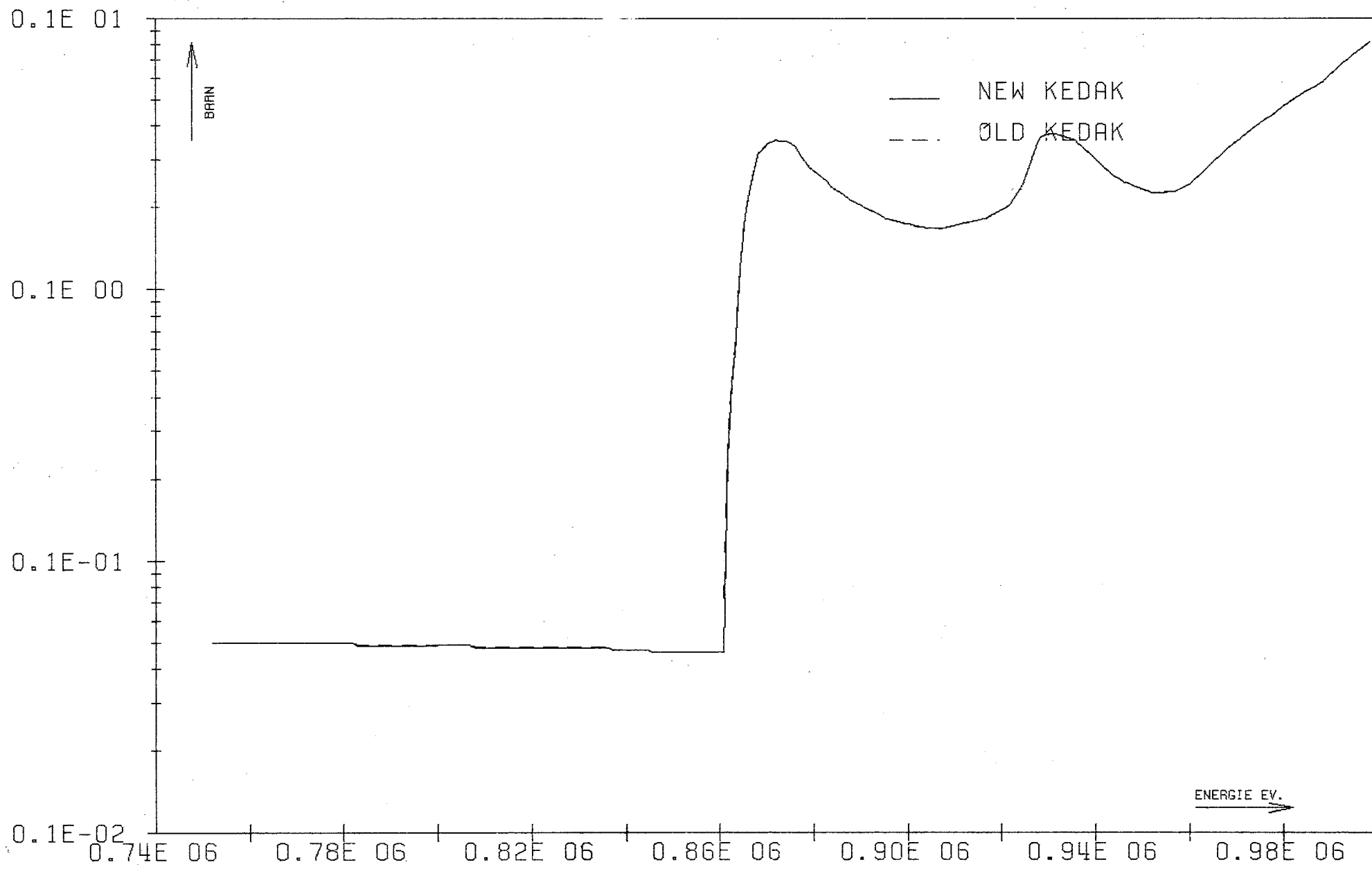


FIG. 28 FE SGX

INR901F3 05.08 18.22.

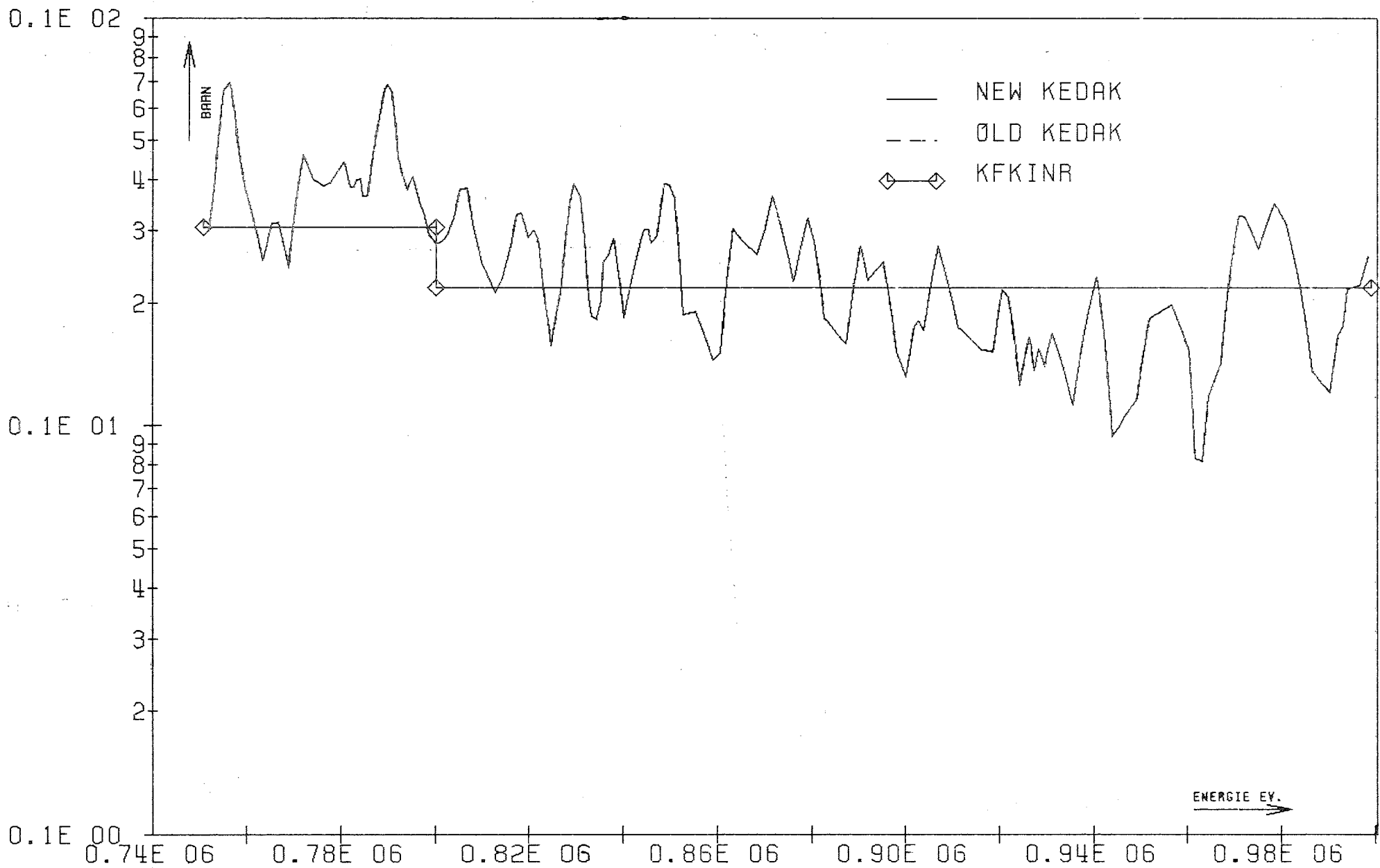


FIG. 29 FE SGN

INR901F3 05.08 18.22.

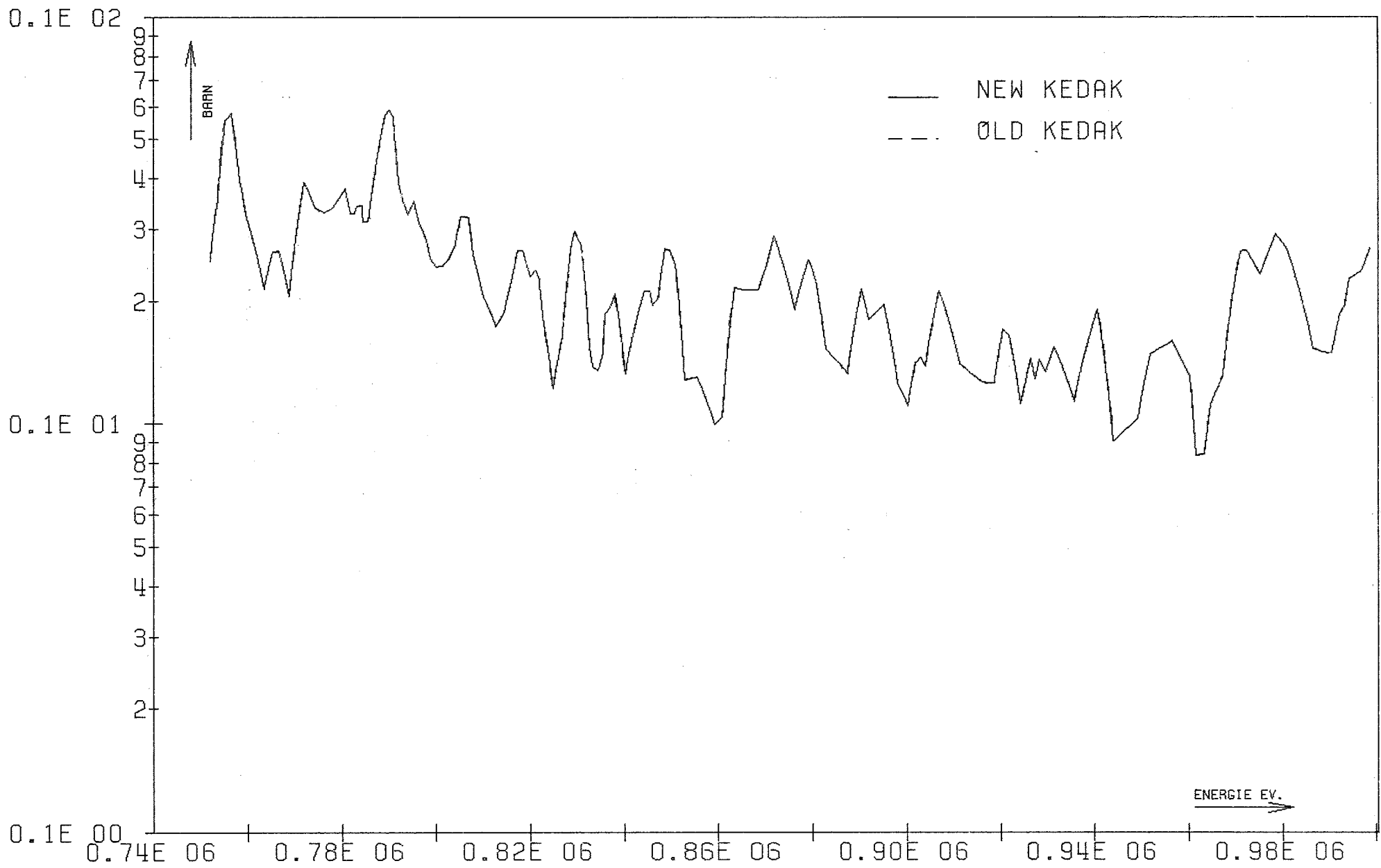


FIG. 30 FE SGTR INR901F3 05.08 18.22.

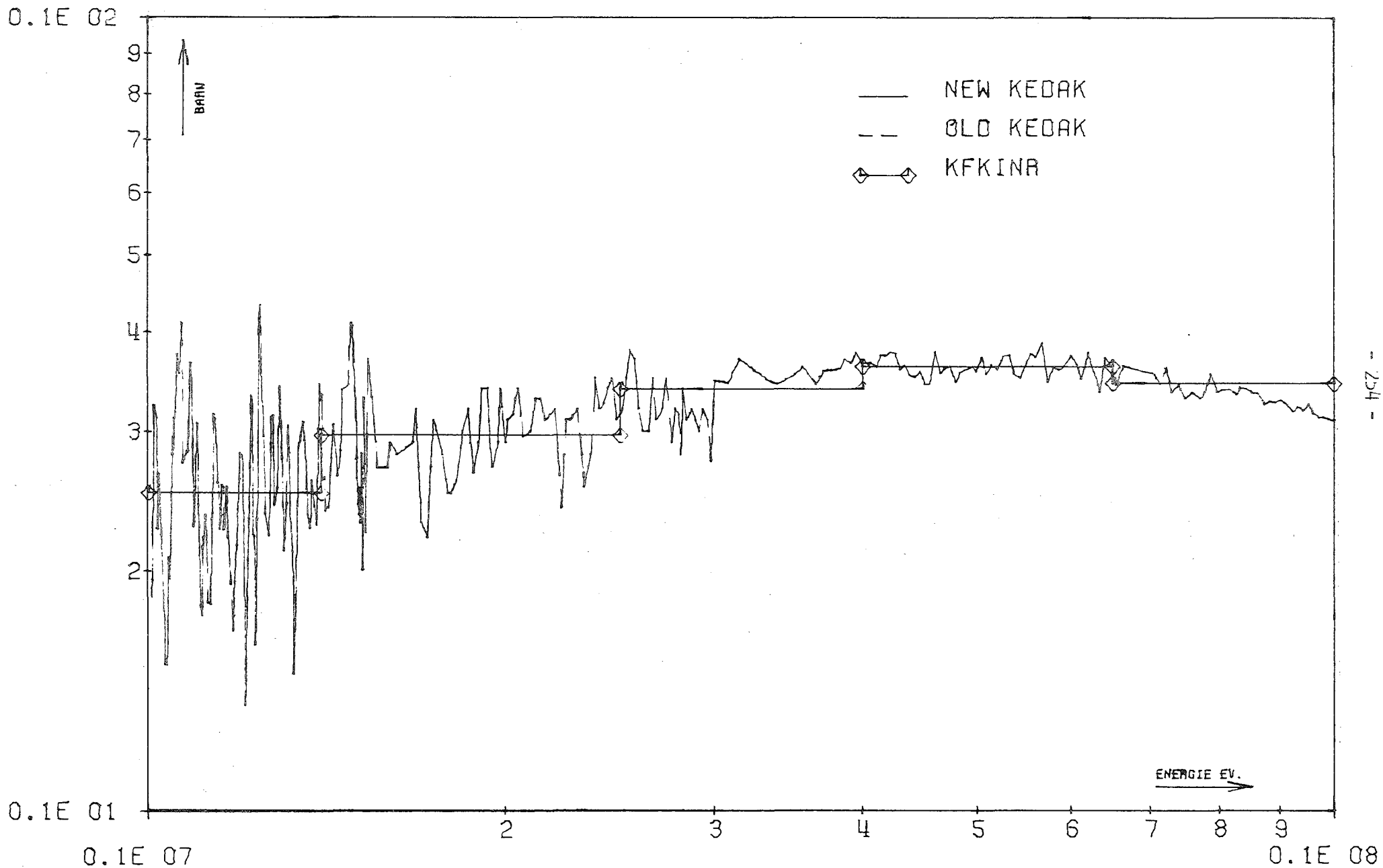


FIG. 31 FE SGT

INR901FE 28.01 19.06.

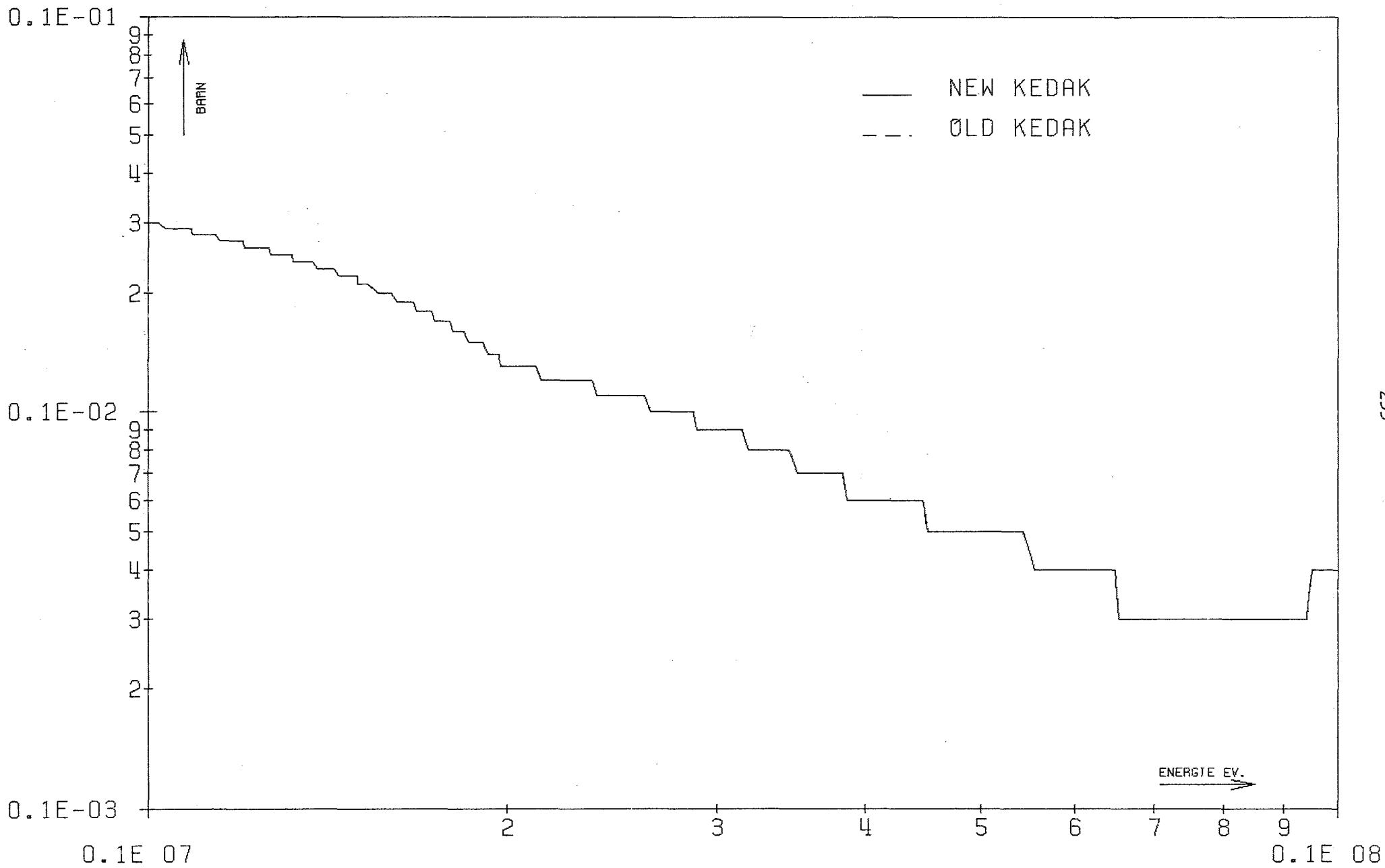
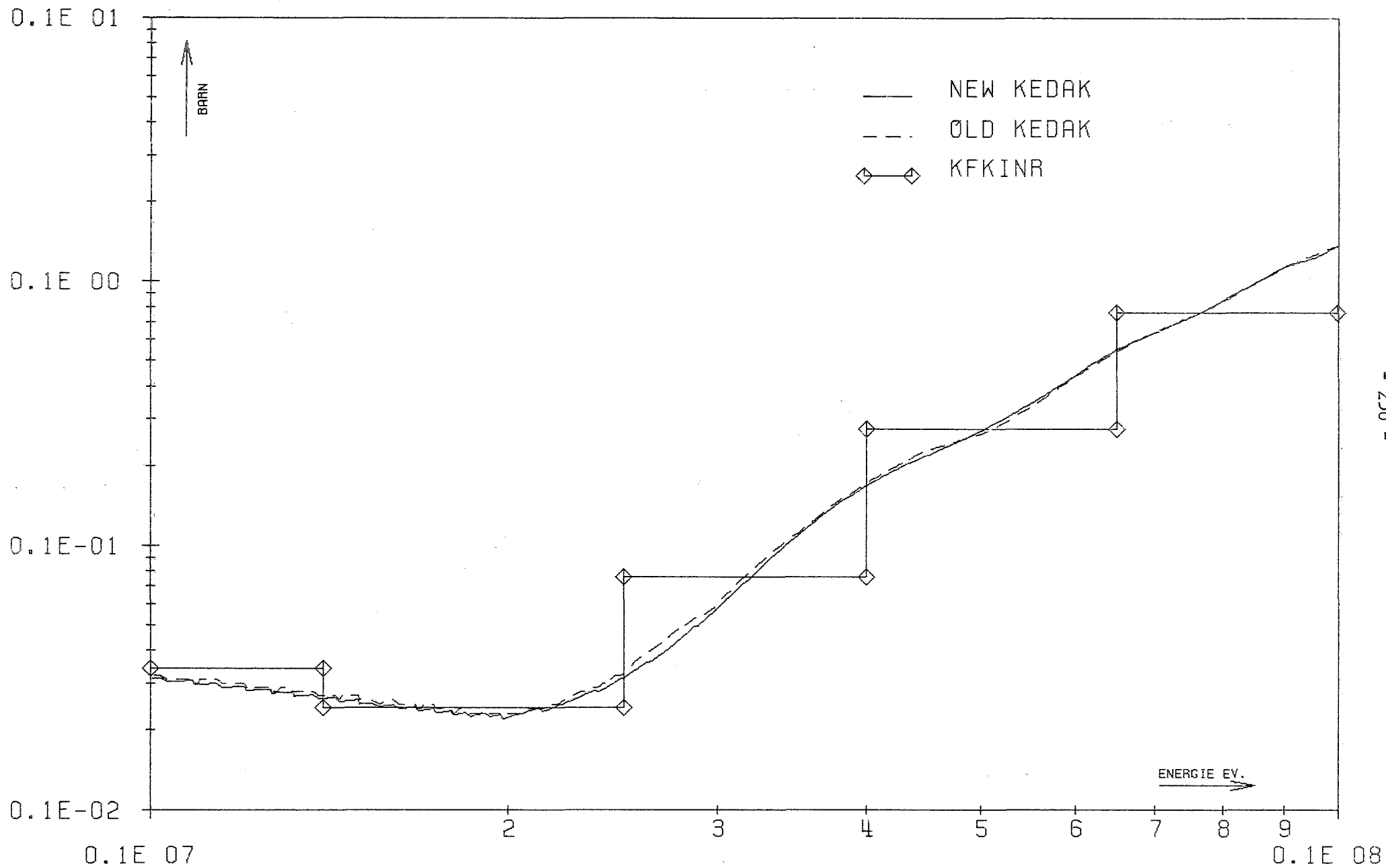


FIG. 32 FE SGG

INR901F4 07.08 16.23.



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FIG. 33 FE SGA

INR901F4 07.08 16.23.

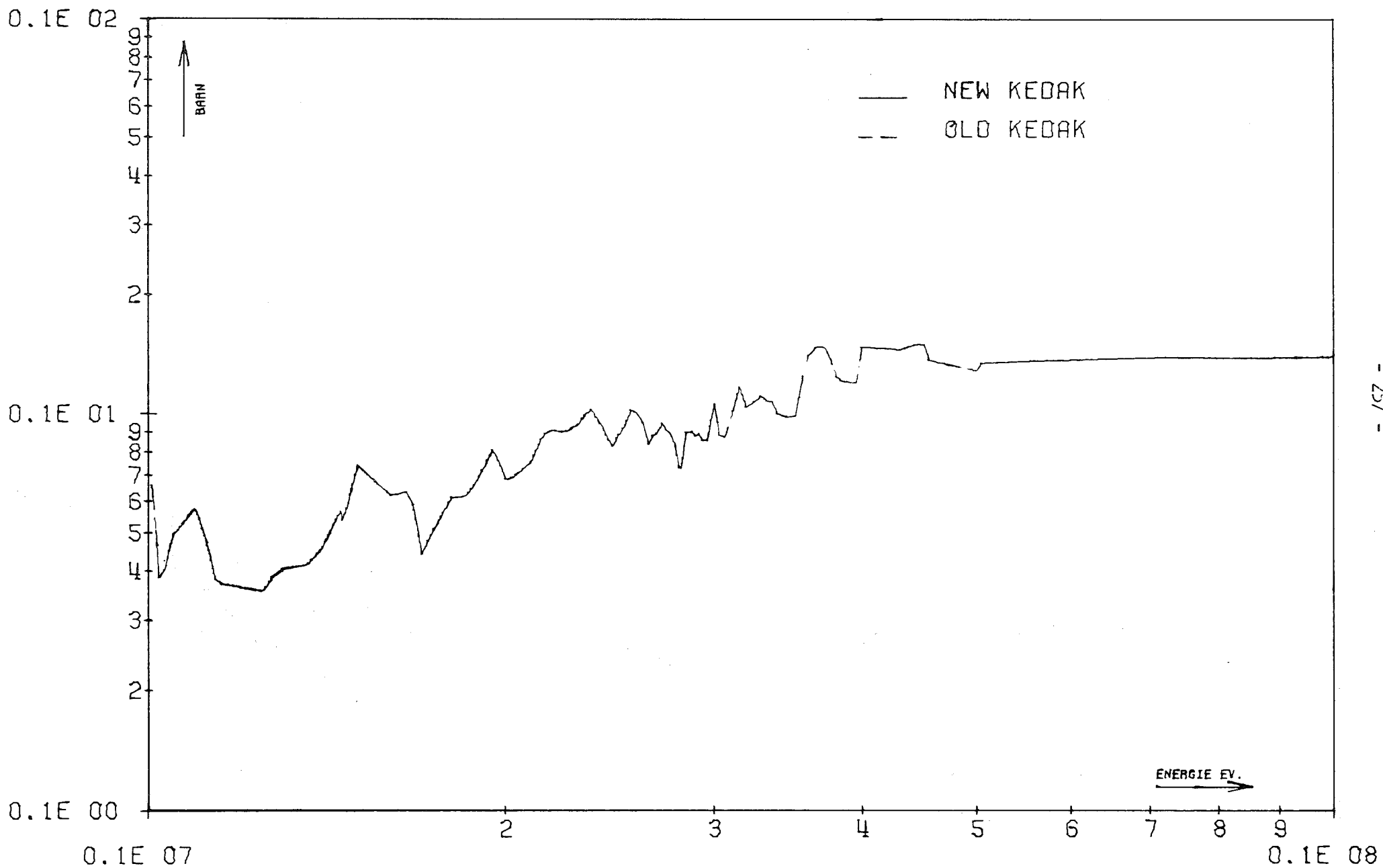


FIG. 34 FE SGX

INR901FE 28.01 19.06.

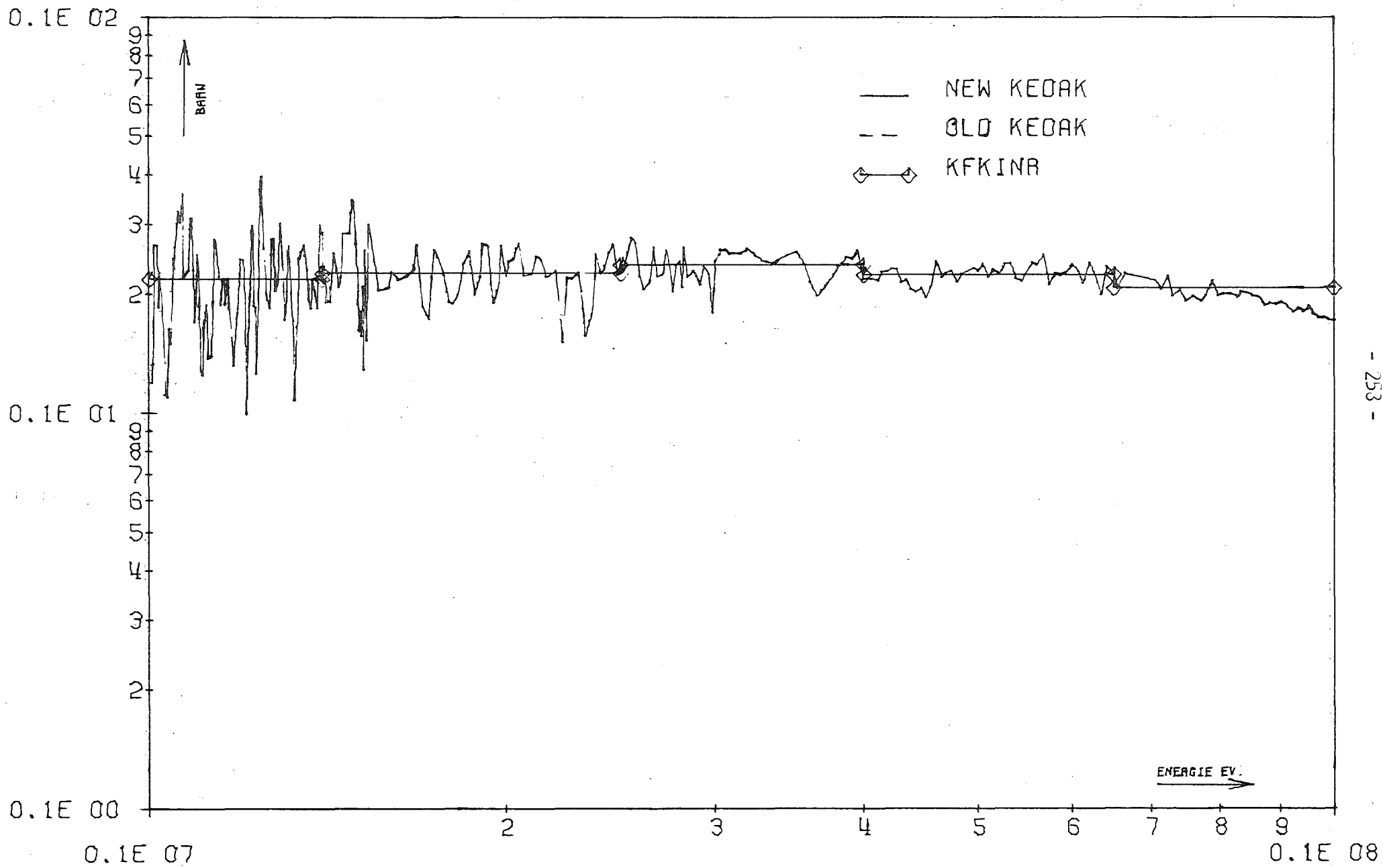
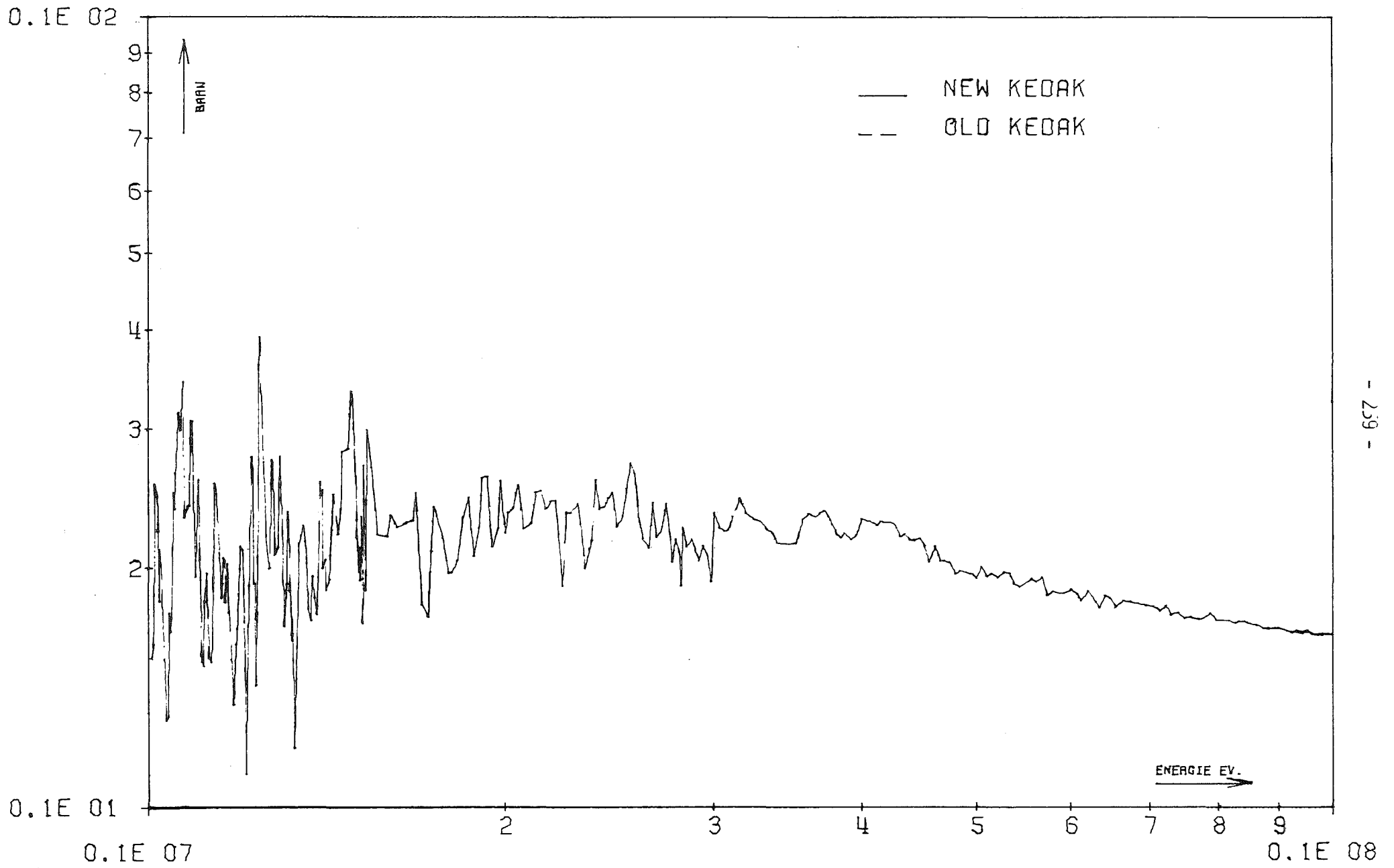


FIG. 35 FE SGN

INR901FE 28.01 19.06.



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FIG. 36 FE SGTR

INR901FE 28.01 19.06.

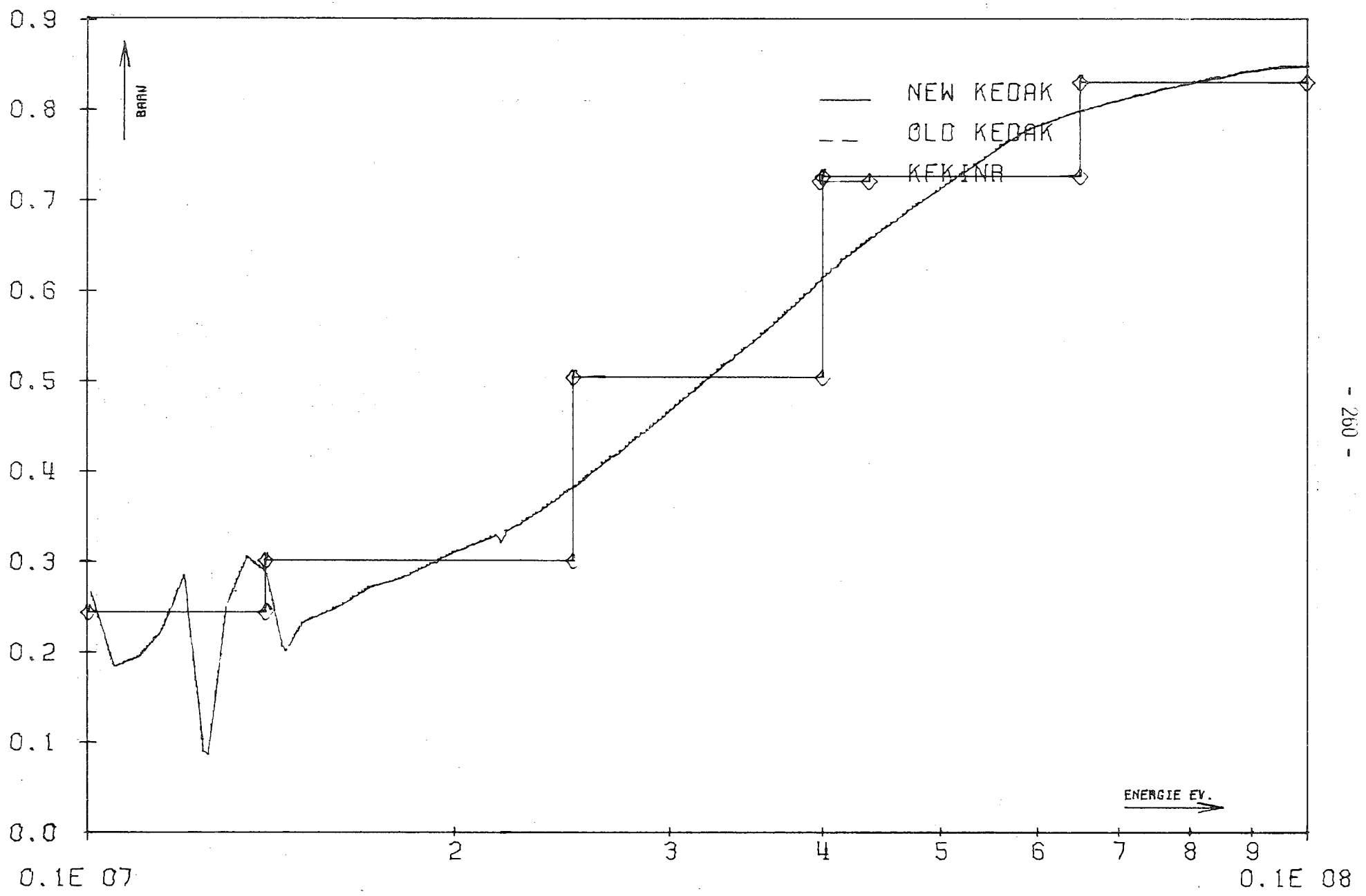
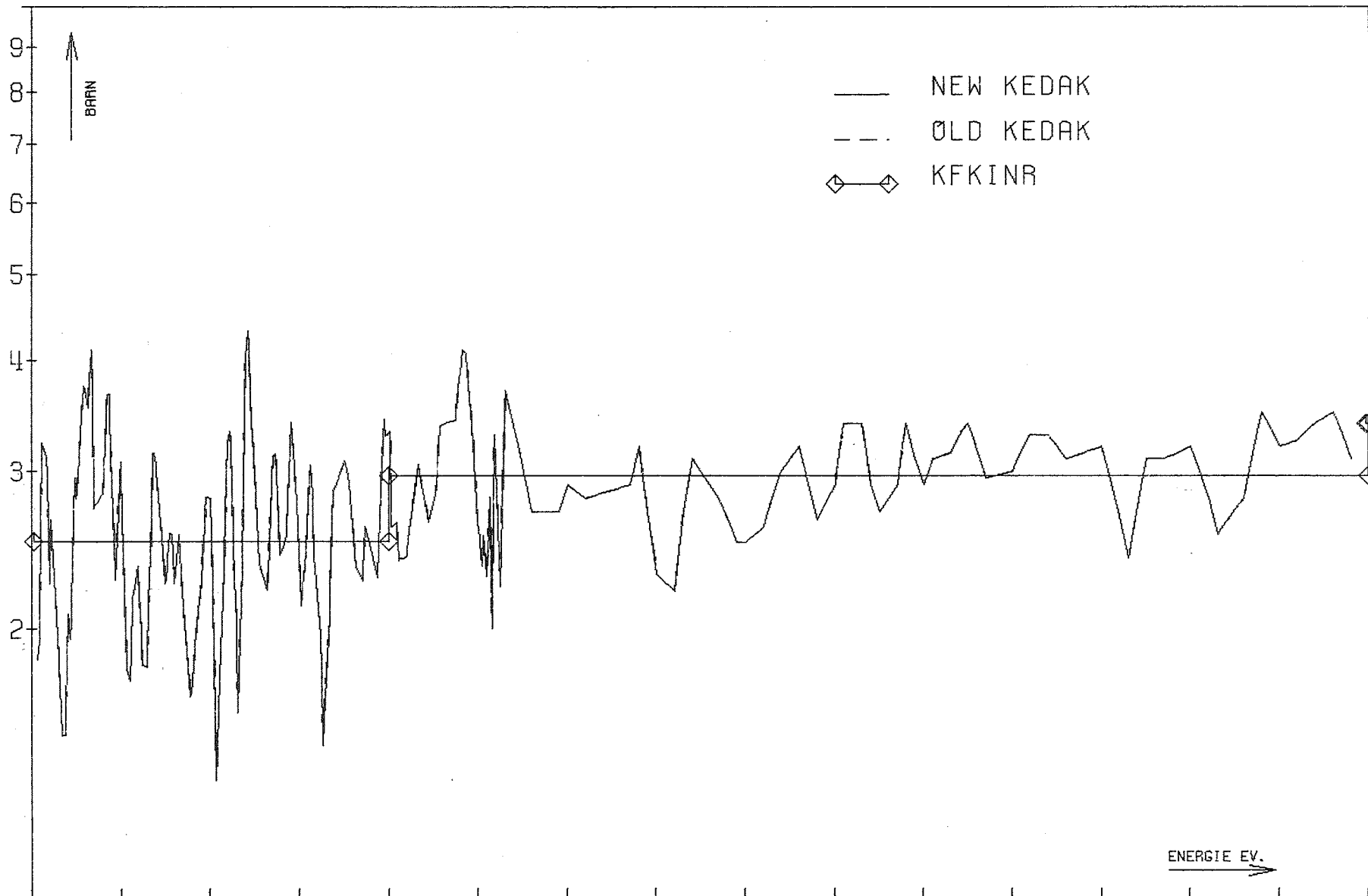


FIG. 37 FE MUEL

INR901FE 28.01 19.06.

0.1E 02



0.1E 01

0.10E 07 0.13E 07 0.16E 07 0.19E 07 0.22E 07 0.25E 07

FIG.

38

FE

SGT

INR901F2 05.08 17.56.

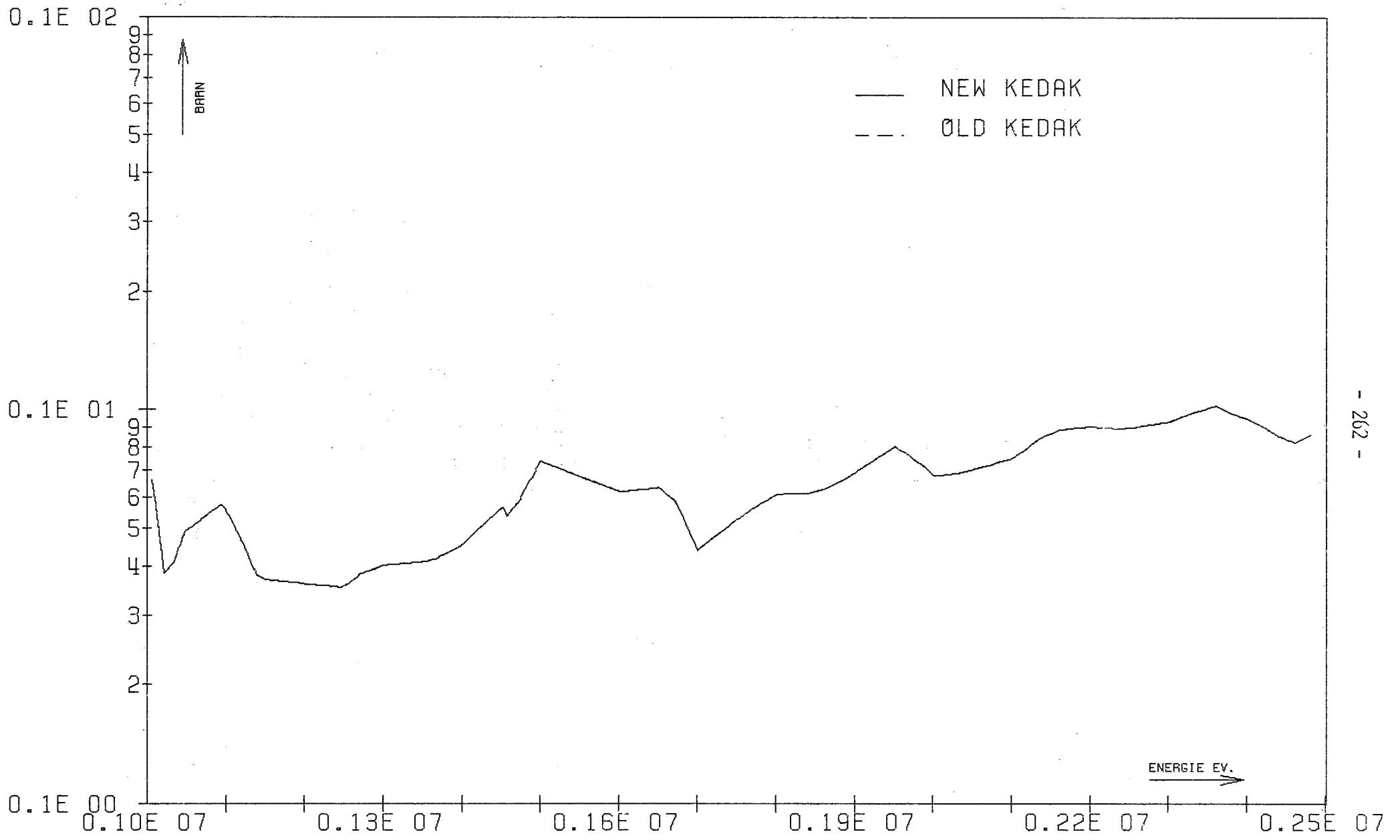
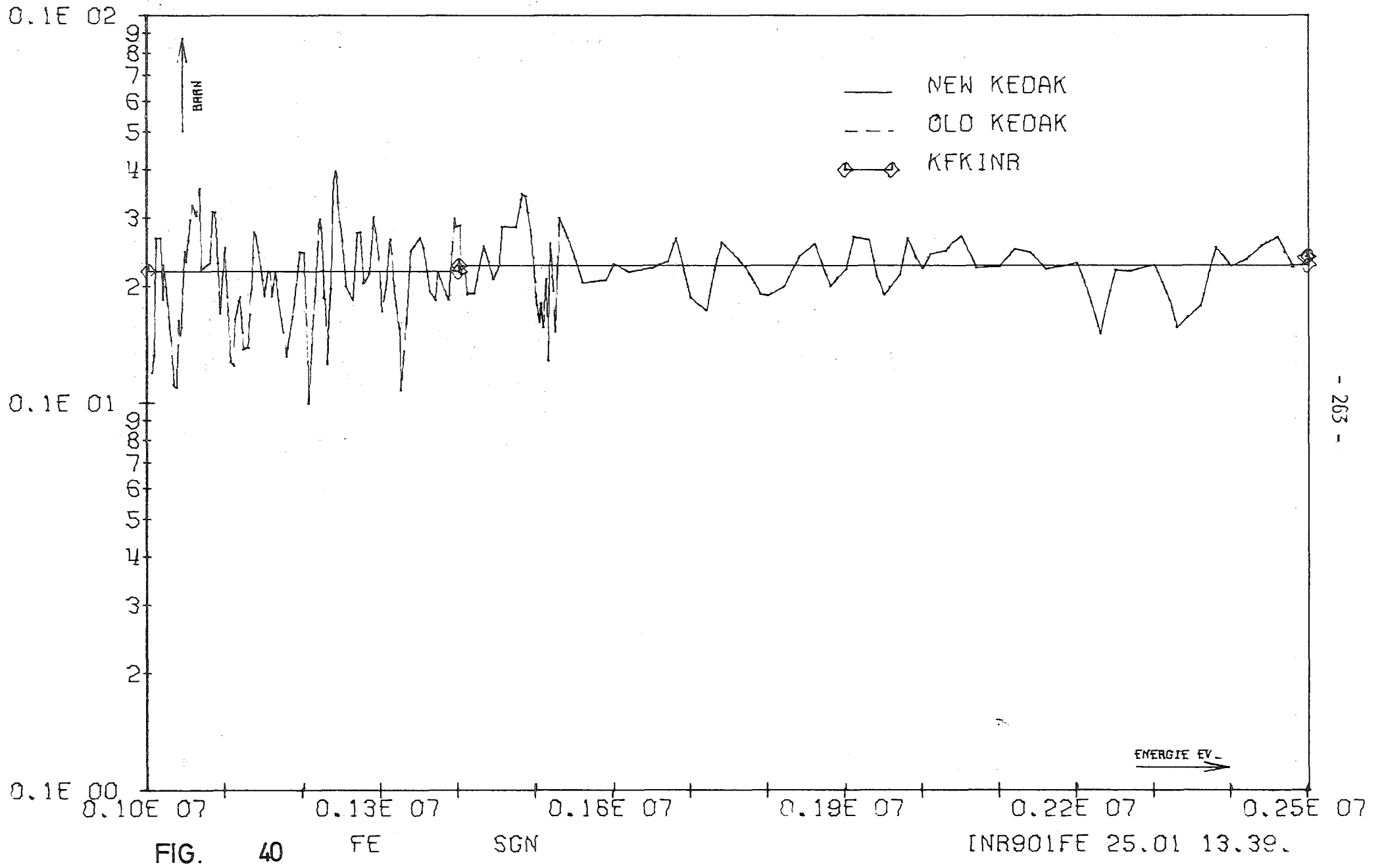


FIG. 39 FE SGX

INR901F2 05.08 17.56.



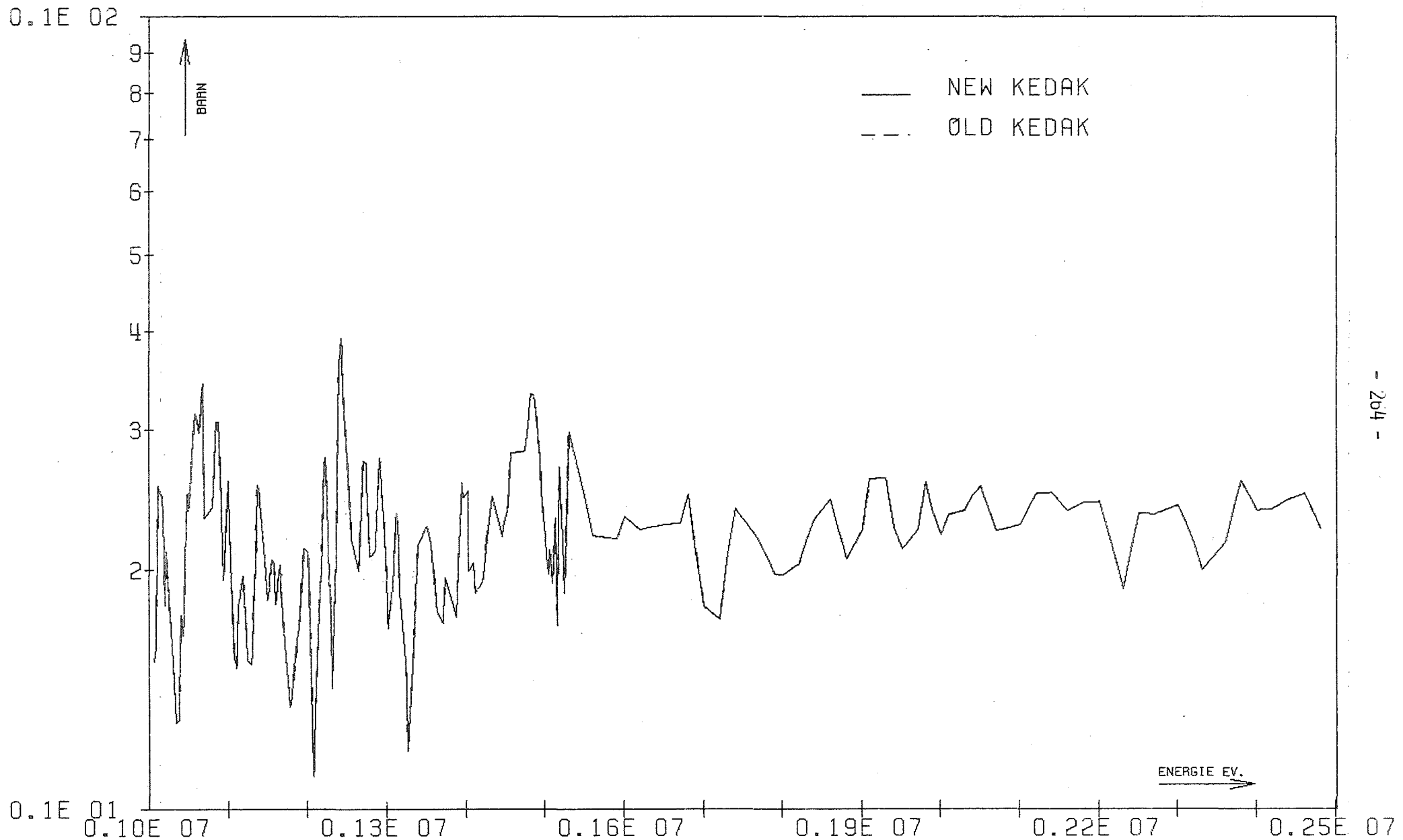


FIG. 41 FE SGTR INR901F2 05.08 17.56.

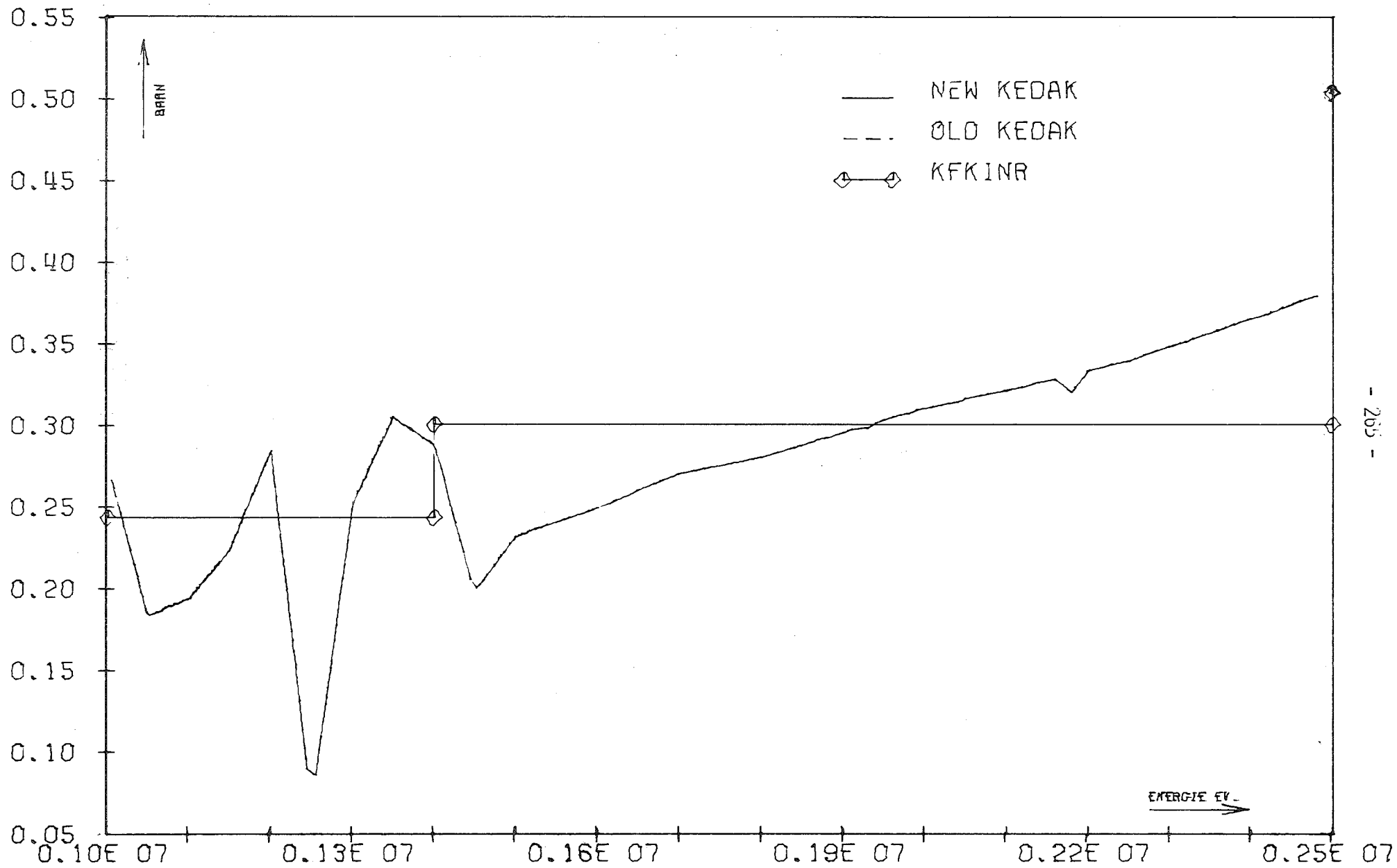
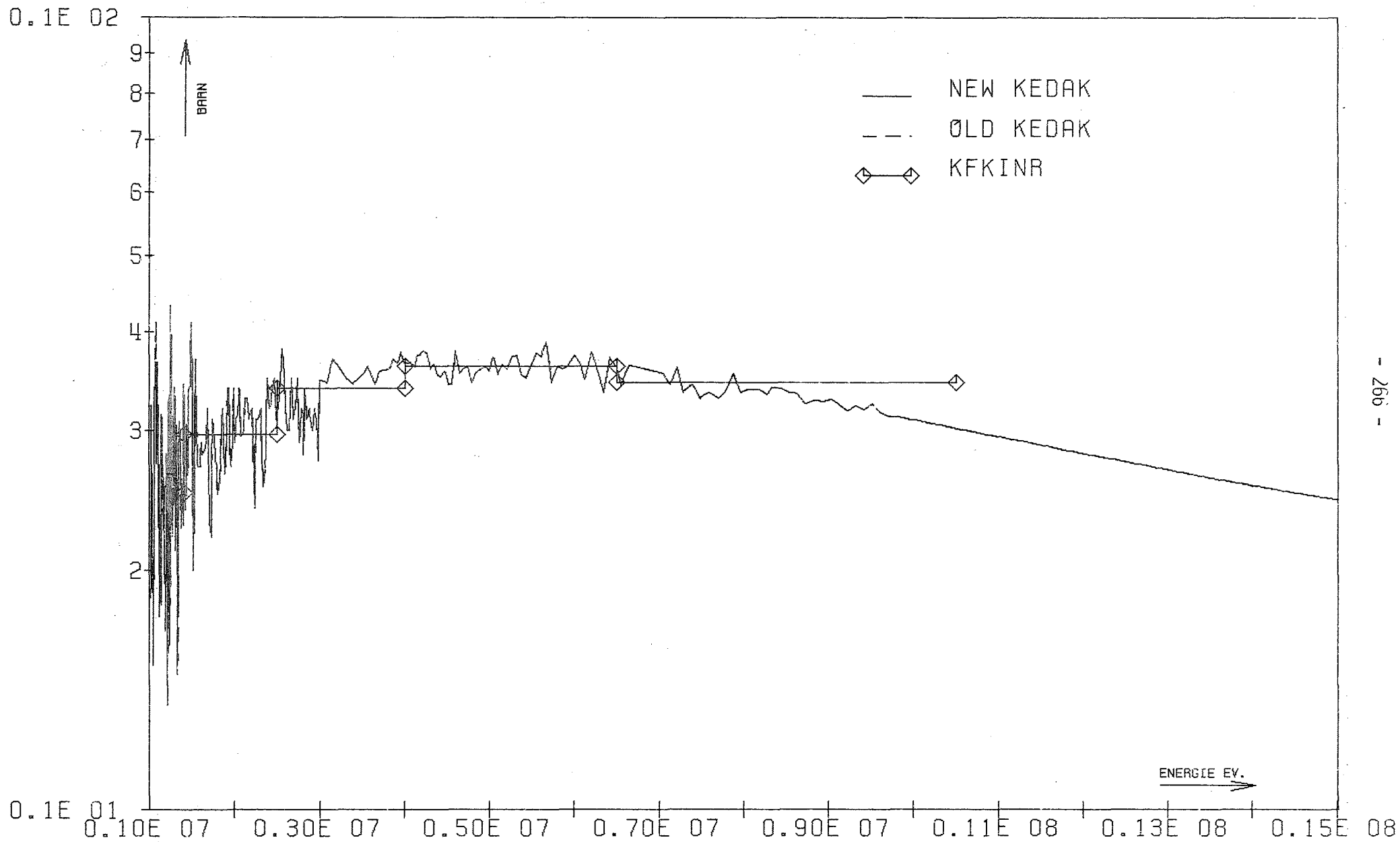


FIG. 42 FE MUEL

INR901FE 25.01 13.39.



FIG

43

FE

SGT

INR901F2 05.08 17.56.

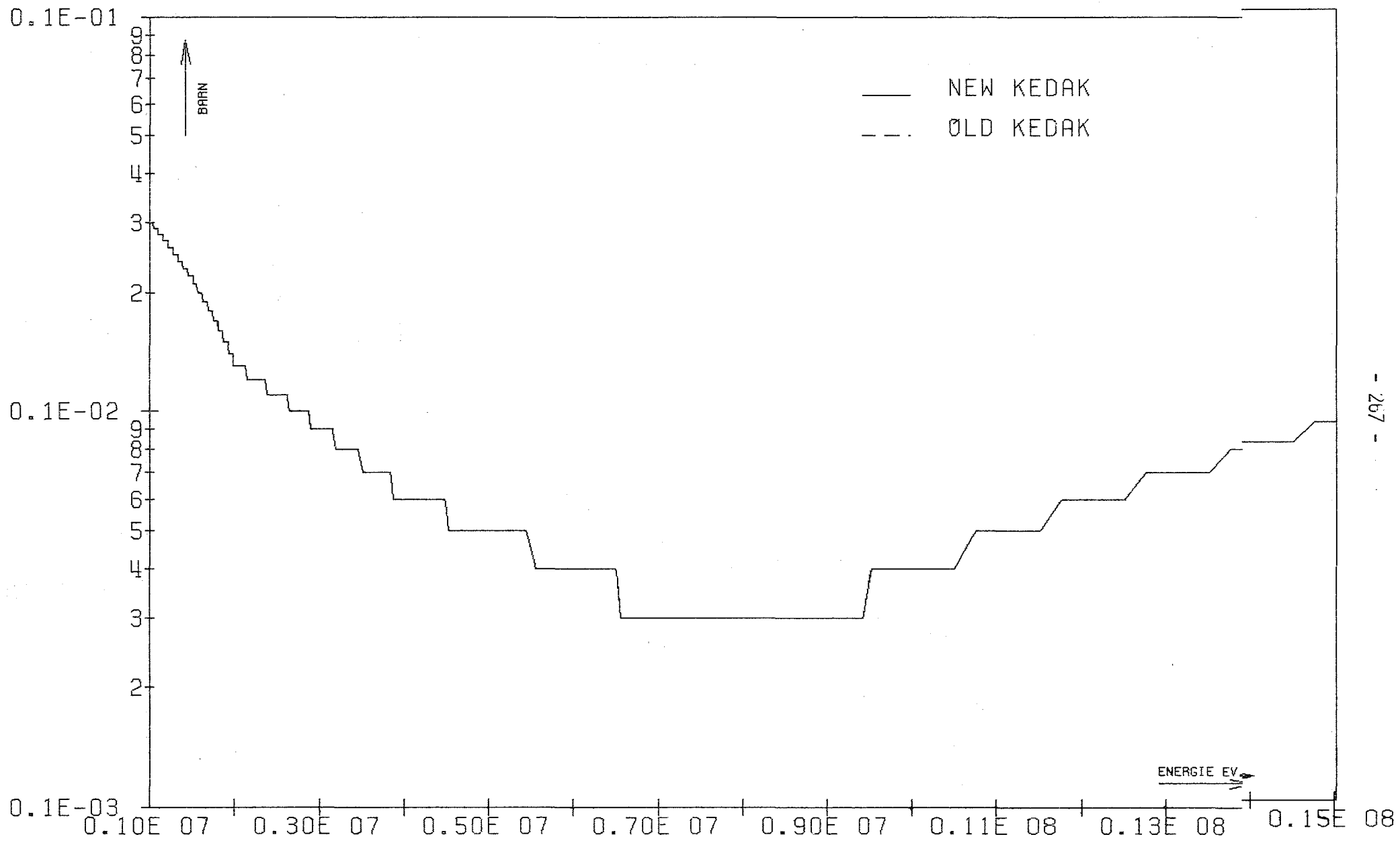


FIG. 44 FE SGG INR901F4 07.08 16.23.

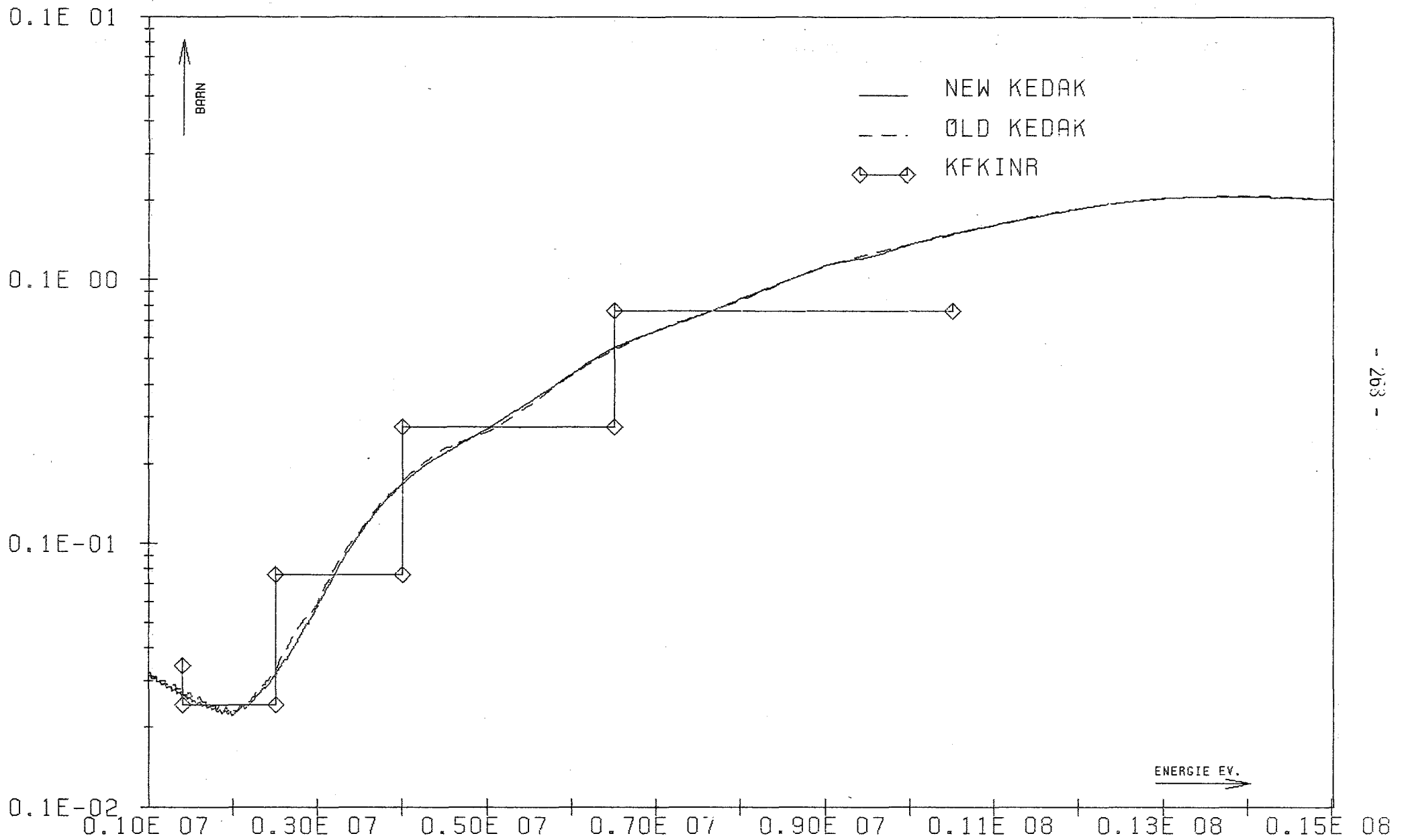
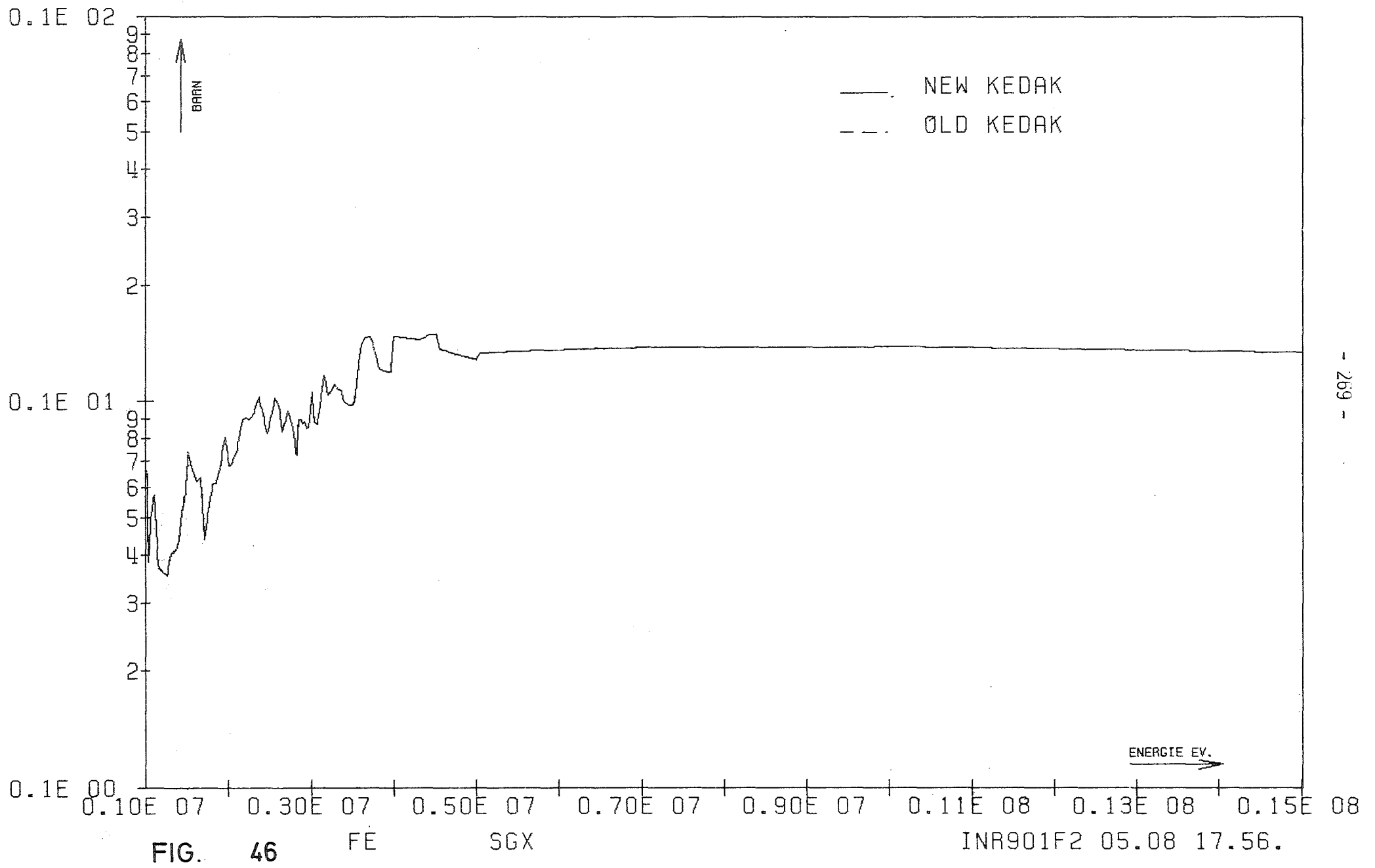


FIG. 45 FE SGA

INR901F4 07.08 16.23.



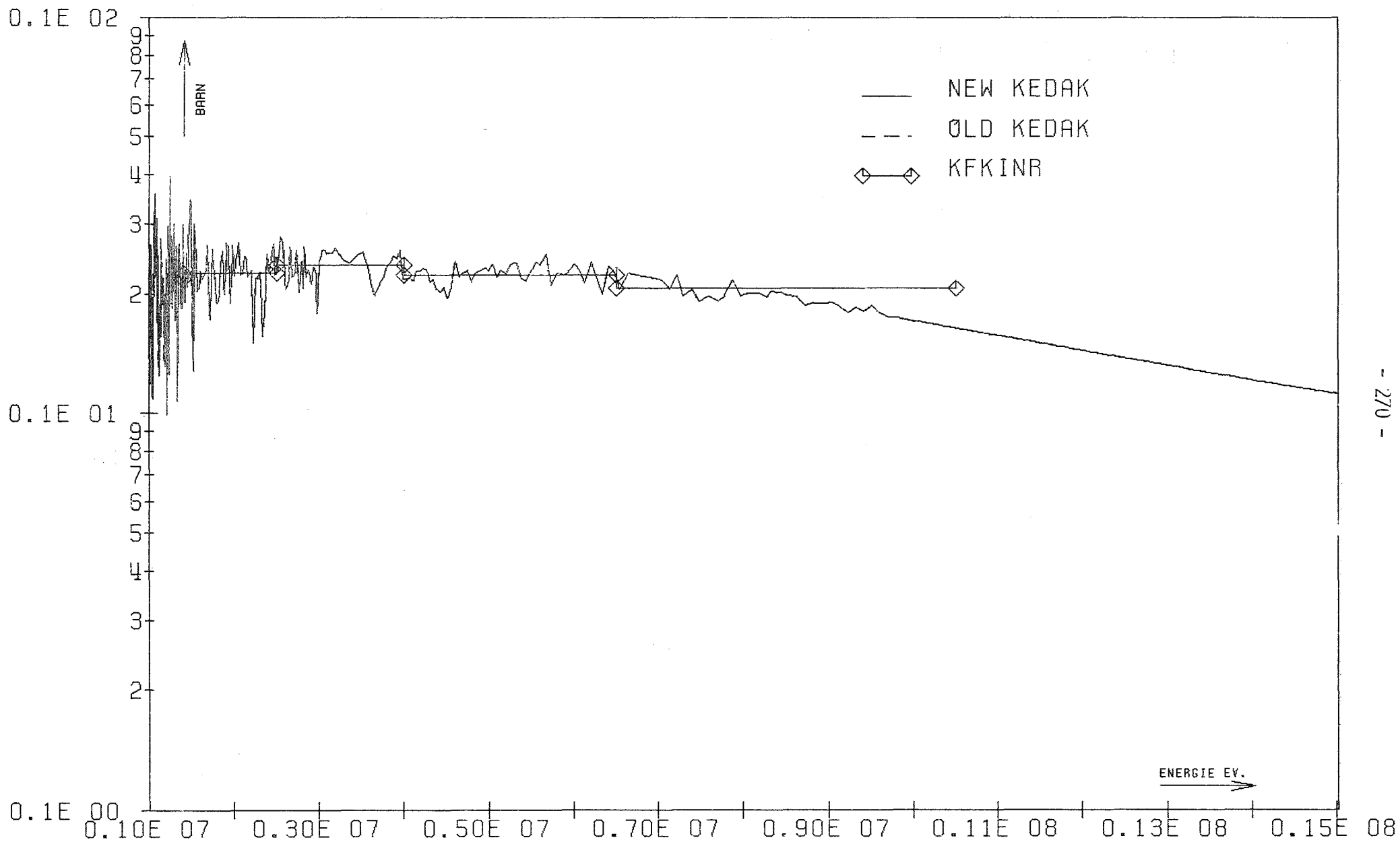


FIG. 47

FE

SGN

INR901F2 05.08 17.56.

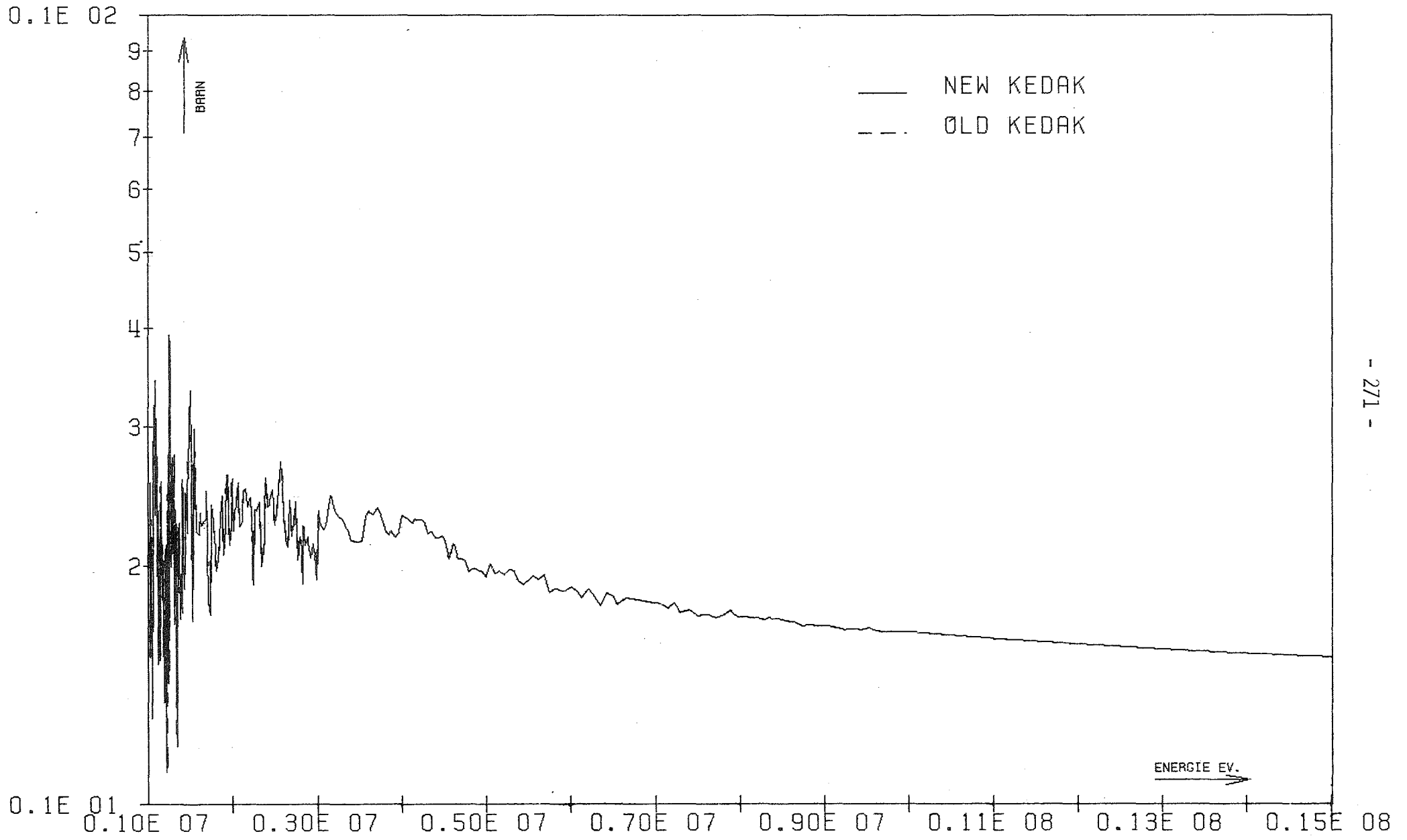


FIG. 48

FE SGTR

INR901F2 05.08 17.56.

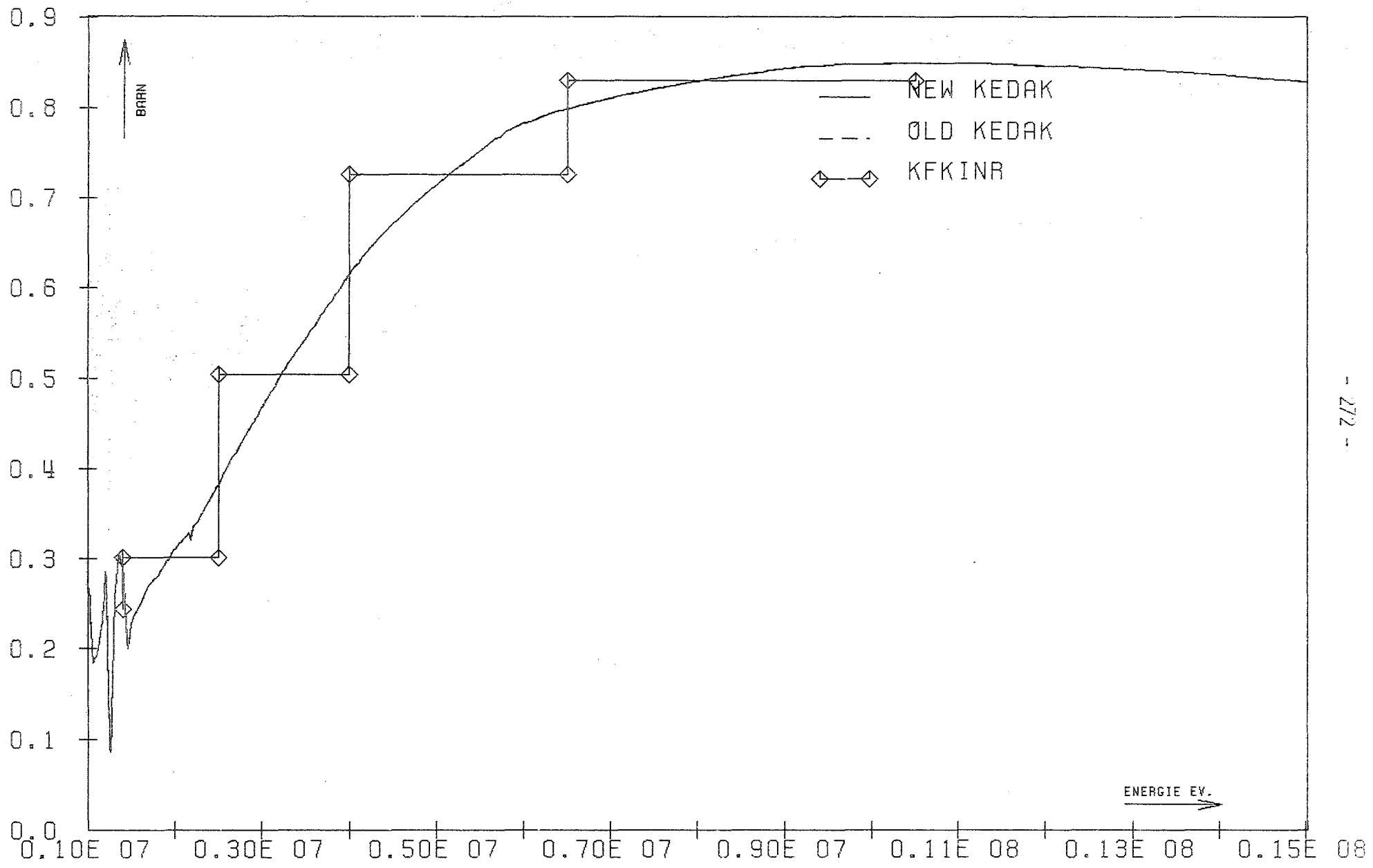


FIG. 49

FE MUEL

INR901F2 05.08 17.56.

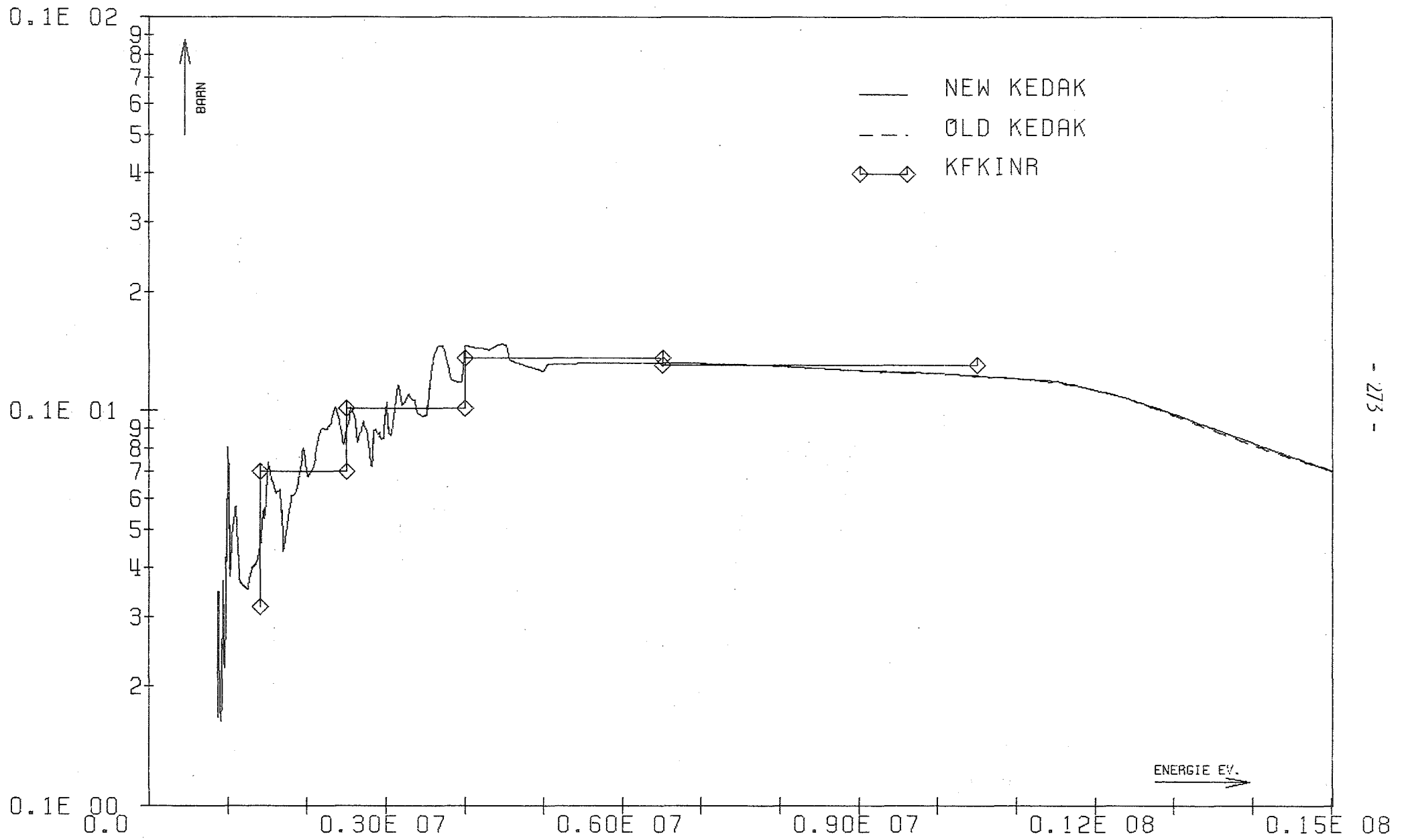


FIG. 50 FE SGI

INR901F4 05.08 18.30.

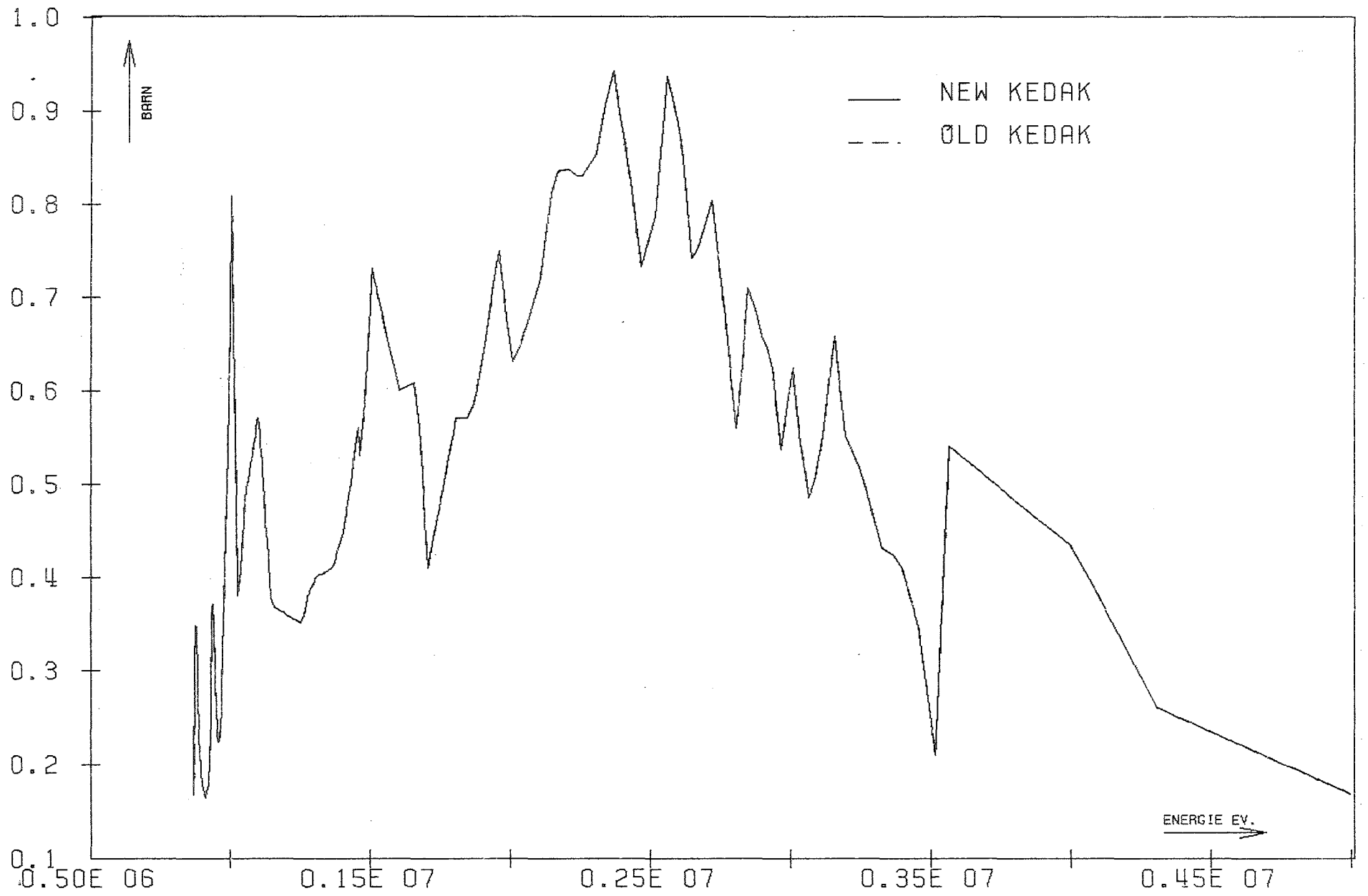


FIG. 51 FE SGIZ 0.845D+06 INR901F4 05.08 18.31.

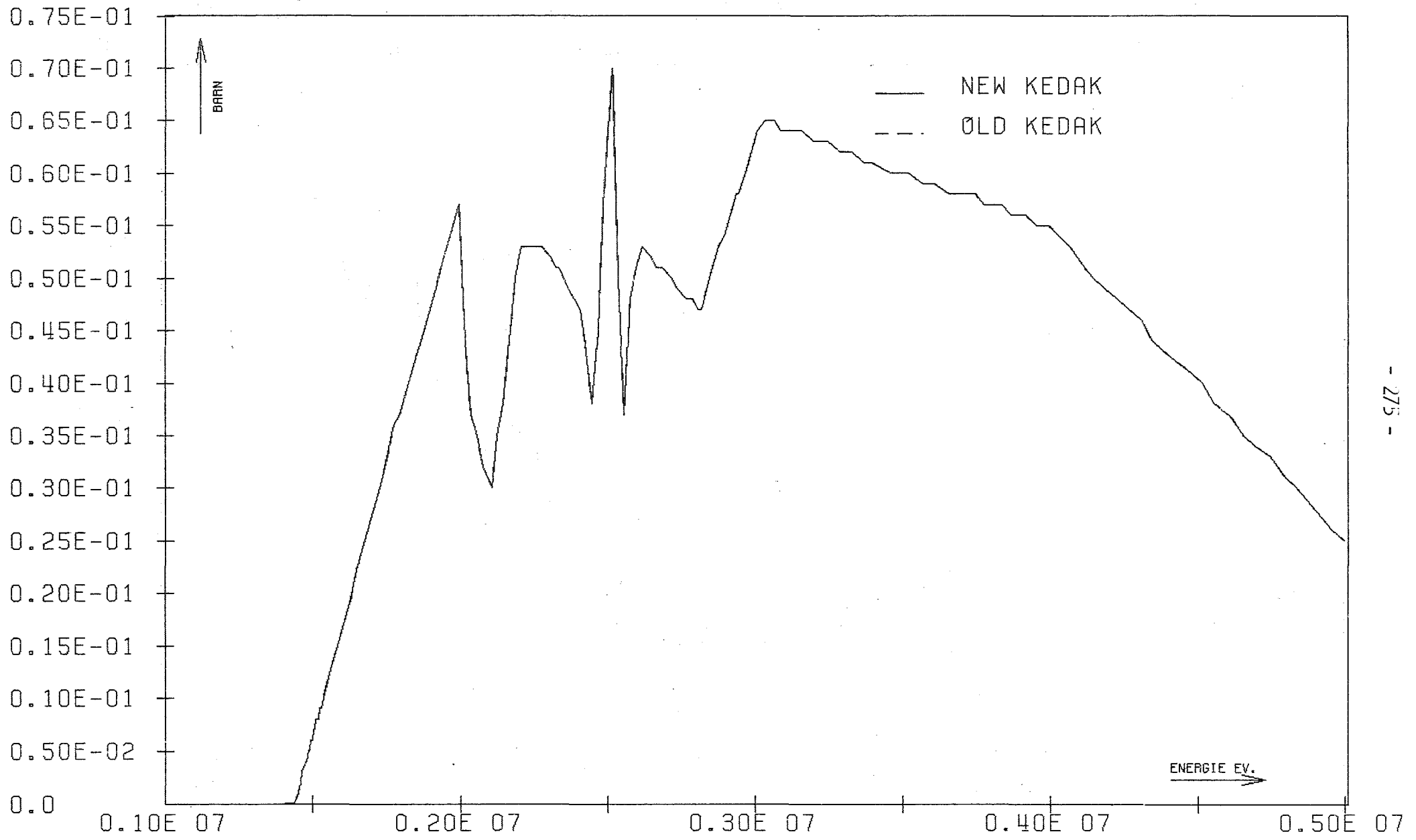


FIG. 52

FE

SGIZ

0.141D+07

INR901F4

05.08

18.31.

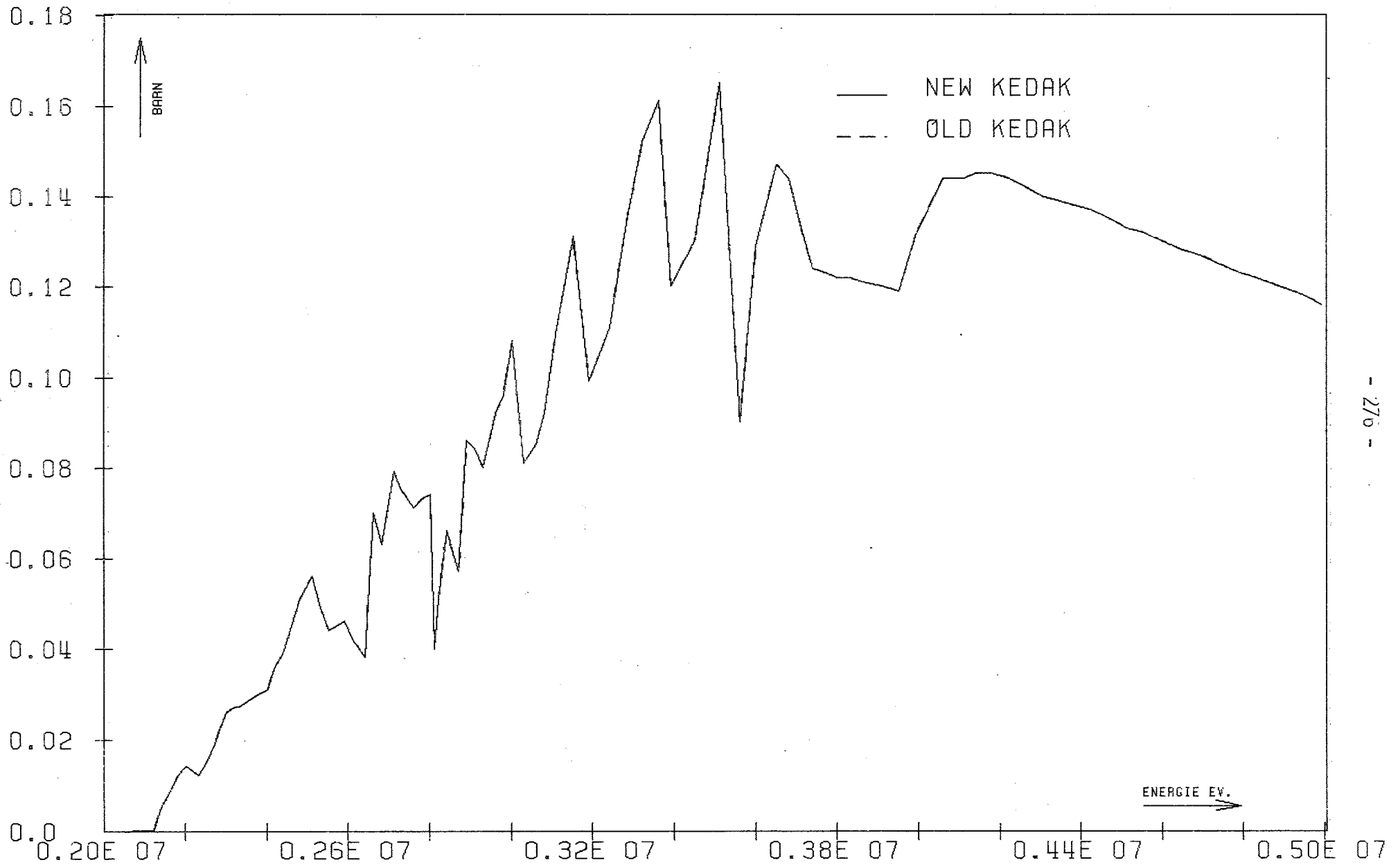


FIG. 53 FE SGIZ 0.208D+07 INR901F4 05.08 18.31.

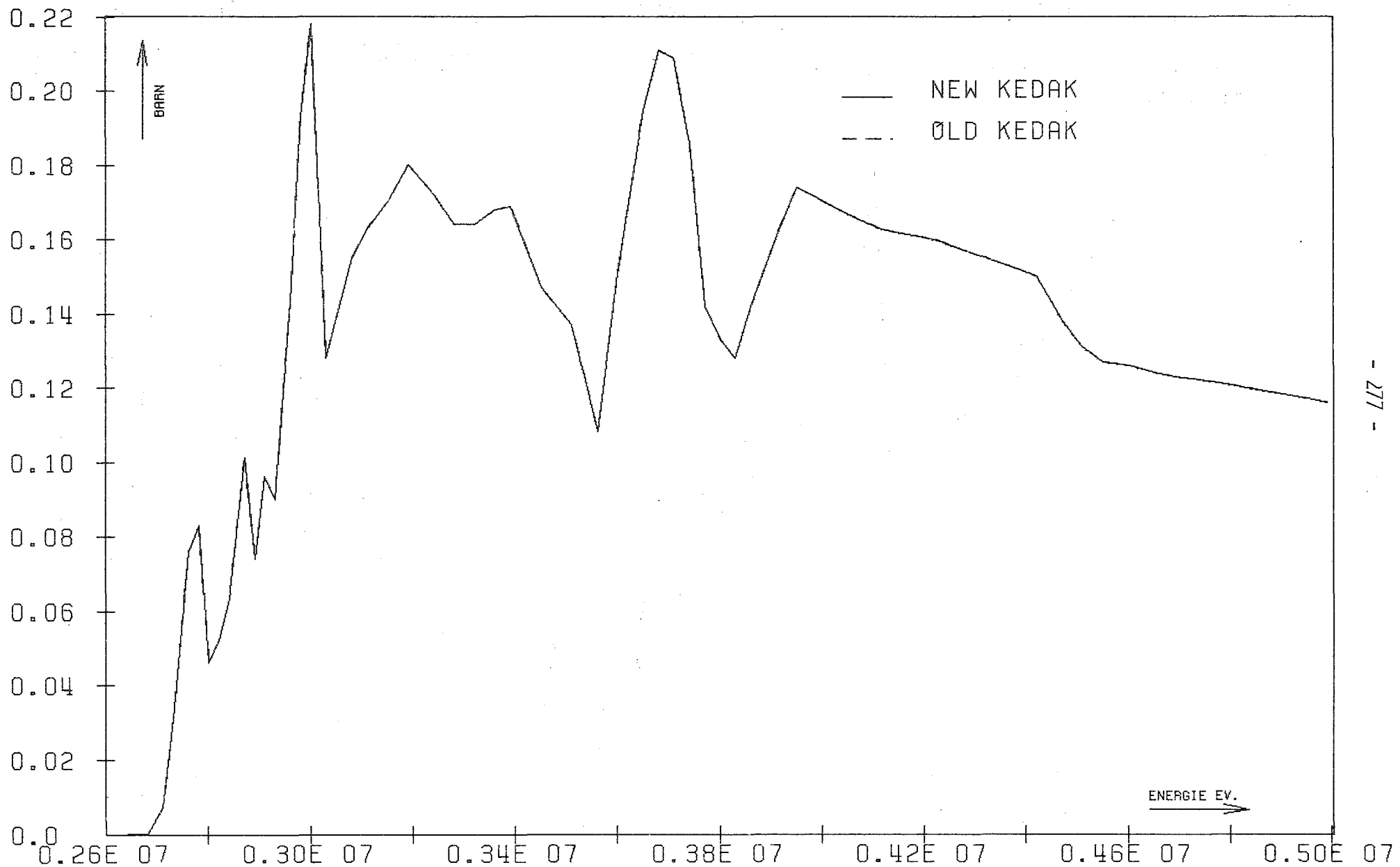


FIG. 54

FE

SGIZ

0.266D+07

INR901F4 05.08 18.31.

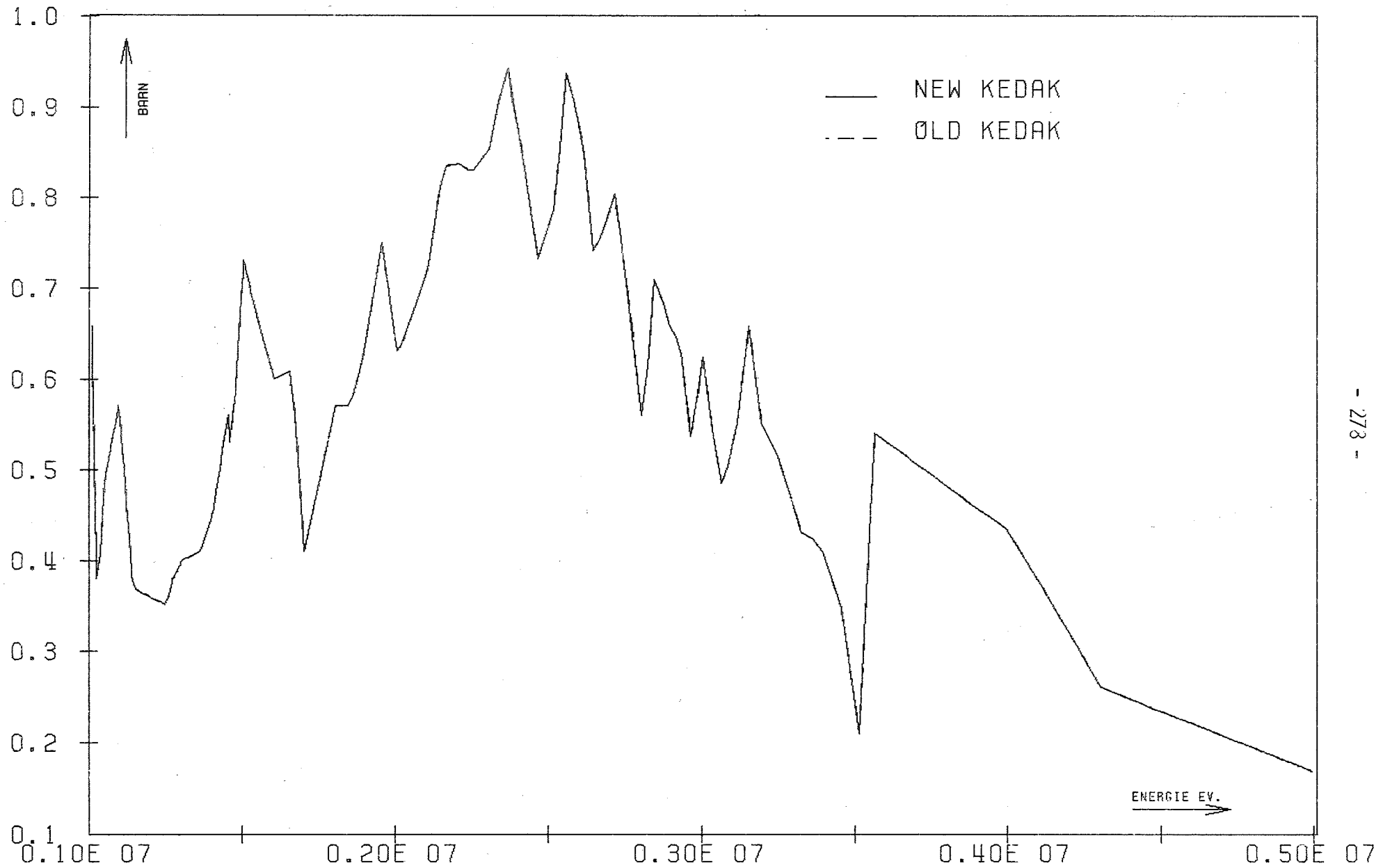


FIG. 55 FE SGIZ 0.2940+01 INR901F4 05.08 18.31.

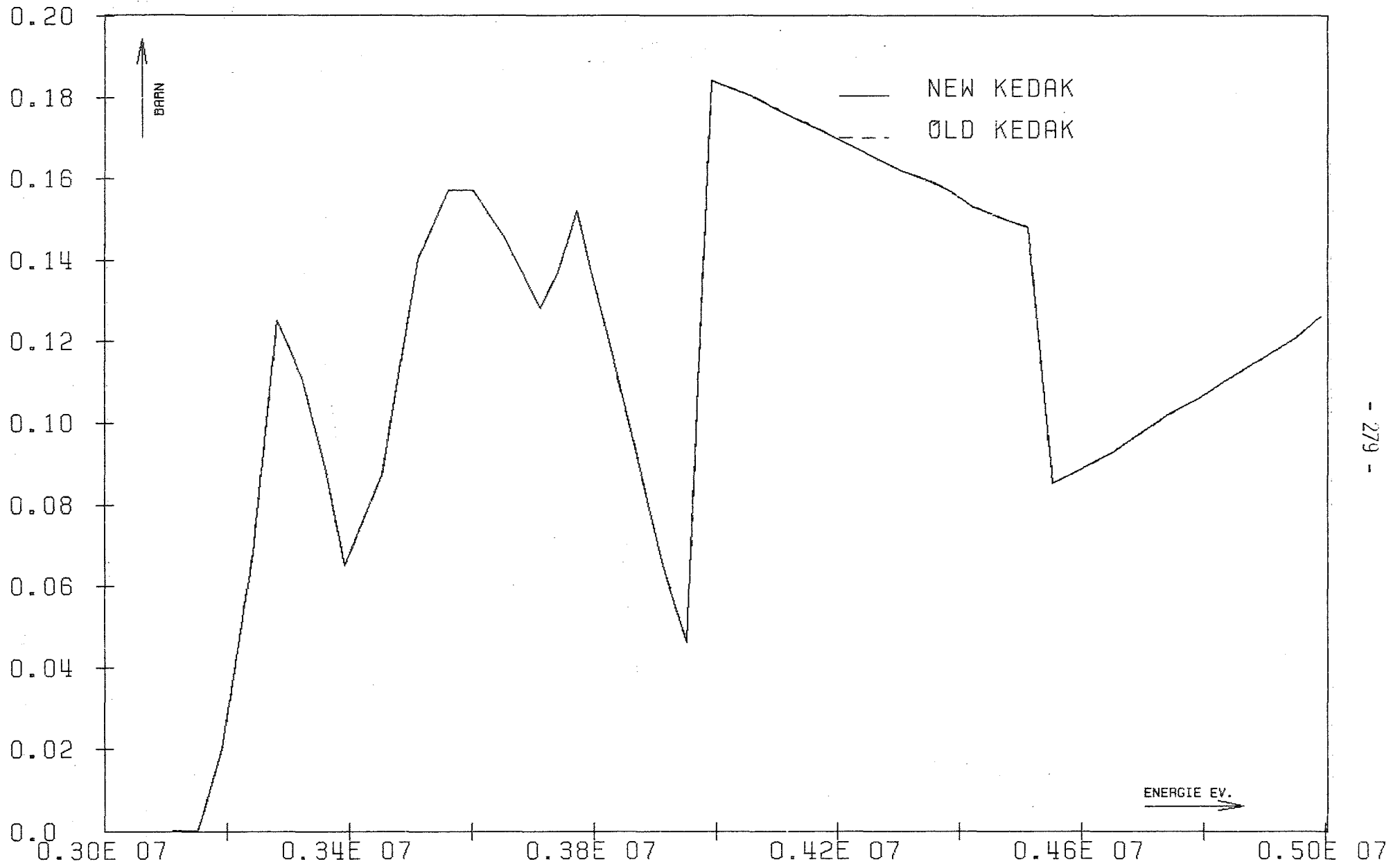


FIG. 56 FE SGIZ 0.3120+07 INR901F4 05.08 18.31.

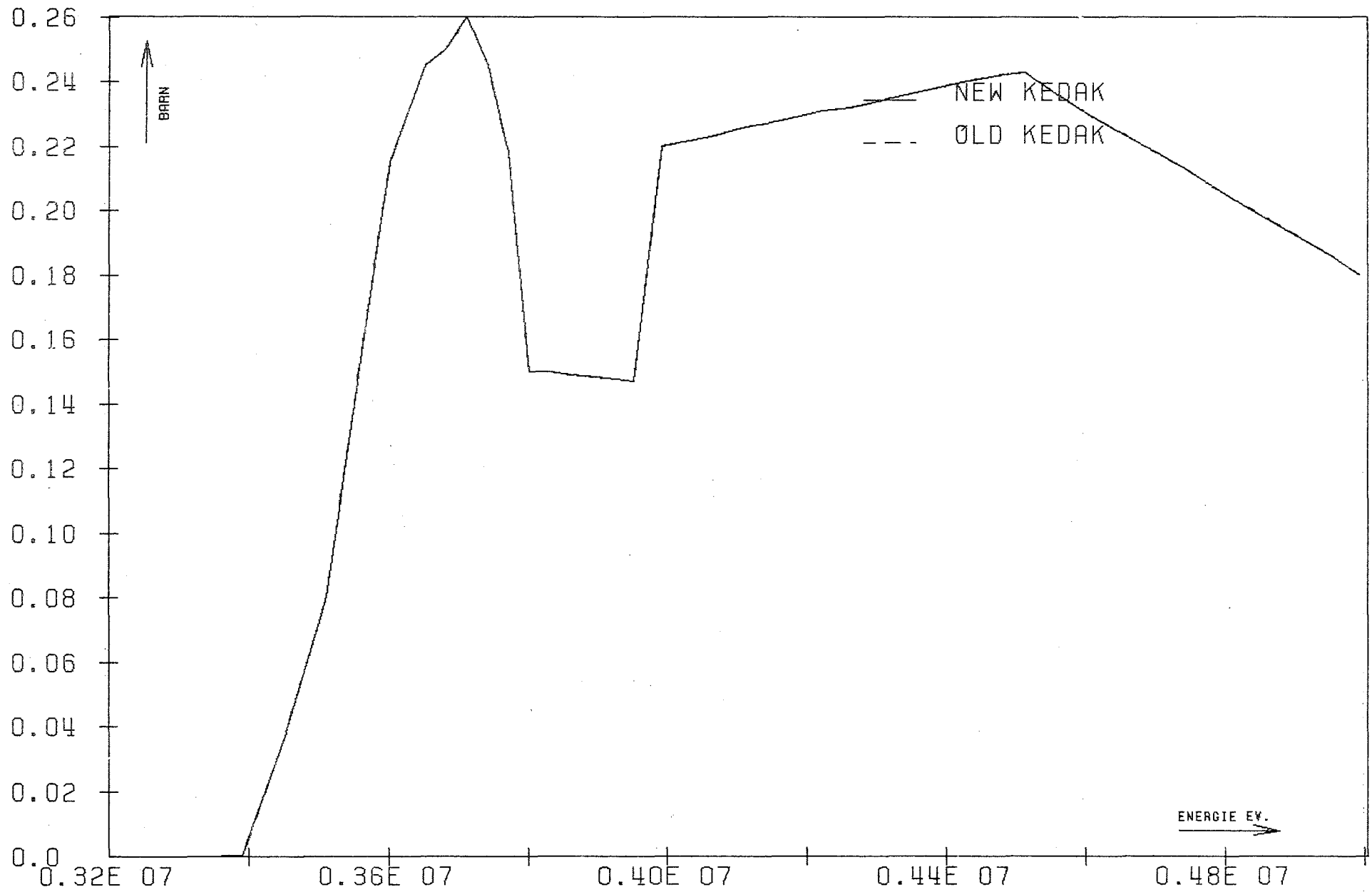


FIG. 57 FE SGIZ 0.337D+07 INR901F4 05.08 18.31.

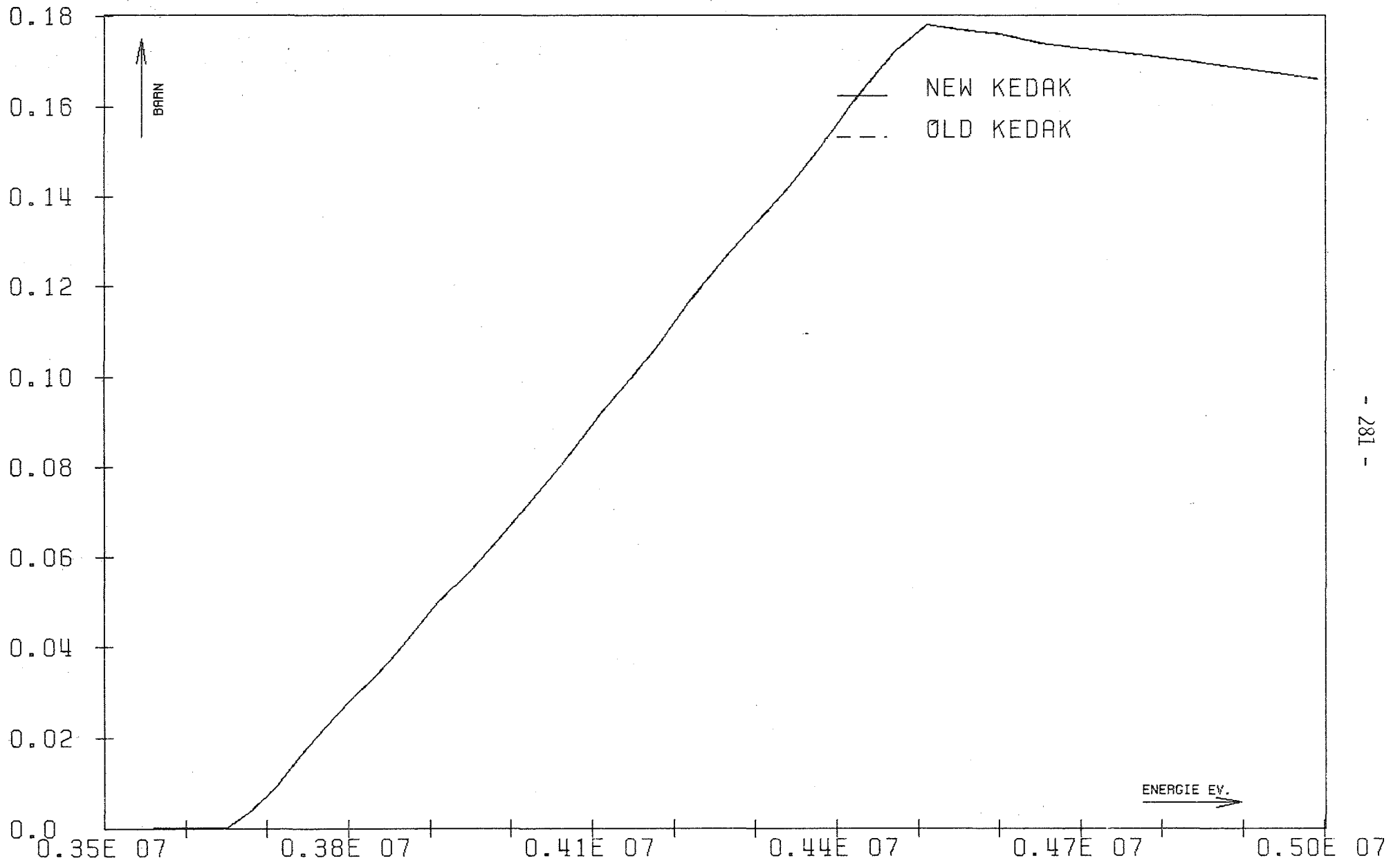


FIG. 58

FE

SGIZ

0.3600+07

INR901F4 05.08 18.31.

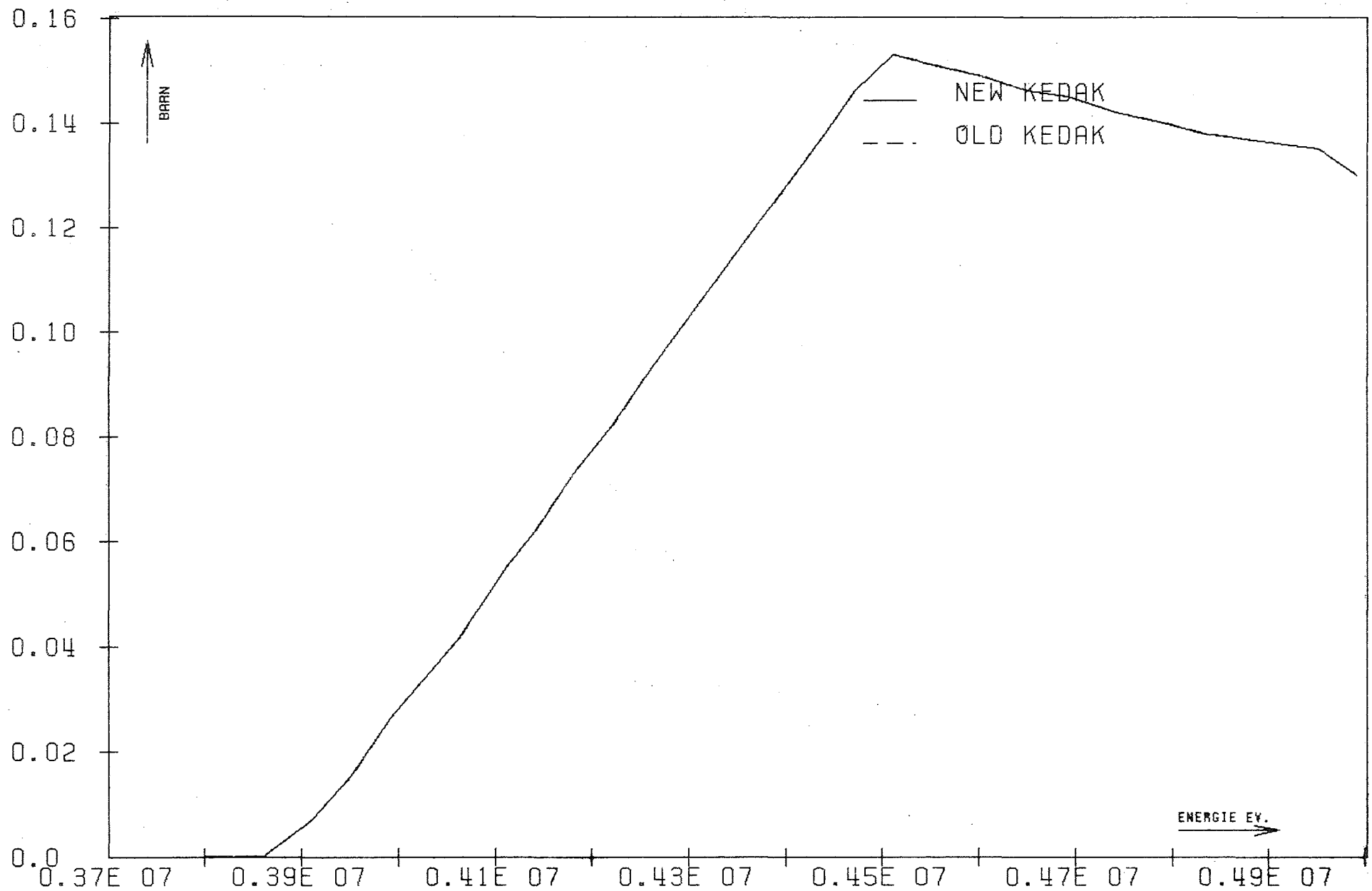


FIG. 59 FE SGIZ 0.383D+07 INR901F4 05.08 18.31.

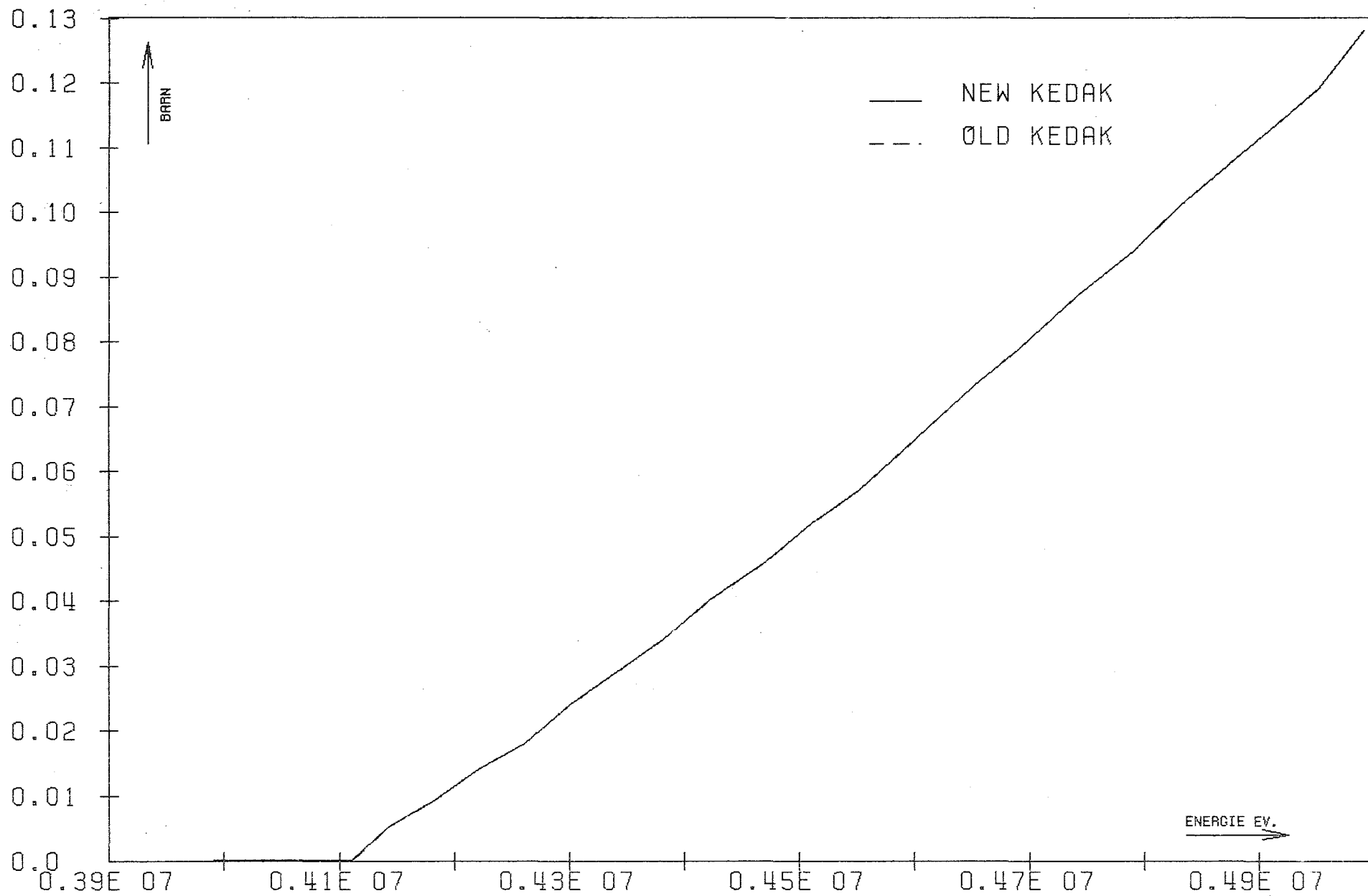


FIG. 60 FE SGIZ 0.4040+07 INR901F4 05.08 18.31.

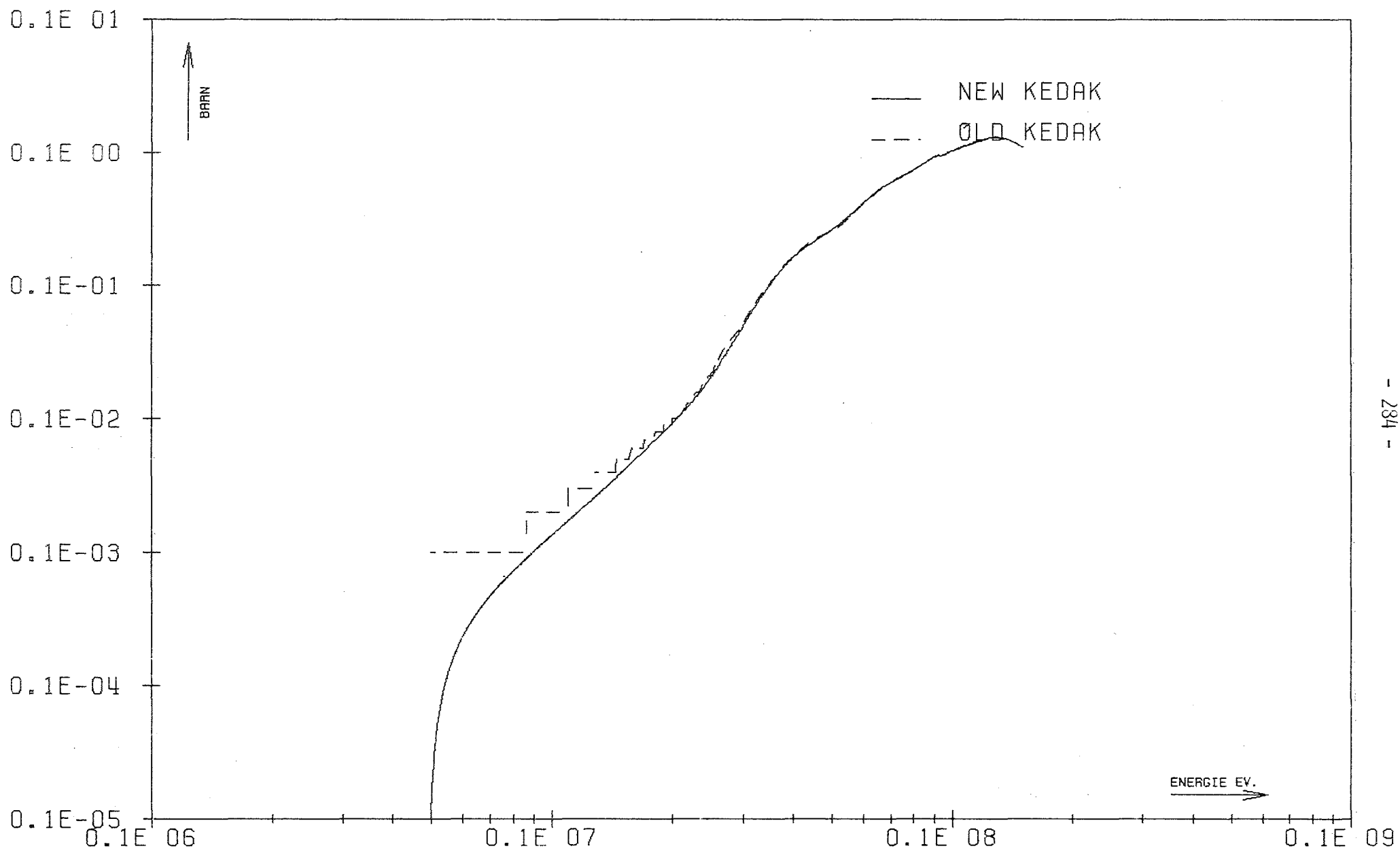


FIG. 61 FE SGP INR901F3 05.08 18.22.

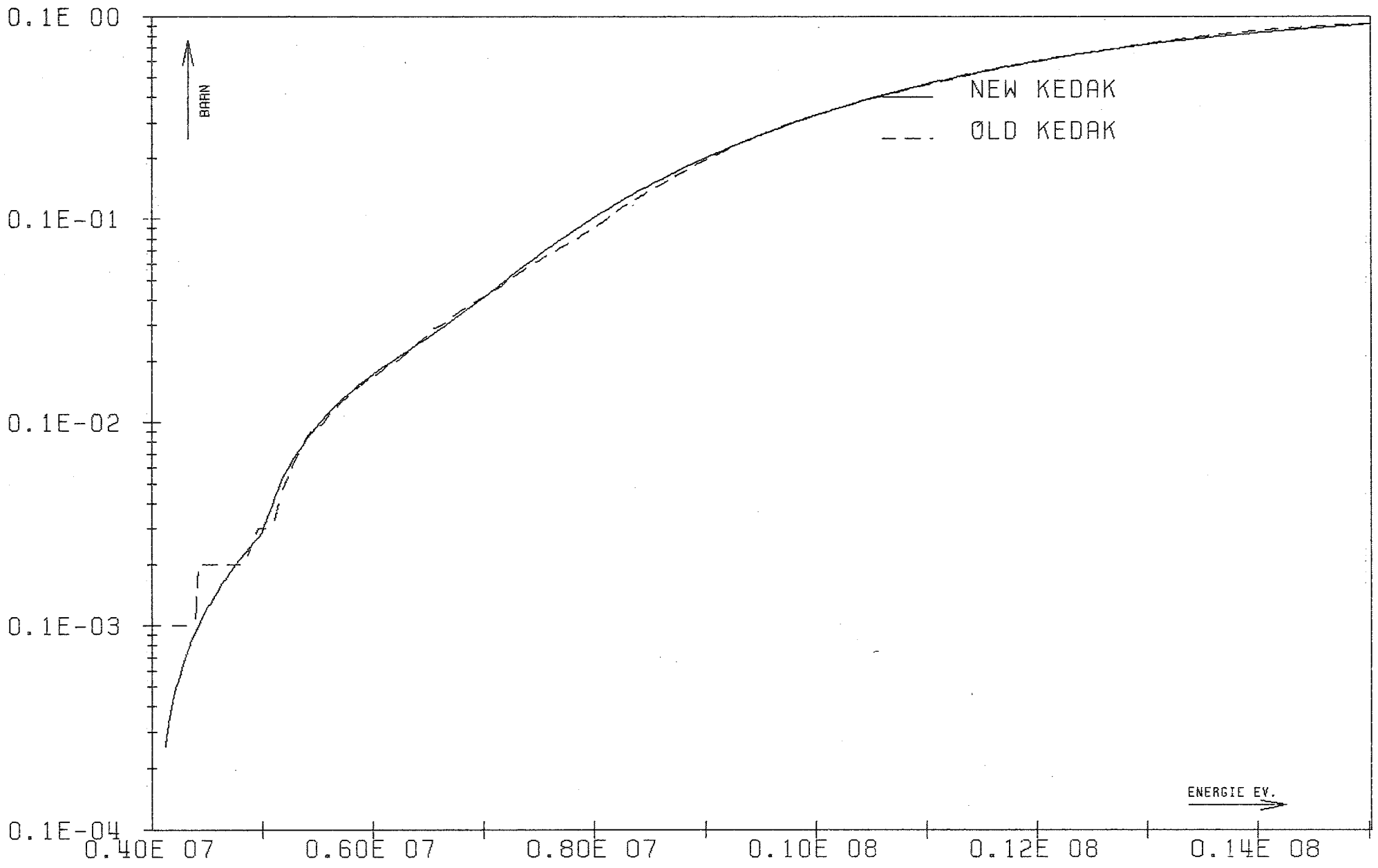


FIG. 62 FE SGALP INR901F3 05.08 18.22.

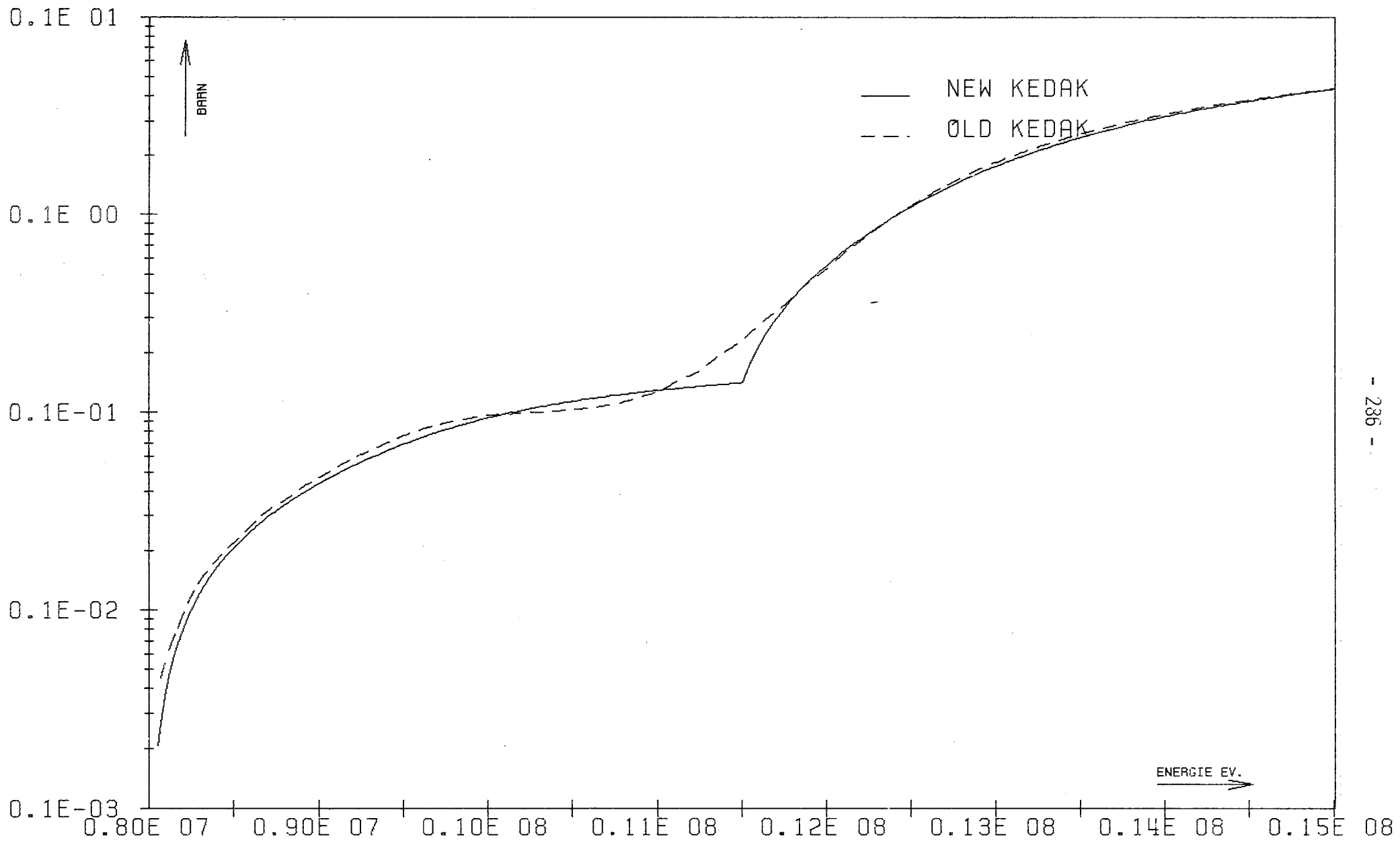
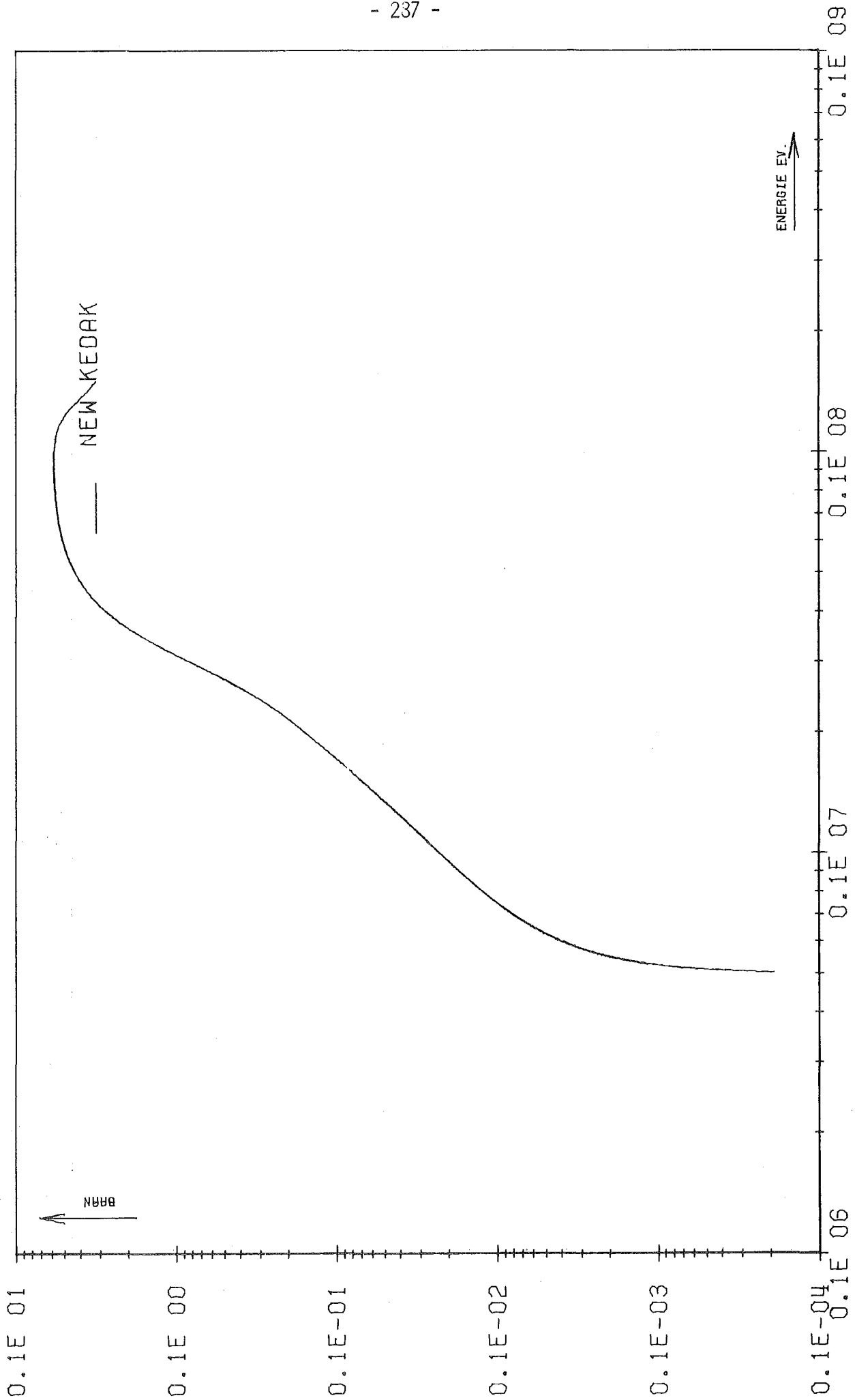


FIG. 63 FE SG2N

INR901F3 05.08 18.22.



INR901FI 29.01 14.31.

FIG. 64 FE 54 SGP

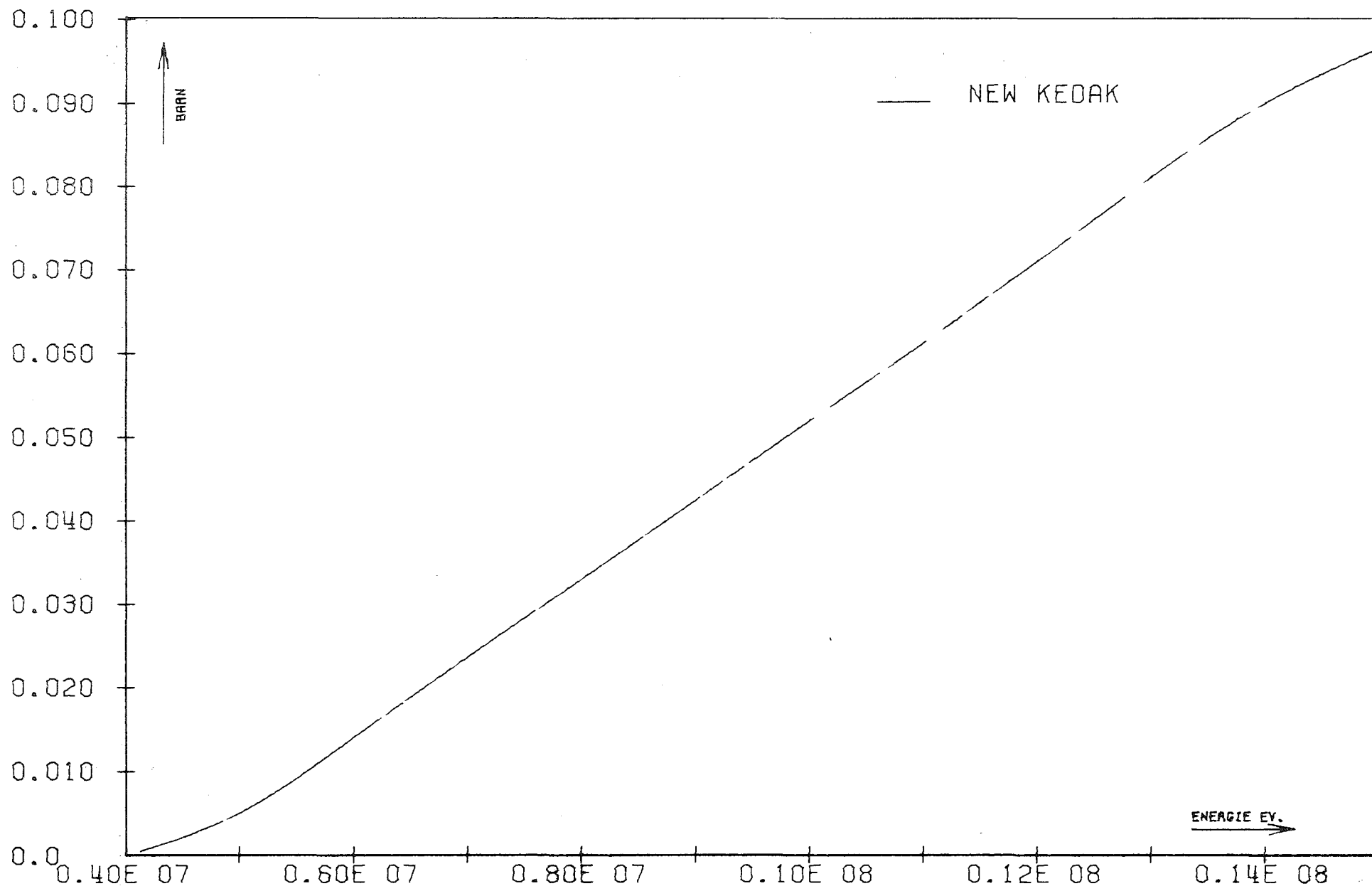


FIG. 65 FE 54 SGALP

INR901FI 29.01 14.31.

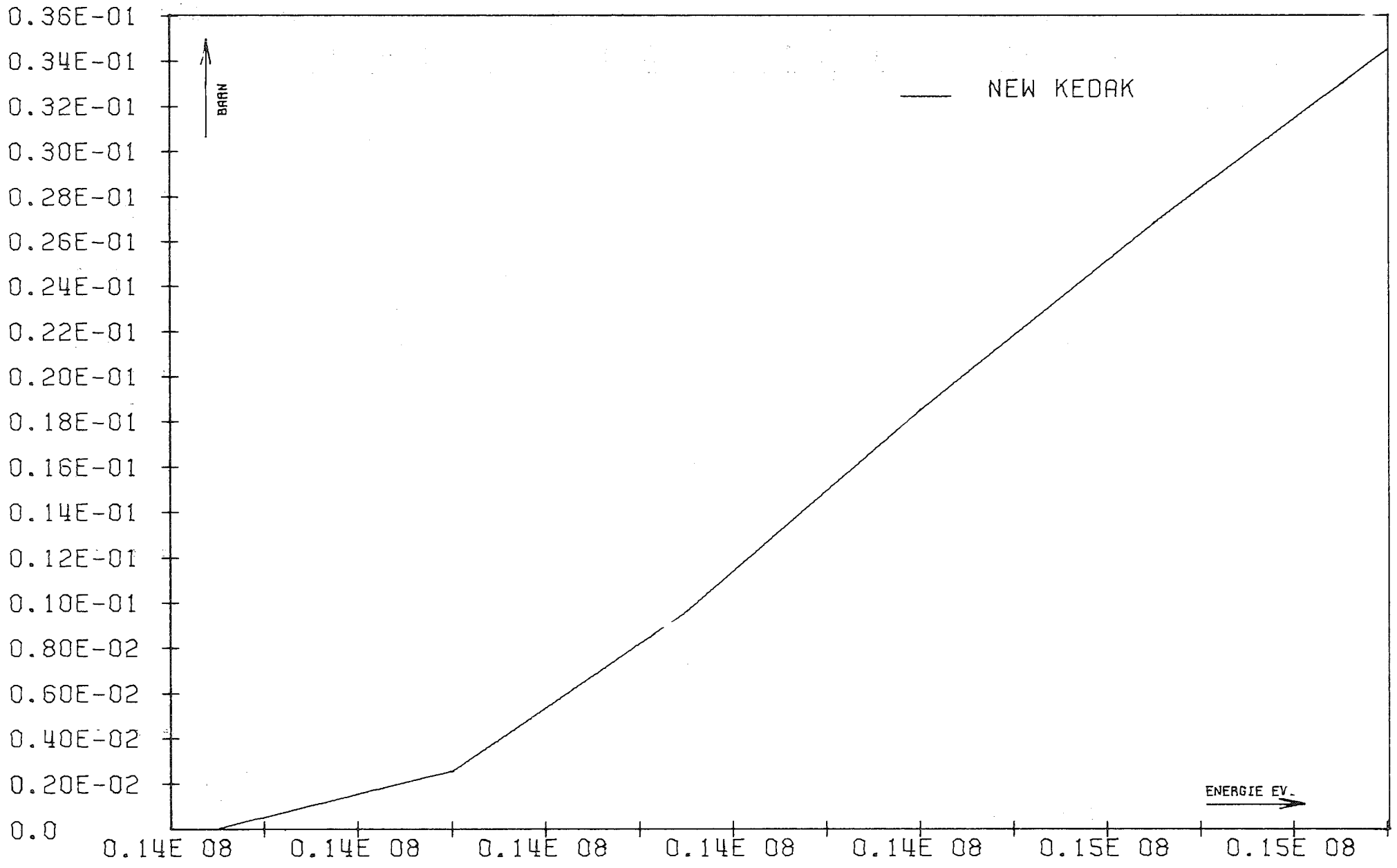


FIG. 66

FE 54 SG2N

INR901FI 29.01 14.31.

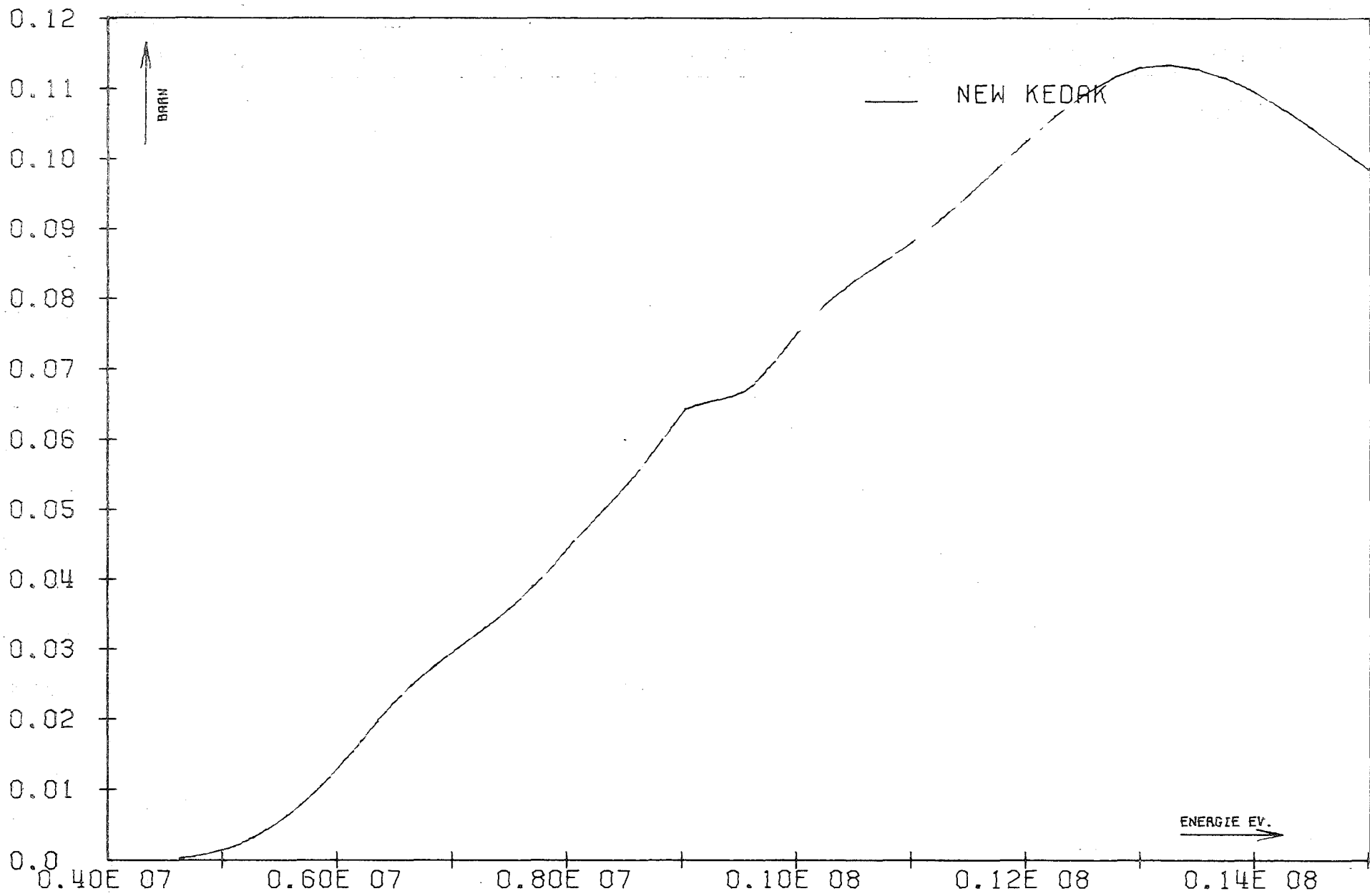


FIG. 67 FE 56 SGP INR901FI 29.01 14.31.

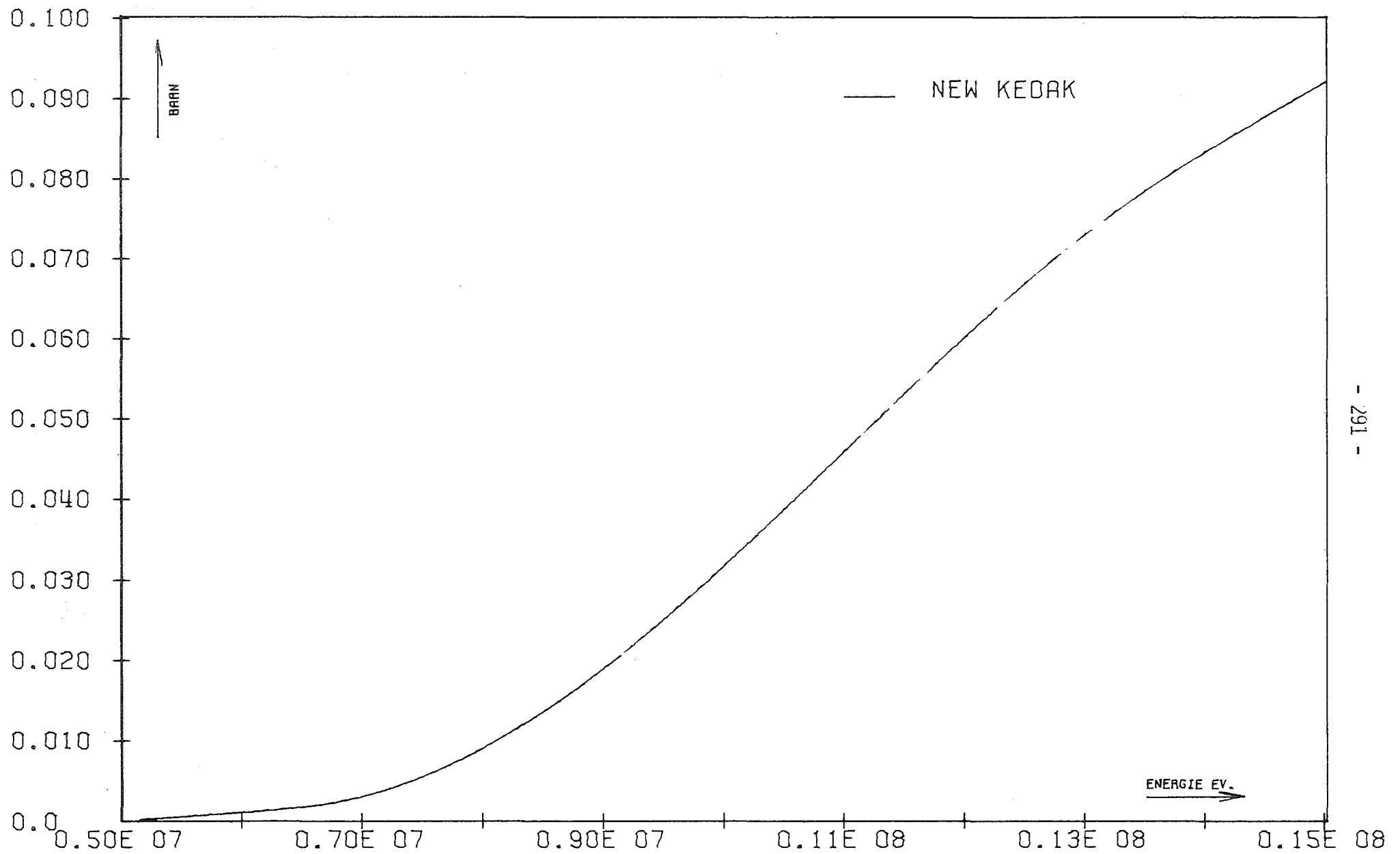


FIG. 68 FE 56 SGALP

INR901FI 29.01 14.31.

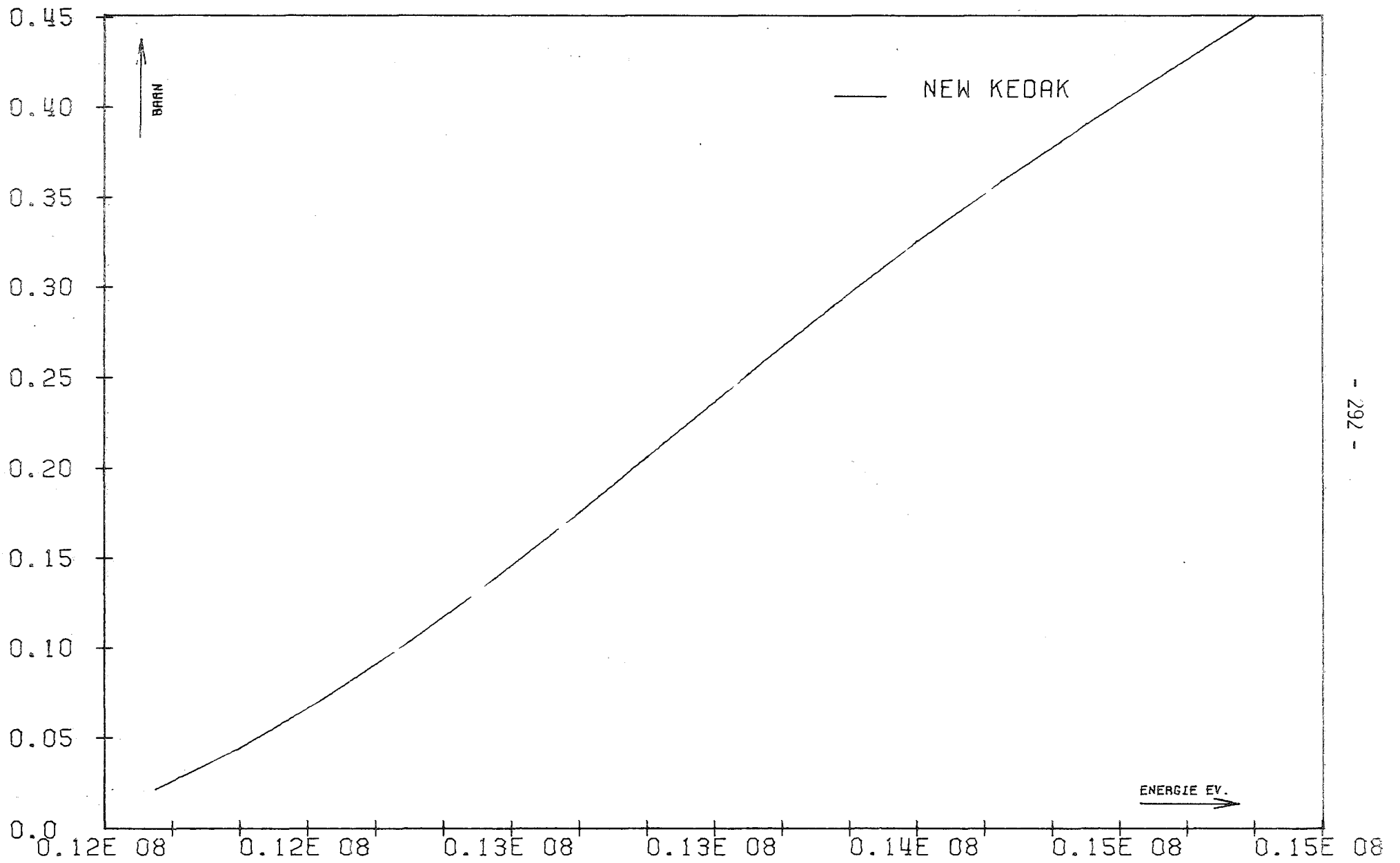


FIG. 69 FE 56 SG2N

INR901FI 29.01 14.31.

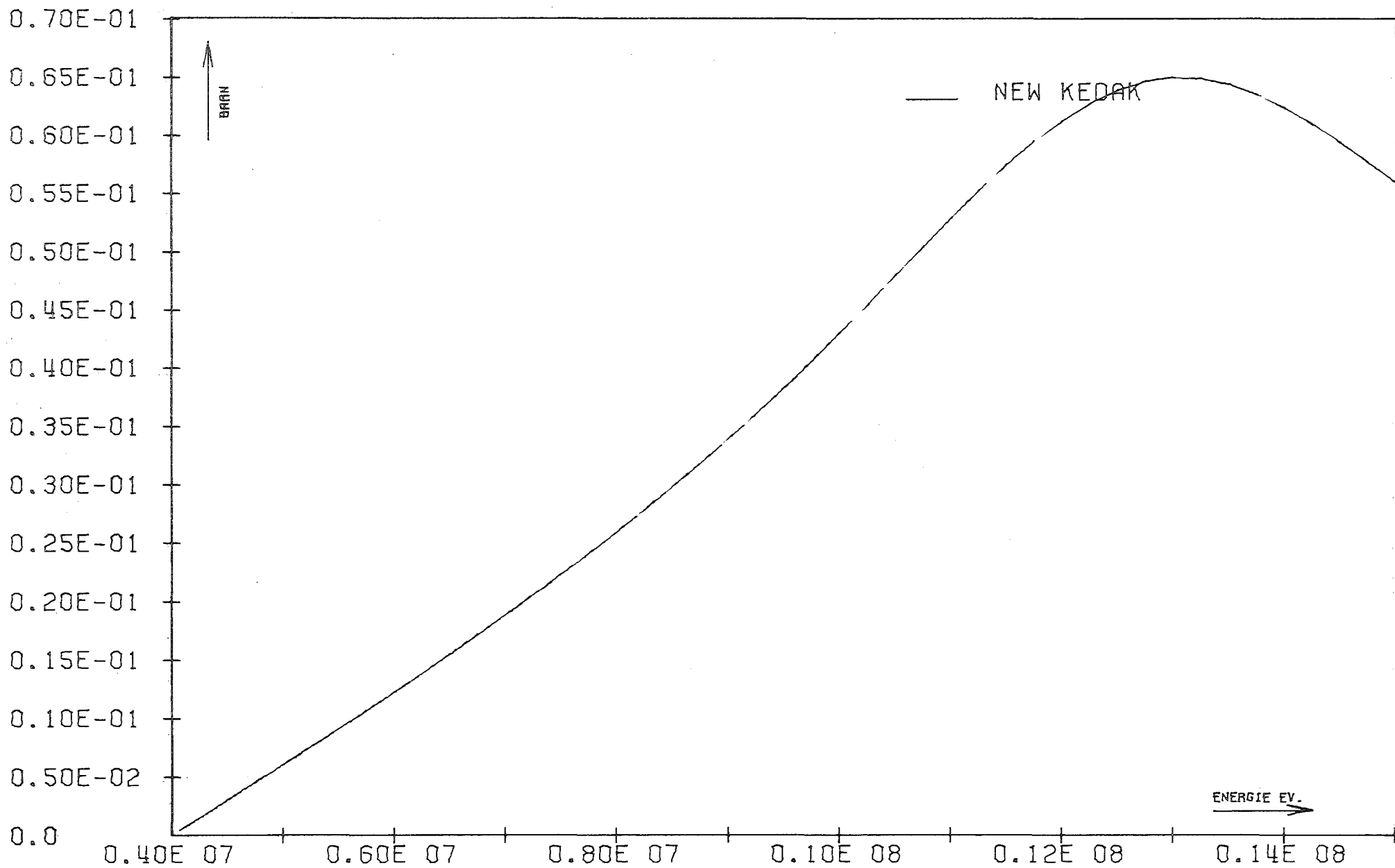


FIG. 70

FE 57

SGP

INR901FI 29.01 14.31.

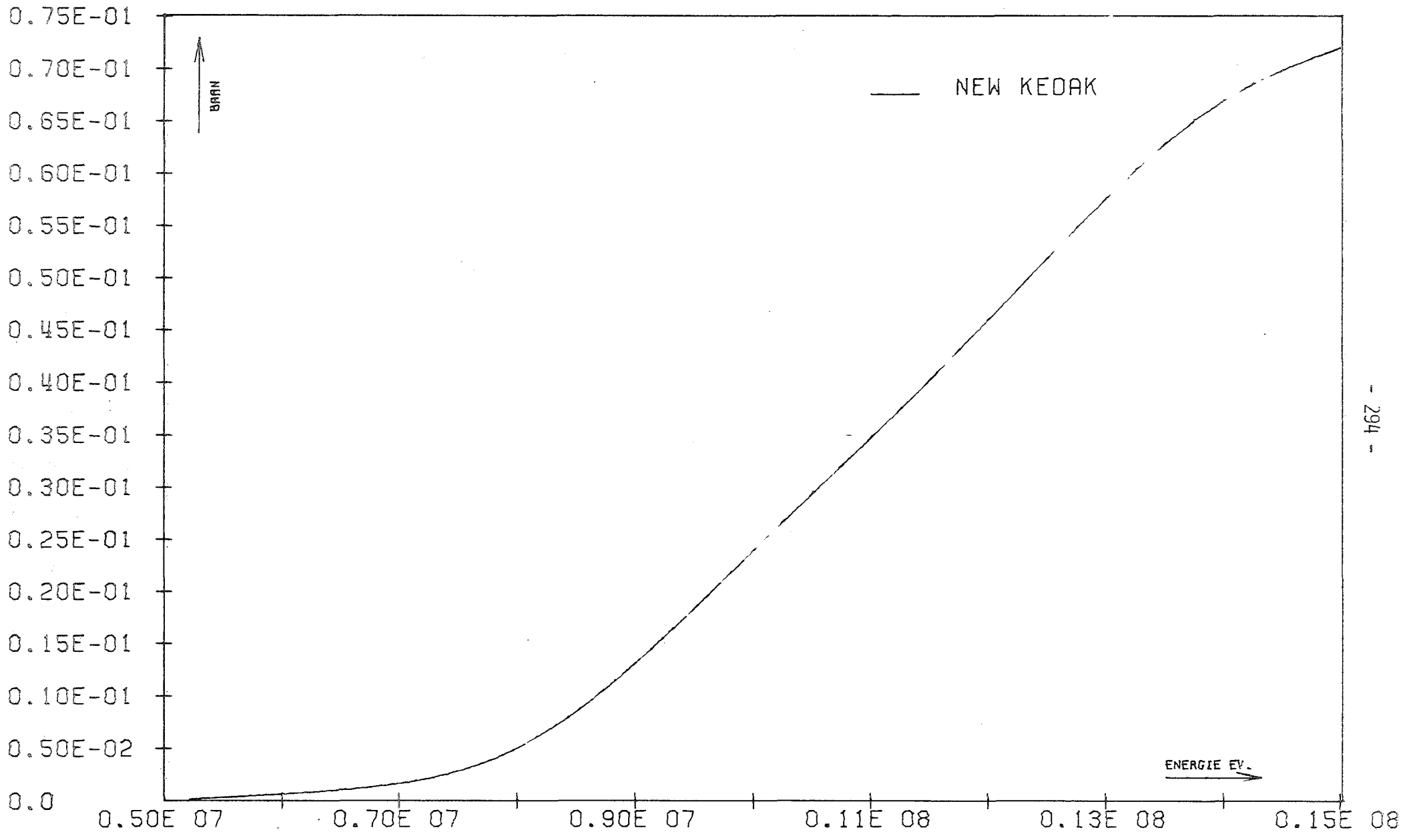


FIG. 71 FE 57 SGALP INR901FI 29.01 14.31.

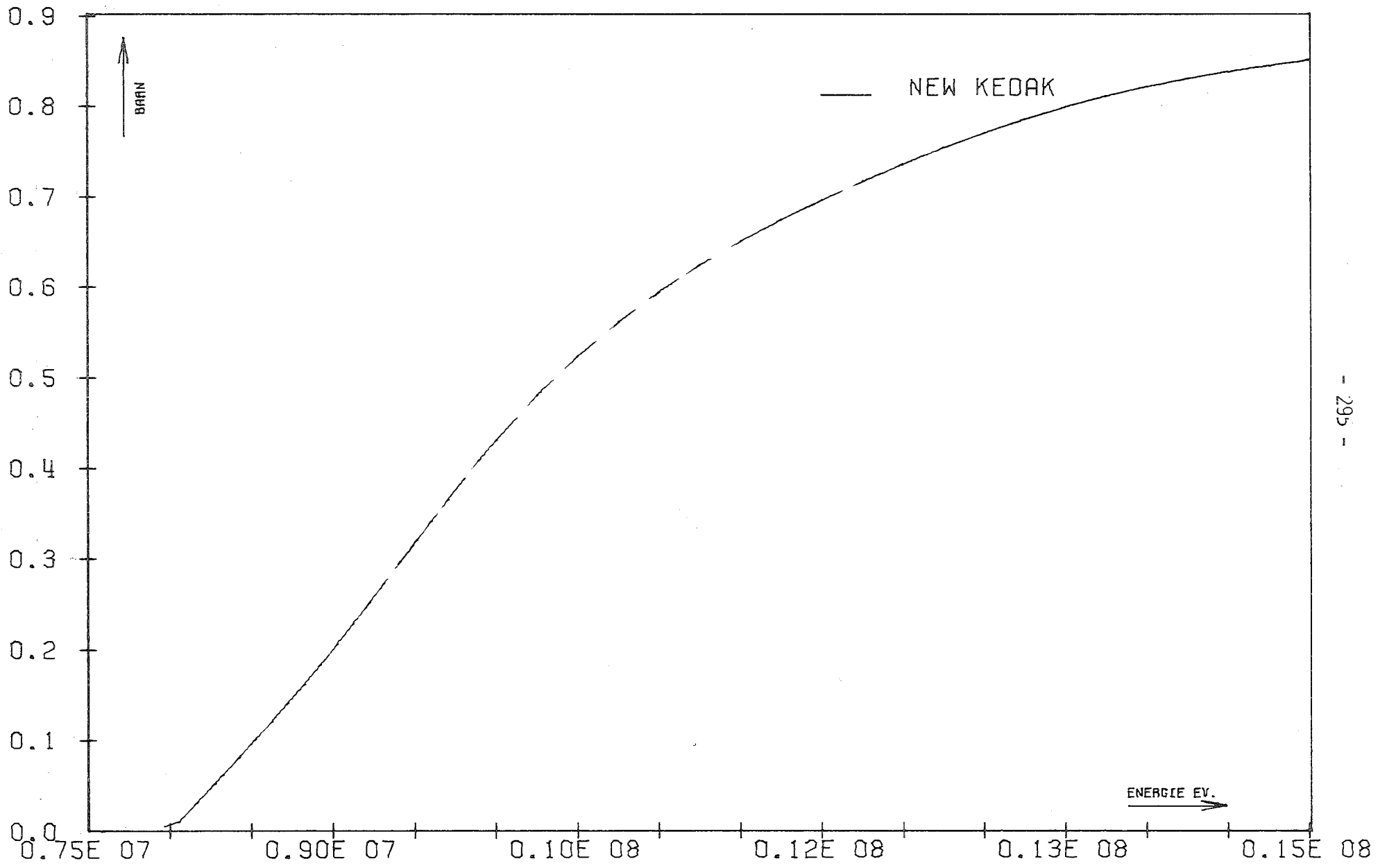


FIG. 72 FE 57 SG2N

INR901FI 29.01 14.31.

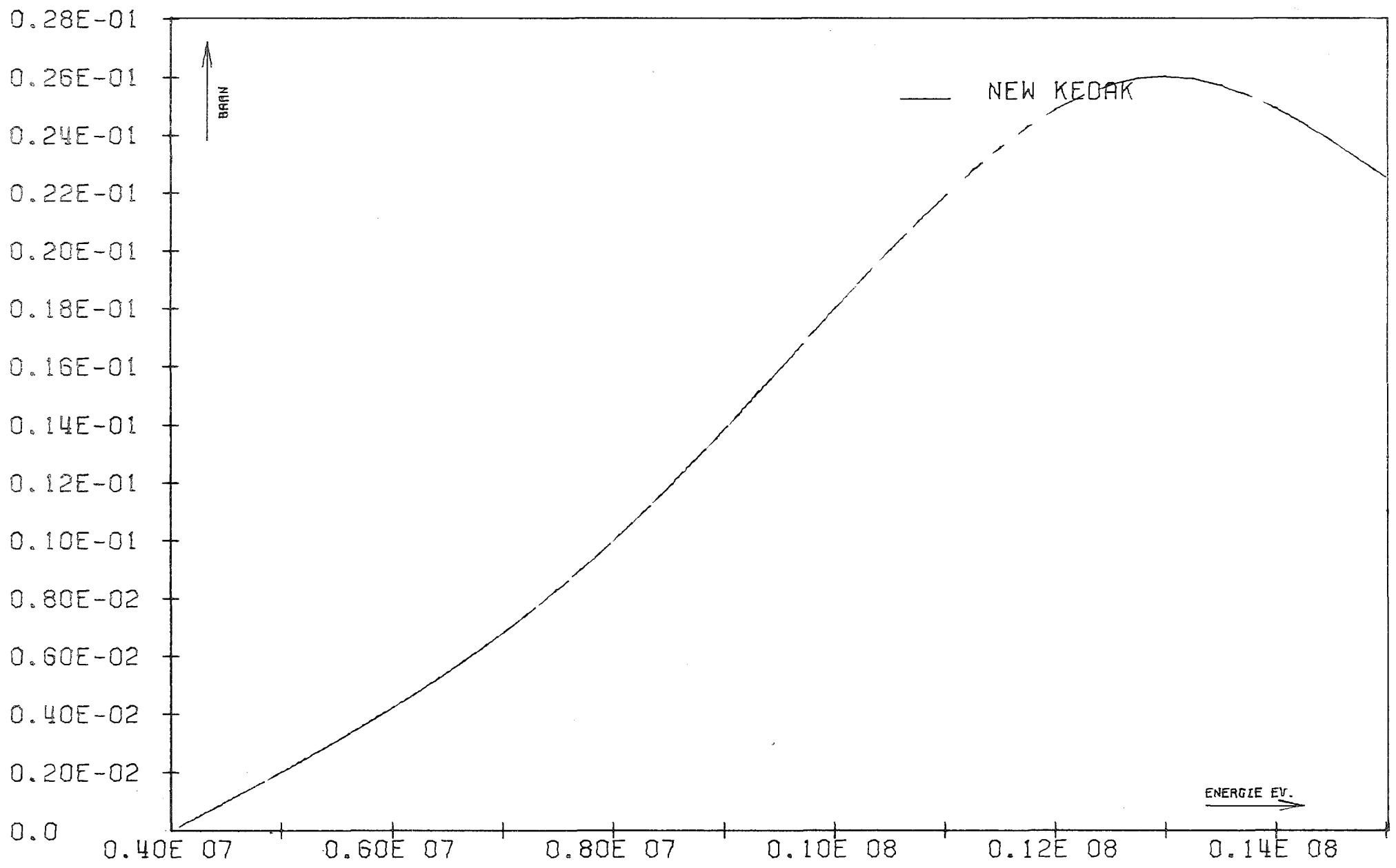


FIG. 73

FE 58 SGP

INR901FI 29.01 14.31.

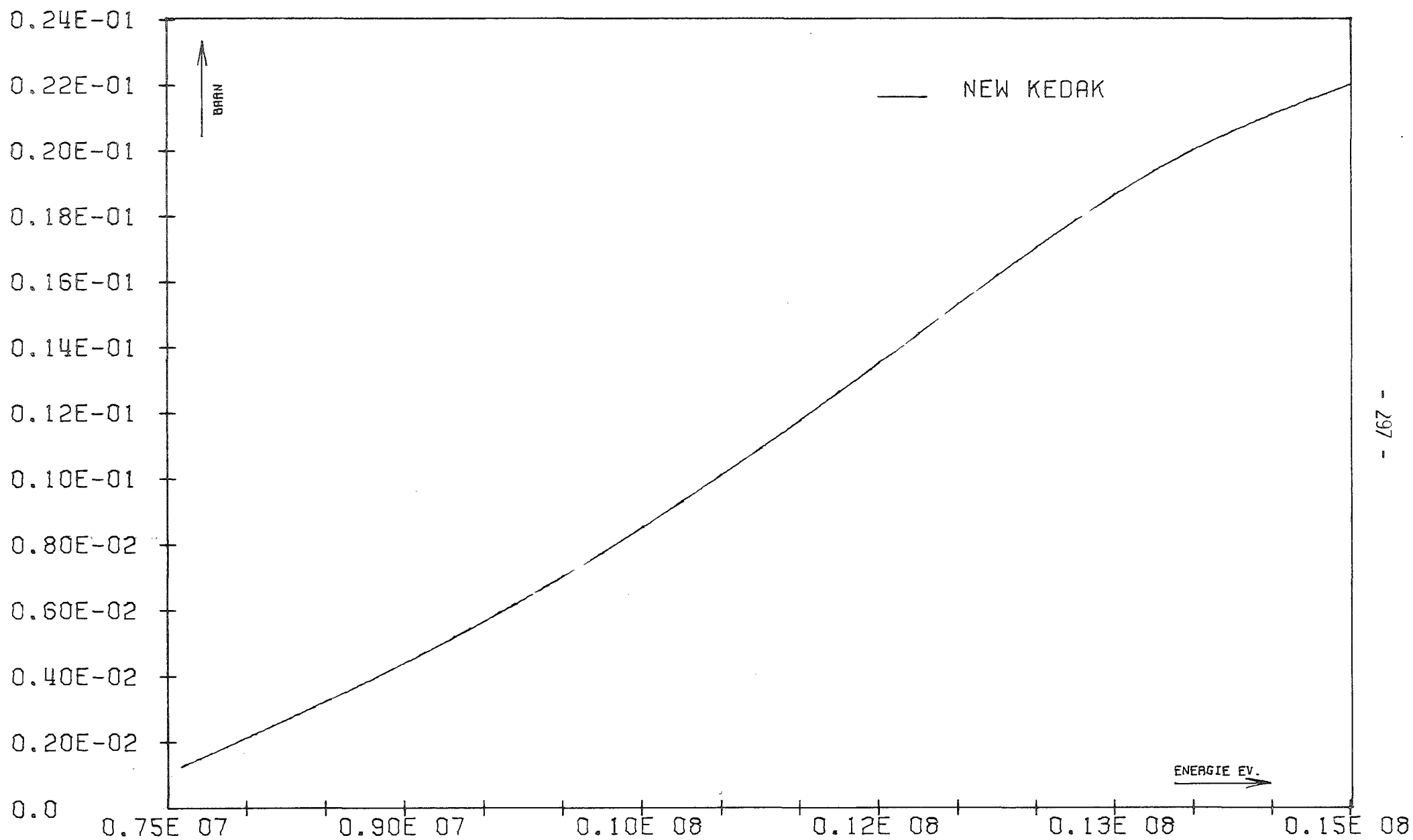


FIG. 74 FE 58 SGALP

INR901FI 29.01 14.31.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 10 keV	NI
2	SGG	''	
3	SGX	''	
4	SGN	''	
5	SGTR	''	
6	SGT	10 keV to 1 MeV	
7	SGG	''	
8	SGN	''	
9	SGTR	''	
10	MUEL	''	
11	SGT	1 MeV to 15 MeV	
12	SGG	''	
13	SGA	''	
14	SGX	''	
15	SGN	''	
16	SGTR	''	
17	MUEL	''	
18	SGi	''	
19	SGIZ		
	E*= 1.33 MeV	Thr. to 4 MeV	
20	E*= 1.45 MeV	''	
21	E*= 2.16 MeV	''	
22	E*= 2.29 MeV	''	
23	E*= 2.46 MeV	''	
24	E*= 2.50 MeV	''	
25	E*= 2.53 MeV	''	
26	E*= 2.77 MeV	''	
27	E*= 3.04 MeV	''	
28	E*= 3.13 MeV	''	
29	E*= 3.26 MeV	''	
30	E*= 3.52 MeV	''	
31	SGP	Thr. to 15 MeV	
32	SGALP	''	
33	SG2N	''	
34	SGP	''	NI 58
35	SGALP	''	
36	SG2N	''	
37	SGP	''	NI 60
38	SGALP	''	
39	SG2N	''	
40	SGP	''	NI 61
41	SGALP	''	
42	SG2N	''	
43	SGP	''	NI 62
44	SGALP	''	
45	SG2N	''	
46	SGP	''	NI 64
47	SGALP	''	
48	SG2N	''	

Ni

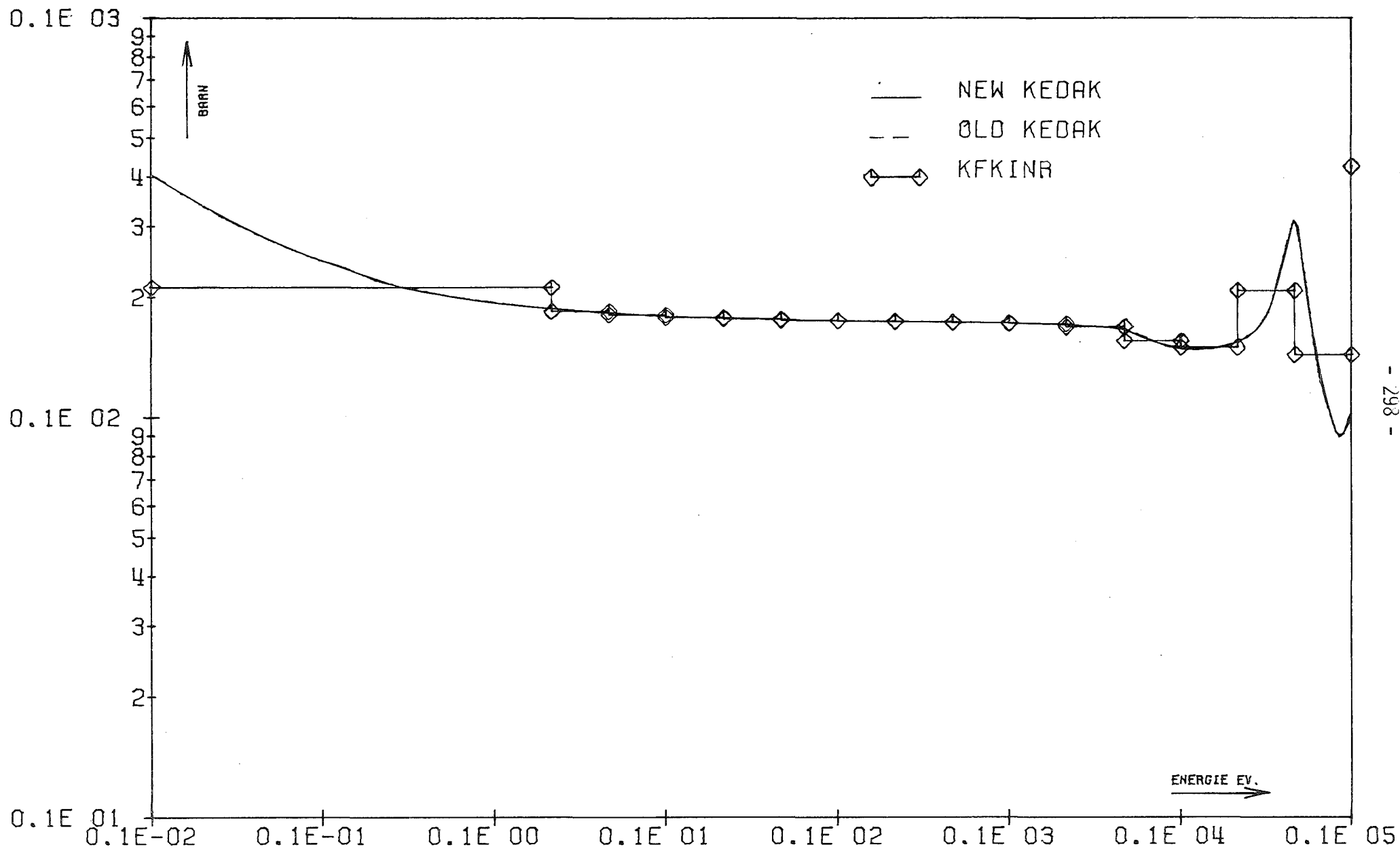


FIG. 1 NI SGT

INR901NI 27.12 17.50.

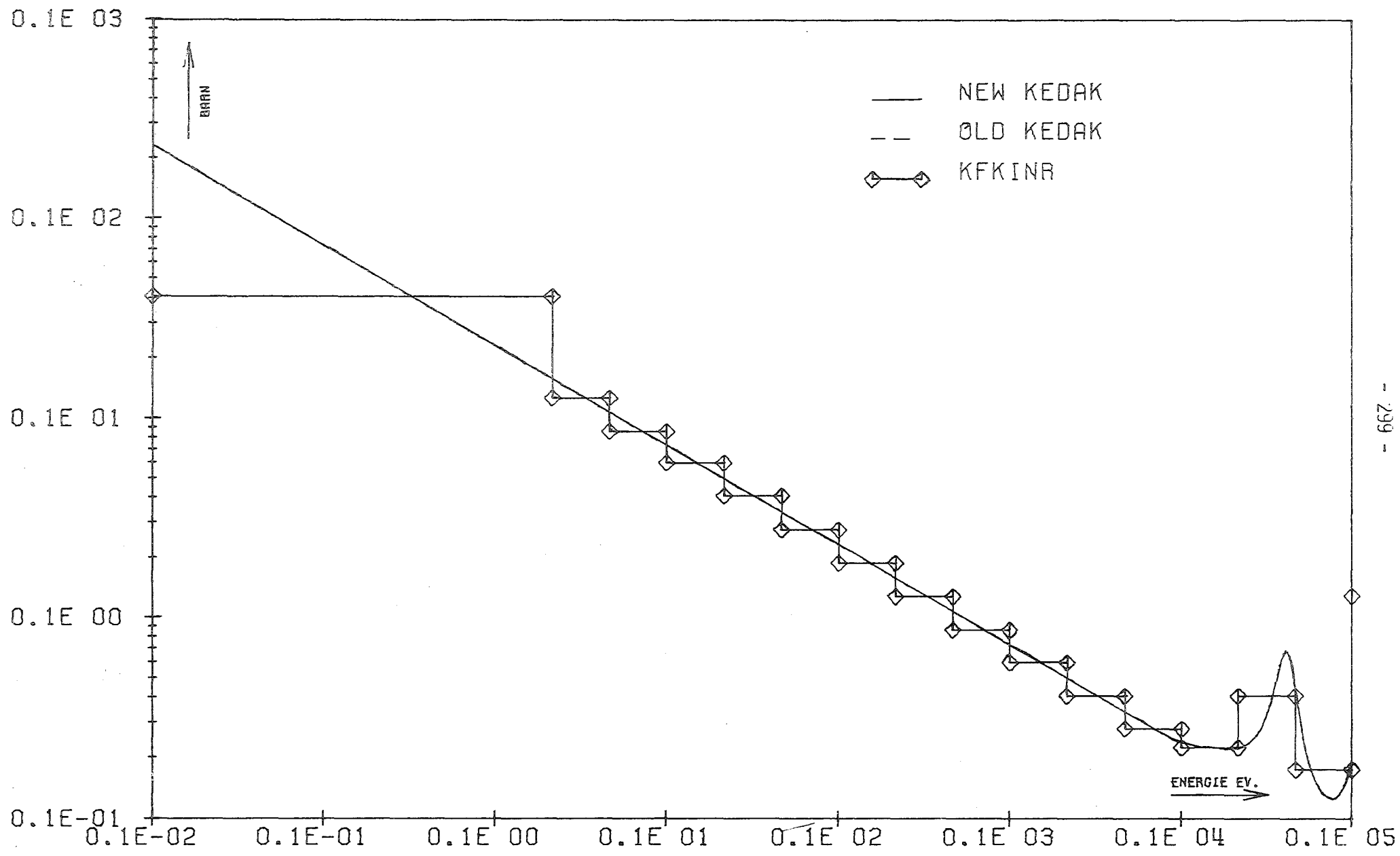


FIG. 2 NI SGG

INR901NI 27.12 17.48.

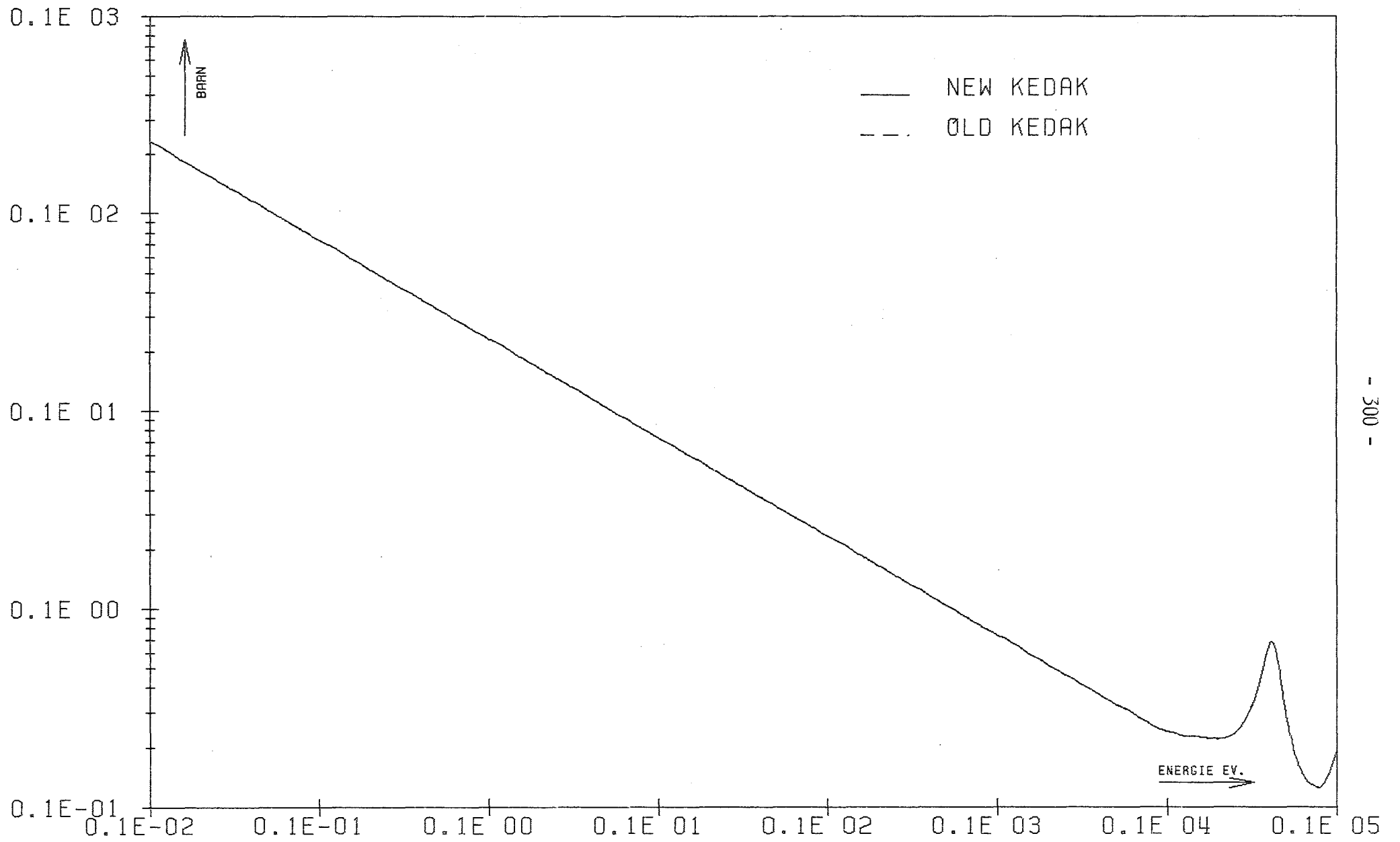


FIG. 3 NI SGX

INR901NI 05.08 16.42.

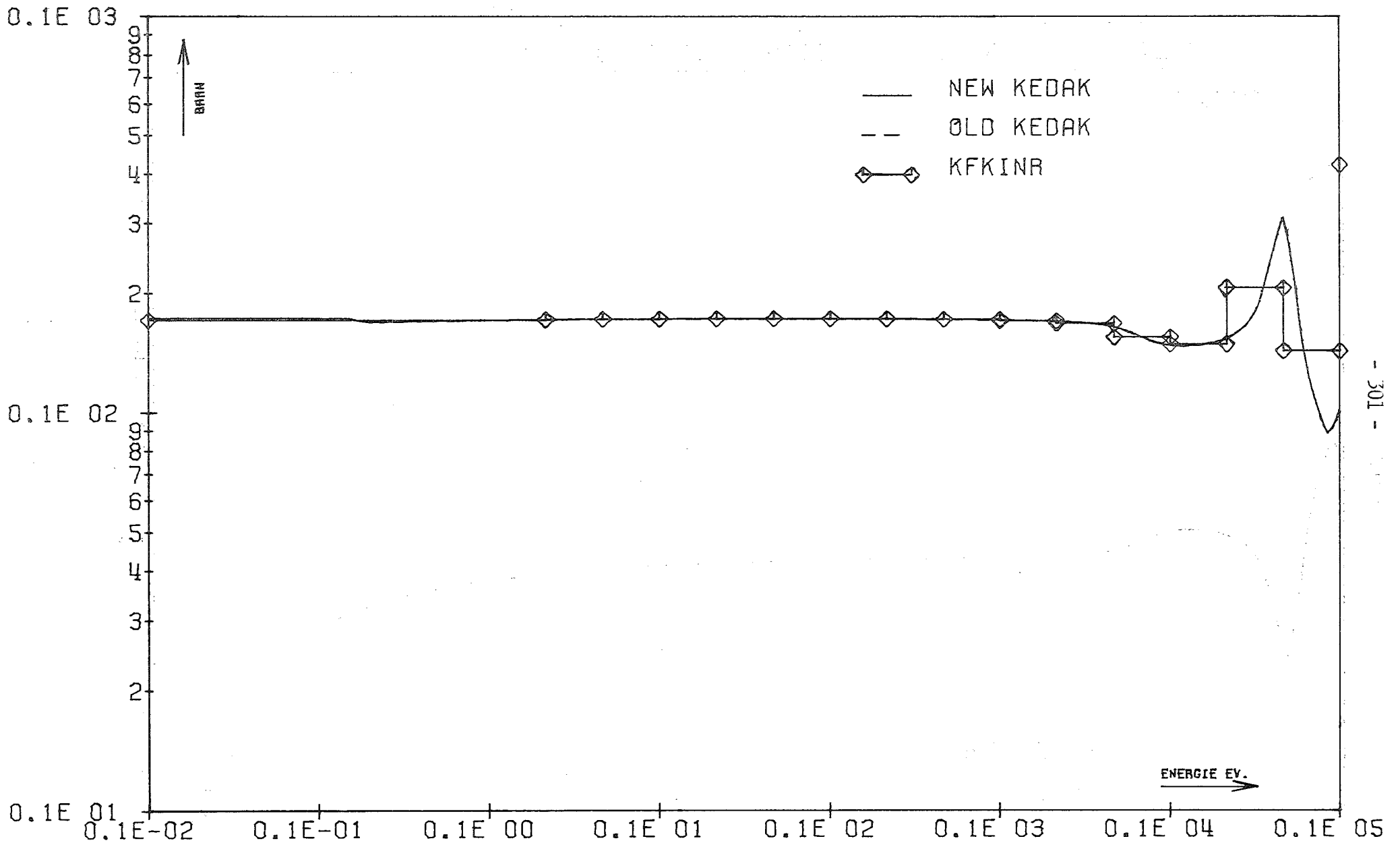


FIG. 4 NI SGN INR901NI 27.12 17.50.

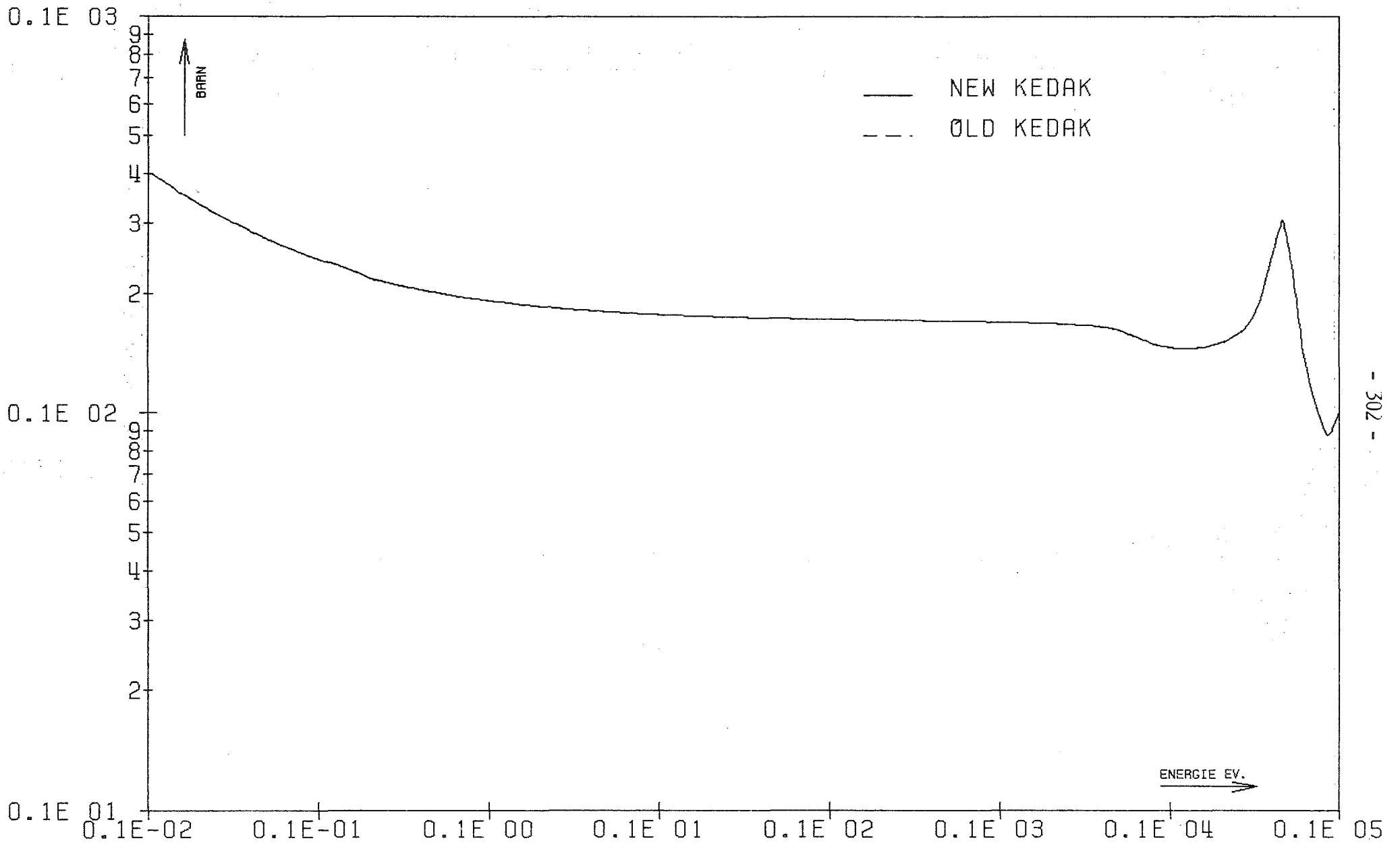


FIG. 5 NI SGTR INR901NI 05.08 16.42.

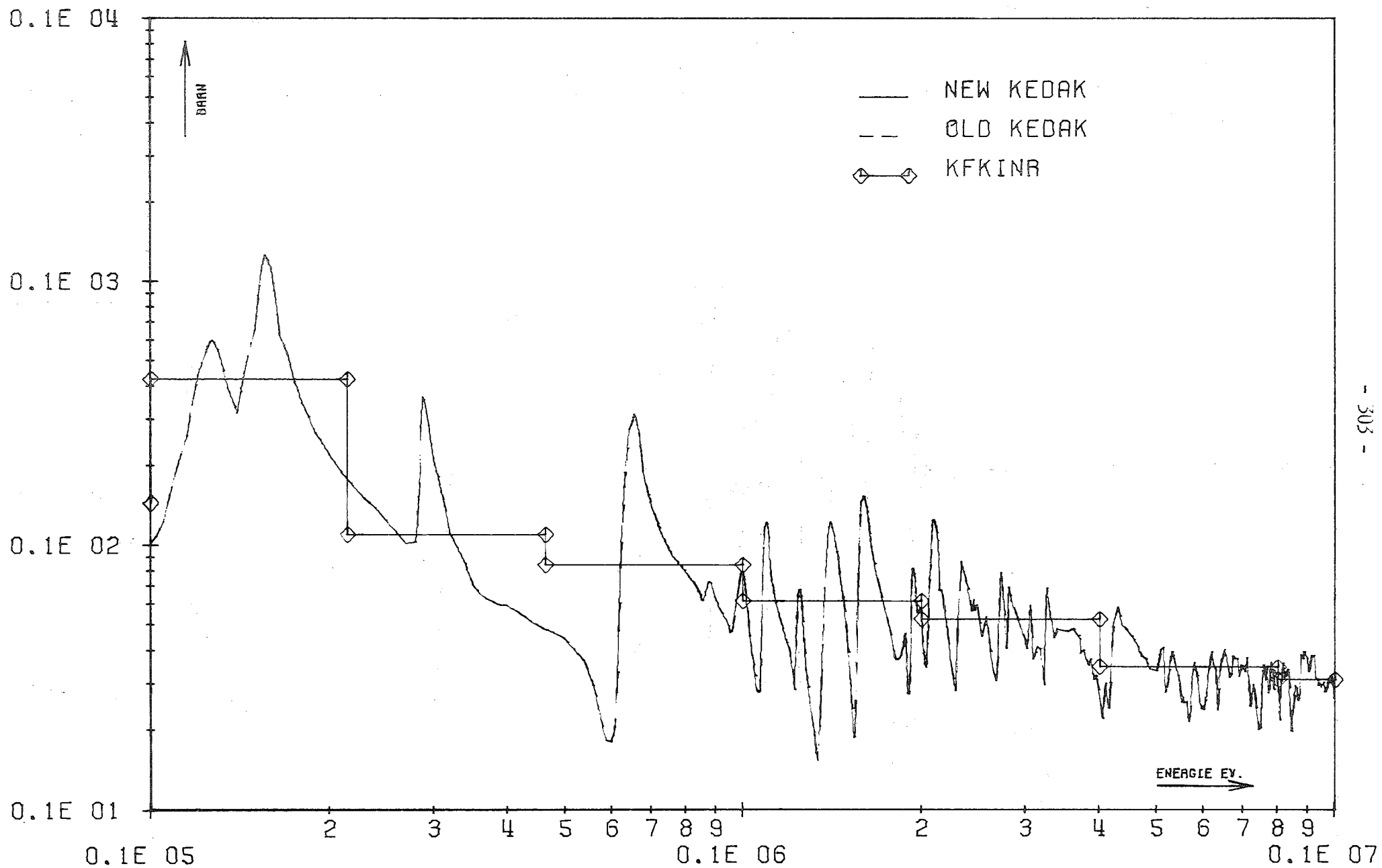


FIG. 6 NI SGT

INR901NI 27.12 17.50.

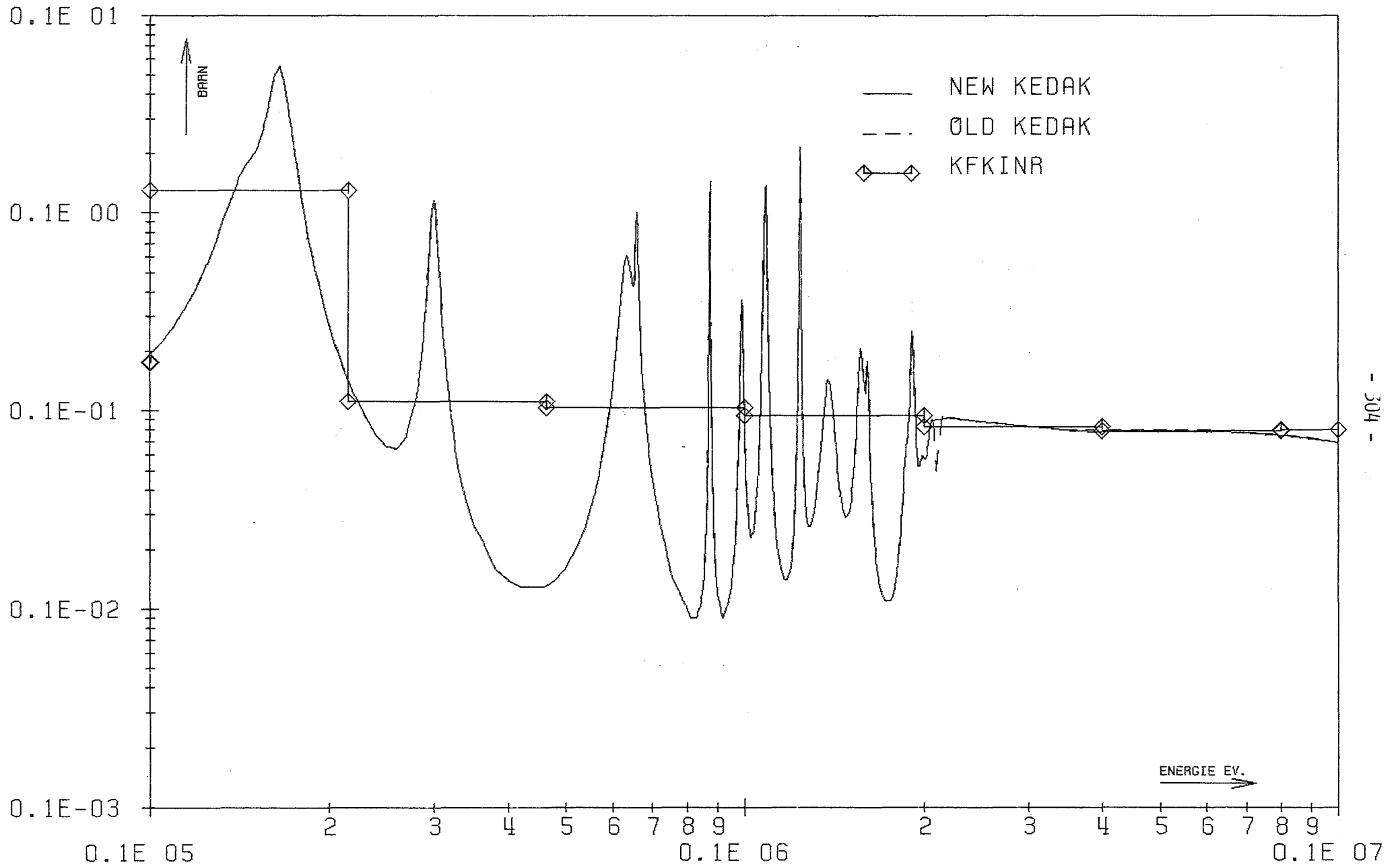


FIG. 7

NI

SGG

INR901NI 05.08 16.42.

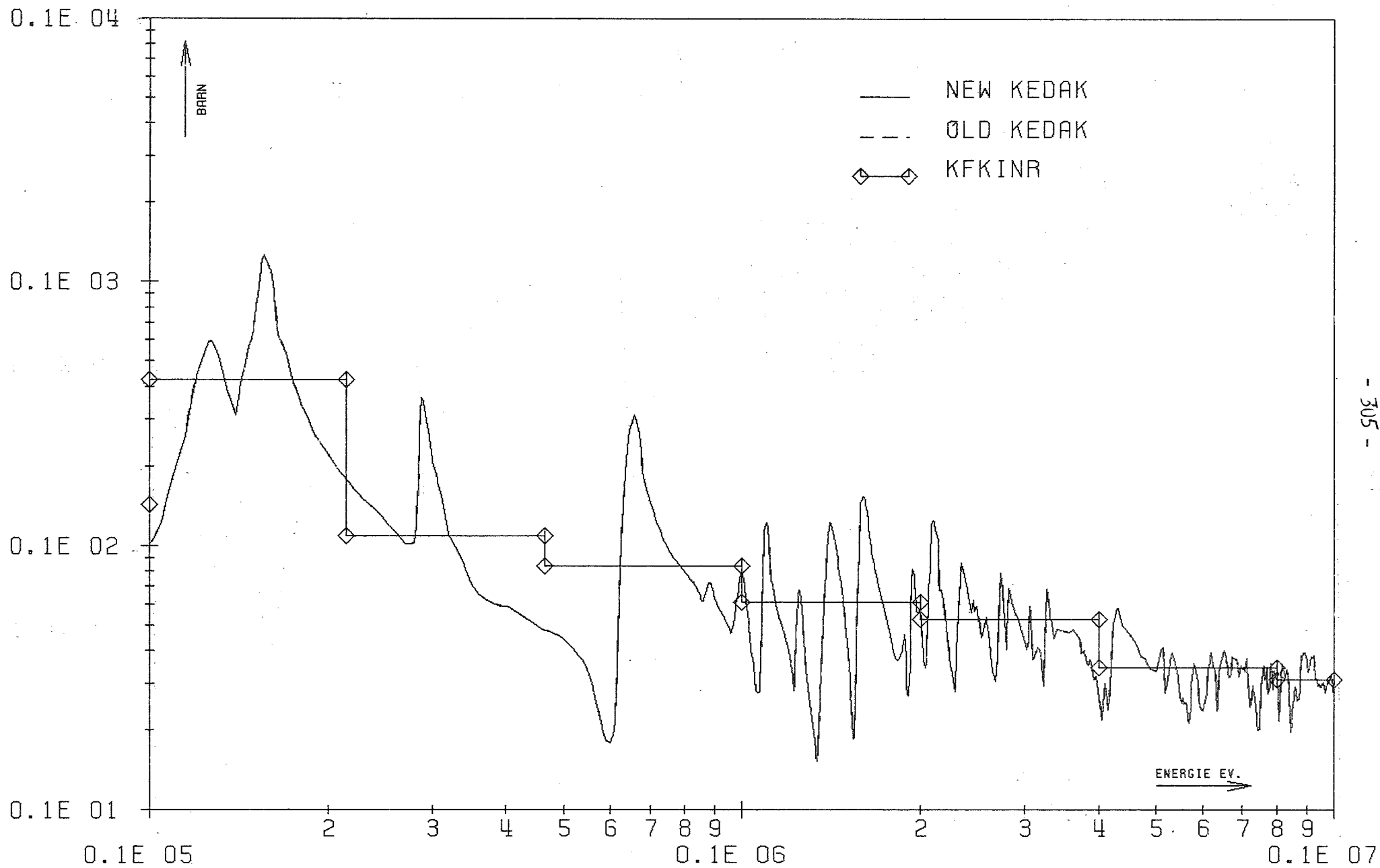


FIG. 8 NI SGN

INR901NI 24.07 20.08.

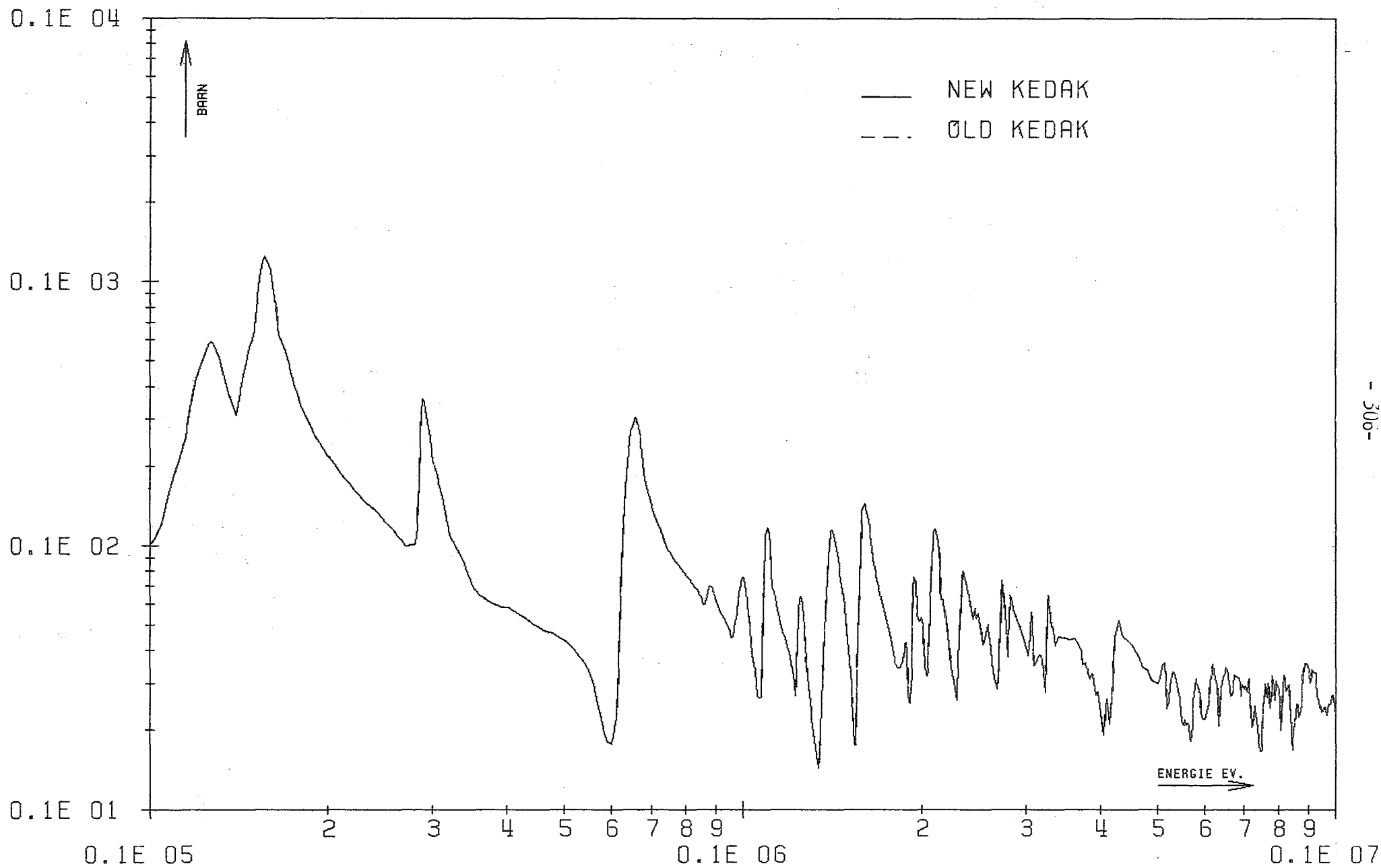


FIG. 9 NI SGTR

INR901NI 24.07 20.08.

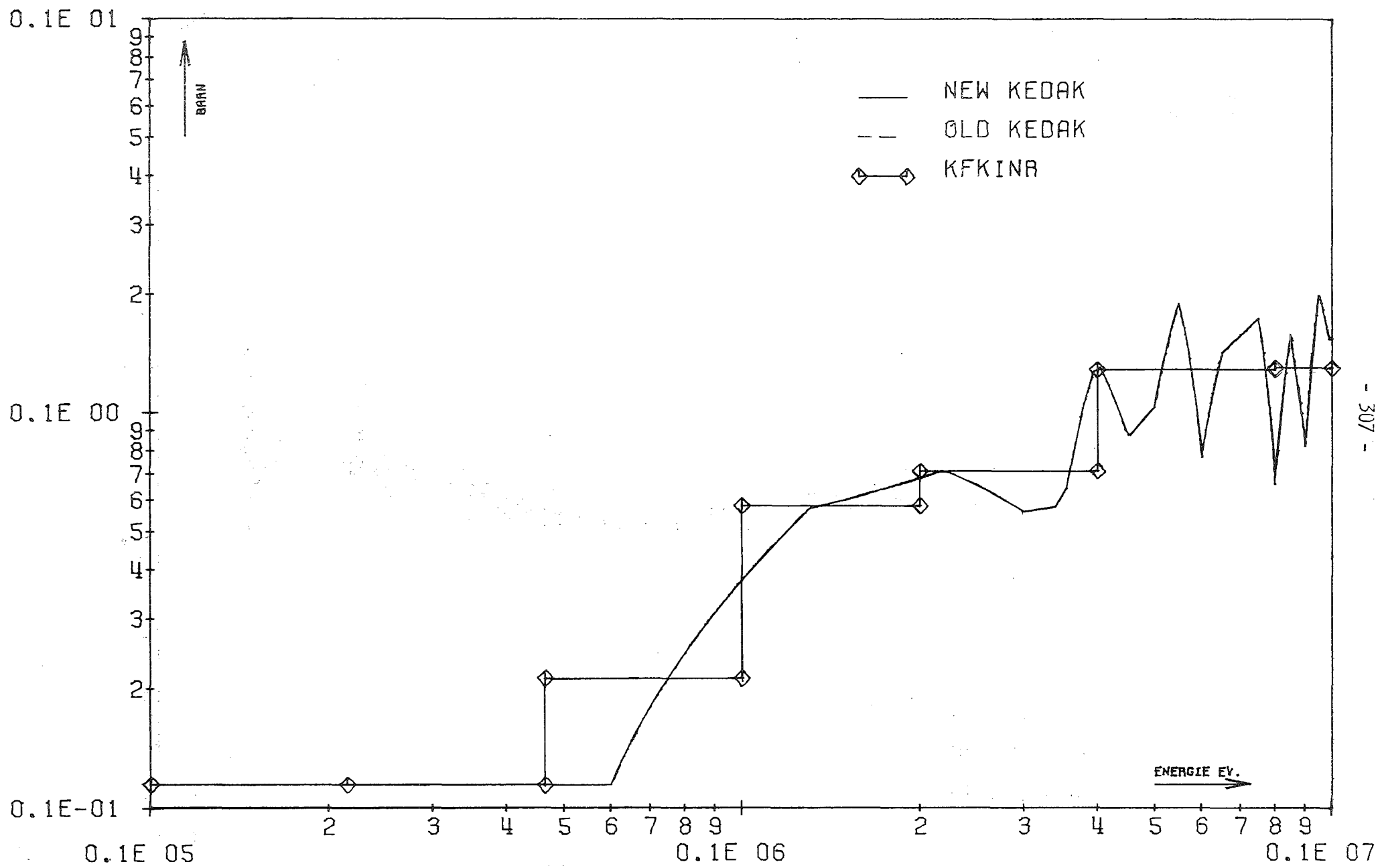


FIG. 10

NI

MUEL

INR901NI 27.12 17.50.

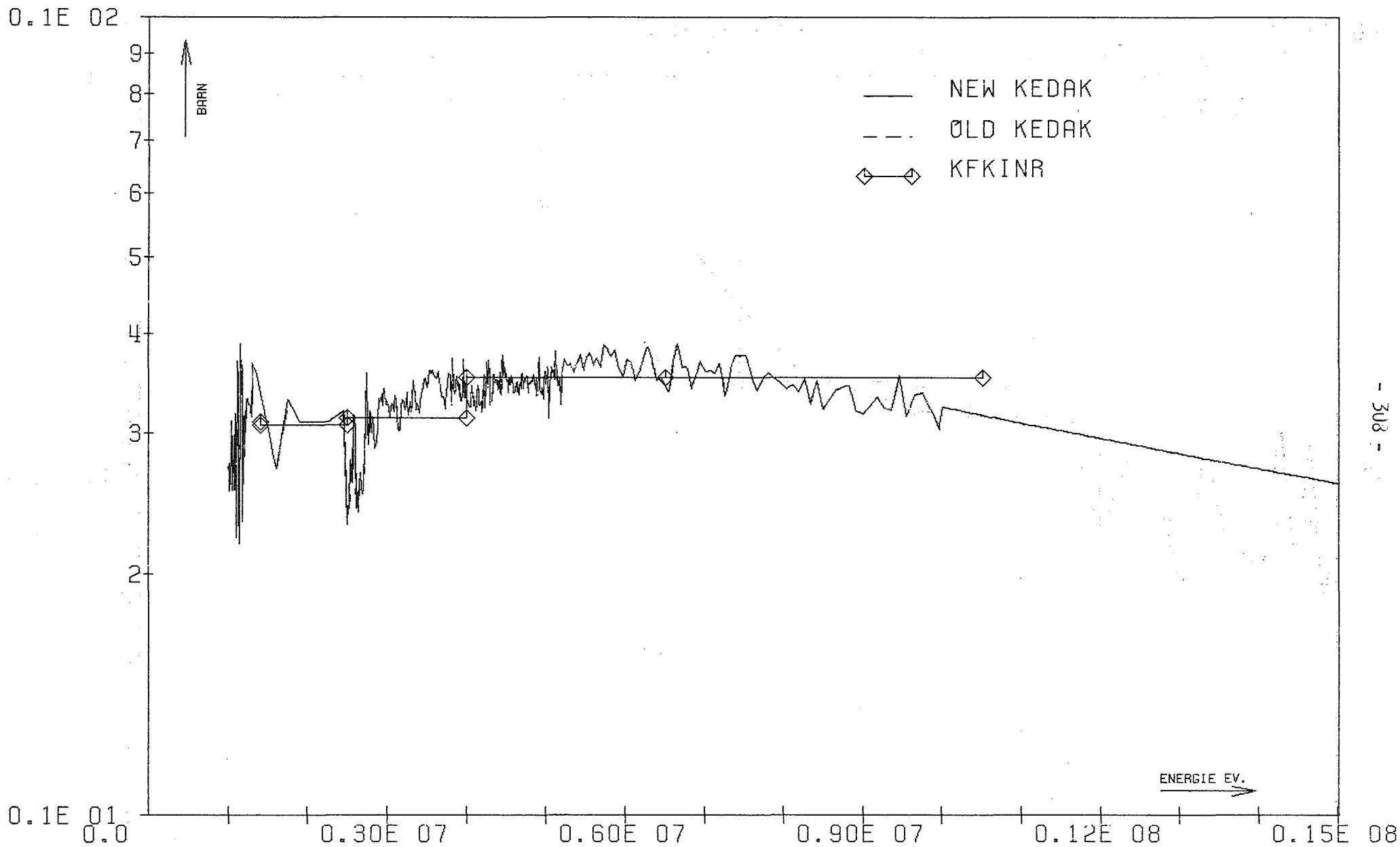


FIG. 11 NI SGT INR901NI 29.07 18.27.

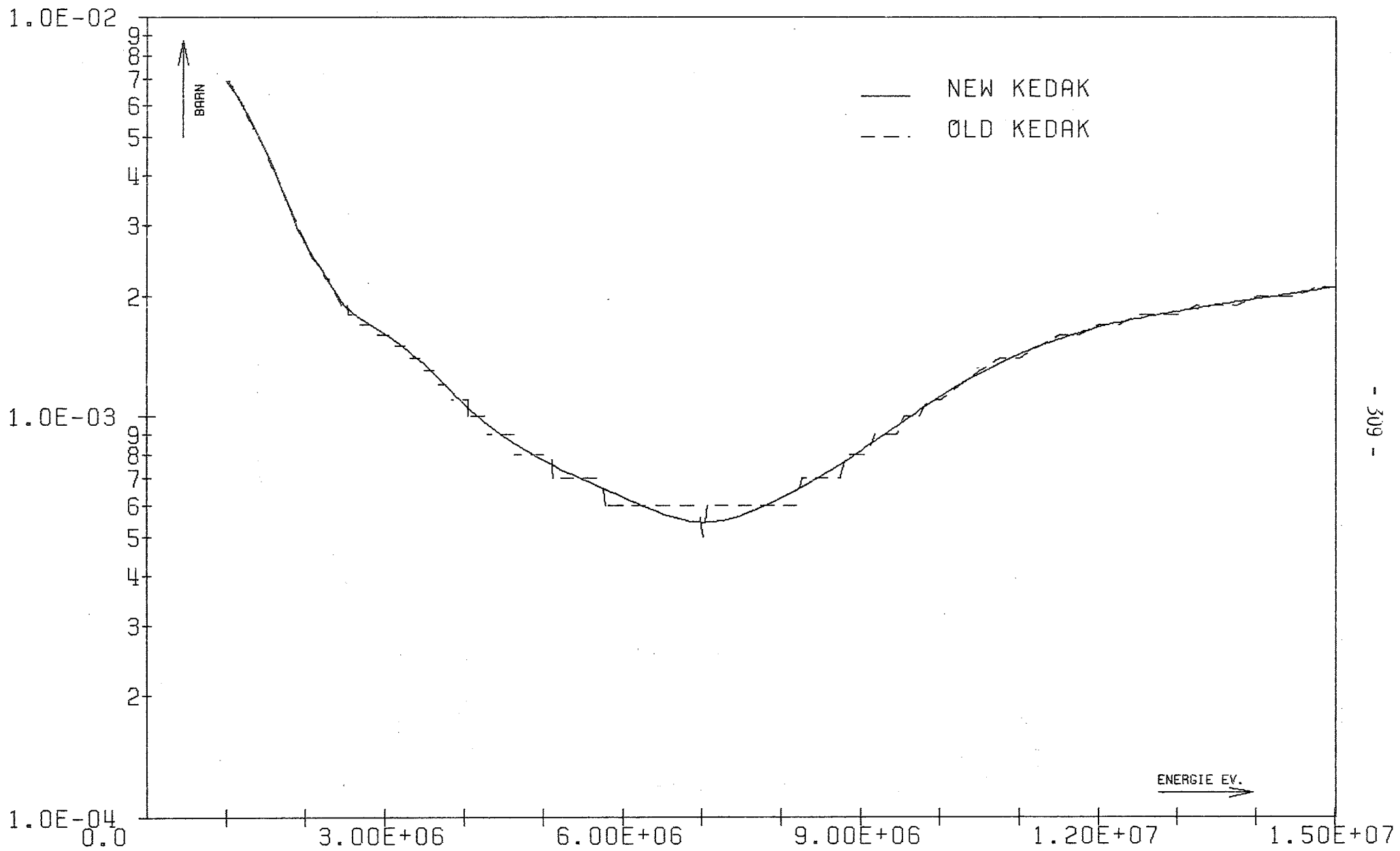


FIG. 12 NI SGG

INR9010I 29.09 21.52.

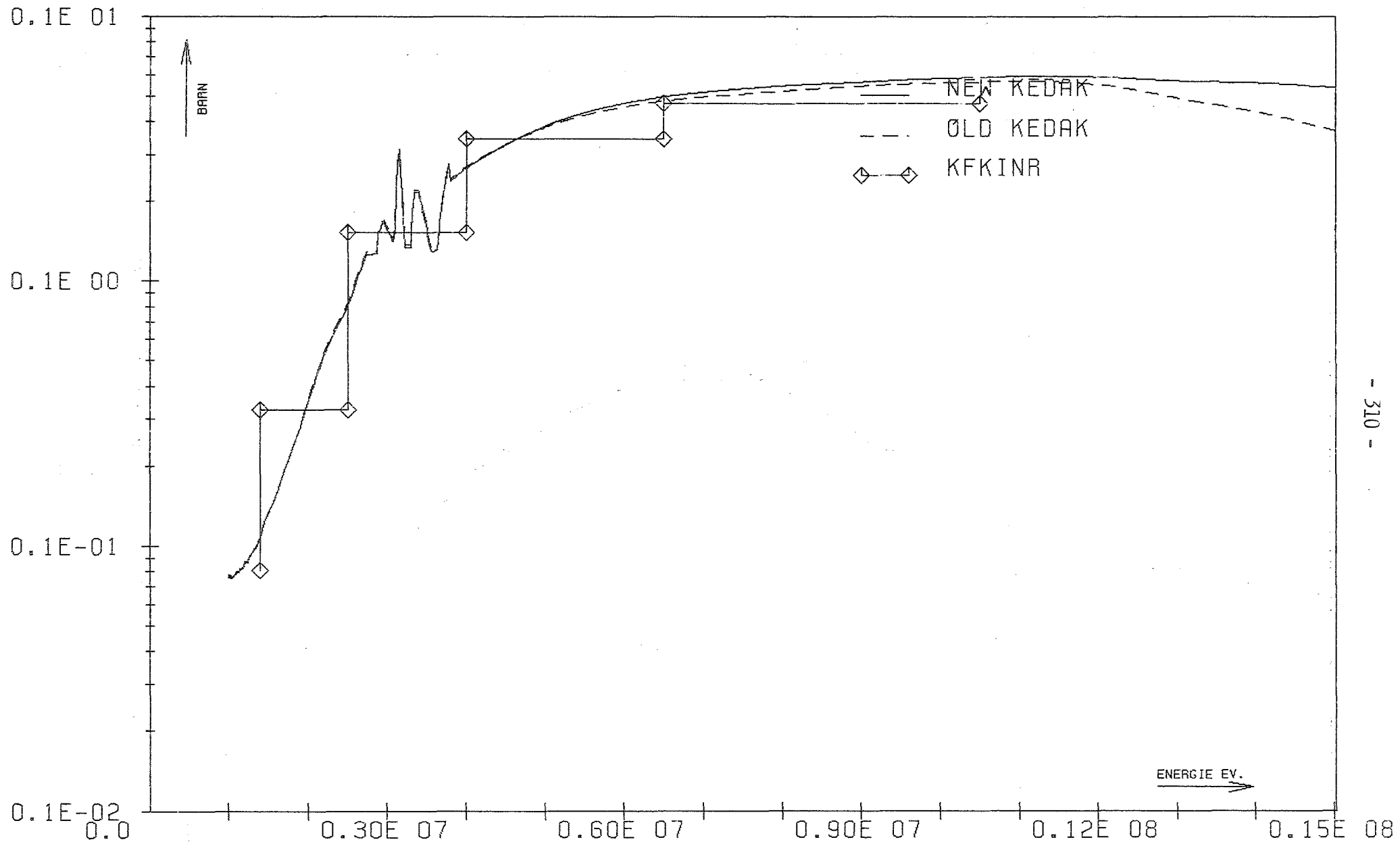


FIG. 13

NI

SGA

INR901NI 29.07 18.27.

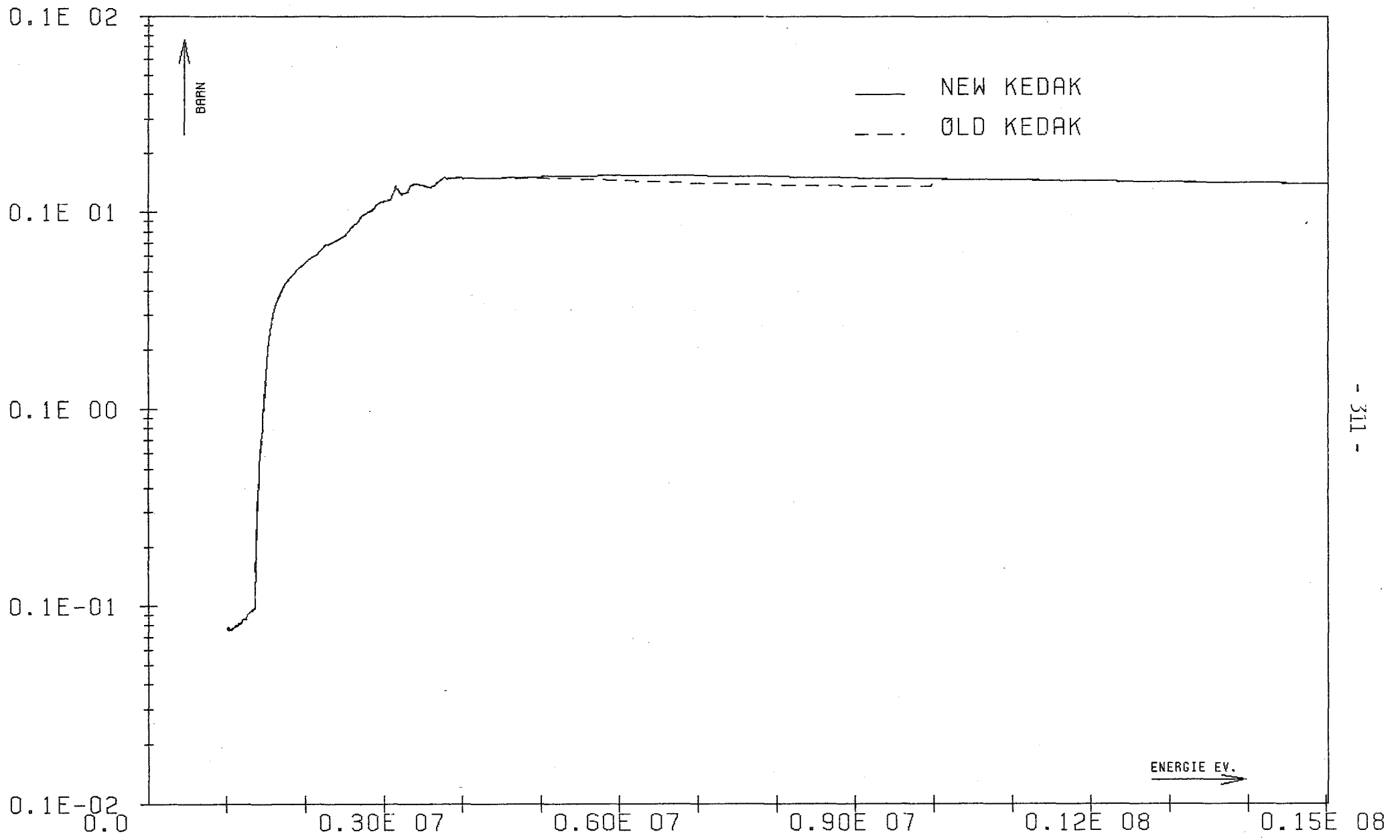
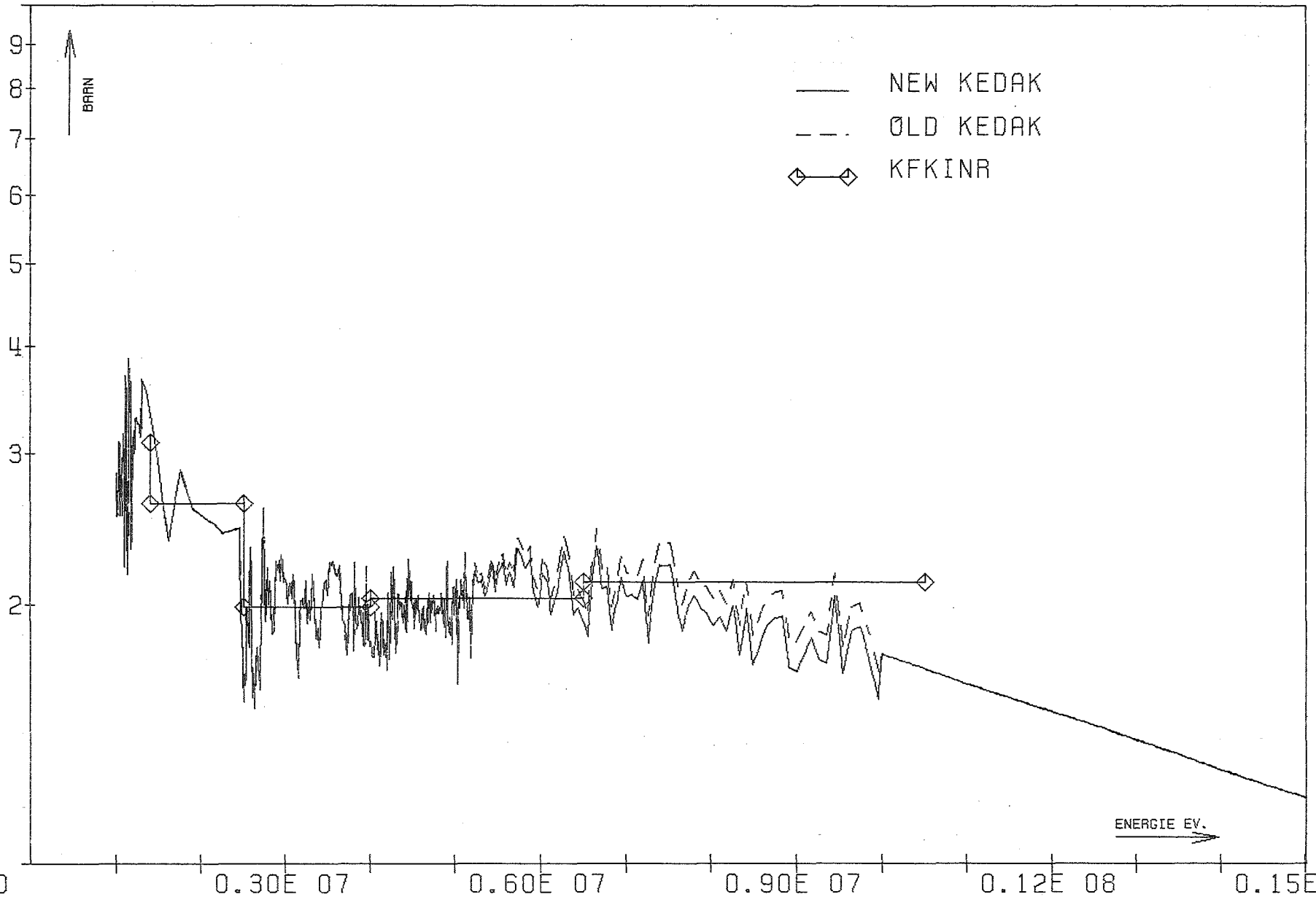


FIG. 14 NI SGX

INR901NI 24.07 20.08.

0.1E 02



0.1E 01
0.0

FIG. 15

NI

SGN

INR901NI 28.07 17.26.

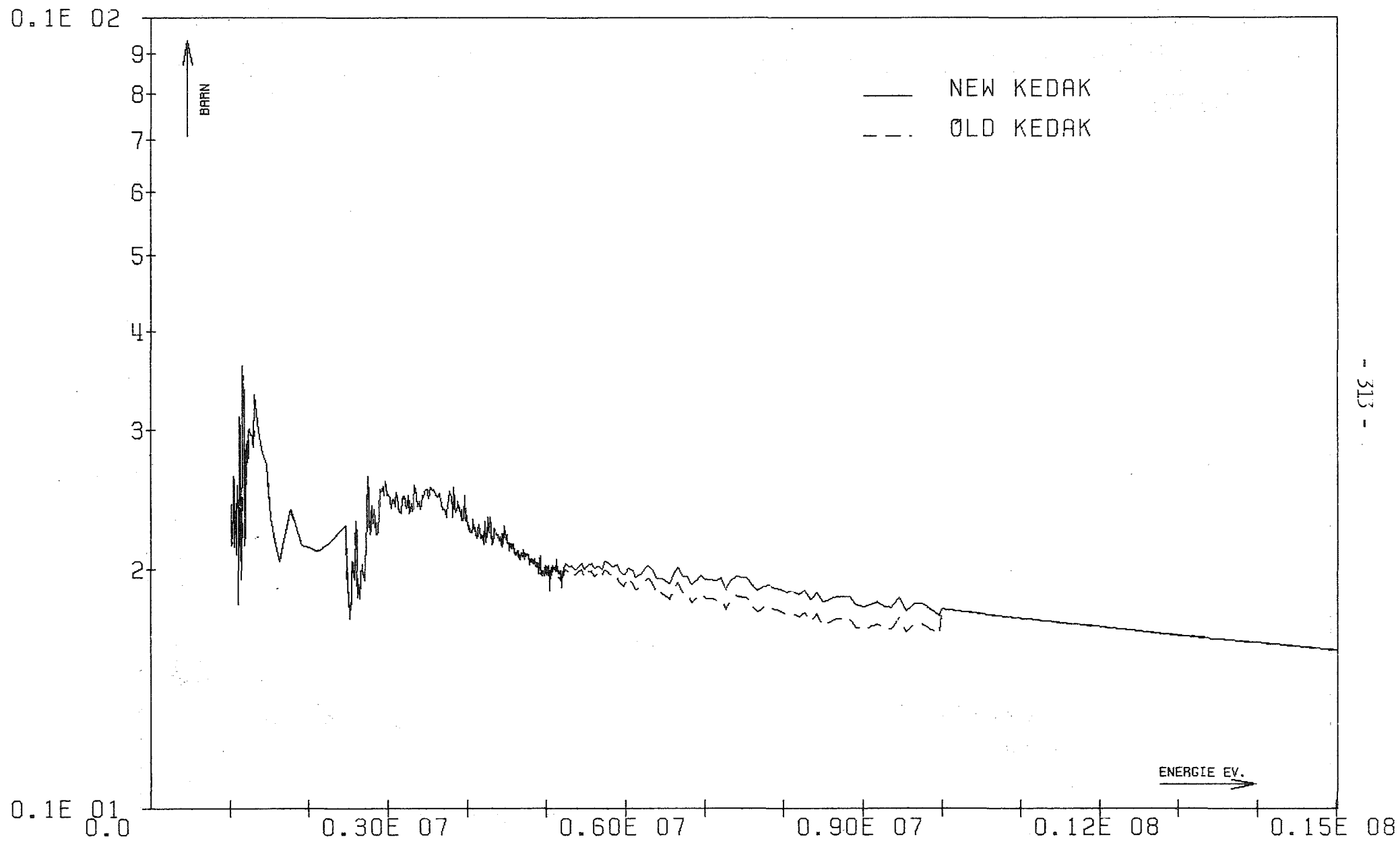


FIG. 16

NI SGTR

INR901NI 24.07 20.08.

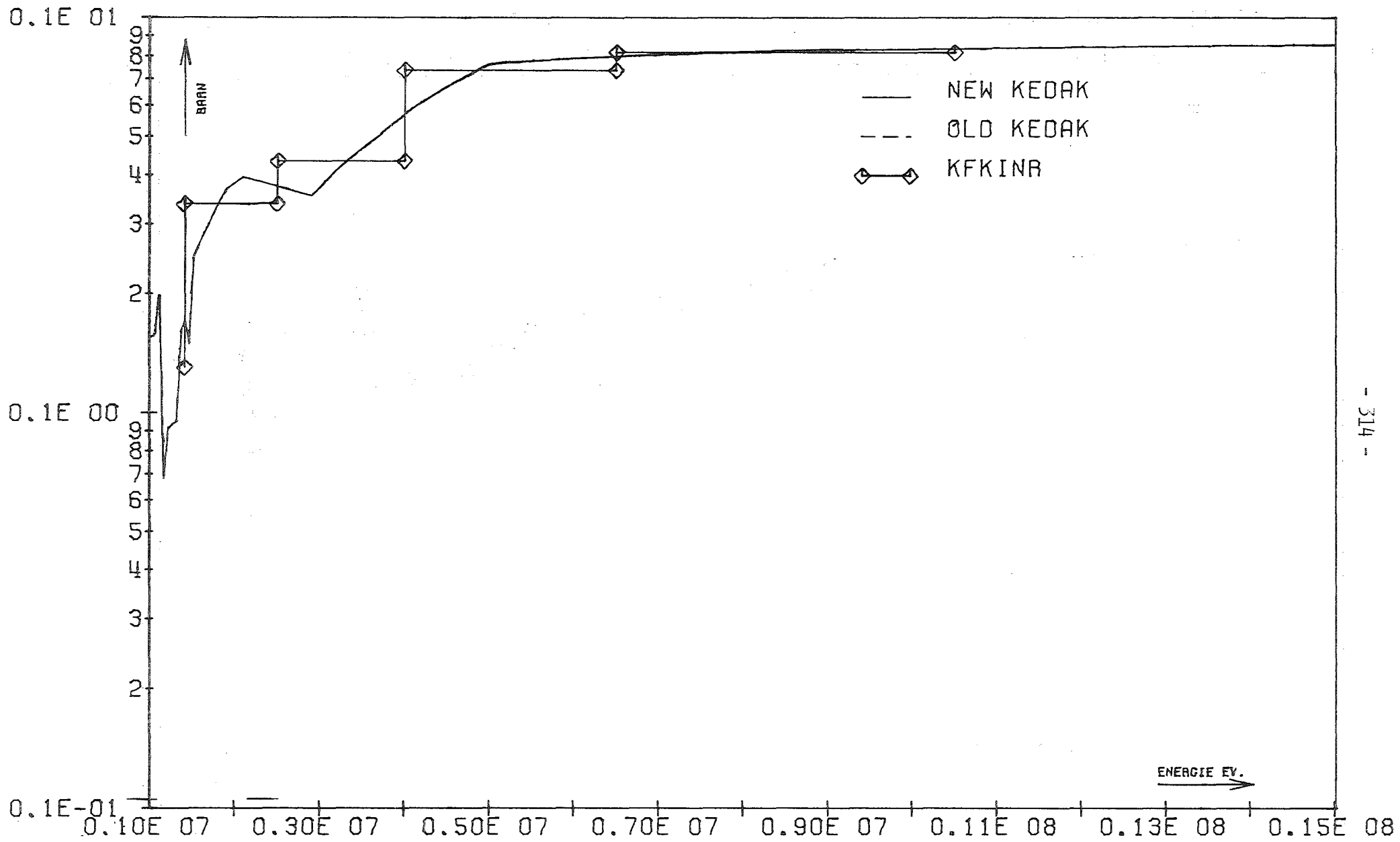


FIG. 17 NI MUEL

INR901NI 27.12 17.50.

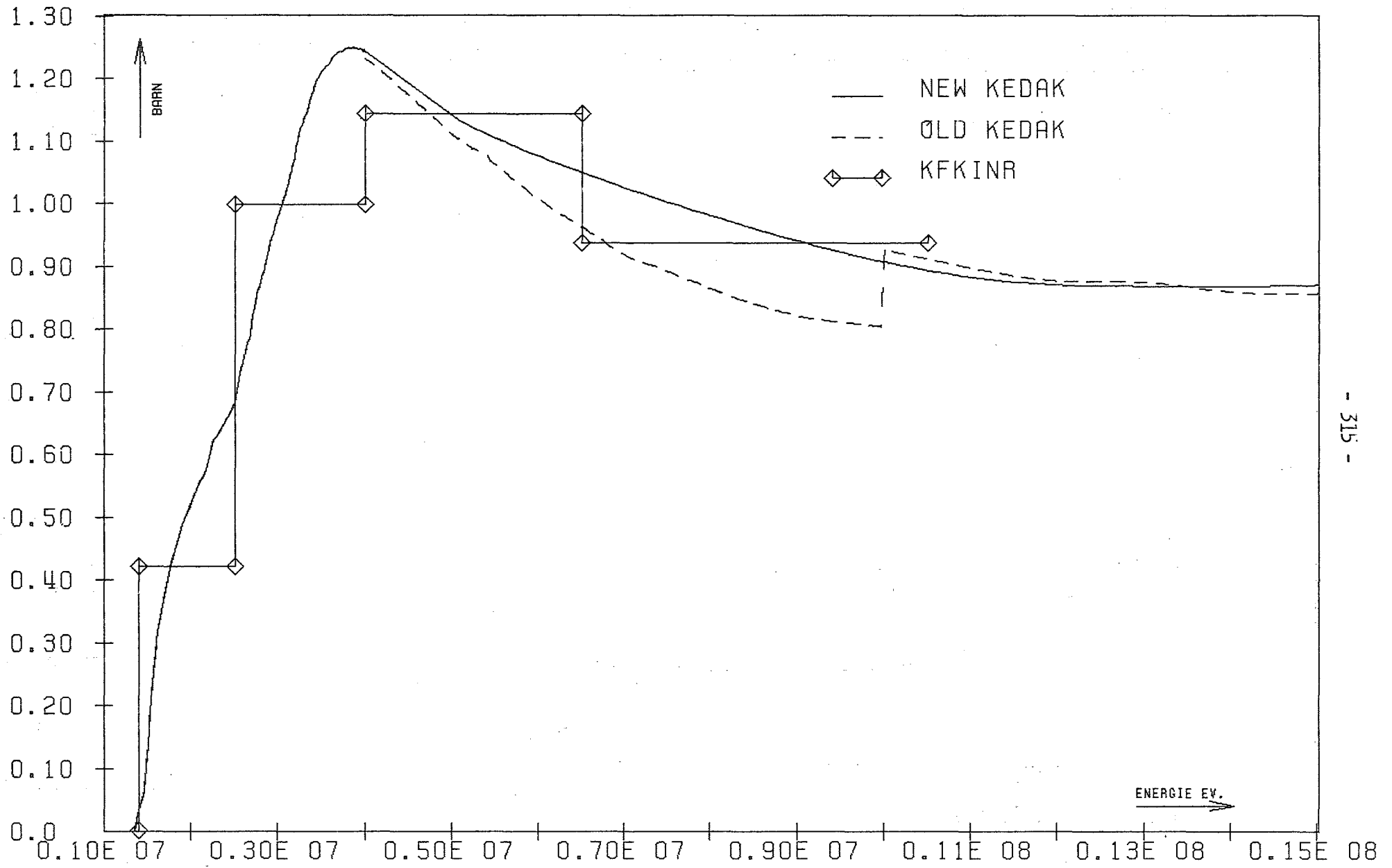
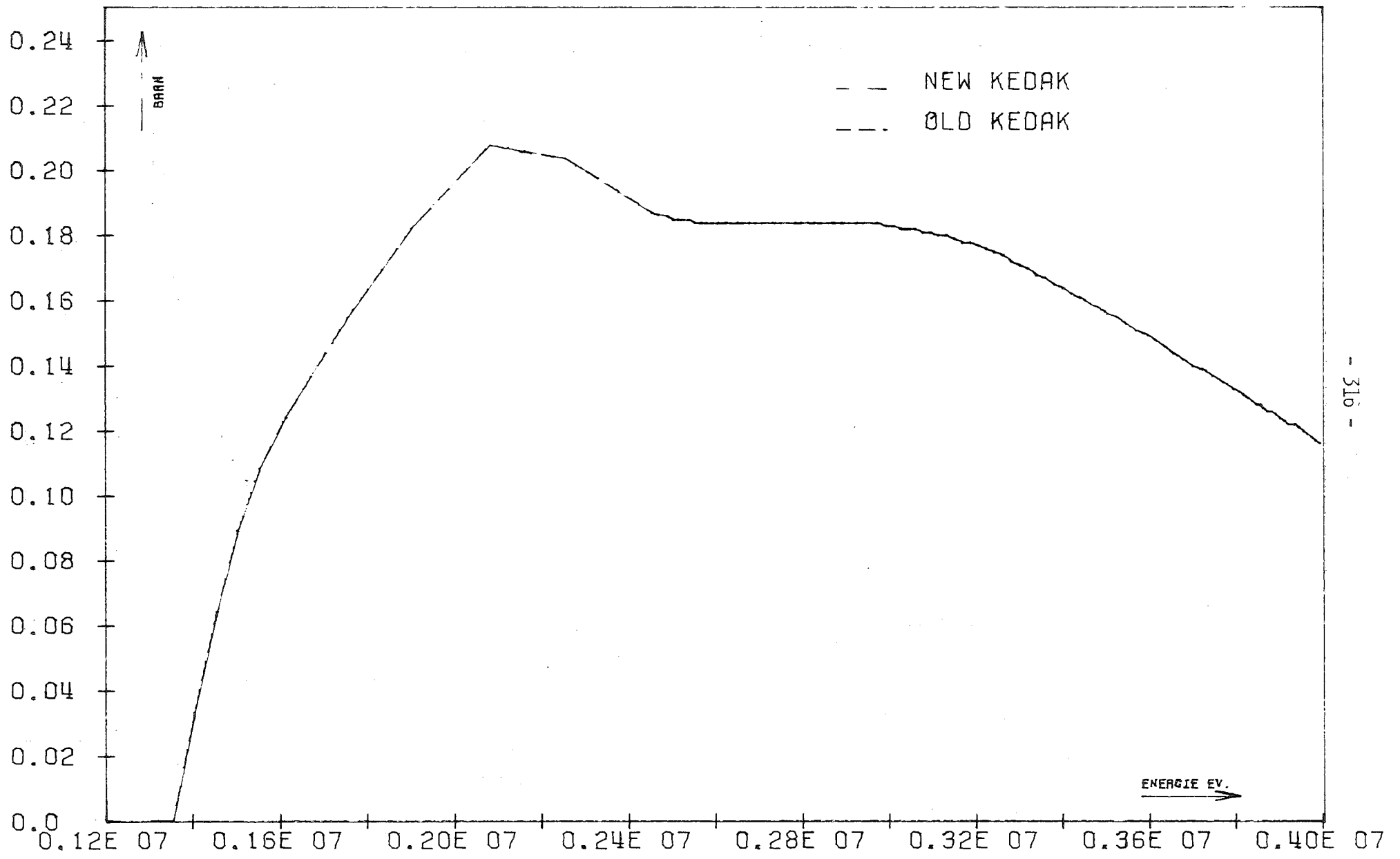


FIG. 18

NI SGI

INR901NI 28.07 17.26.



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FIG. 19 NI SGIZ 0.1330+07 INR901N1 16.06 18.02.

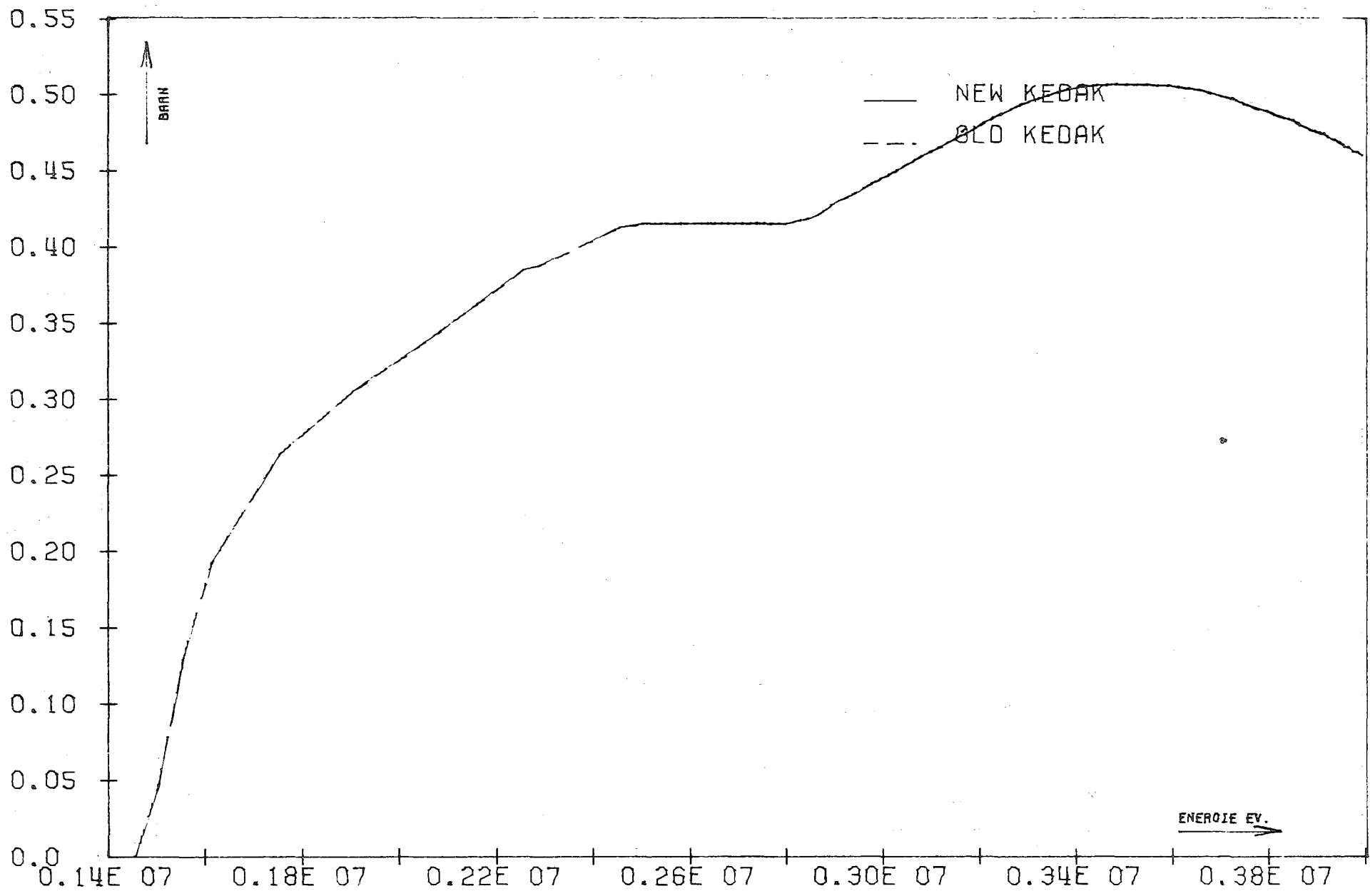


FIG. 20

NI

SGIZ

0.1450+07

INR901N1 16.06 18.02.

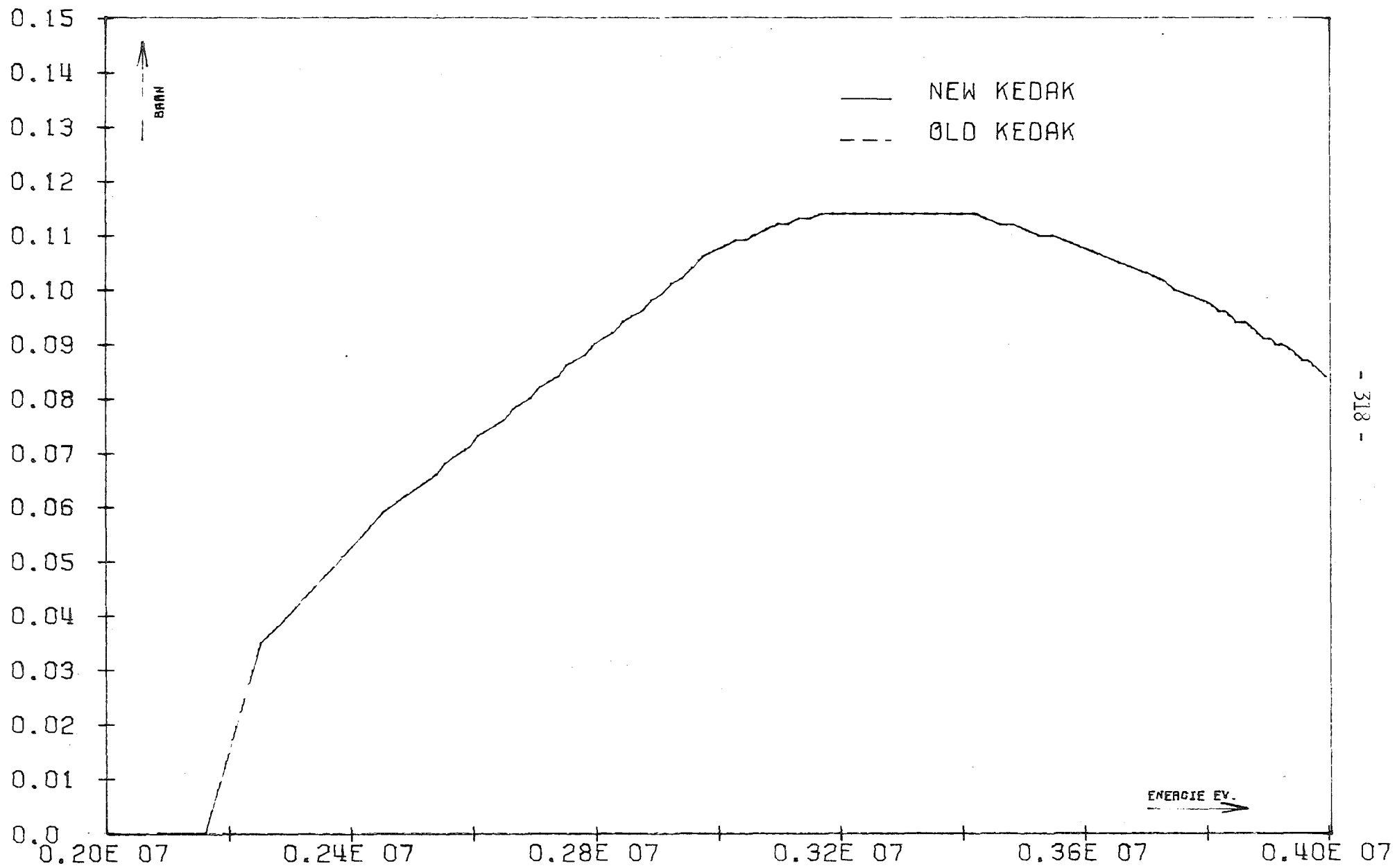


FIG. 21

NI

SGIZ

0.2160+07

INR901N1 16.06 18.02.

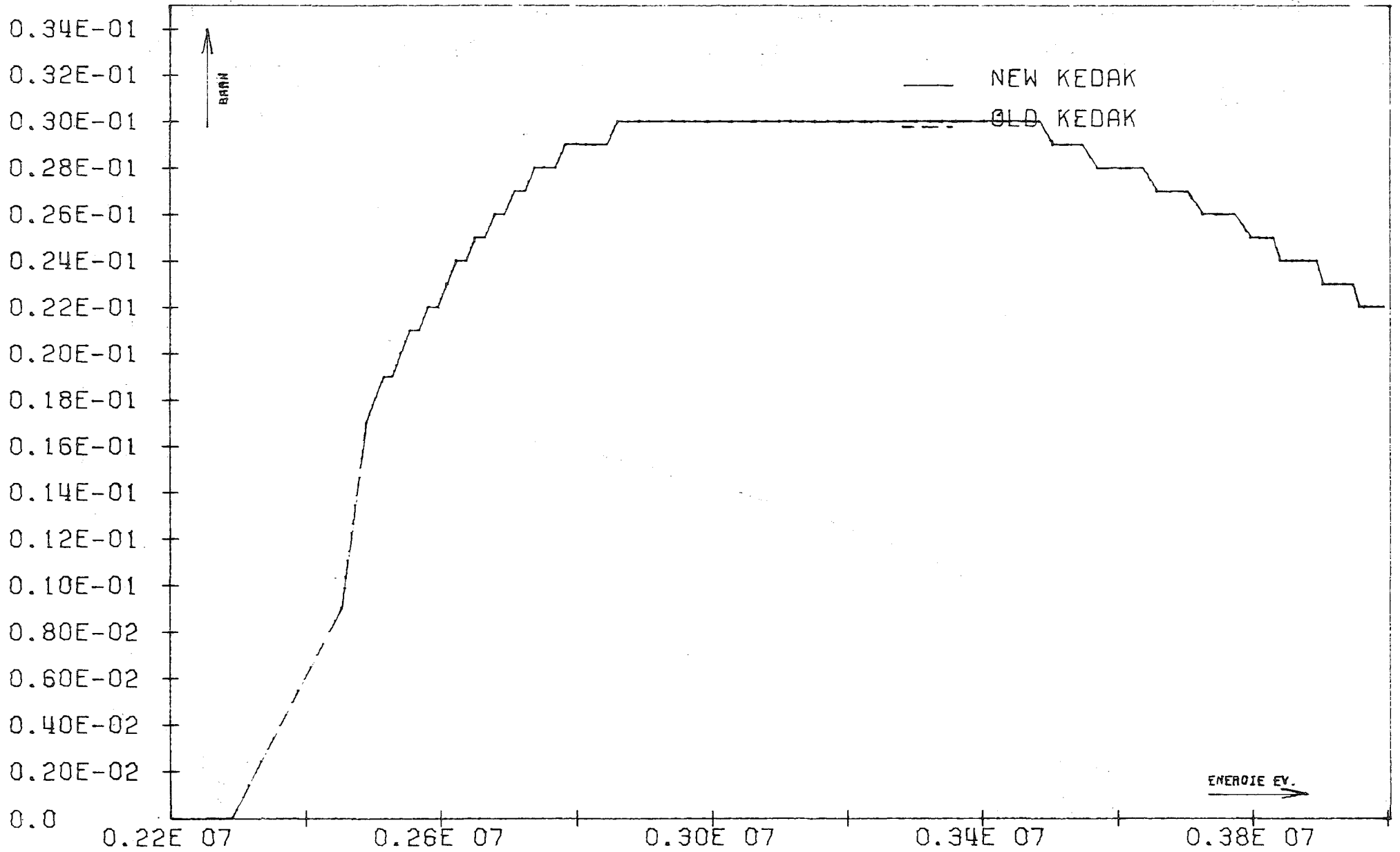


FIG. 22

NI

SGIZ

0.2290+07

INR901N1 16.06 18.02.

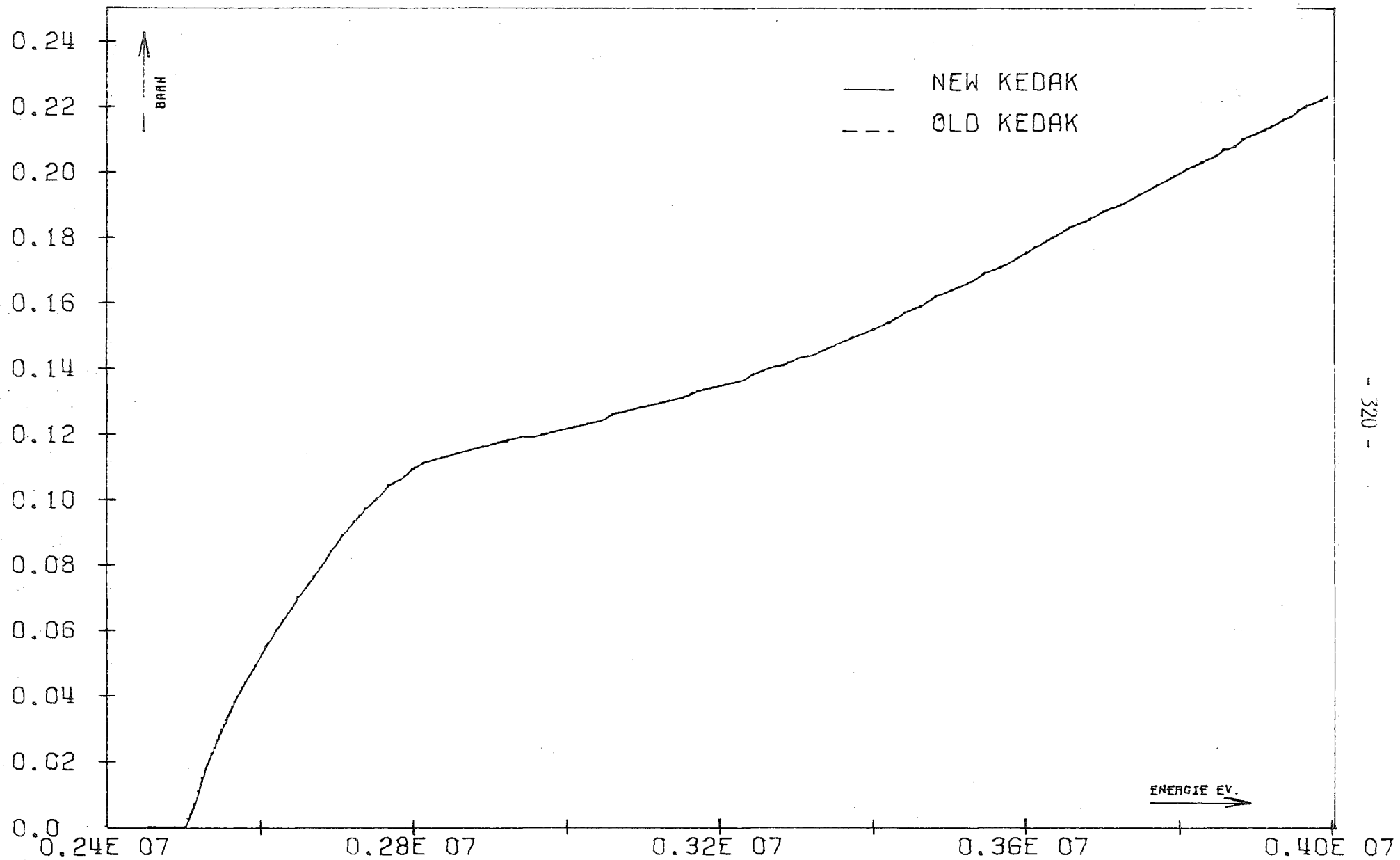


FIG. 23

NI

SGIZ

0.2460+07

0.36E 07

0.40E 07

INR901N1 16.06 18.02.

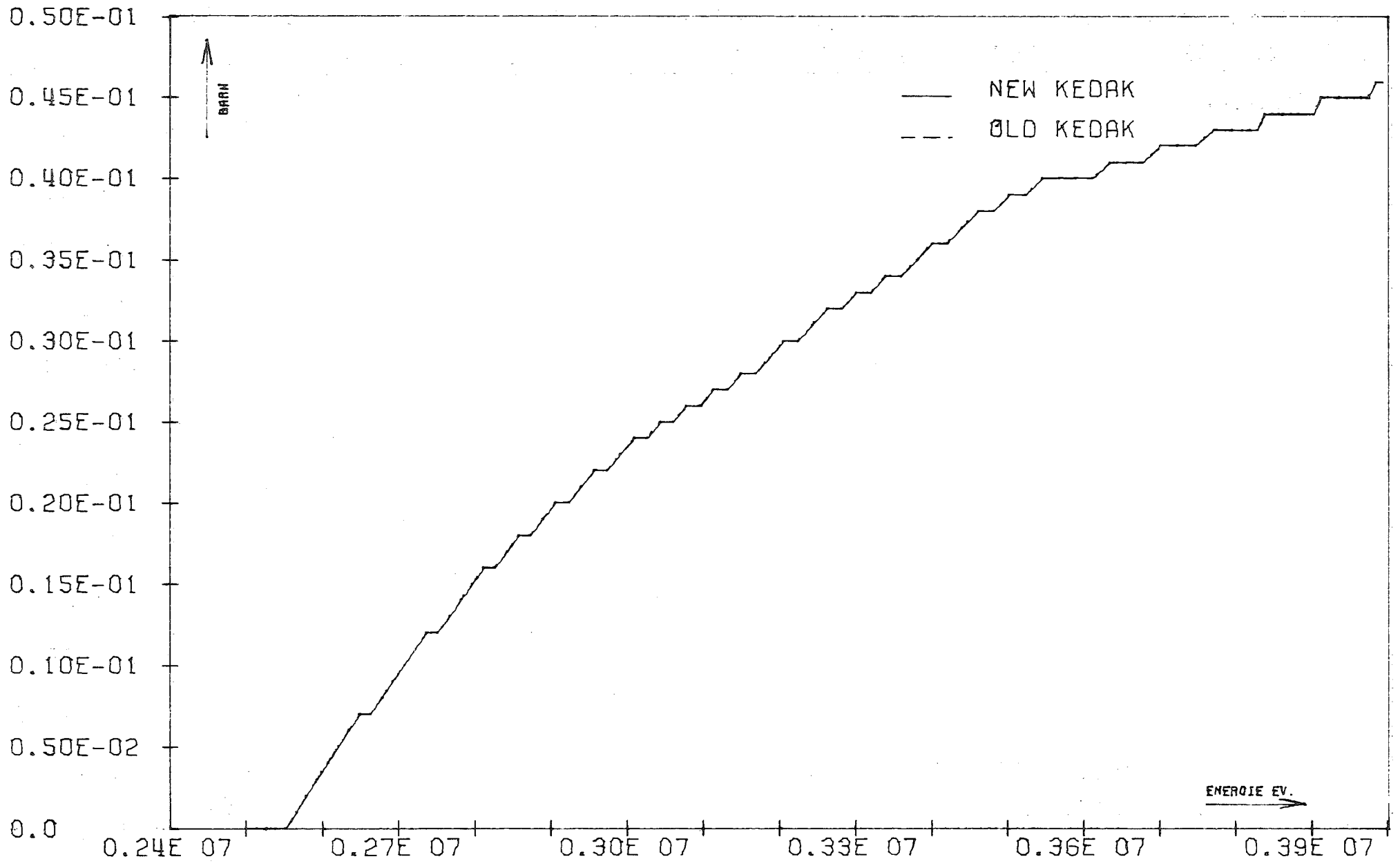


FIG. 24 NI SGIZ 0.2500+07 INR901N1 16.06 18.02.

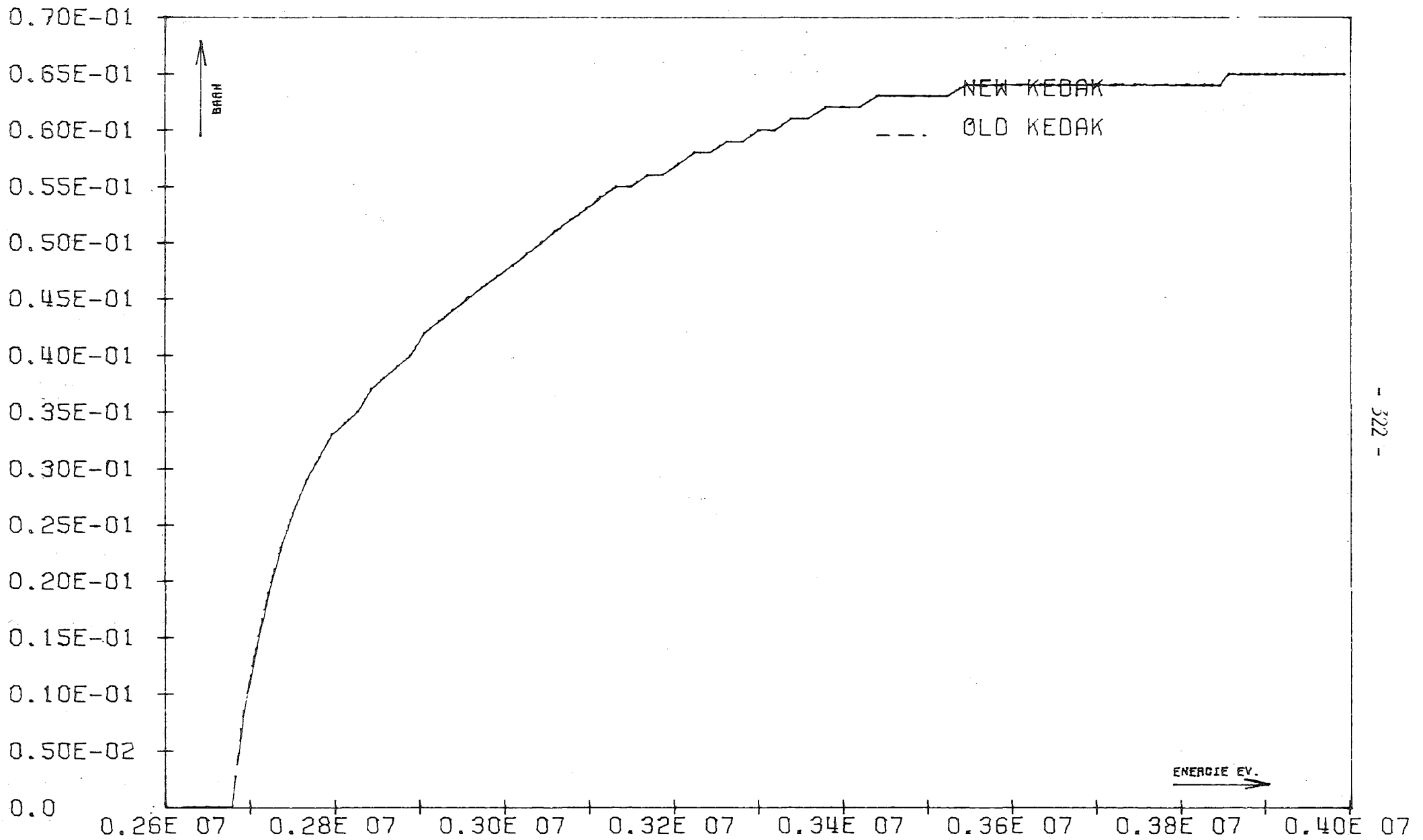


FIG. 25 NI SGIZ 0.2630+07 INR901N1 16.06 18.02.

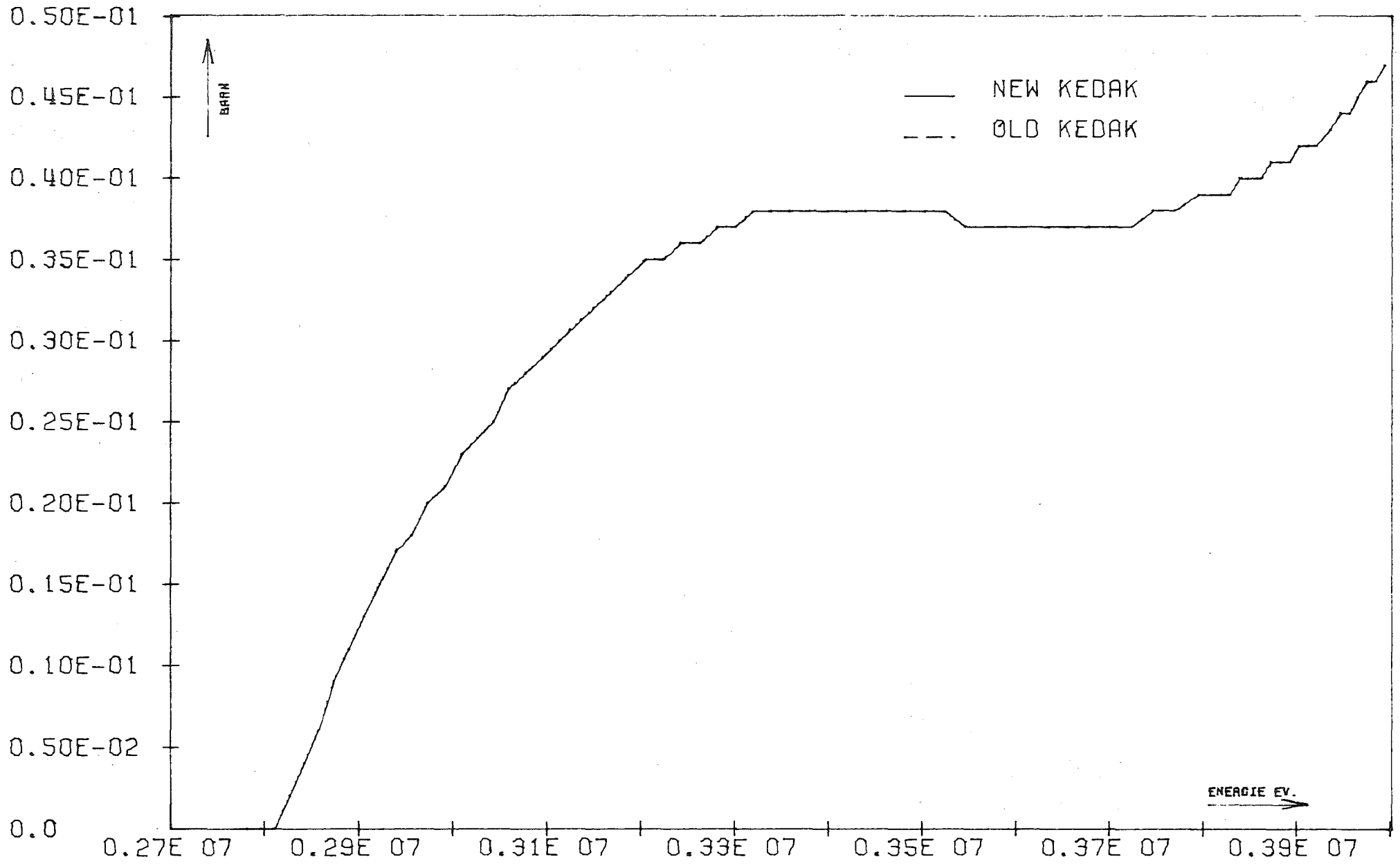


FIG. 26 NI SGIZ 0.2770+07 INR901N1 16.06 18.02.

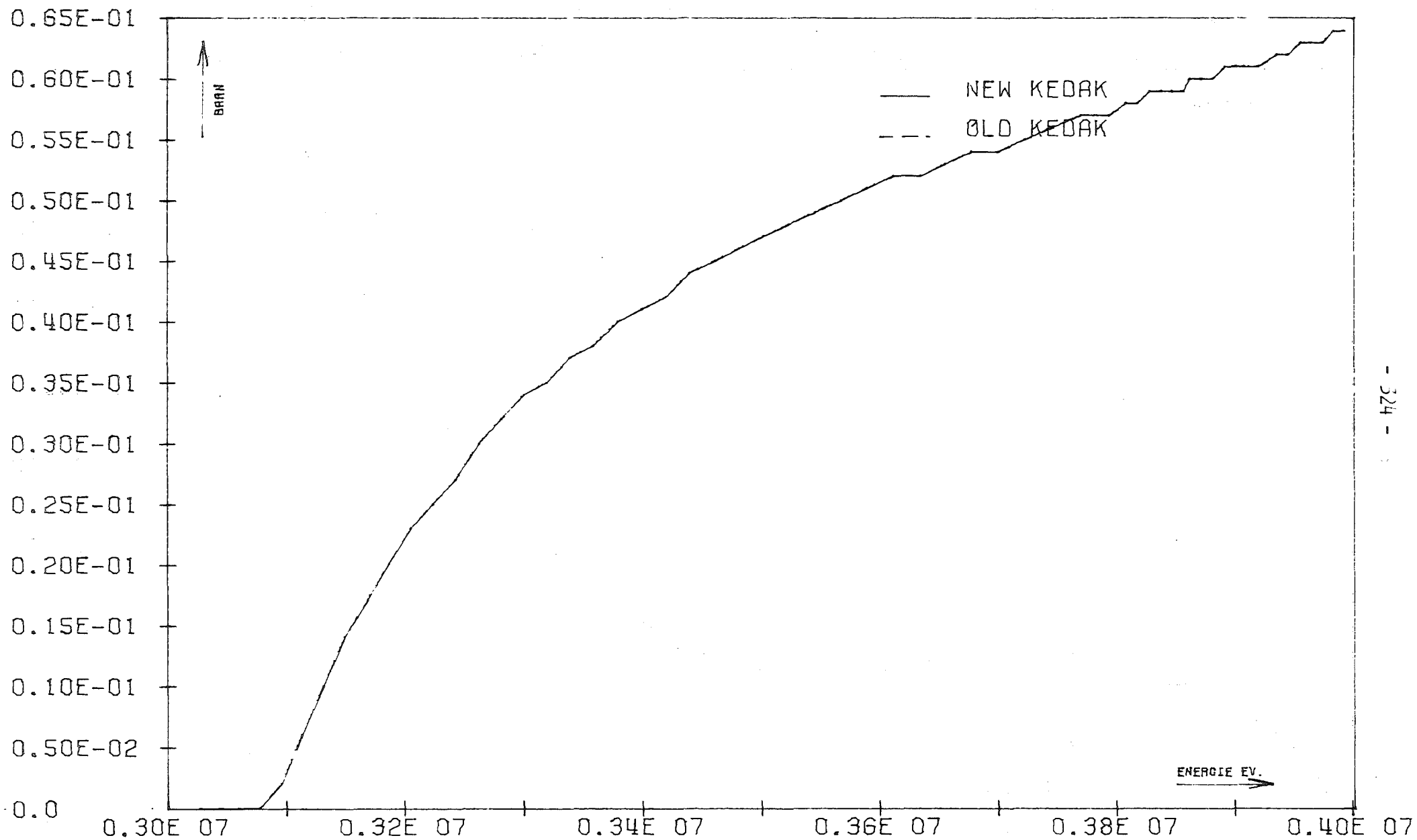


FIG. 27

NI

SGIZ

0.3040+07

INR901N1 16.06 18.02.

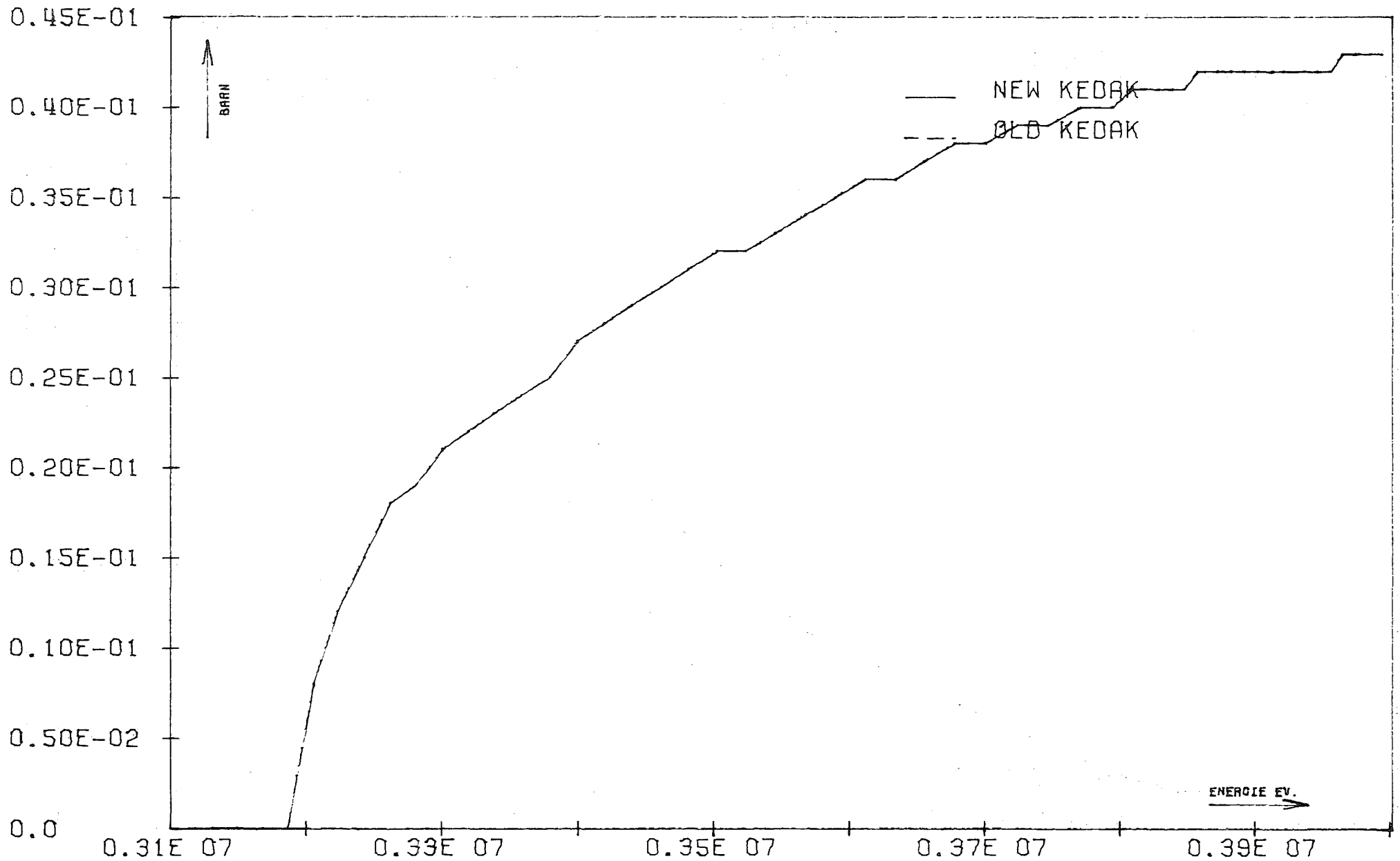


FIG. 28

NI

SGIZ

0.3130+07

INR901N1 16.06 18.02.

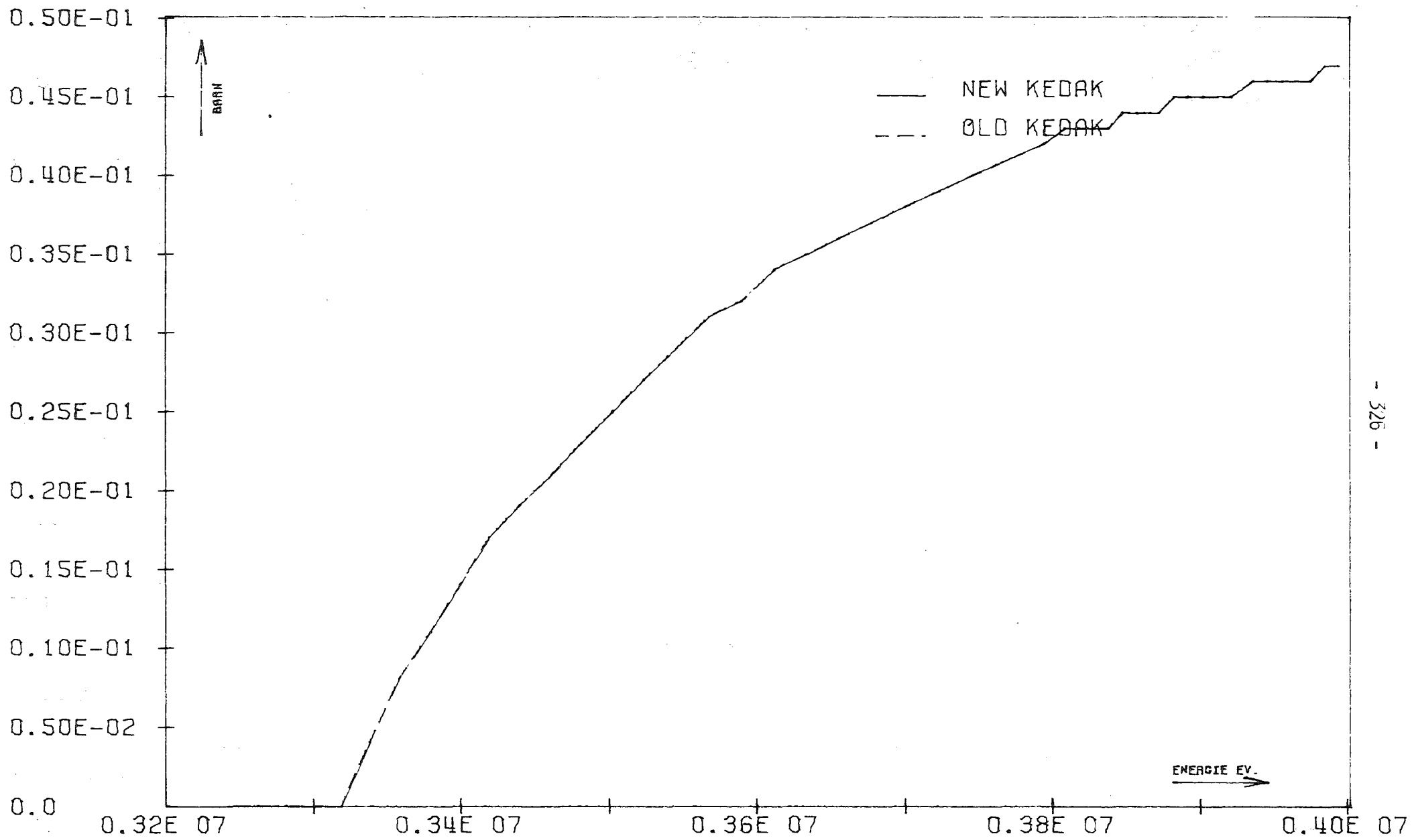


FIG. 29

NI

SGIZ

0.3260+07

0.38E 07

INR901N1 16.06 18.02.

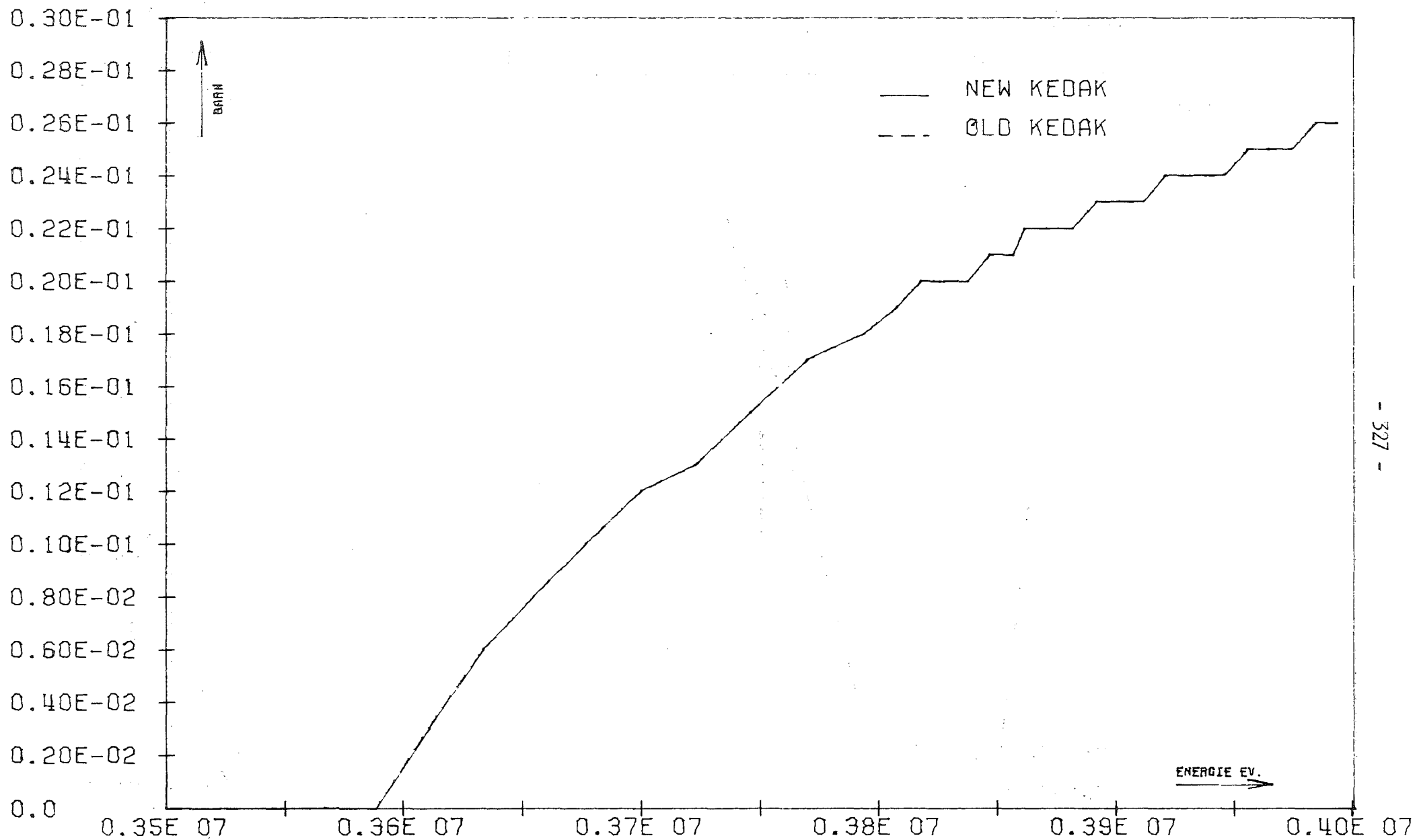


FIG. 30

NI

SGIZ

0.3520+07

INR901N1 16.06 18.02.

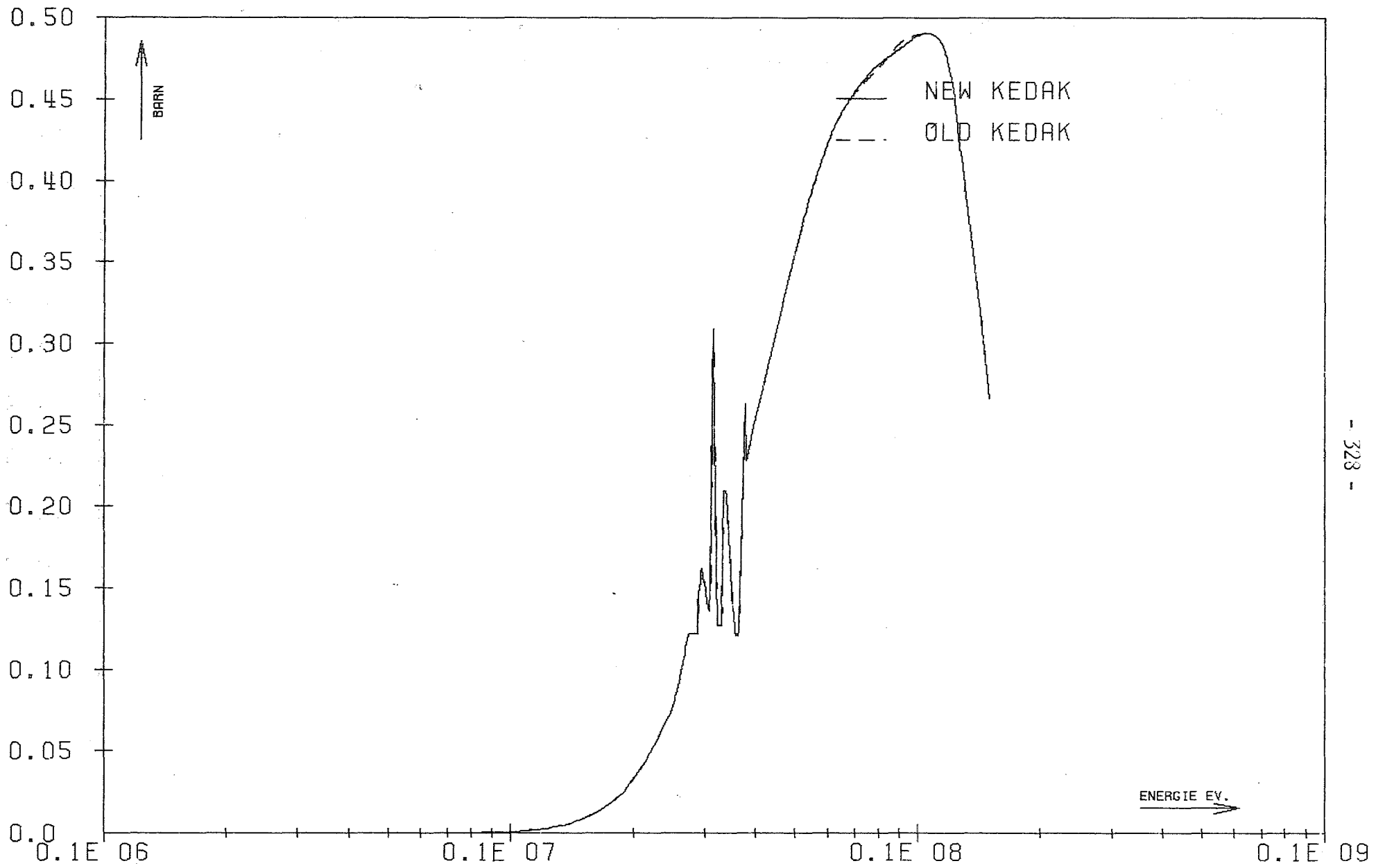


FIG. 31 NI SGP

INR901N1 24.07 19.01.

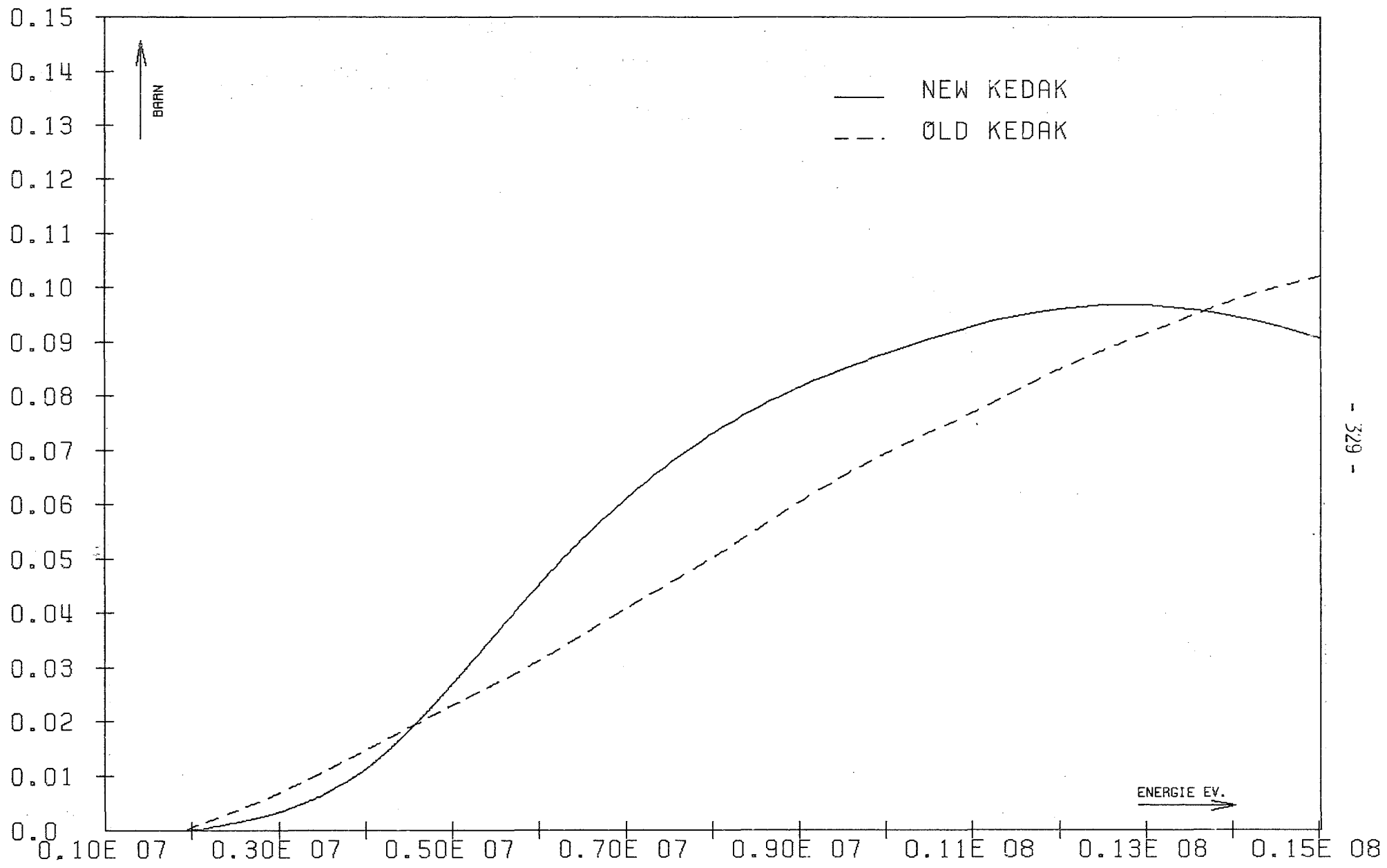


FIG. 32 NI SGALP

INR901N1 24.07 19.01.

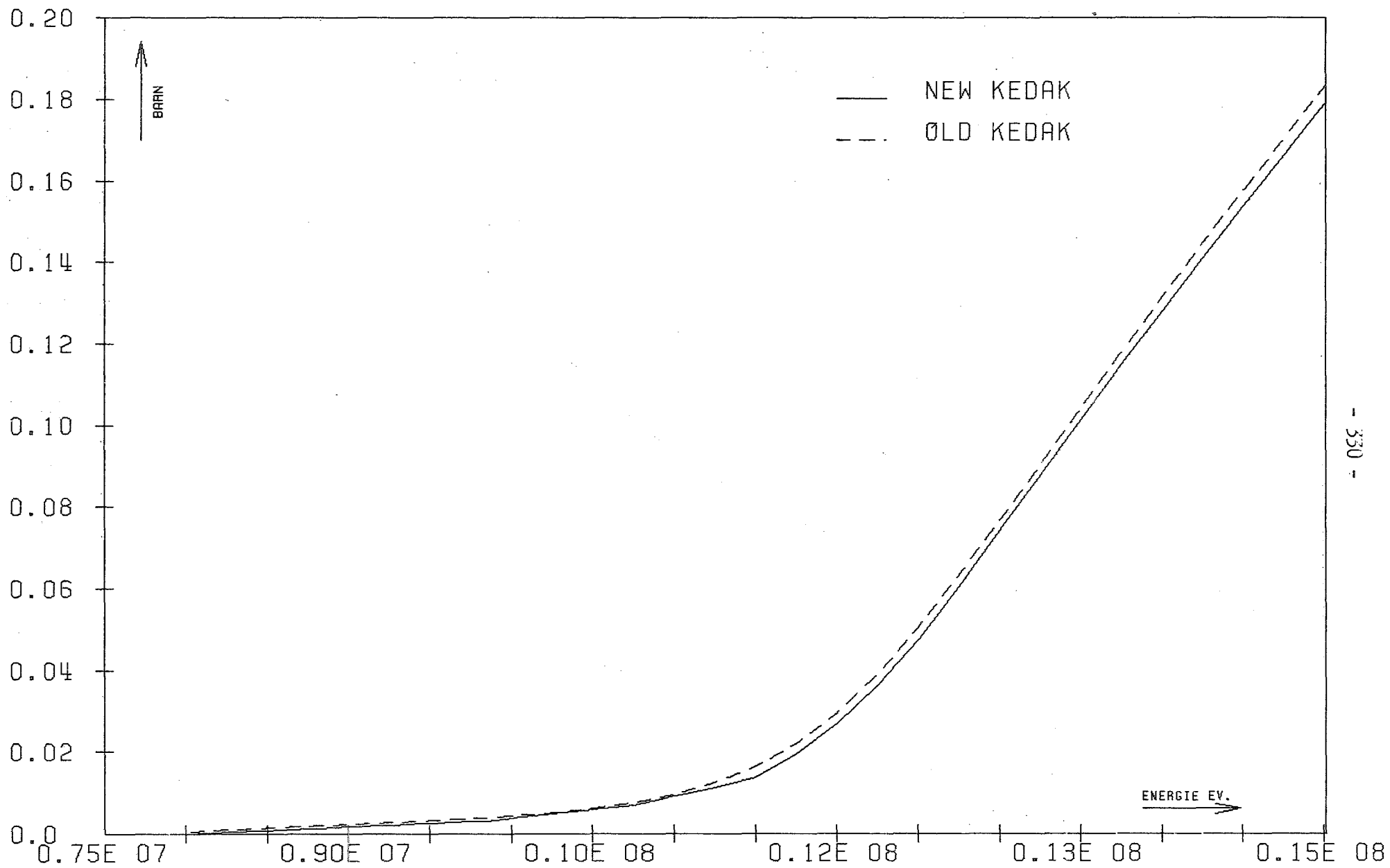


FIG. 33

NI

SG2N

INR901N1 24.07 19.01.

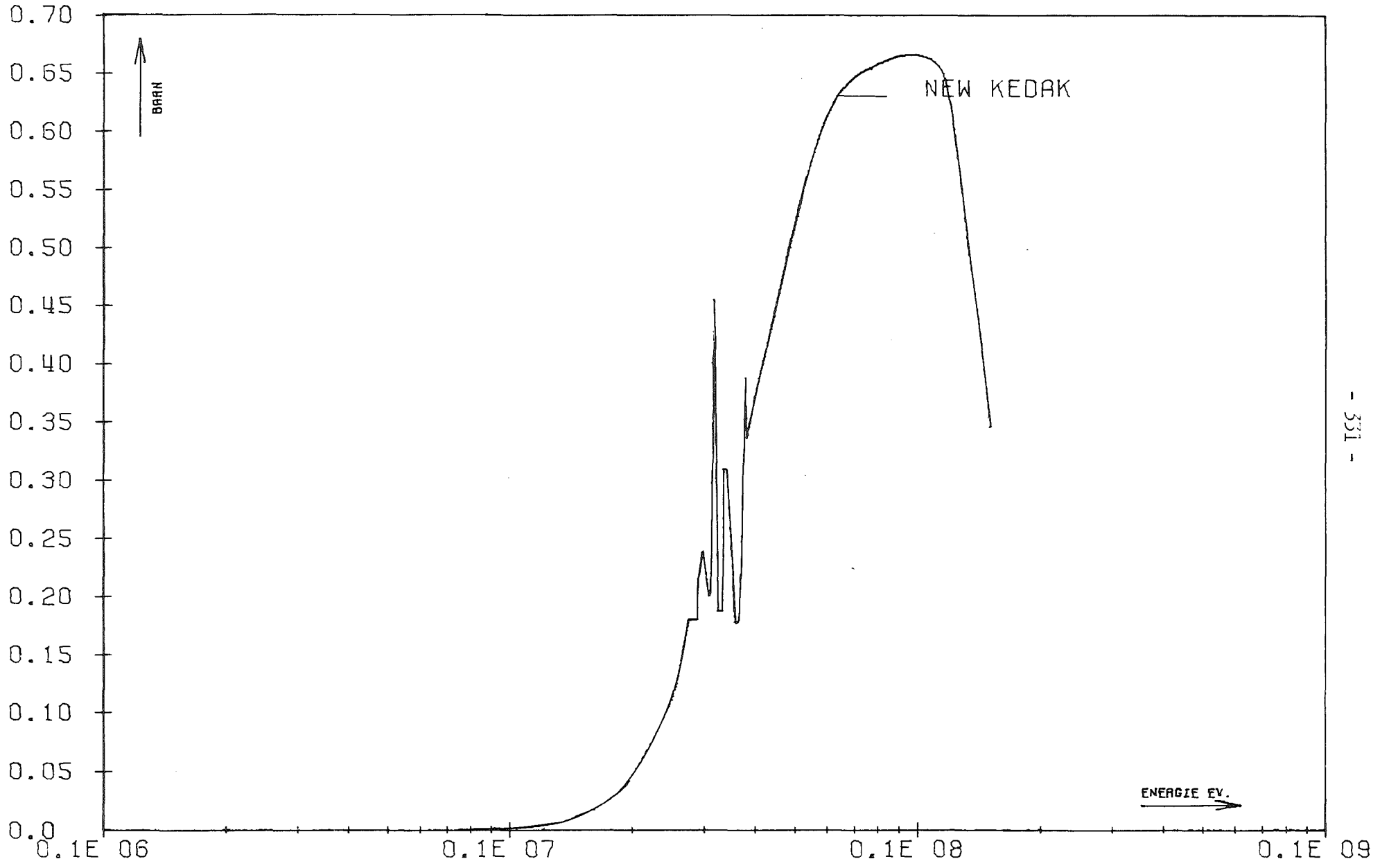


FIG. 34 NI 58 SGP INR901N1 16.06 18.02.

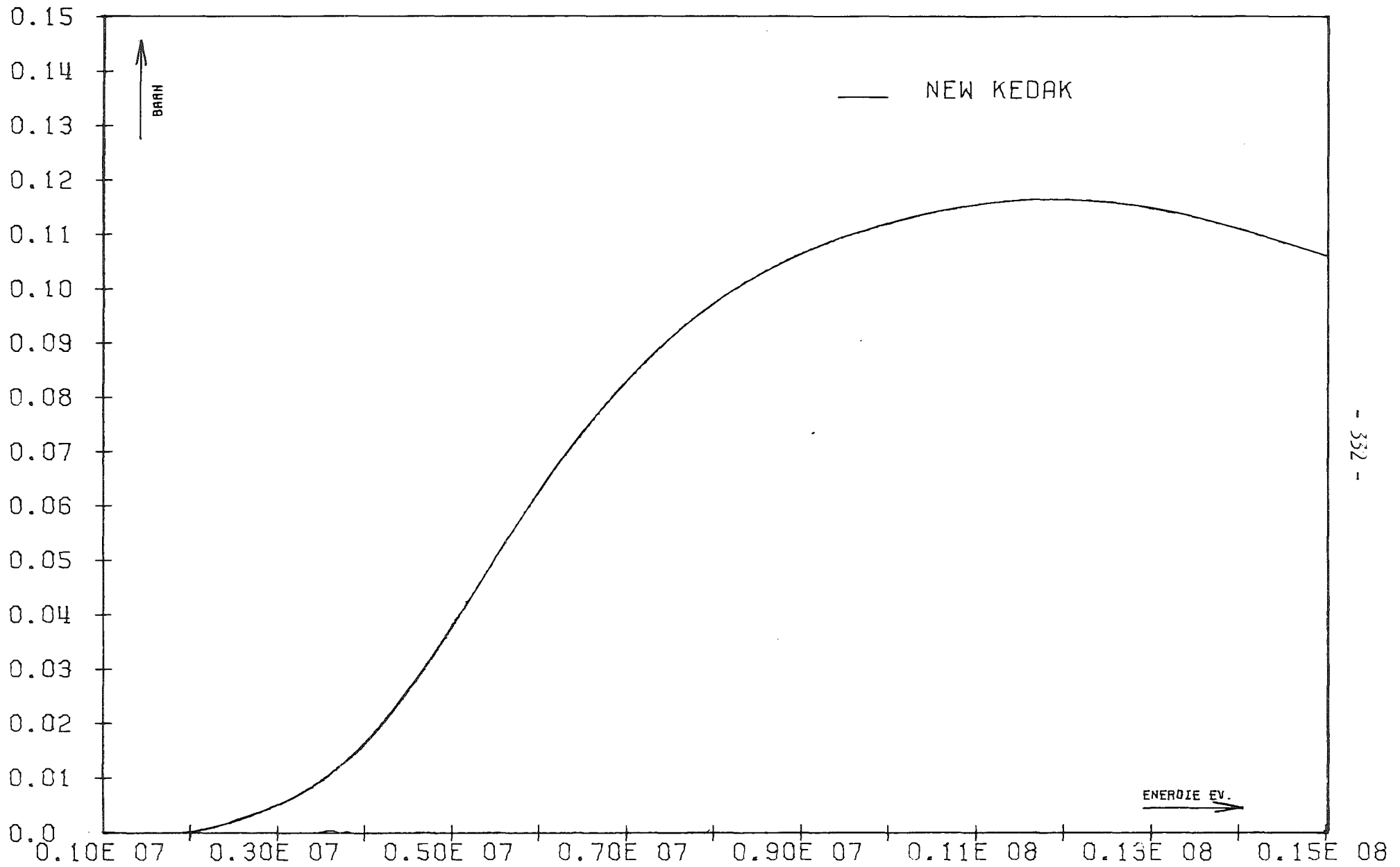


FIG. 35 NI 58 SGALP

INR901N1 16.06 18.02.

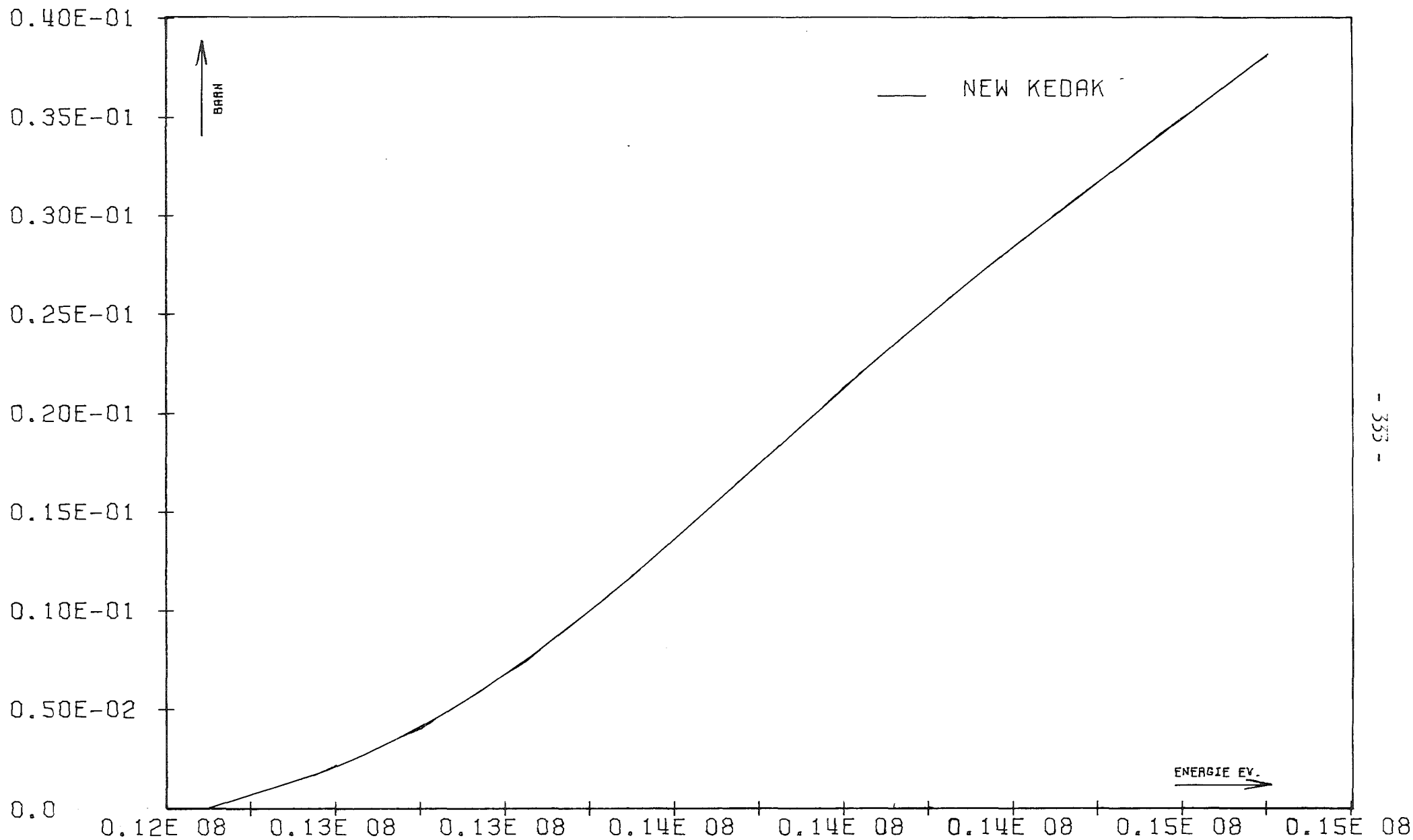
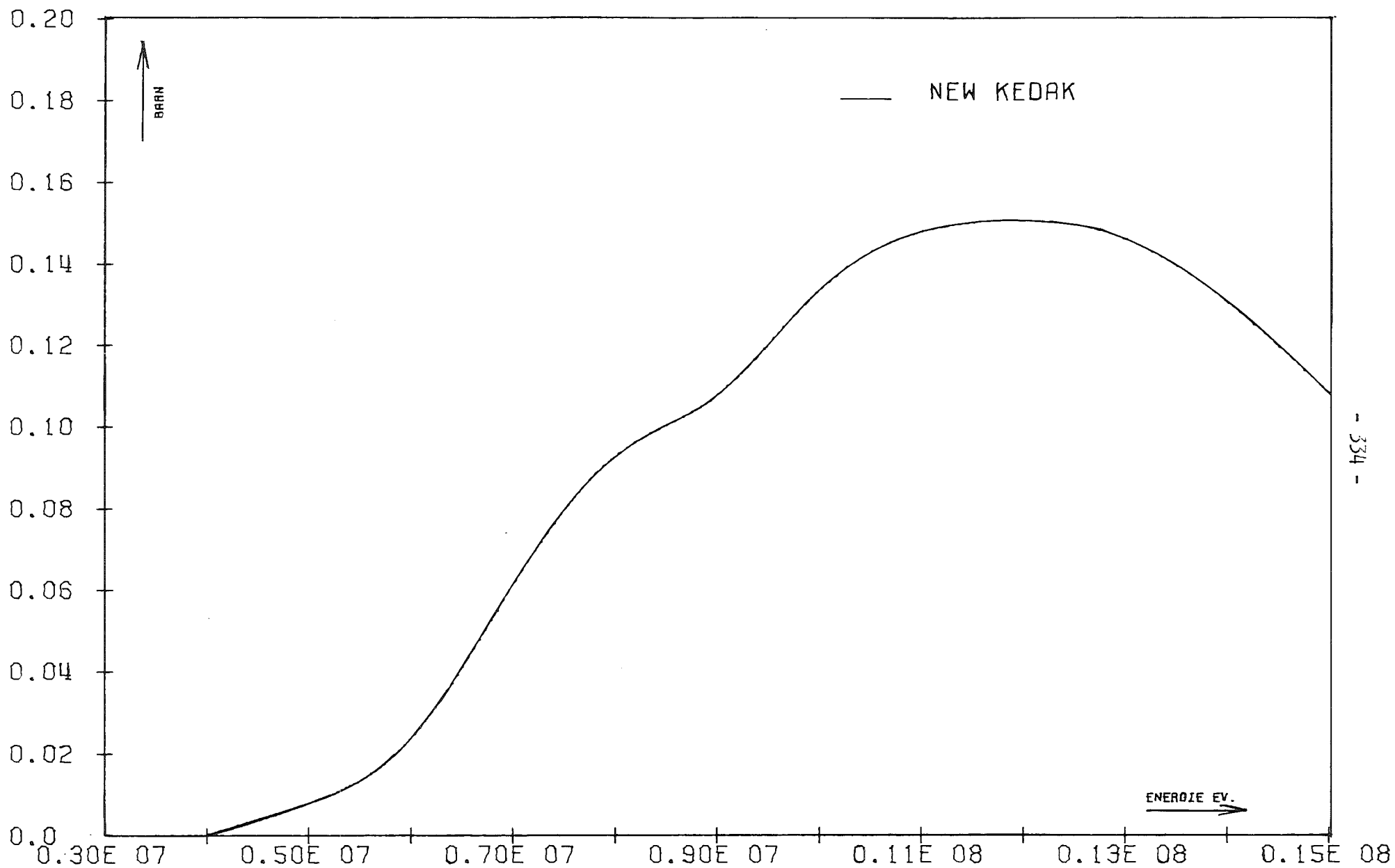


FIG. 36 NI 58 SG2N

INR901N1 16.06 18.02.



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FIG. 37 NI 60 SGP

INR901N1 16.06 18.02.

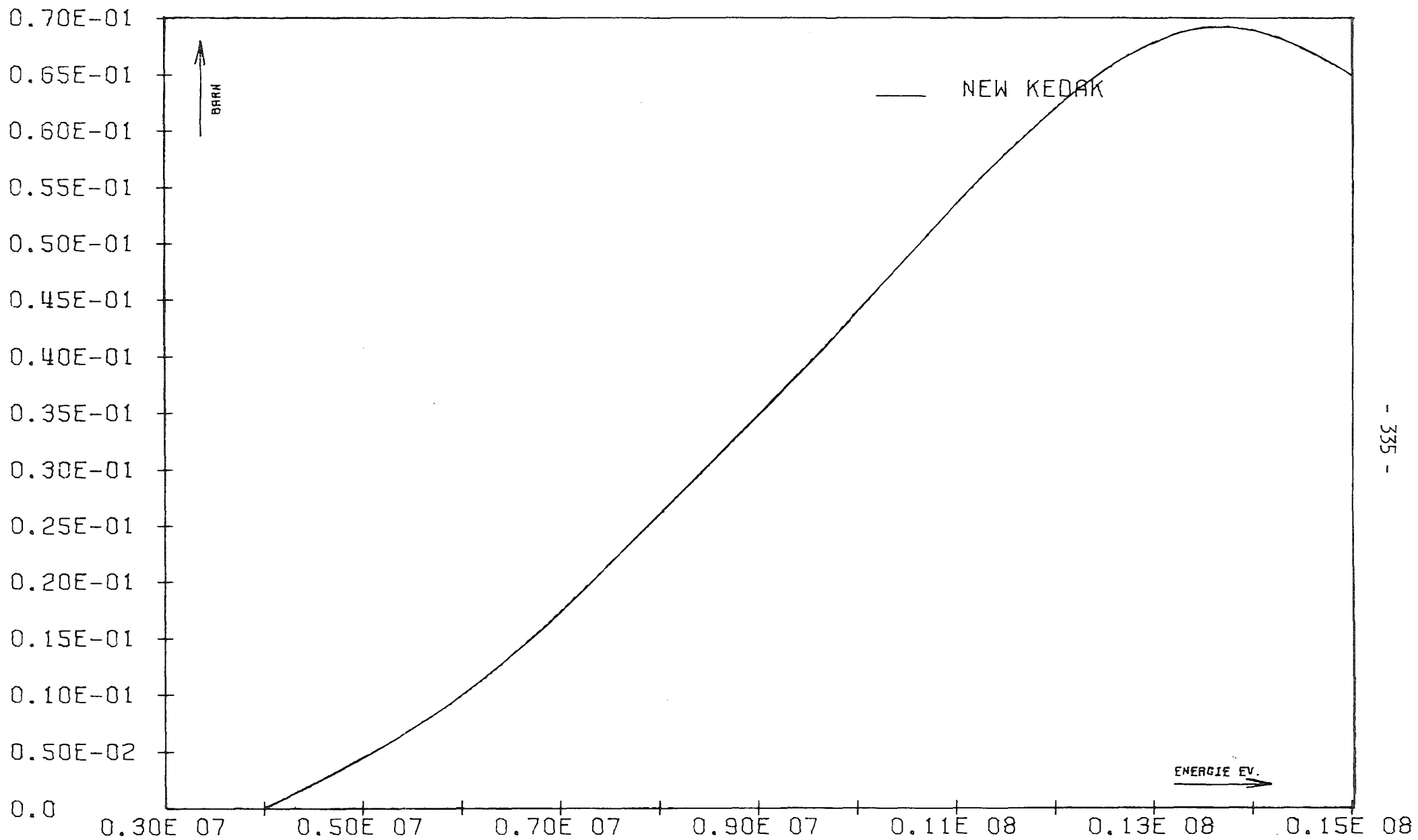


FIG. 38

NI 60

SGALP

INR901N1 16.06 18.02.

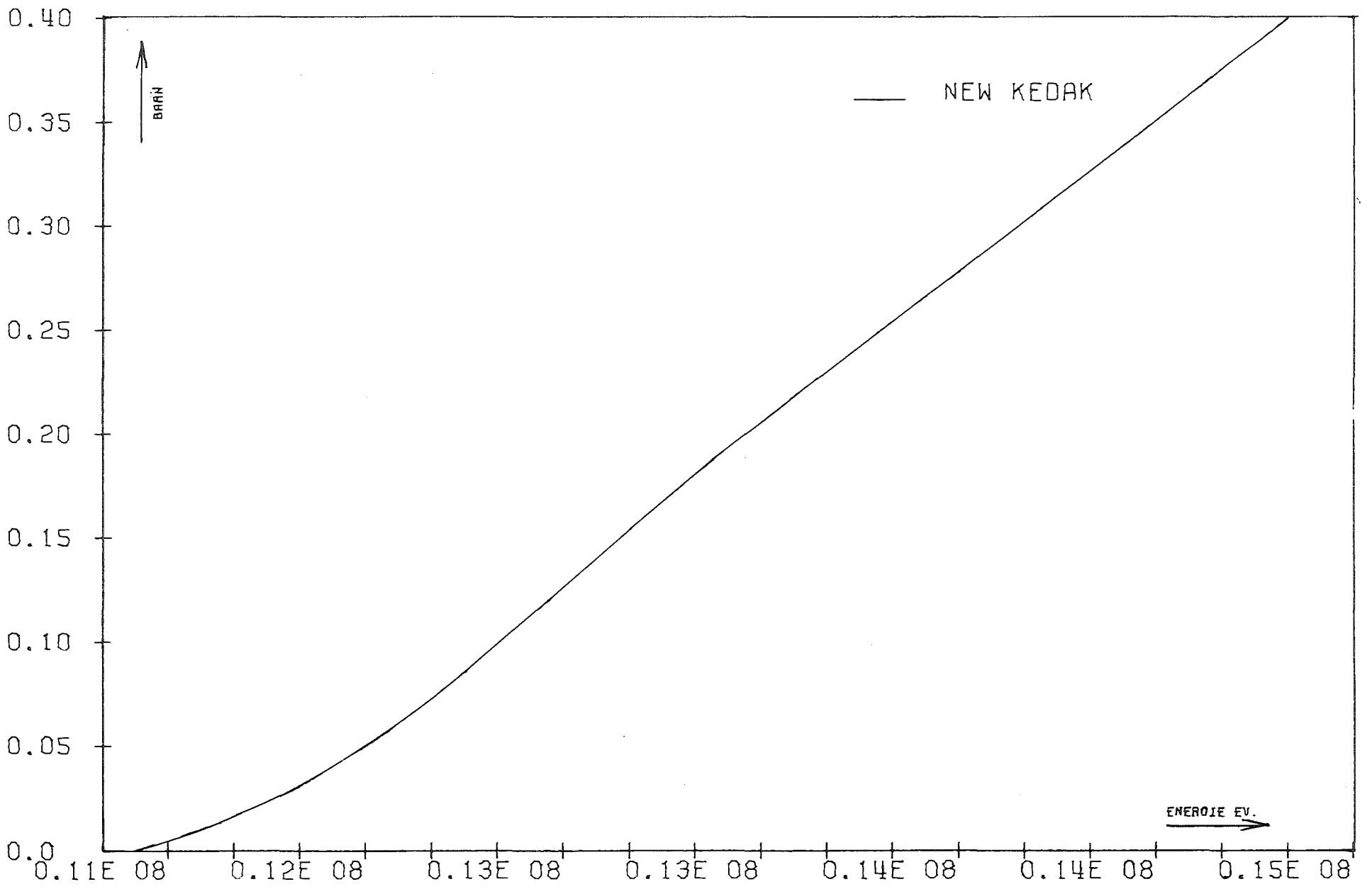


FIG. 39 NI 60 SG2N

INR901N1 16.06 18.02.

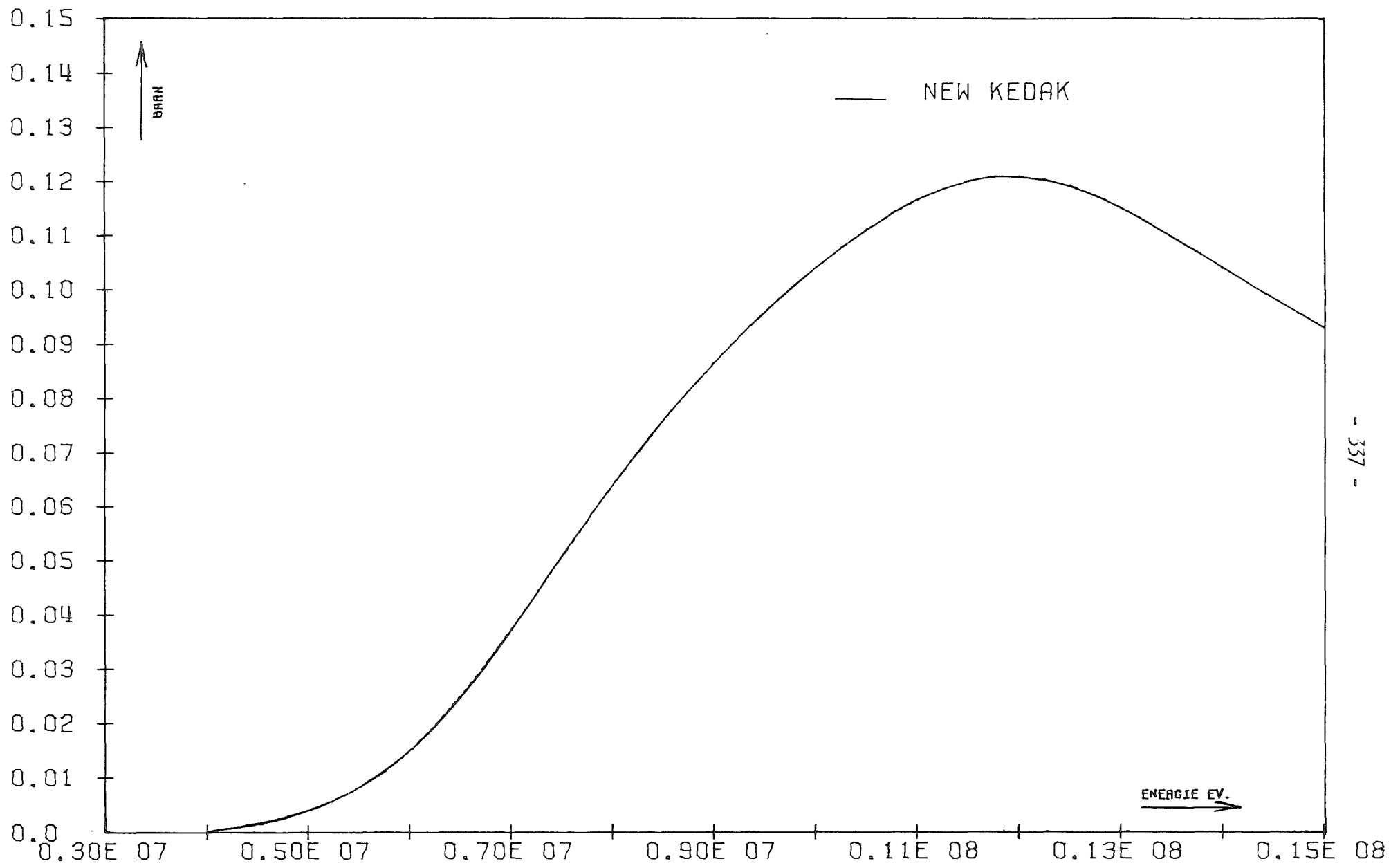


FIG. 40 NI 61 SGP

INR901N1 16.06 18.02.

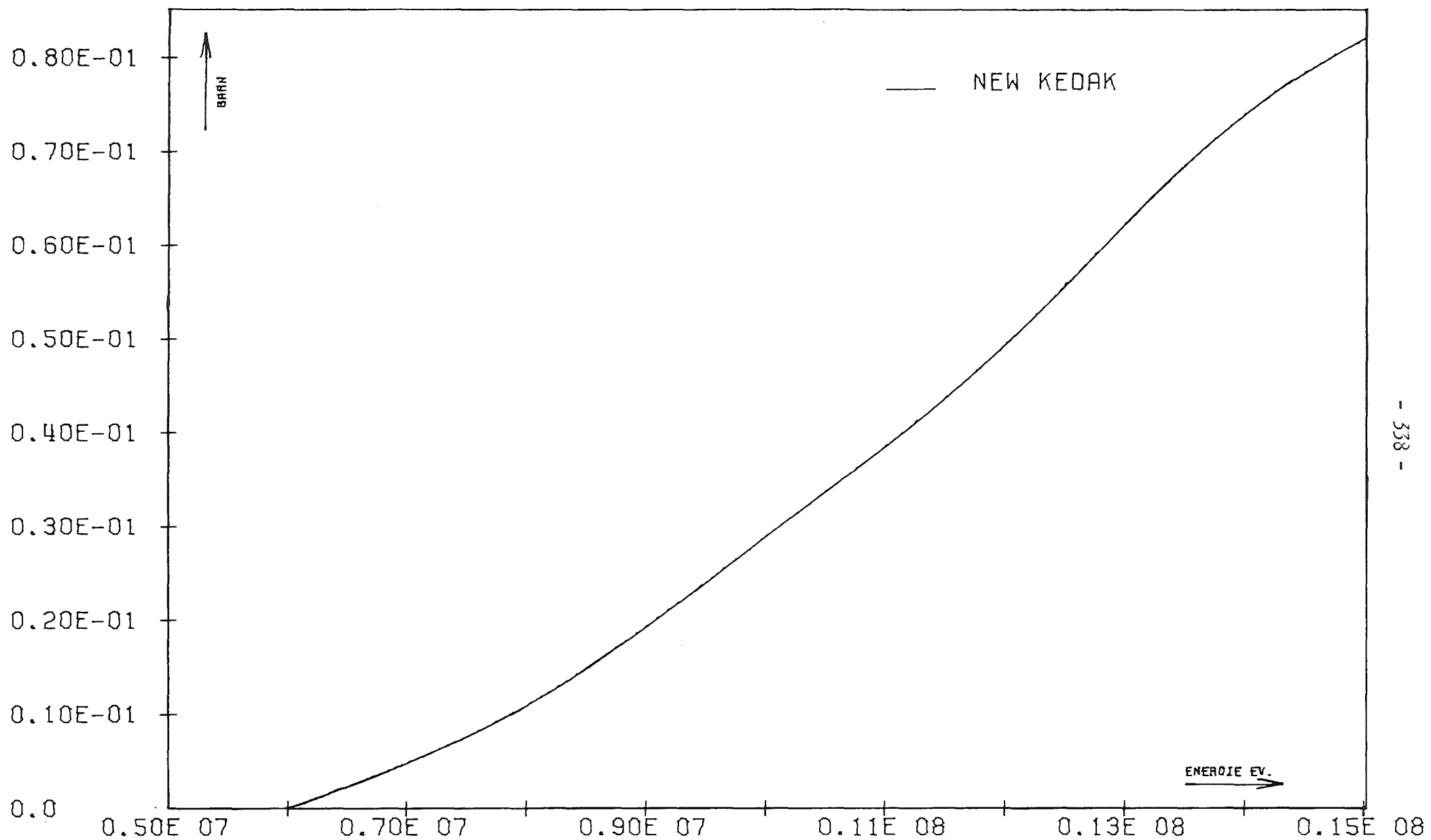


FIG. 41

NI 61 SGALP

INR901N1 16.06 18.02.

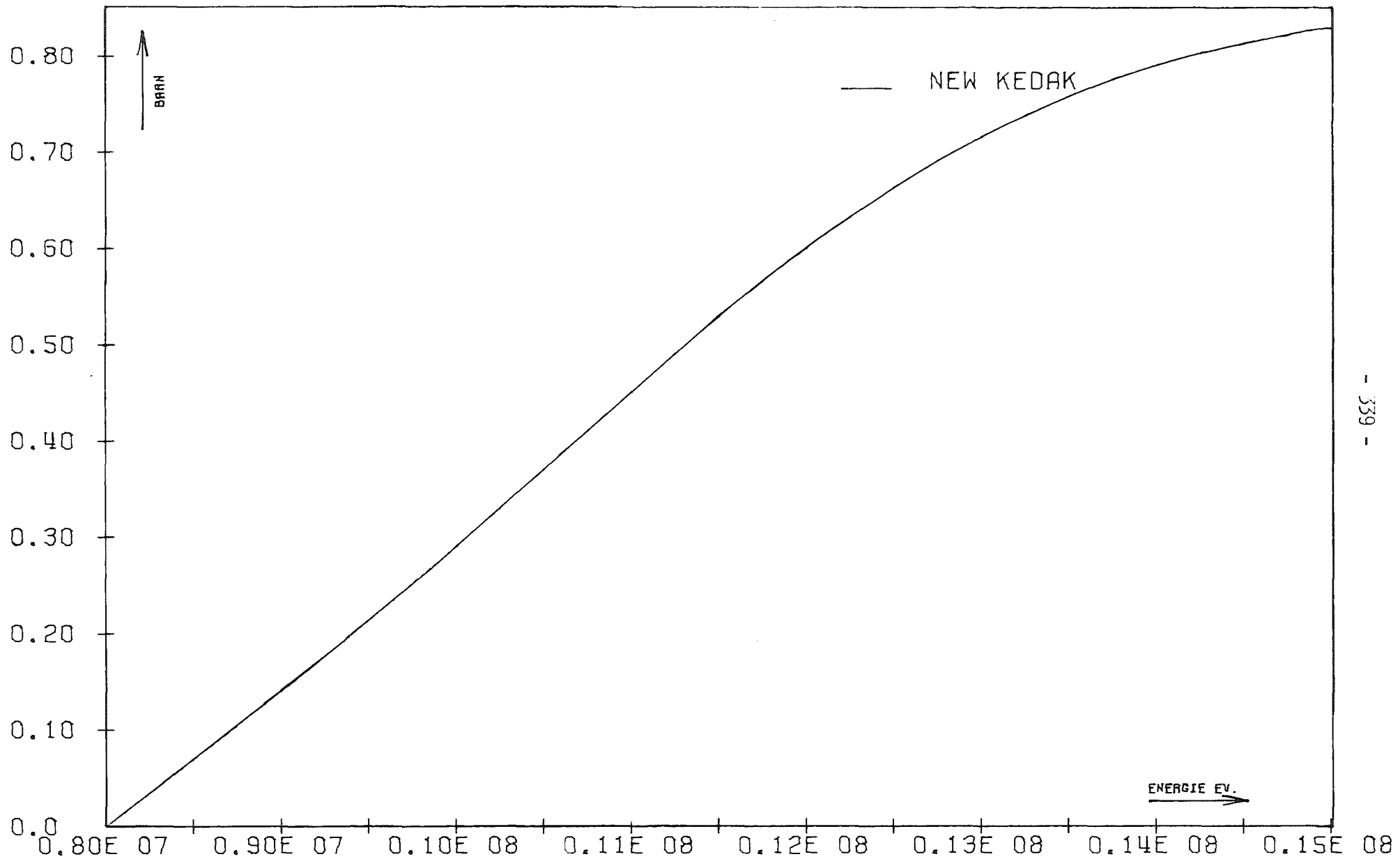


FIG. 42 NI 61 SG2N

INR901N1 16.06 18.02.

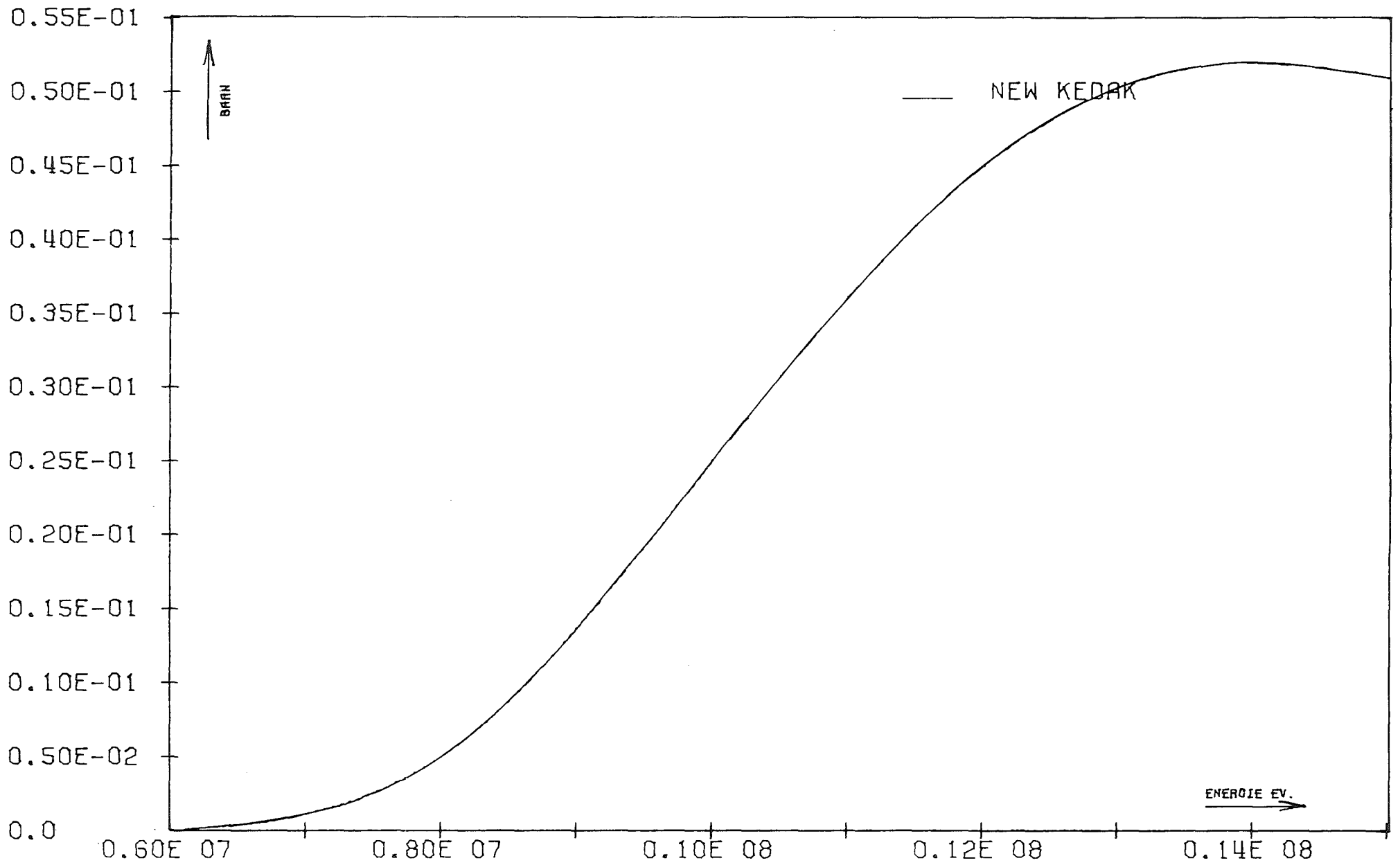


FIG. 43 NI 62 SGP

INR901N1 16.06 18.02.

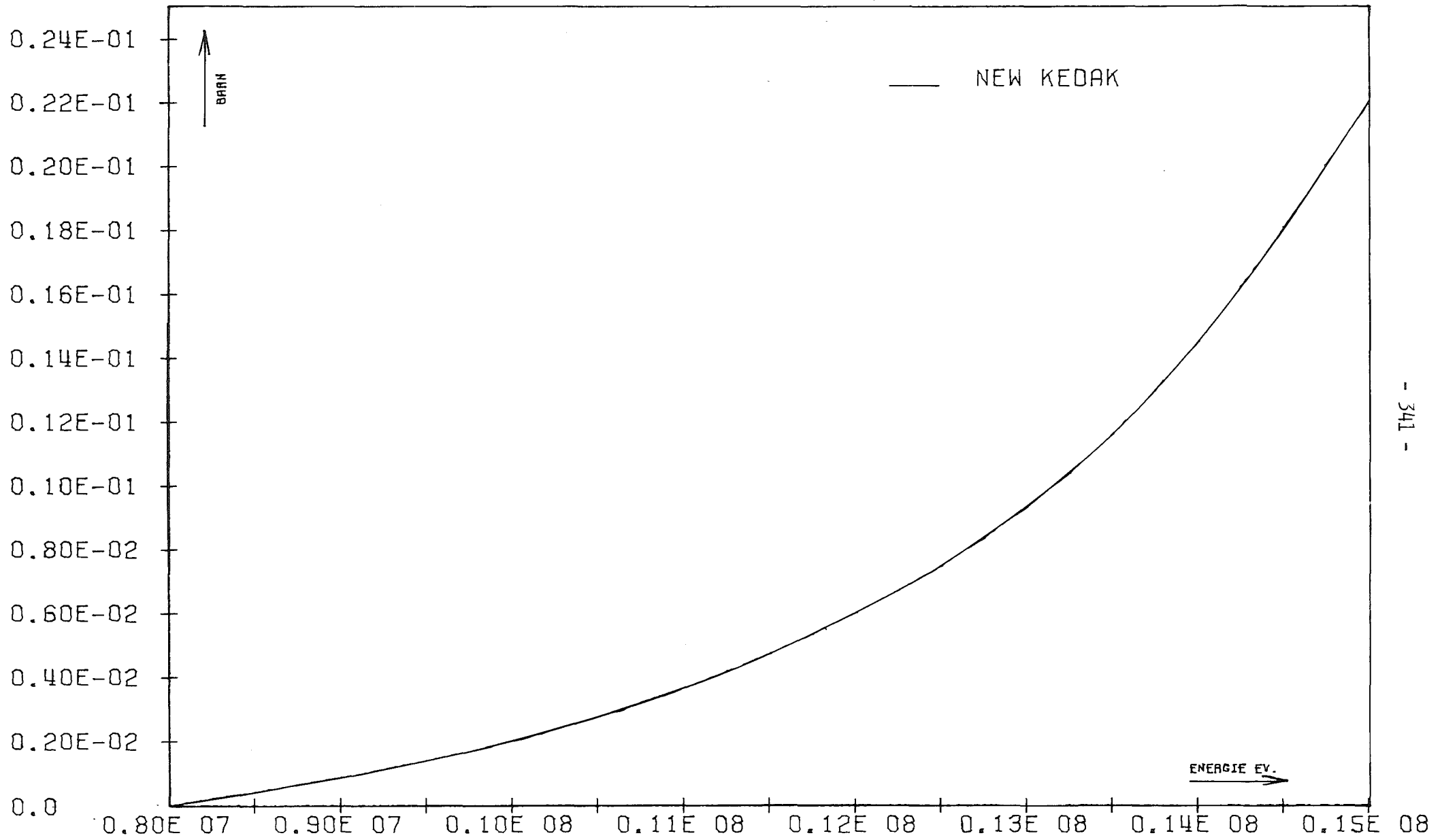


FIG. 44 NI 62 SGALP

INR901N1 16.06 18.02.

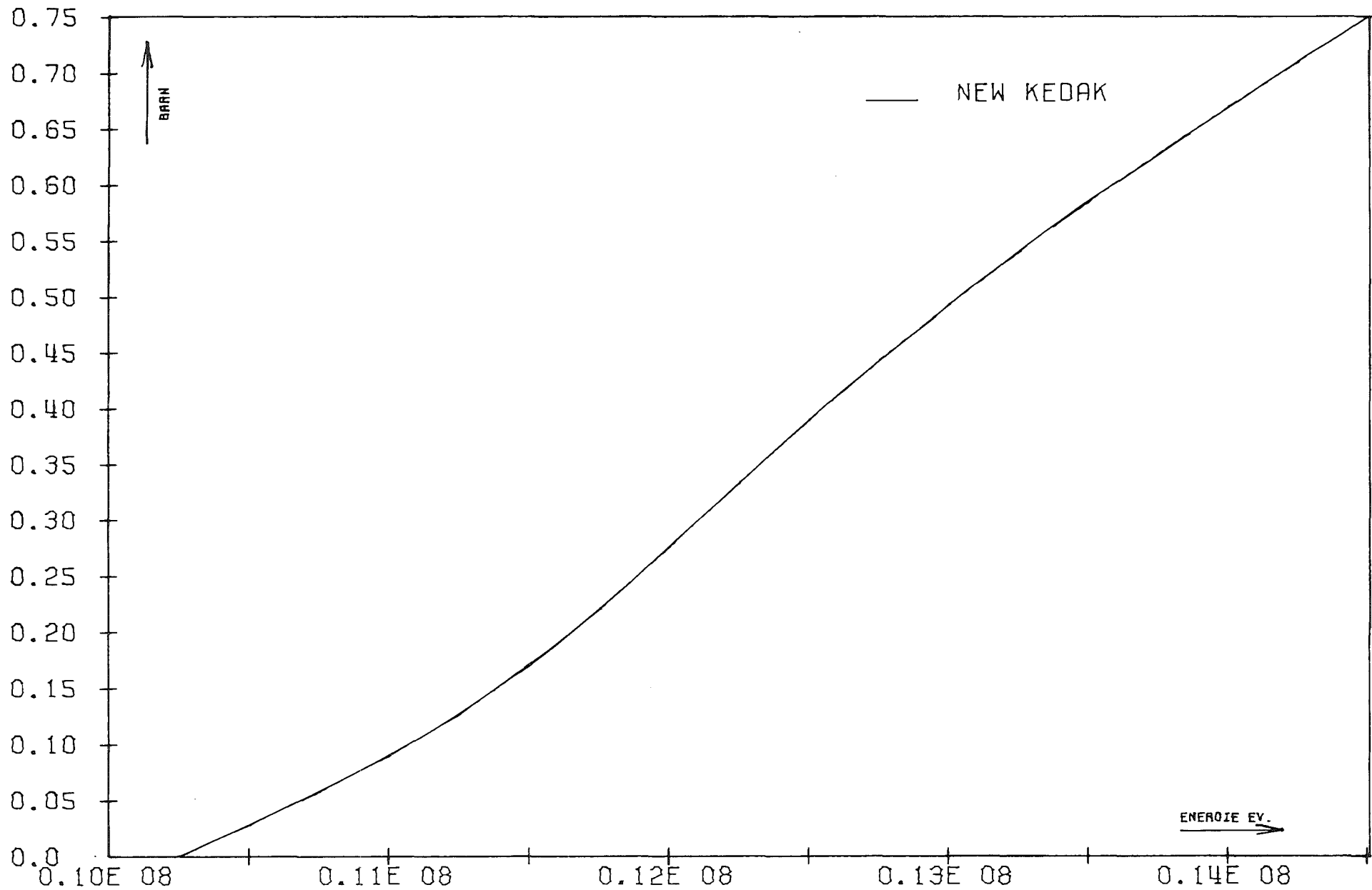


FIG. 45 NI 62 SG2N

INR901N1 16.06 18.02.

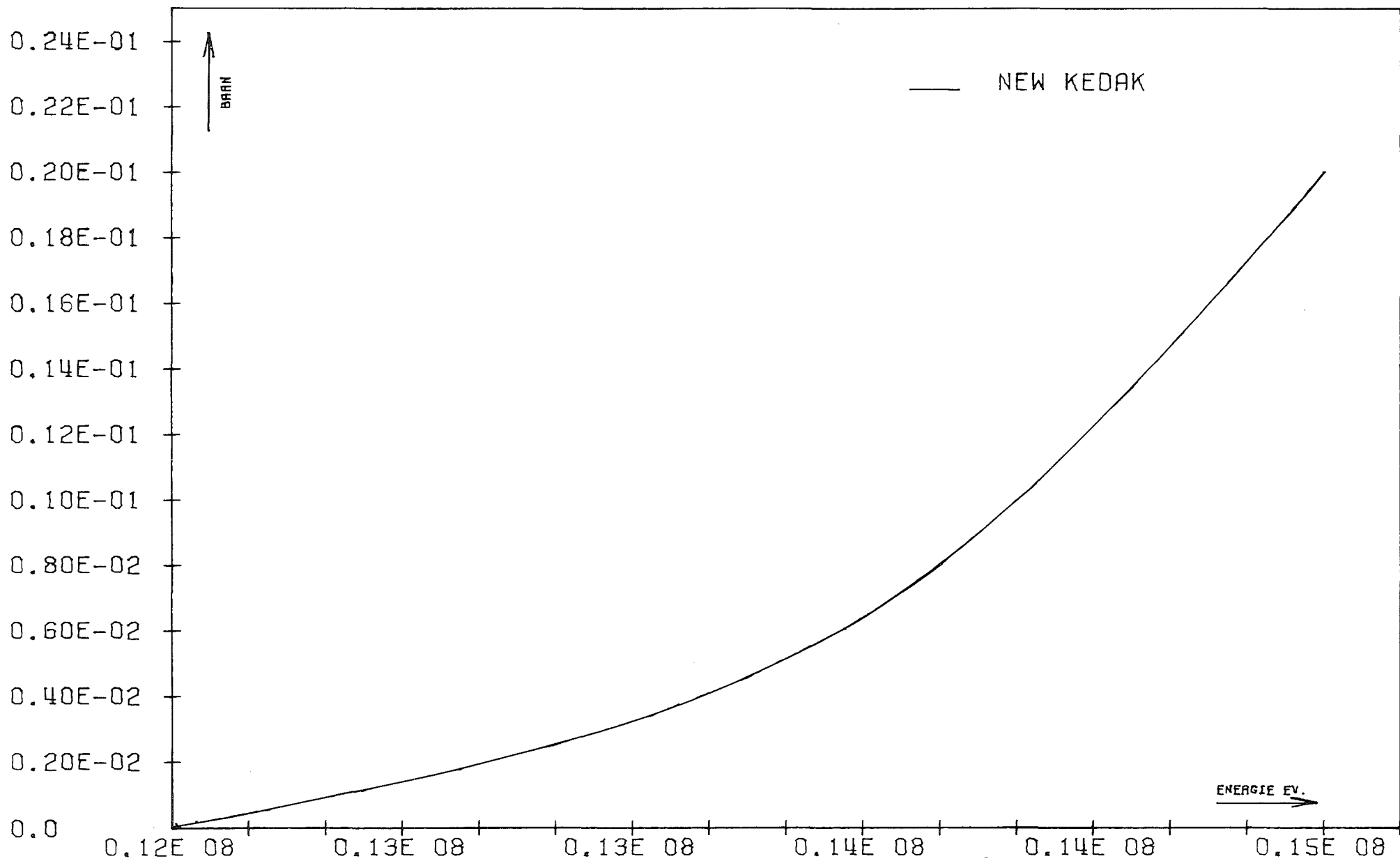


FIG. 46 NI 64 SGP

INR901N1 16.06 18.02.

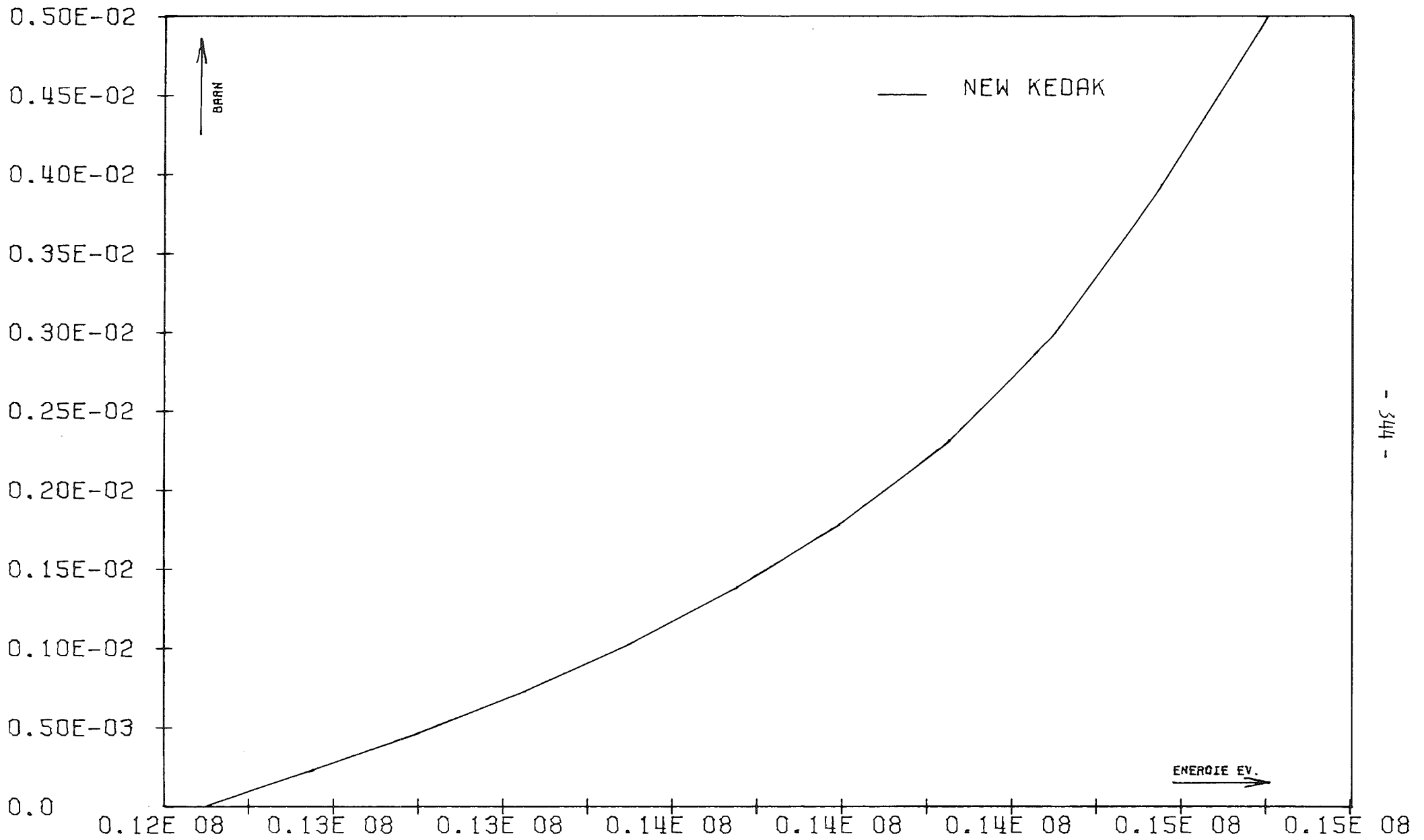


FIG. 47 NI 64 SGALP

INR901N1 16.06 18.02.

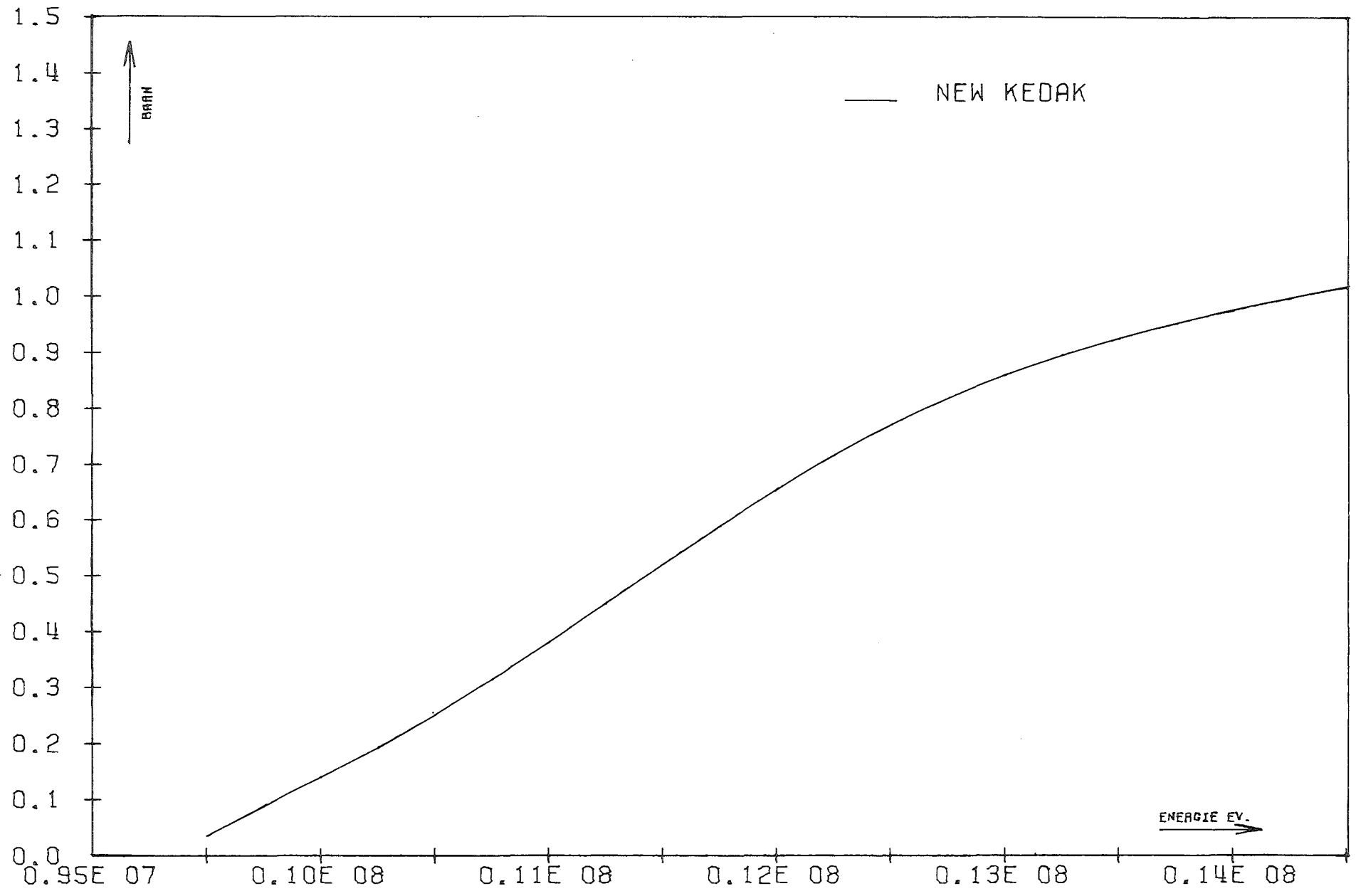


FIG. 48 NI 64 SG2N INR901N1 16.06 18.02.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 10 eV	MO
2	SGG	''	
3	SGN	''	
4	SGTR	''	
5	SGT	10 eV to 100 eV	
6	SGG	''	
7	SGN	''	
8	SGTR	''	
9	SGT	100 eV to 300 eV	
10	SGG	''	
11	SGN	''	
12	SGTR	''	
13	SGT	300 eV to 500 eV	
14	SGG	''	
15	SGN	''	
16	SGTR	''	
17	SGT	500 eV to 700 eV	
18	SGG	''	
19	SGN	''	
20	SGTR	''	
21	SGT	700 eV to 1 keV	
22	SGG	''	
23	SGN	''	
24	SGTR	''	
25	SGT	1 keV to 10 keV	
26	SGG	''	
27	SGN	''	
28	SGTR	''	
29	SGT	10 keV to 1 MeV	
30	SGG	''	
31	SGX	''	
32	SGN	''	
33	SGTR	''	
34	MUEL	''	
35	SGT	1 MeV to 15 MeV	
36	SGG	''	
37	SGA	''	
38	SGX	''	
39	SGN	''	
40	SGTR	''	
41	MUEL	''	
42	SGI	''	
43	SGIZ	''	
	E* = 0.203 MeV	''	
44	E* = 0.530 MeV	''	
45	E* = 0.785 MeV	''	
46	E* = 0.930 MeV	''	
47	E* = 1.100 MeV	''	
48	E* = 1.260 MeV	''	
49	E* = 1.500 MeV	''	
50	E* = 1.860 MeV	''	

Mo

Figure	Reaction type	Energy range	Material name
51	SGP	1 MeV to 15 MeV	MO
52	SGALP	??	
53	SG2N	??	
54	SGP	??	MO 92
55	SGALP	??	
56	SG2N	??	
57	SGP	??	MO 94
58	SGALP	??	
59	SG2N	??	
60	SGP	??	MO 95
61	SGALP	??	
62	SG2N	??	
63	SGP	??	MO 96
64	SGALP	??	
65	SG2N	??	
66	SGP	??	MO 97
67	SGALP	??	
68	SG2N	??	
69	SGP	??	MO 98
70	SGALP	??	
71	SG2N	??	
72	SGP	??	MO100
73	SGALP	??	
74	SG2N	??	

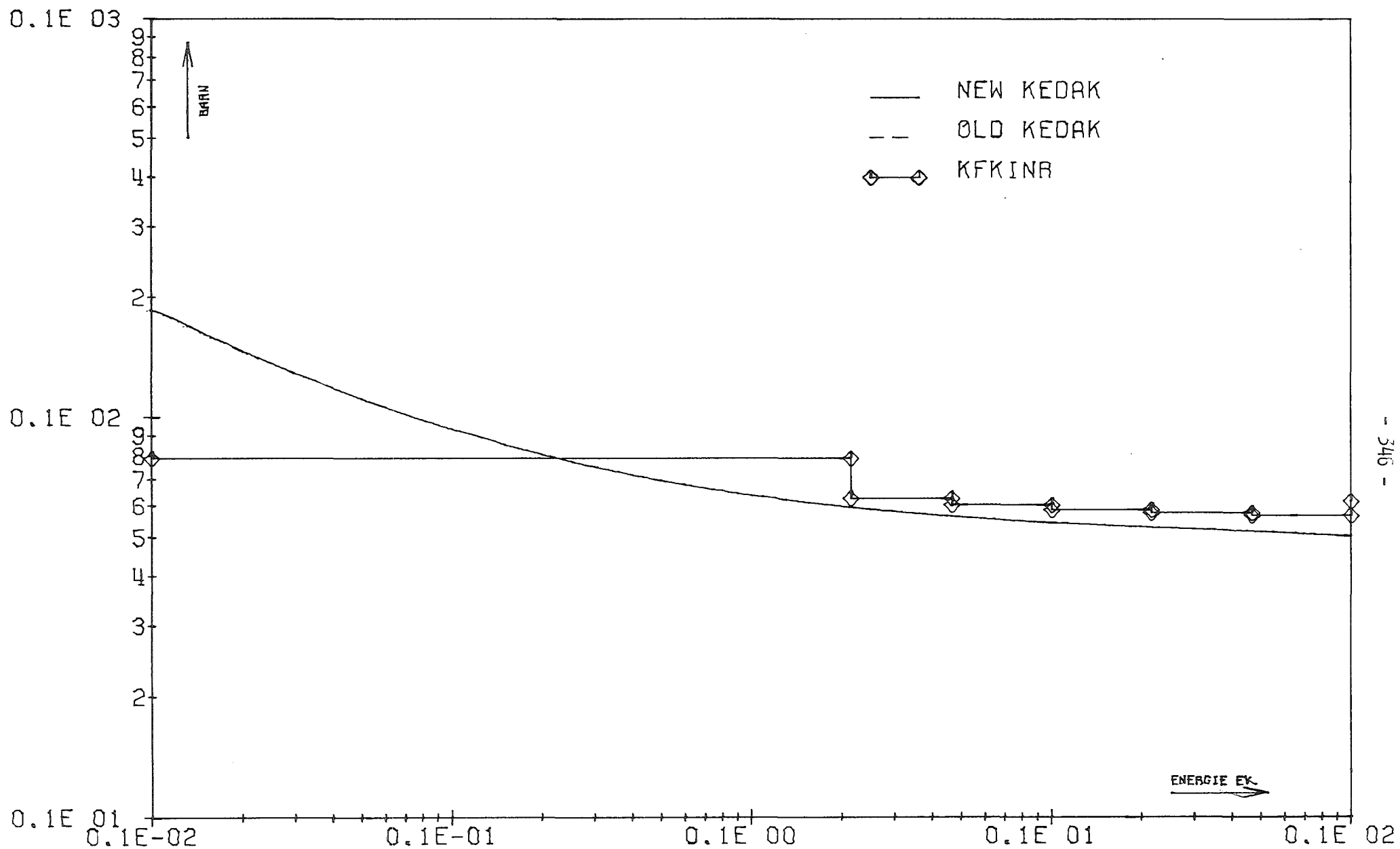


FIG. 1 MØ SGT

INR901MØ 25.01 20.44.

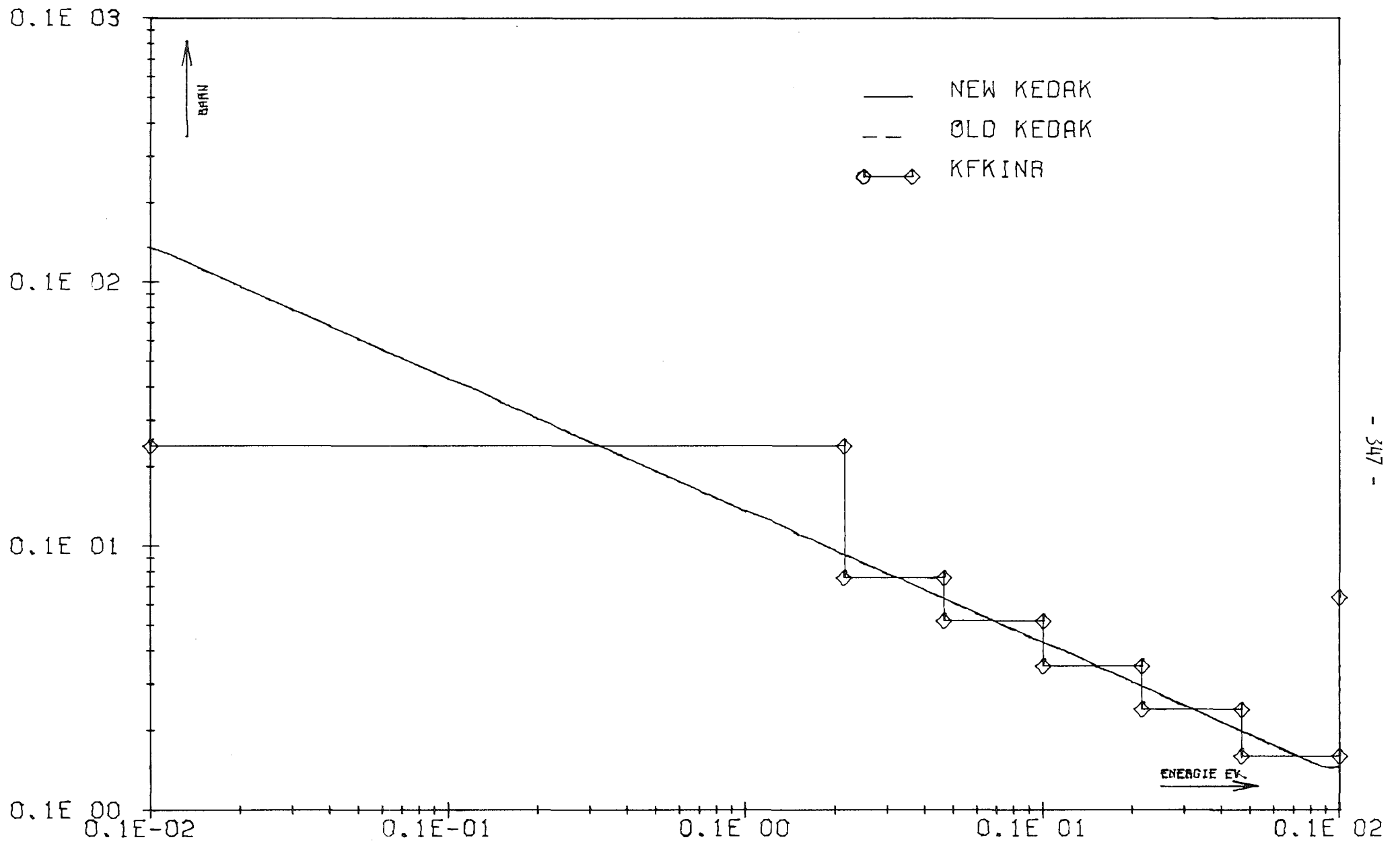


FIG. 2 M0 SGG

INR901M0 25.01 20.44.

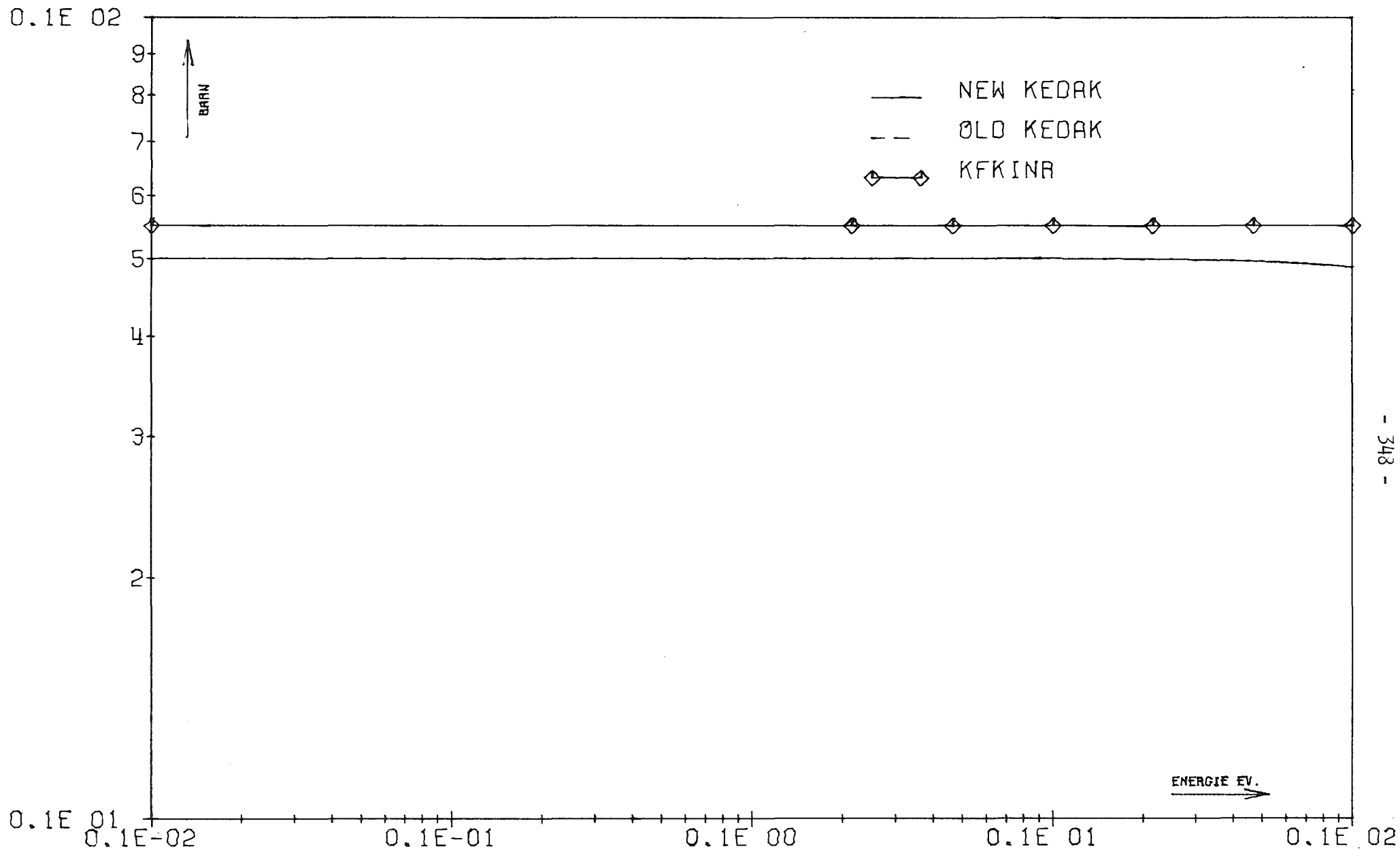


FIG. 3 MØ SGN

INR901MØ 25.01 20.44.

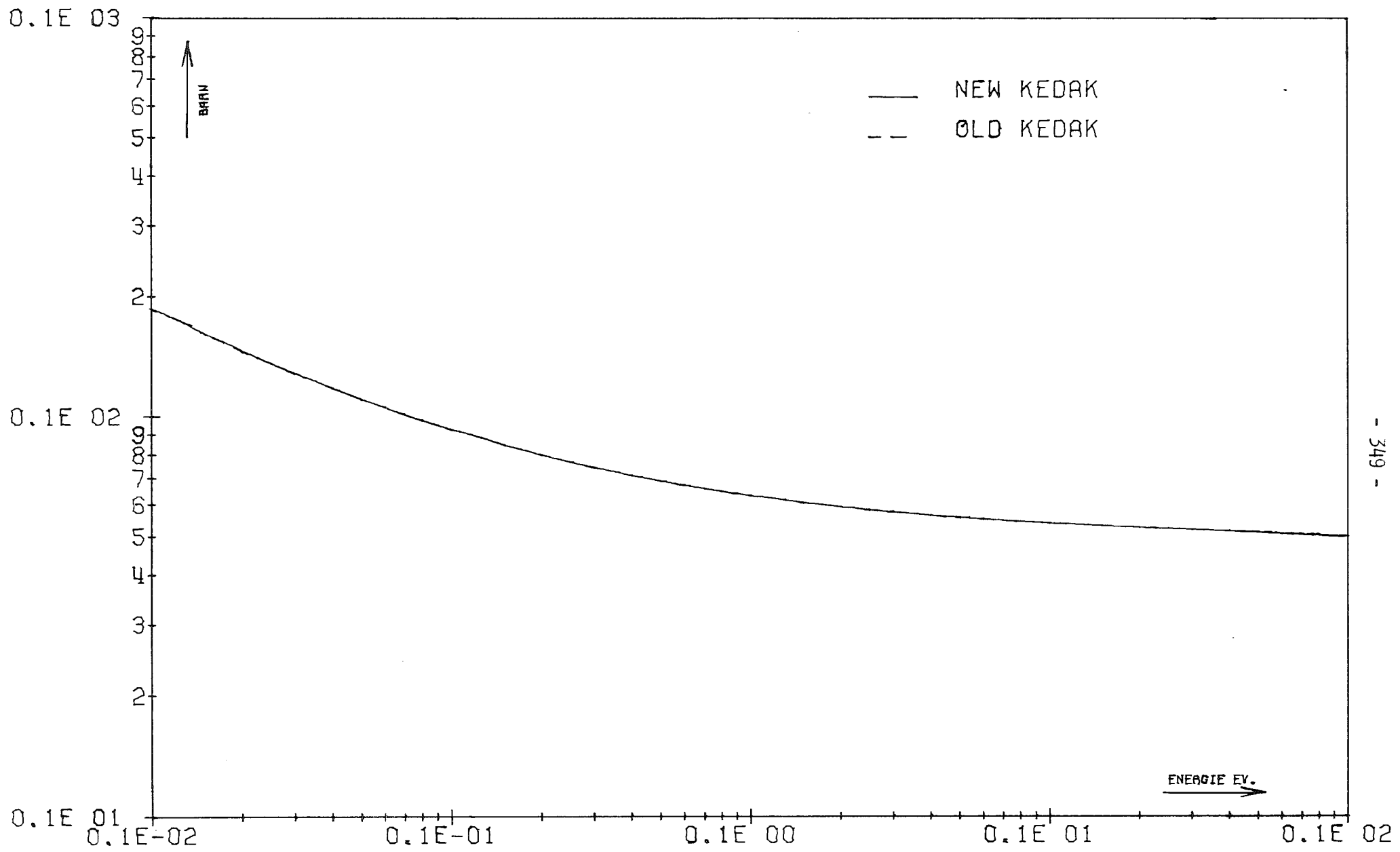
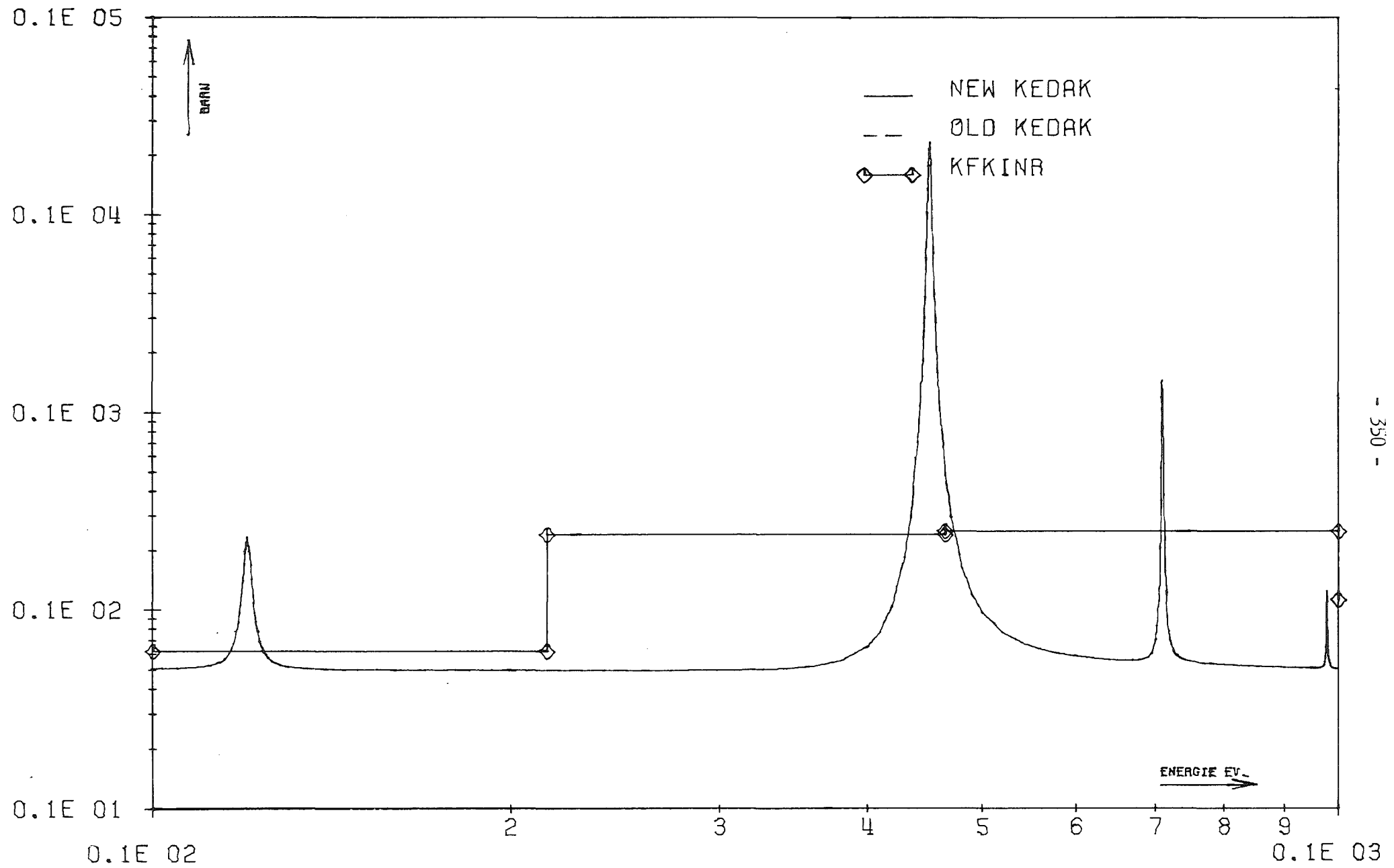


FIG. 4 MØ SGTR

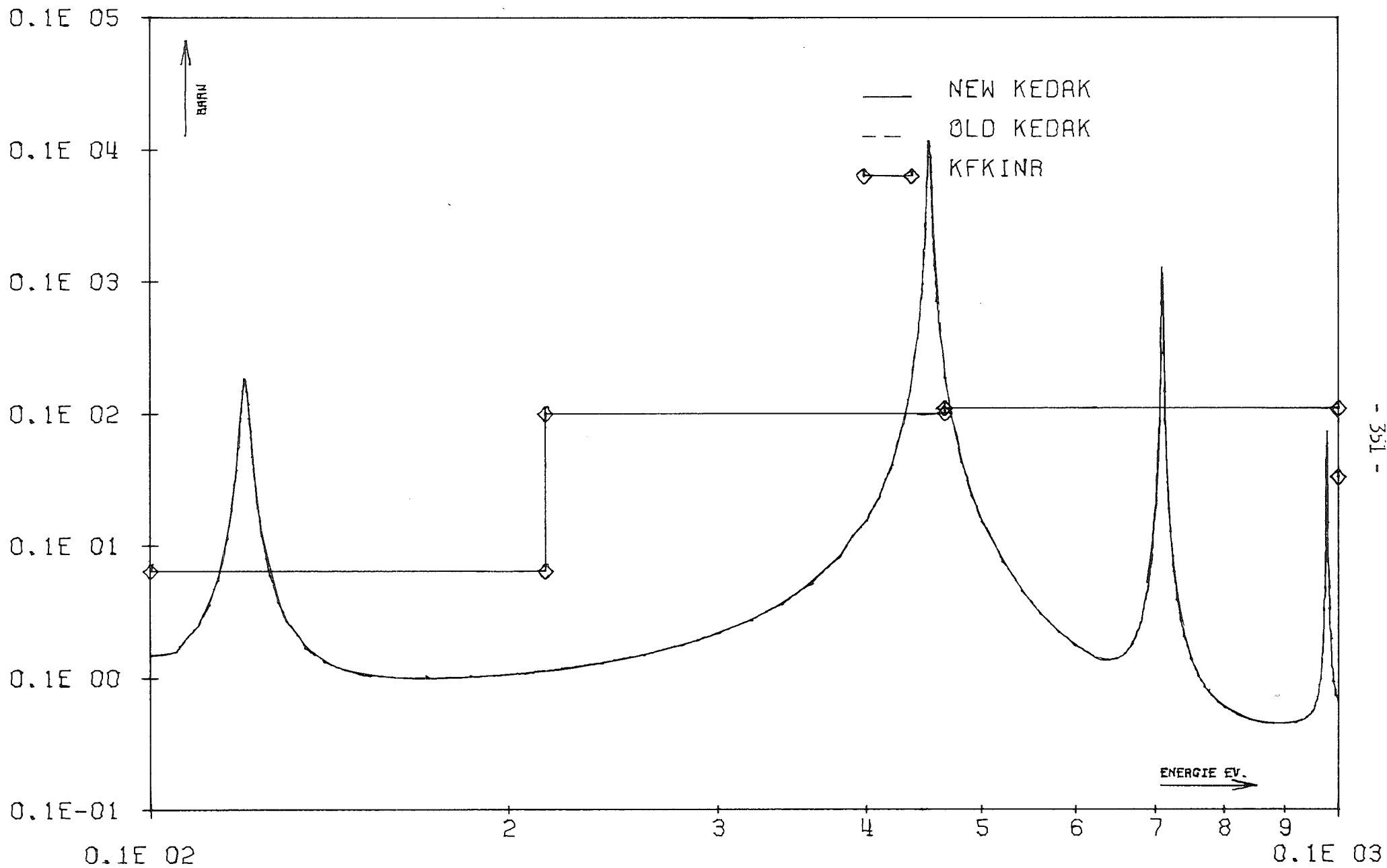
INR901MØ 25.01 20.44.



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FIG. 5 MØ SGT

INR901MØ 25.01 20.44.



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FIG. 6 MØ SGG

INR901MØ 25.01 20.44.

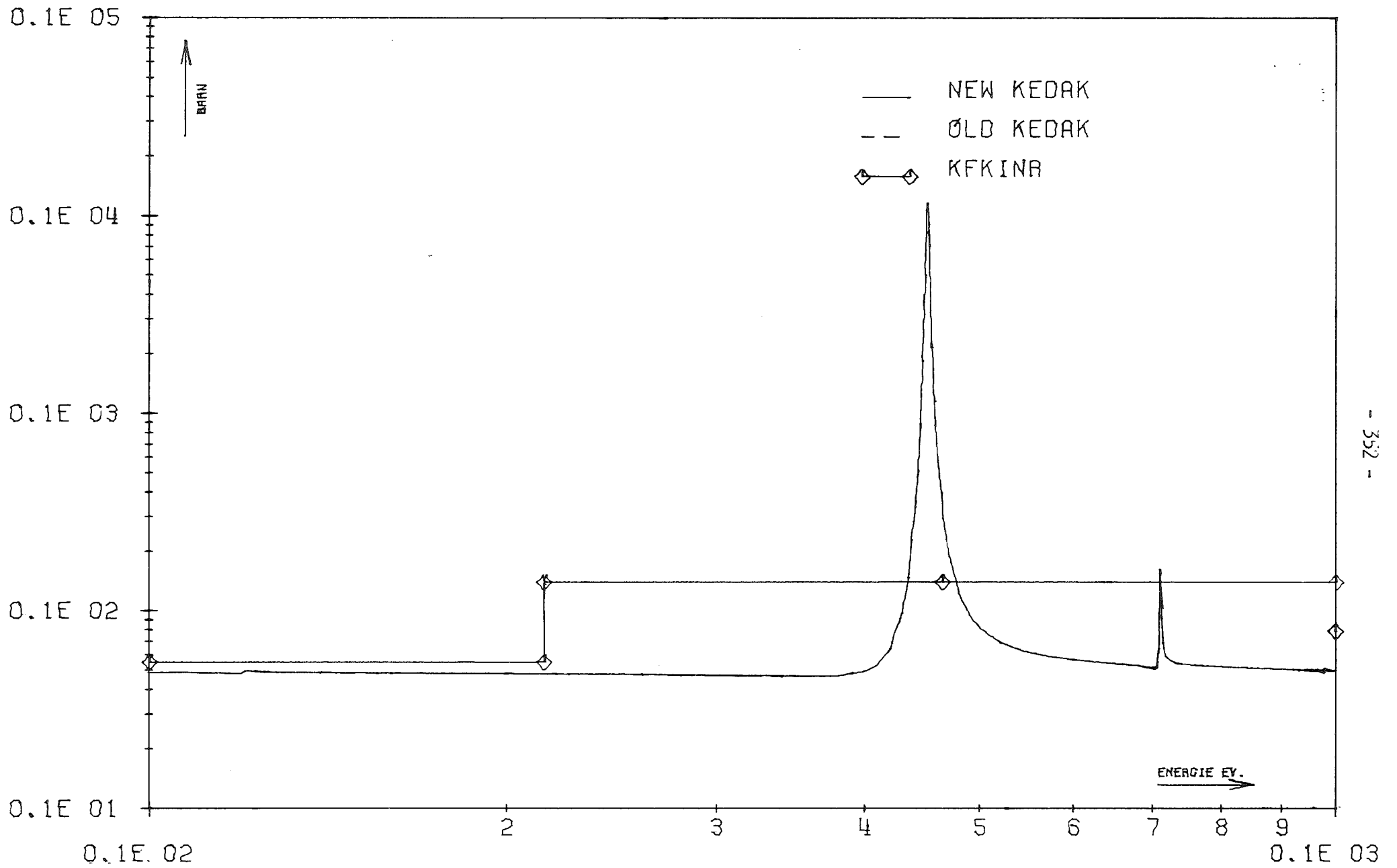
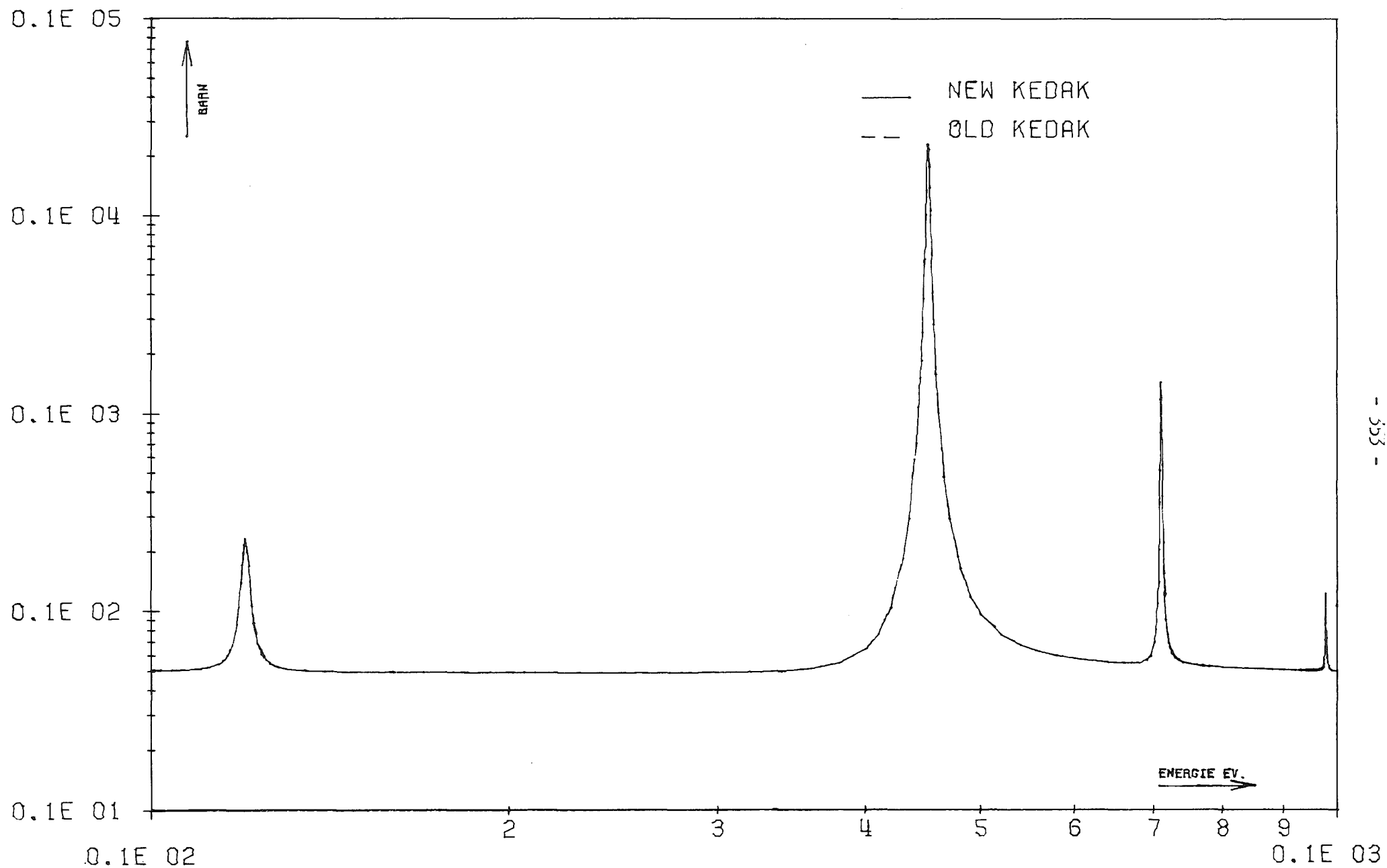


FIG. 7 MØ SGN

INR901MØ 25.01 20.44.



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FIG 8 MØ SGTR

INR901MØ 25.01 20.44.

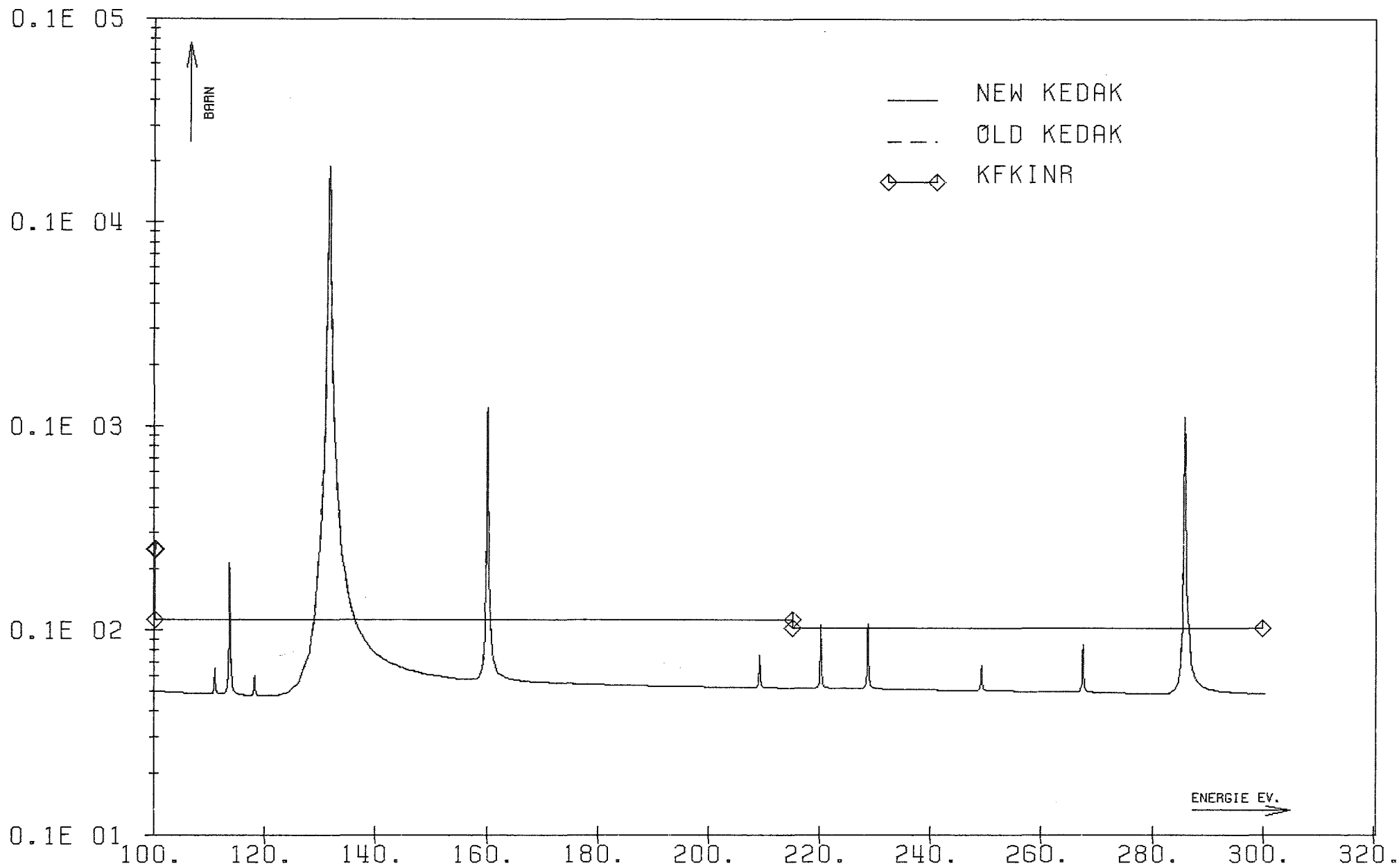


FIG. 9 MØ SGT

INR901MØ 04.08 14.48.

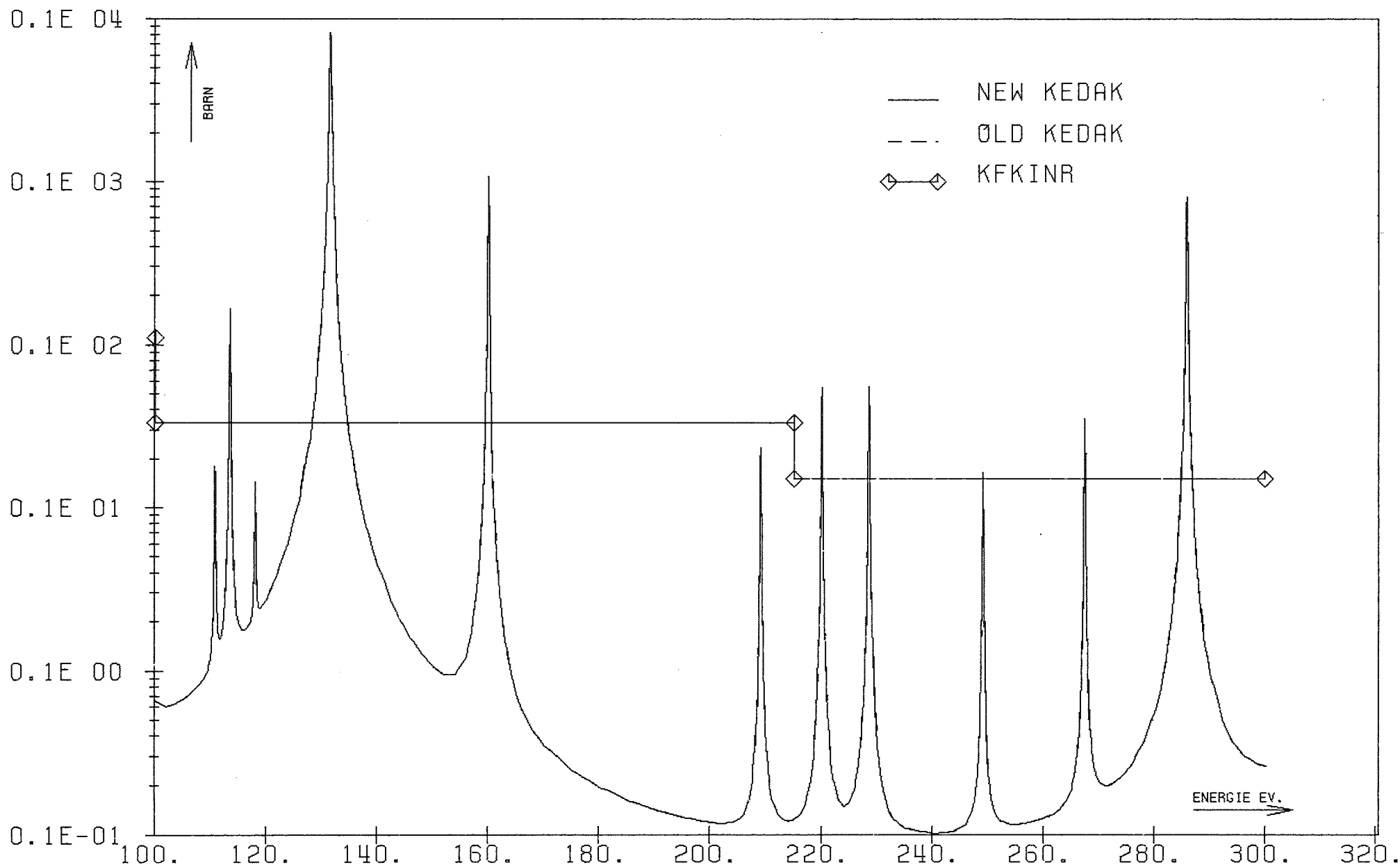


FIG. 10

M0 SGG

INR901M0 04.08 14.48.

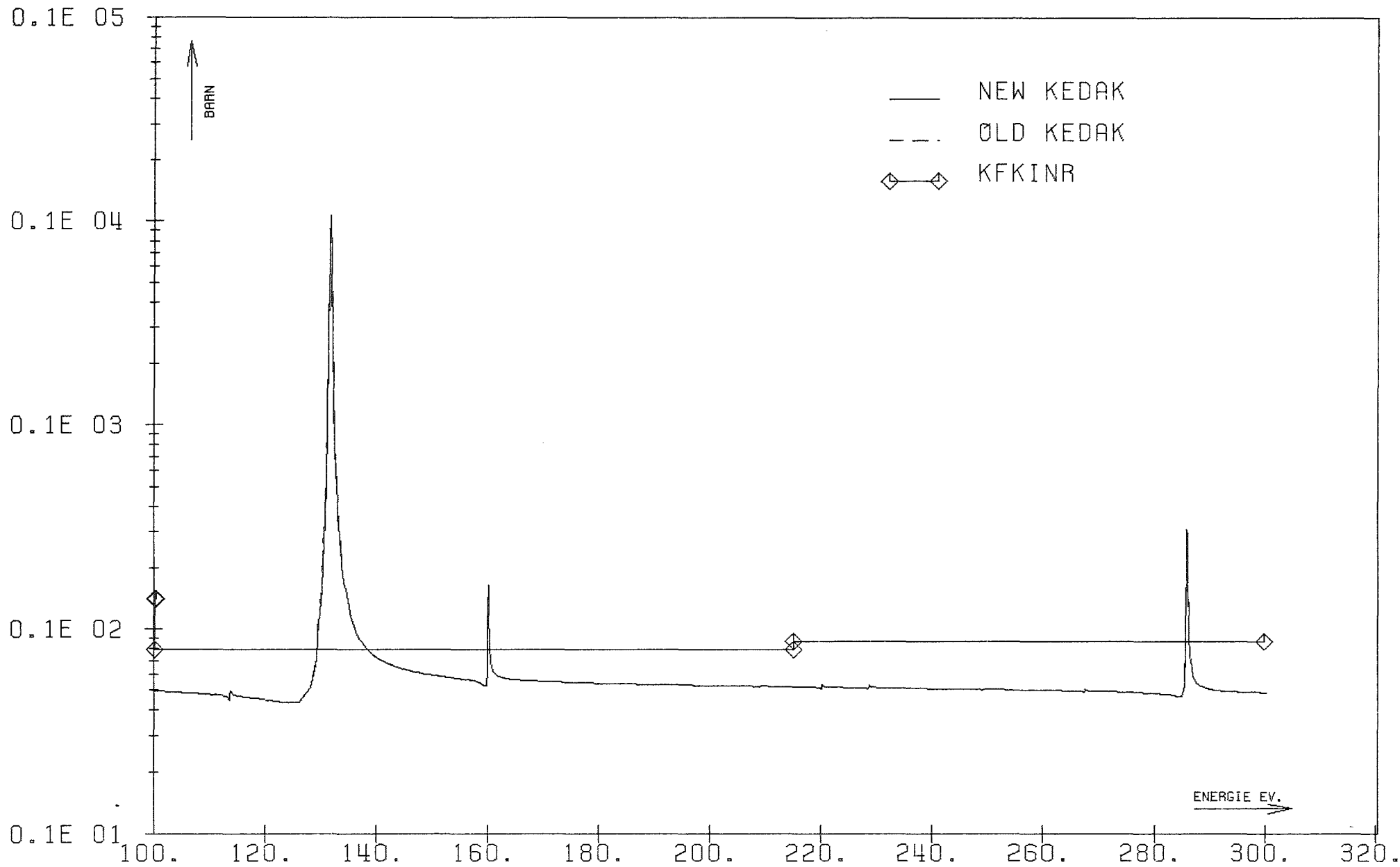


FIG. 11

MØ

SGN

INR901MØ 04.08 14.48.

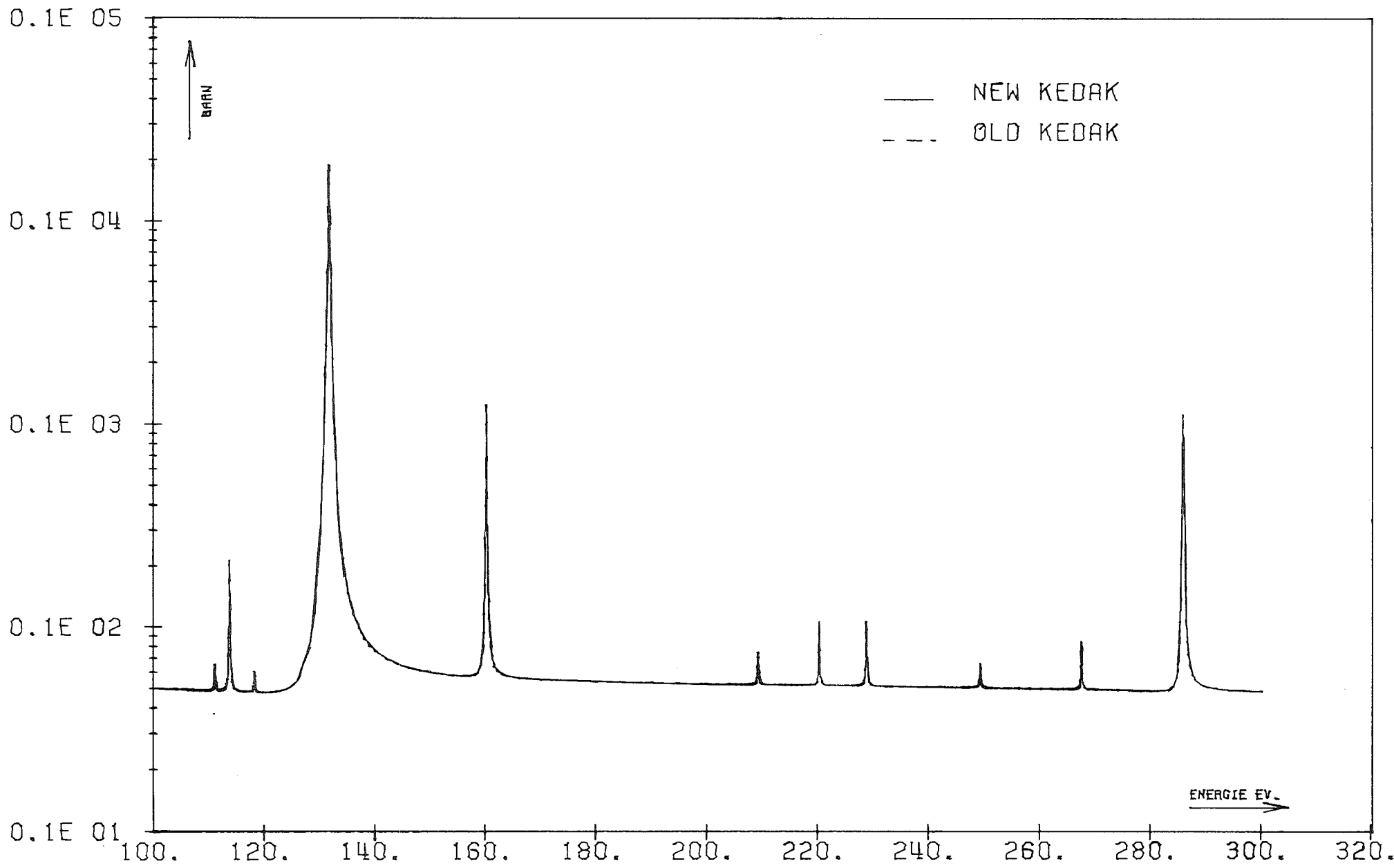


FIG. 12 MO SGTR

INR901MO 25.01 20.44.

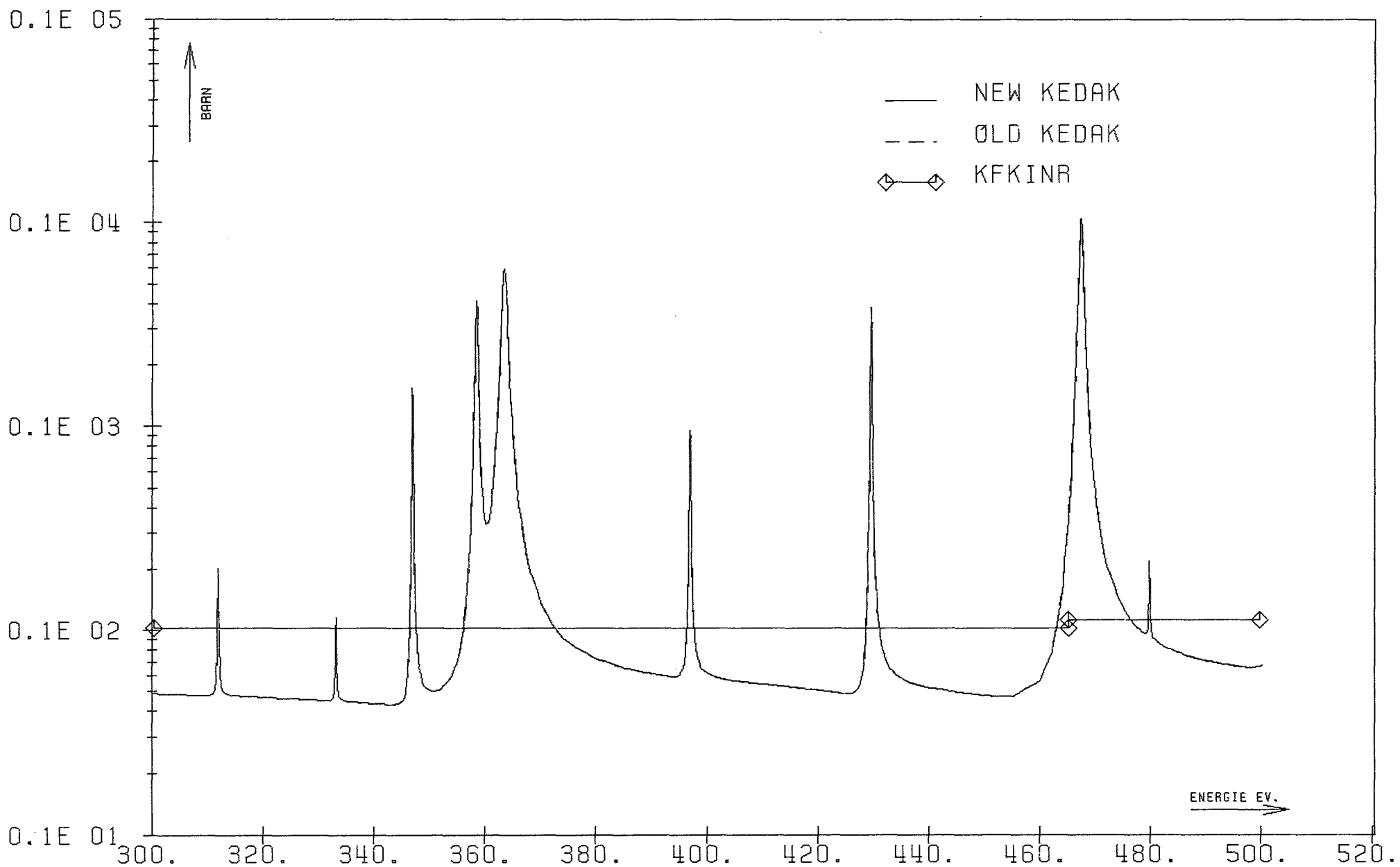


FIG. 13

M0

SGT

INR901M0 04.08 14.48.

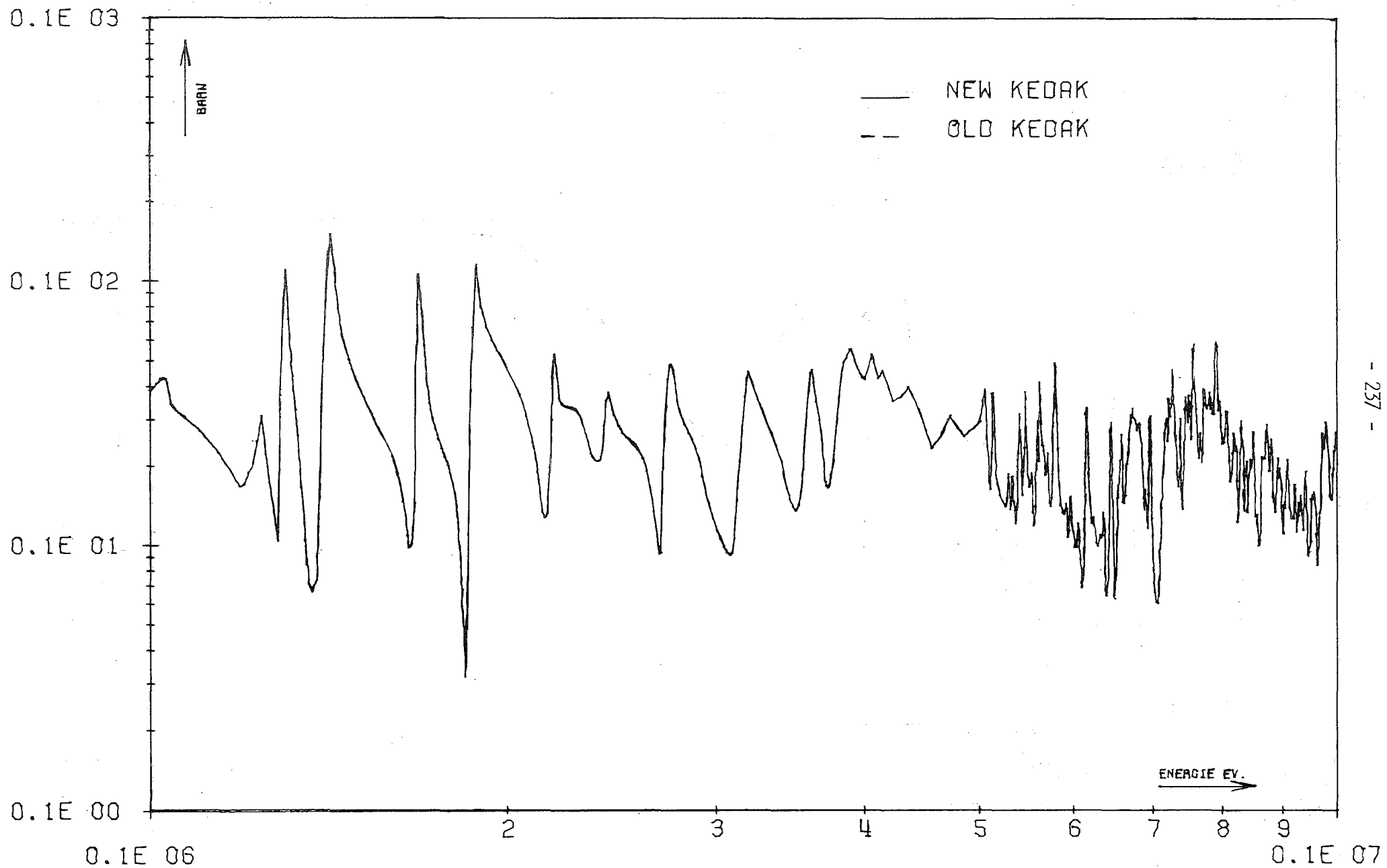


FIG. 14 FE SGTR

INR901FE 28.01 19.06.

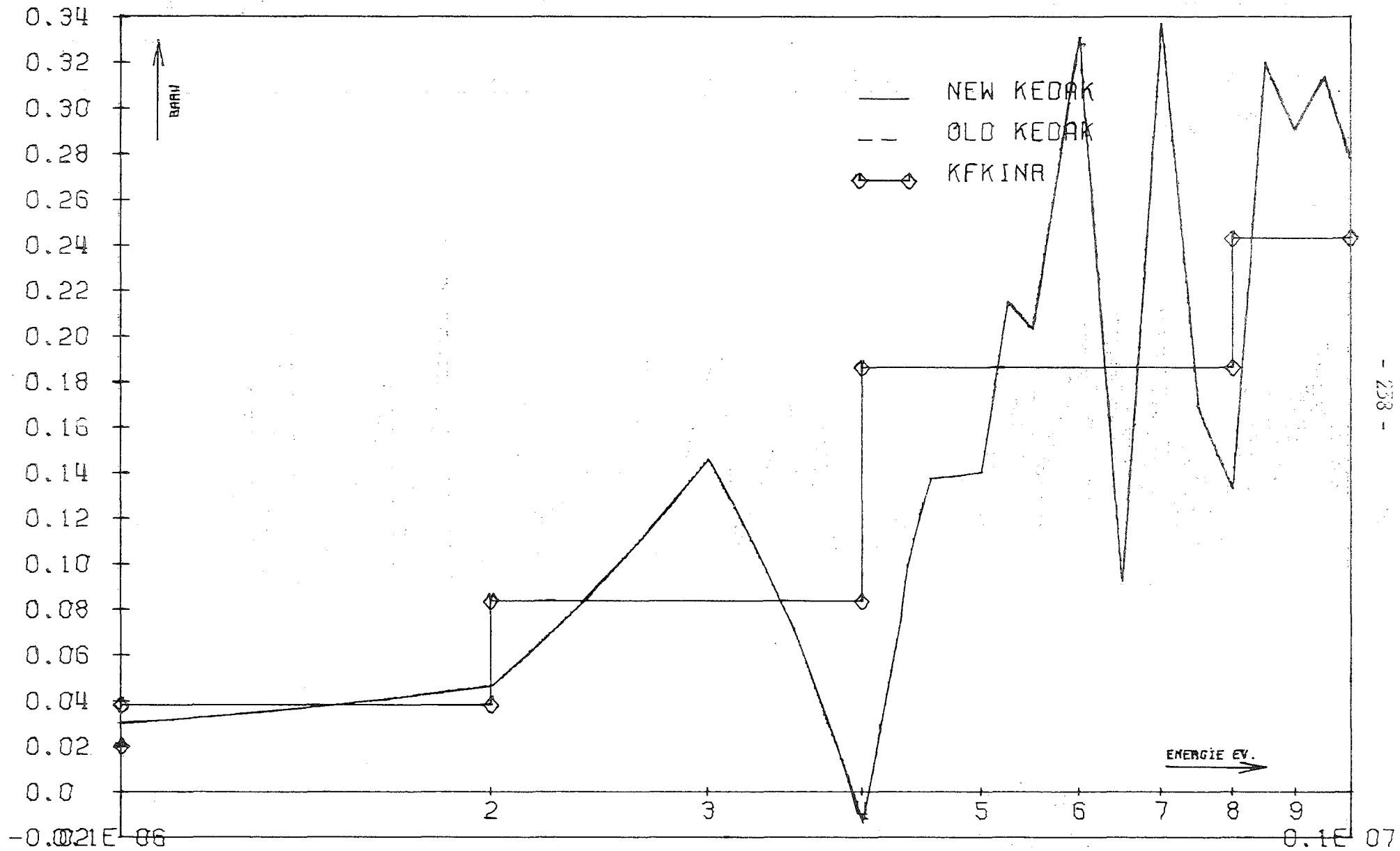


FIG. 15 FE MUEL

INR901FE 28.01 19.06.

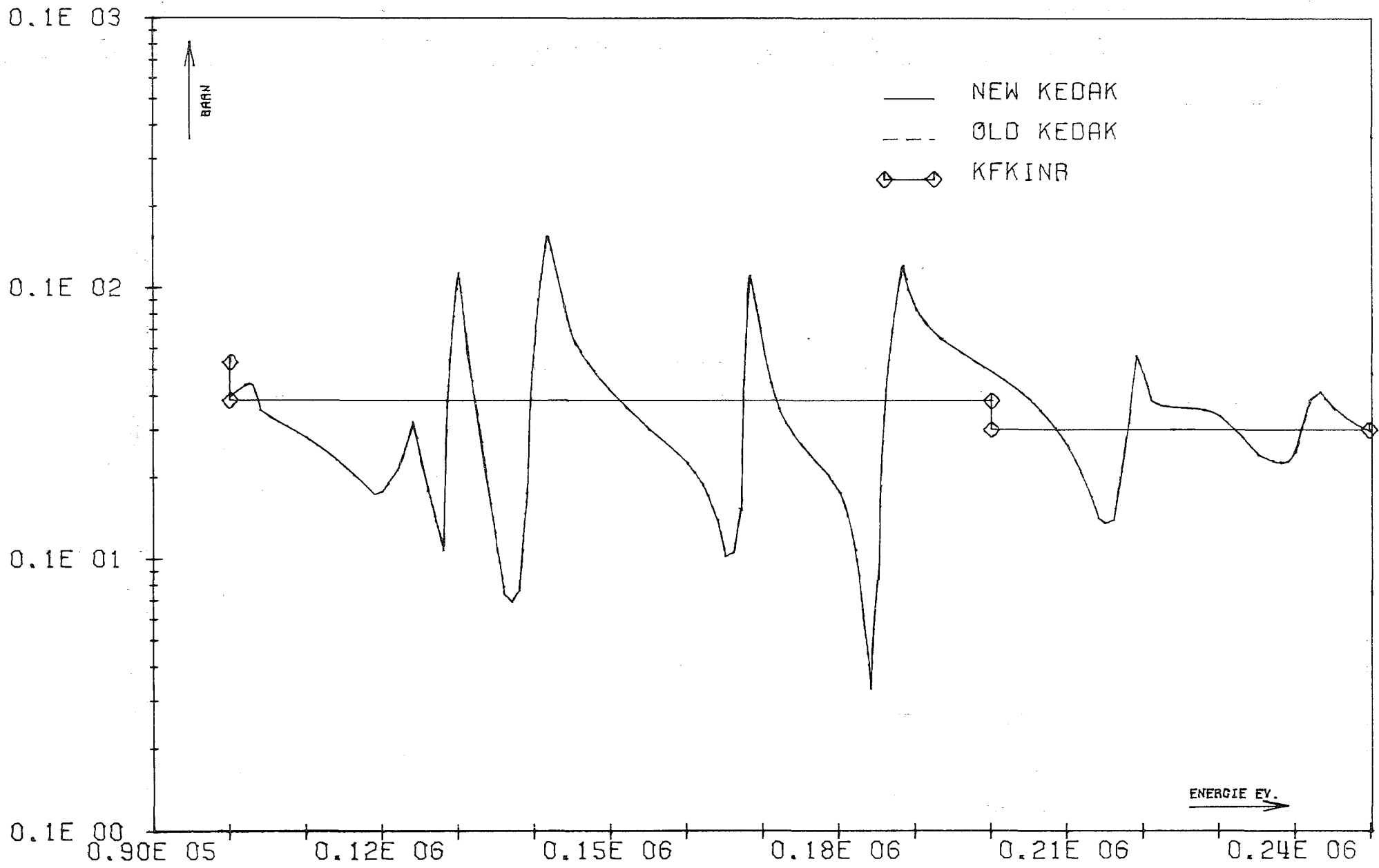


FIG. 16 FE SGT INR901FE 30.01 14.13.

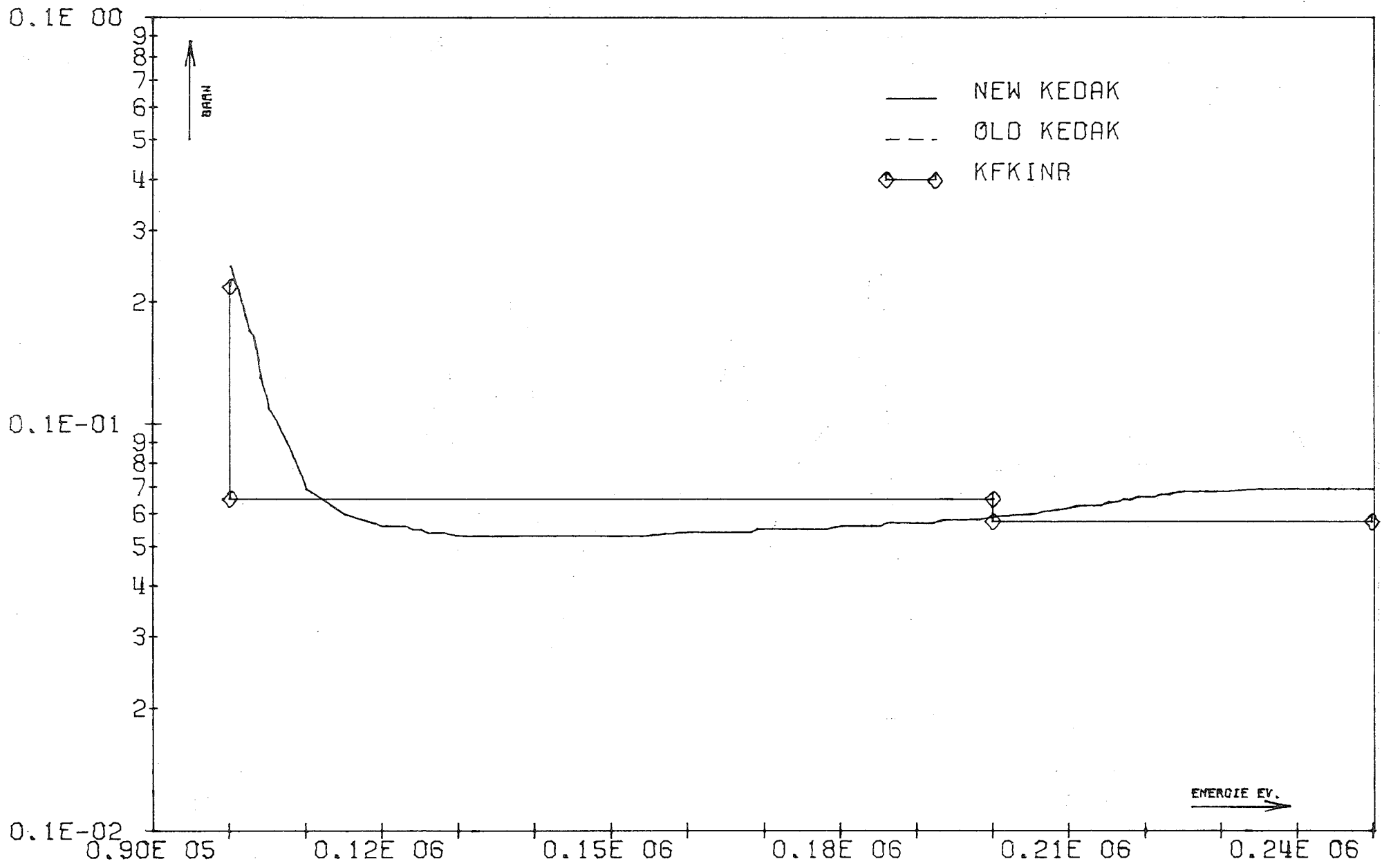


FIG. 17 FE SGG INR901FE 30.01 14.13.

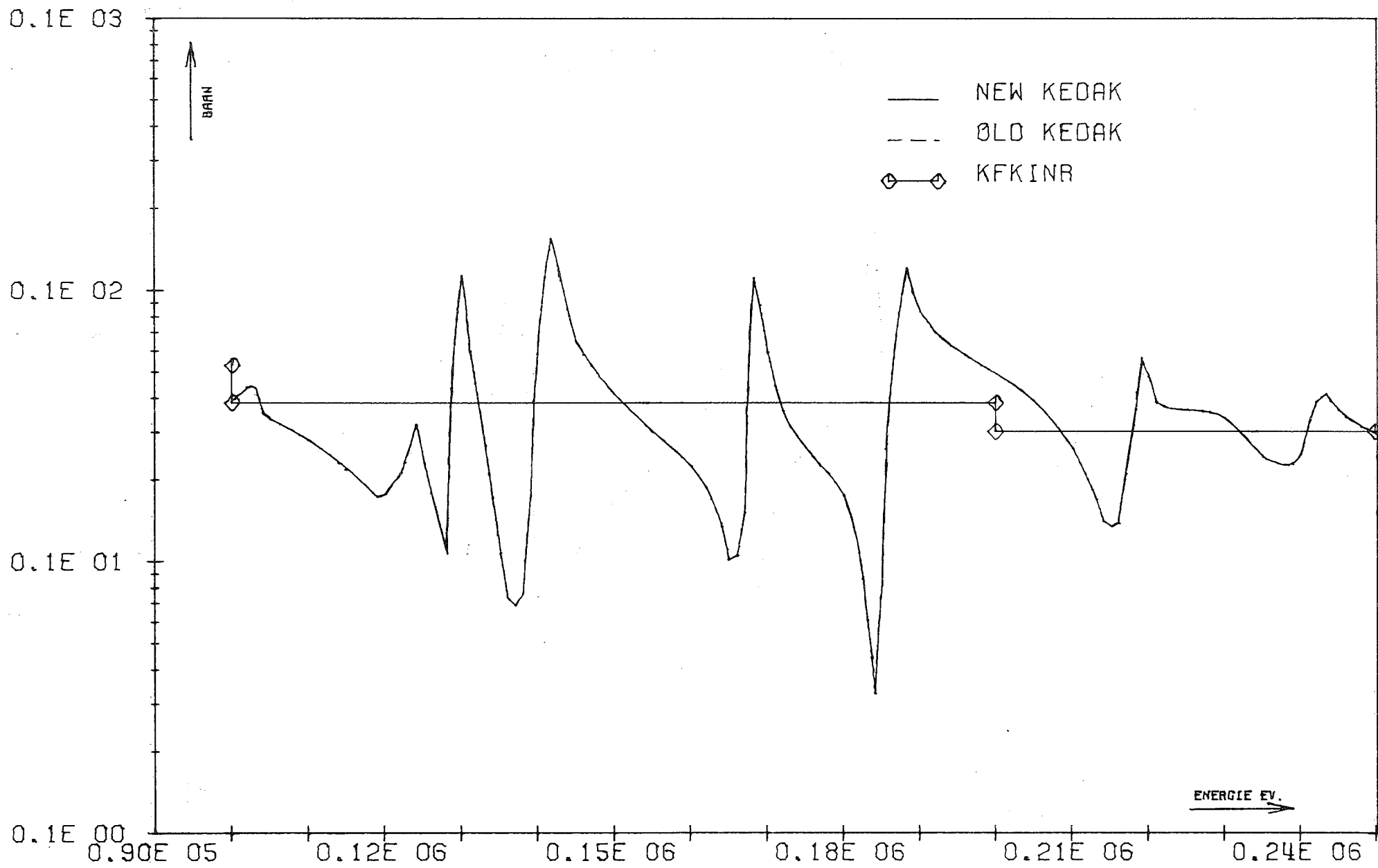


FIG. 18 FE SGN INR901FE 30.01 14.13.

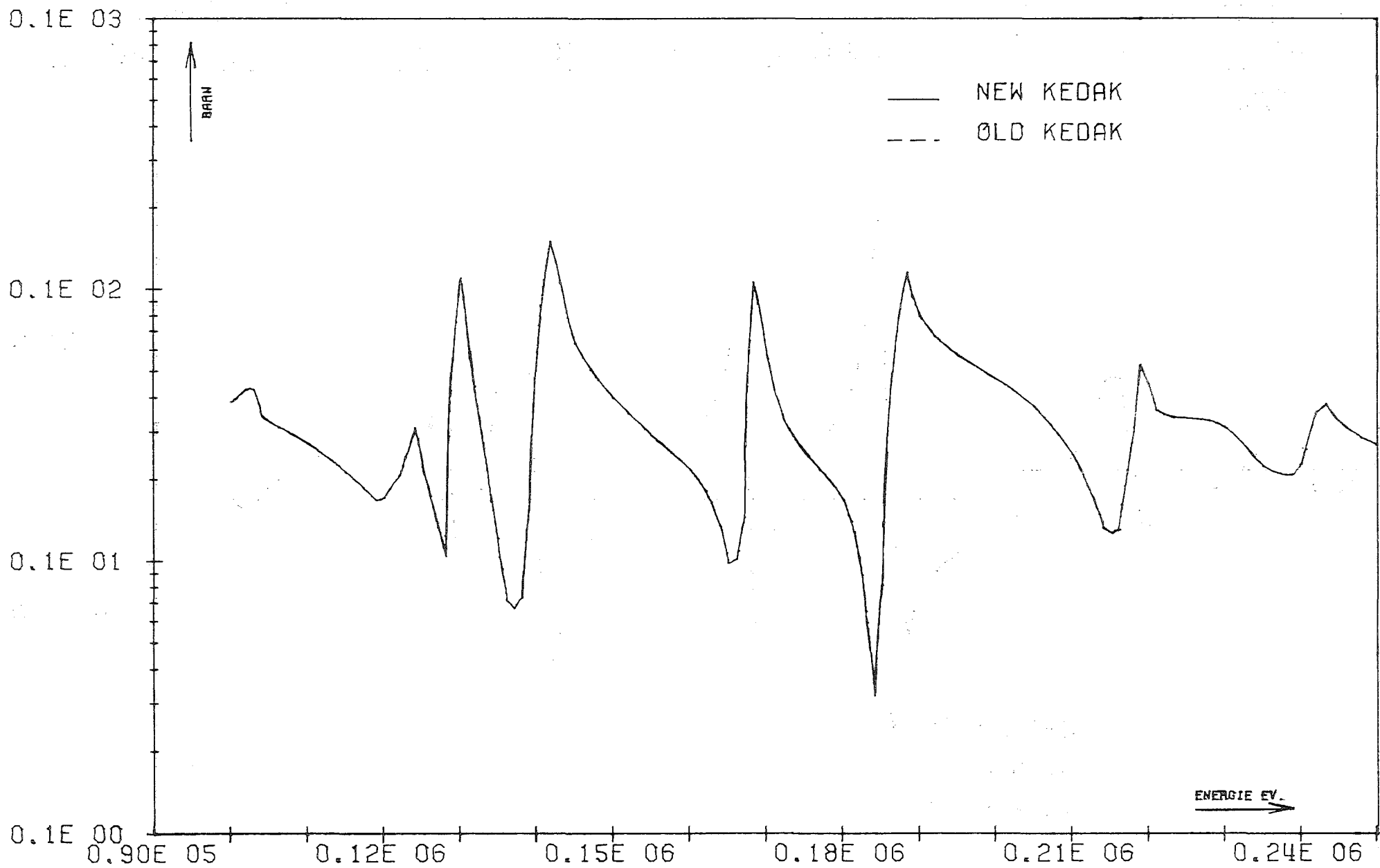


FIG. 19 FE SGTR

INR901FE 30.01 14.13.

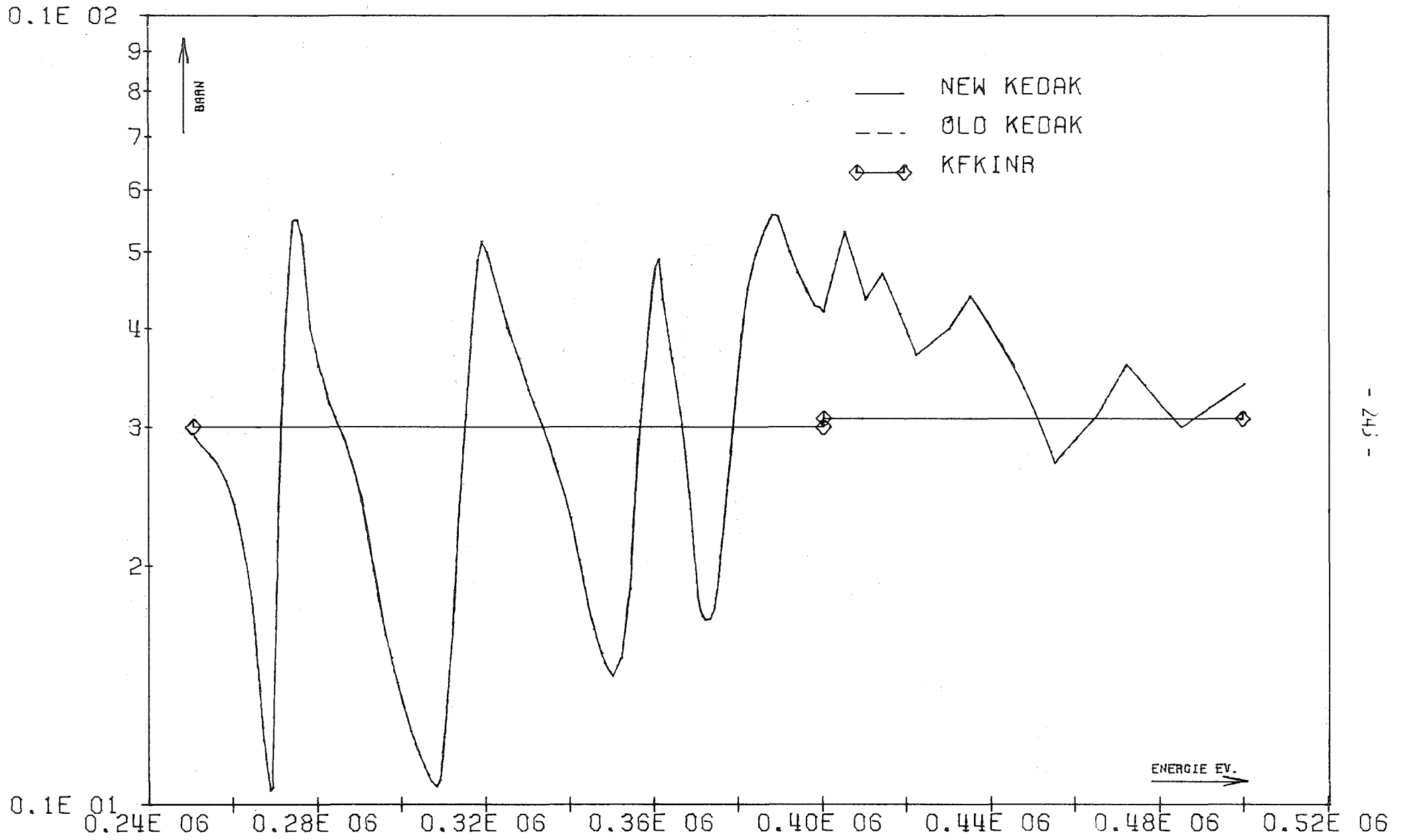


FIG. 20 FE SGT

INR901FE 25.01 13.38.

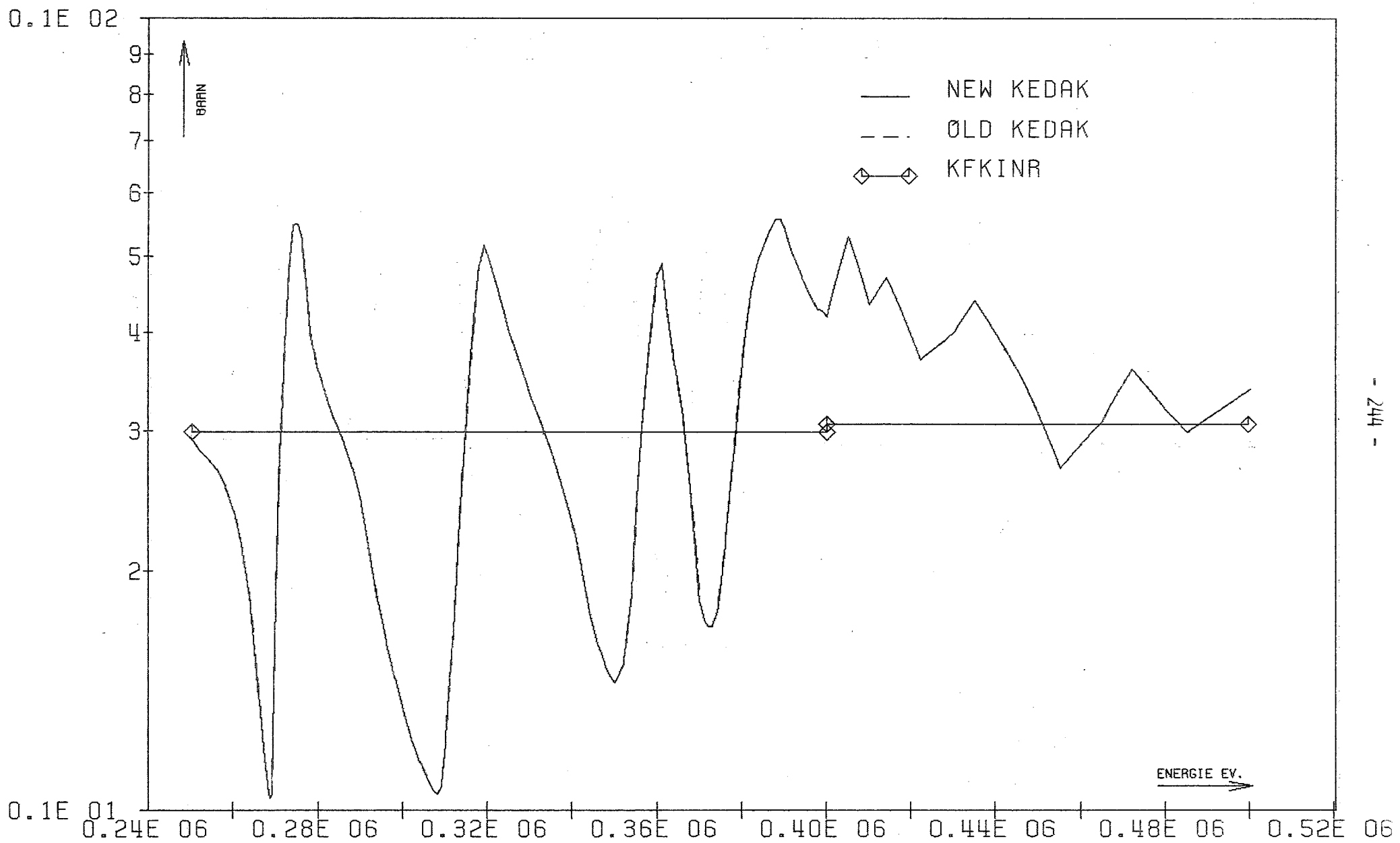


FIG. 21 FE SGN

INR901F1 05.08 17.43.

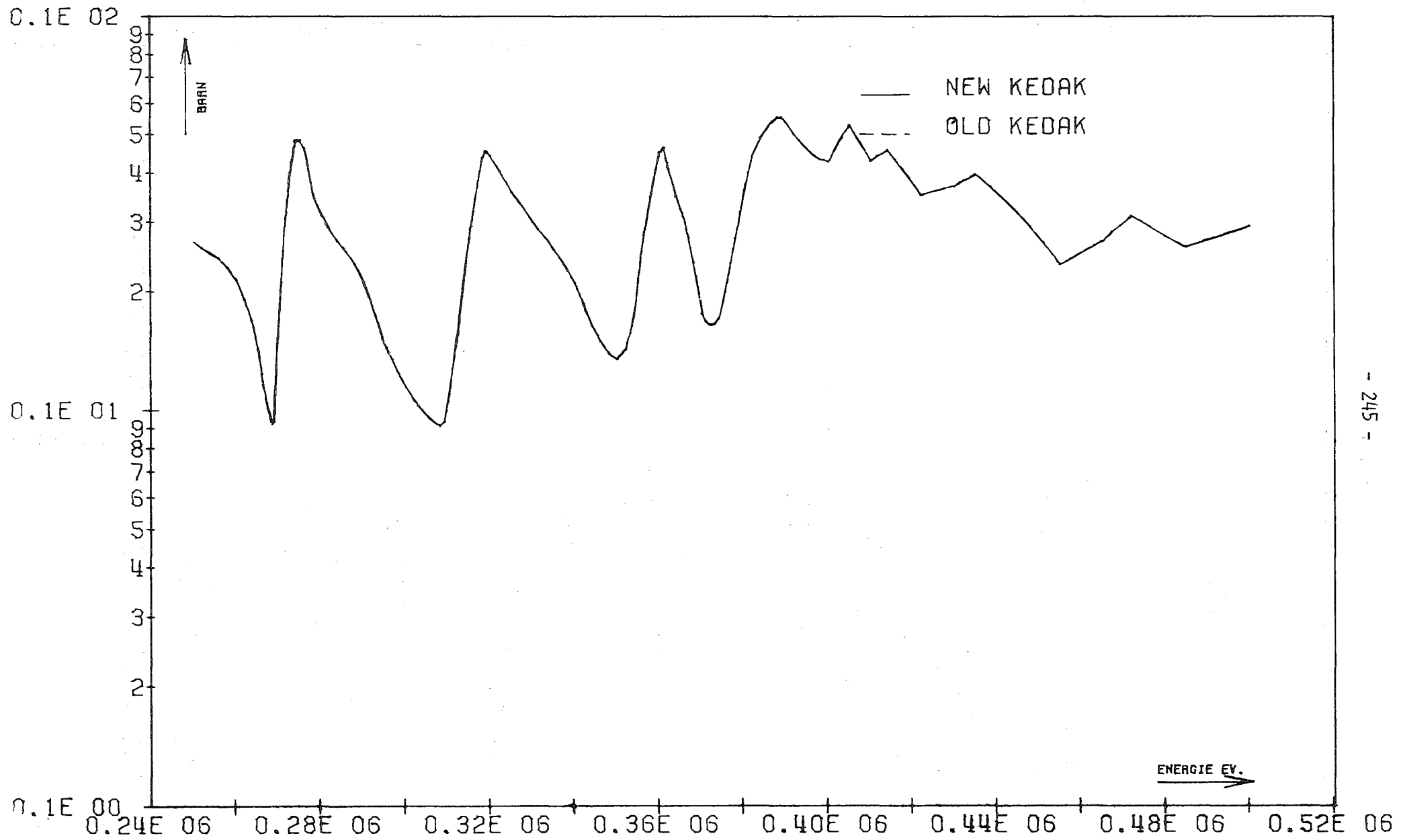


FIG. 22 FE SGTR

INR901FE 25.01 13.38.

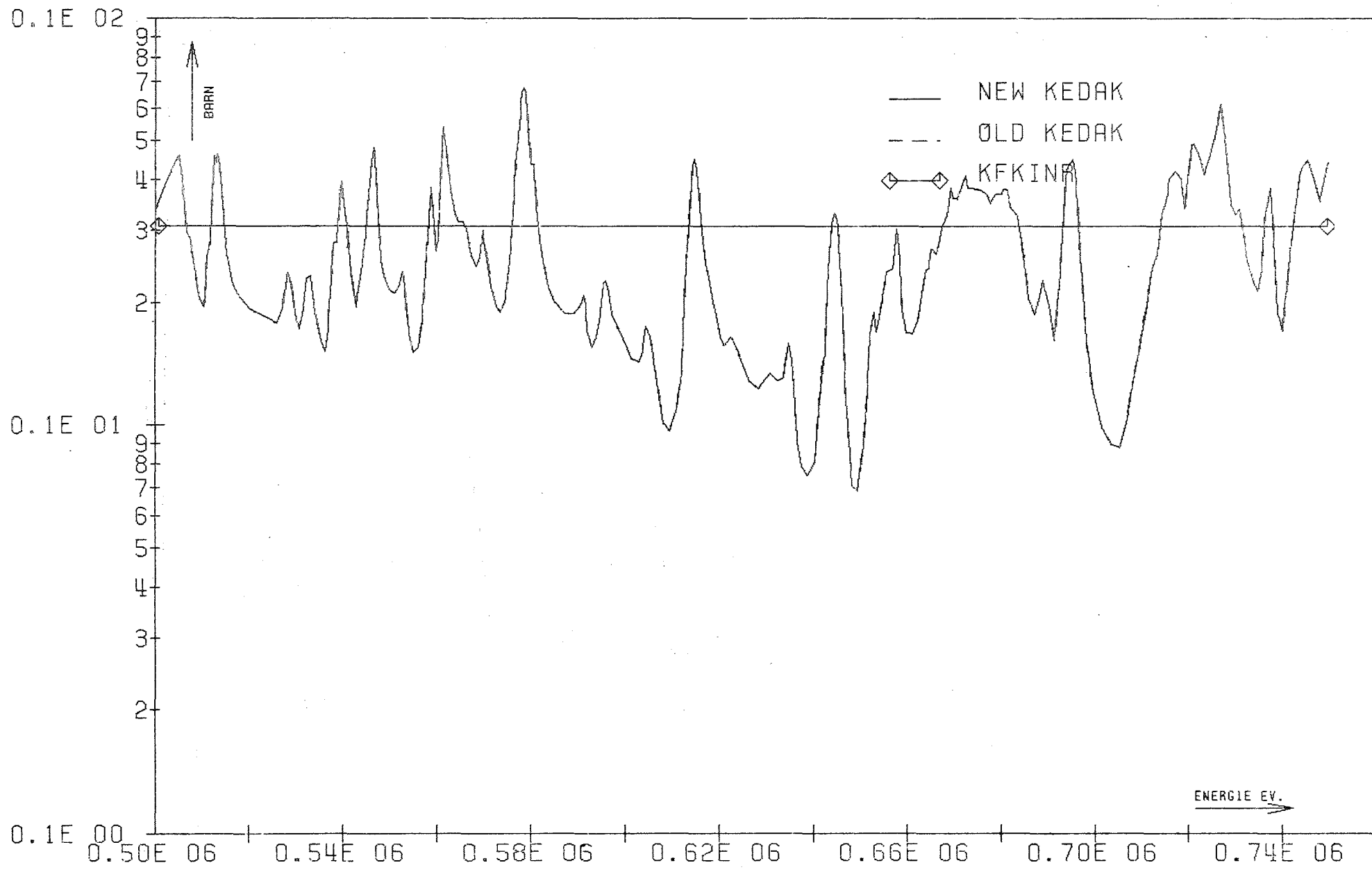


FIG. 23 FE SGT

INR901F1 05.08 17.43.

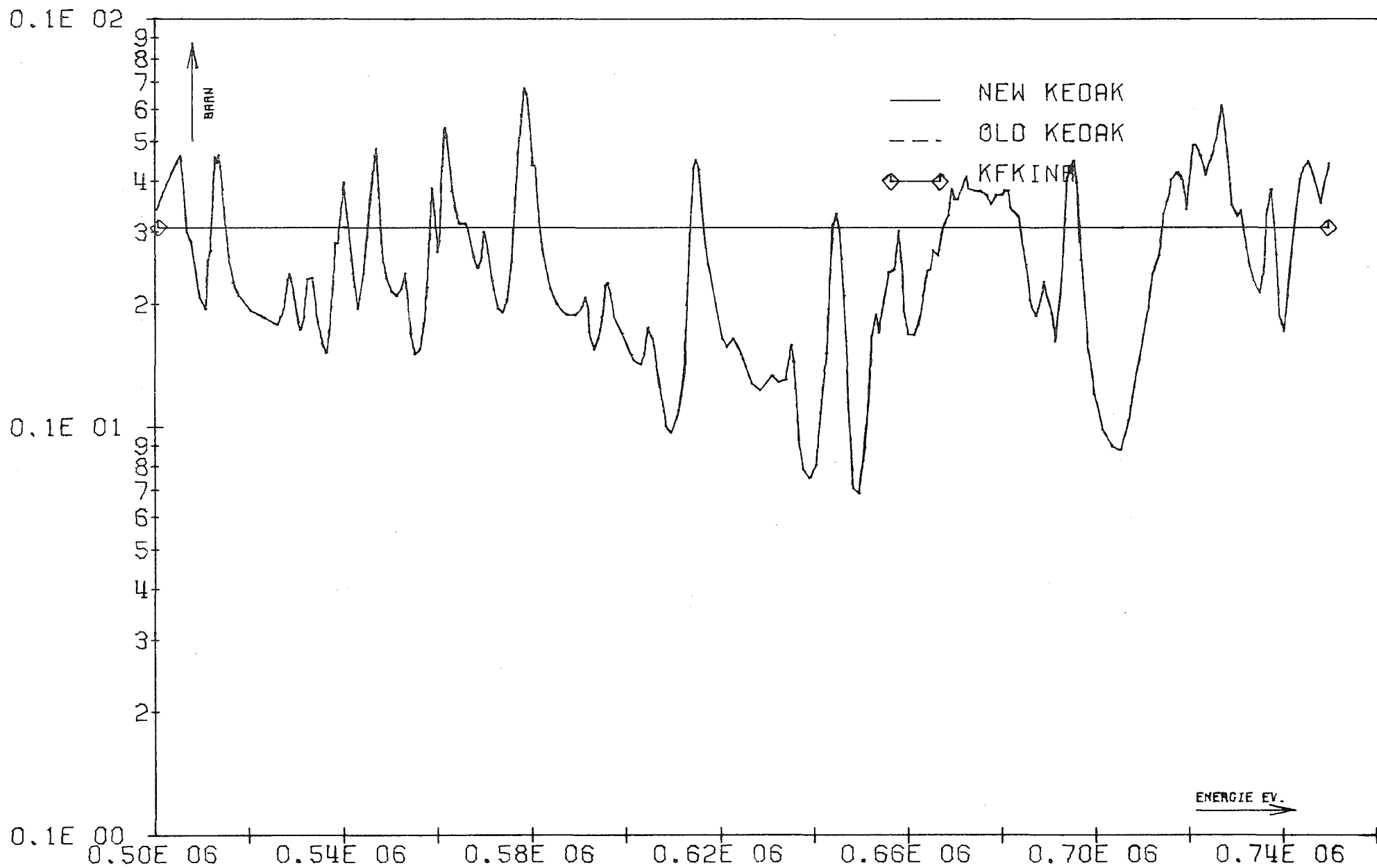


FIG. 24 FE SGN

INR901FE 25.01 13.38.

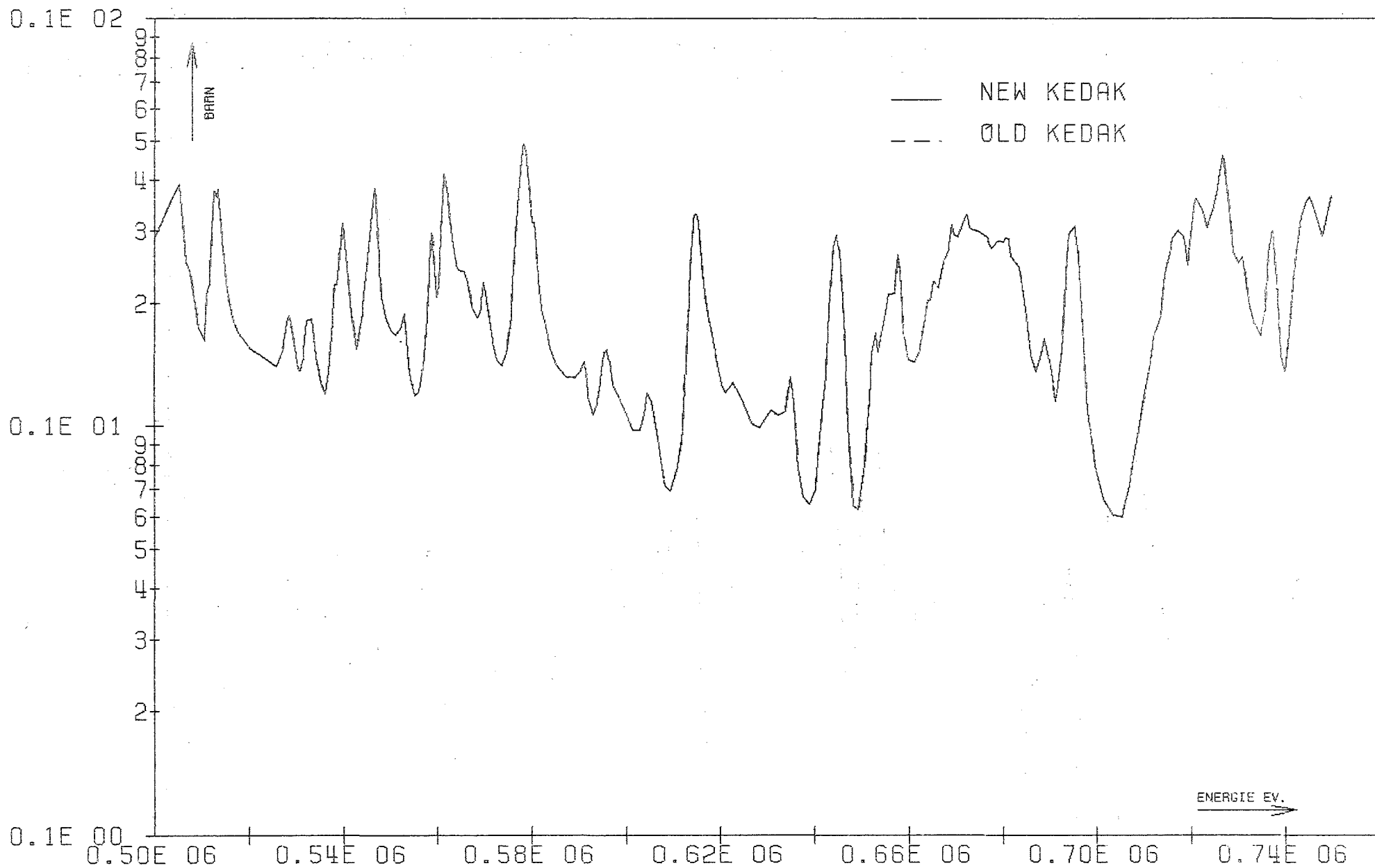


FIG. 25 FE SGTR

INR901F1 05.08 17.43.

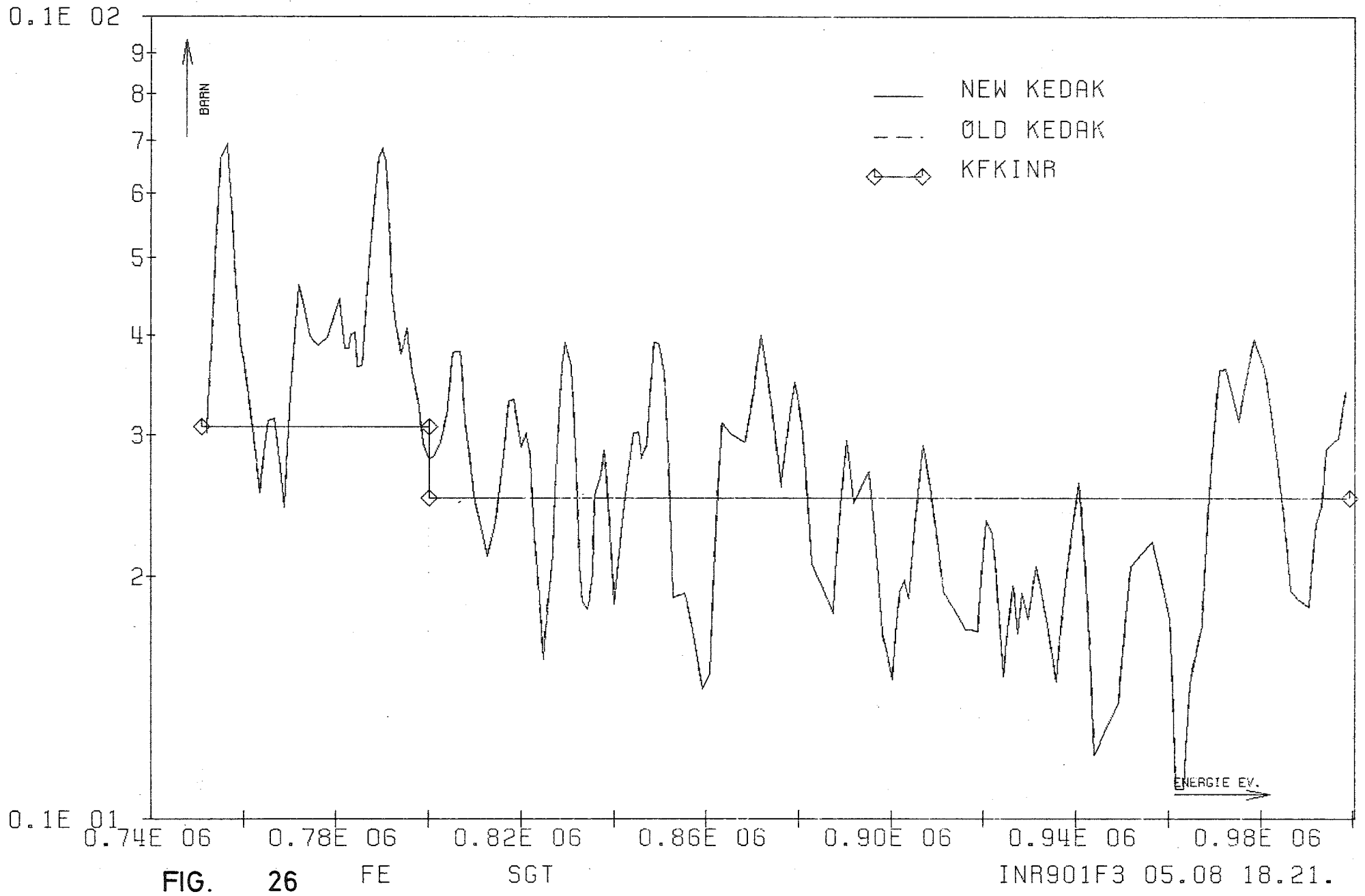


FIG. 26

FE

SGT

INR901F3 05.08 18.21.

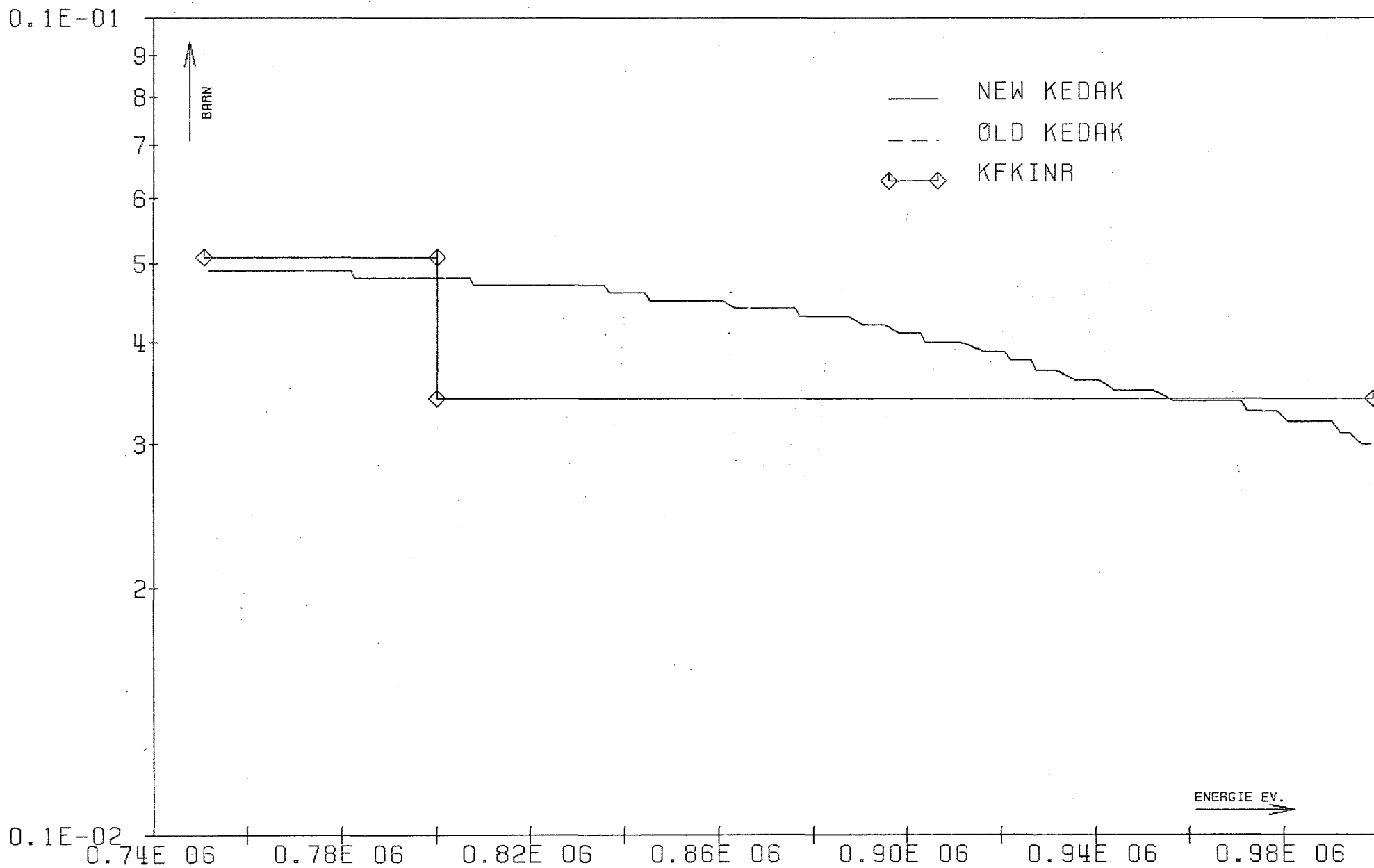


FIG.

27

FE

SGG

INR901F3 05.08 18.22.

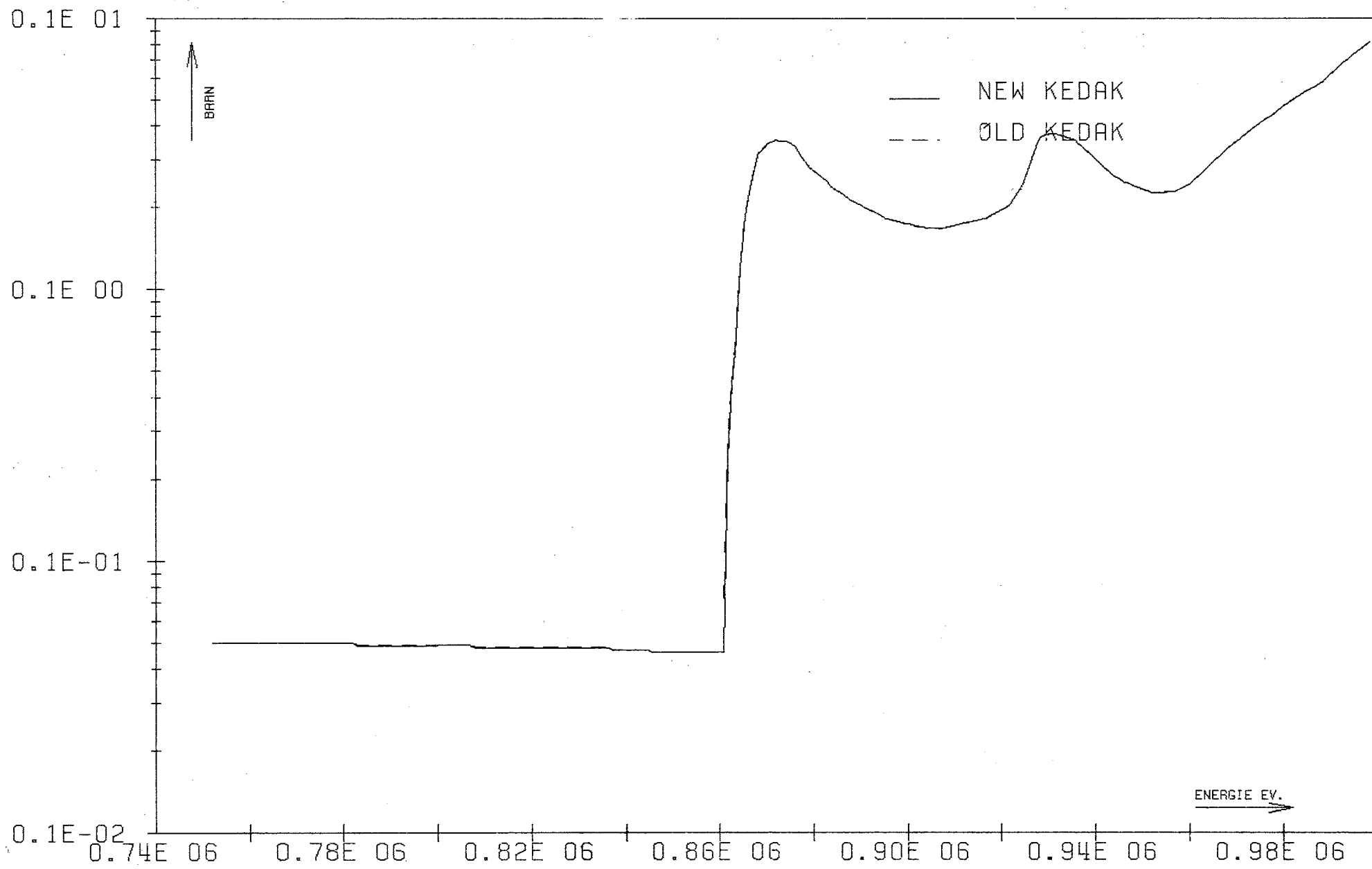


FIG. 28

FE

SGX

INR901F3 05.08 18.22.

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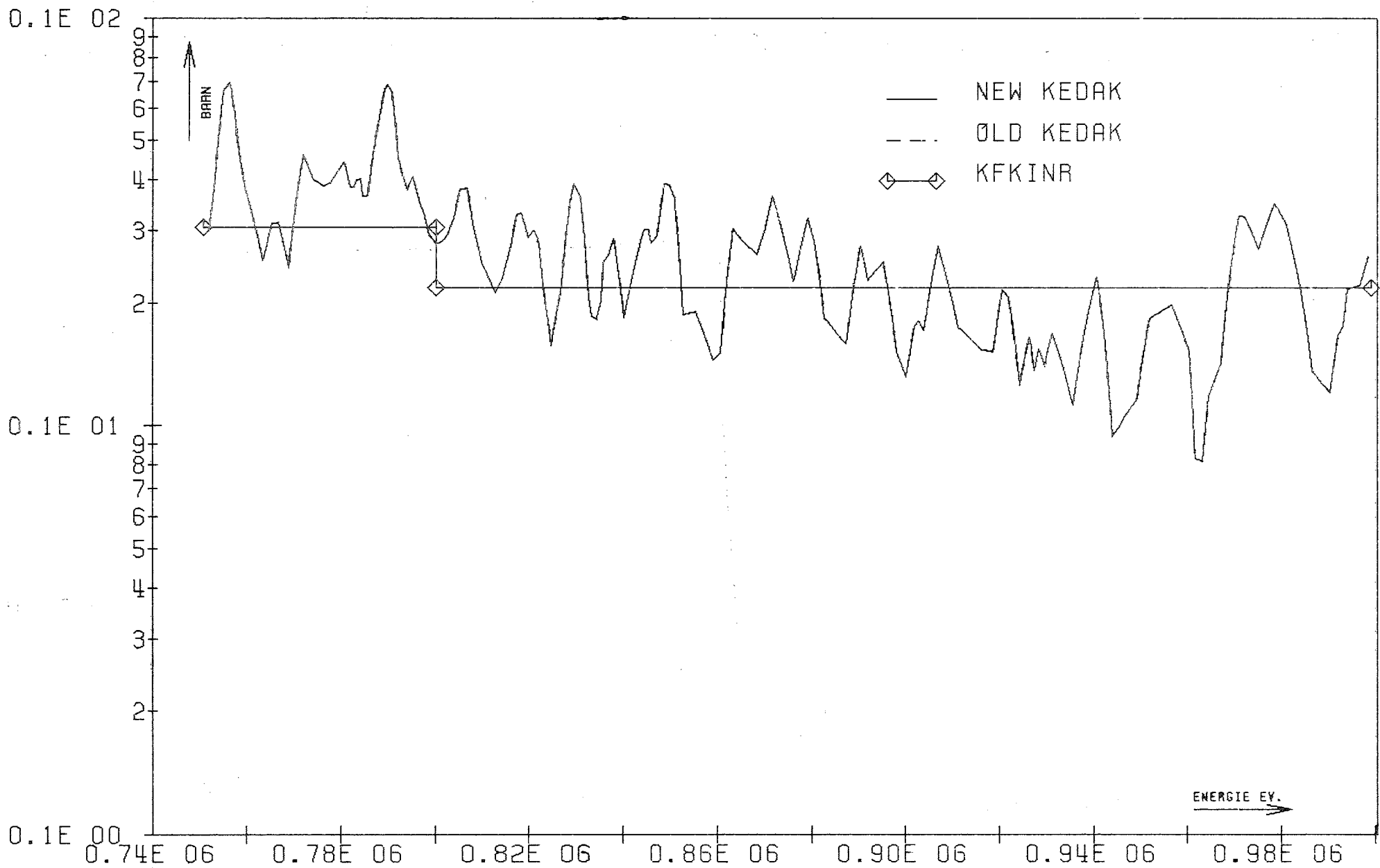


FIG. 29 FE SGN

INR901F3 05.08 18.22.

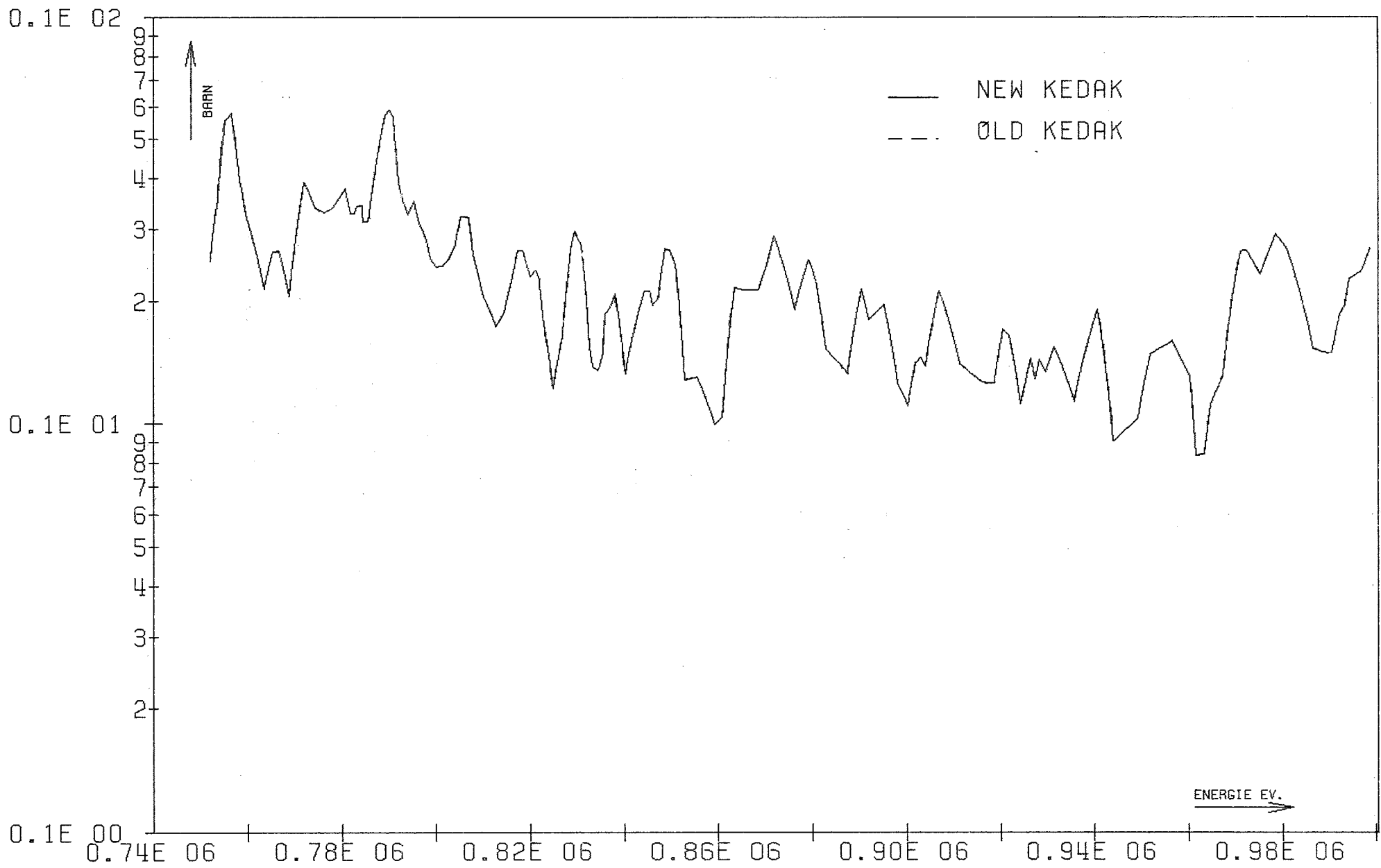


FIG. 30 FE SGTR INR901F3 05.08 18.22.

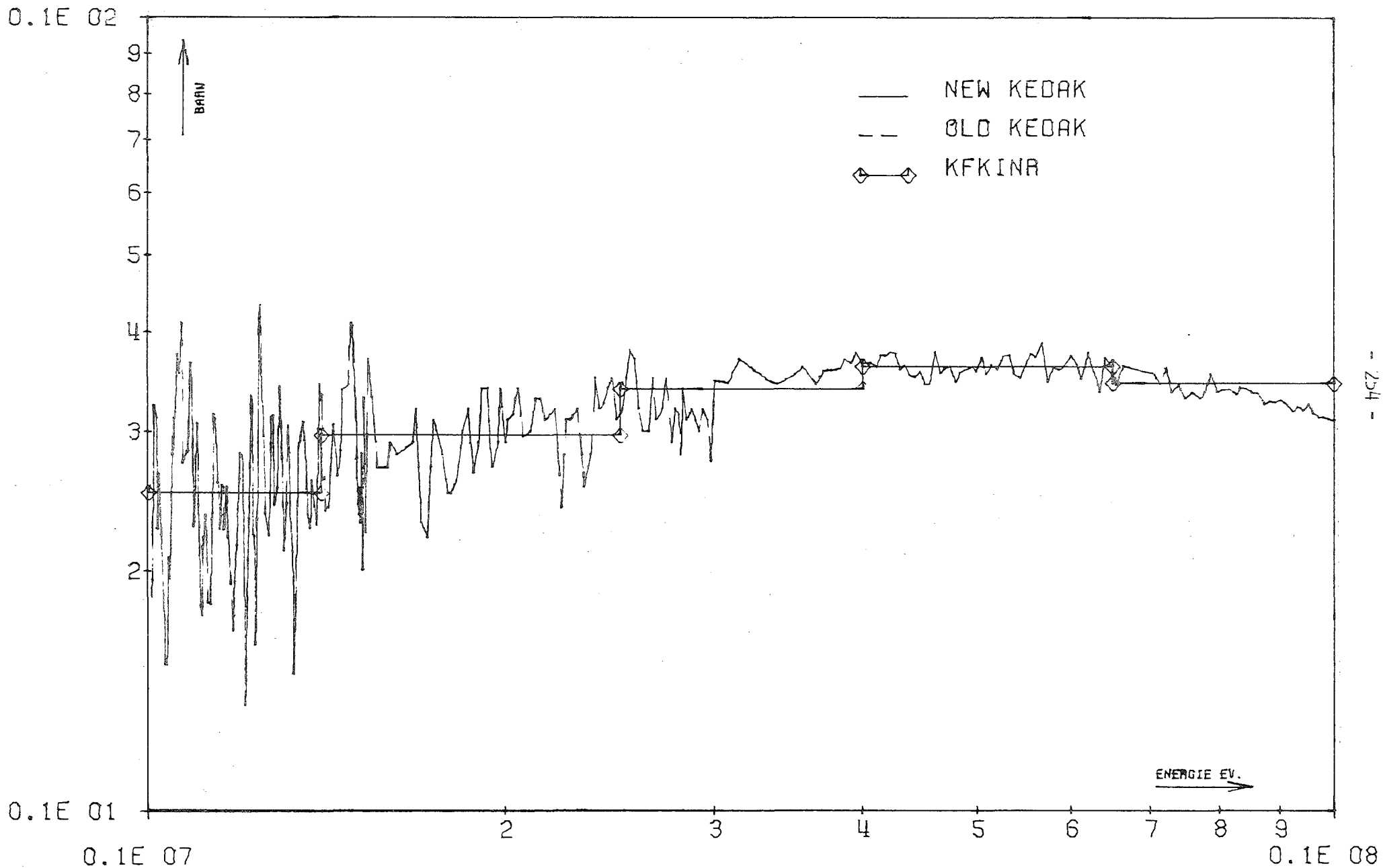


FIG. 31 FE SGT

INR901FE 28.01 19.06.

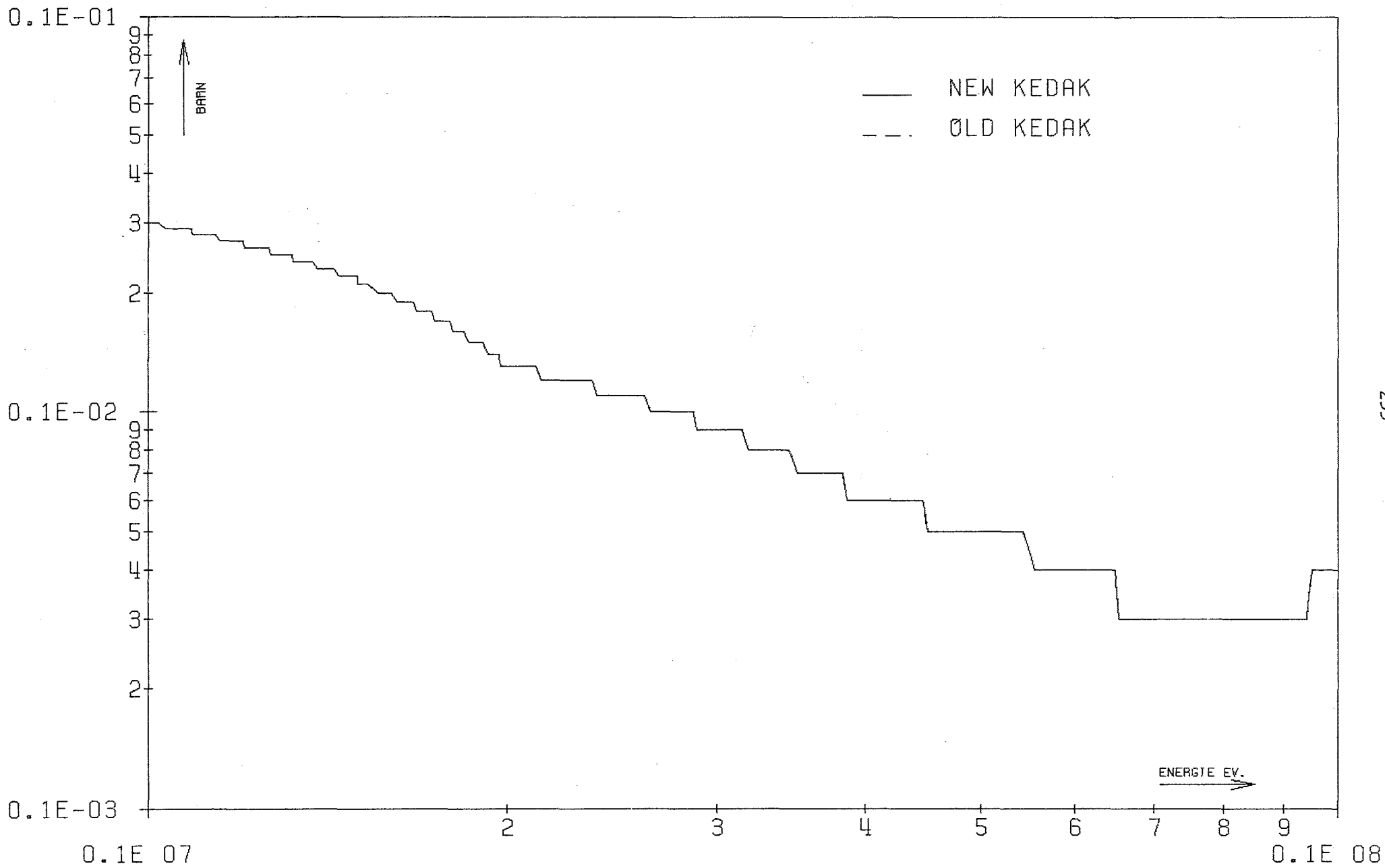


FIG. 32 FE SGG

INR901F4 07.08 16.23.

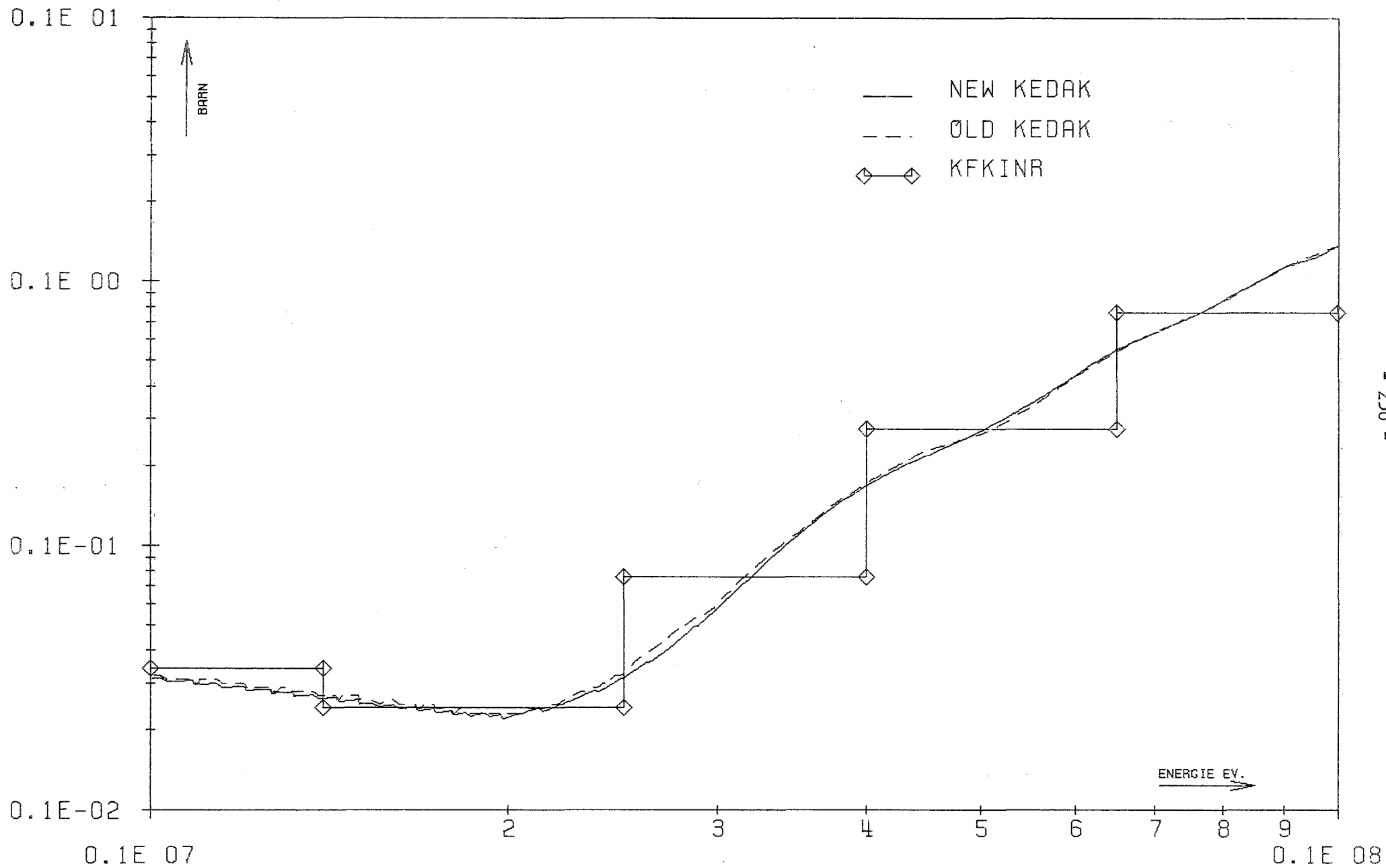


FIG. 33 FE SGA

INR901F4 07.08 16.23.

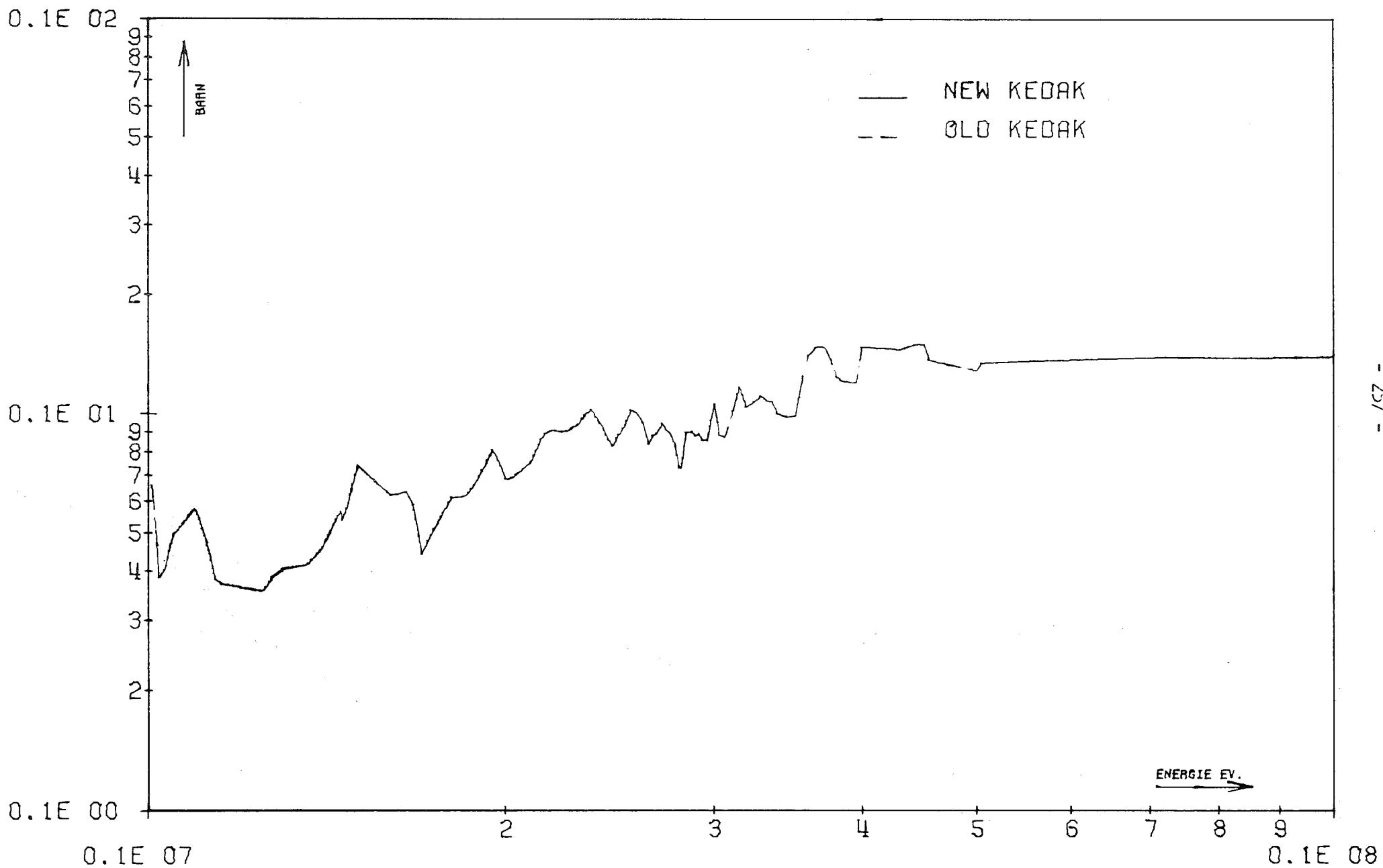


FIG. 34 FE SGX

INR901FE 28.01 19.06.

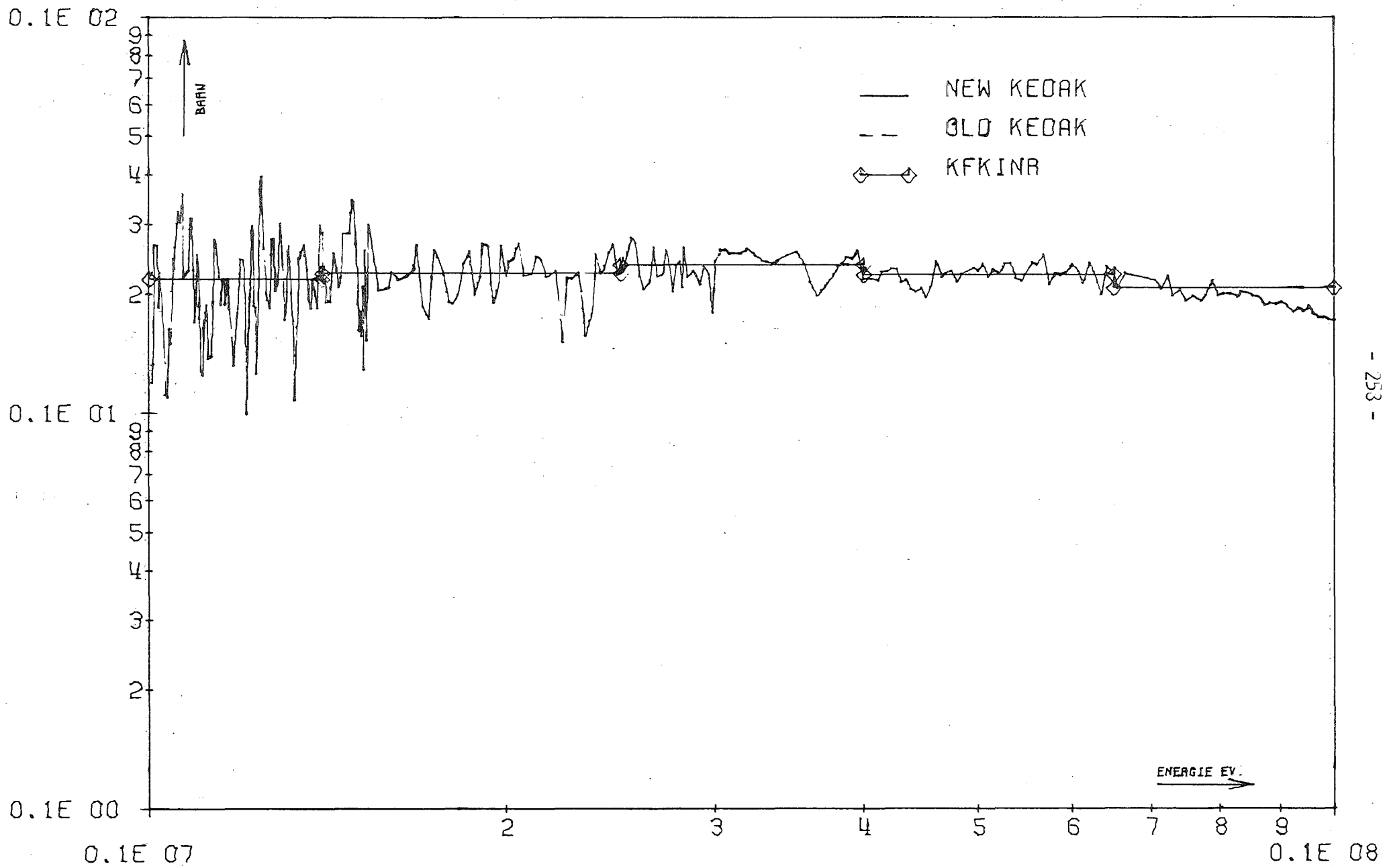
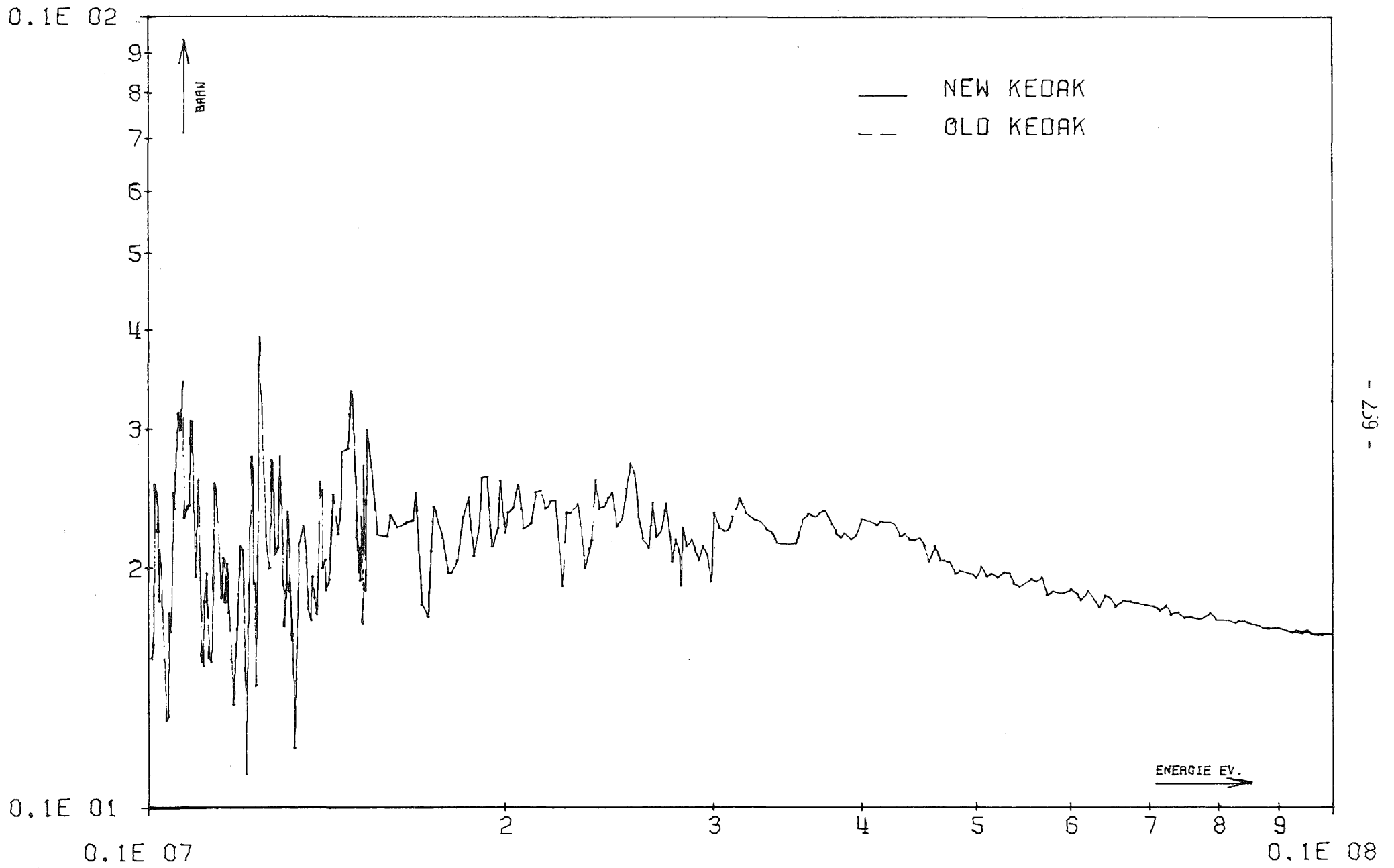


FIG. 35 FE SGN

INR901FE 28.01 19.06.



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FIG. 36 FE SGTR

INR901FE 28.01 19.06.

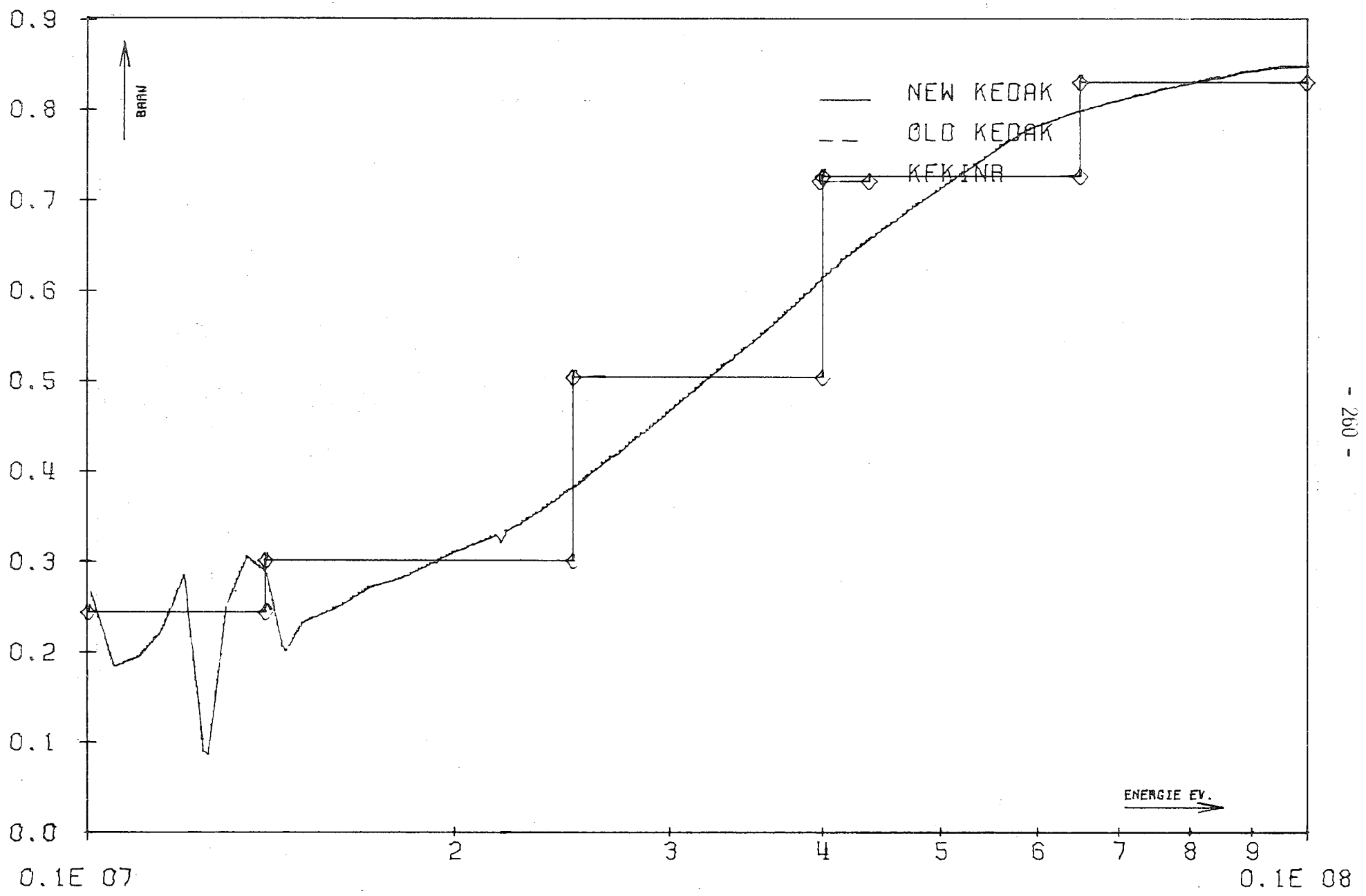
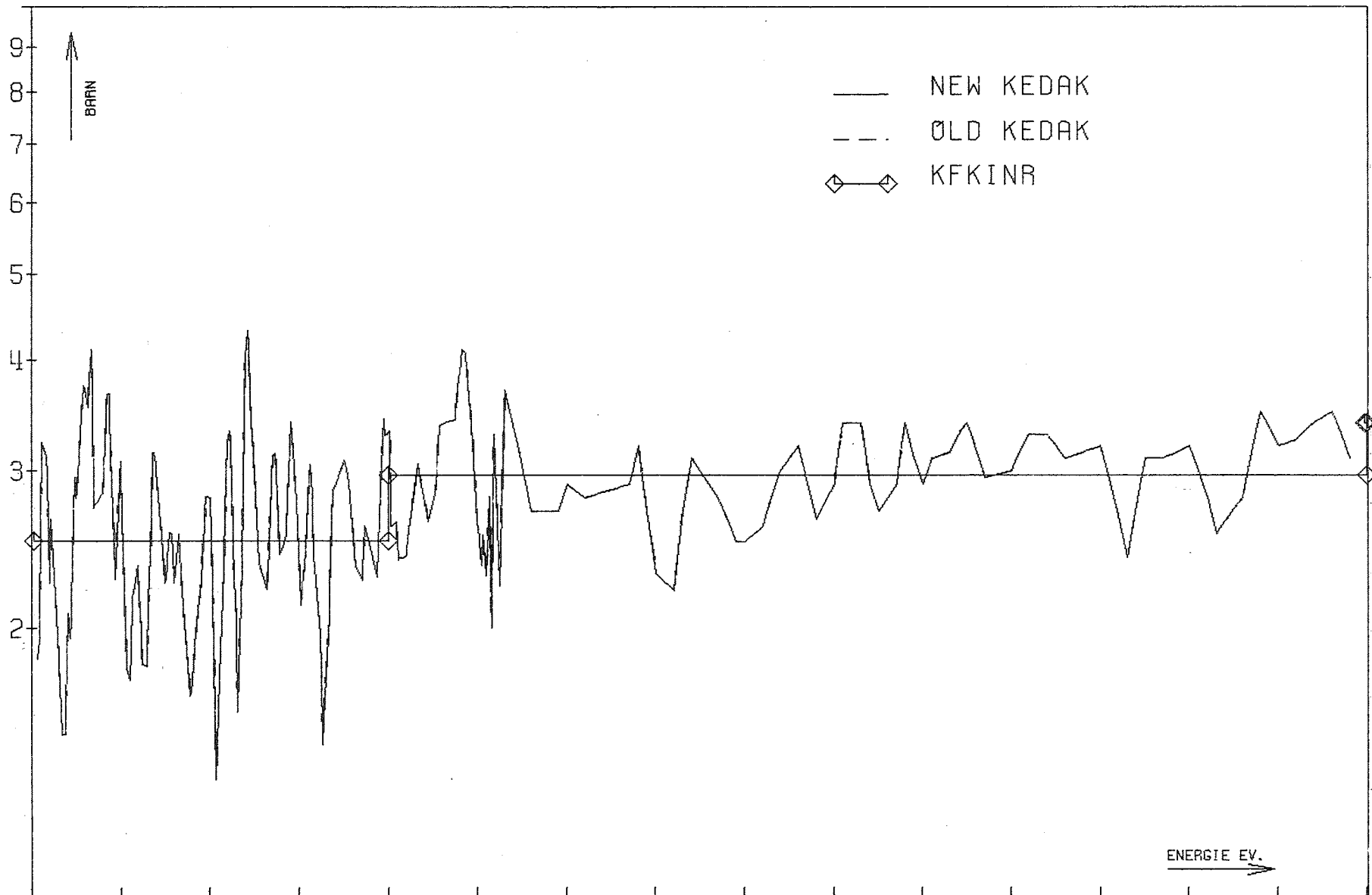


FIG. 37 FE MUEL

INR901FE 28.01 19.06.

0.1E 02



0.1E 01

0.10E 07 0.13E 07 0.16E 07 0.19E 07 0.22E 07 0.25E 07

FIG.

38

FE

SGT

INR901F2 05.08 17.56.

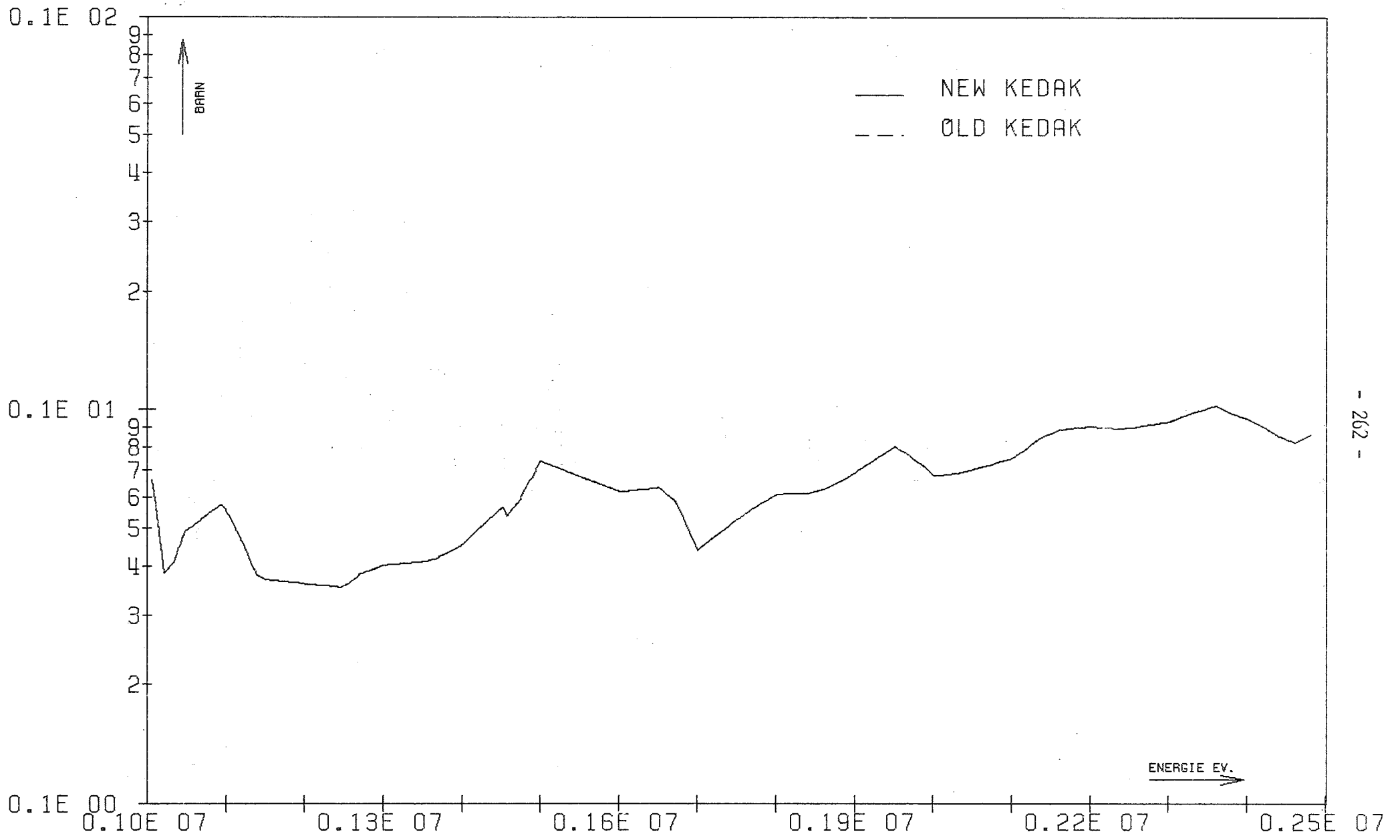
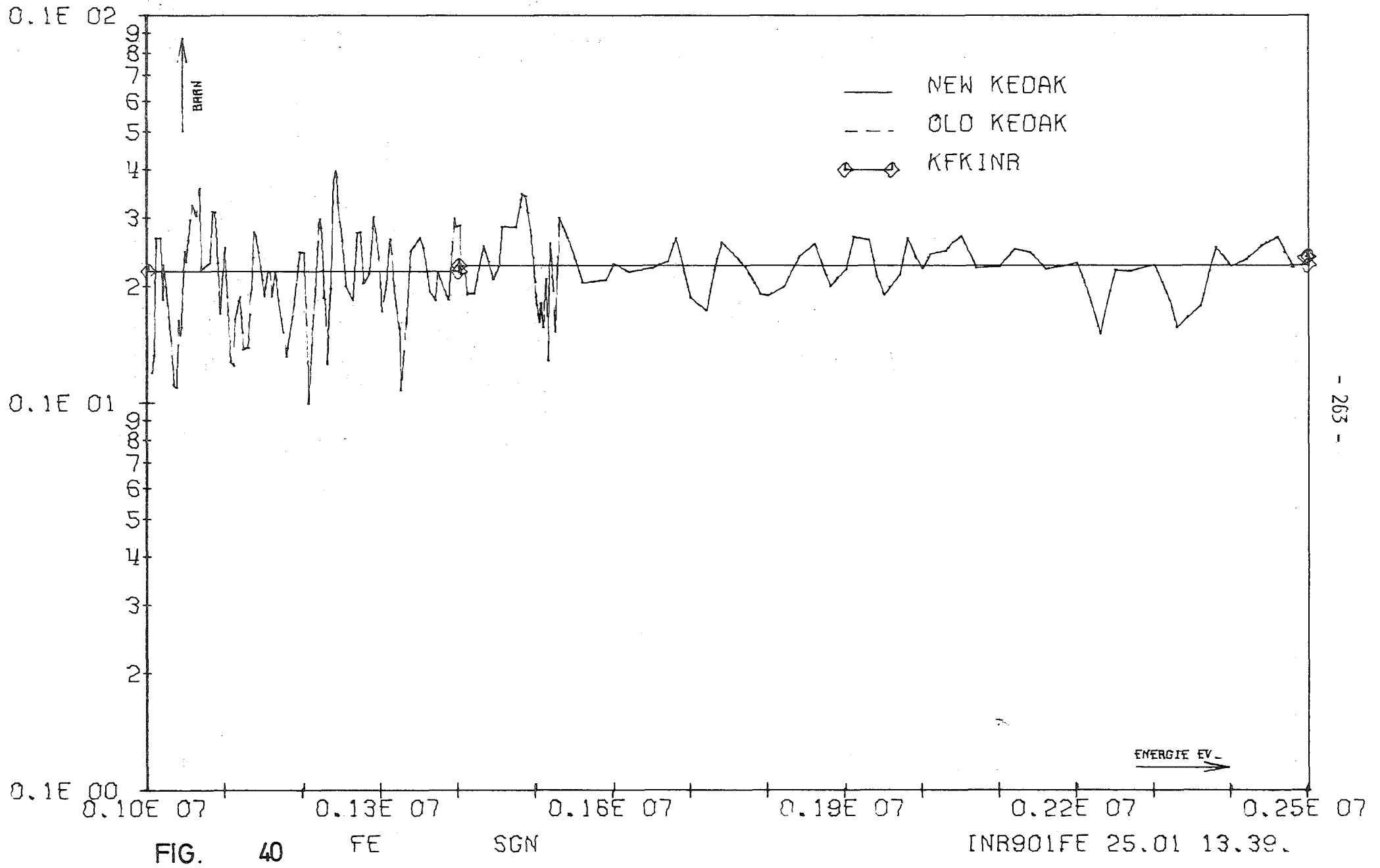


FIG. 39 FE SGX

INR901F2 05.08 17.56.



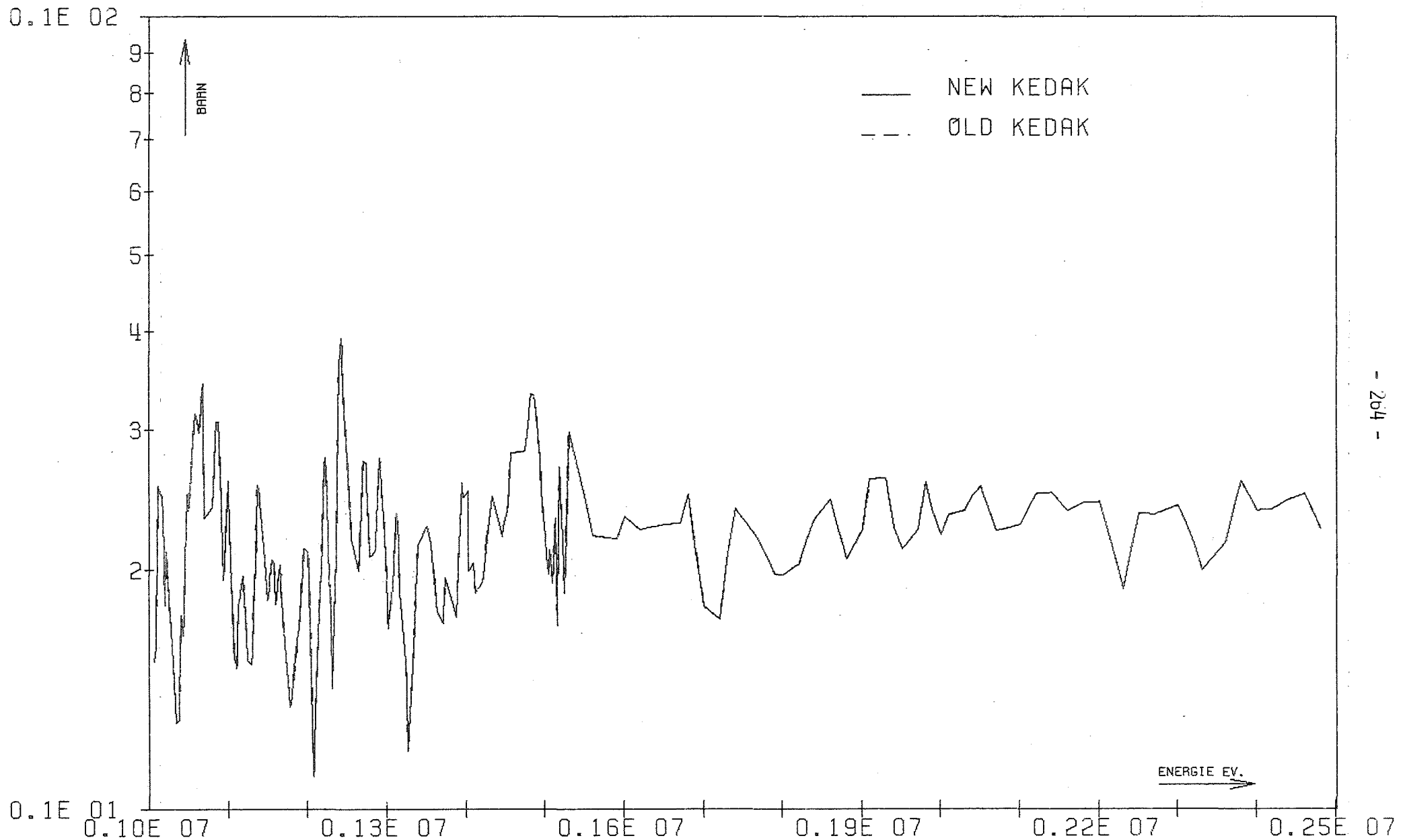


FIG. 41 FE SGTR INR901F2 05.08 17.56.

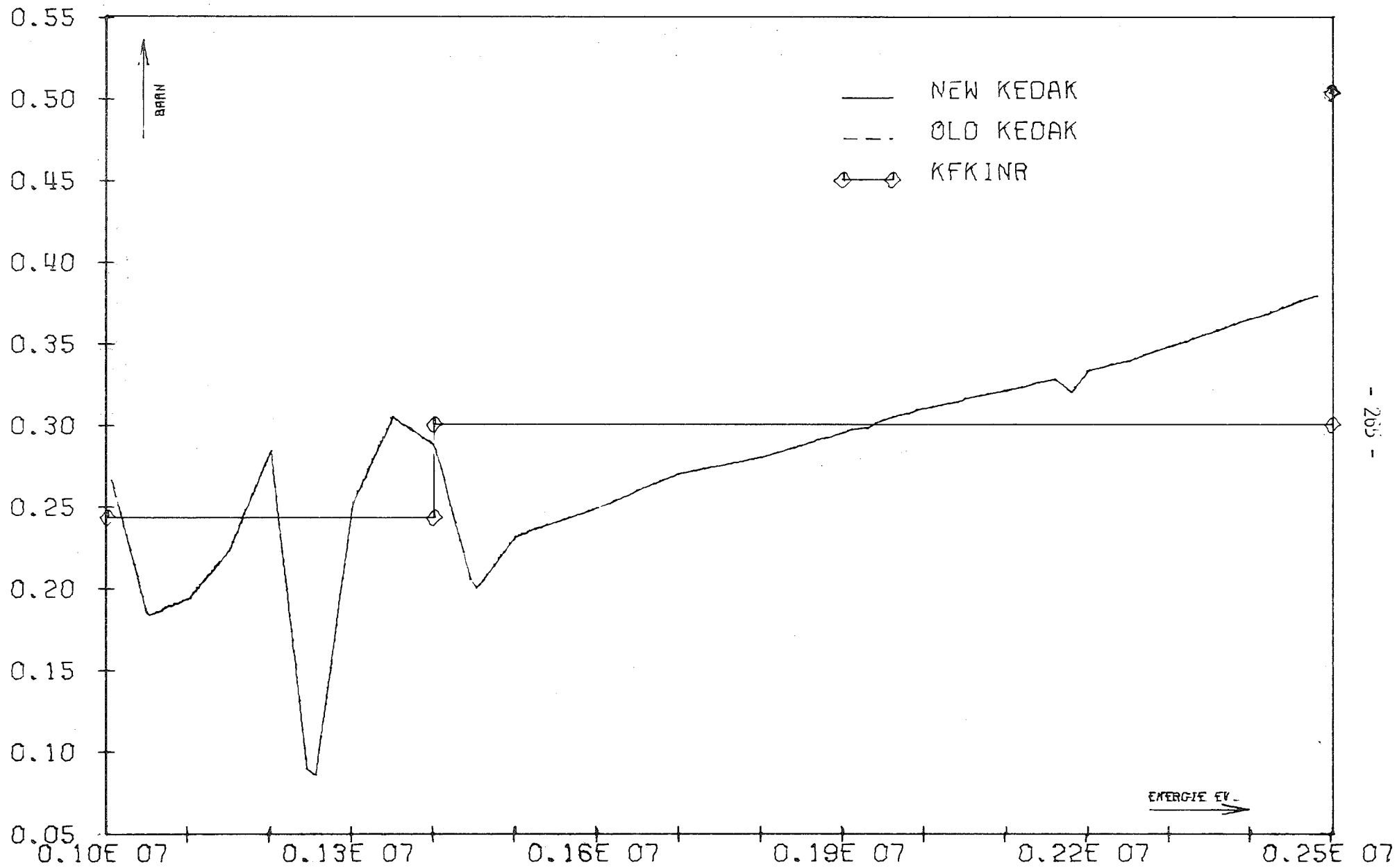
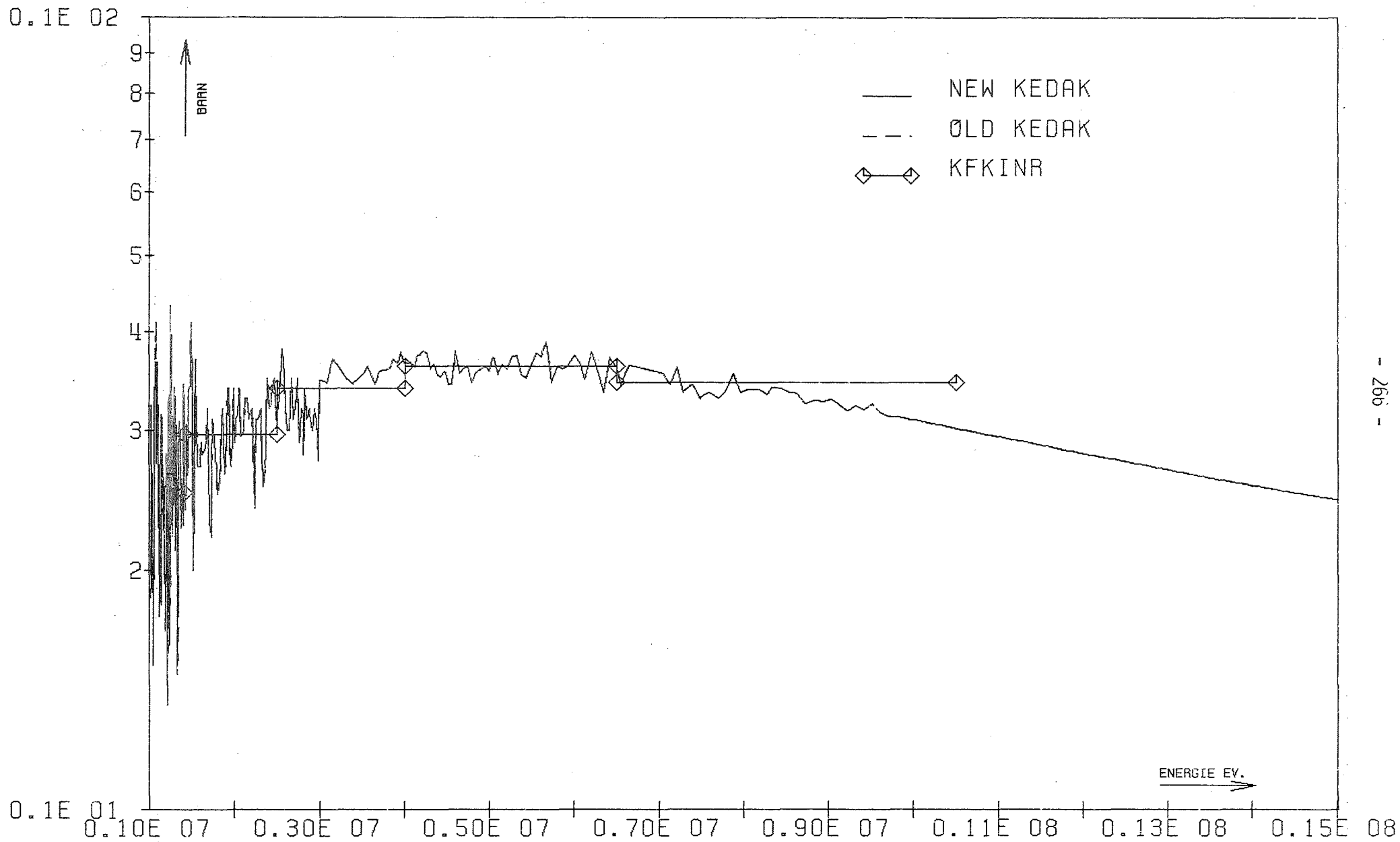


FIG. 42 FE MUEL

INR901FE 25.01 13.39.



FIG

43

FE

SGT

INR901F2 05.08 17.56.

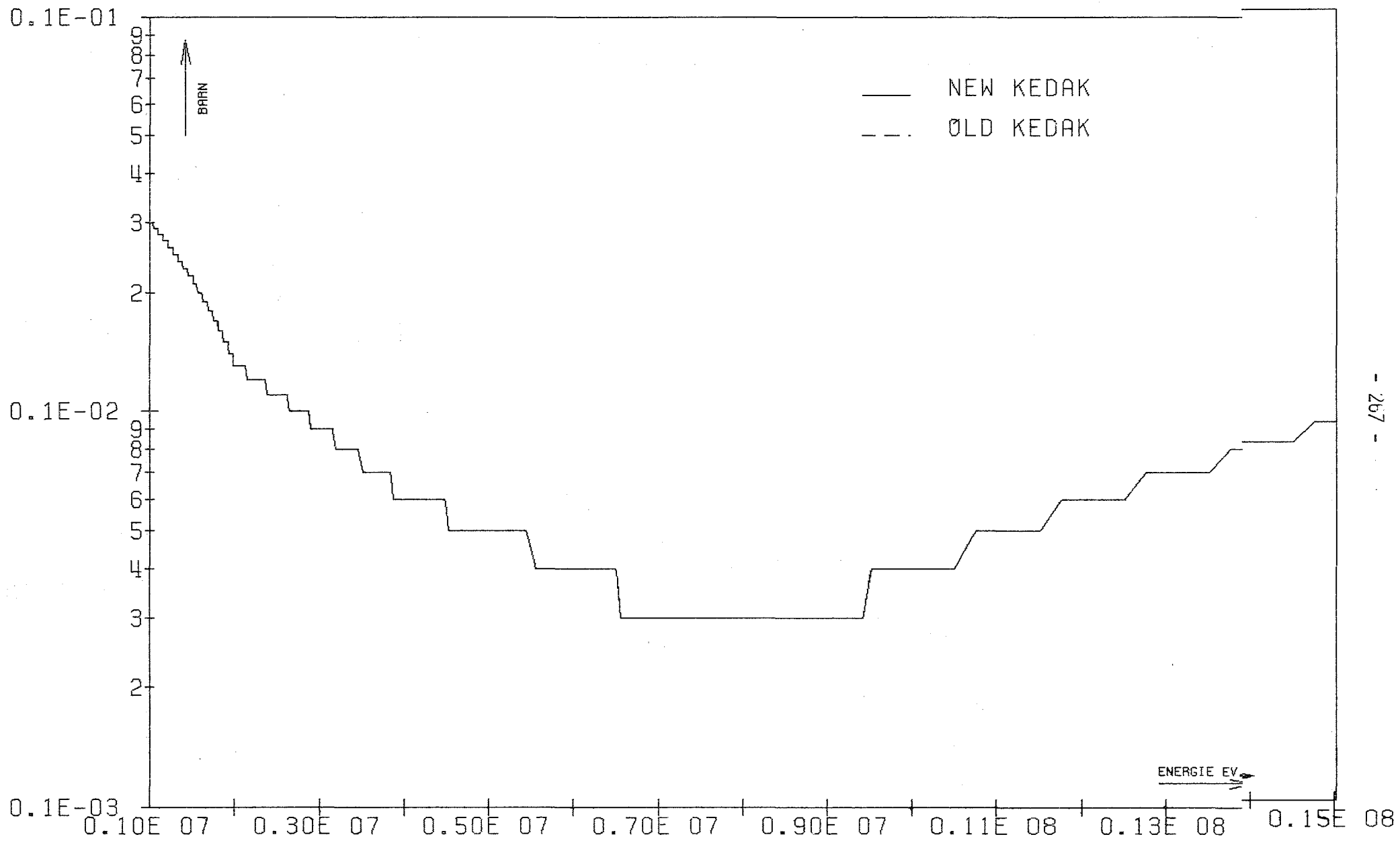


FIG. 44 FE SGG INR901F4 07.08 16.23.

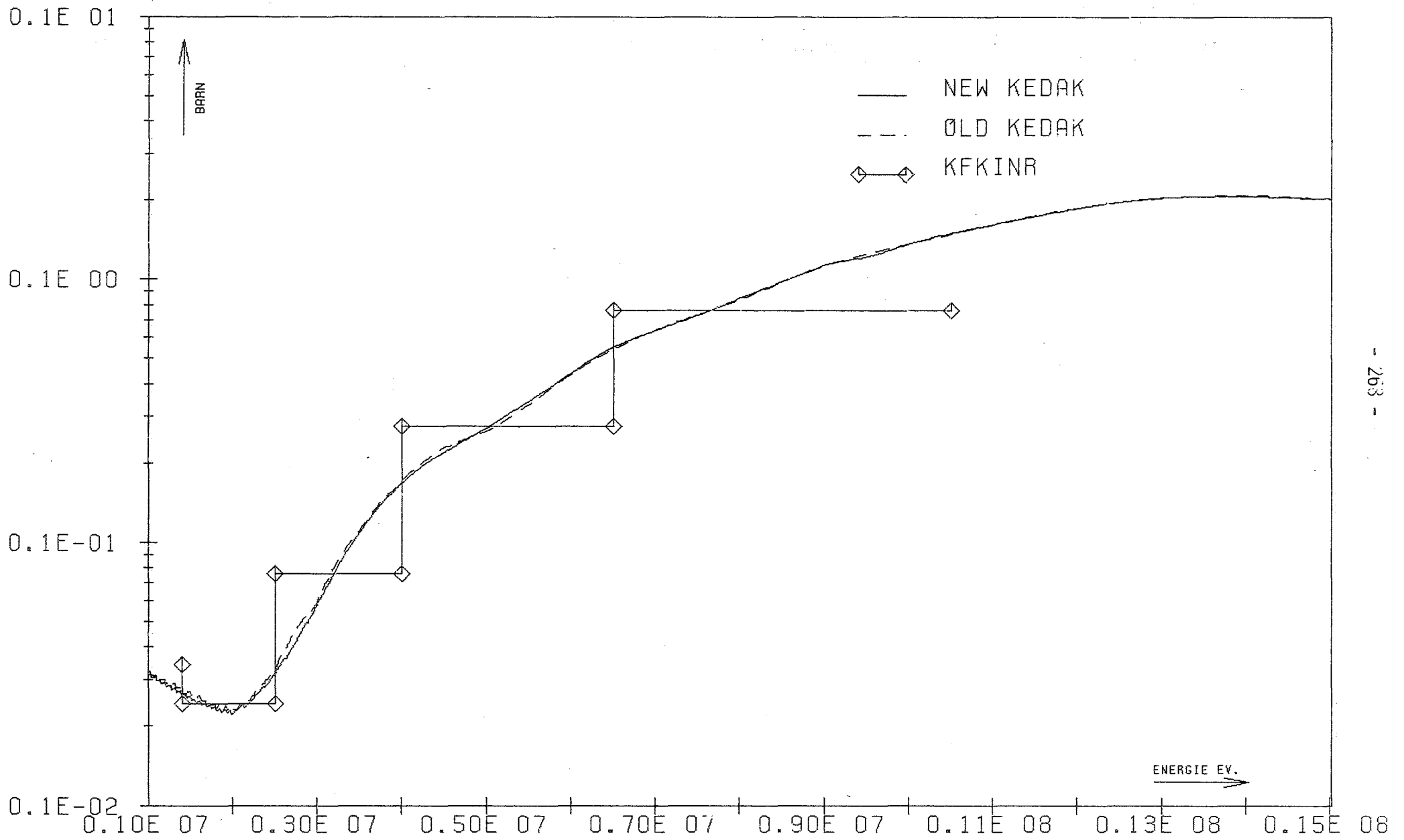
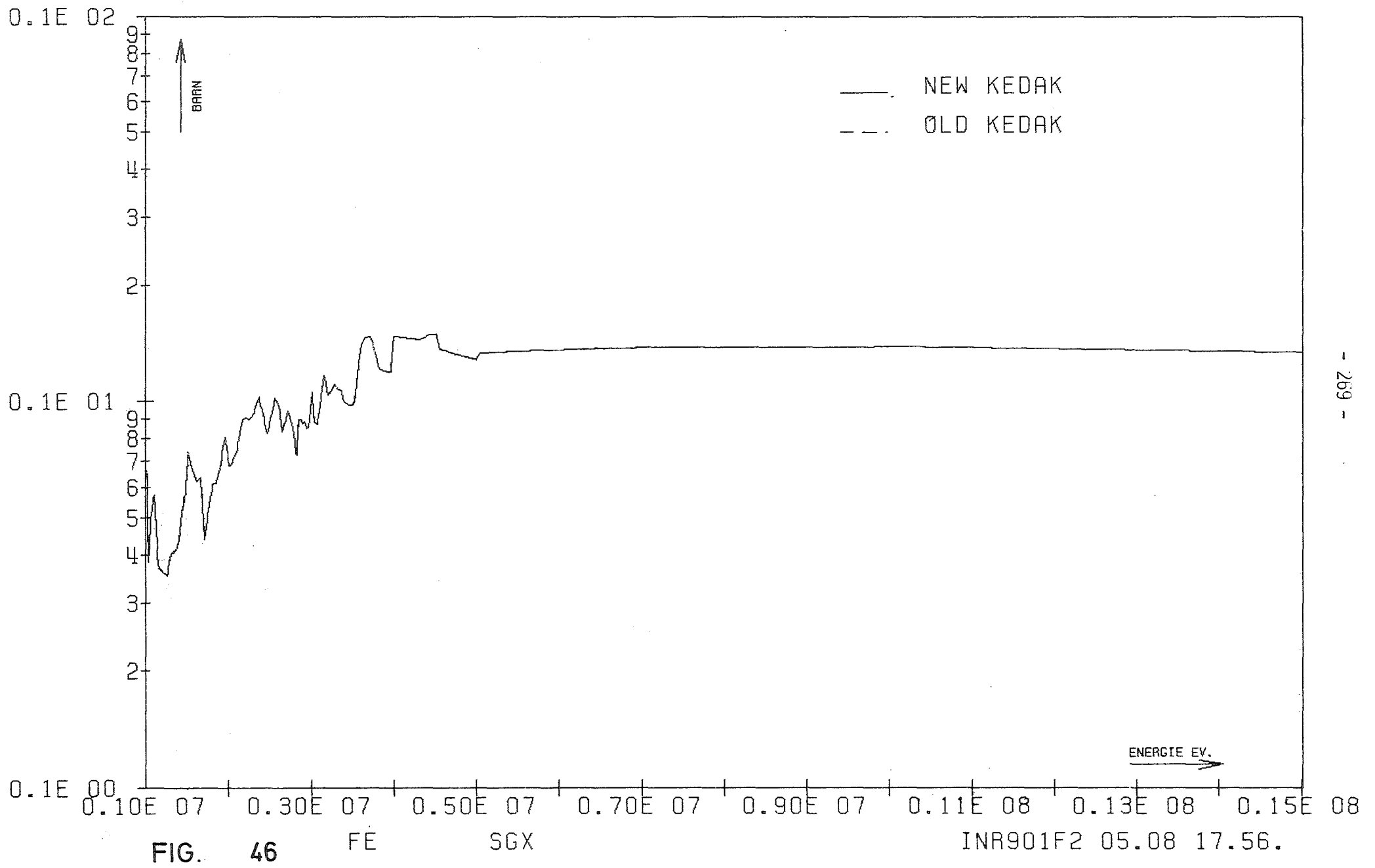


FIG. 45 FE SGA

INR901F4 07.08 16.23.



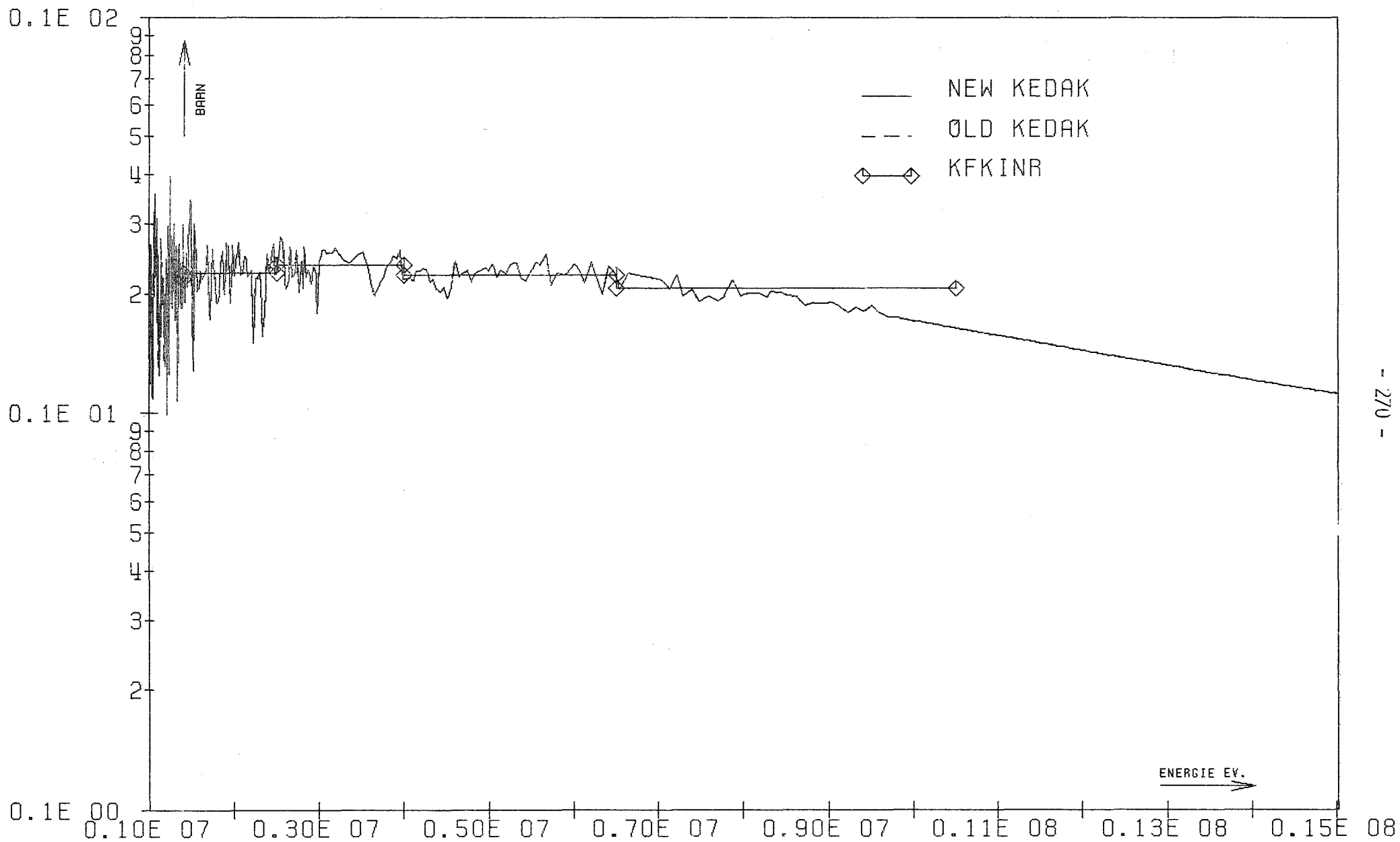


FIG. 47

FE

SGN

INR901F2 05.08 17.56.

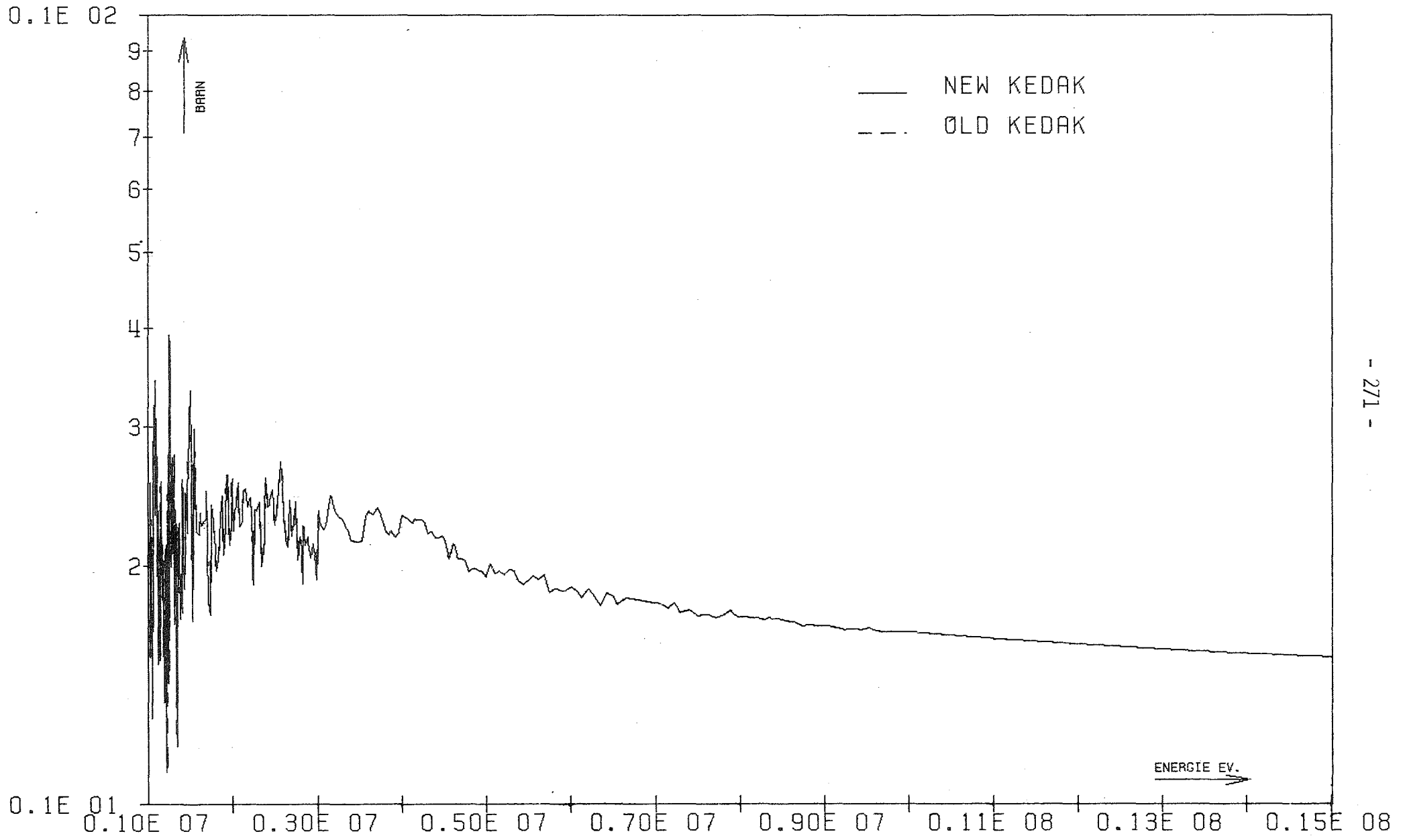


FIG. 48

FE SGTR

INR901F2 05.08 17.56.

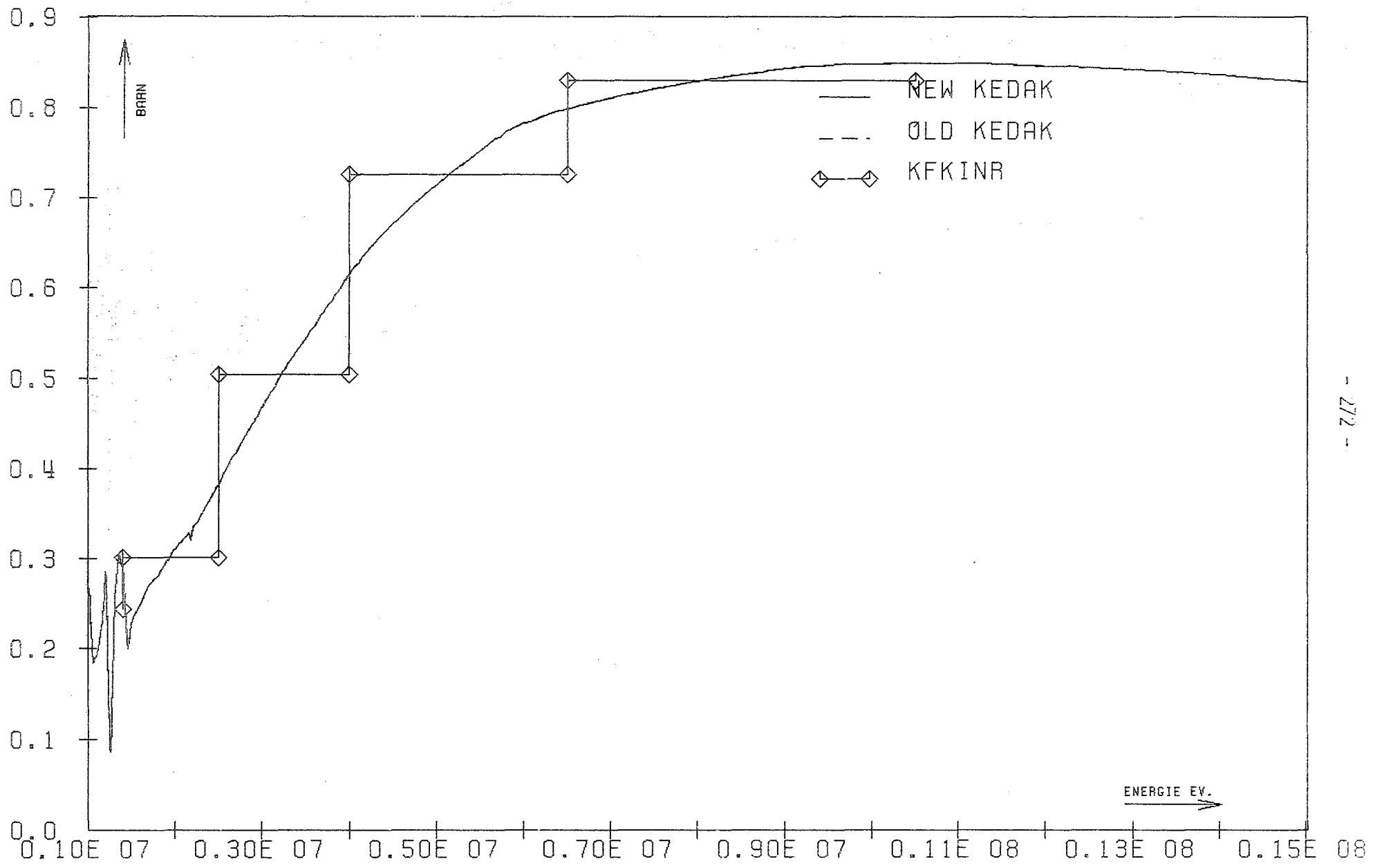


FIG. 49

FE MUEL

INR901F2 05.08 17.56.

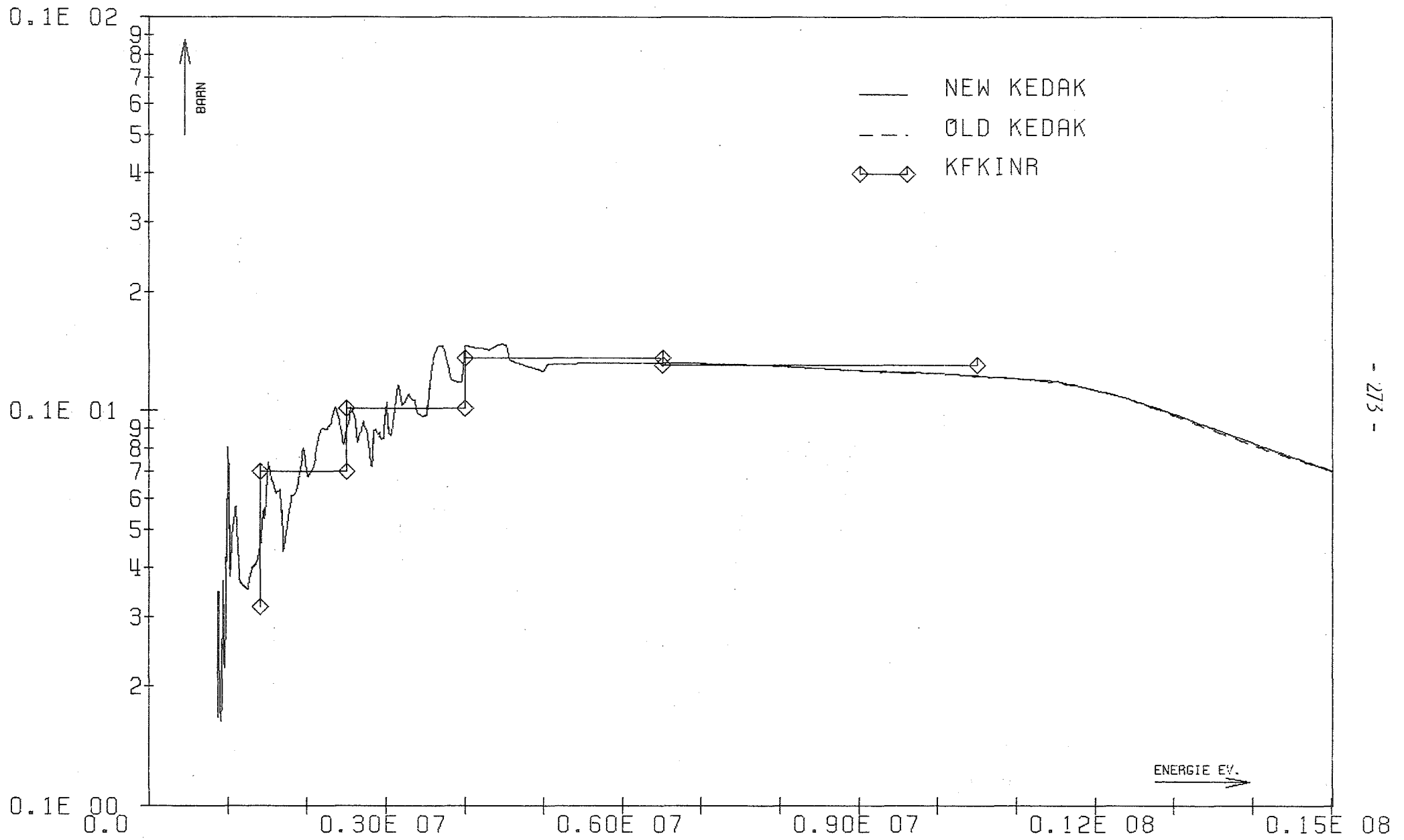


FIG. 50 FE SGI

INR901F4 05.08 18.30.

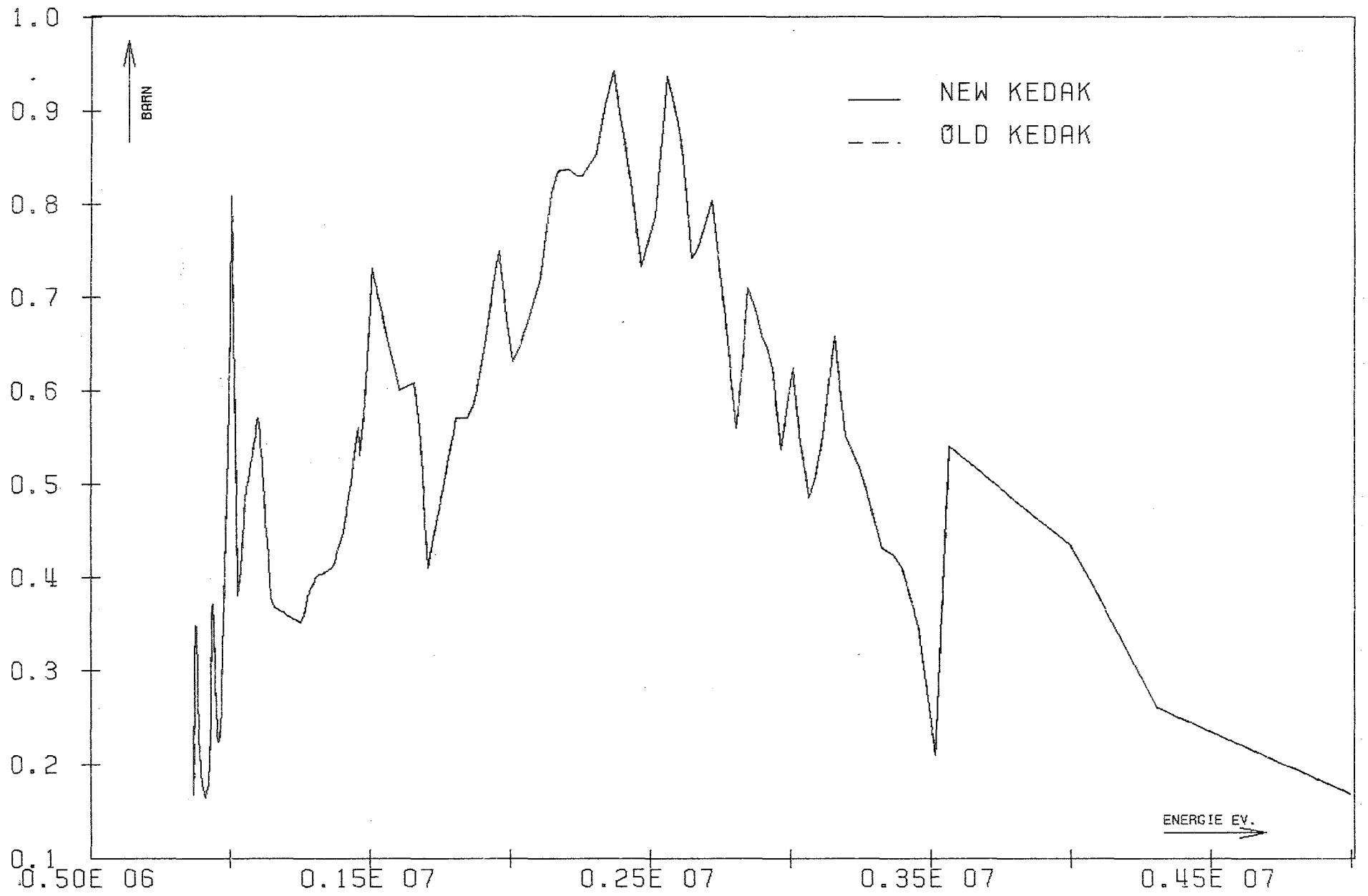


FIG. 51 FE SGIZ 0.845D+06 INR901F4 05.08 18.31.

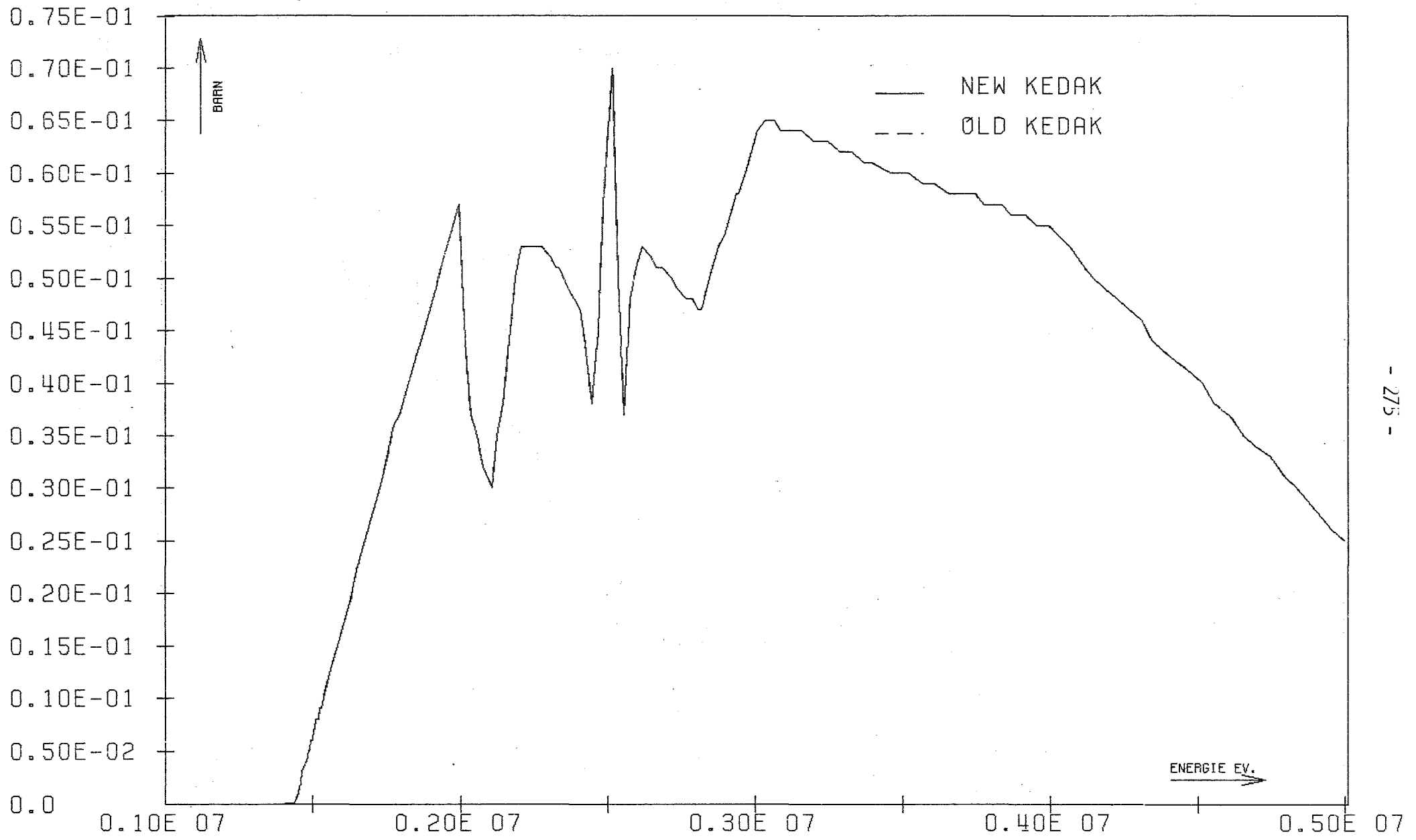


FIG. 52

FE

SGIZ

0.141D+07

INR901F4

05.08

18.31.

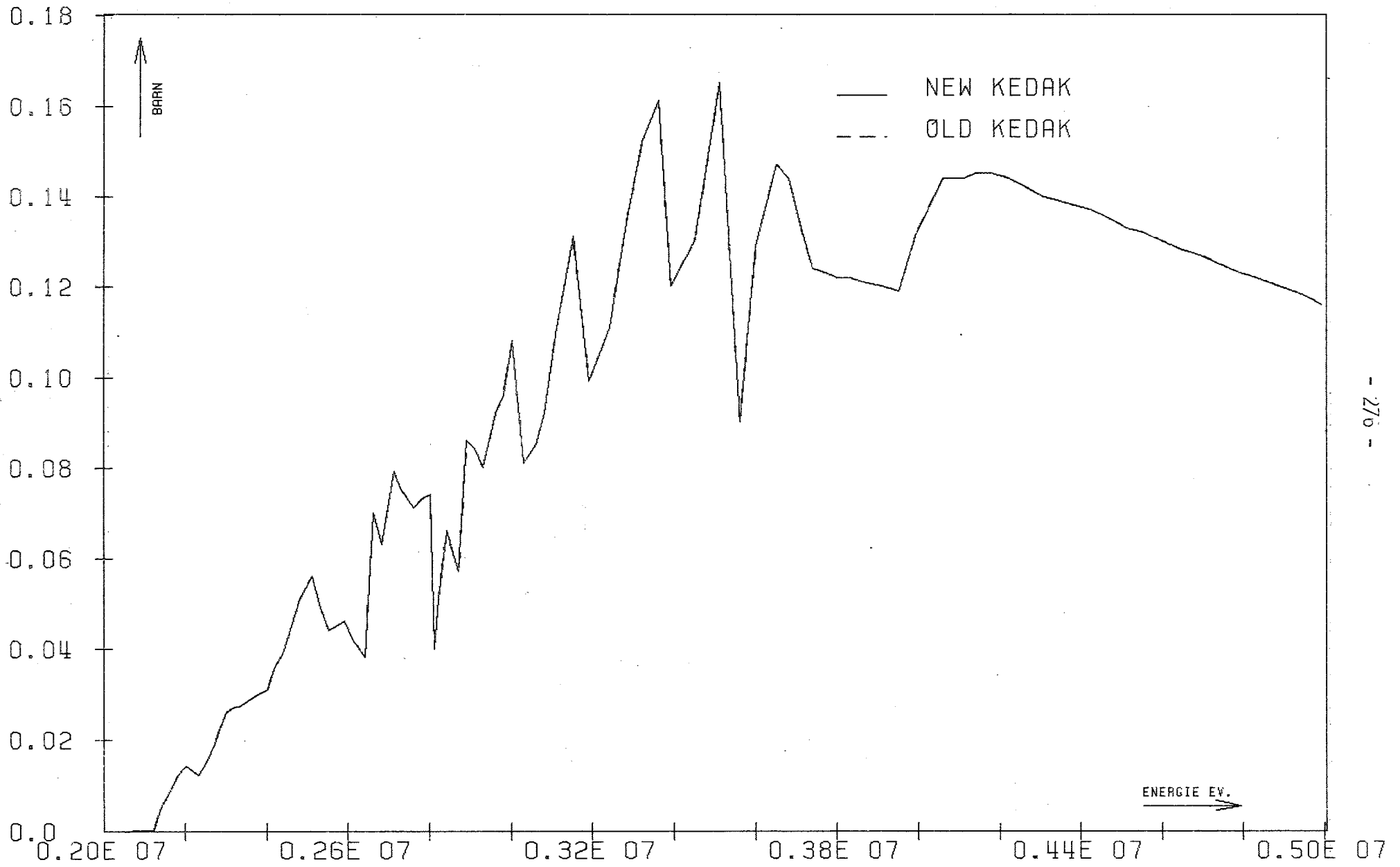


FIG. 53 FE SGIZ 0.208D+07 INR901F4 05.08 18.31.

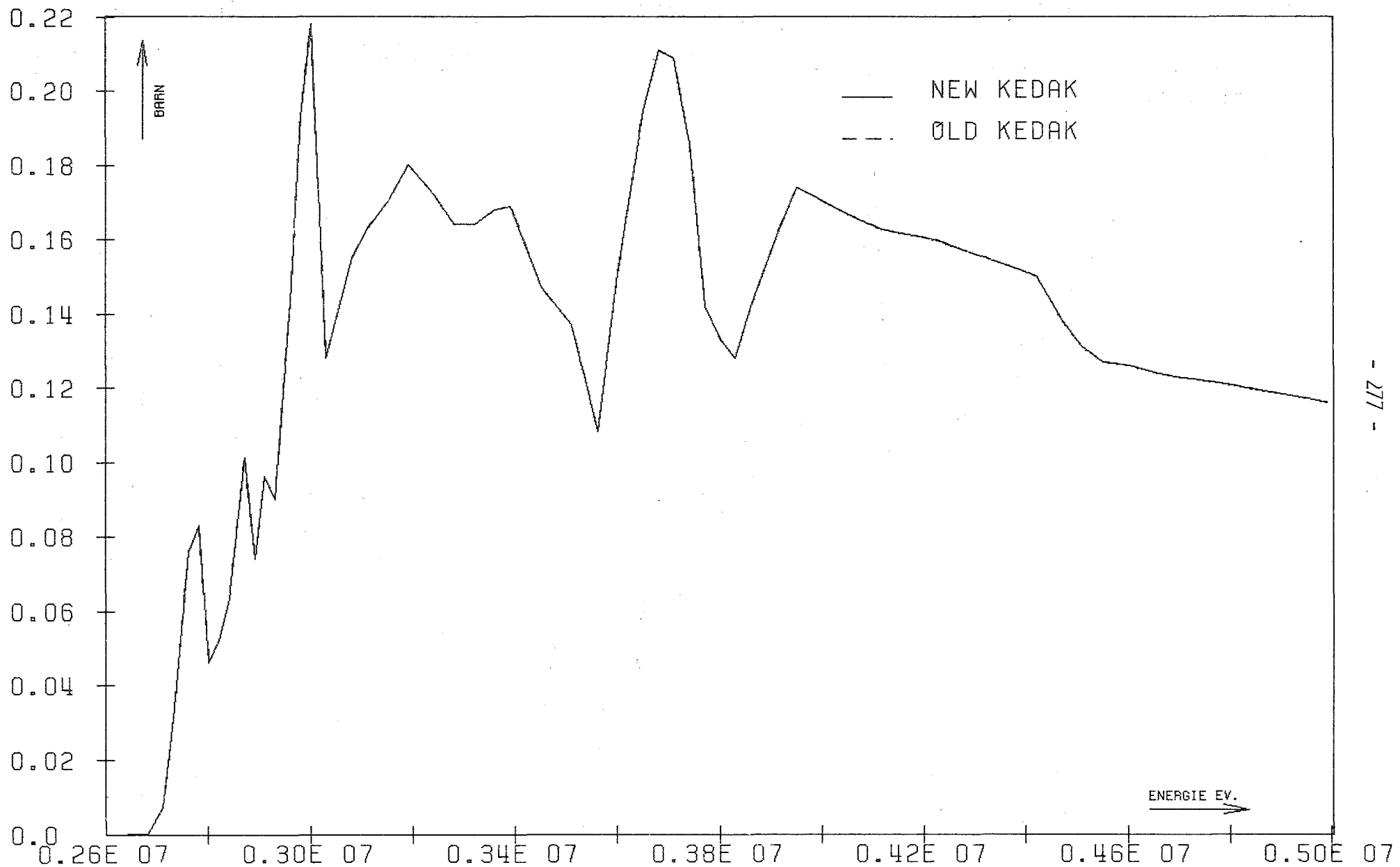


FIG. 54

FE

SGIZ

0.266D+07

INR901F4 05.08 18.31.

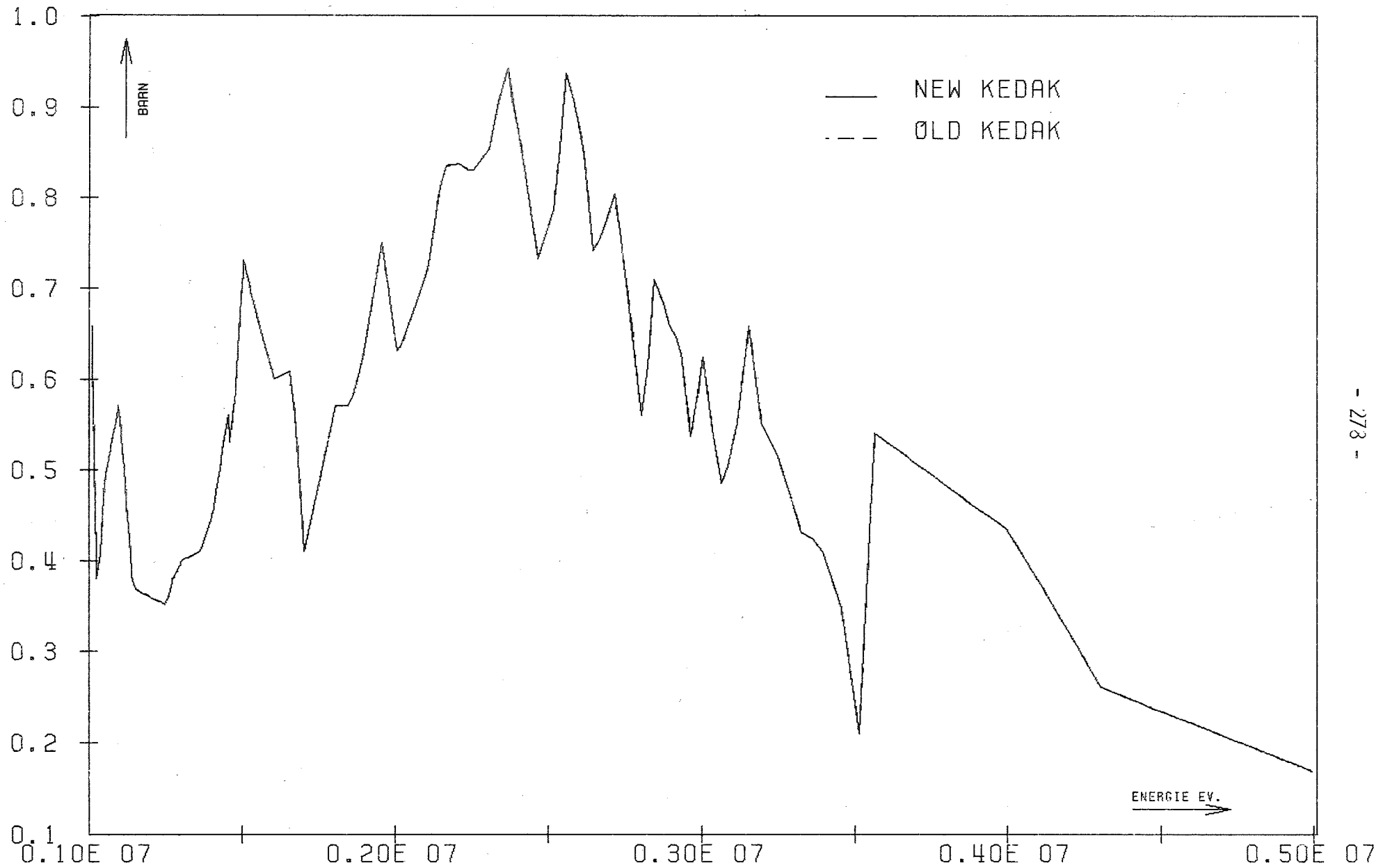


FIG. 55 FE SGIZ 0.2940+01 INR901F4 05.08 18.31.

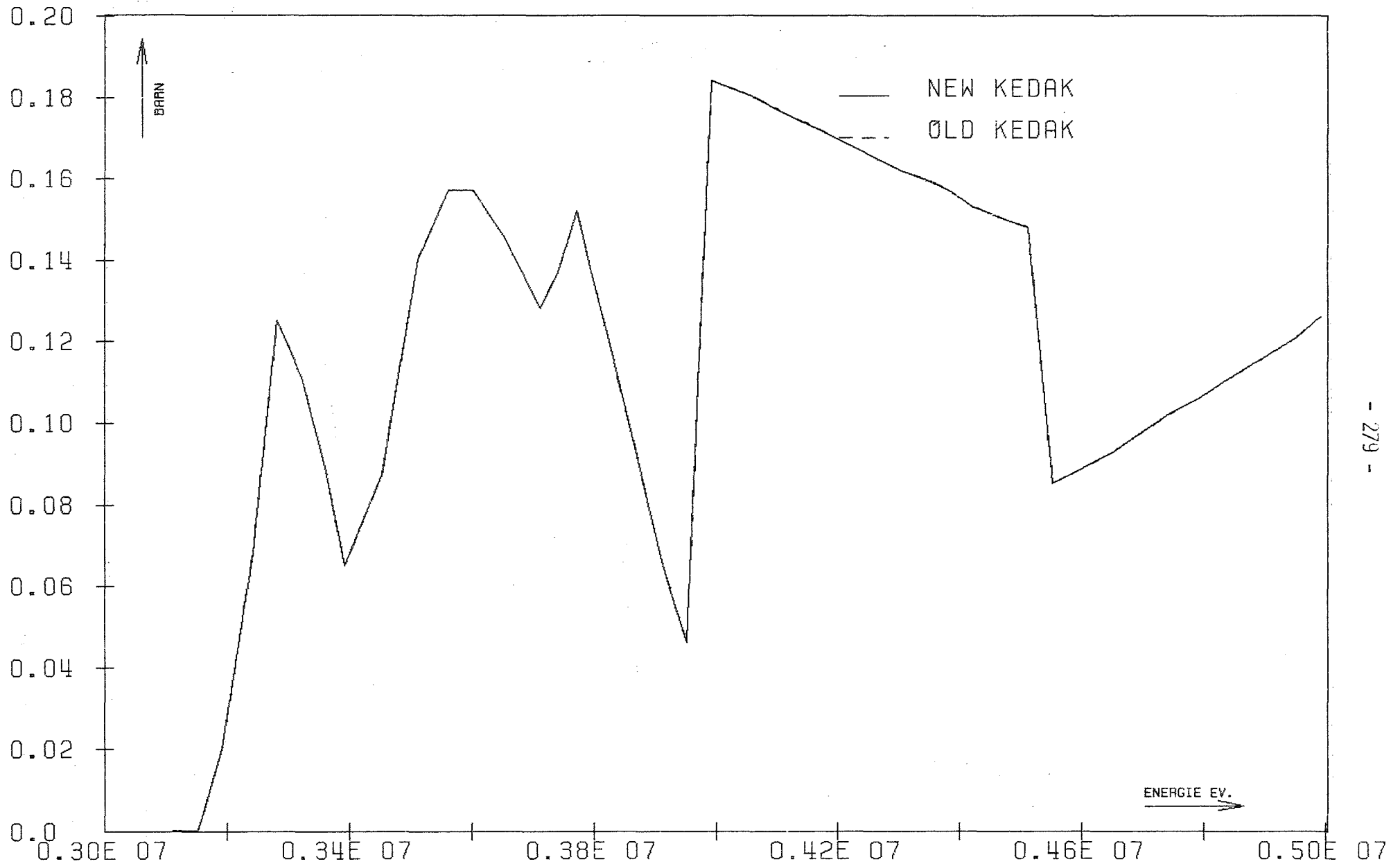


FIG. 56 FE SGIZ 0.3120+07 INR901F4 05.08 18.31.

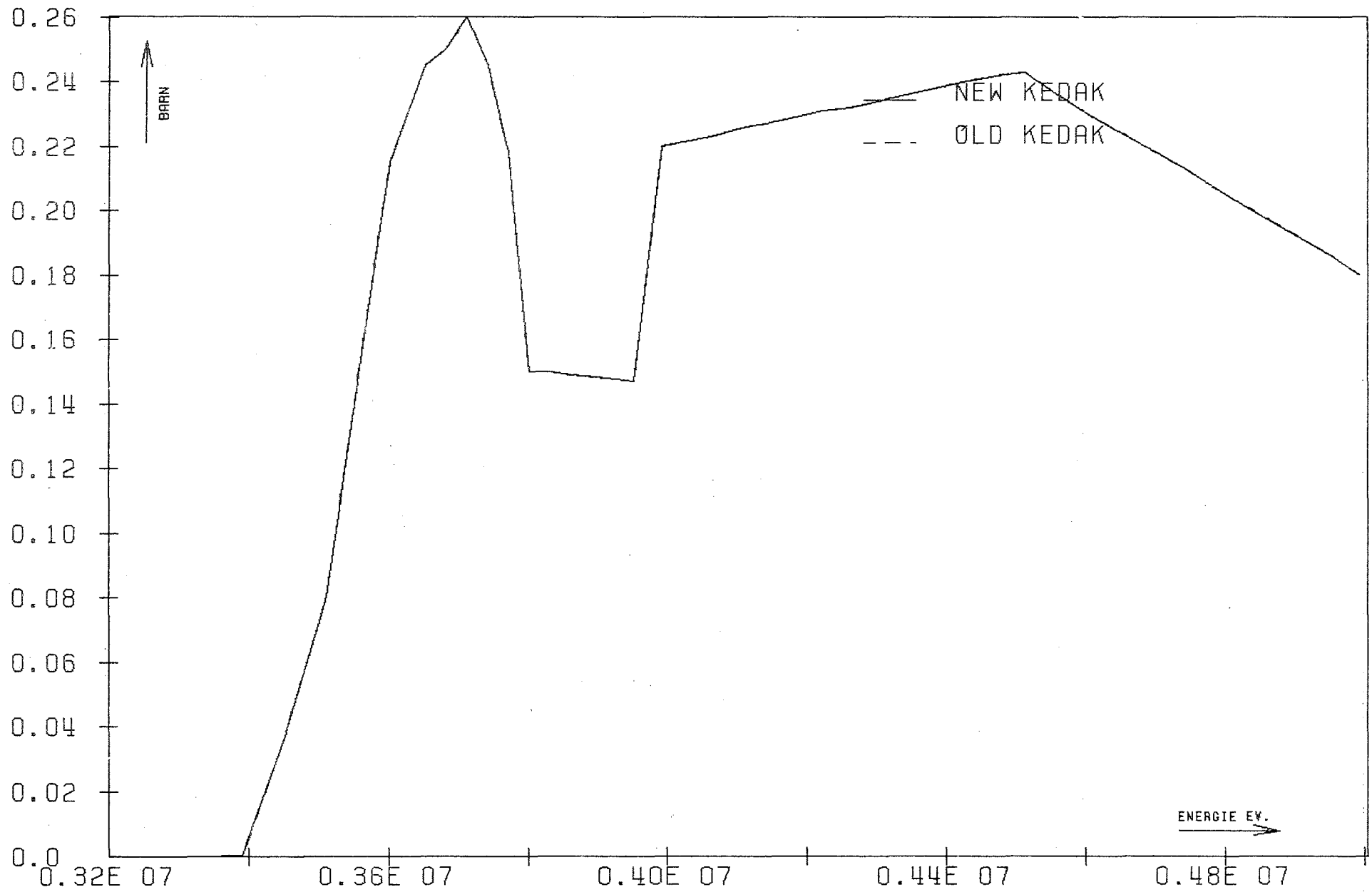


FIG. 57

FE

SGIZ

0.337D+07

INR901F4 05.08 18.31.

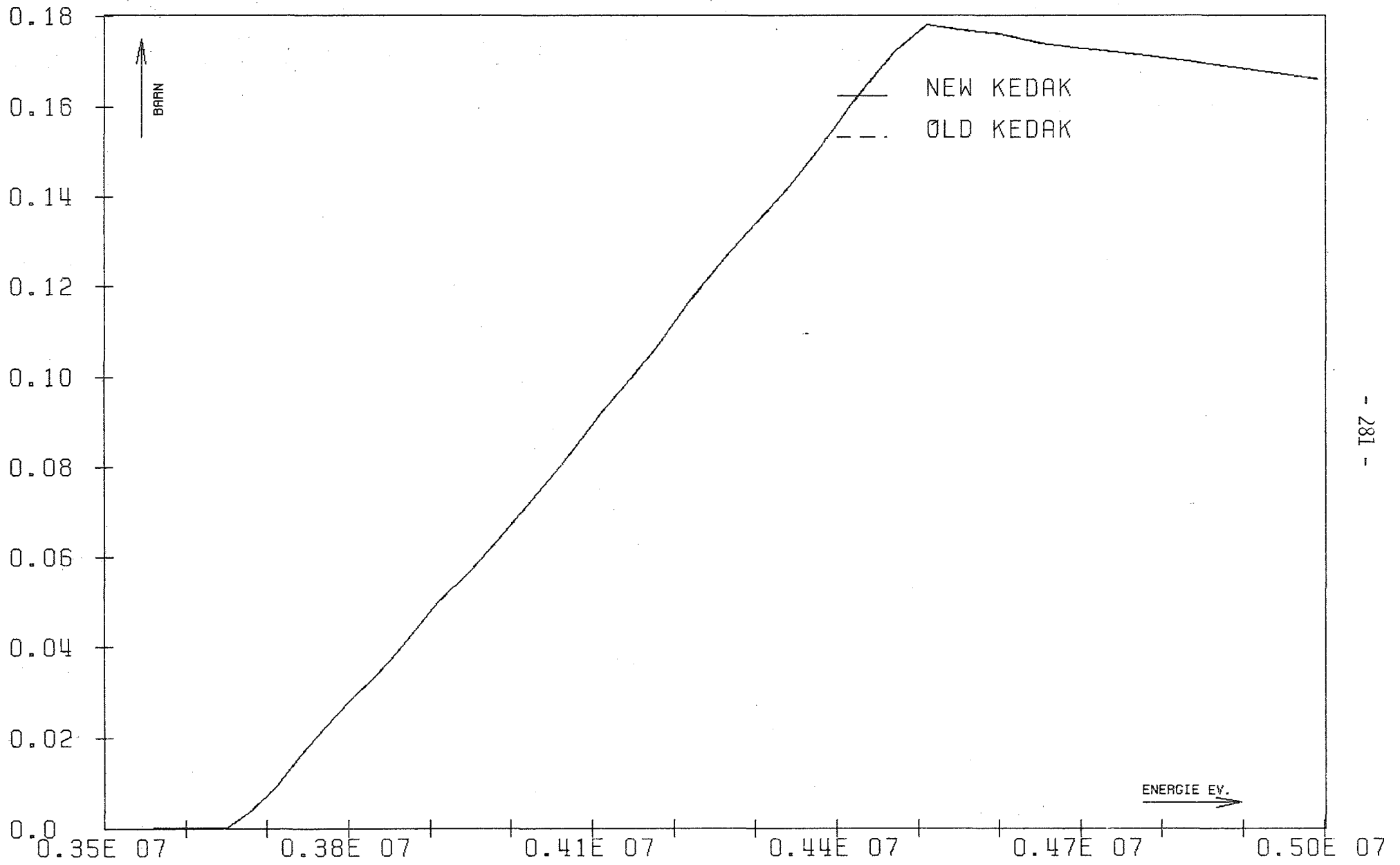


FIG. 58

FE

SGIZ

0.3600+07

INR901F4 05.08 18.31.

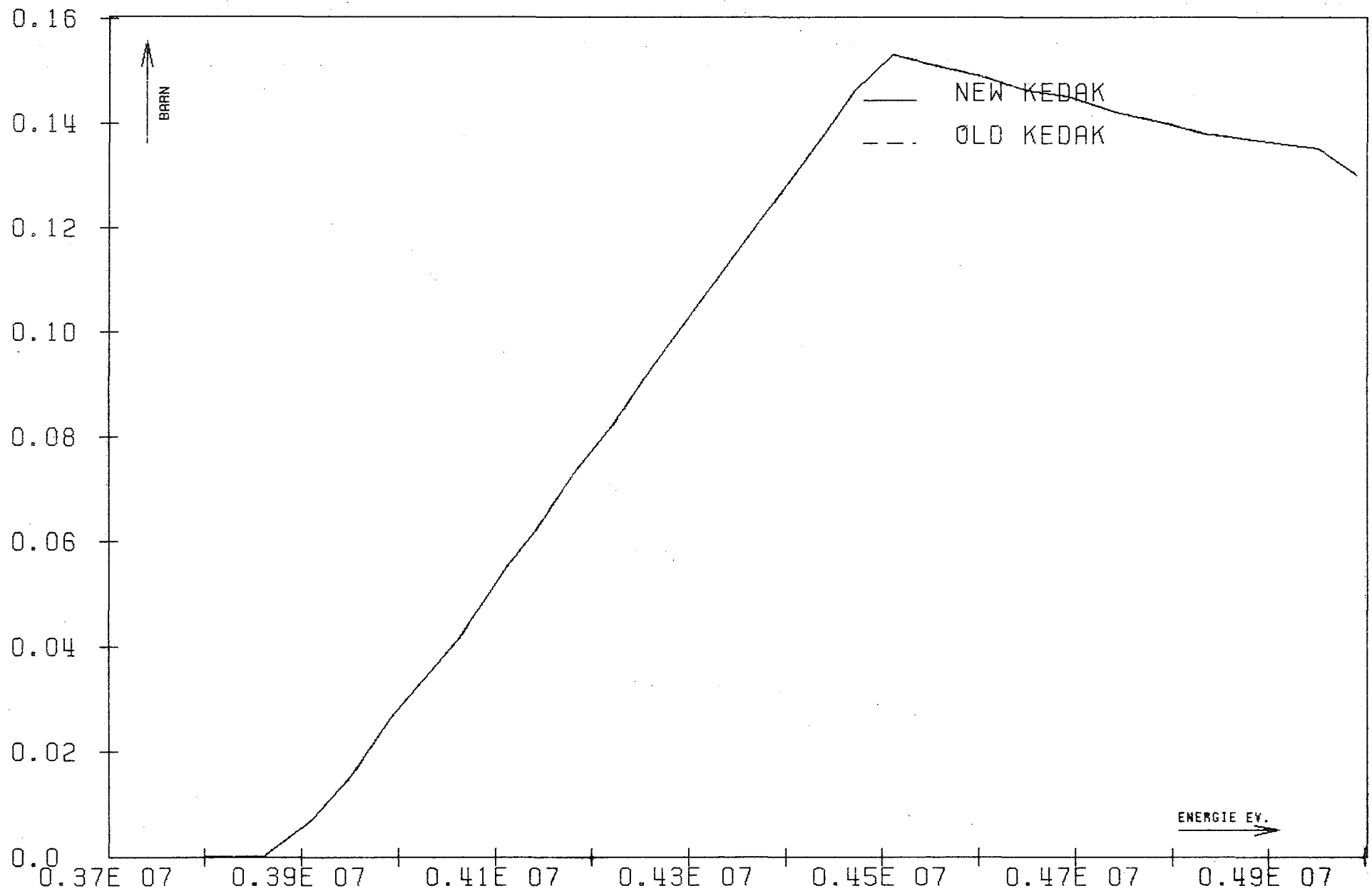


FIG. 59 FE SGIZ 0.383D+07 INR901F4 05.08 18.31.

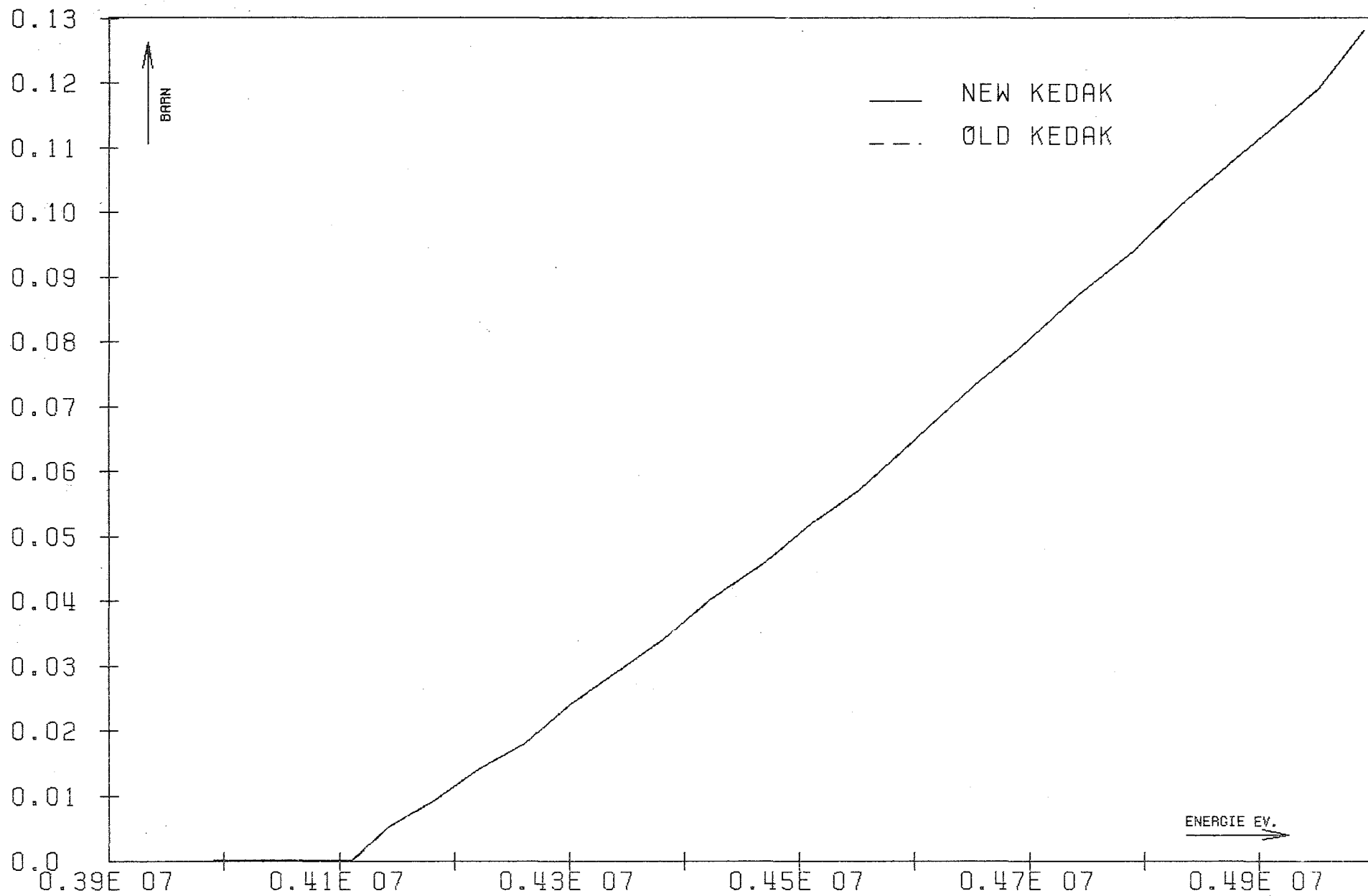


FIG. 60 FE SGIZ 0.4040+07 INR901F4 05.08 18.31.

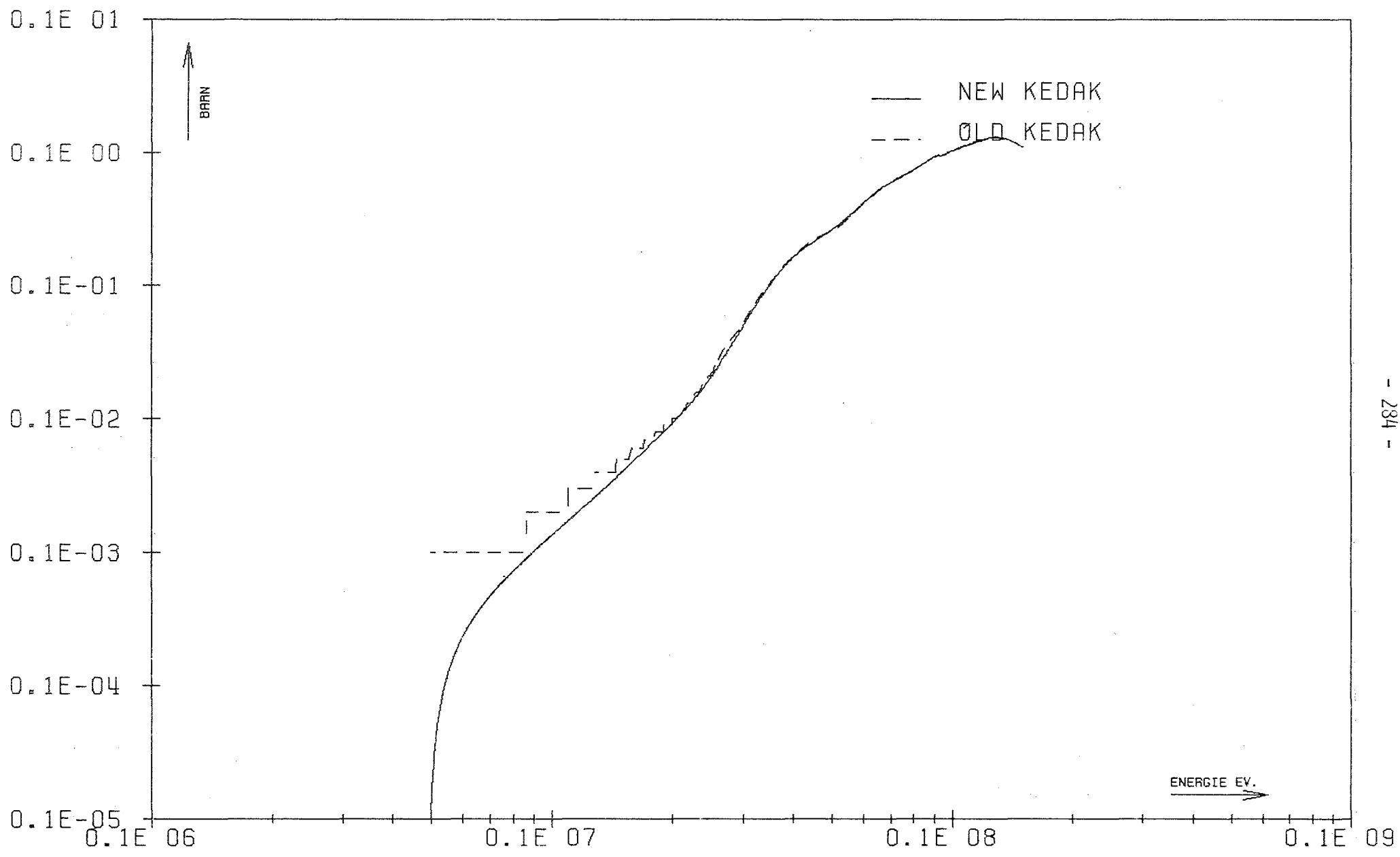


FIG. 61 FE SGP INR901F3 05.08 18.22.

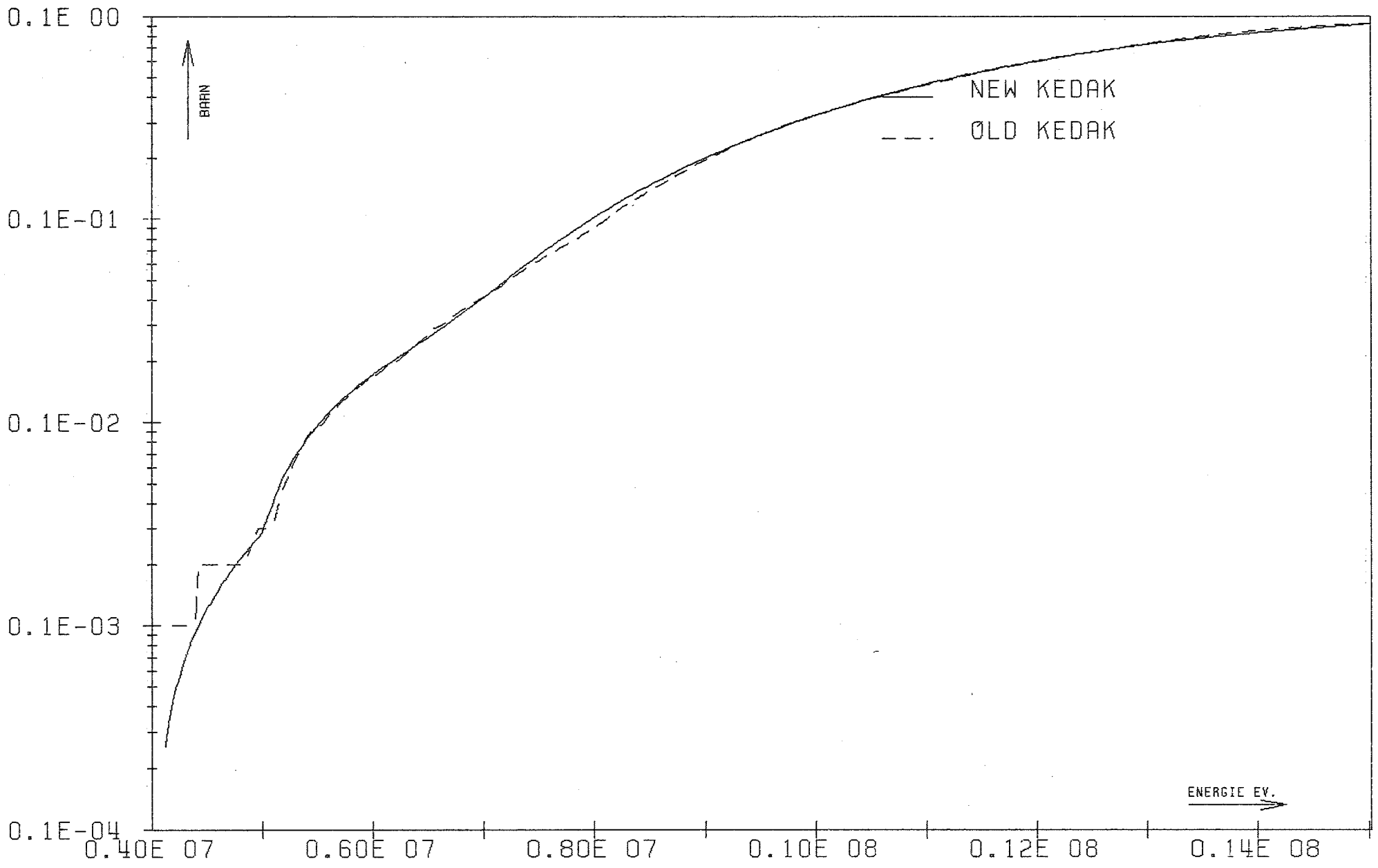


FIG. 62 FE SGALP INR901F3 05.08 18.22.

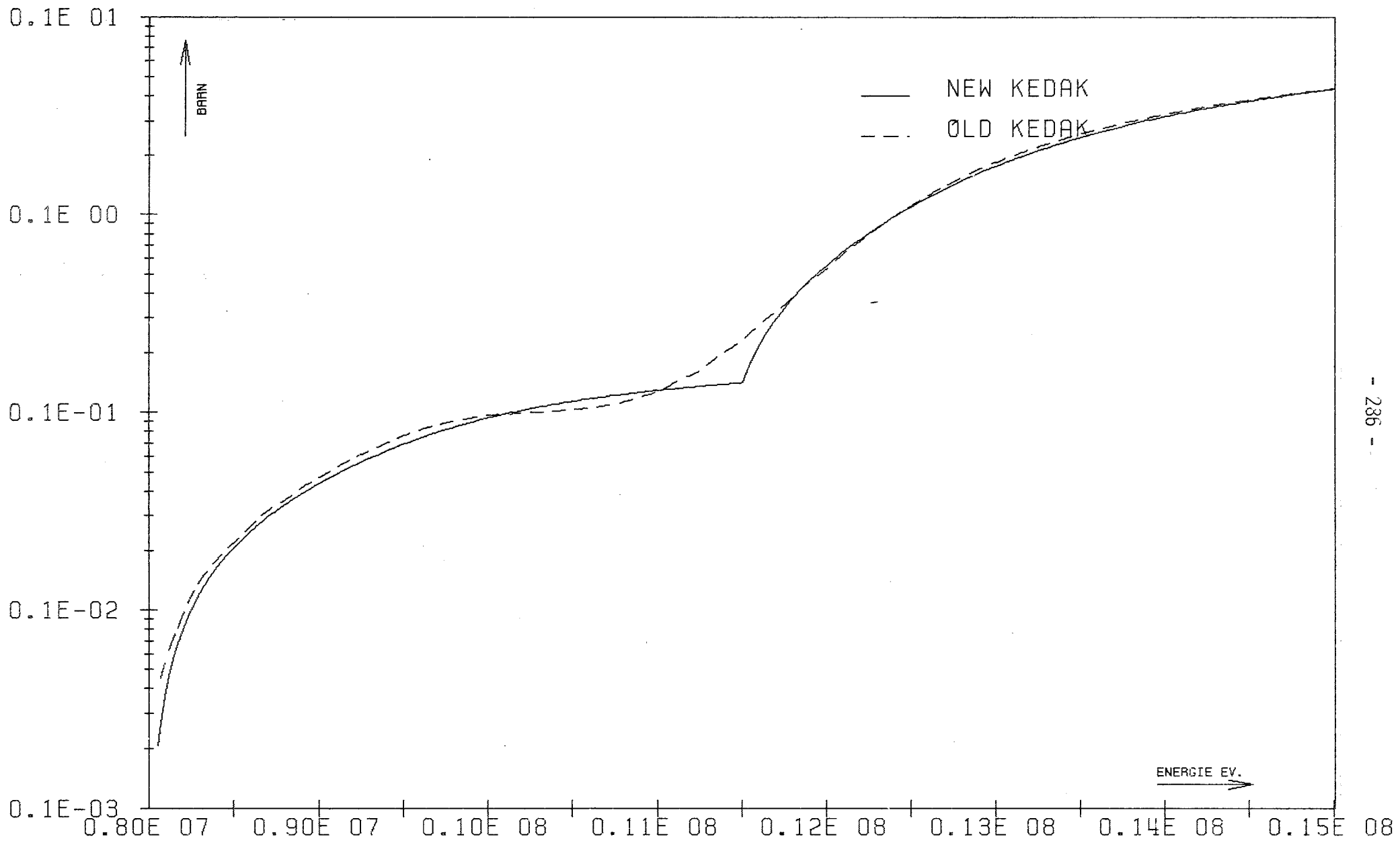
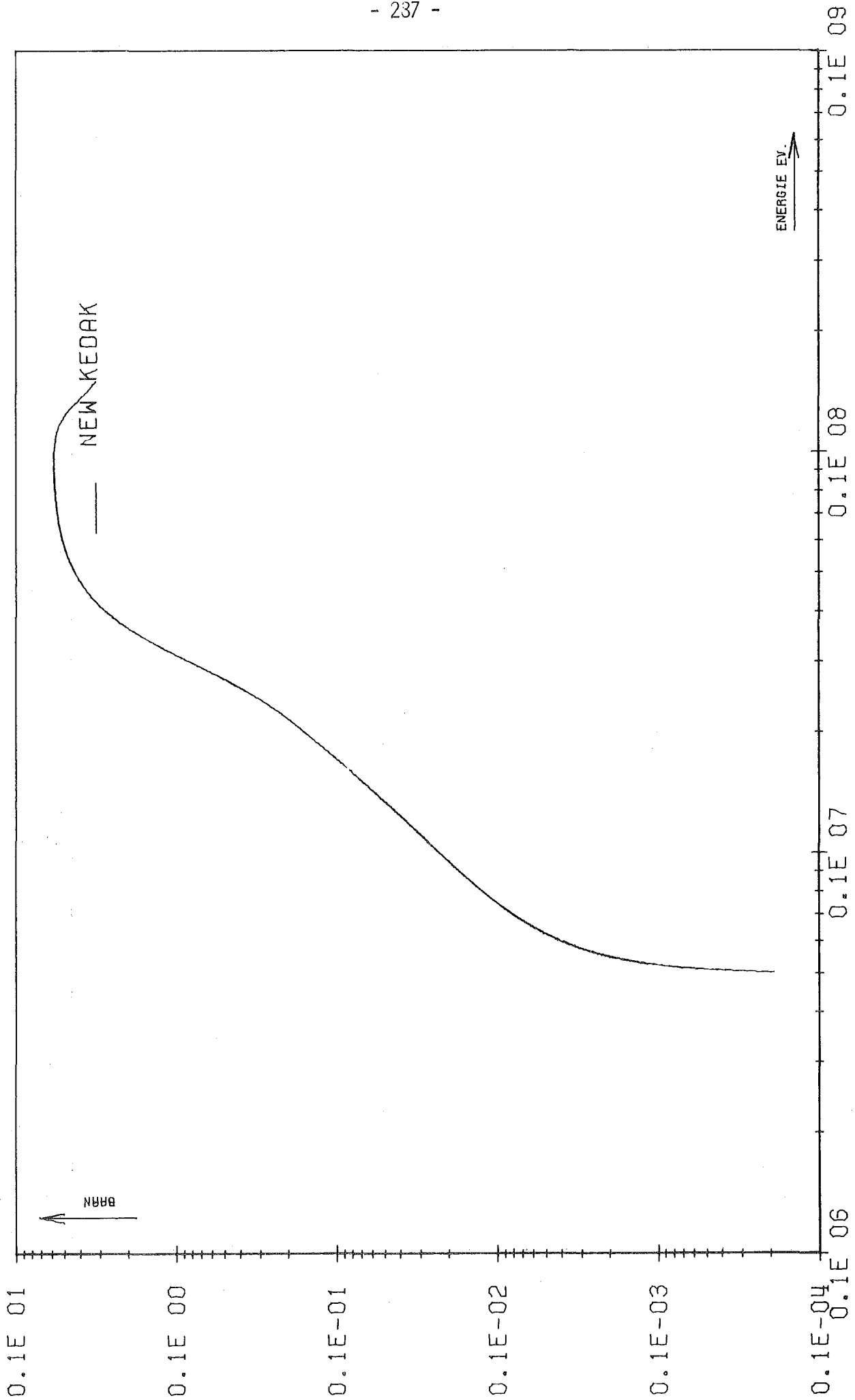


FIG. 63 FE SG2N

INR901F3 05.08 18.22.



INR901FI 29.01 14.31.

FIG. 64 FE 54 SGP

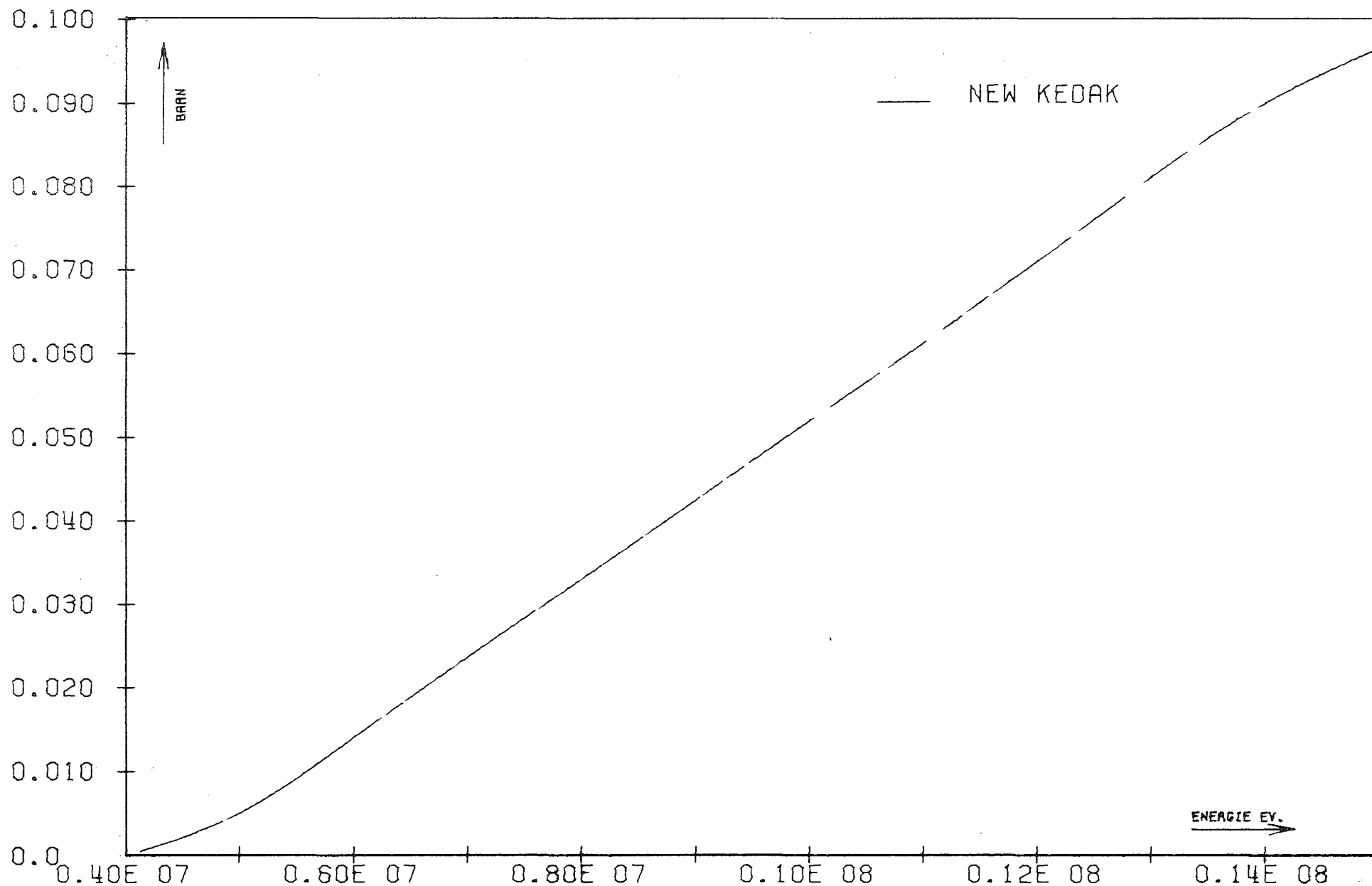


FIG. 65 FE 54 SGALP

INR901FI 29.01 14.31.

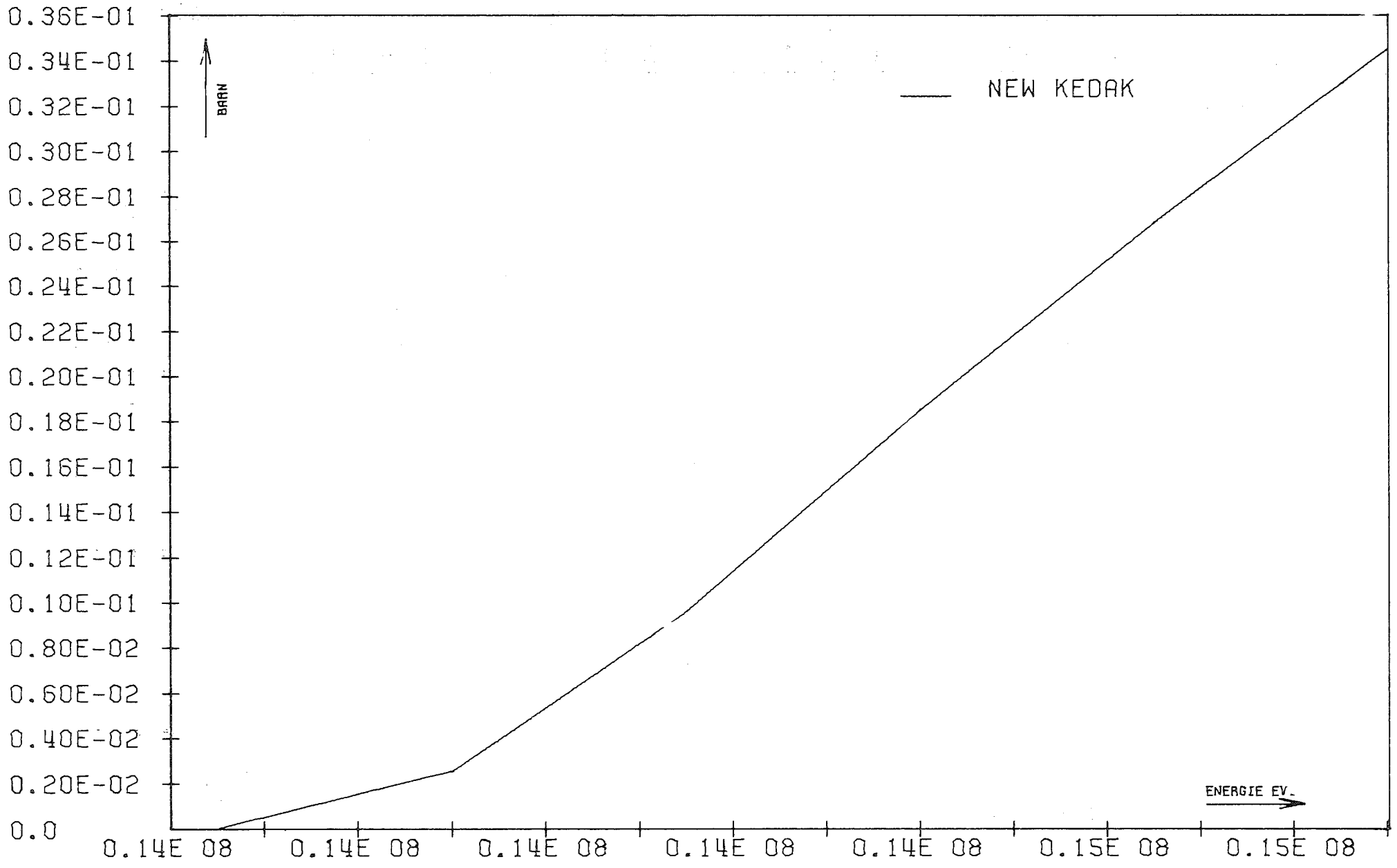


FIG. 66

FE 54 SG2N

INR901FI 29.01 14.31.

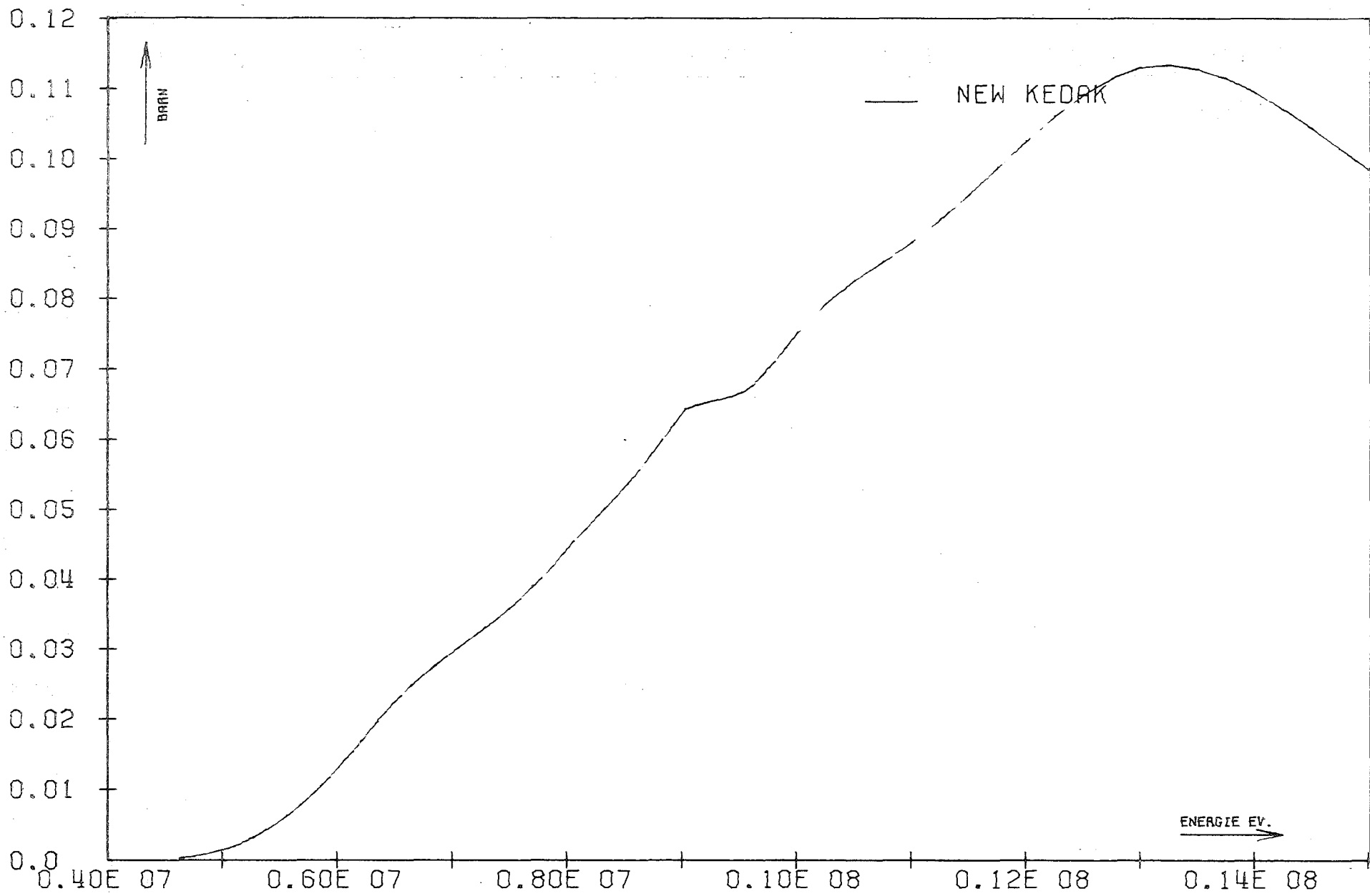


FIG. 67 FE 56 SGP INR901FI 29.01 14.31.

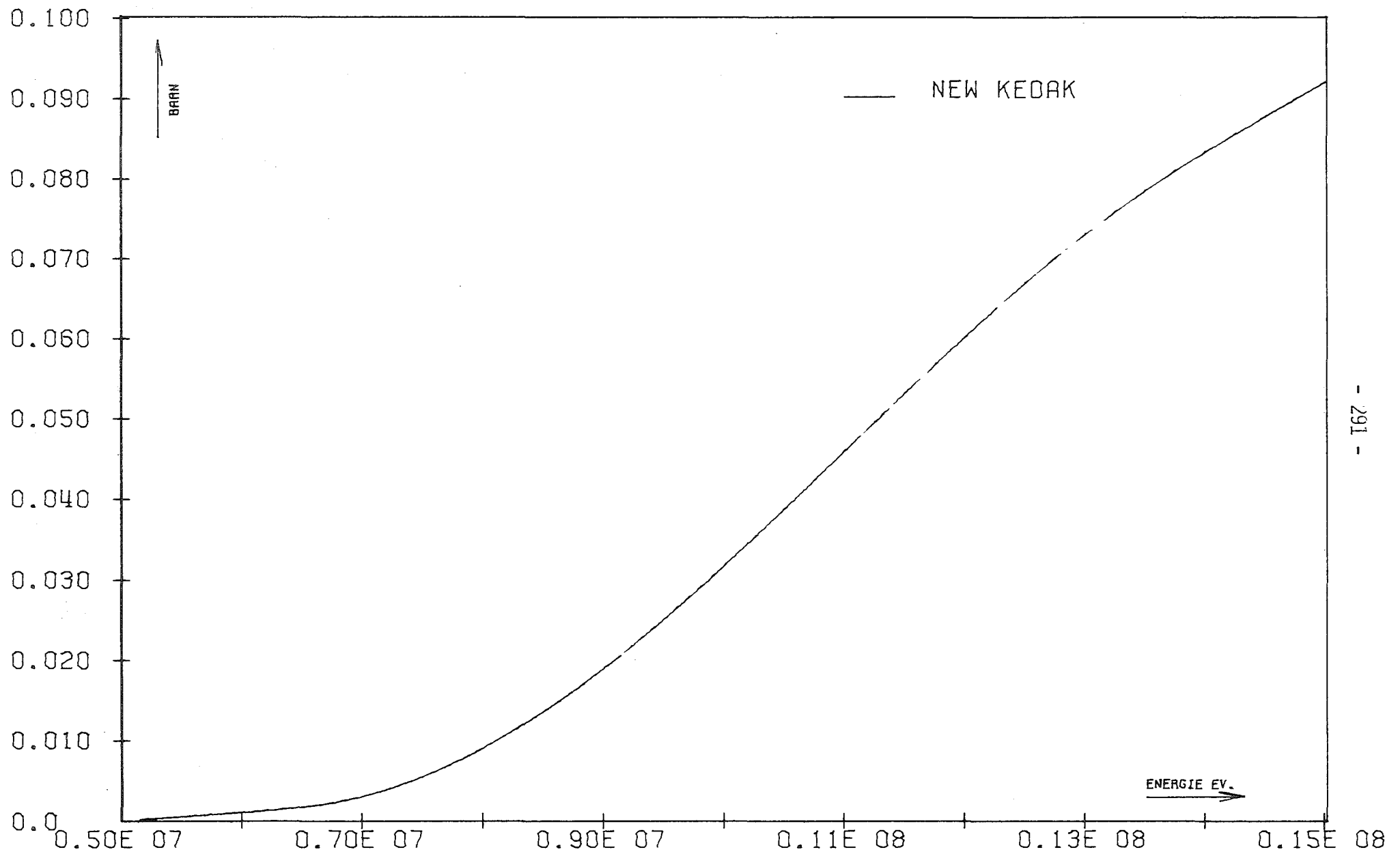


FIG. 68 FE 56 SGALP

INR901FI 29.01 14.31.

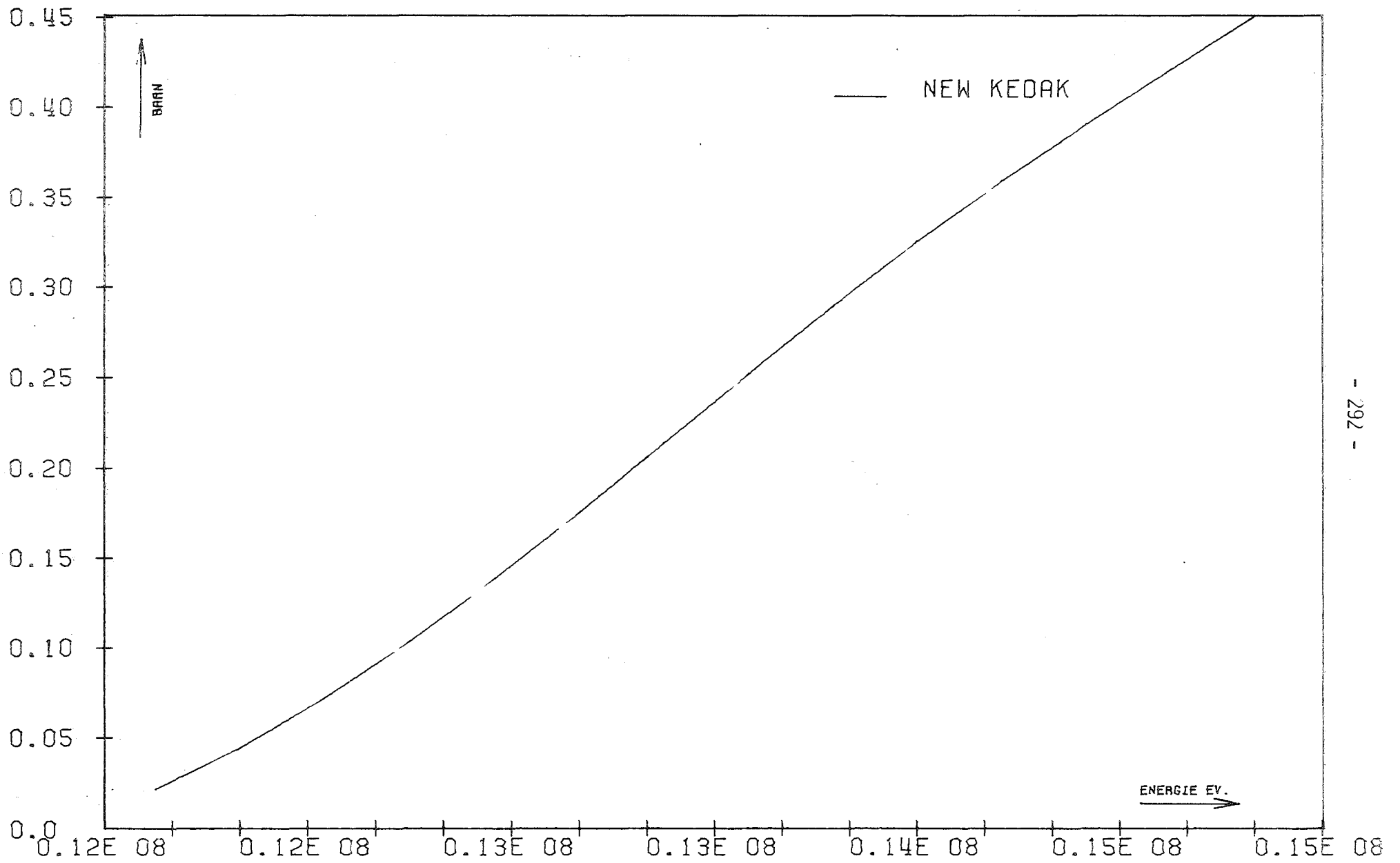


FIG. 69 FE 56 SG2N

INR901FI 29.01 14.31.

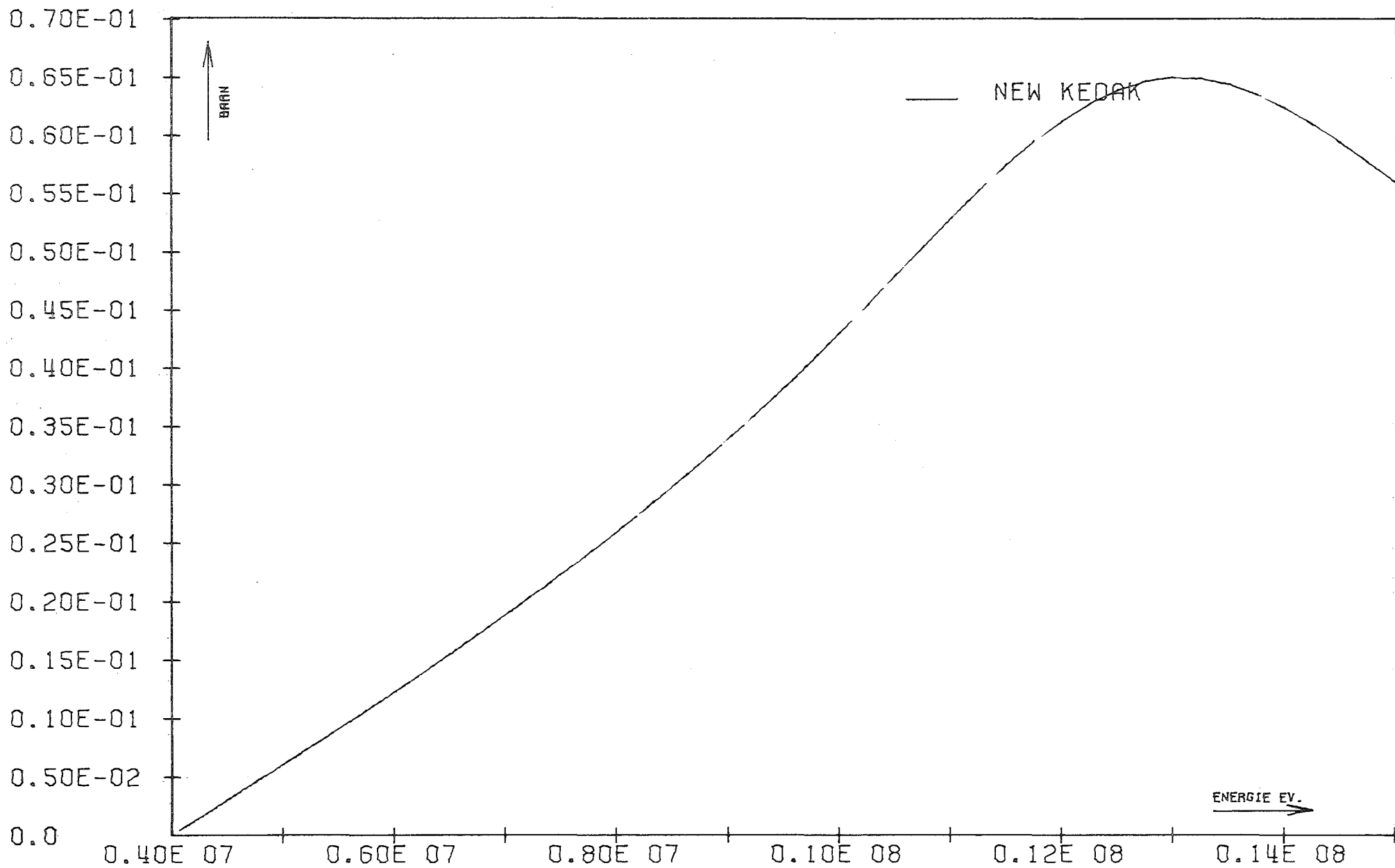


FIG. 70

FE 57

SGP

INR901FI 29.01 14.31.

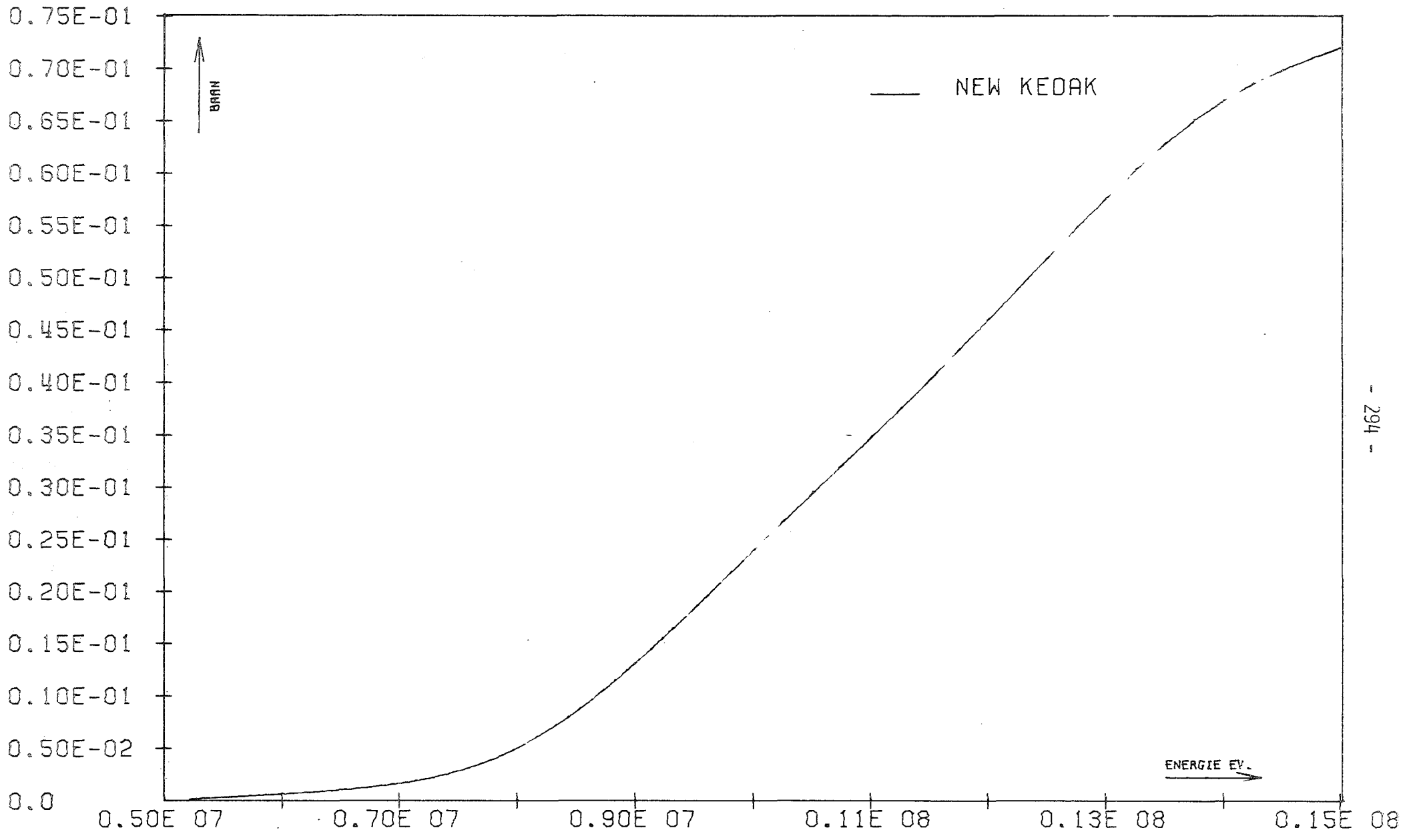


FIG. 71 FE 57 SGALP INR901FI 29.01 14.31.

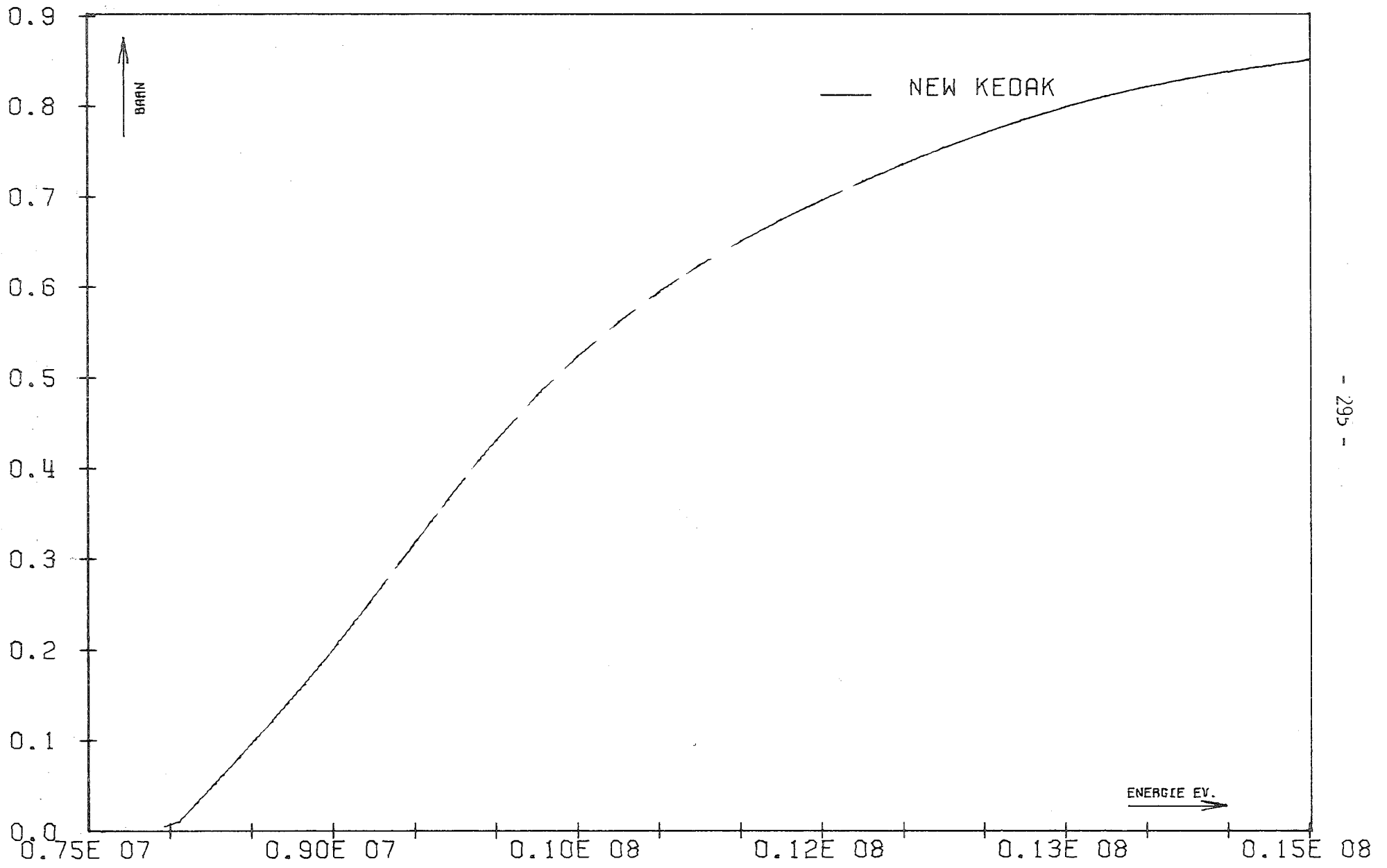


FIG. 72 FE 57 SG2N

INR901FI 29.01 14.31.

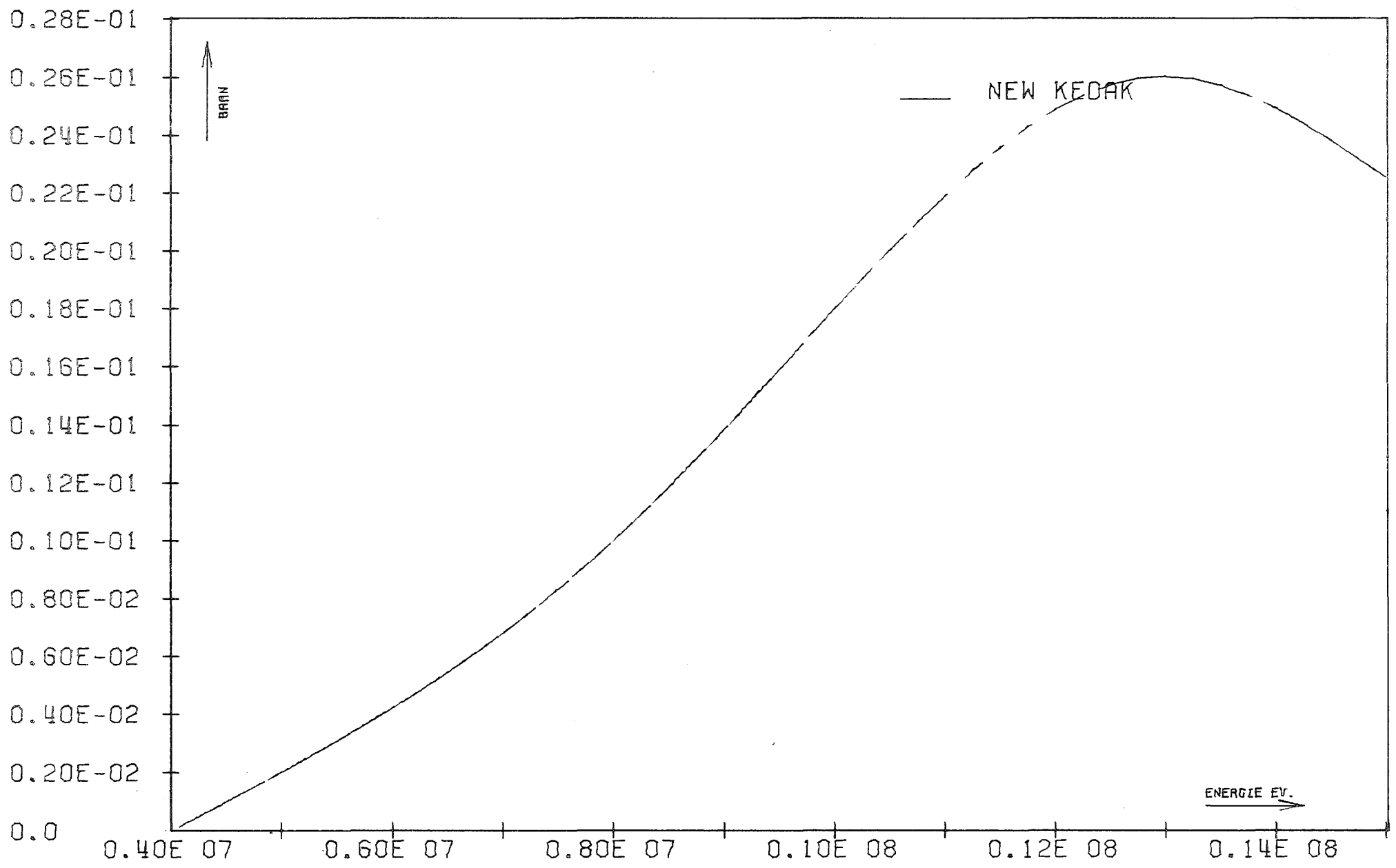


FIG. 73

FE 58 SGP

INR901FI 29.01 14.31.

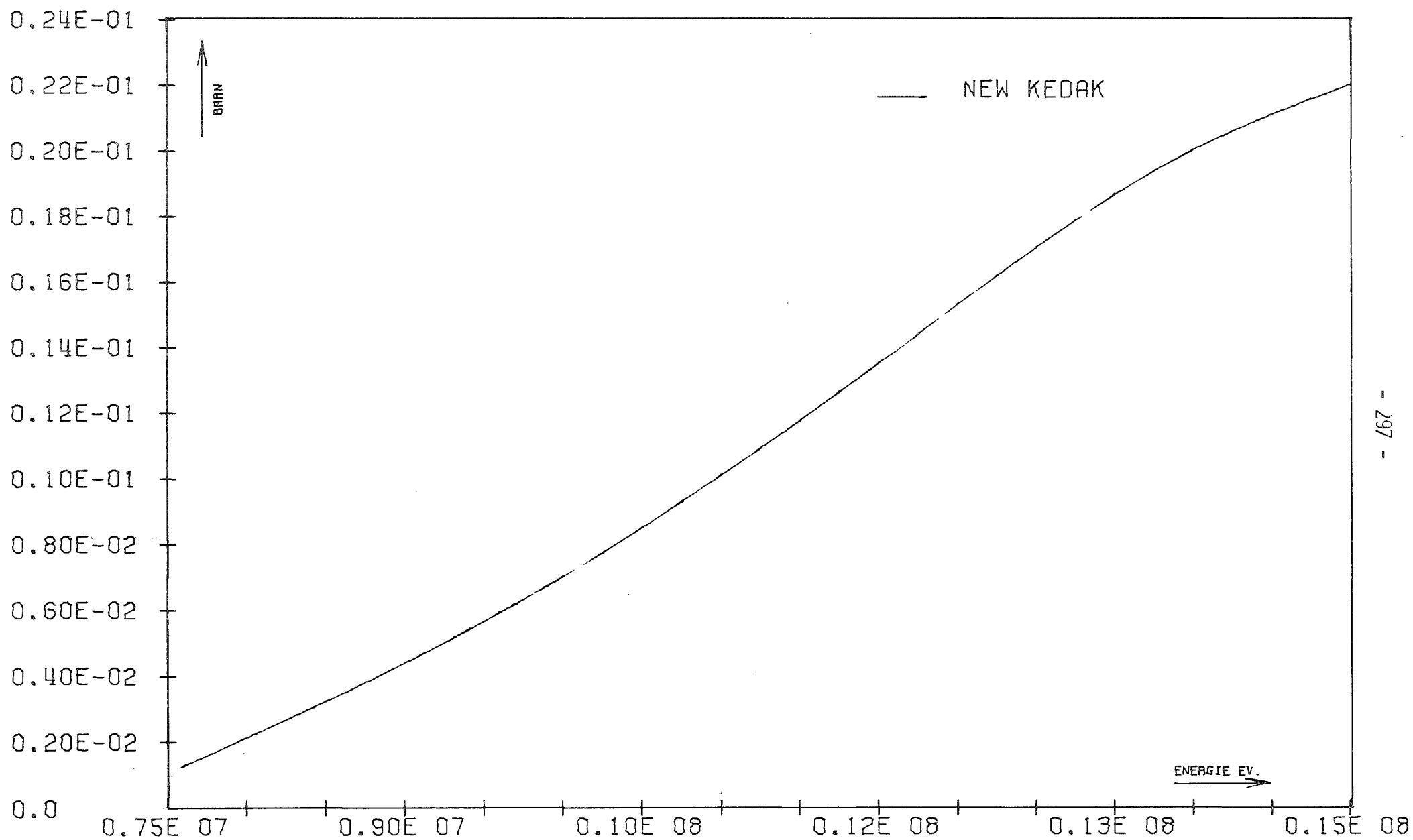


FIG. 74 FE 58 SGALP

INR901FI 29.01 14.31.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 10 keV	NI
2	SGG	''	
3	SGX	''	
4	SGN	''	
5	SGTR	''	
6	SGT	10 keV to 1 MeV	
7	SGG	''	
8	SGN	''	
9	SGTR	''	
10	MUEL	''	
11	SGT	1 MeV to 15 MeV	
12	SGG	''	
13	SGA	''	
14	SGX	''	
15	SGN	''	
16	SGTR	''	
17	MUEL	''	
18	SGi	''	
19	SGIZ		
	E*= 1.33 MeV	Thr. to 4 MeV	
20	E*= 1.45 MeV	''	
21	E*= 2.16 MeV	''	
22	E*= 2.29 MeV	''	
23	E*= 2.46 MeV	''	
24	E*= 2.50 MeV	''	
25	E*= 2.53 MeV	''	
26	E*= 2.77 MeV	''	
27	E*= 3.04 MeV	''	
28	E*= 3.13 MeV	''	
29	E*= 3.26 MeV	''	
30	E*= 3.52 MeV	''	
31	SGP	Thr. to 15 MeV	
32	SGALP	''	
33	SG2N	''	
34	SGP	''	NI 58
35	SGALP	''	
36	SG2N	''	
37	SGP	''	NI 60
38	SGALP	''	
39	SG2N	''	
40	SGP	''	NI 61
41	SGALP	''	
42	SG2N	''	
43	SGP	''	NI 62
44	SGALP	''	
45	SG2N	''	
46	SGP	''	NI 64
47	SGALP	''	
48	SG2N	''	

Ni

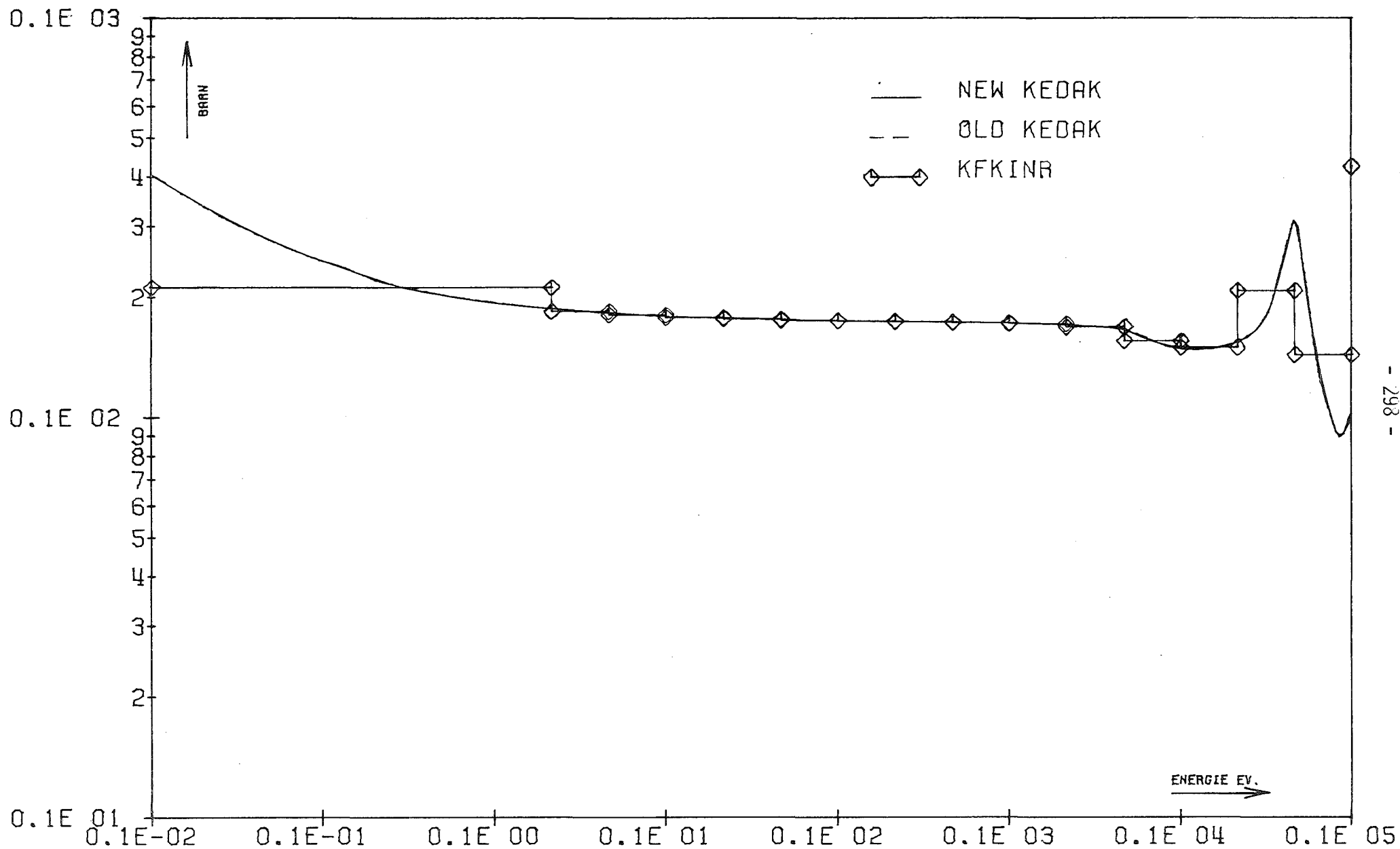


FIG. 1 NI SGT

INR901NI 27.12 17.50.

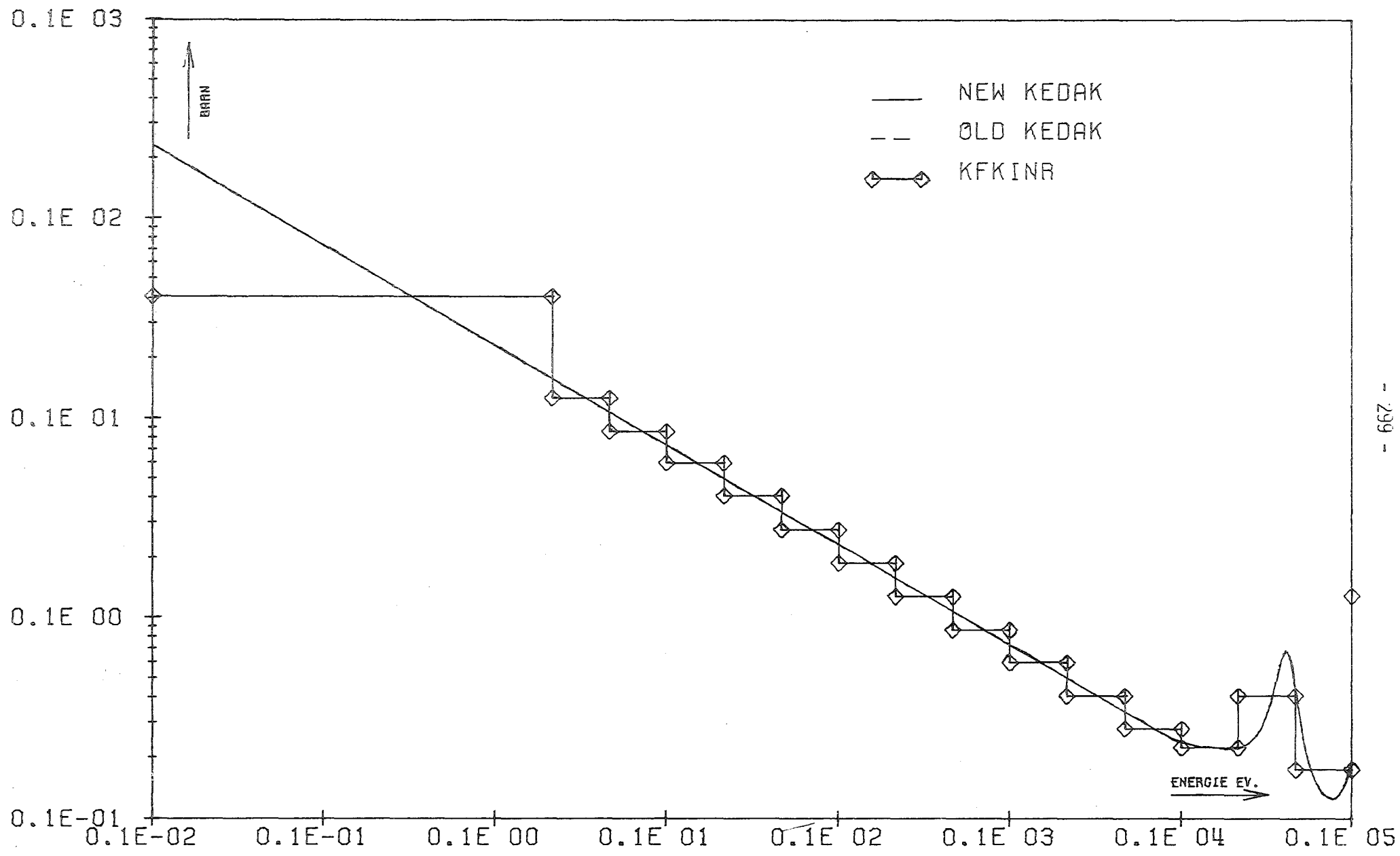


FIG. 2 NI SGG

INR901NI 27.12 17.48.

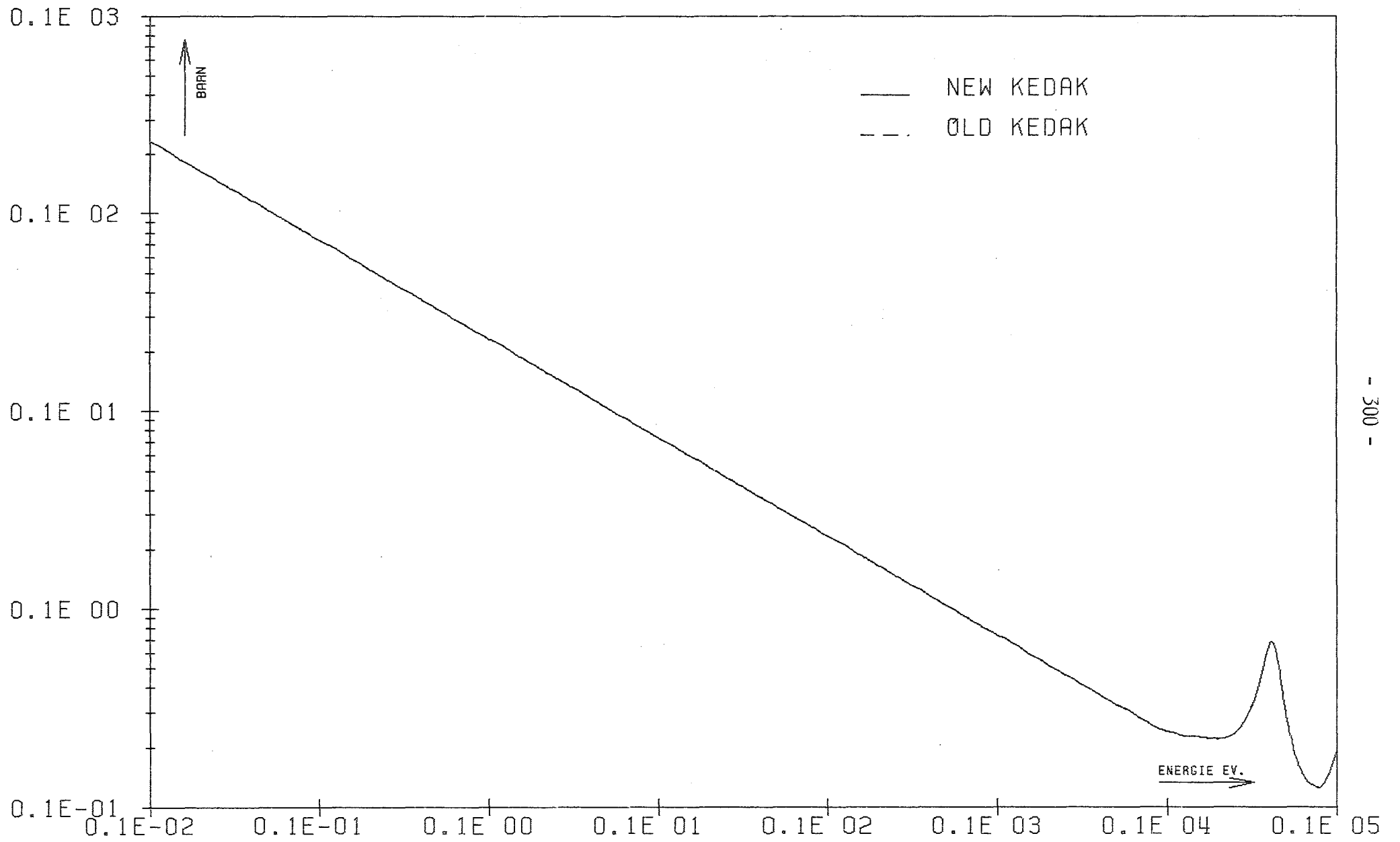


FIG. 3 NI SGX

INR901NI 05.08 16.42.

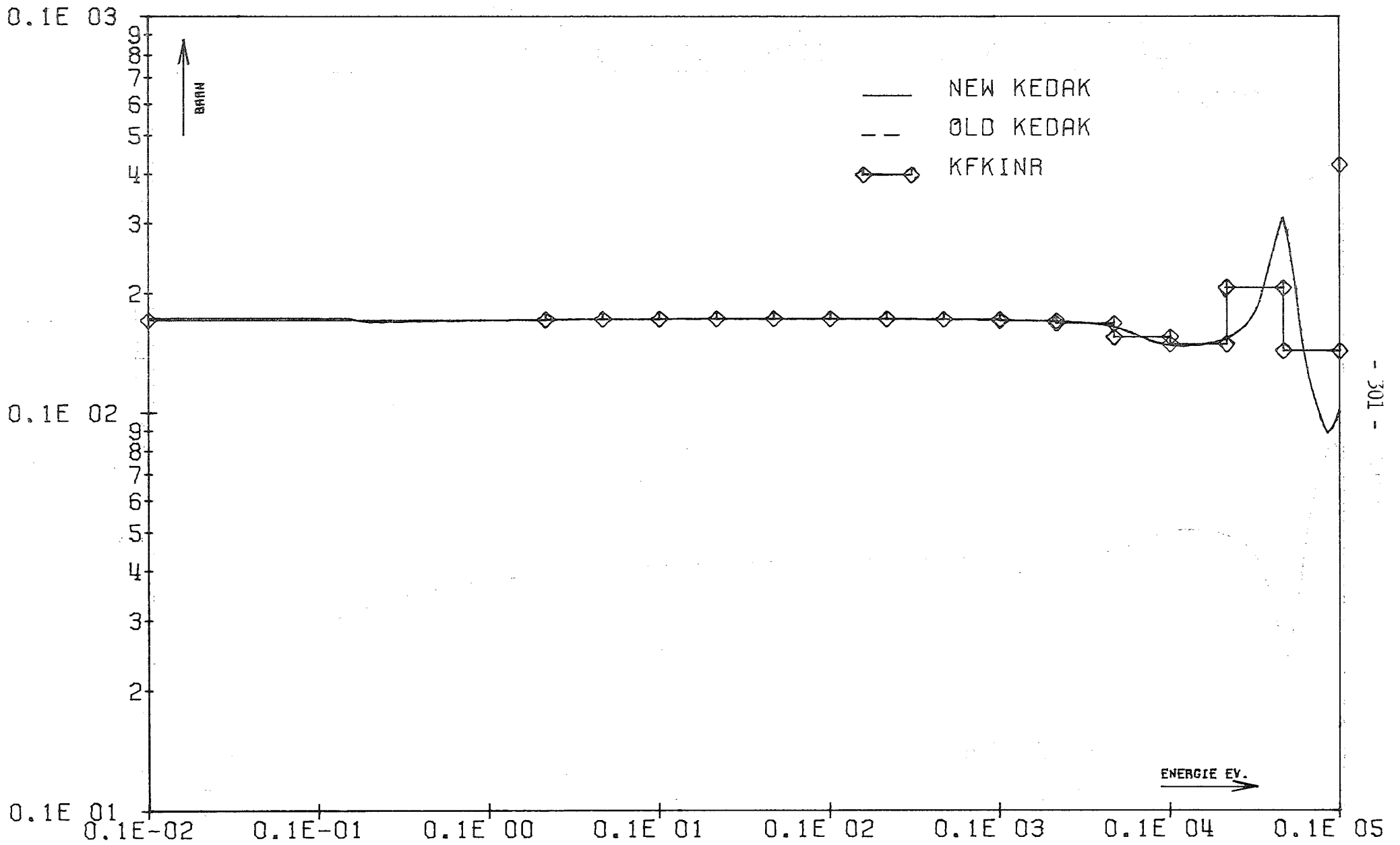


FIG. 4 NI SGN INR901NI 27.12 17.50.

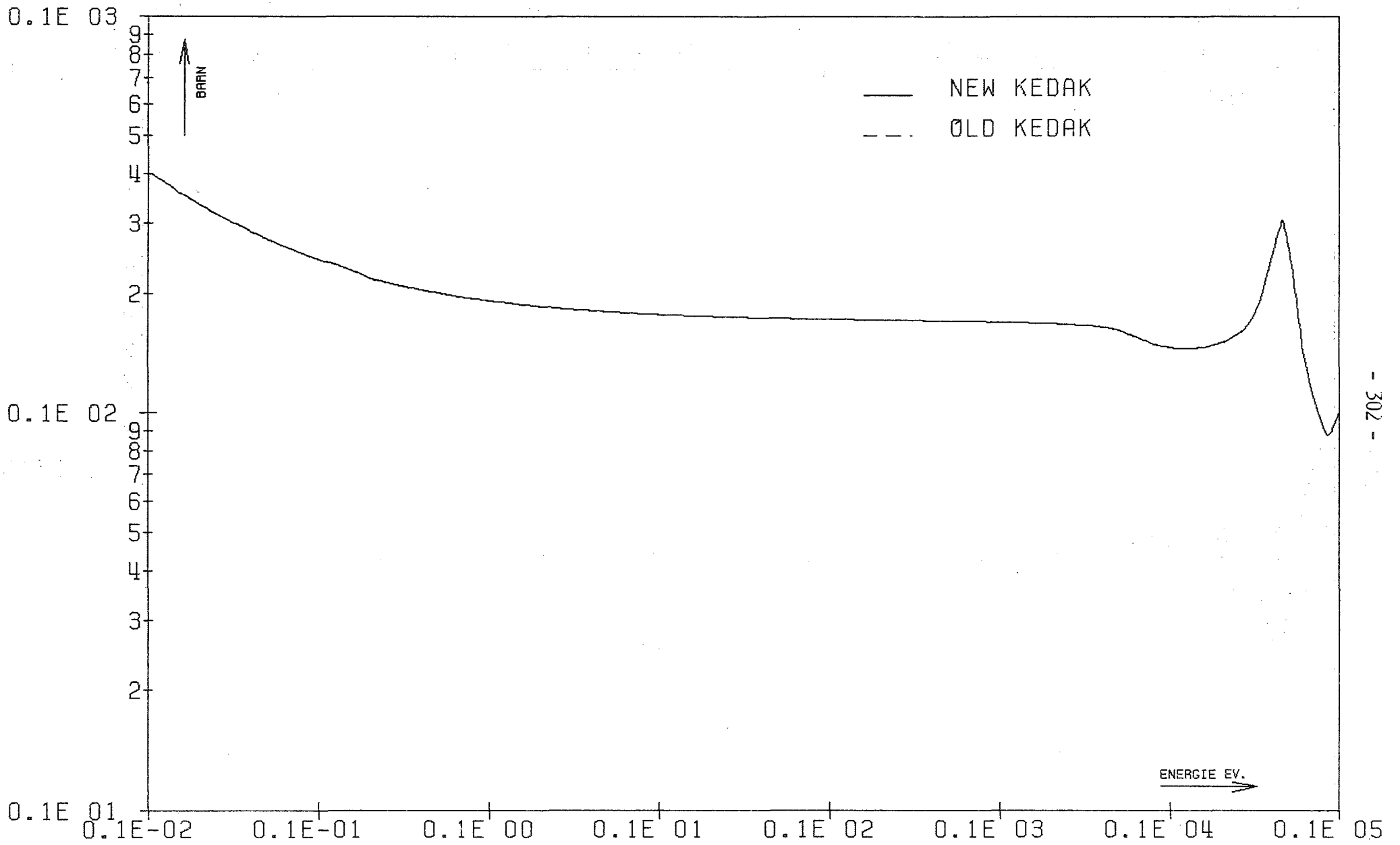


FIG. 5 NI SGTR

INR901NI 05.08 16.42.

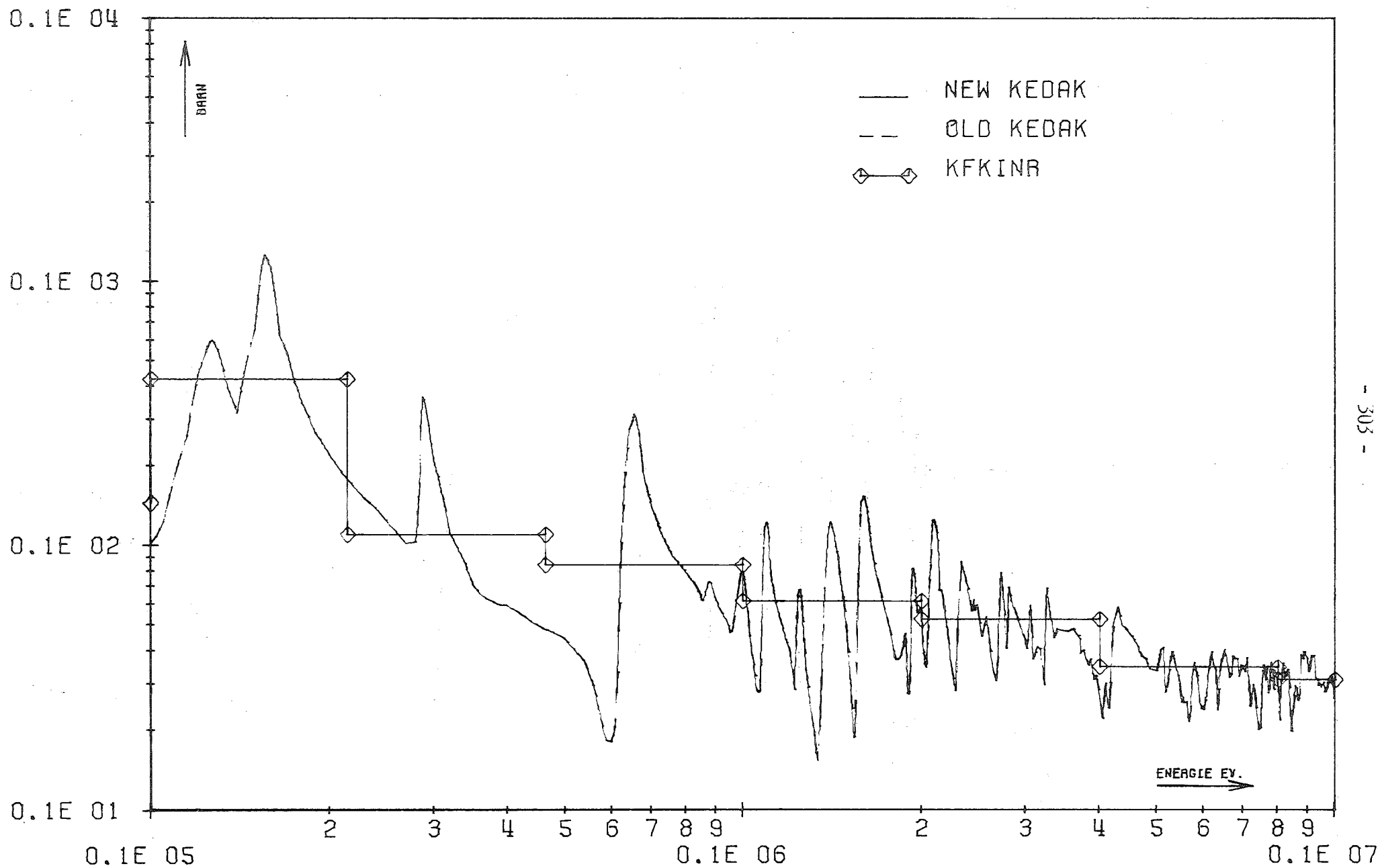


FIG. 6 NI SGT

INR901NI 27.12 17.50.

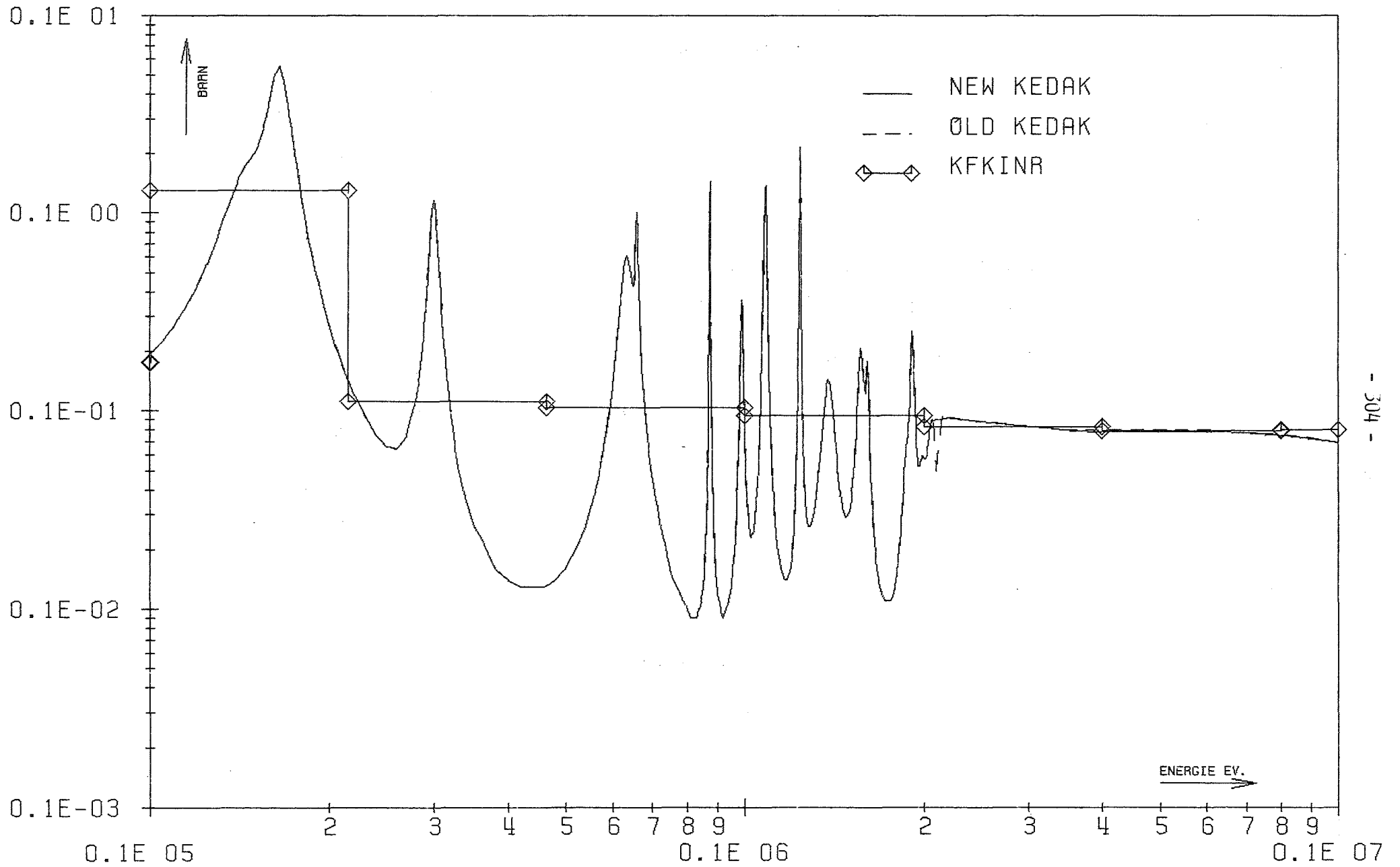


FIG. 7

NI

SGG

INR901NI 05.08 16.42.

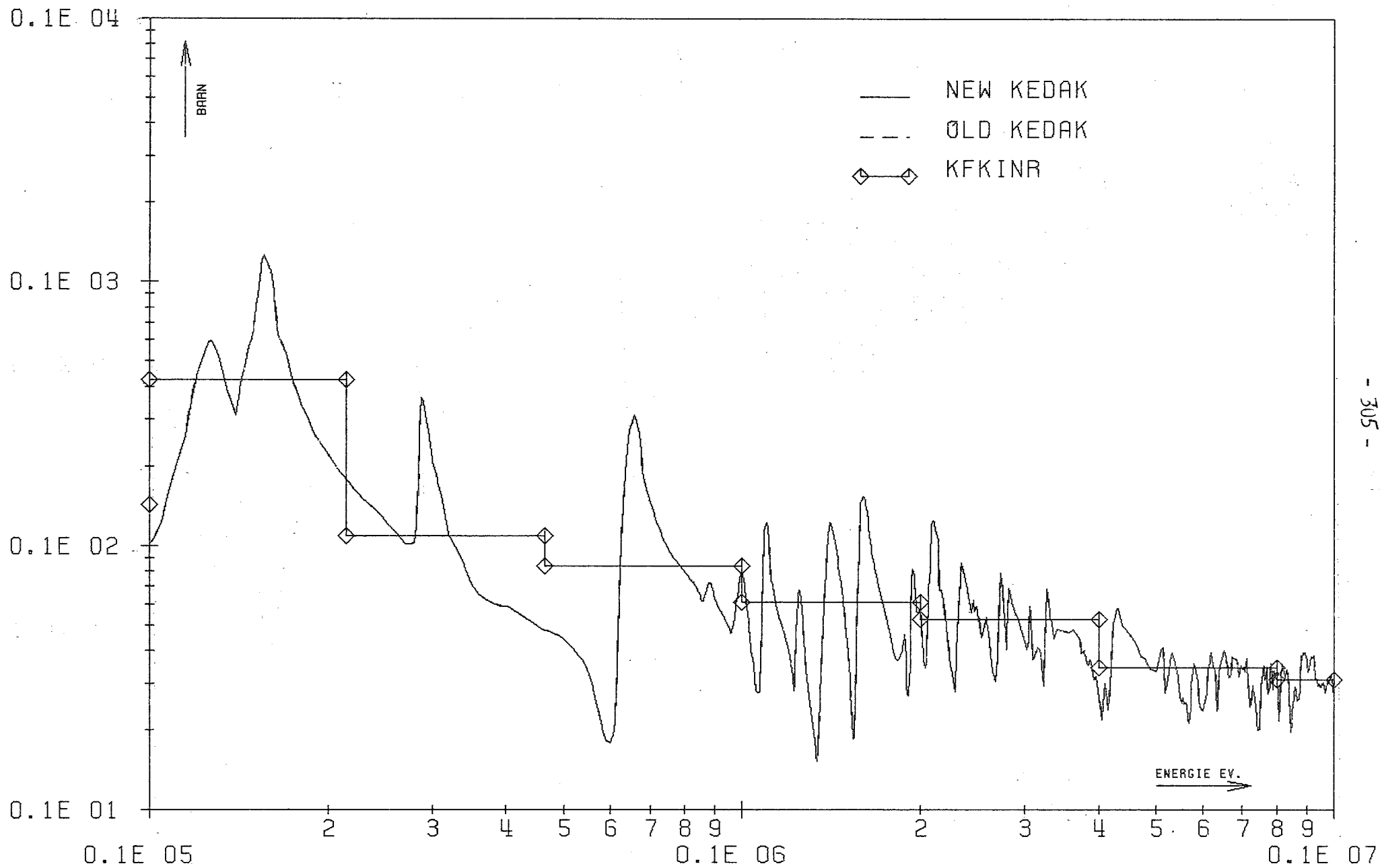


FIG. 8 NI SGN

INR901NI 24.07 20.08.

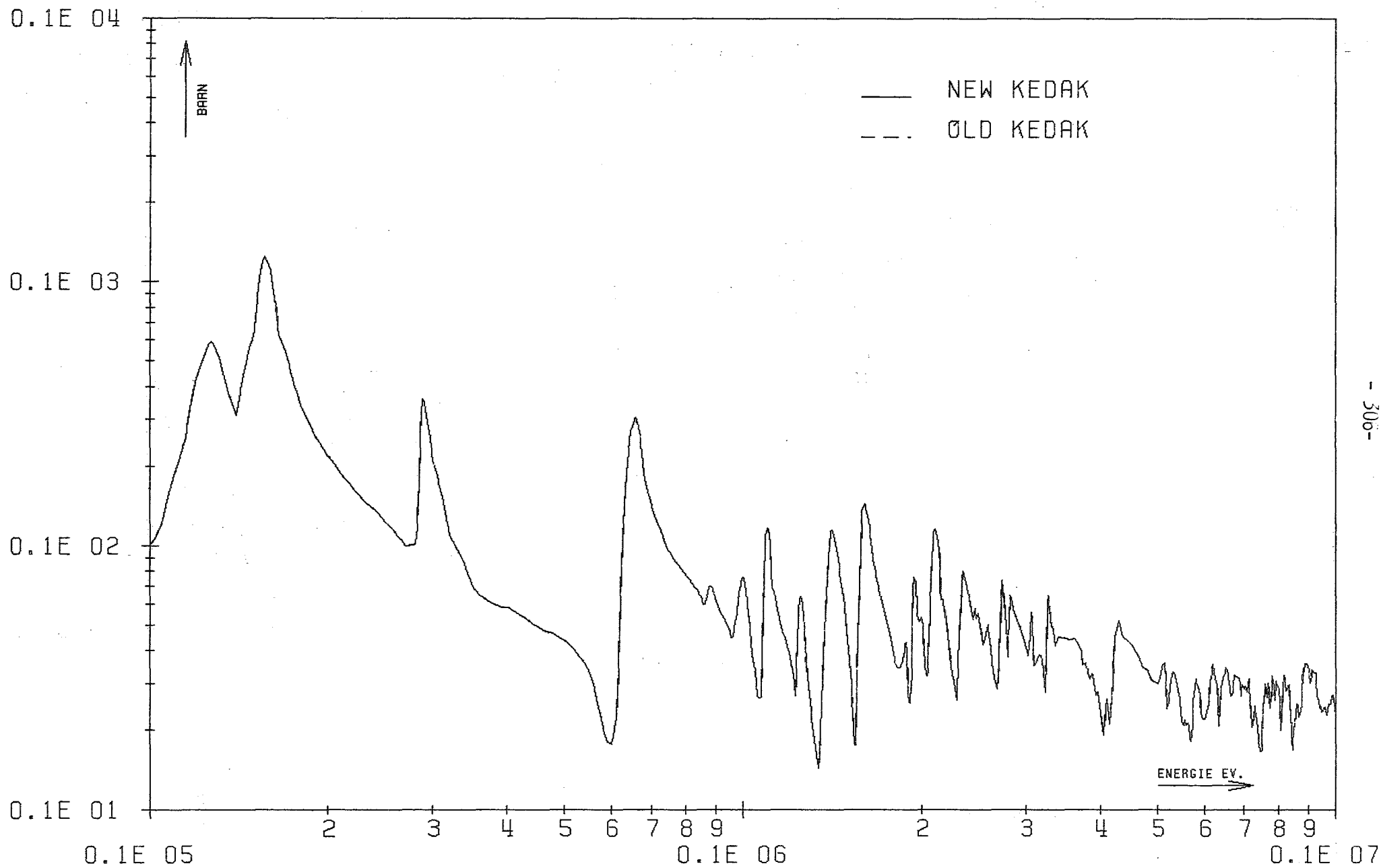
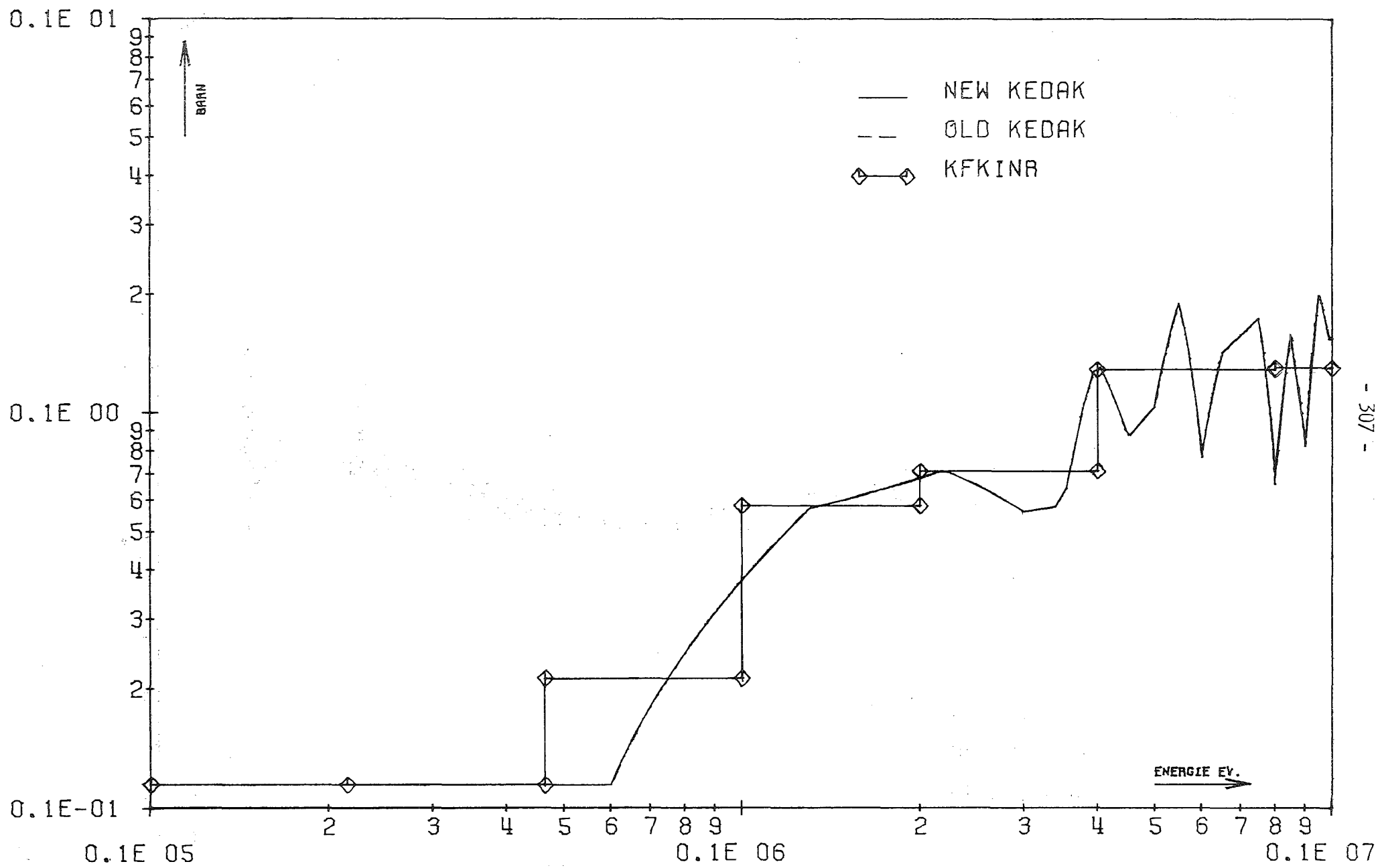


FIG. 9 NI SGTR

INR901NI 24.07 20.08.



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FIG. 10

NI

MUEL

INR901NI 27.12 17.50.

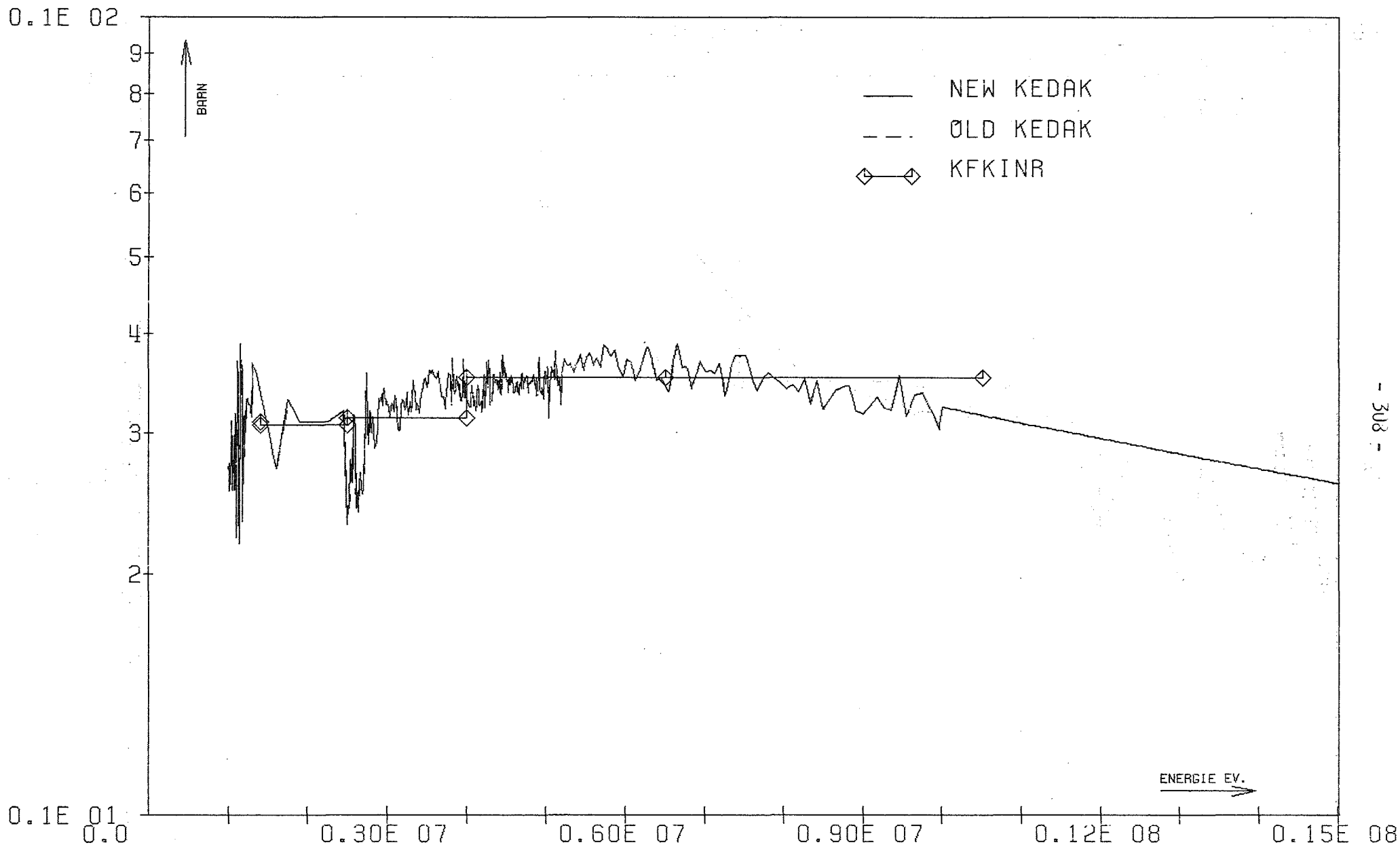


FIG. 11 NI SGT INR901NI 29.07 18.27.

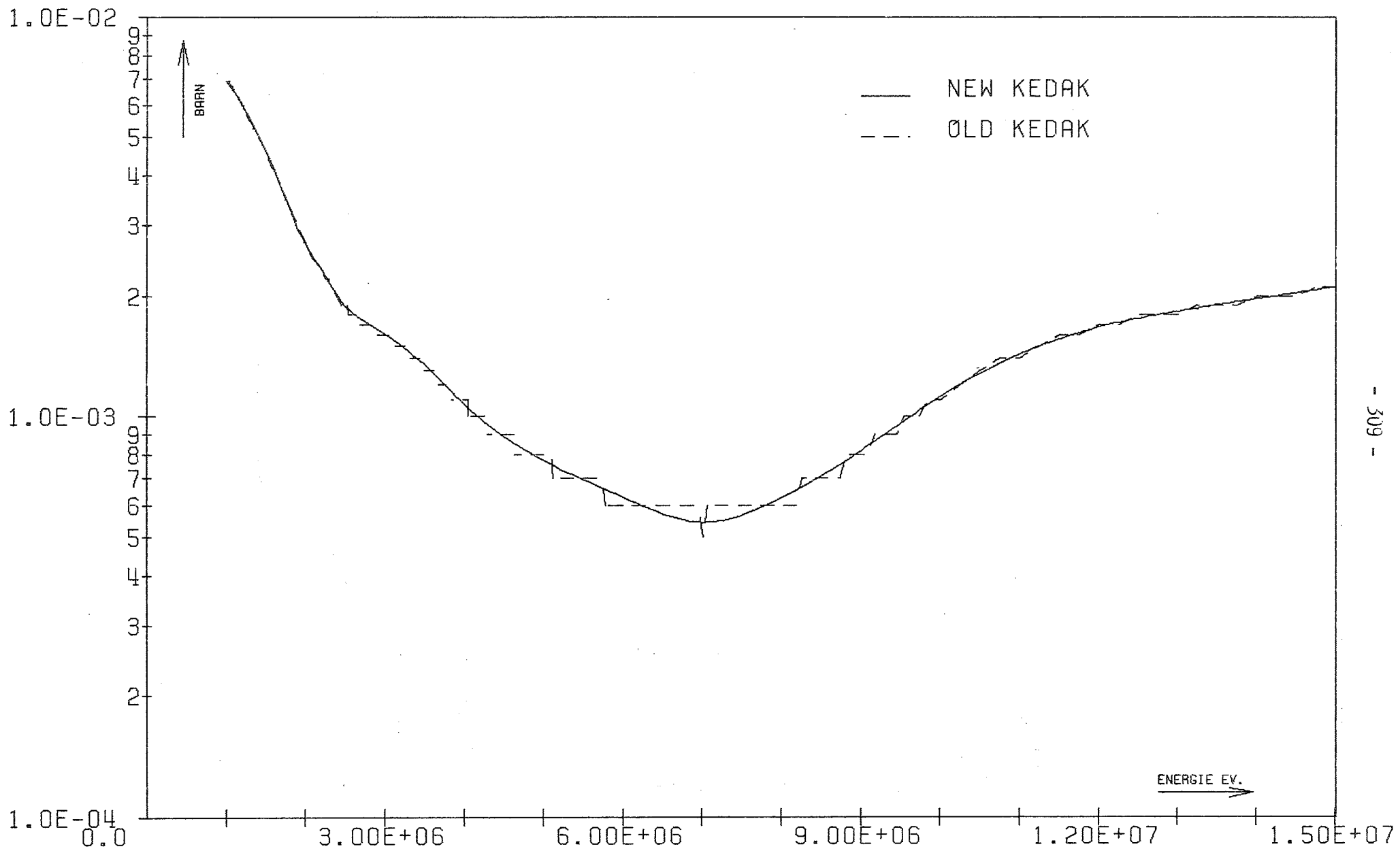


FIG. 12 NI SGG

INR9010I 29.09 21.52.

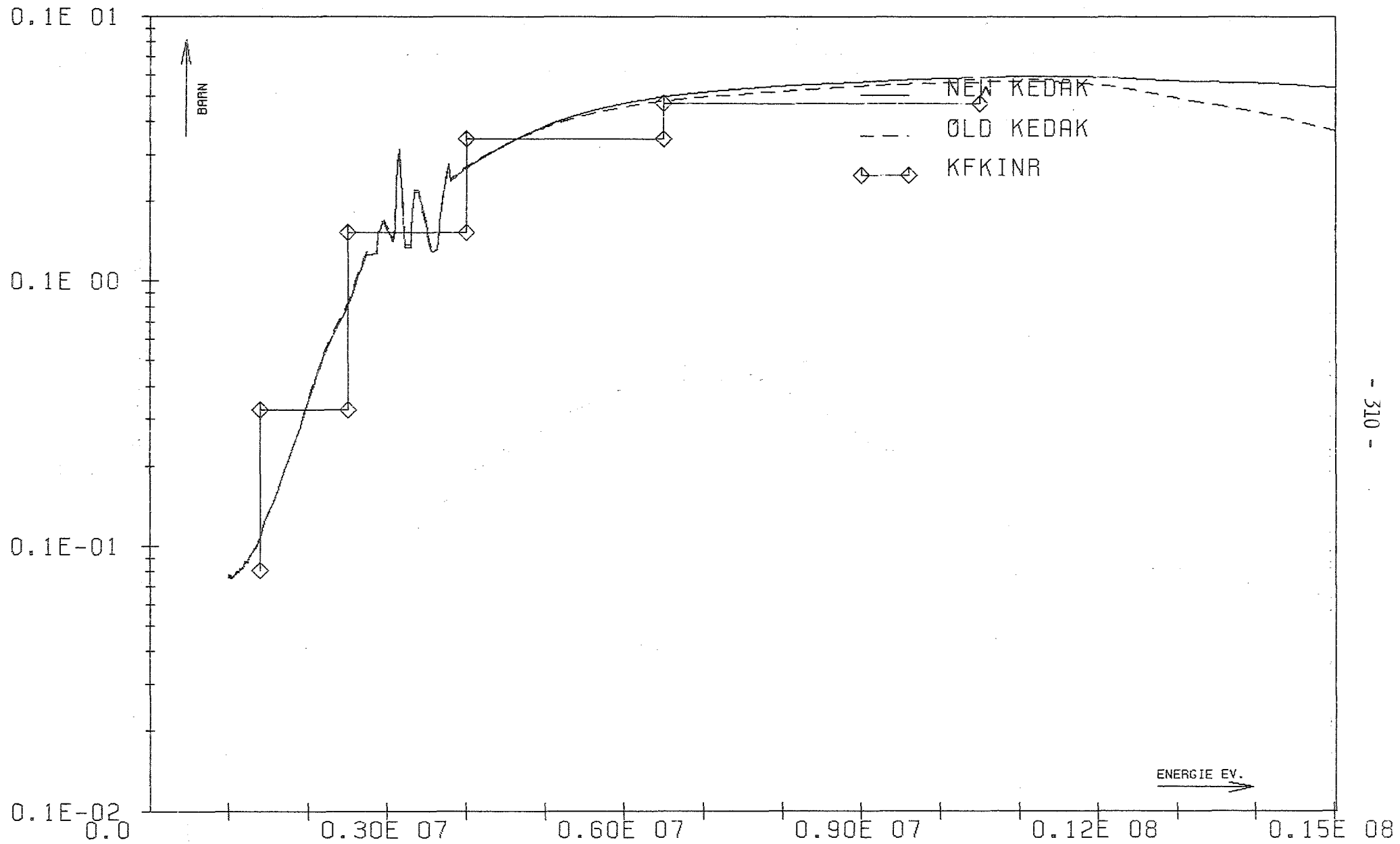


FIG. 13

NI

SGA

INR901NI 29.07 18.27.

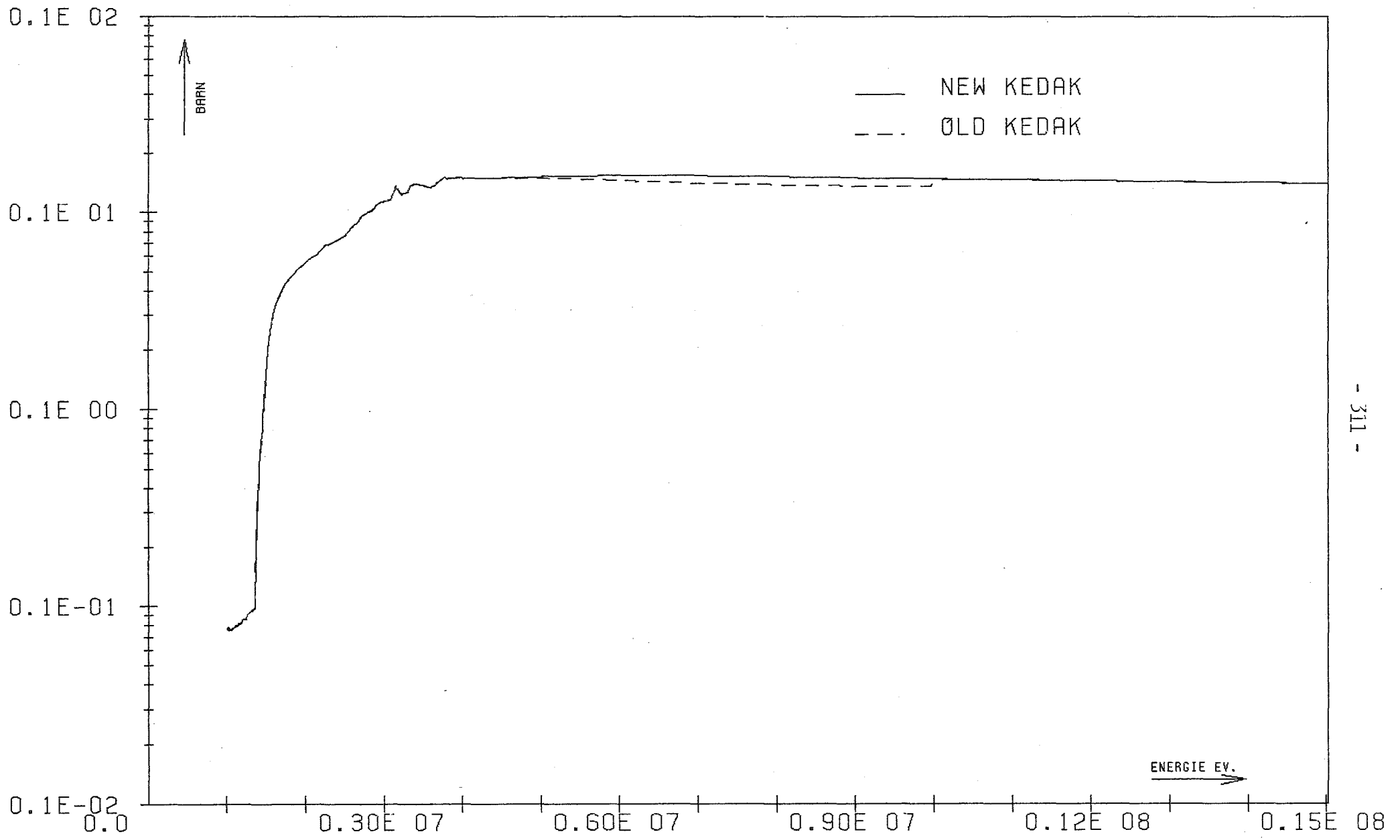
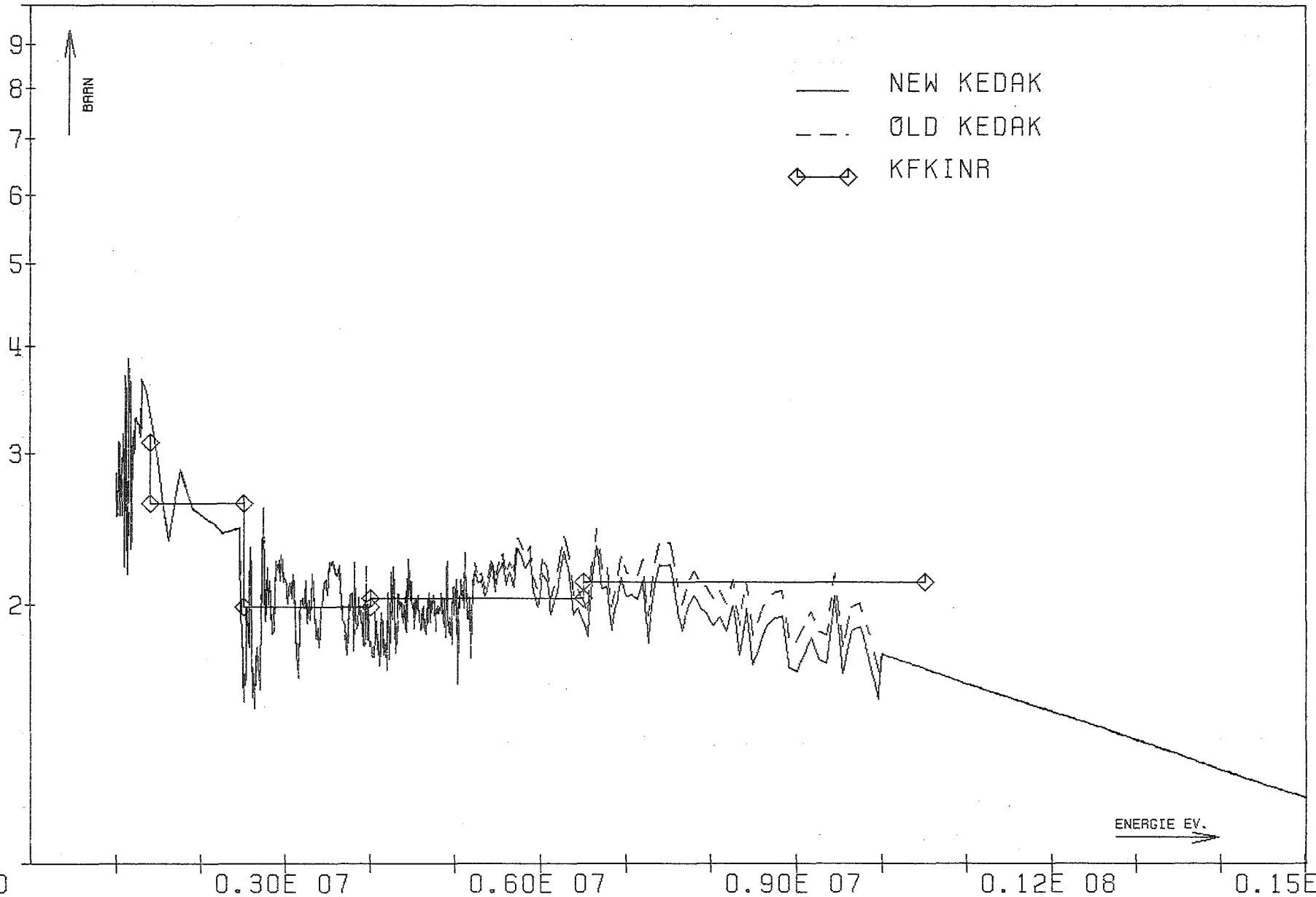


FIG. 14 NI SGX

INR901NI 24.07 20.08.

0.1E 02



0.1E 01
0.0

FIG. 15

NI

SGN

INR901NI 28.07 17.26.

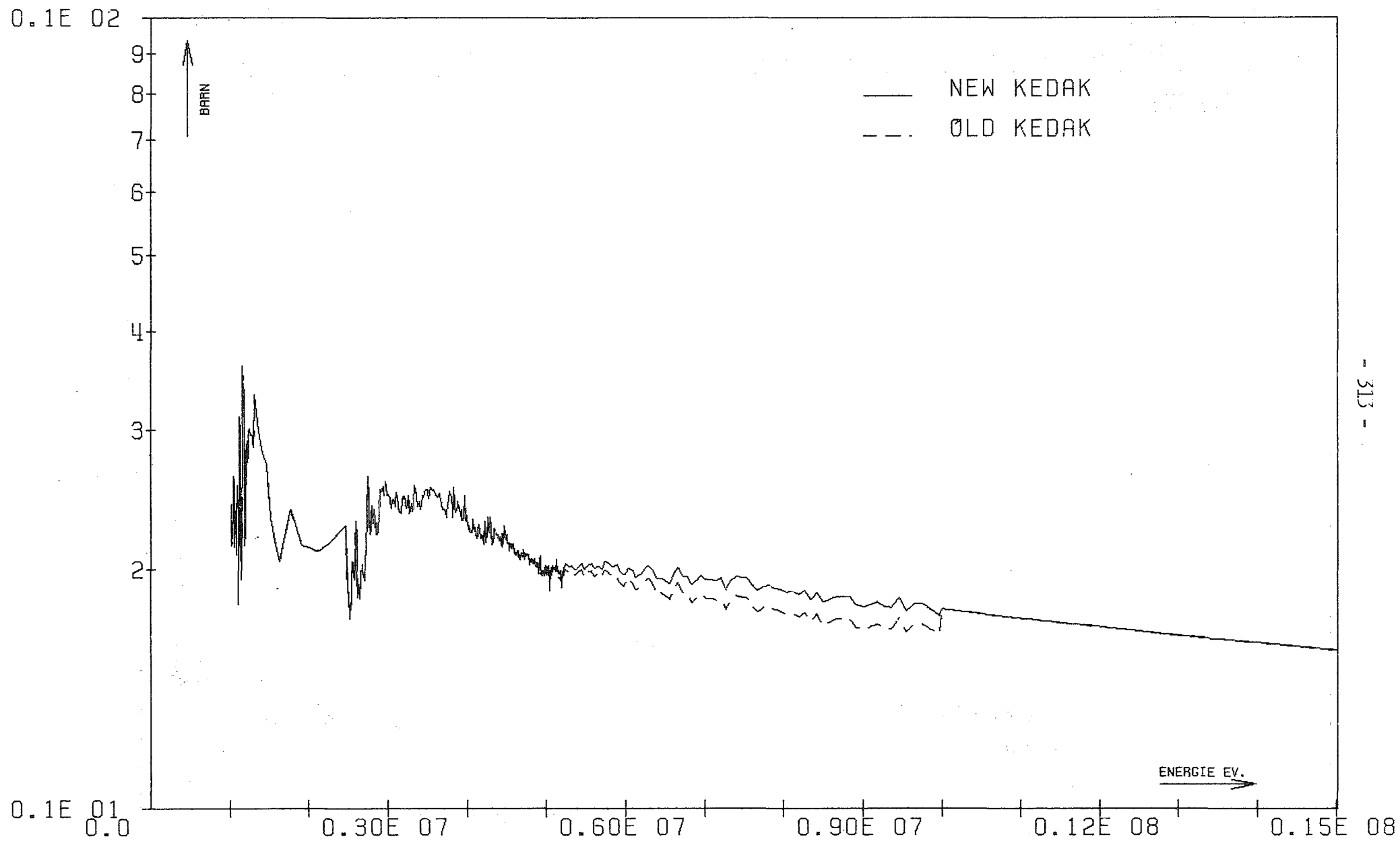


FIG. 16

NI SGTR

INR901NI 24.07 20.08.

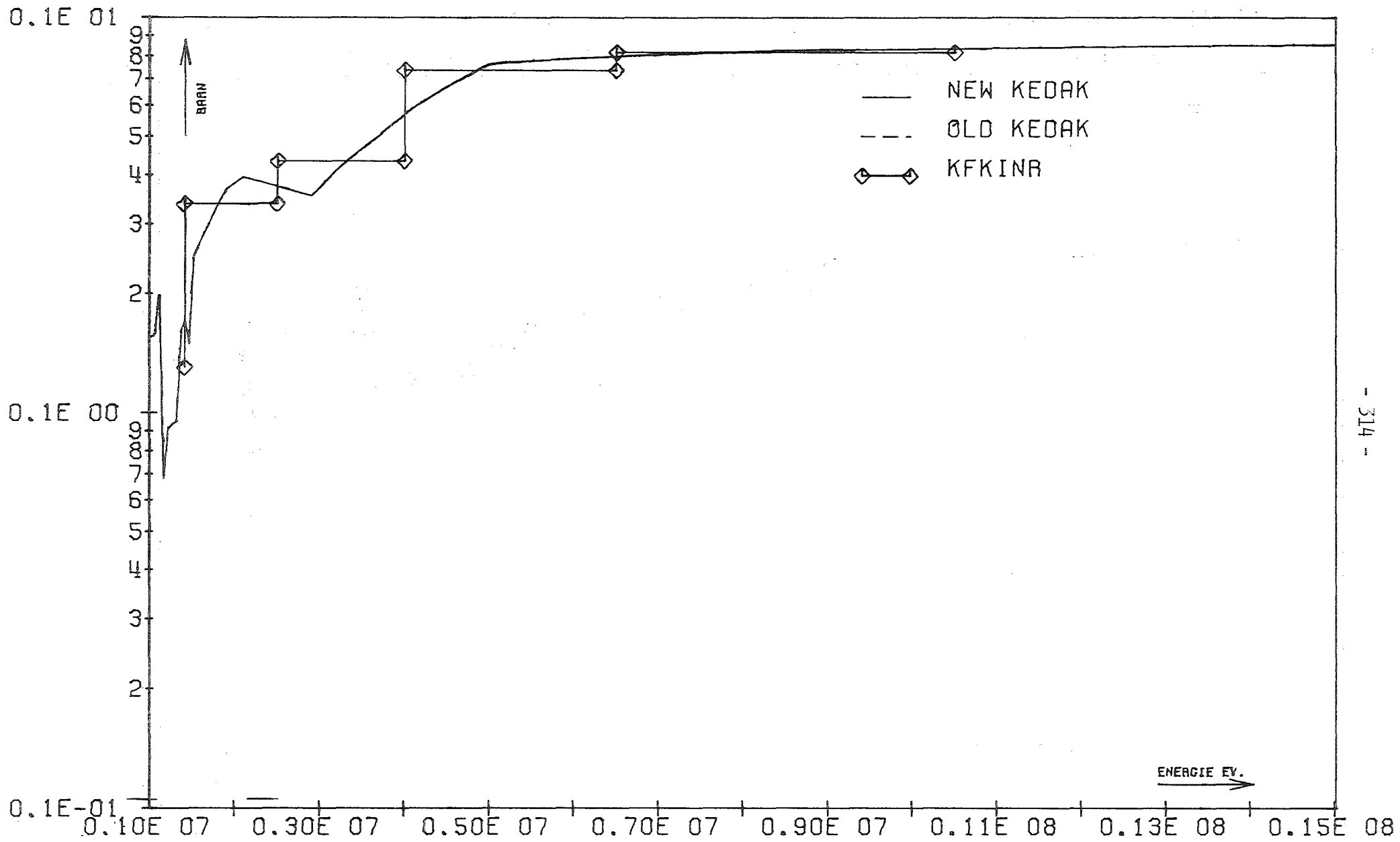


FIG. 17 NI MUEL

INR901NI 27.12 17.50.

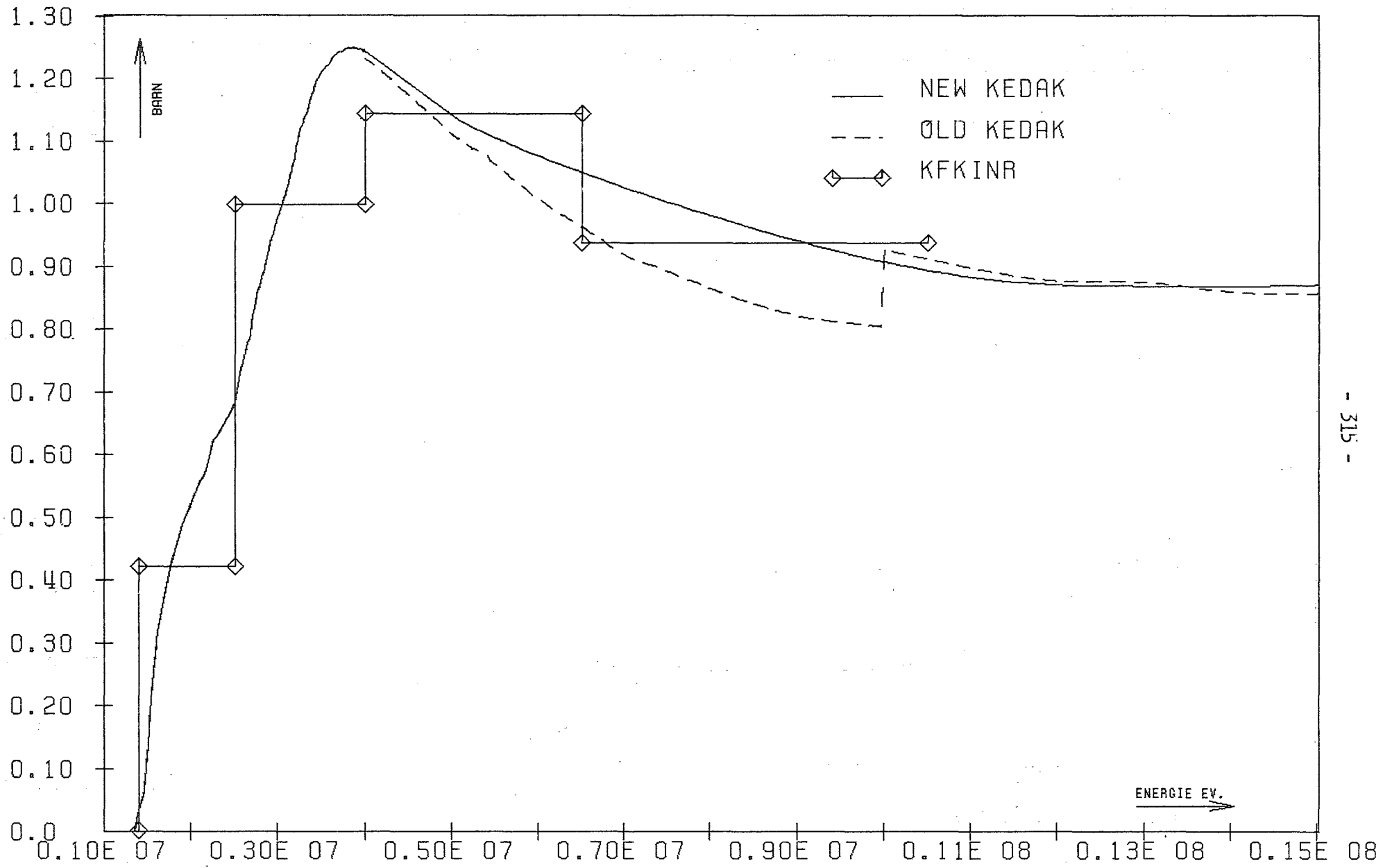
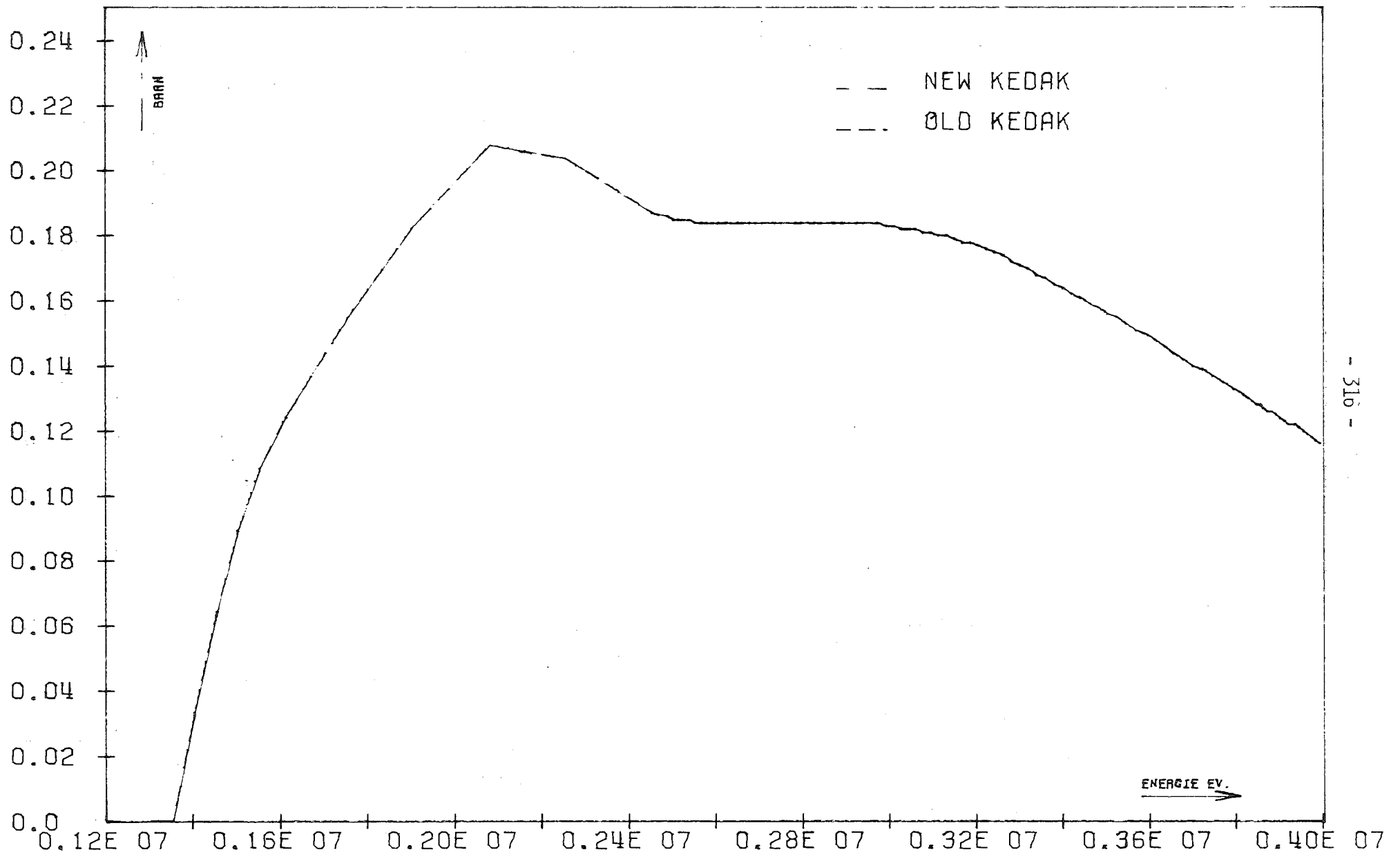


FIG. 18

NI SGI

INR901NI 28.07 17.26.



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FIG. 19 NI SGIZ 0.1330+07 INR901N1 16.06 18.02.

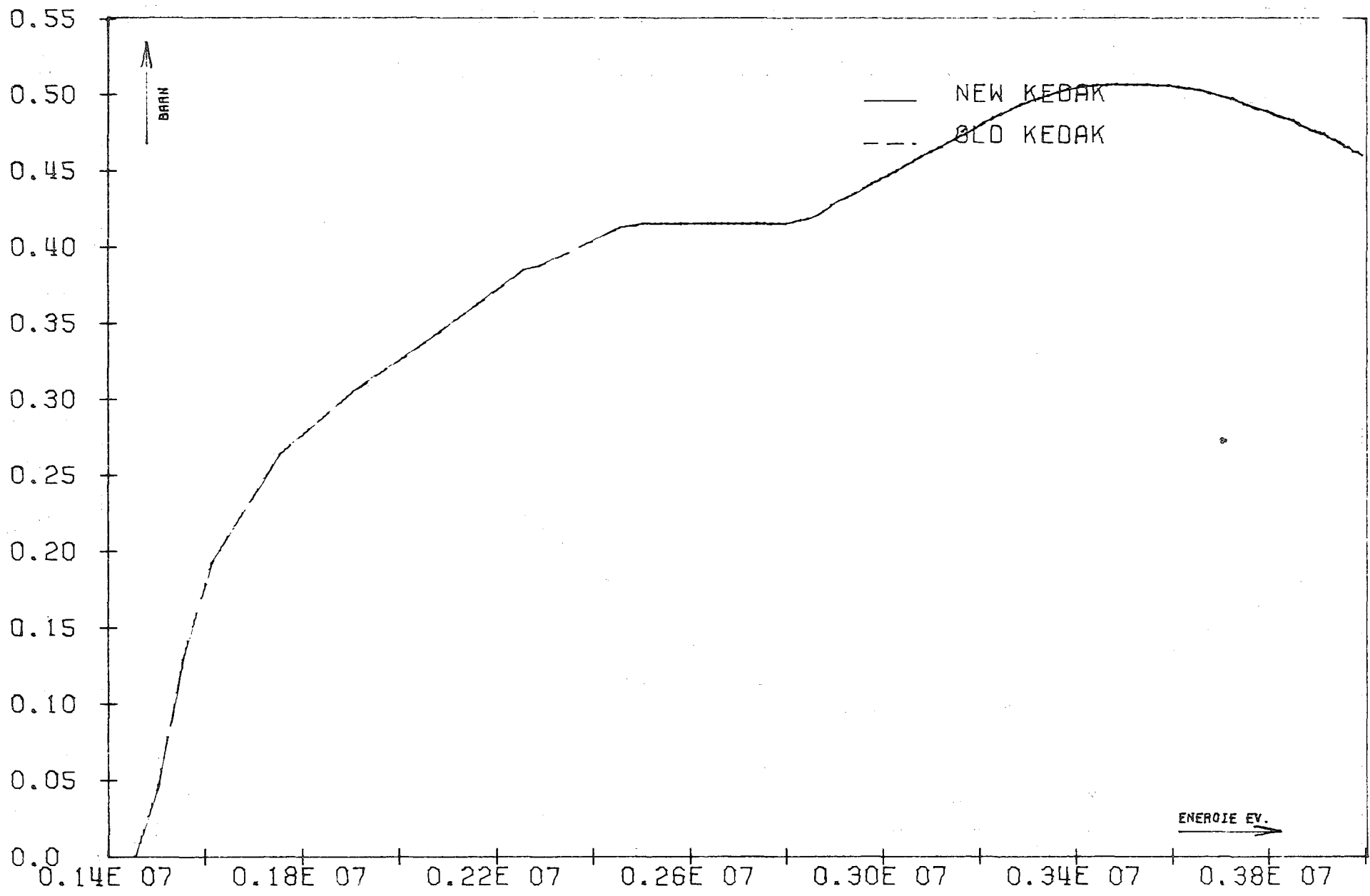
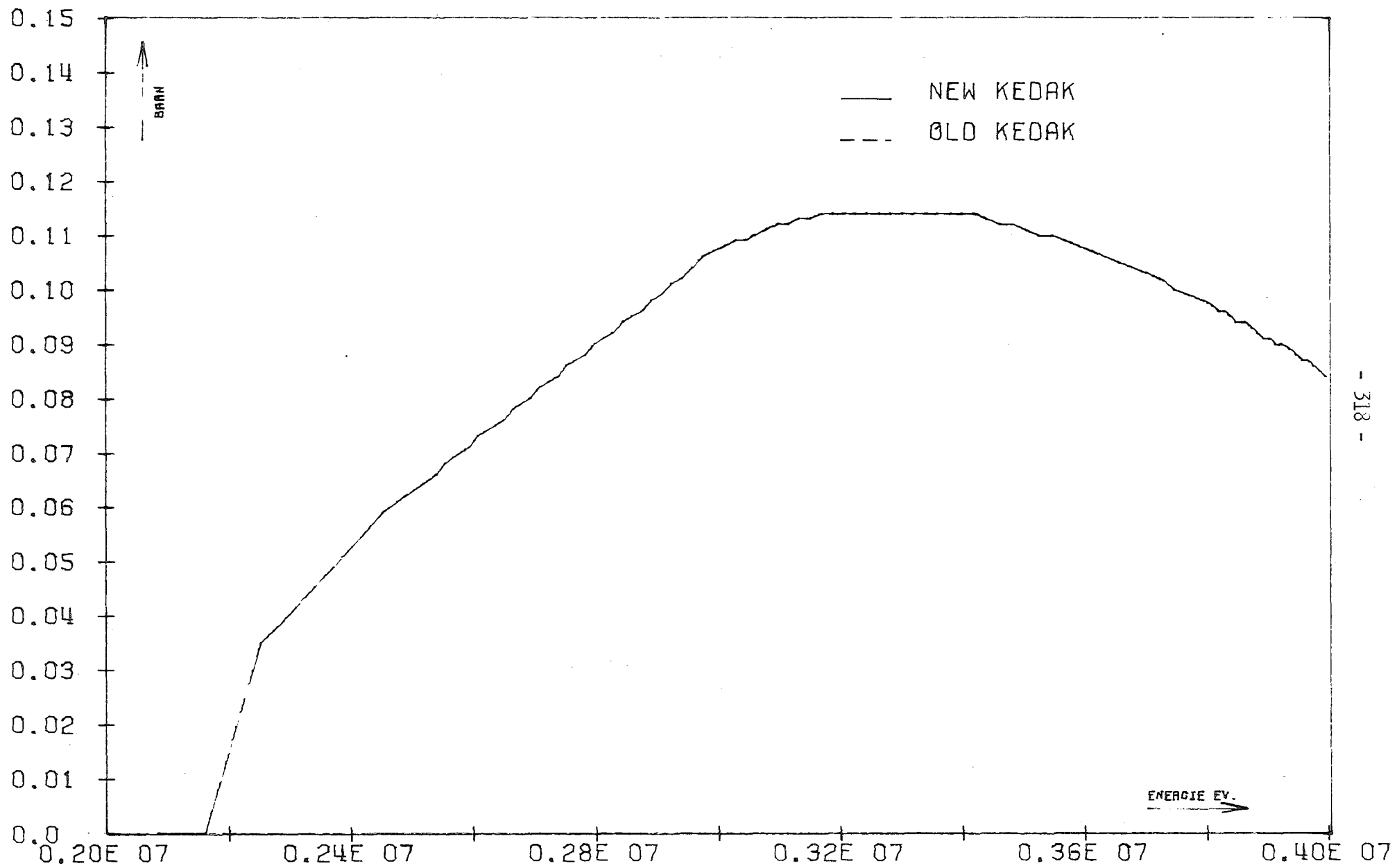


FIG. 20 NI SGIZ 0.1450+07 INR901N1 16.06 18.02.



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FIG. 21

NI

SGIZ

0.2160+07

INR901N1 16.06 18.02.

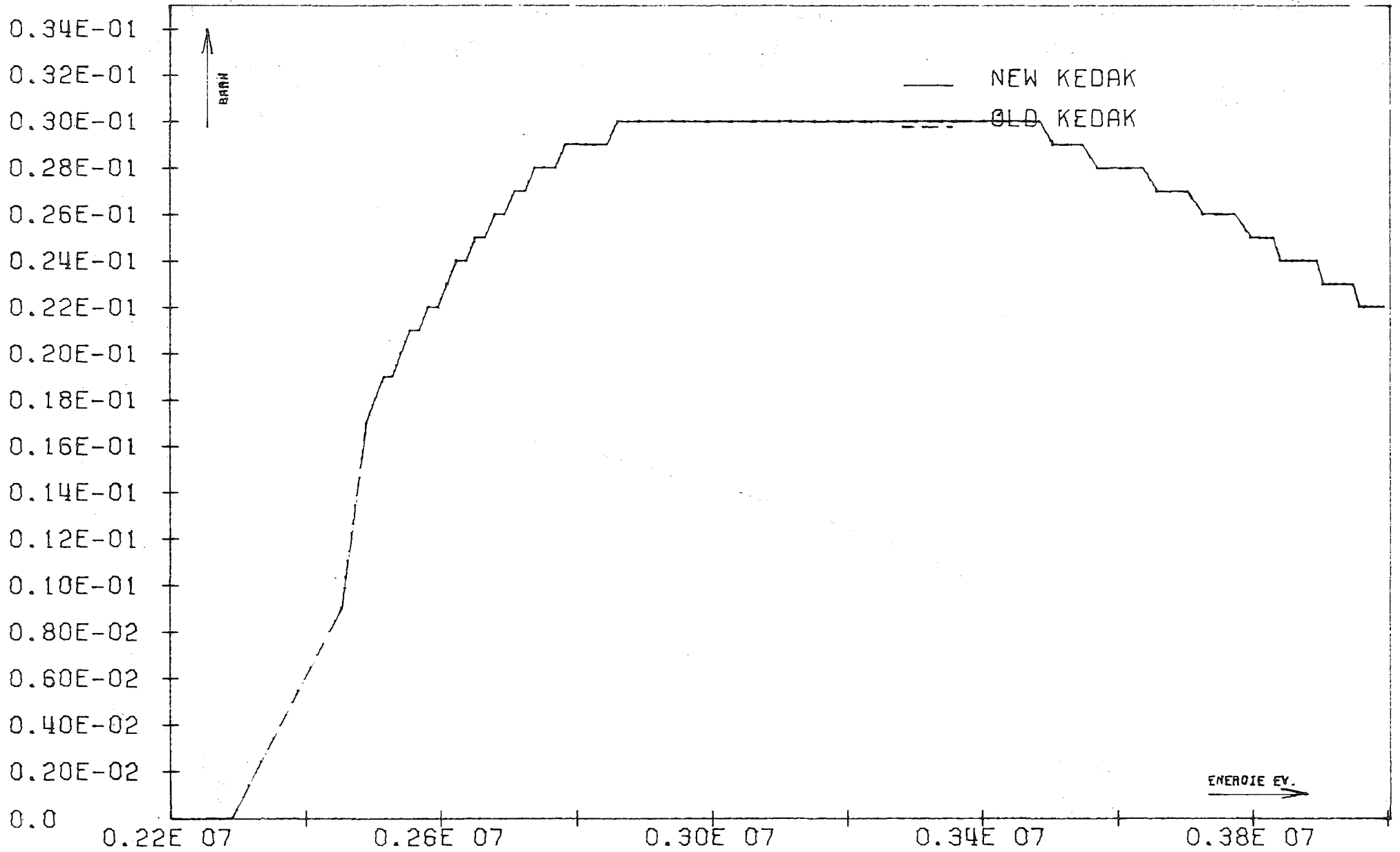


FIG. 22

NI

SGIZ

0.2290+07

INR901N1 16.06 18.02.

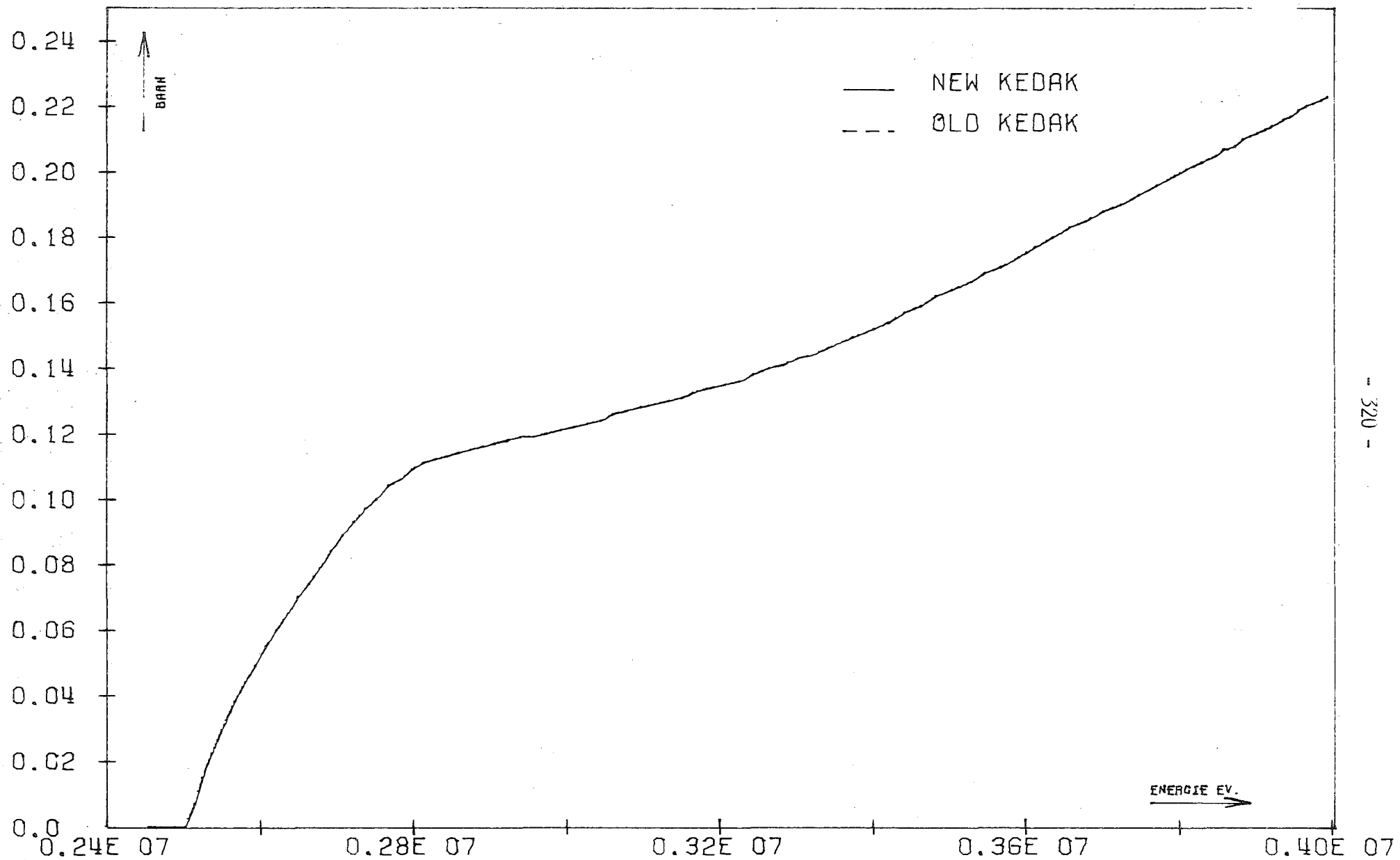


FIG. 23

NI

SGIZ

0.2460+07

0.36E 07

0.40E 07

INR901N1 16.06 18.02.

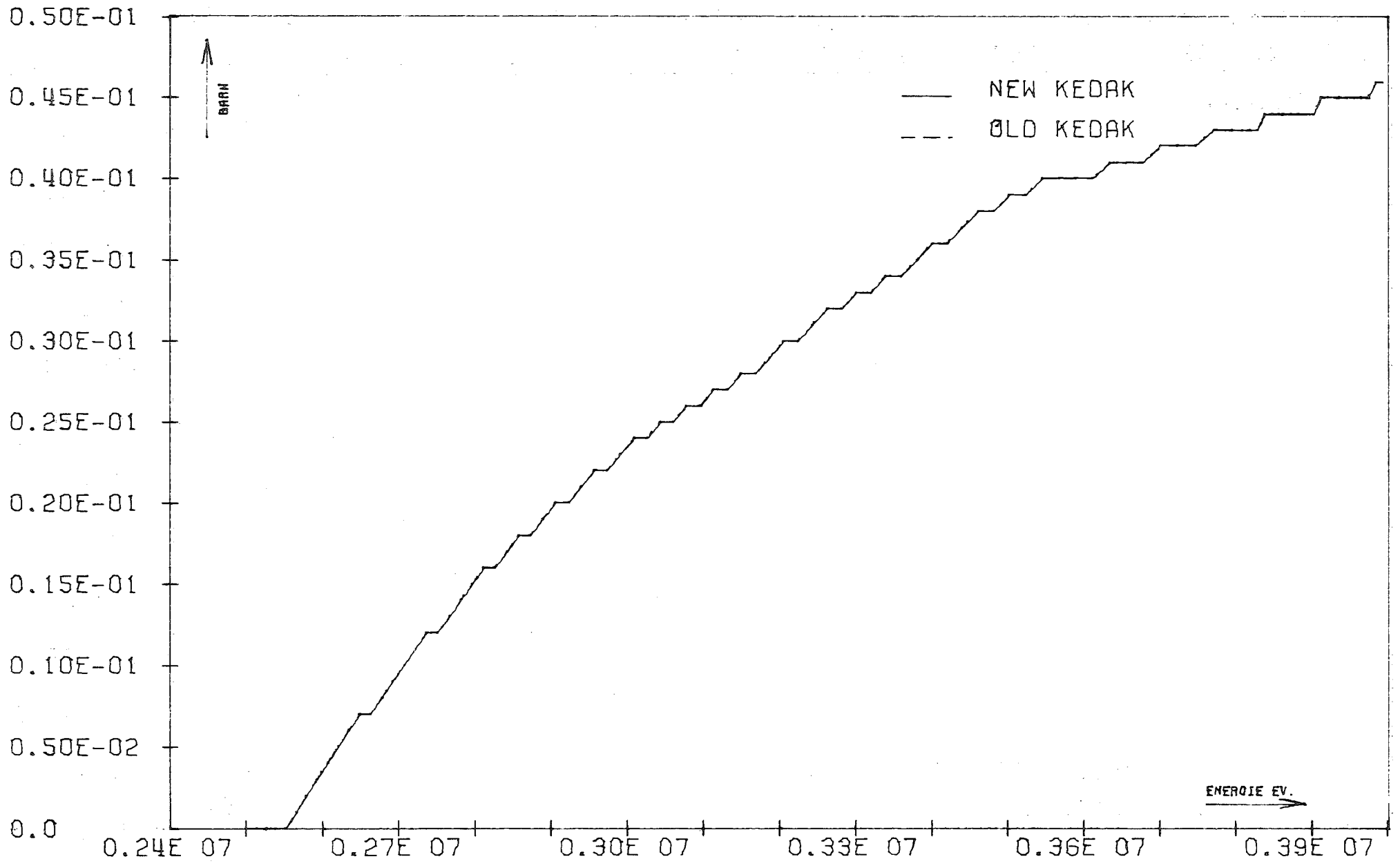


FIG. 24 NI SGIZ 0.2500+07 INR901N1 16.06 18.02.

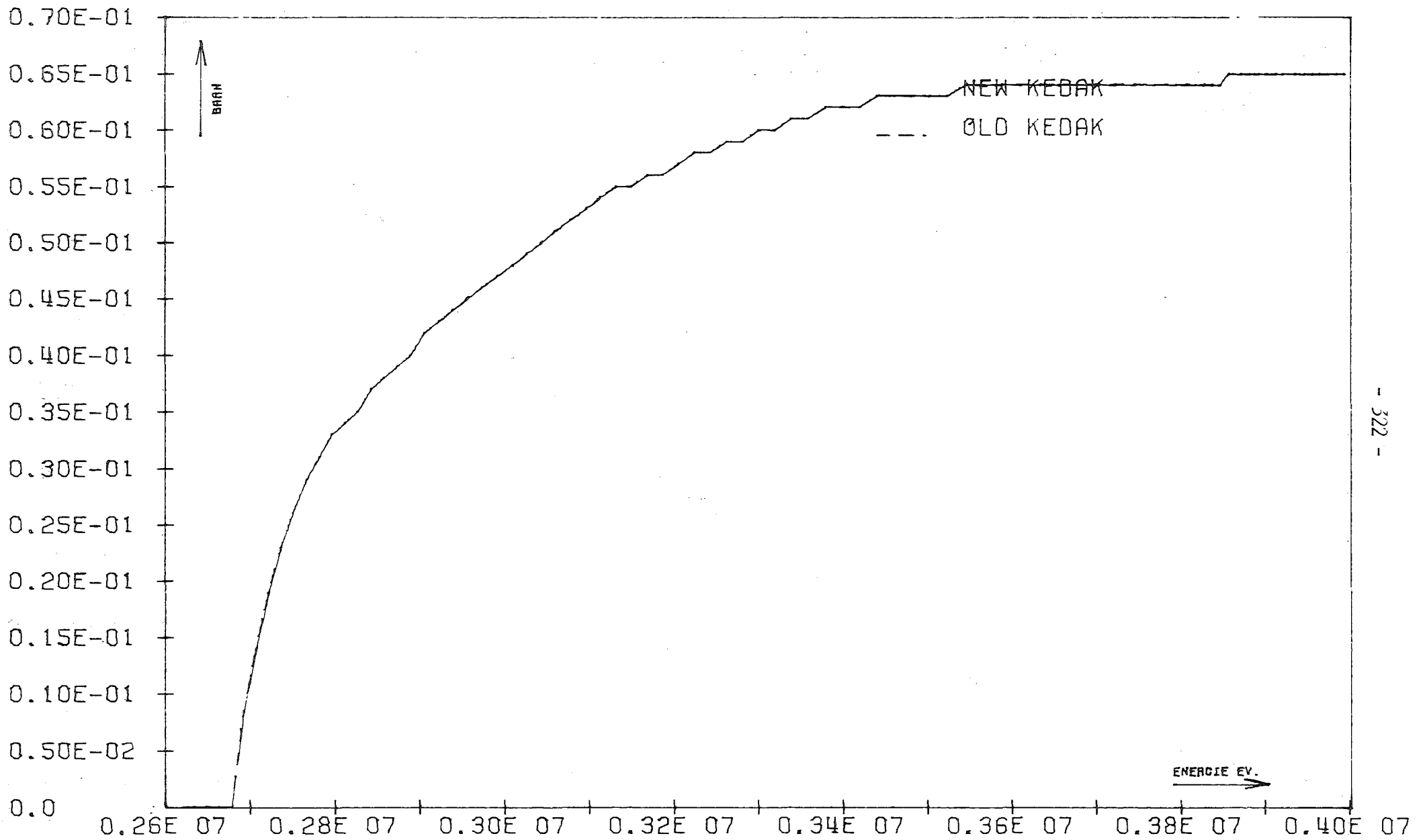


FIG. 25 NI SGIZ 0.2630+07 INR901N1 16.06 18.02.

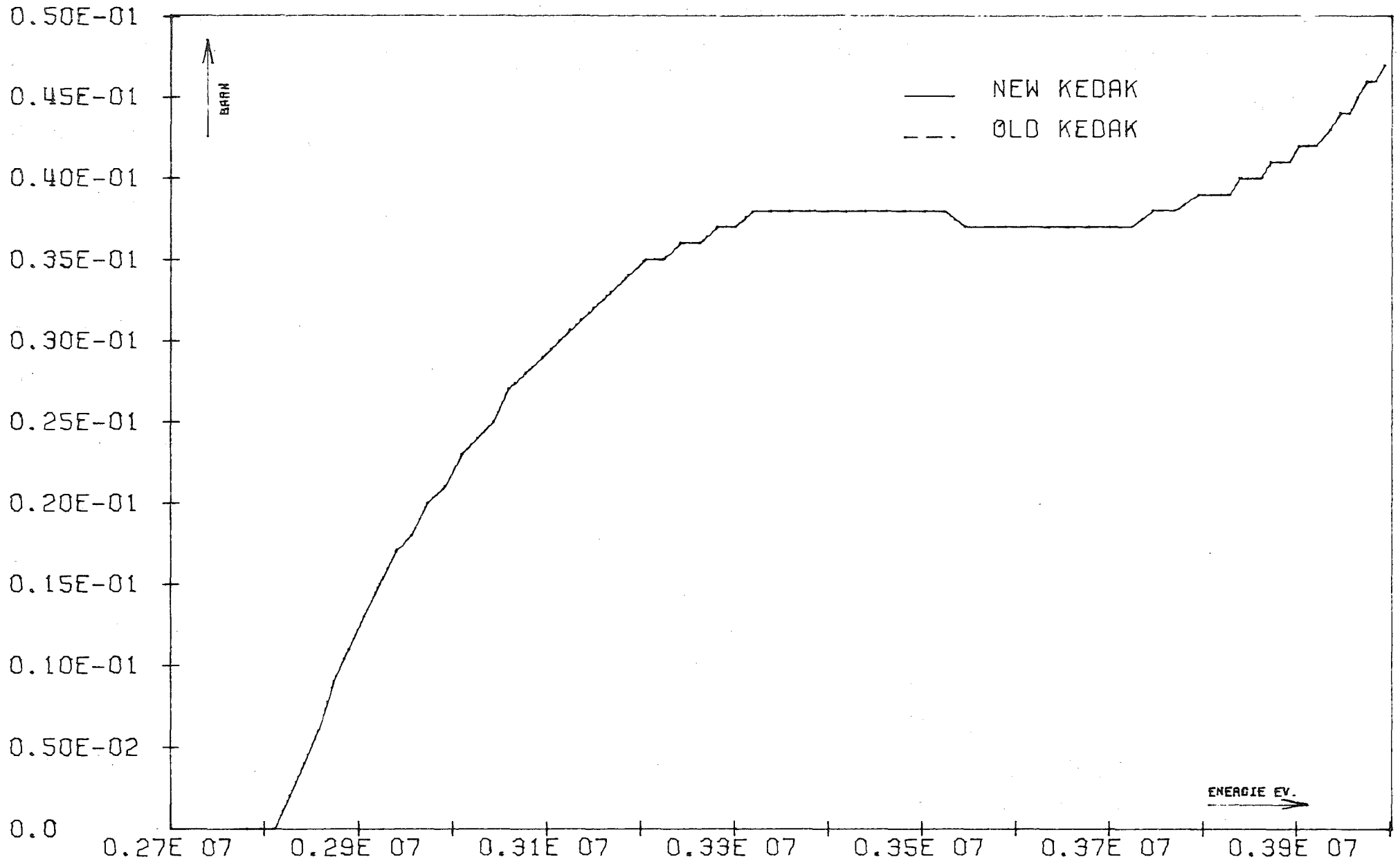


FIG. 26 NI SGIZ 0.2770+07 INR901N1 16.06 18.02.

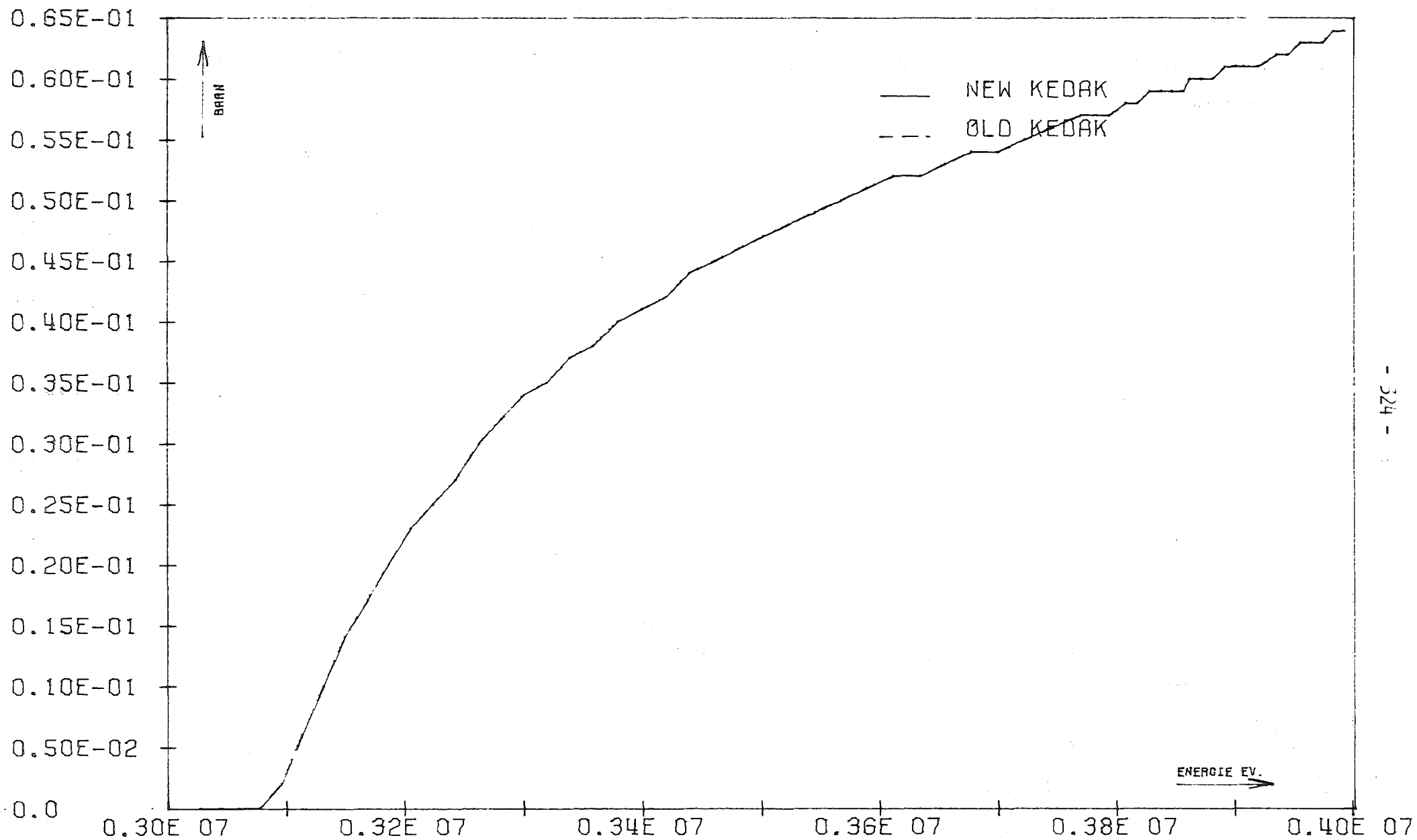


FIG. 27

NI

SGIZ

0.3040+07

INR901N1 16.06 18.02.

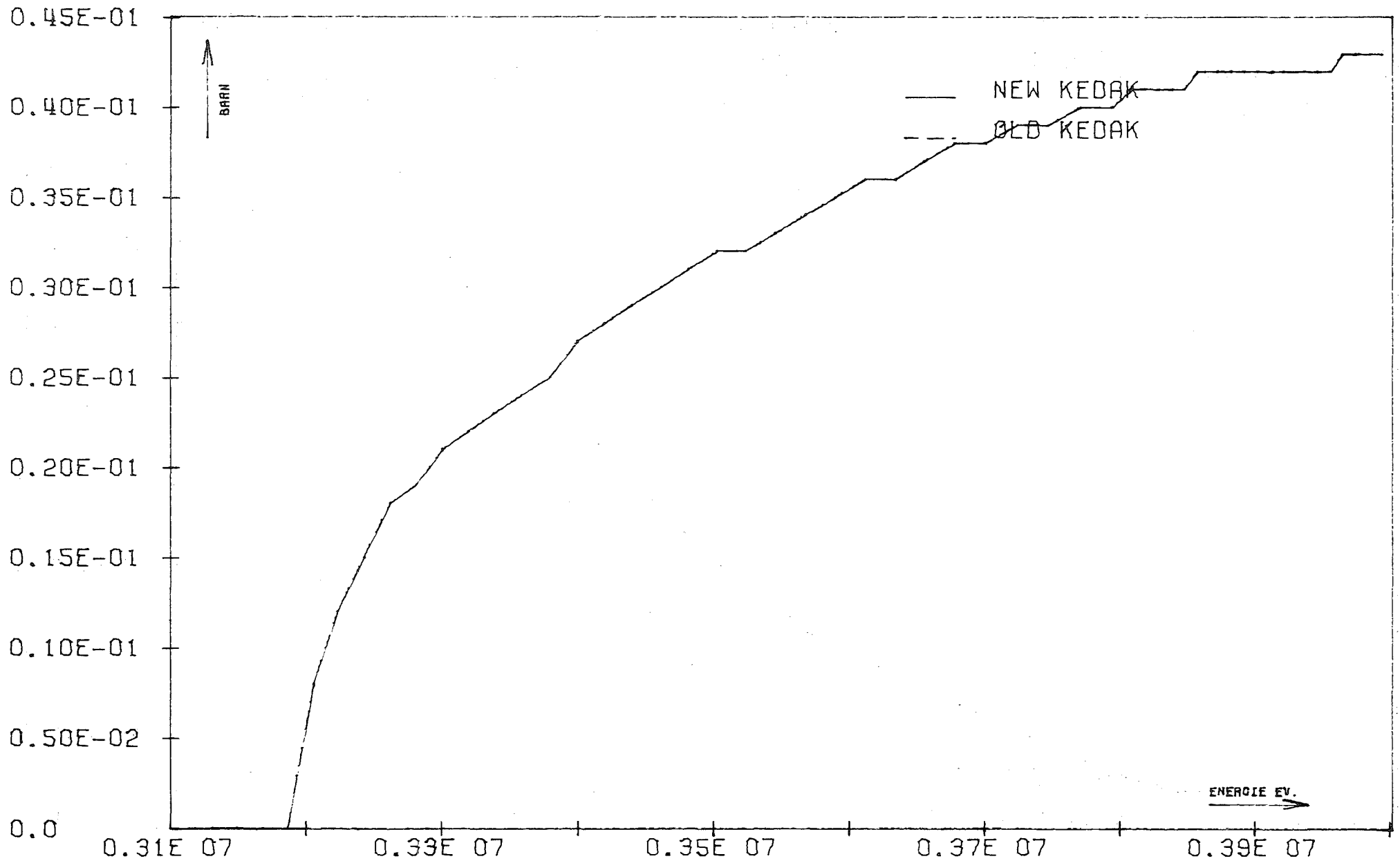


FIG. 28

NI

SGIZ

0.3130+07

INR901N1 16.06 18.02.

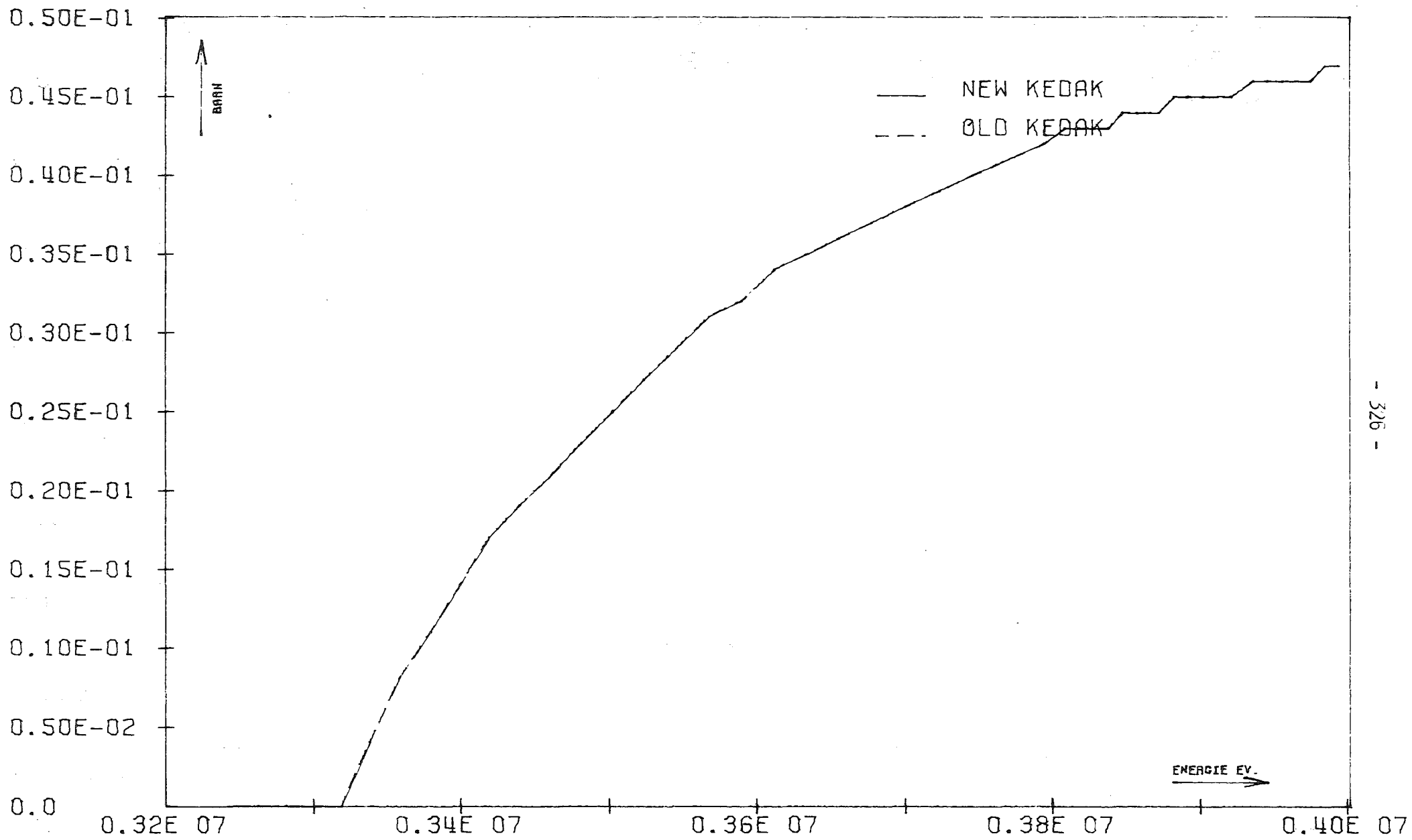


FIG. 29

NI

SGIZ

0.3260+07

0.38E 07

INR901N1 16.06 18.02.

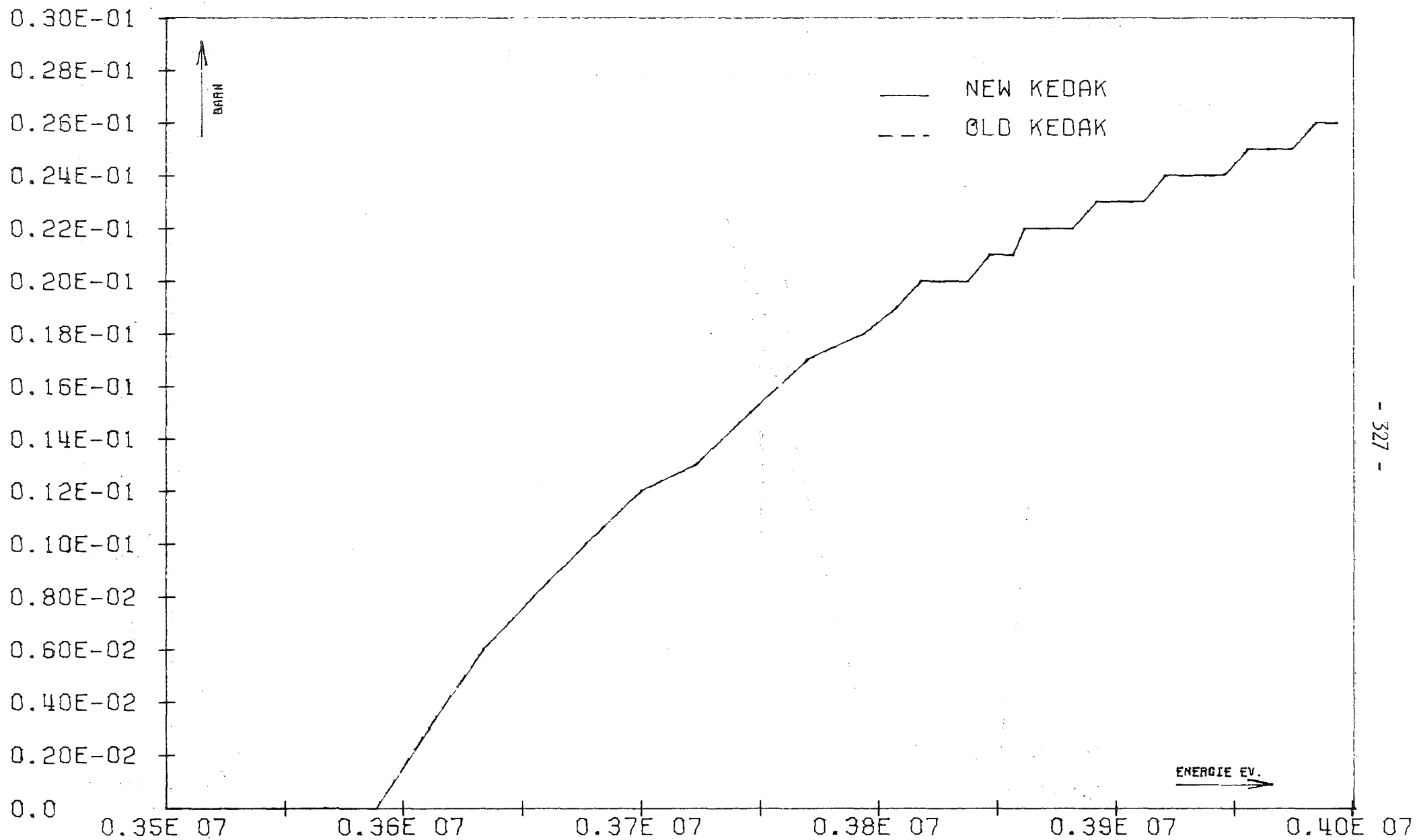


FIG. 30

NI

SGIZ

0.3520+07

INR901N1 16.06 18.02.

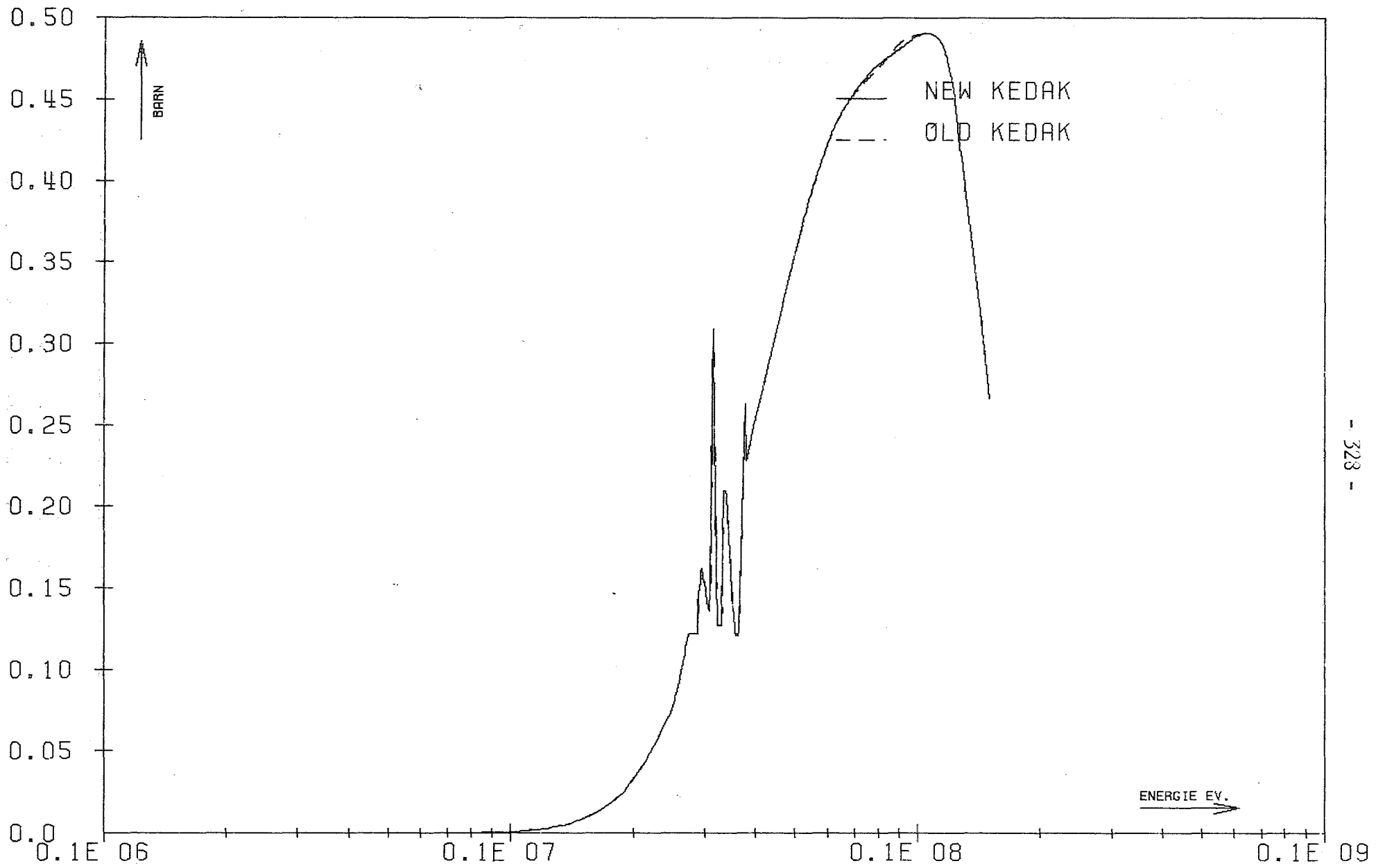


FIG. 31 NI SGP

INR901N1 24.07 19.01.

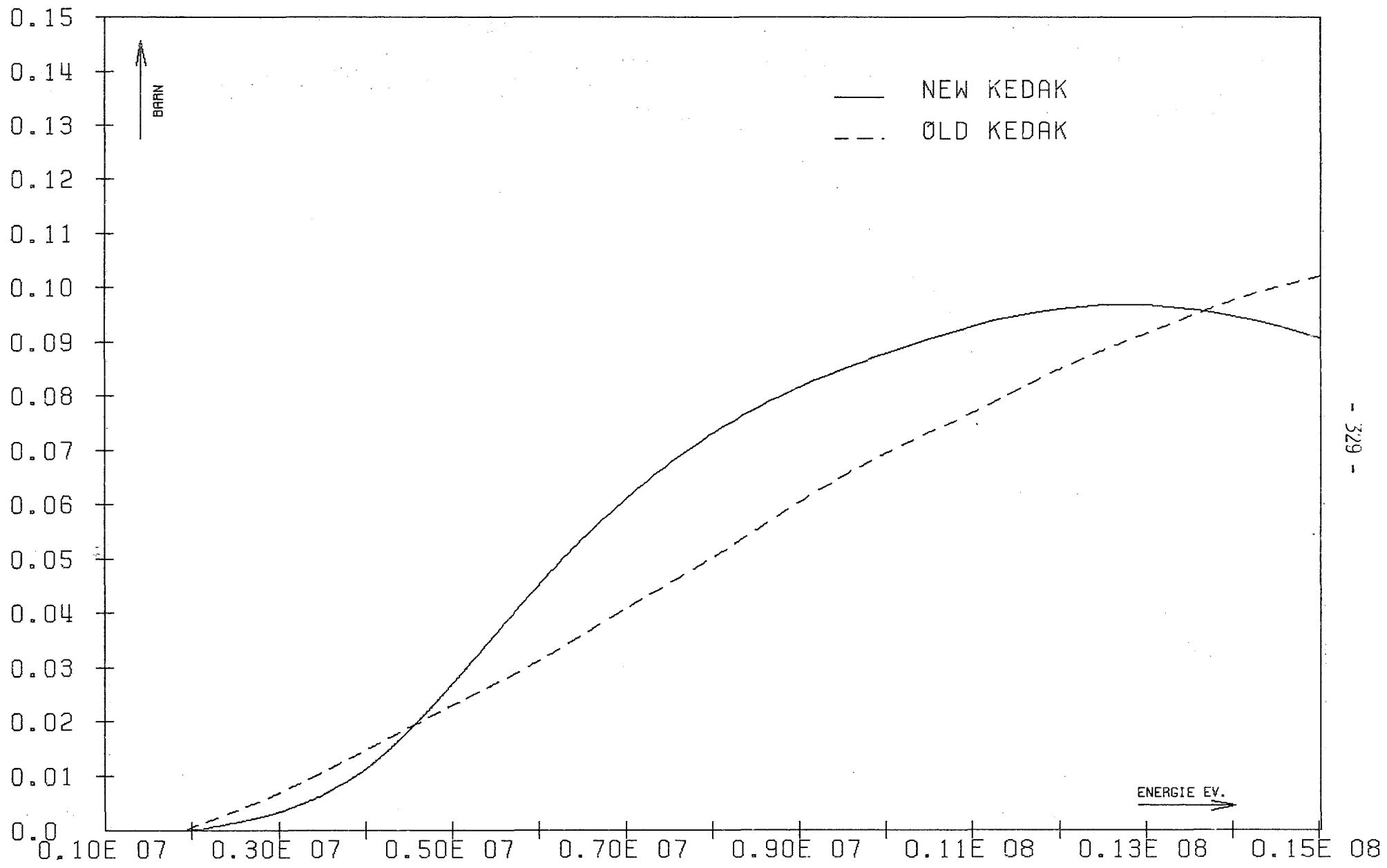
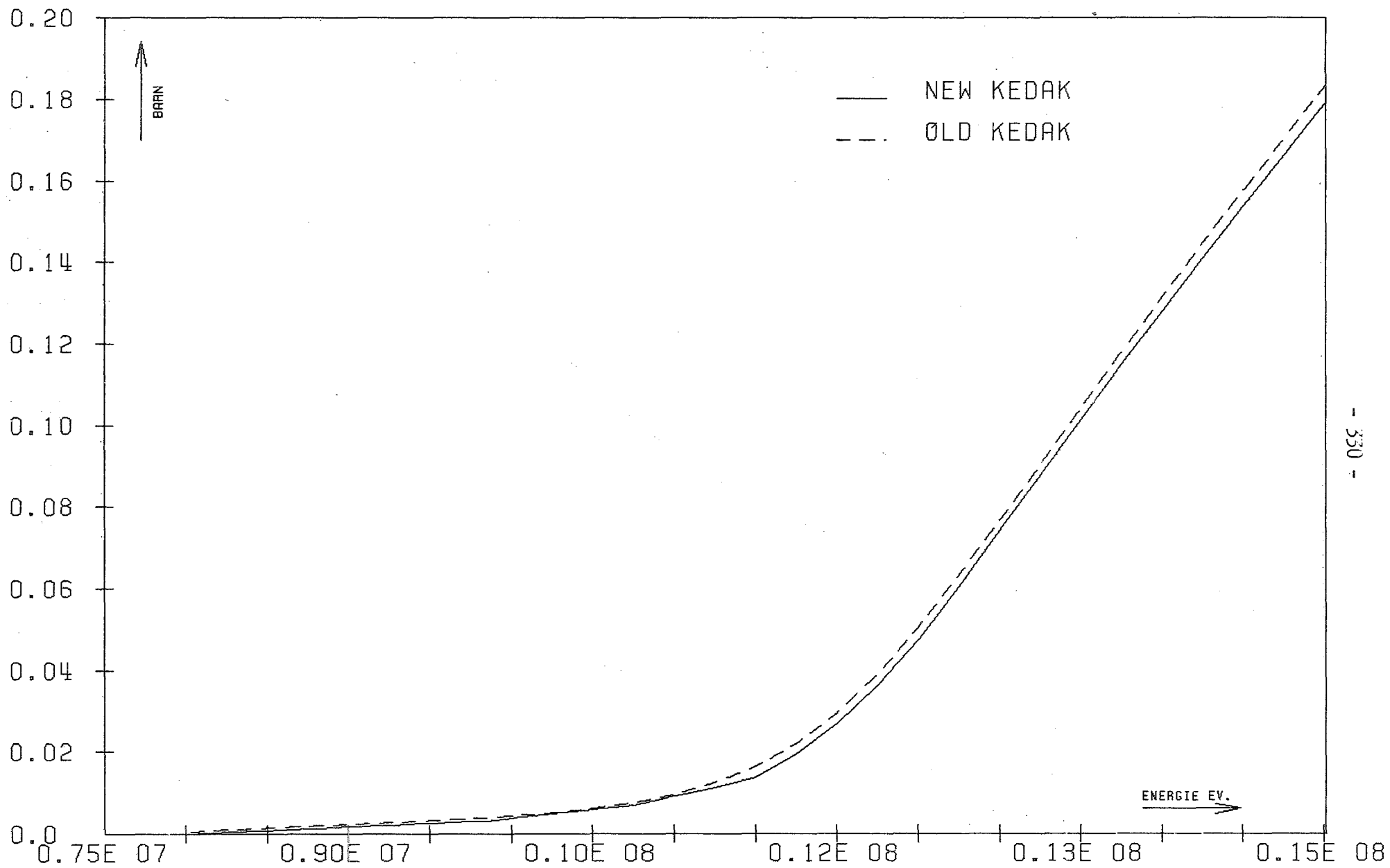


FIG. 32 NI SGALP

INR901N1 24.07 19.01.



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FIG. 33

NI

SG2N

INR901N1 24.07 19.01.

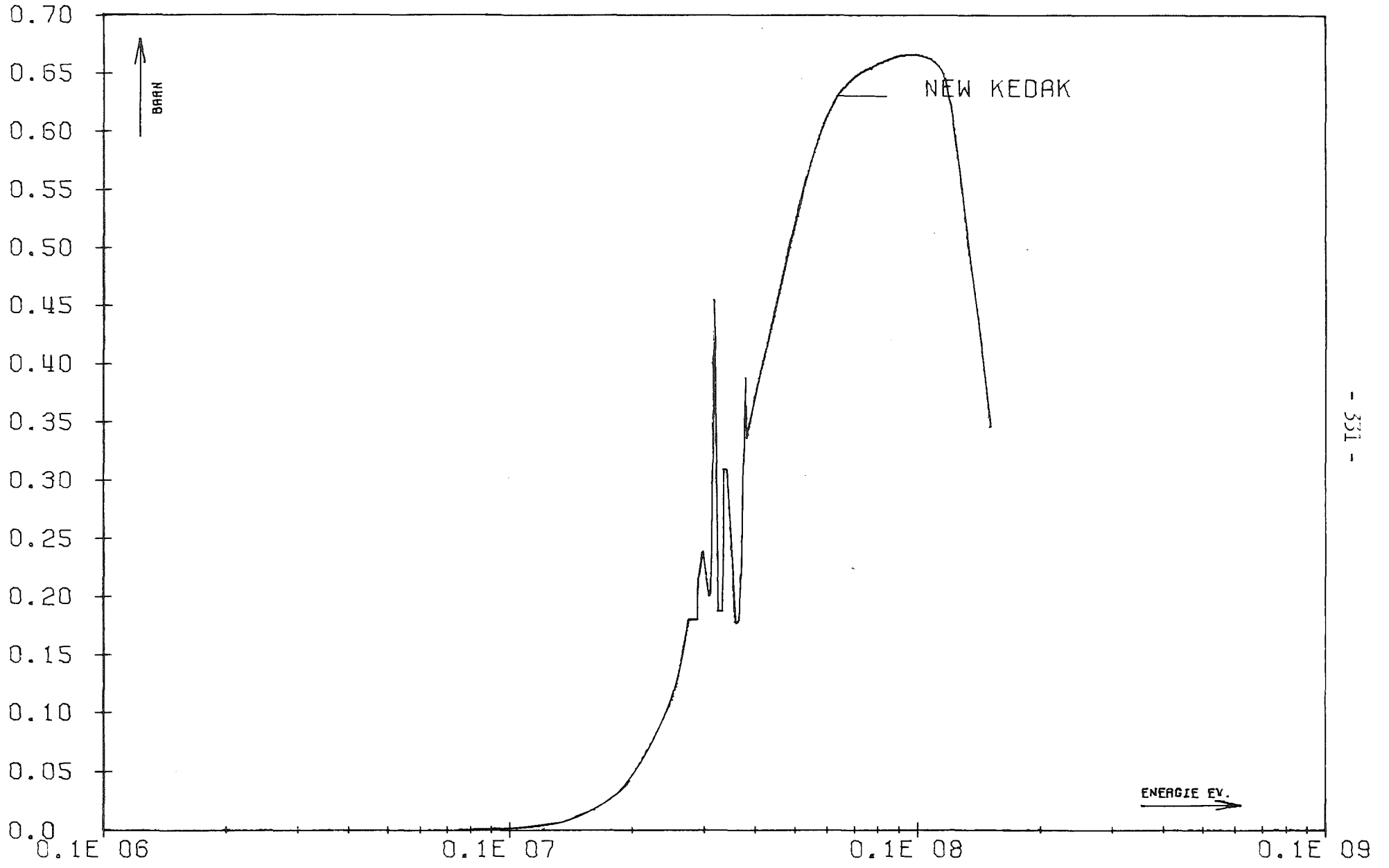


FIG. 34 NI 58 SGP INR901N1 16.06 18.02.

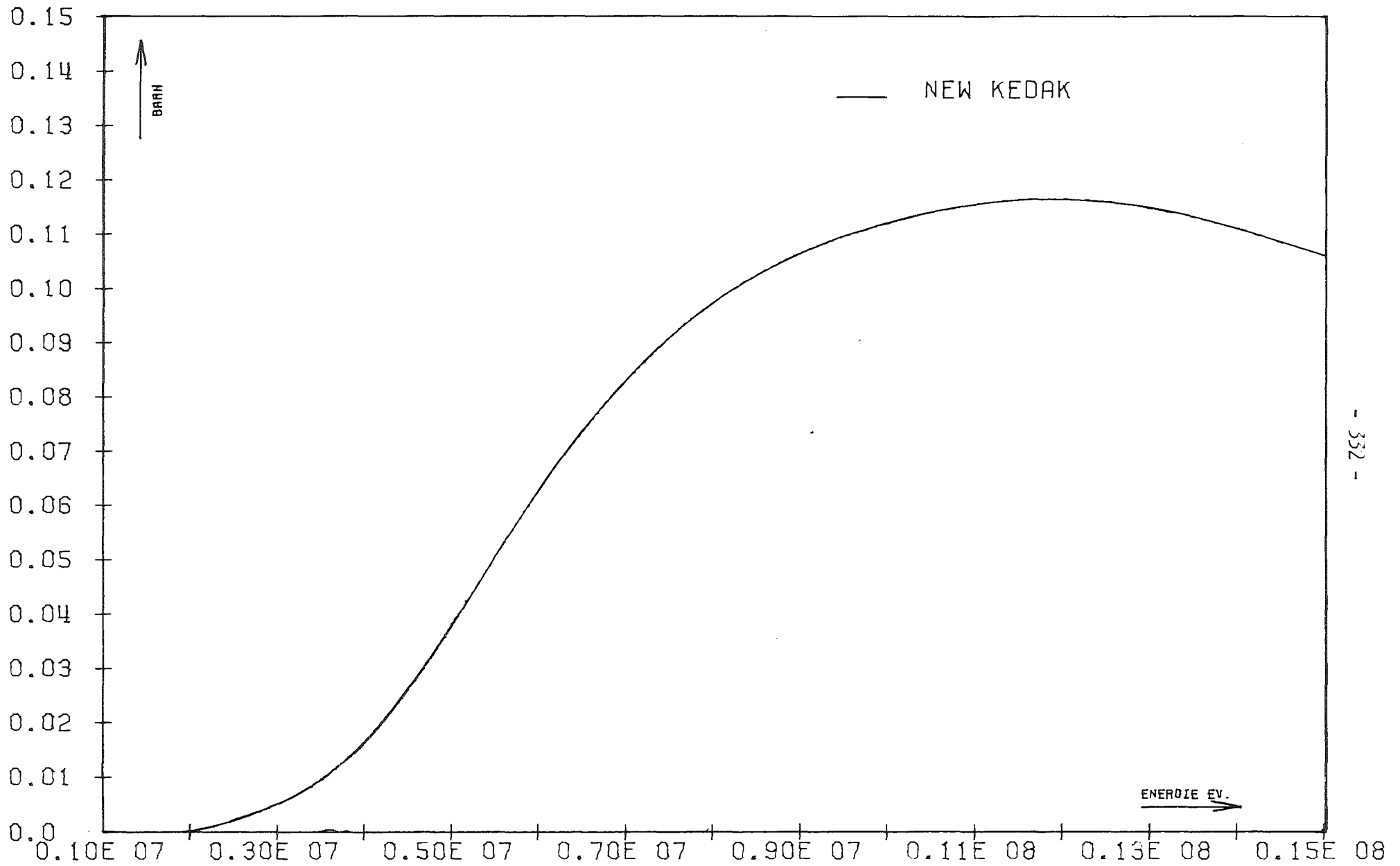


FIG. 35 NI 58 SGALP

INR901N1 16.06 18.02.

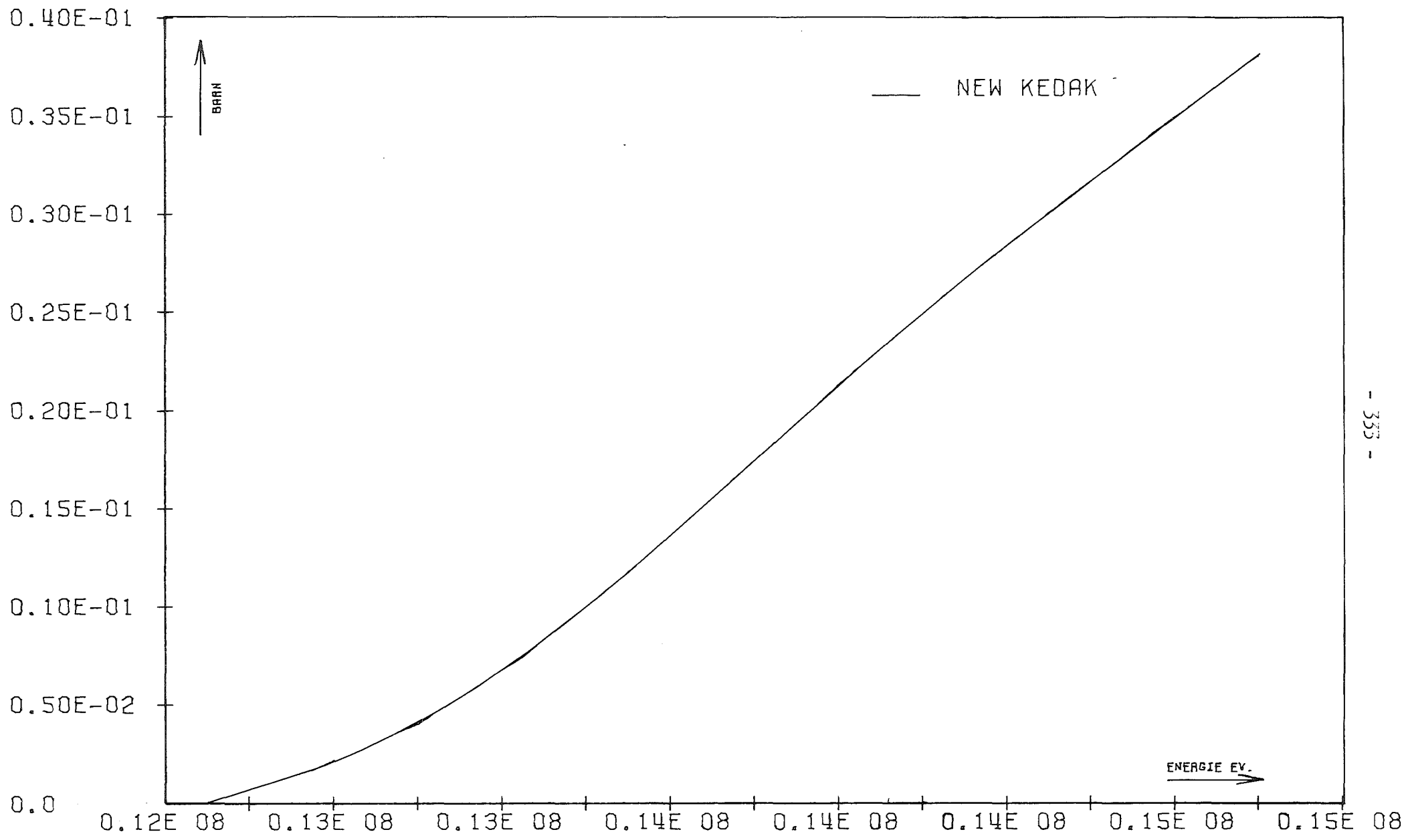
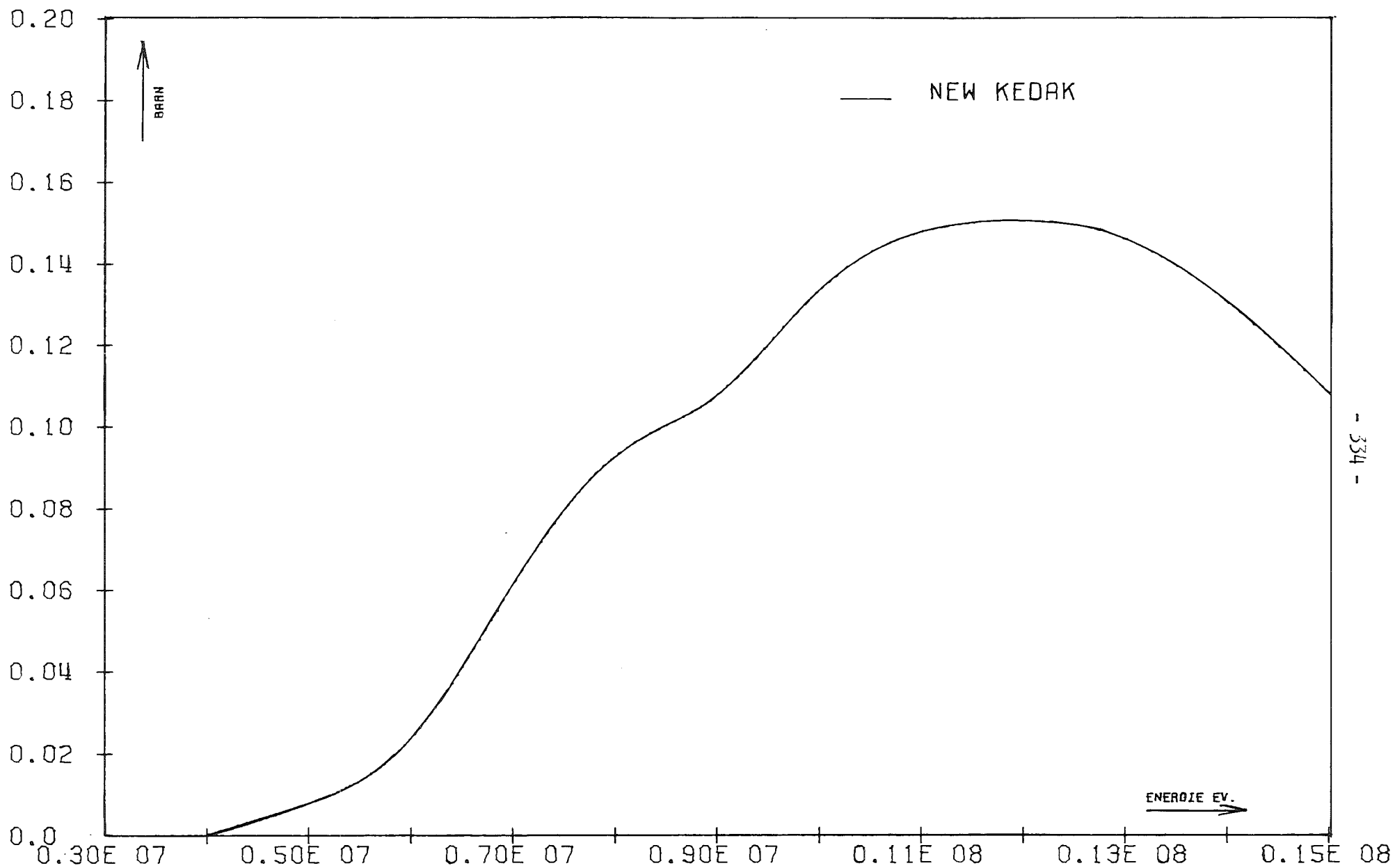


FIG. 36 NI 58 SG2N

INR901N1 16.06 18.02.



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FIG. 37 NI 60 SGP

INR901N1 16.06 18.02.

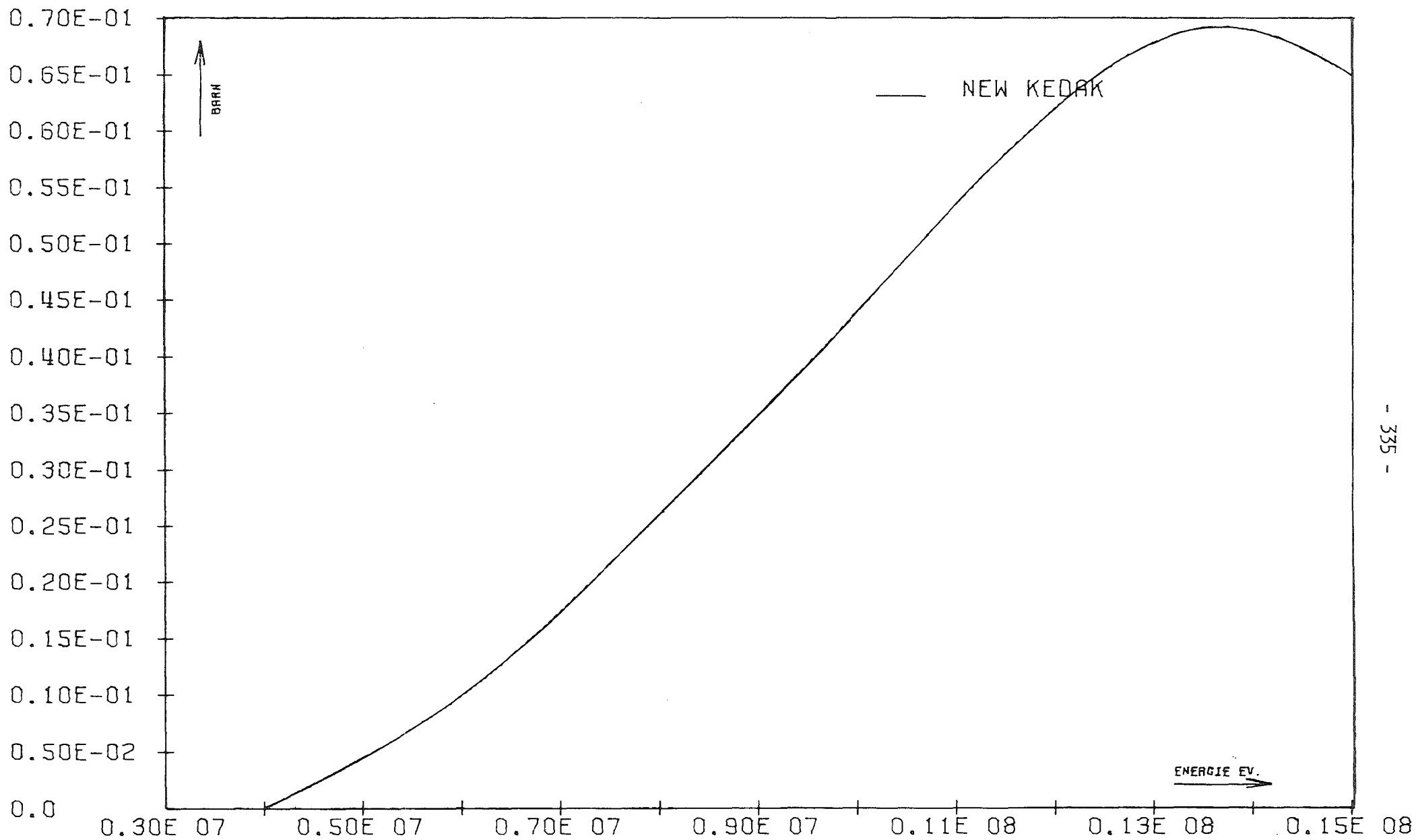


FIG. 38

NI 60

SGALP

INR901N1 16.06 18.02.

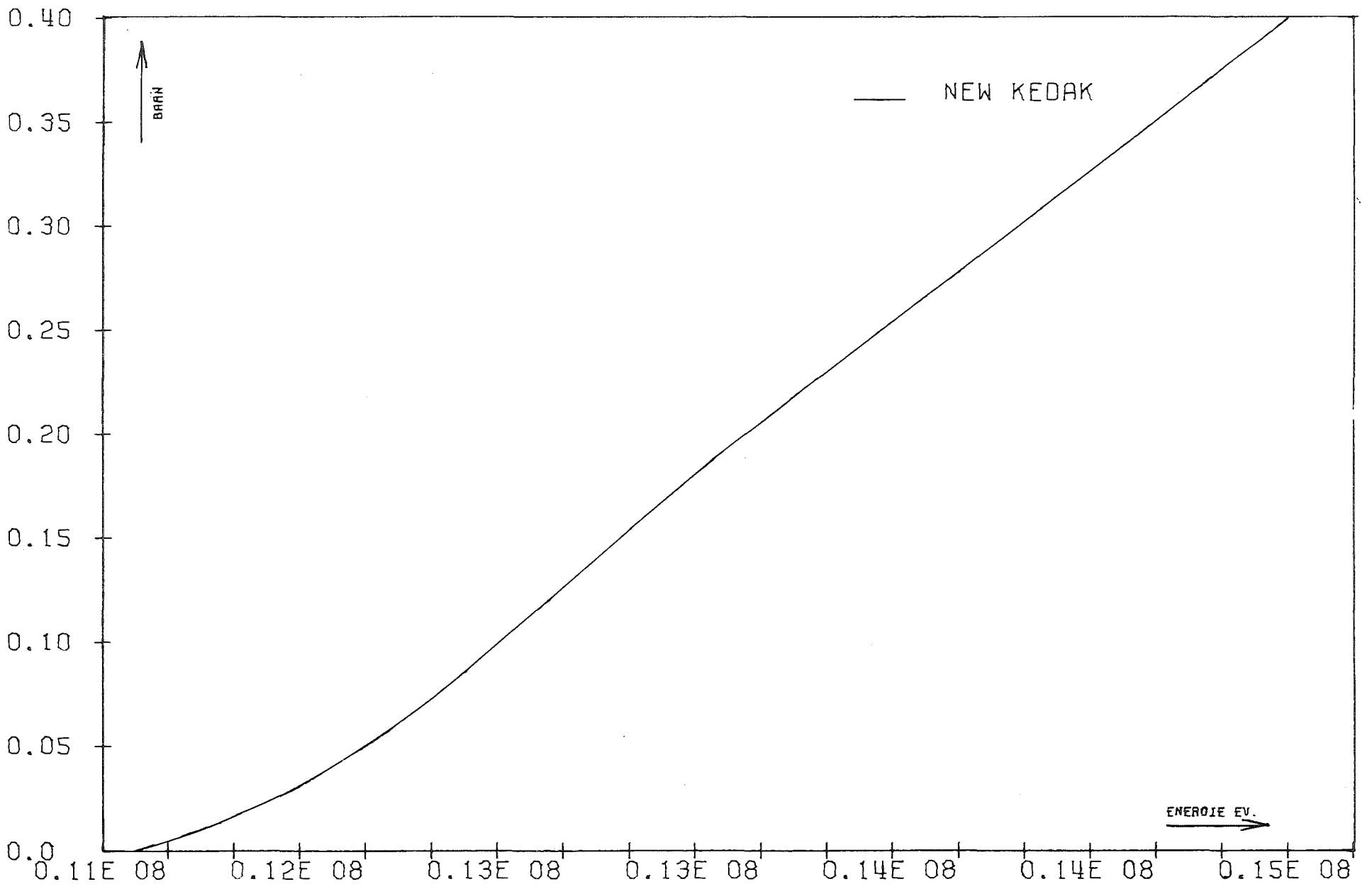
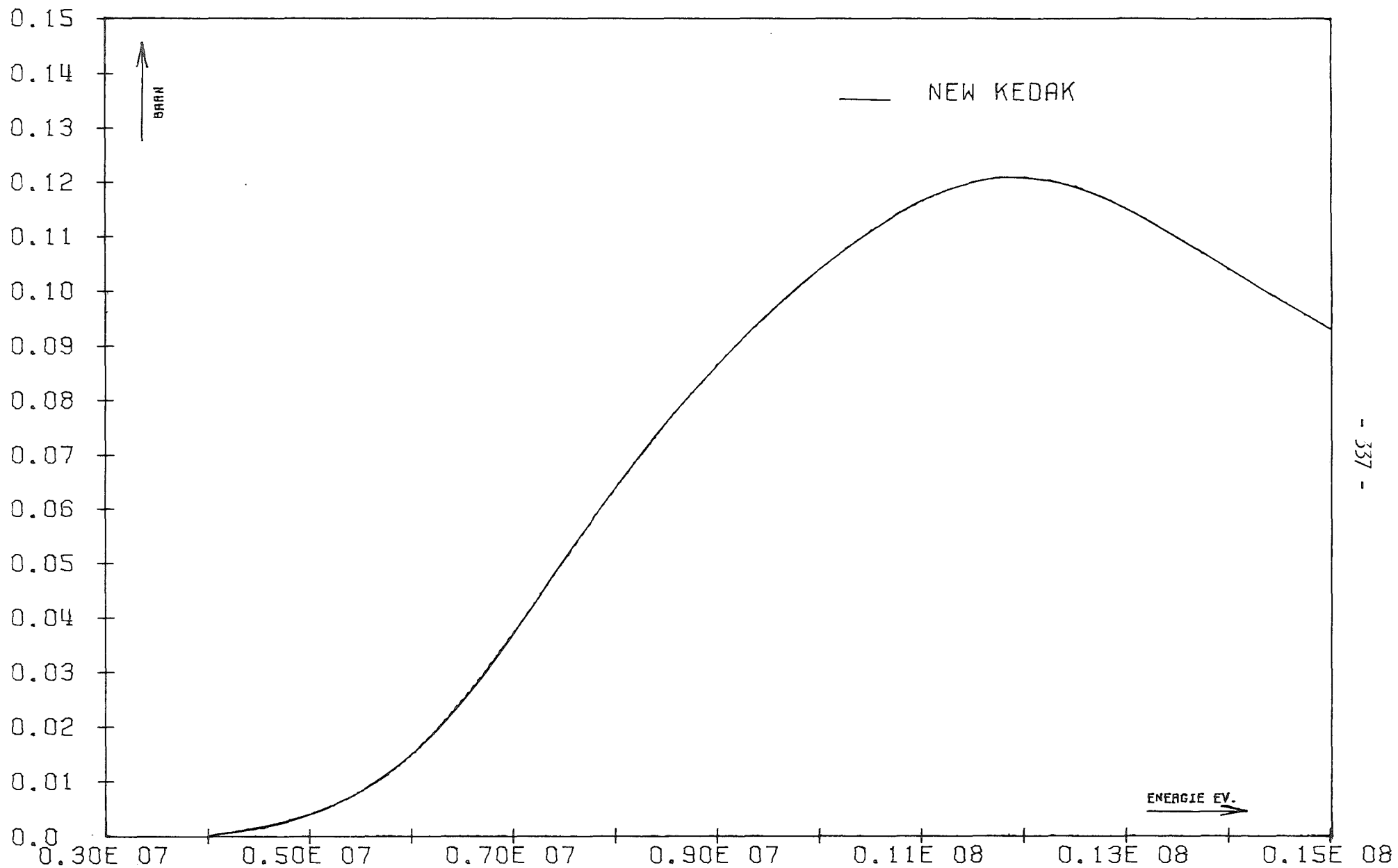


FIG. 39 NI 60 SG2N

INR901N1 16.06 18.02.



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FIG. 40 NI 61 SGP

INR901N1 16.06 18.02.

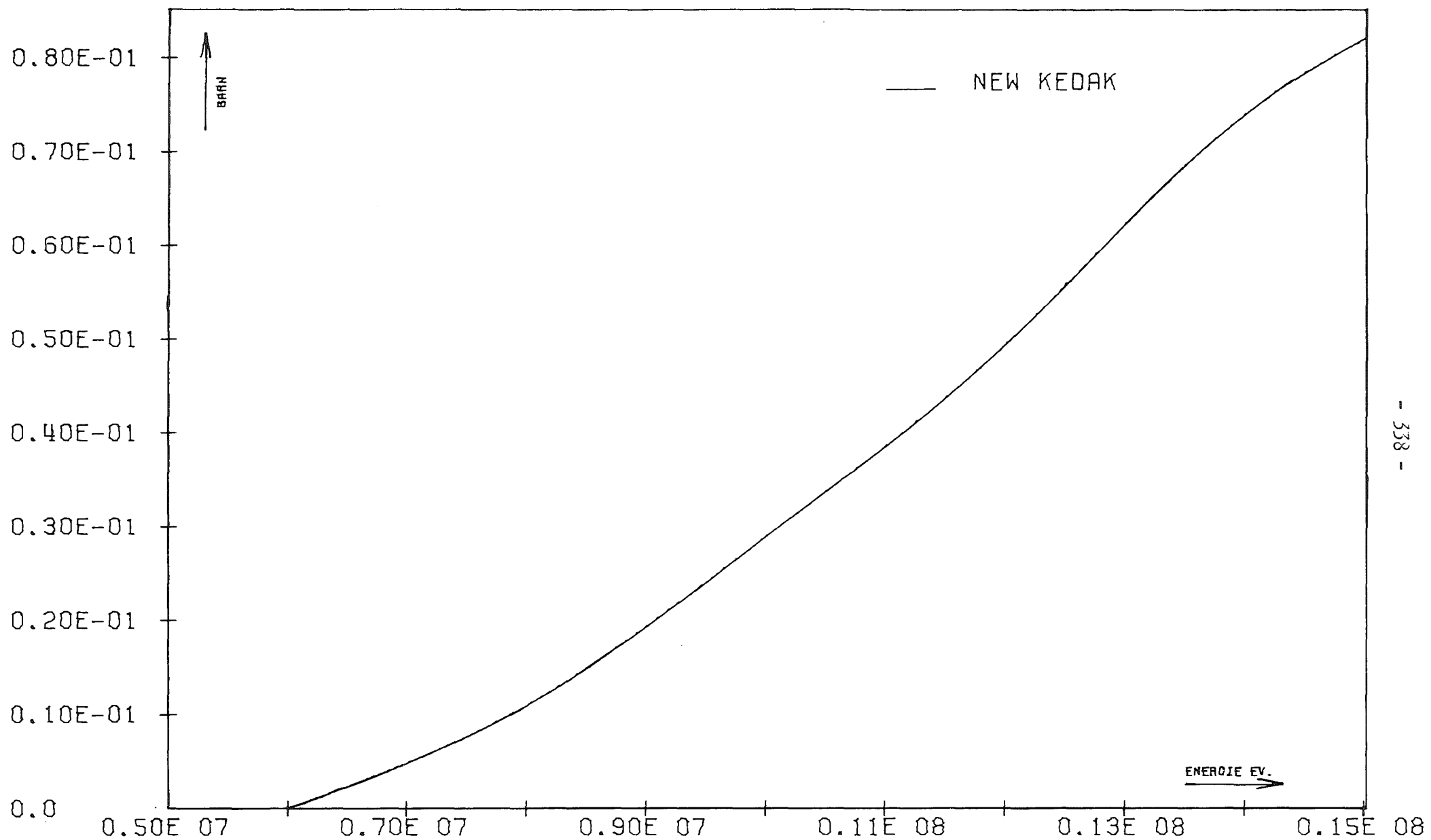


FIG. 41

NI 61 SGALP

INR901N1 16.06 18.02.

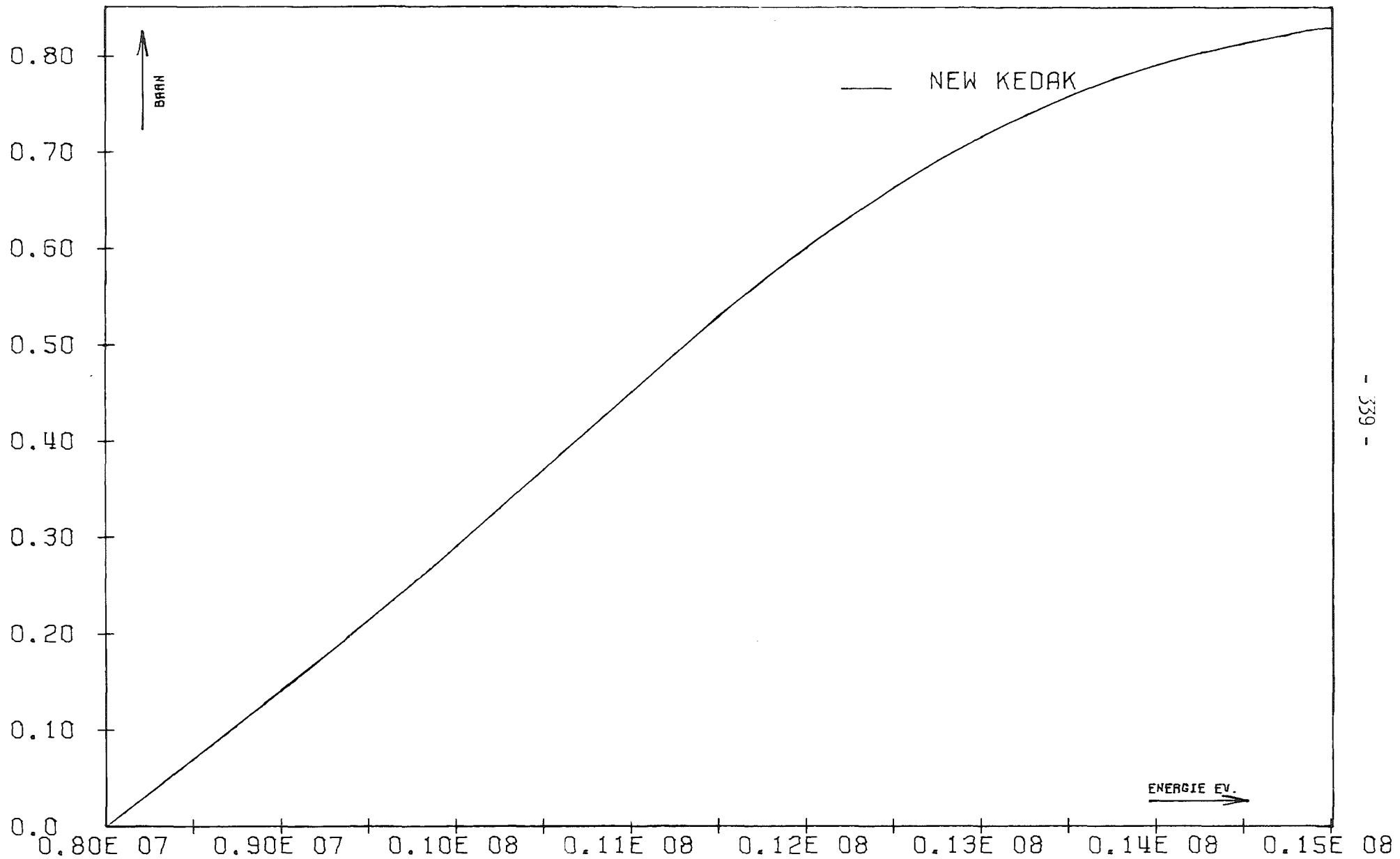


FIG. 42 NI 61 SG2N

INR901N1 16.06 18.02.

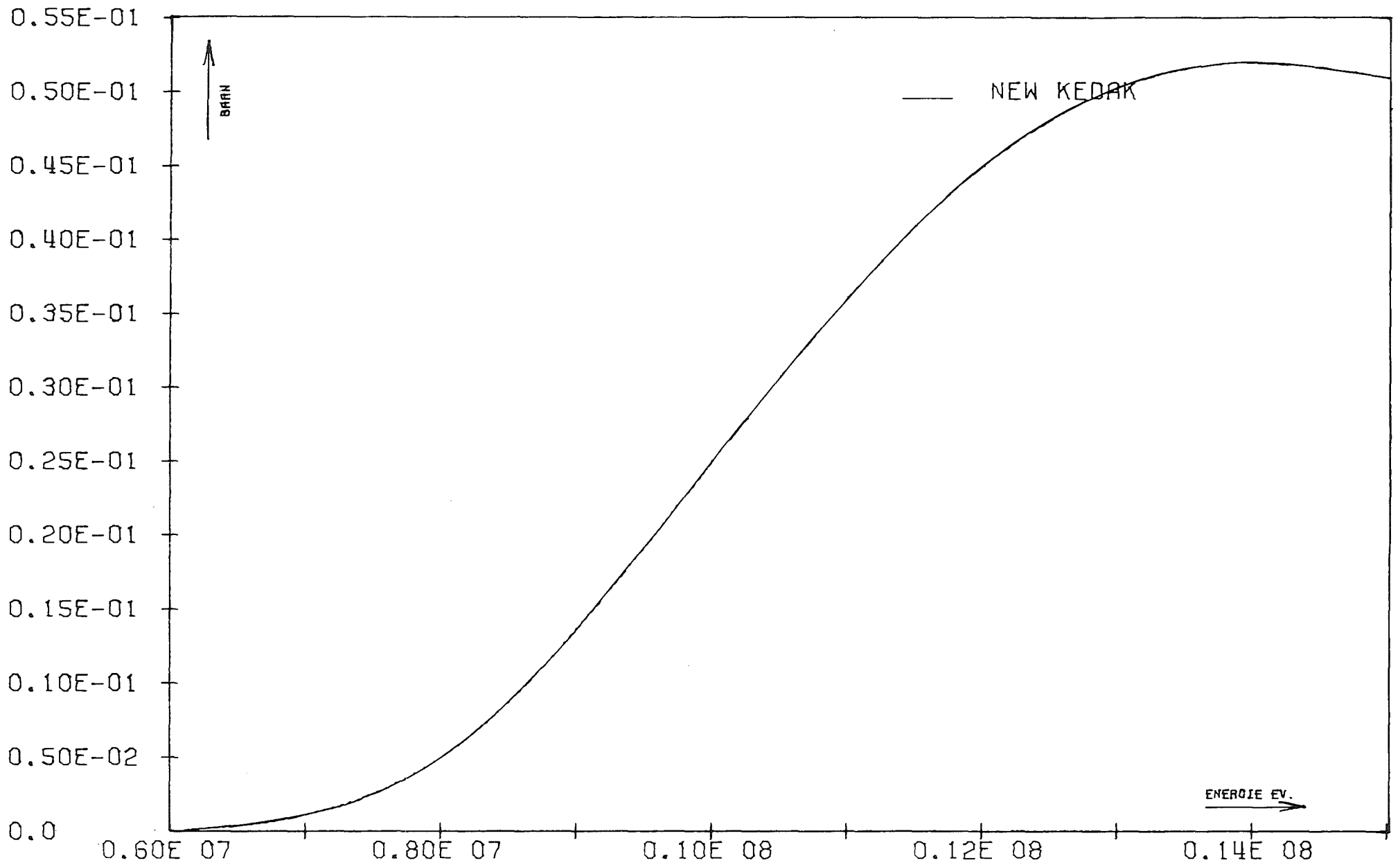


FIG. 43 NI 62 SGP

INR901N1 16.06 18.02.

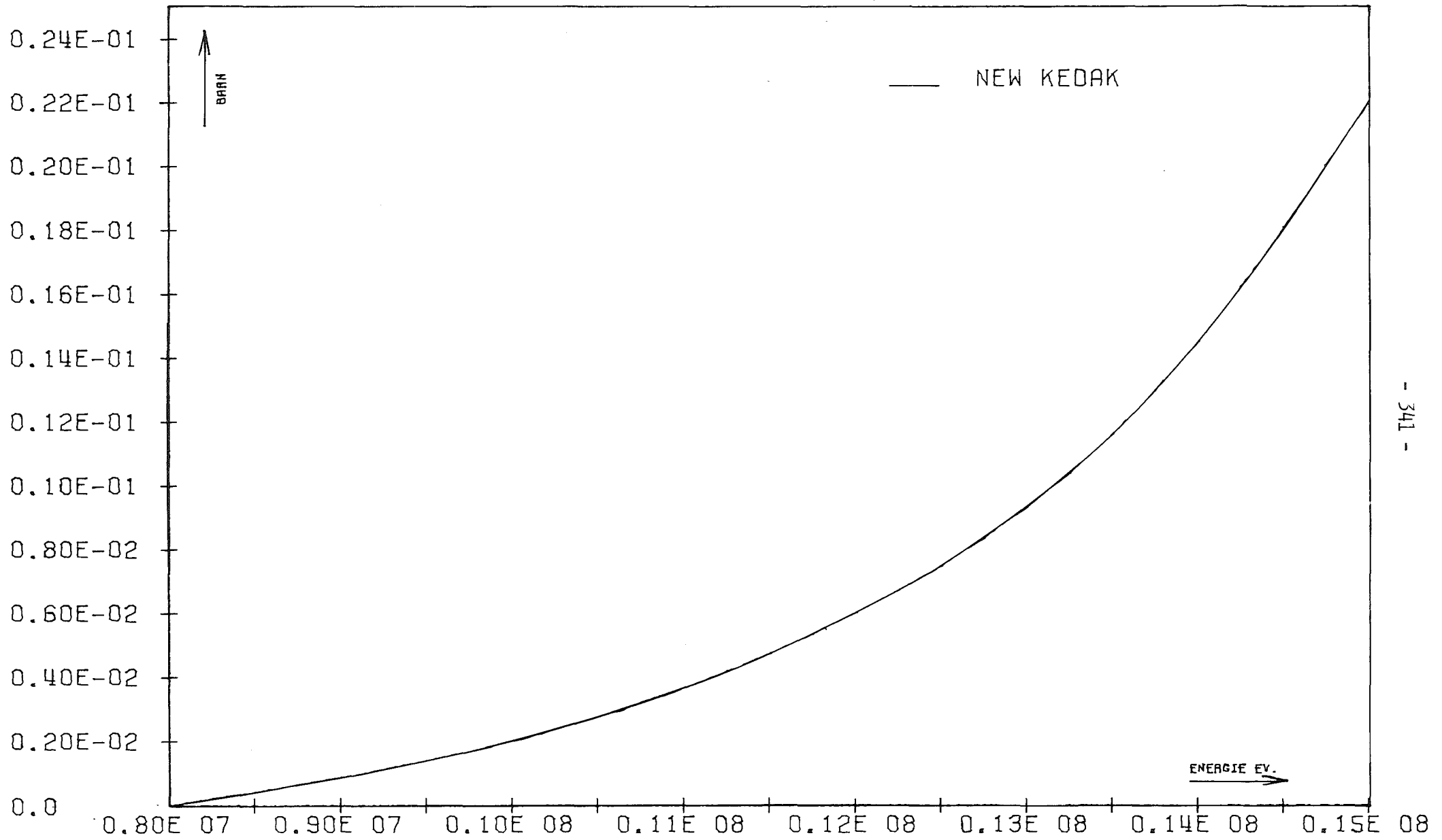


FIG. 44 NI 62 SGALP

INR901N1 16.06 18.02.

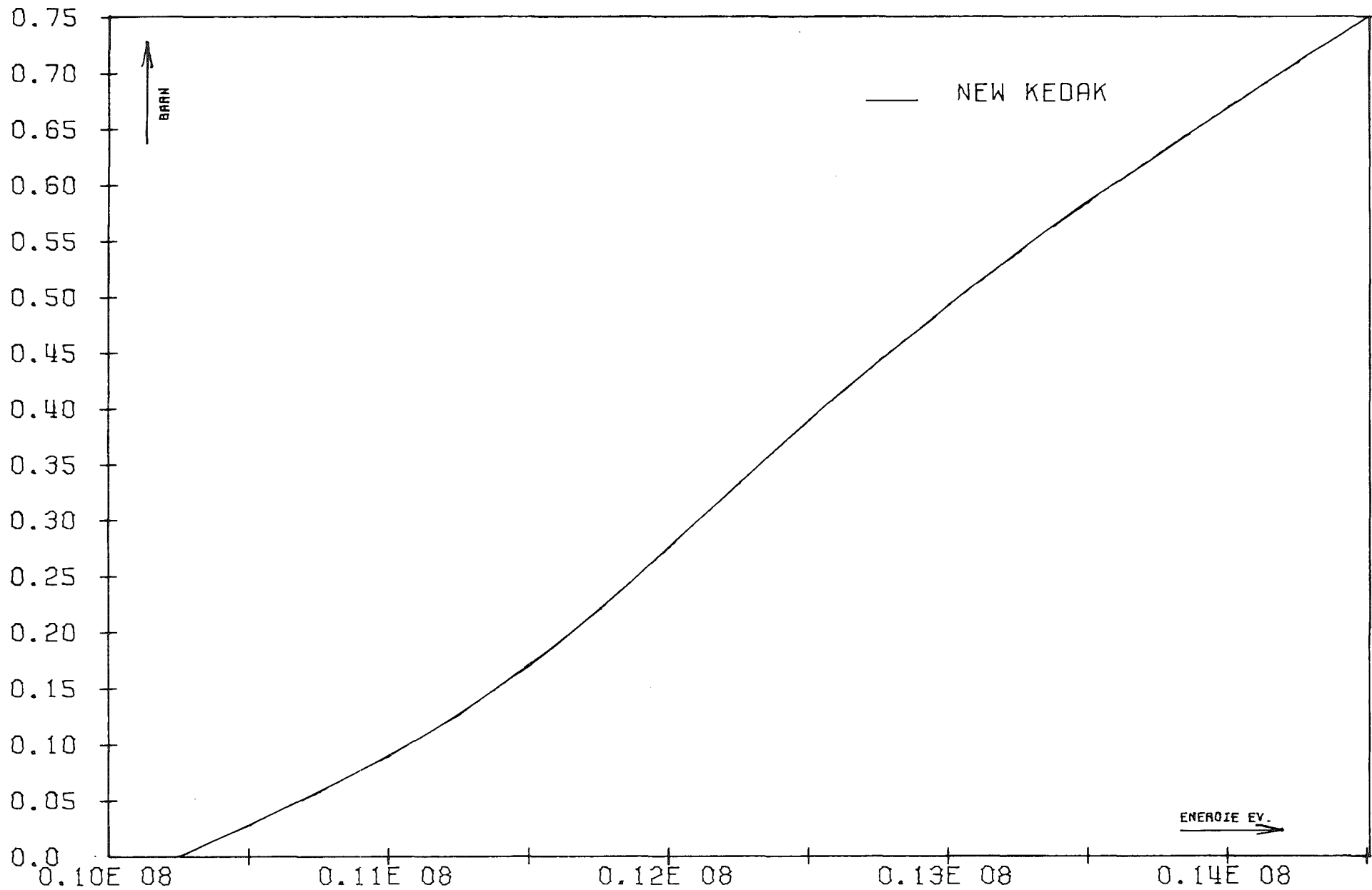


FIG. 45 NI 62 SG2N

INR901N1 16.06 18.02.

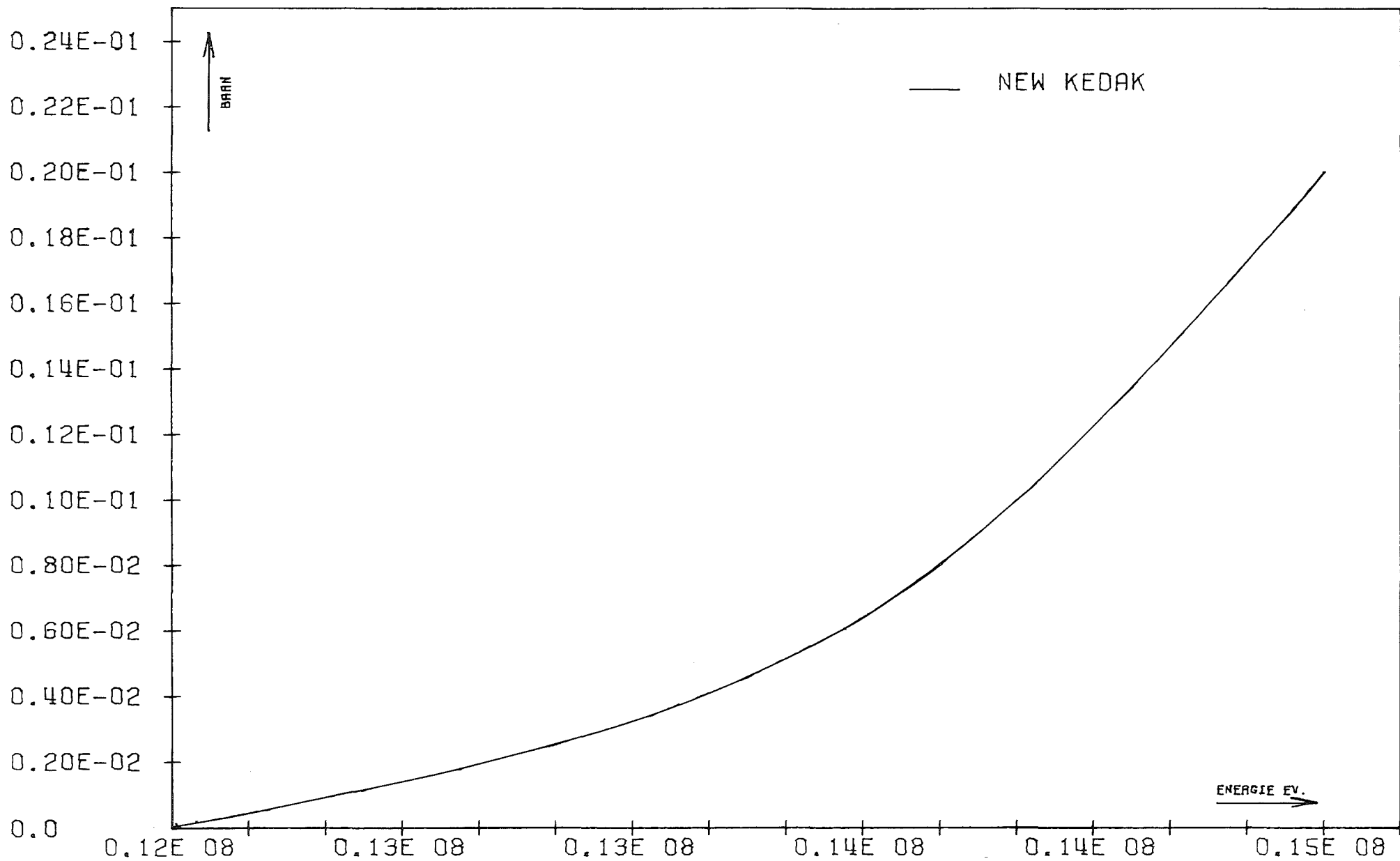


FIG. 46 NI 64 SGP

INR901N1 16.06 18.02.

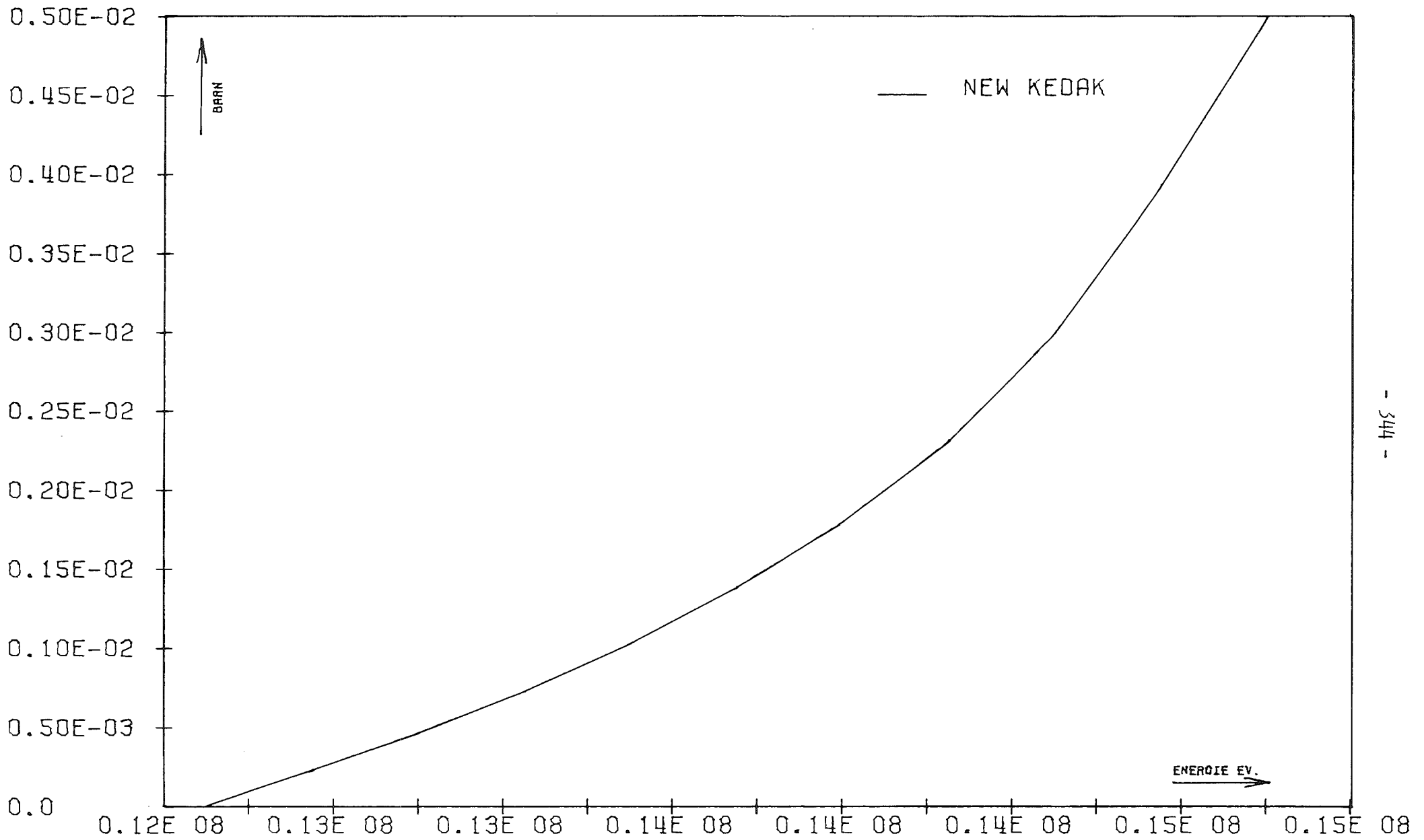


FIG. 47 NI 64 SGALP

INR901N1 16.06 18.02.

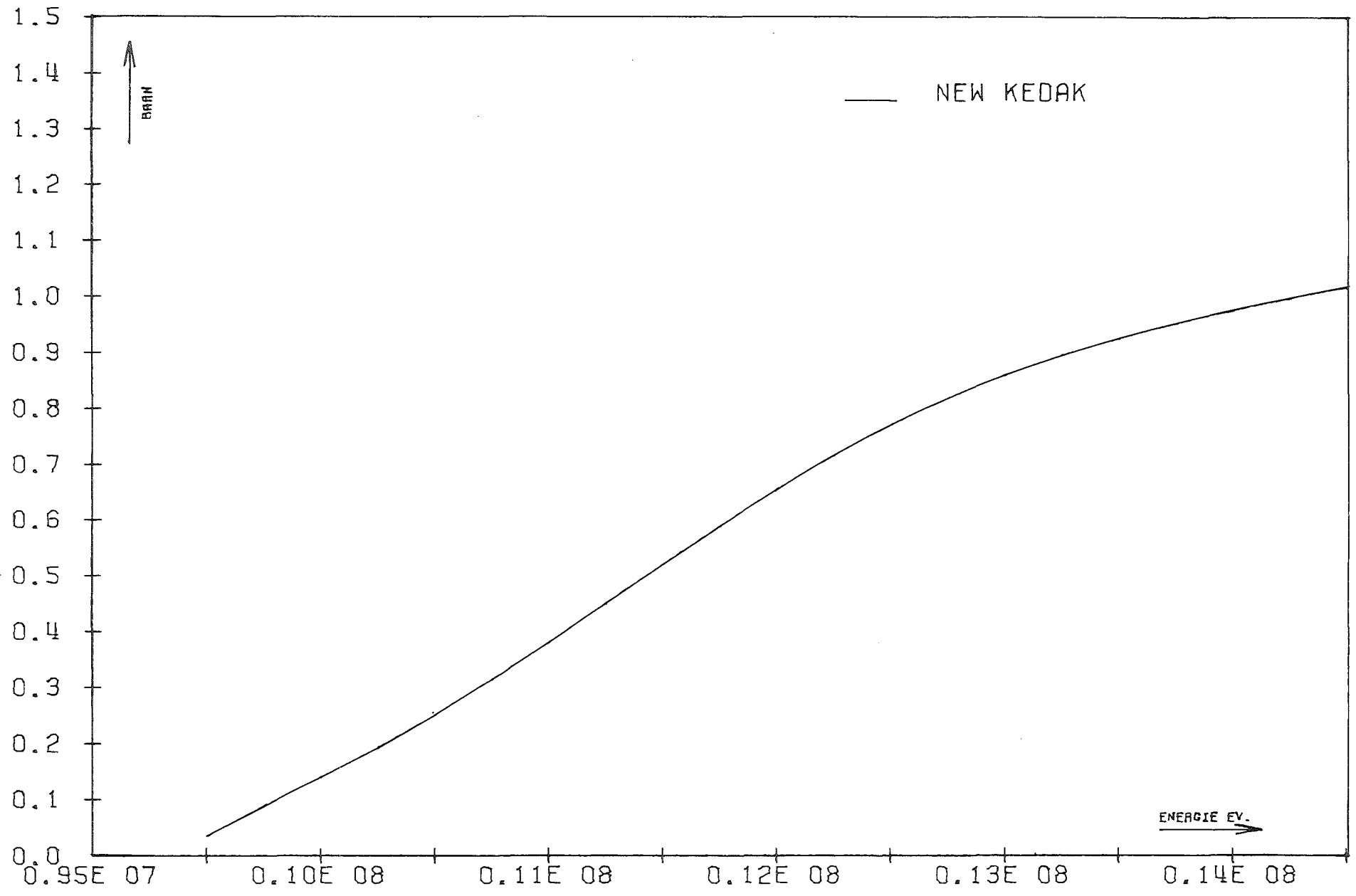


FIG. 48 NI 64 SG2N INR901N1 16.06 18.02.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 10 eV	MO
2	SGG	''	
3	SGN	''	
4	SGTR	''	
5	SGT	10 eV to 100 eV	
6	SGG	''	
7	SGN	''	
8	SGTR	''	
9	SGT	100 eV to 300 eV	
10	SGG	''	
11	SGN	''	
12	SGTR	''	
13	SGT	300 eV to 500 eV	
14	SGG	''	
15	SGN	''	
16	SGTR	''	
17	SGT	500 eV to 700 eV	
18	SGG	''	
19	SGN	''	
20	SGTR	''	
21	SGT	700 eV to 1 keV	
22	SGG	''	
23	SGN	''	
24	SGTR	''	
25	SGT	1 keV to 10 keV	
26	SGG	''	
27	SGN	''	
28	SGTR	''	
29	SGT	10 keV to 1 MeV	
30	SGG	''	
31	SGX	''	
32	SGN	''	
33	SGTR	''	
34	MUEL	''	
35	SGT	1 MeV to 15 MeV	
36	SGG	''	
37	SGA	''	
38	SGX	''	
39	SGN	''	
40	SGTR	''	
41	MUEL	''	
42	SGI	''	
43	SGIZ	''	
	E* = 0.203 MeV	''	
44	E* = 0.530 MeV	''	
45	E* = 0.785 MeV	''	
46	E* = 0.930 MeV	''	
47	E* = 1.100 MeV	''	
48	E* = 1.260 MeV	''	
49	E* = 1.500 MeV	''	
50	E* = 1.860 MeV	''	

Mo

Figure	Reaction type	Energy range	Material name
51	SGP	1 MeV to 15 MeV	MO
52	SGALP	??	
53	SG2N	??	
54	SGP	??	MO 92
55	SGALP	??	
56	SG2N	??	
57	SGP	??	MO 94
58	SGALP	??	
59	SG2N	??	
60	SGP	??	MO 95
61	SGALP	??	
62	SG2N	??	
63	SGP	??	MO 96
64	SGALP	??	
65	SG2N	??	
66	SGP	??	MO 97
67	SGALP	??	
68	SG2N	??	
69	SGP	??	MO 98
70	SGALP	??	
71	SG2N	??	
72	SGP	??	MO100
73	SGALP	??	
74	SG2N	??	

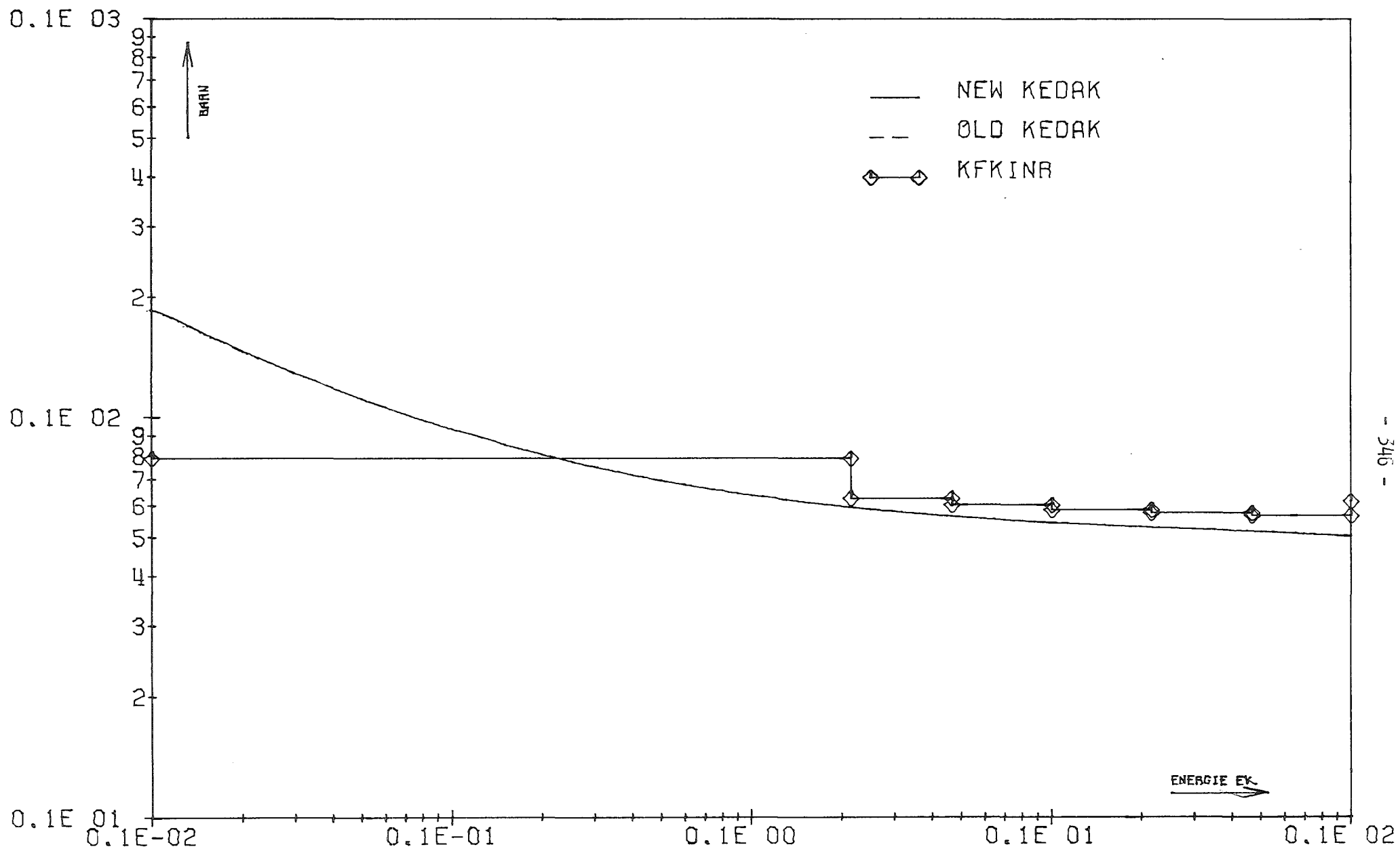


FIG. 1 MØ SGT

INR901MØ 25.01 20.44.

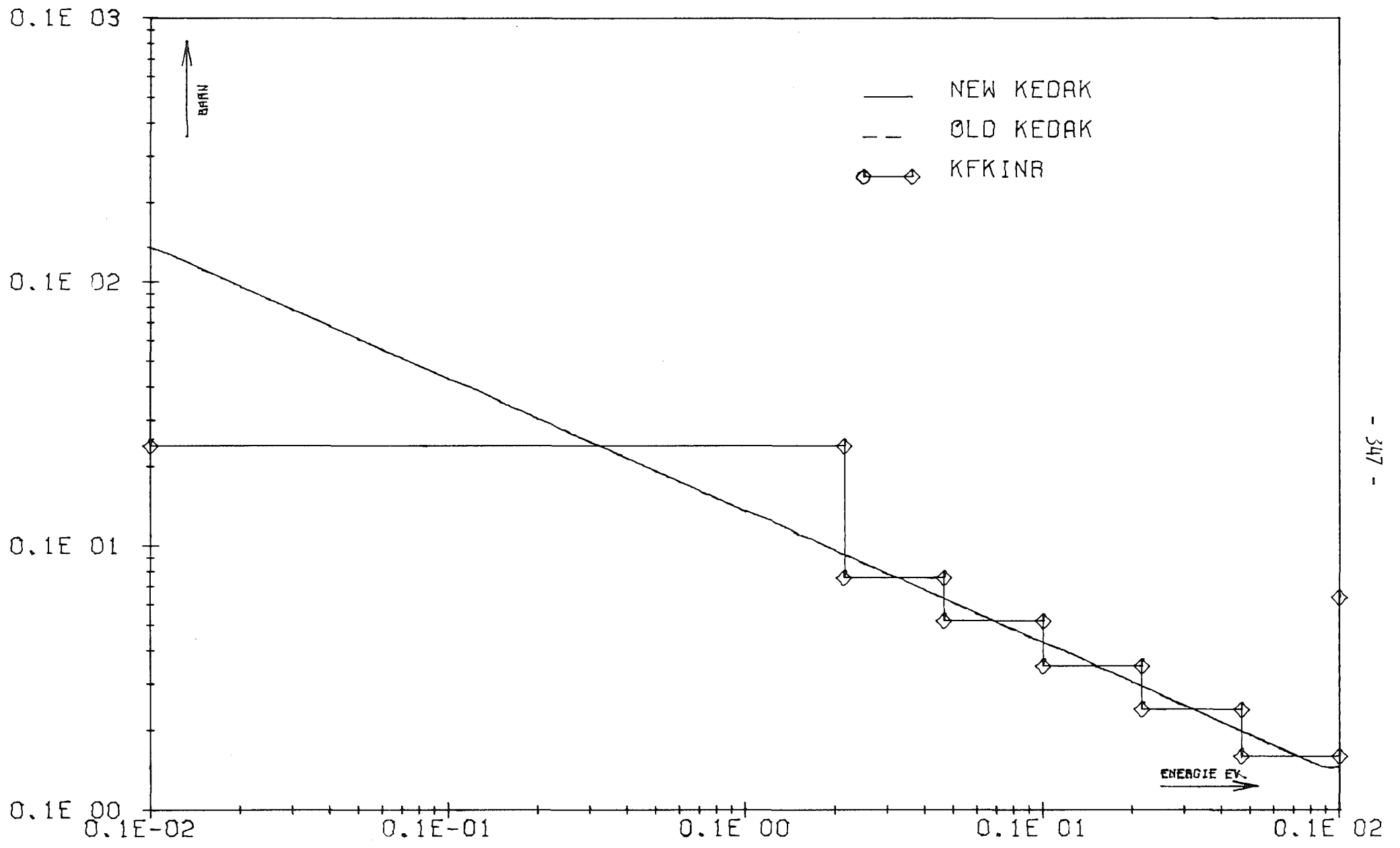


FIG. 2 M0 SGG

INR901M0 25.01 20.44.

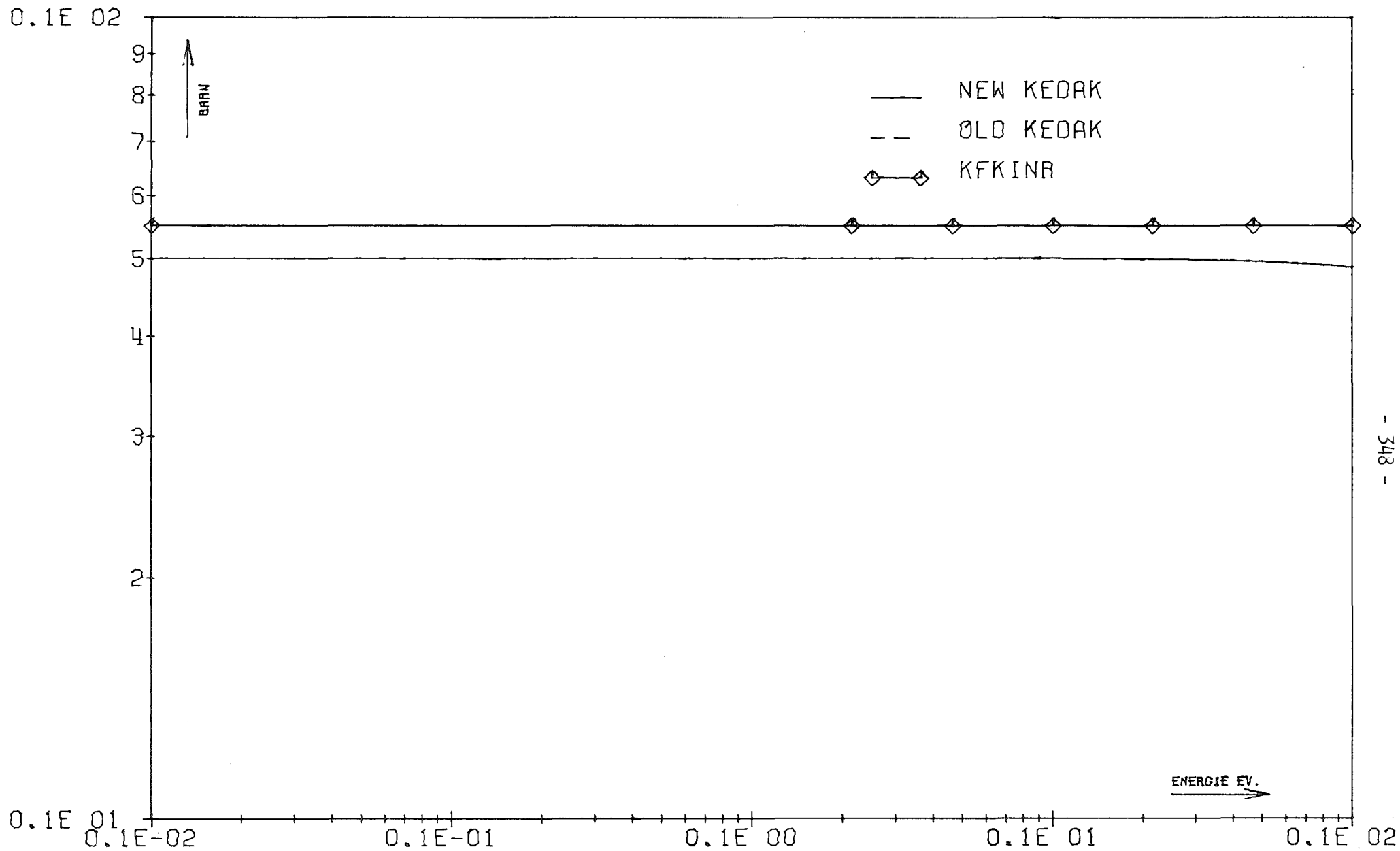


FIG. 3 MØ SGN

INR901MØ 25.01 20.44.

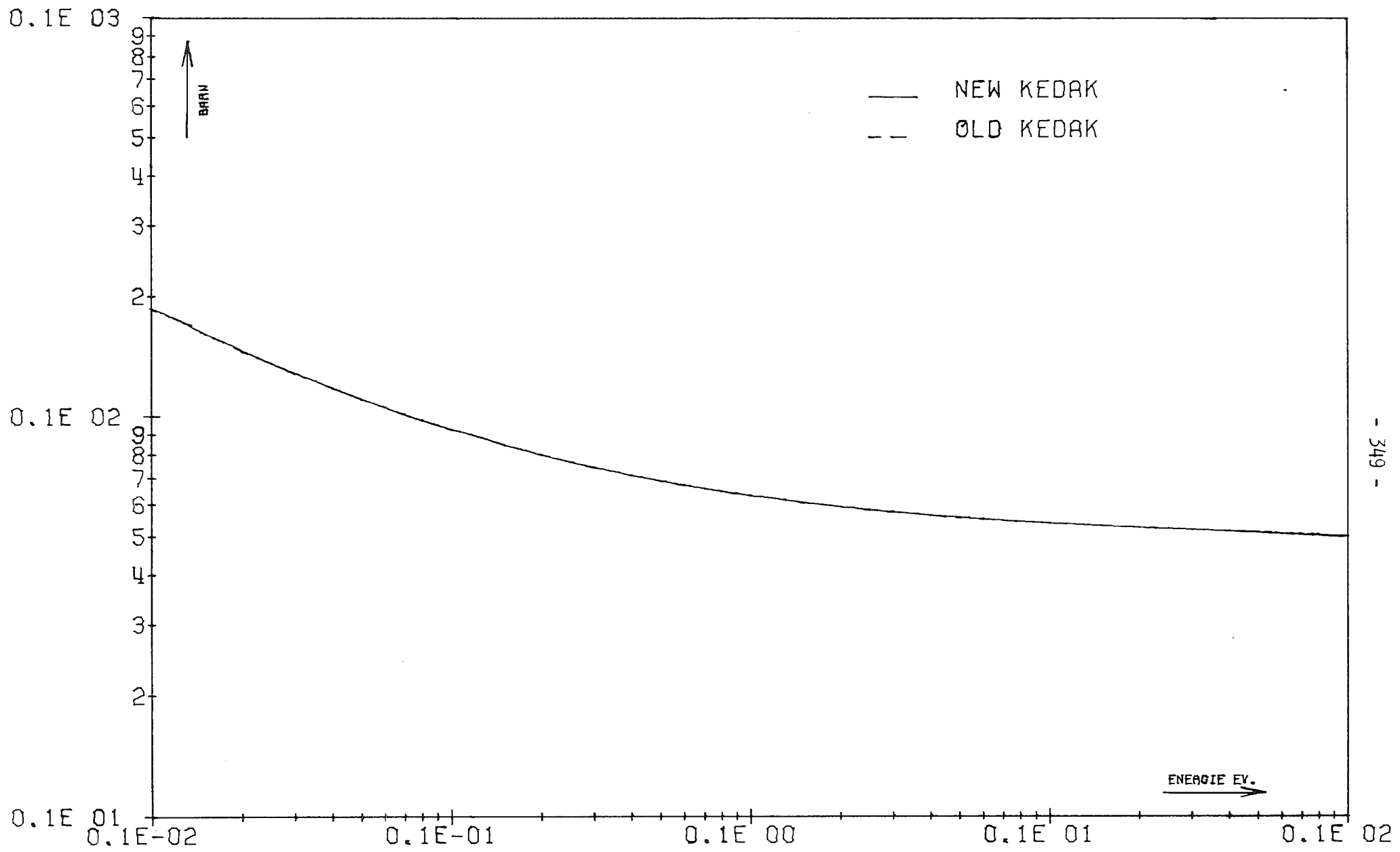
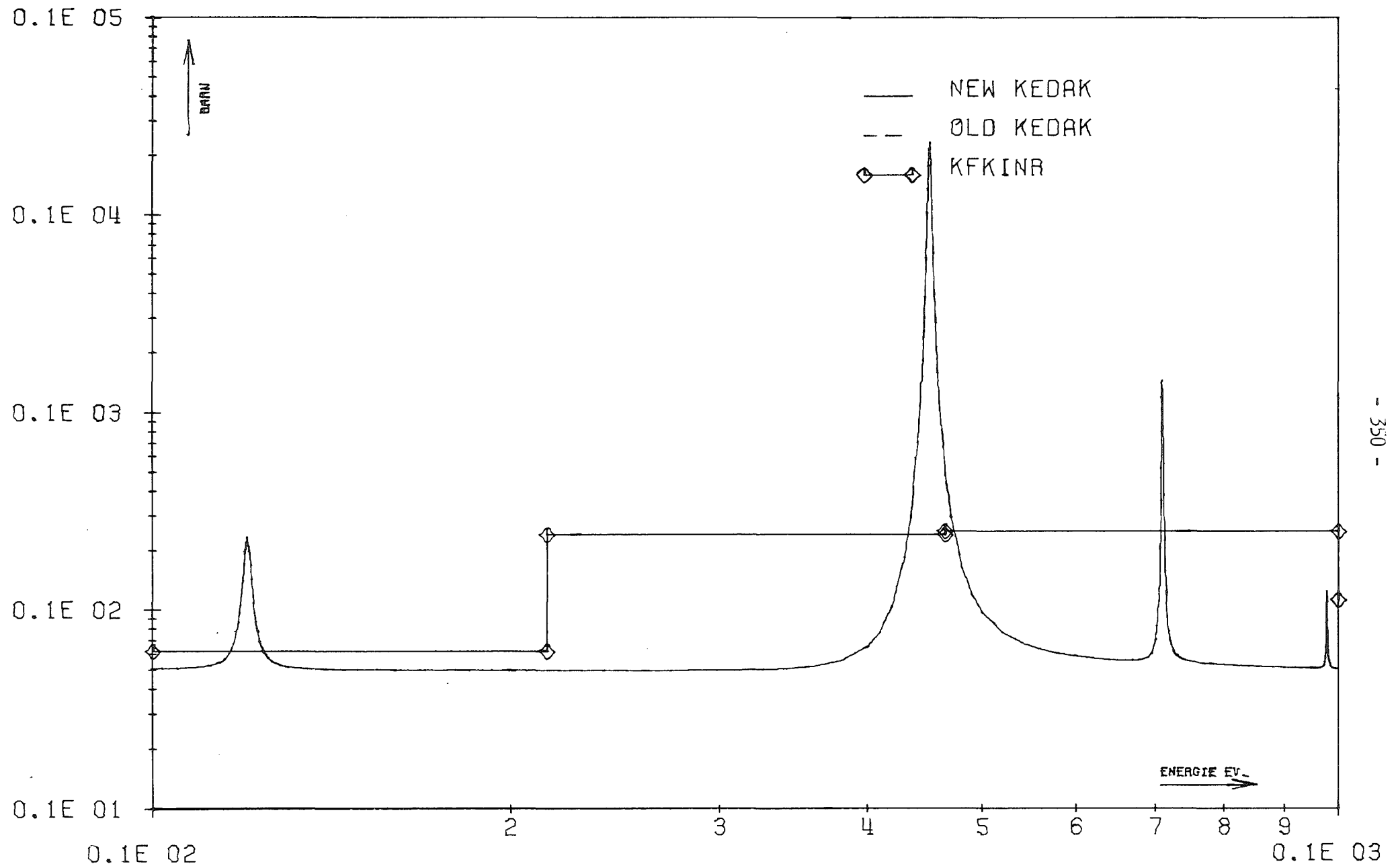


FIG. 4 MØ SGTR

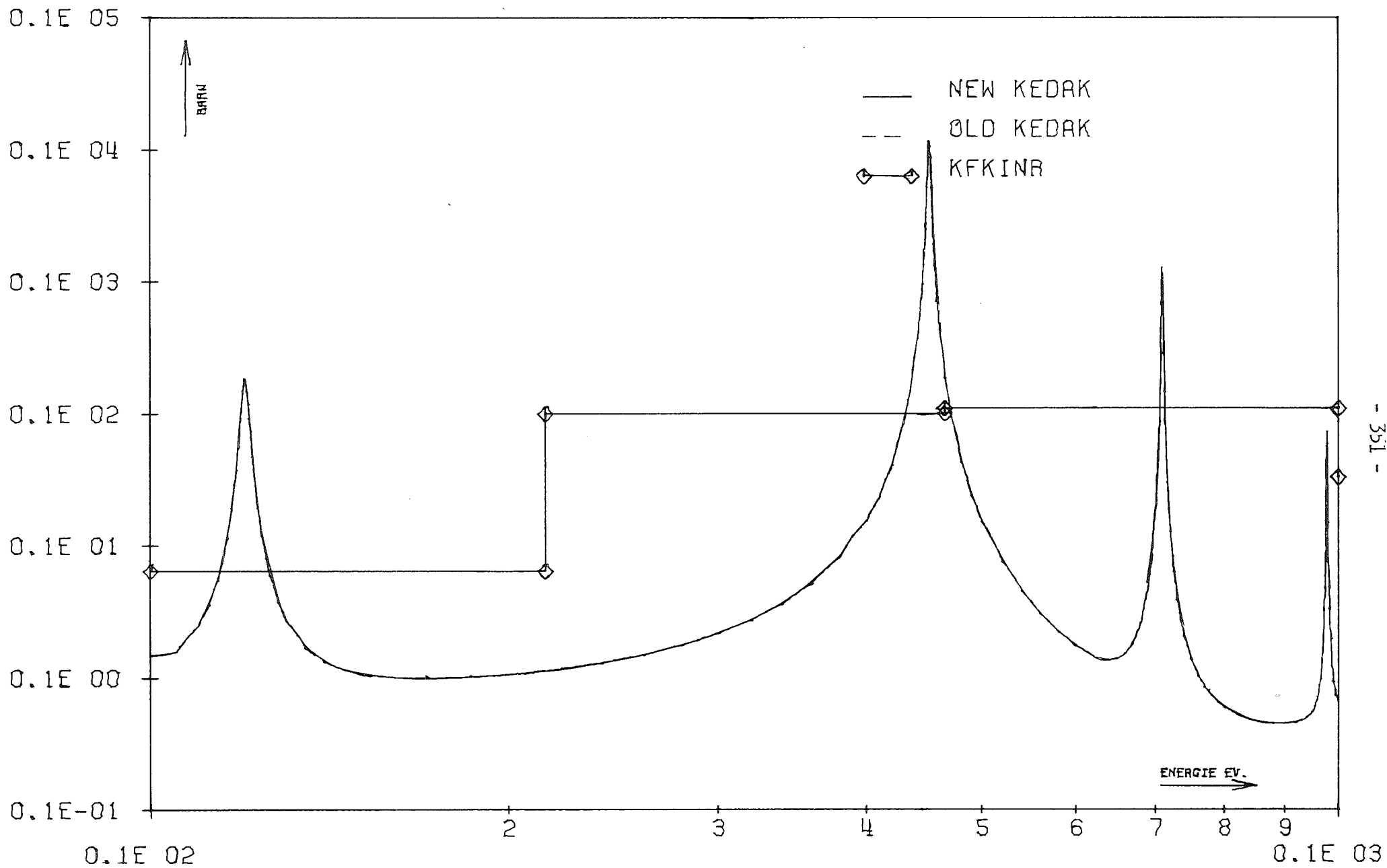
INR901MØ 25.01 20.44.



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FIG. 5 MØ SGT

INR901MØ 25.01 20.44.



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FIG. 6 MØ SGG

INR901MØ 25.01 20.44.

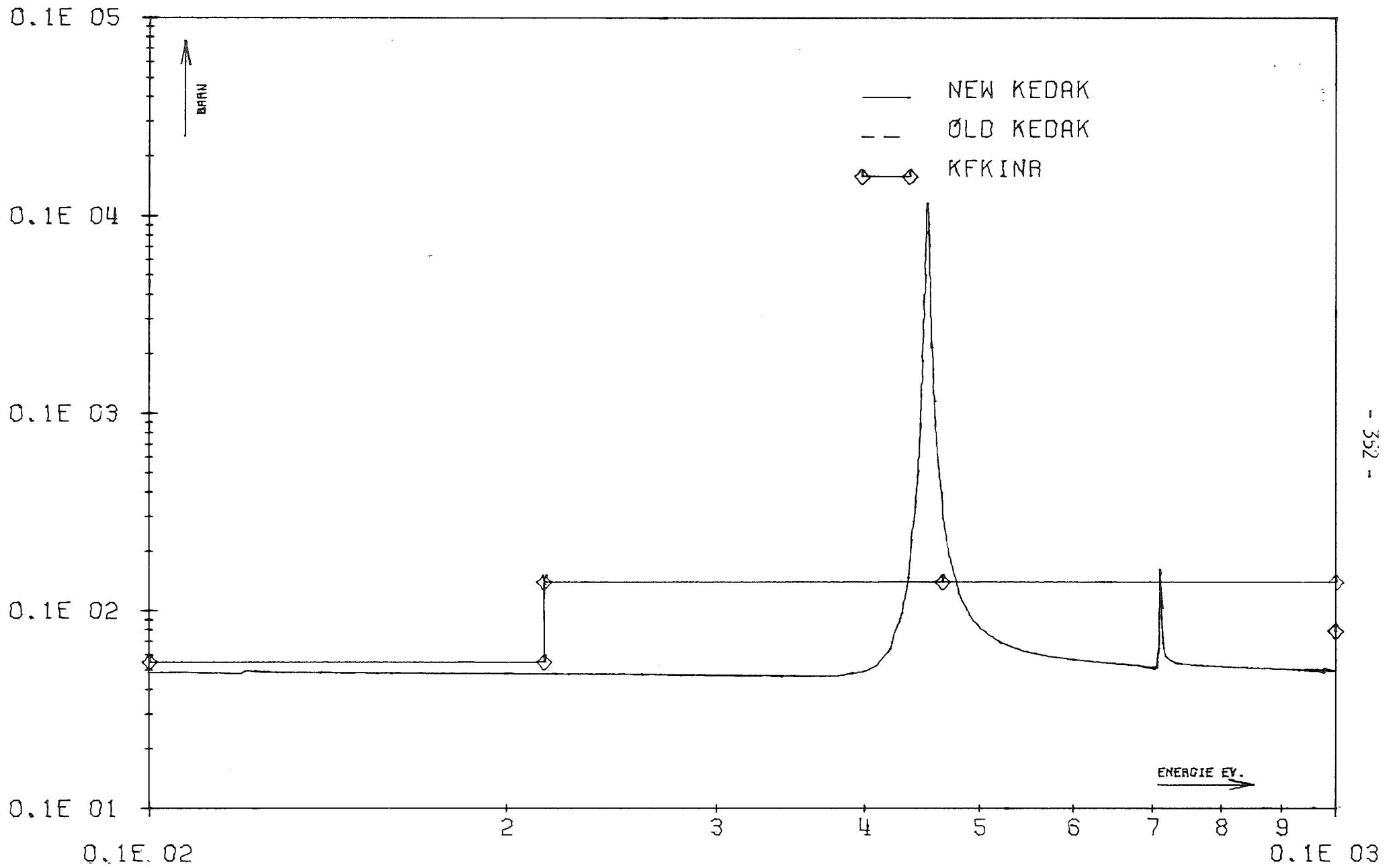
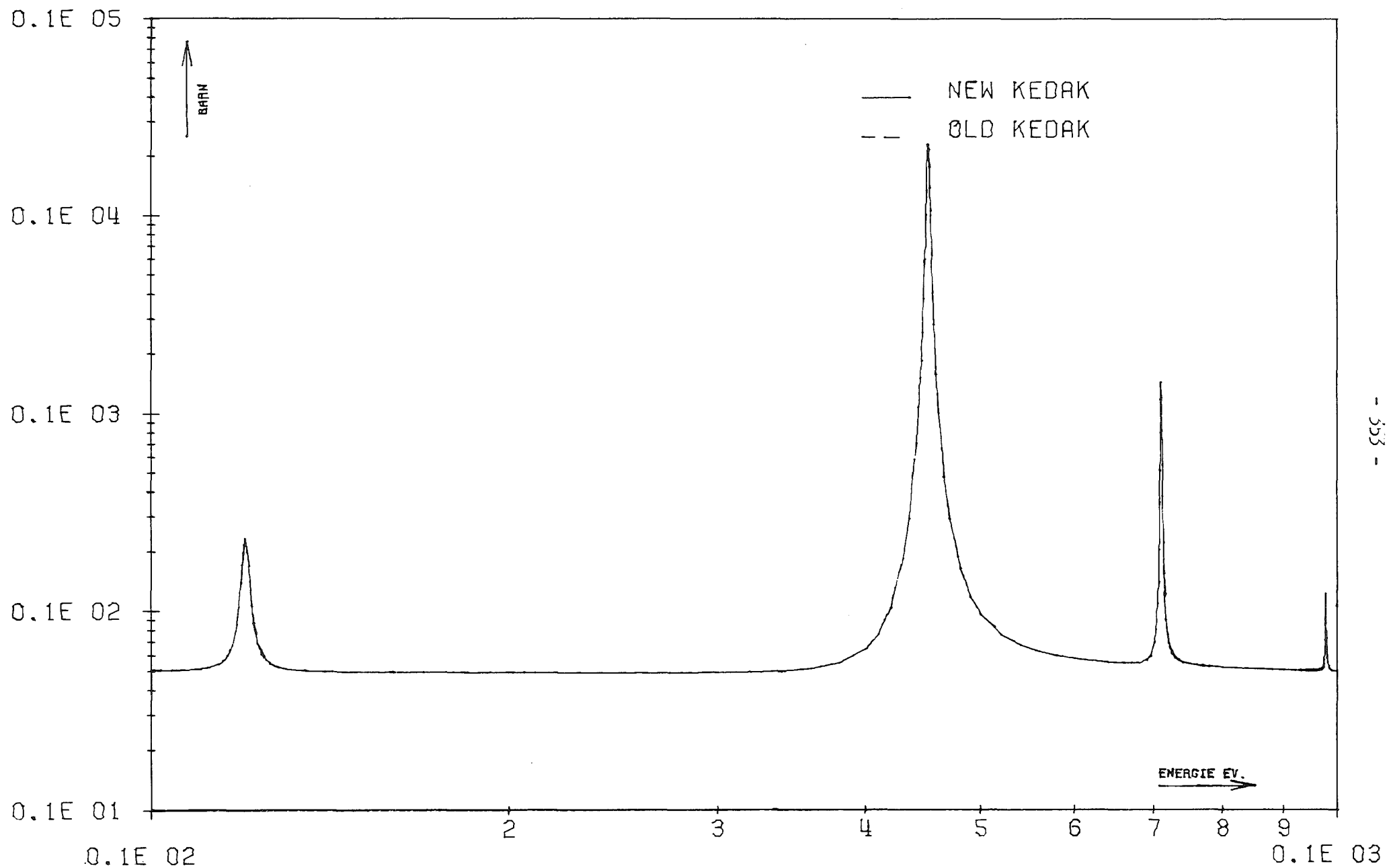


FIG. 7 MØ SGN

INR901MØ 25.01 20.44.



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FIG 8 MØ SGTR

INR901MØ 25.01 20.44.

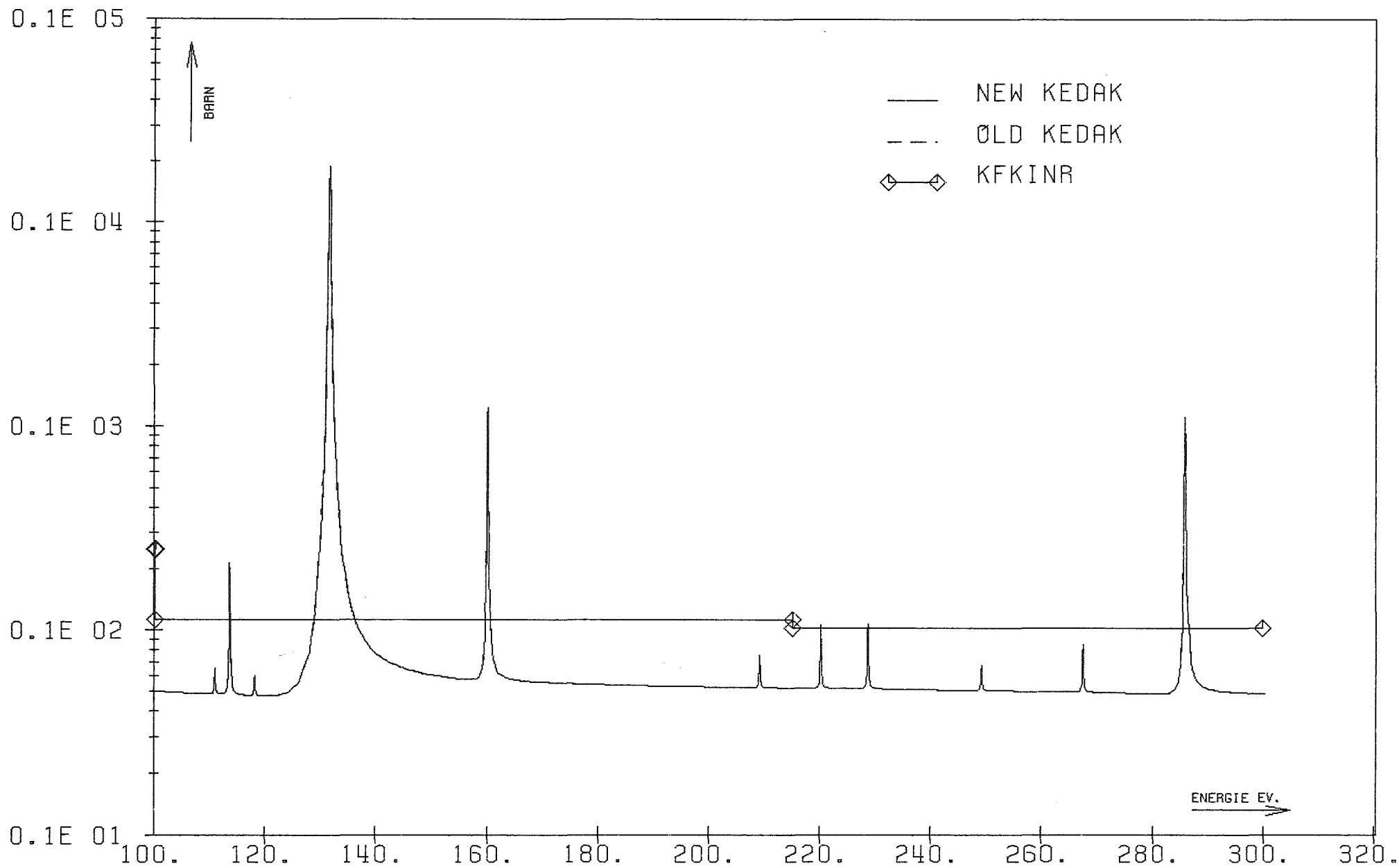


FIG. 9 MØ SGT

INR901MØ 04.08 14.48.

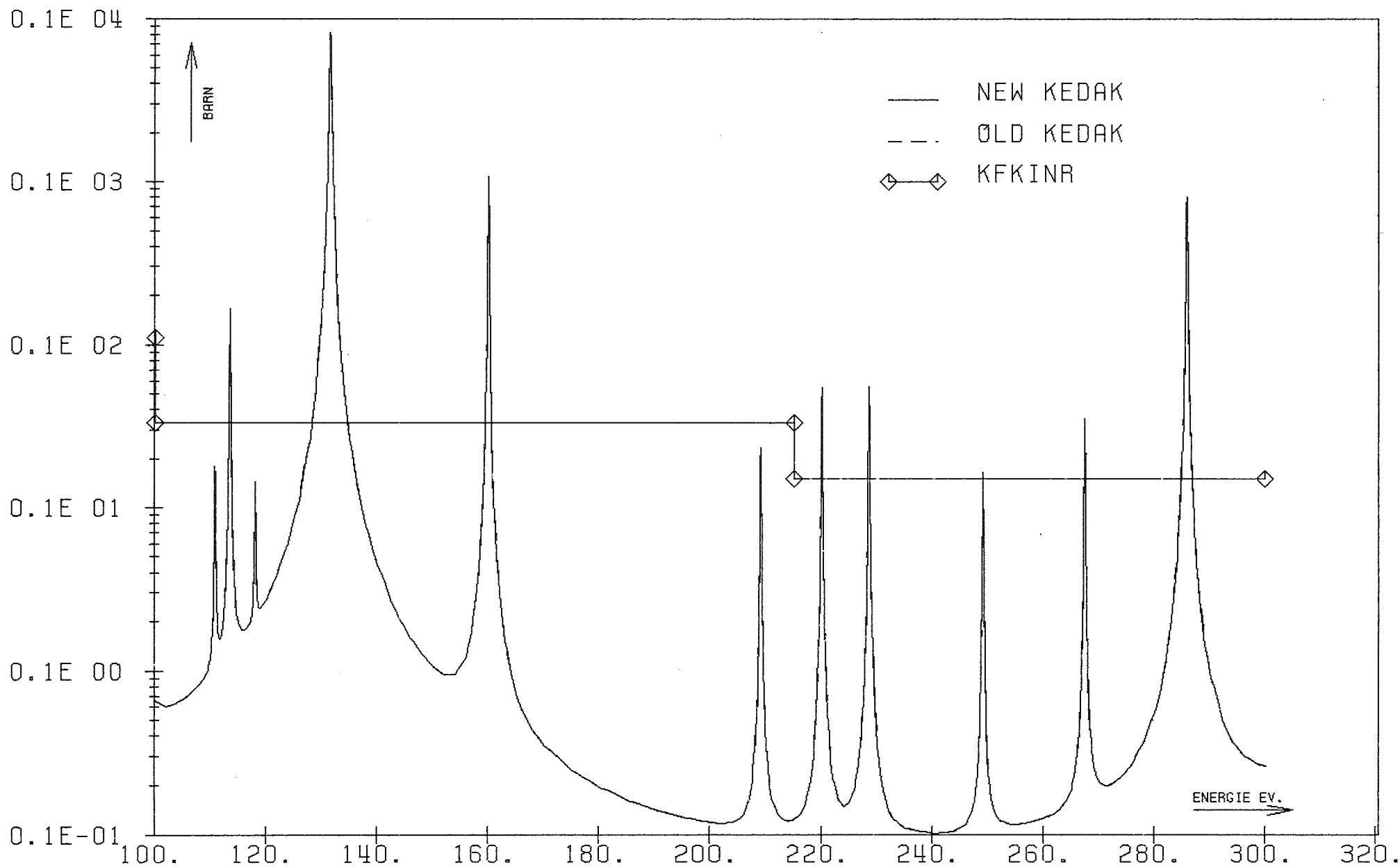


FIG. 10

M0 SGG

INR901M0 04.08 14.48.

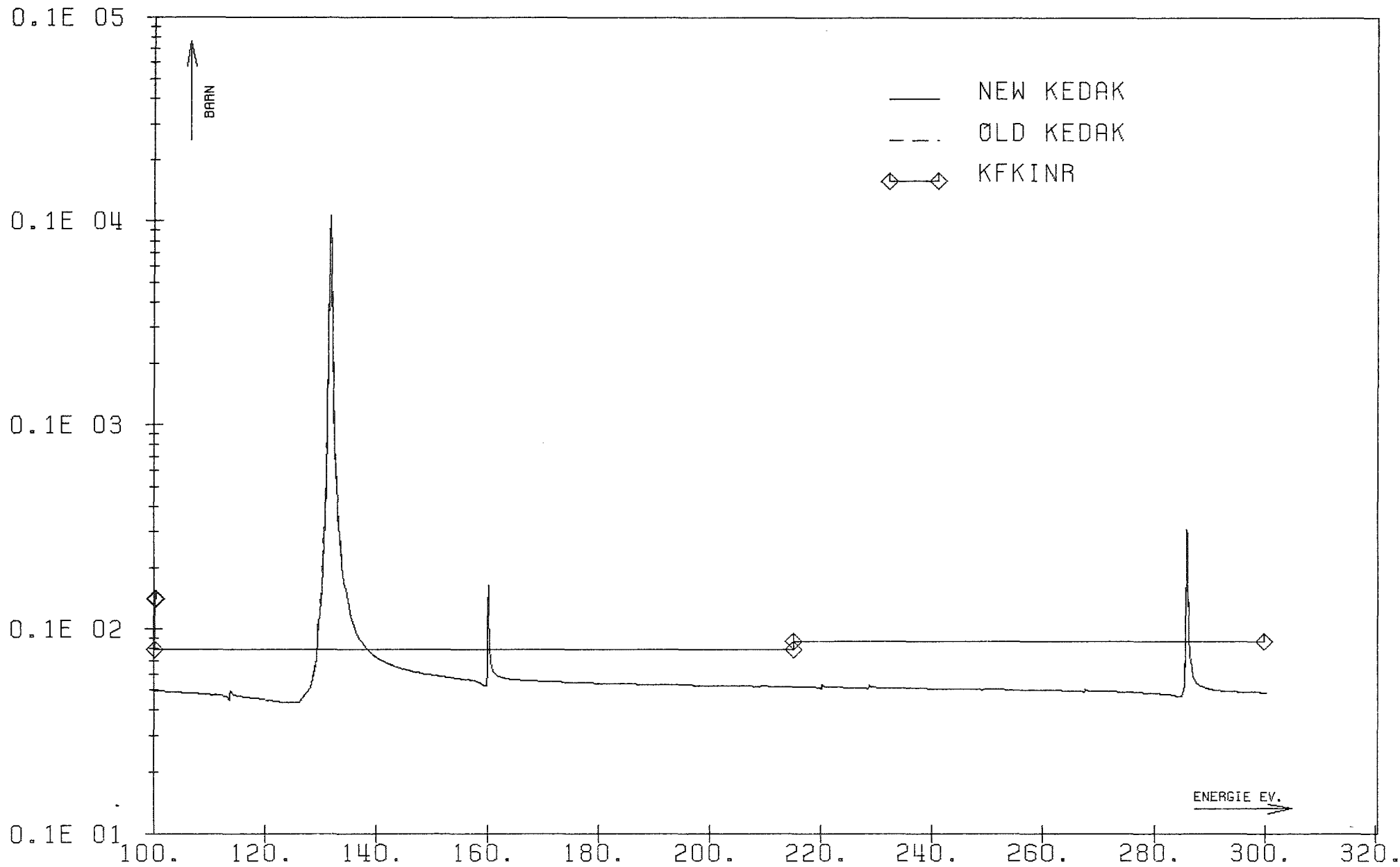


FIG. 11

MØ

SGN

INR901MØ 04.08 14.48.

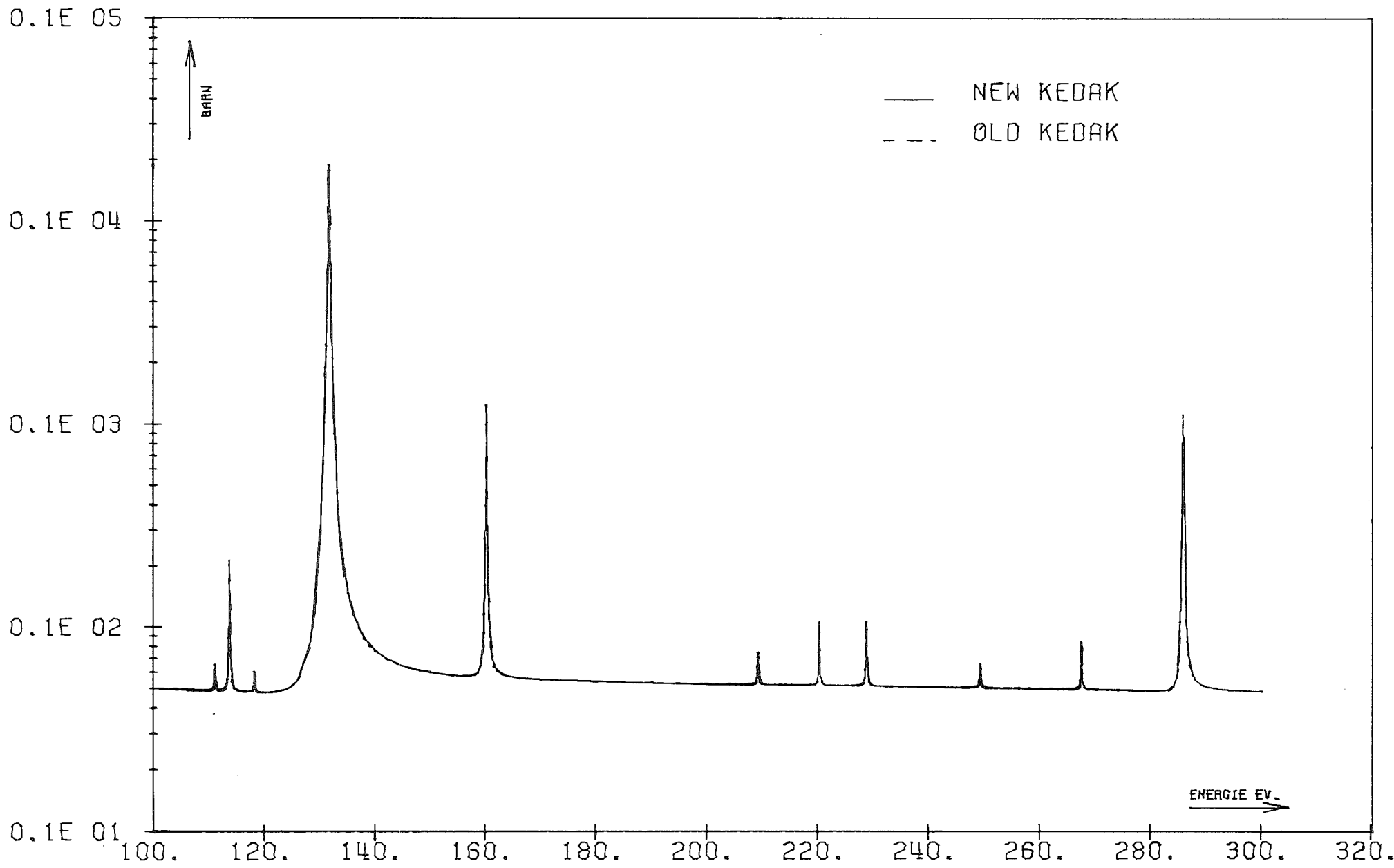


FIG. 12 MO SGTR

INR901MO 25.01 20.44.

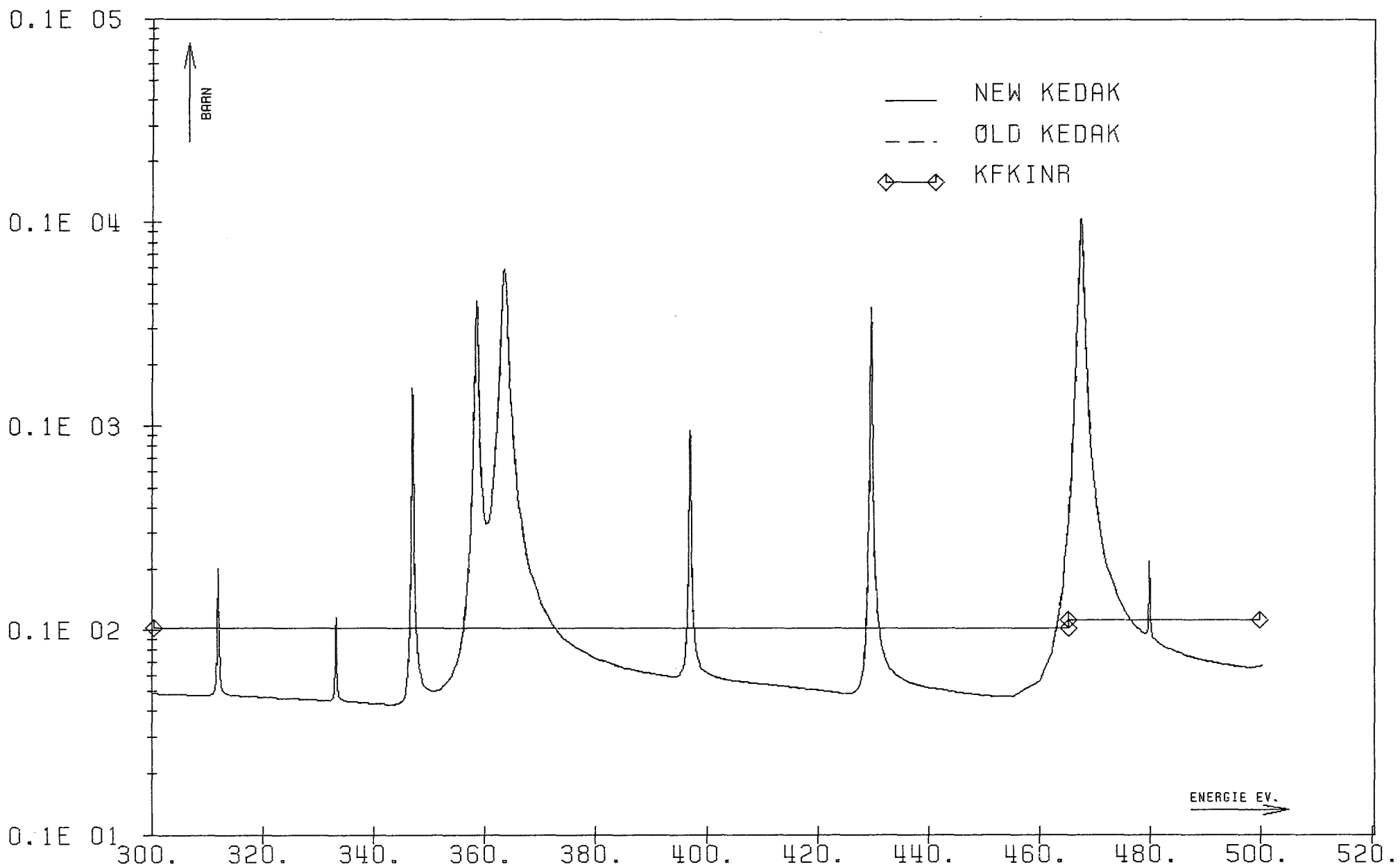


FIG. 13

M0

SGT

INR901M0 04.08 14.48.

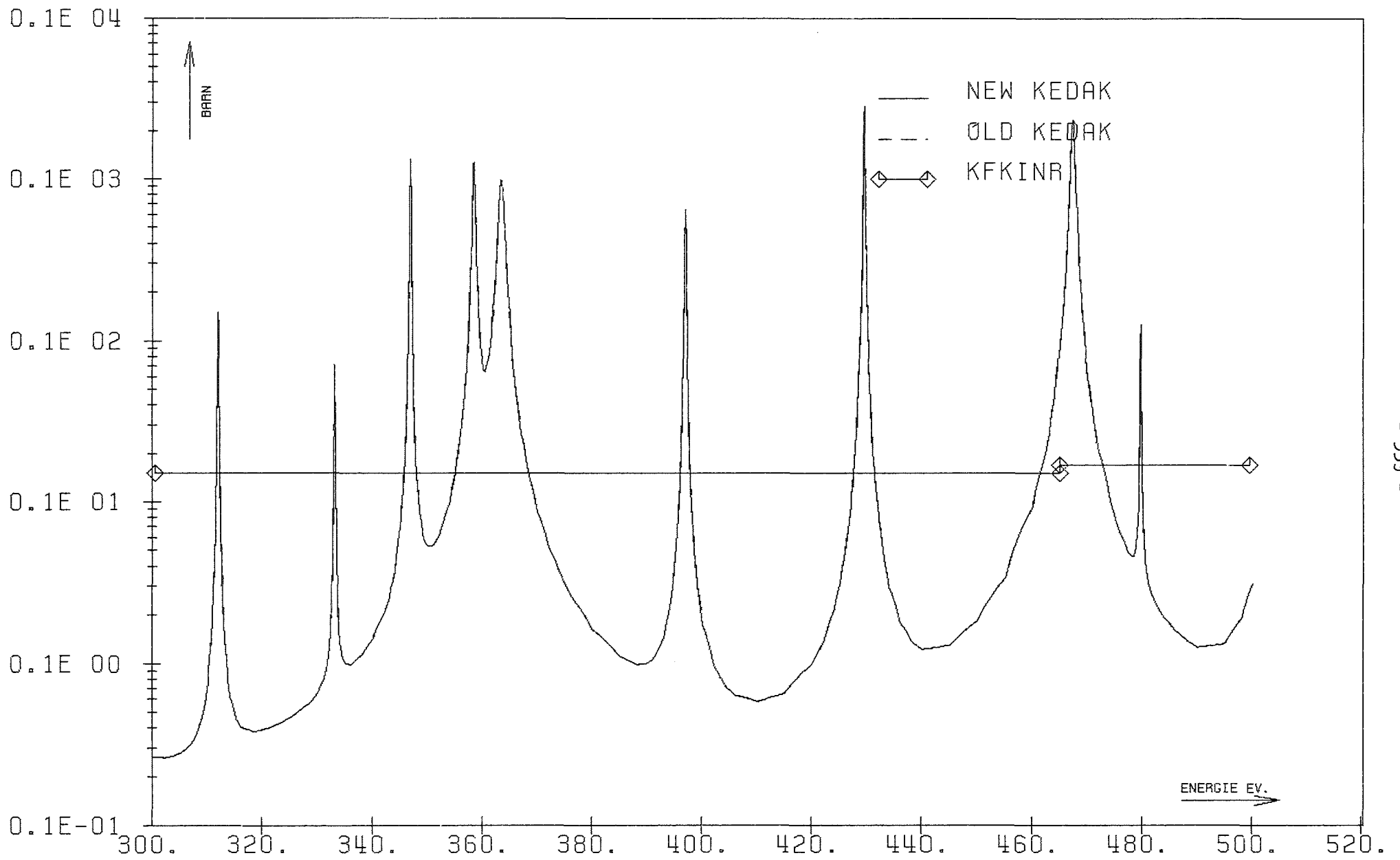


FIG 14 MØ SGG

INR901MØ 04.08 14.48.

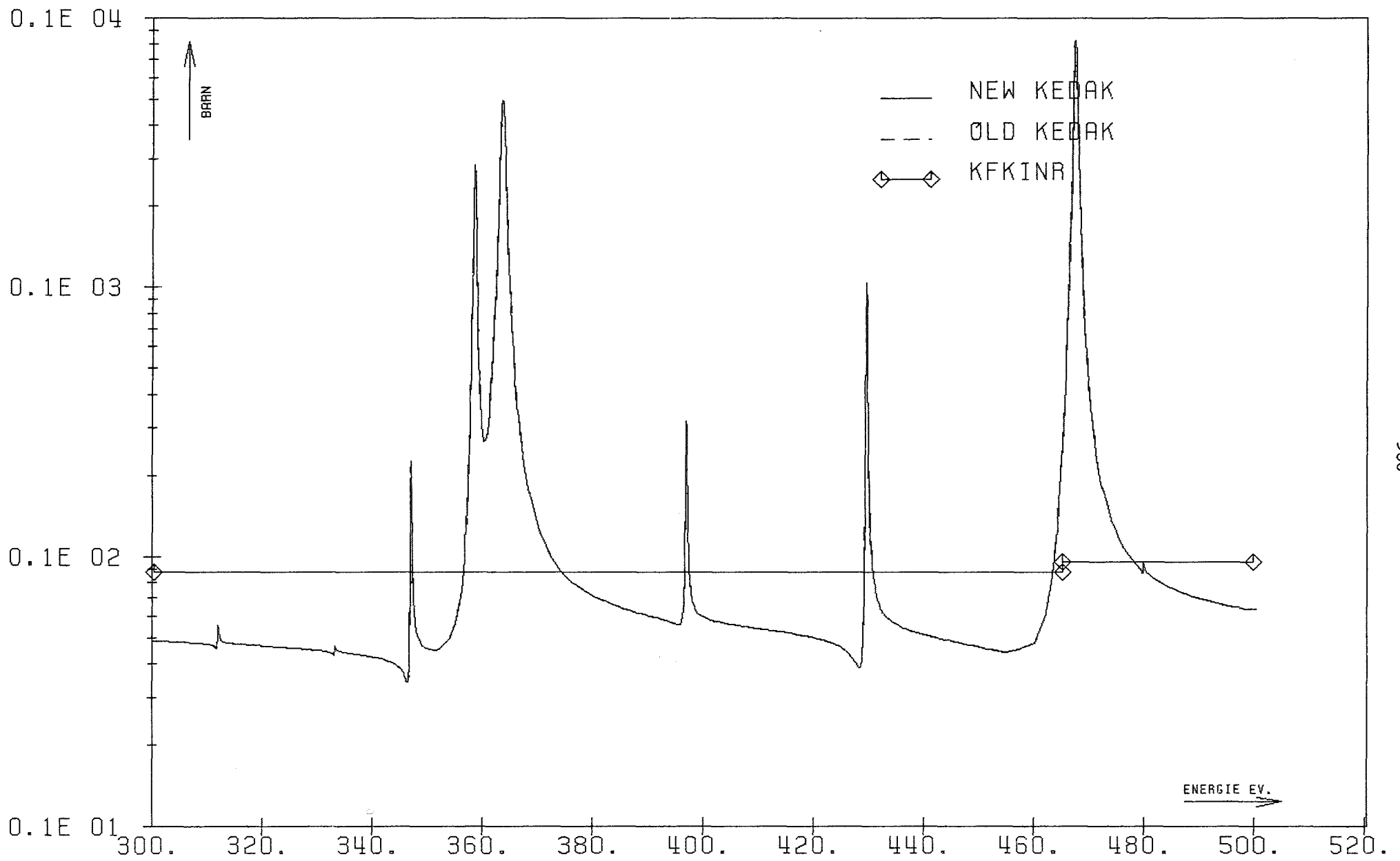


FIG. 15 MØ SGN

INR901MØ 04.08 14.49.

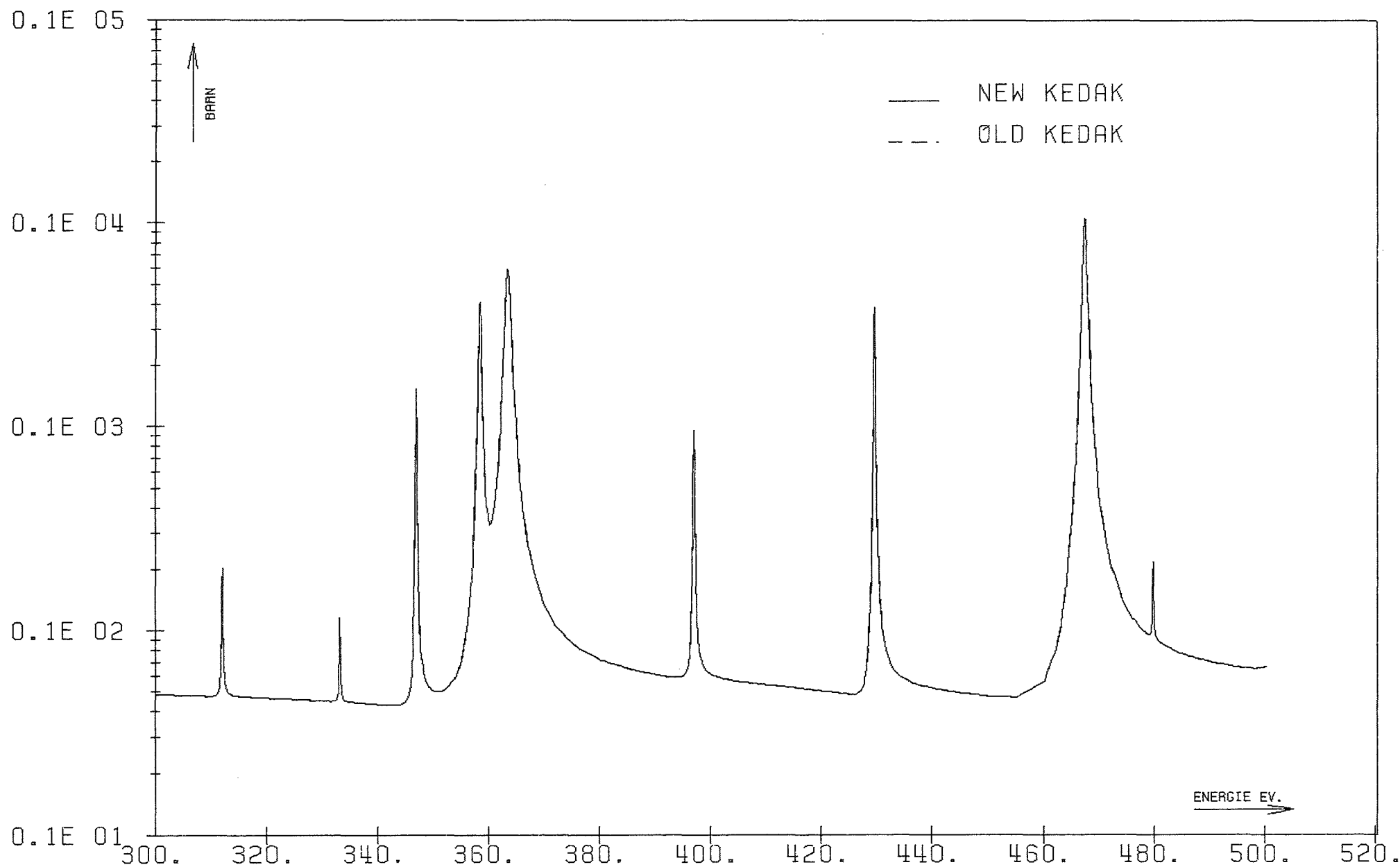


FIG. 16 MØ SGTR INR901MØ 04.08 14.49.

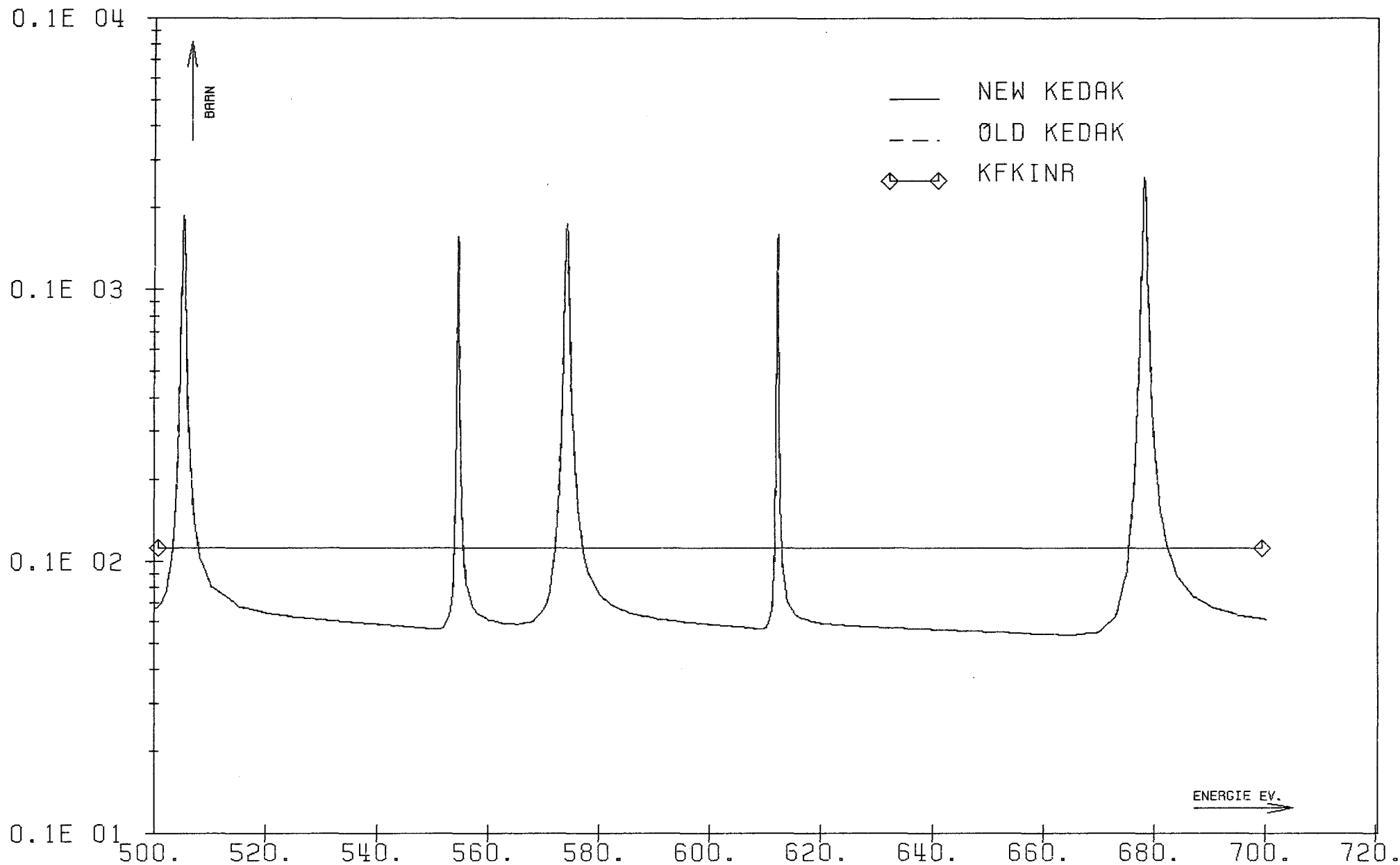


FIG. 17

MØ

SGT

INR901MØ 04.08 14.49.

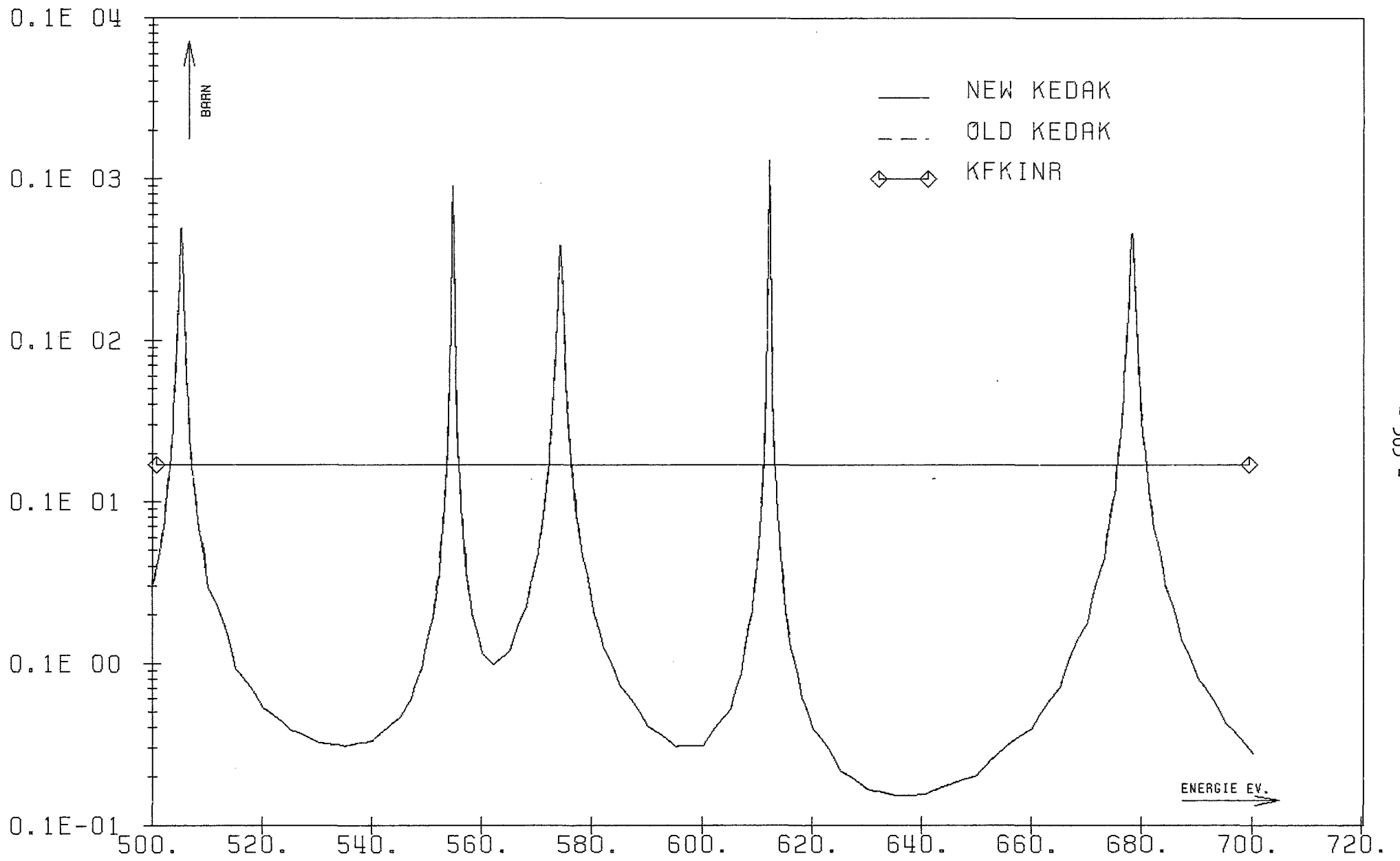


FIG. 18 MØ

SGG

INR901MØ 04.08 14.49.

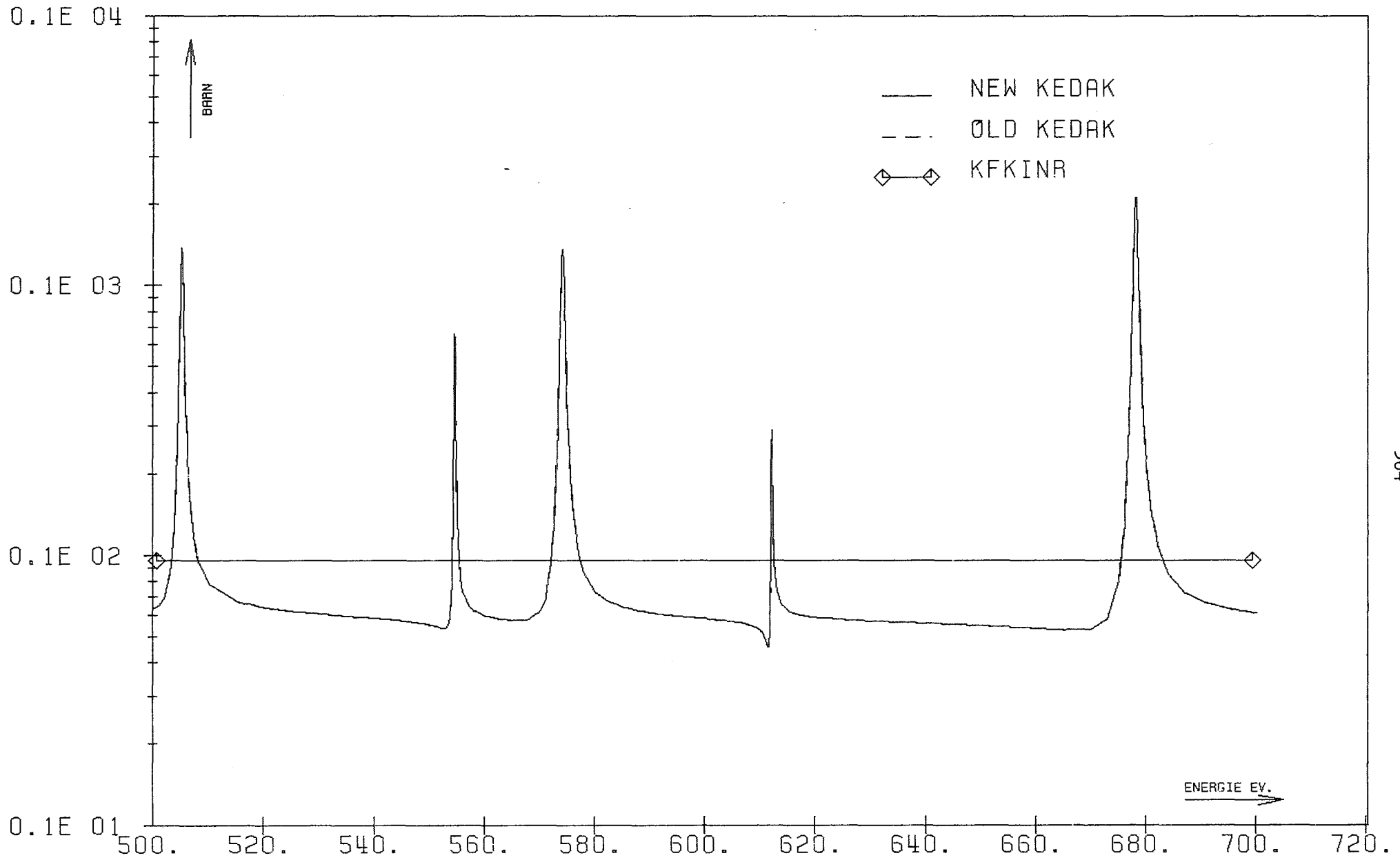


FIG. 19

MØ

SGN

INR901MØ 04.08 14.49.

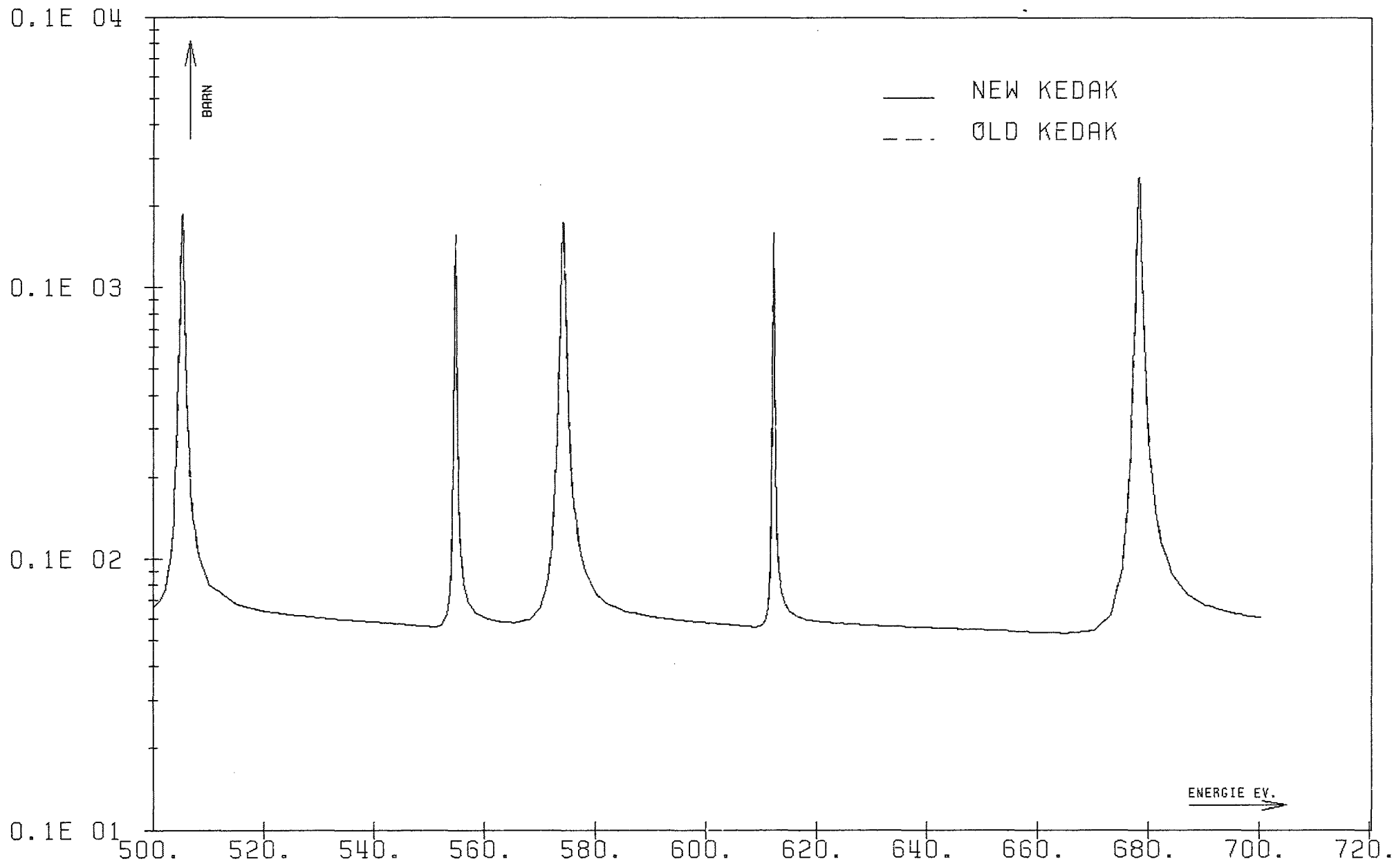


FIG. 20

MØ

SGTR

INR901MØ 04.08 14.49.

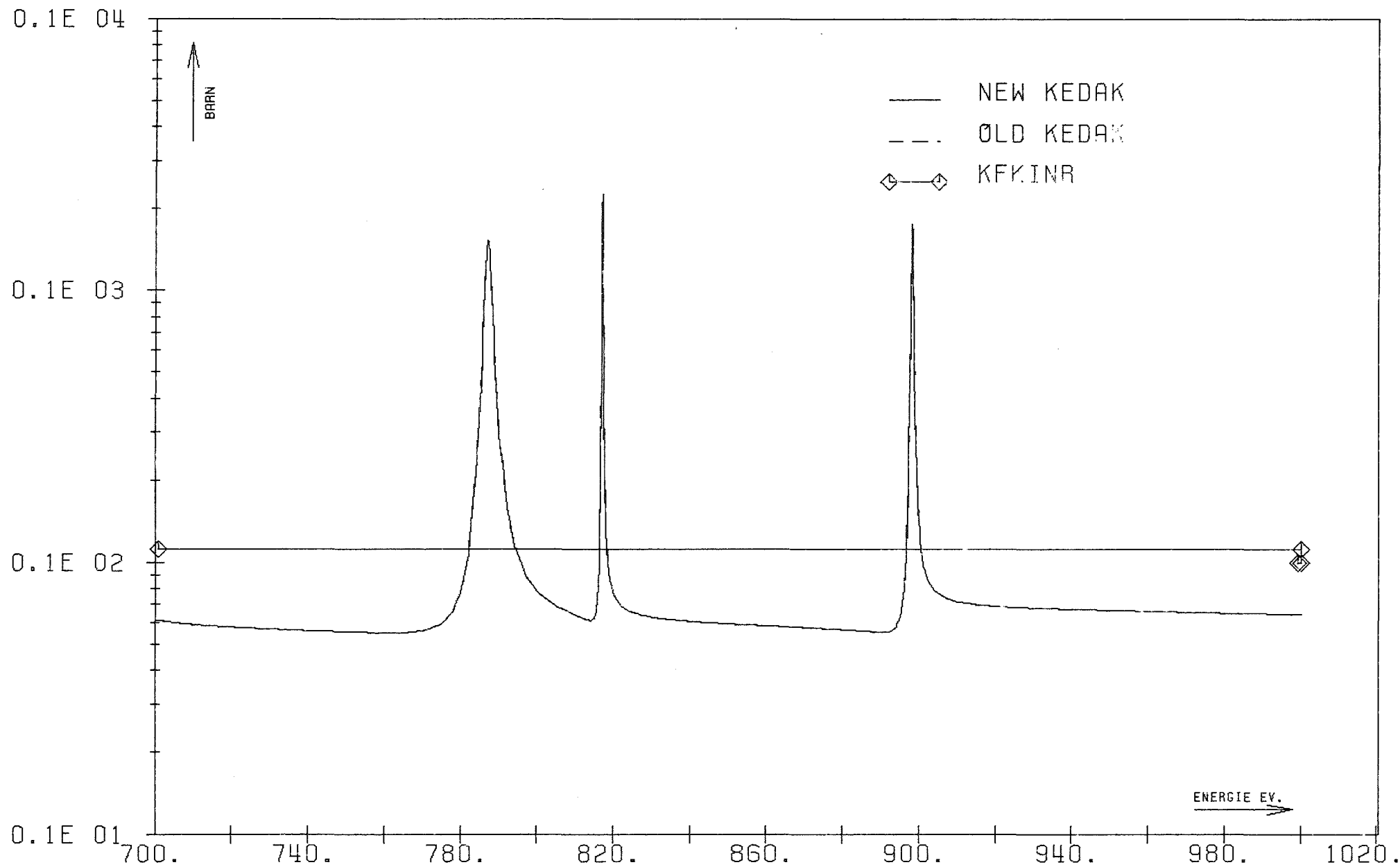


FIG. 21 MØ SGT

INR901MØ 05.08 16.25.

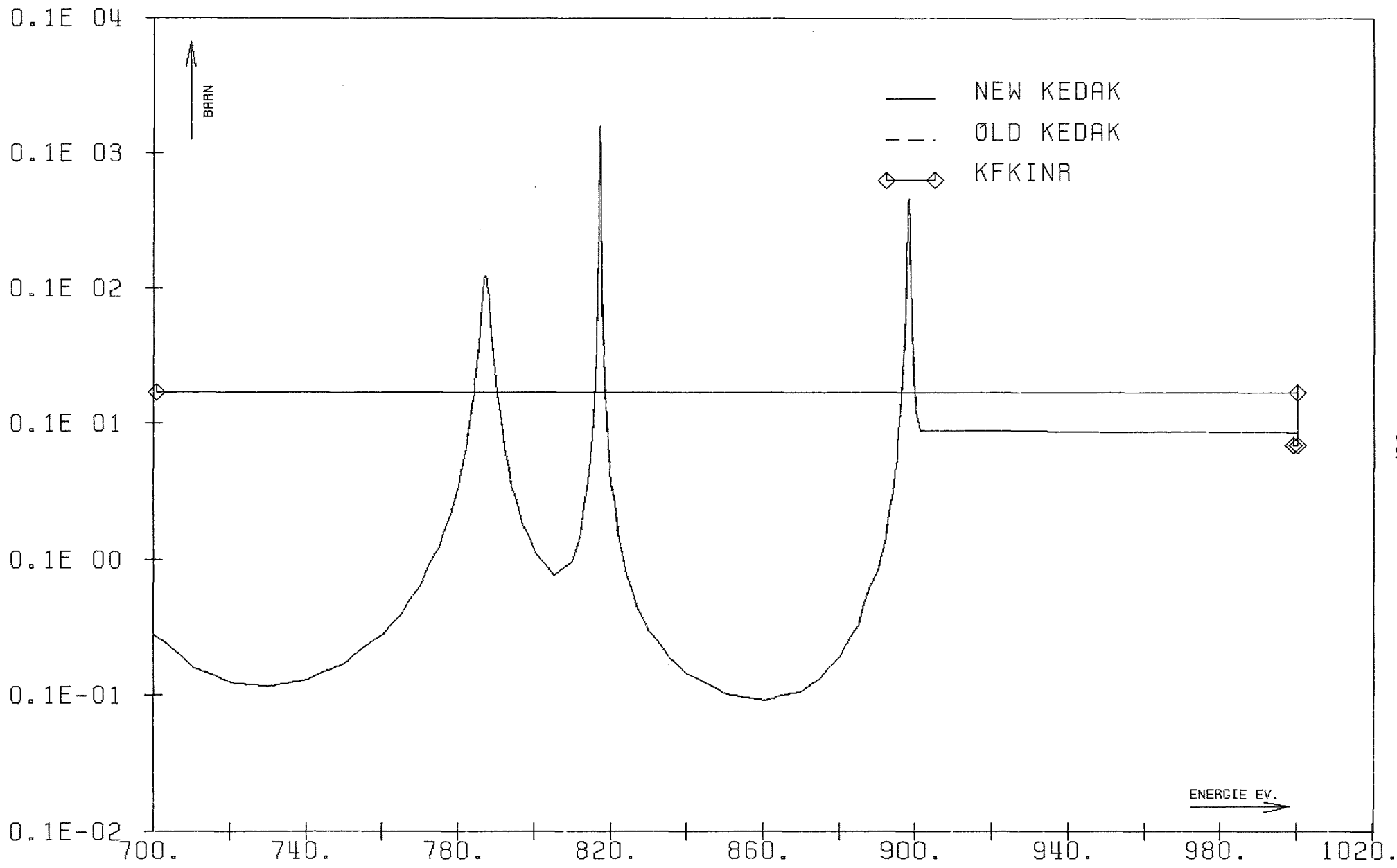


FIG. 22 MØ SGG

INR901MØ 06.08 11.38.

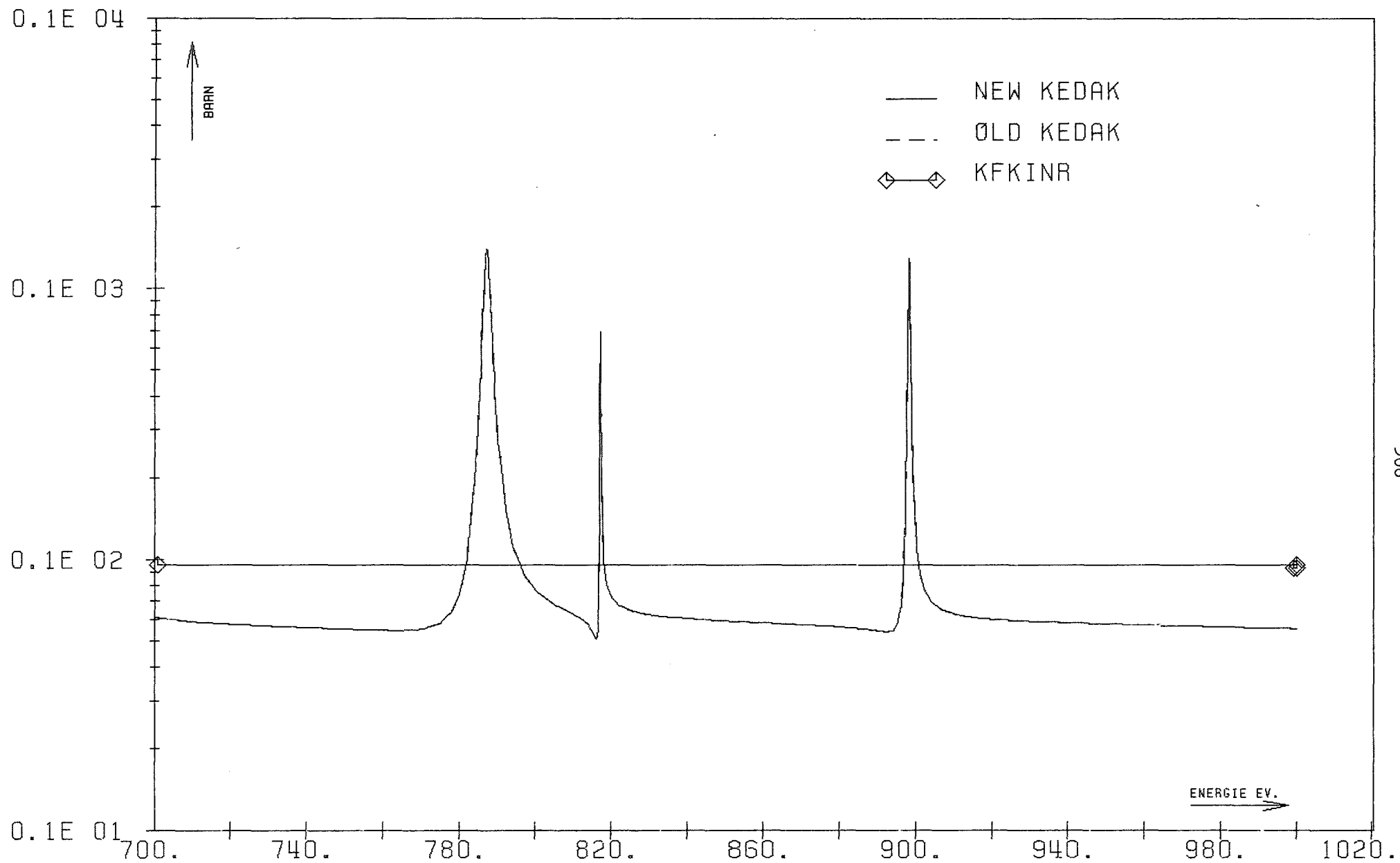


FIG. 23 MØ SGN

INR901MØ 06.08 11.38.

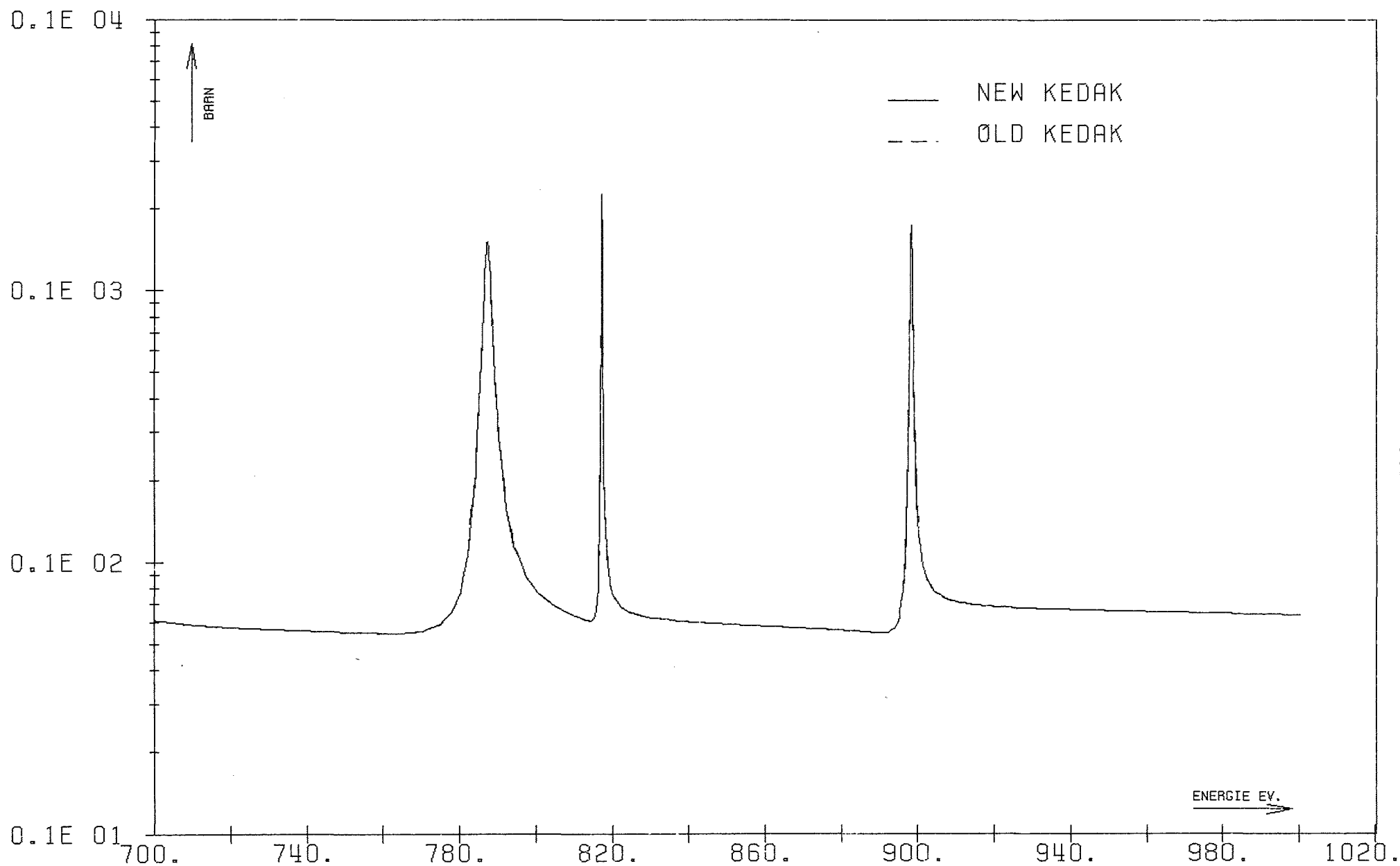


FIG. 24 MØ SGTR

INR901MØ 06.08 11.38.

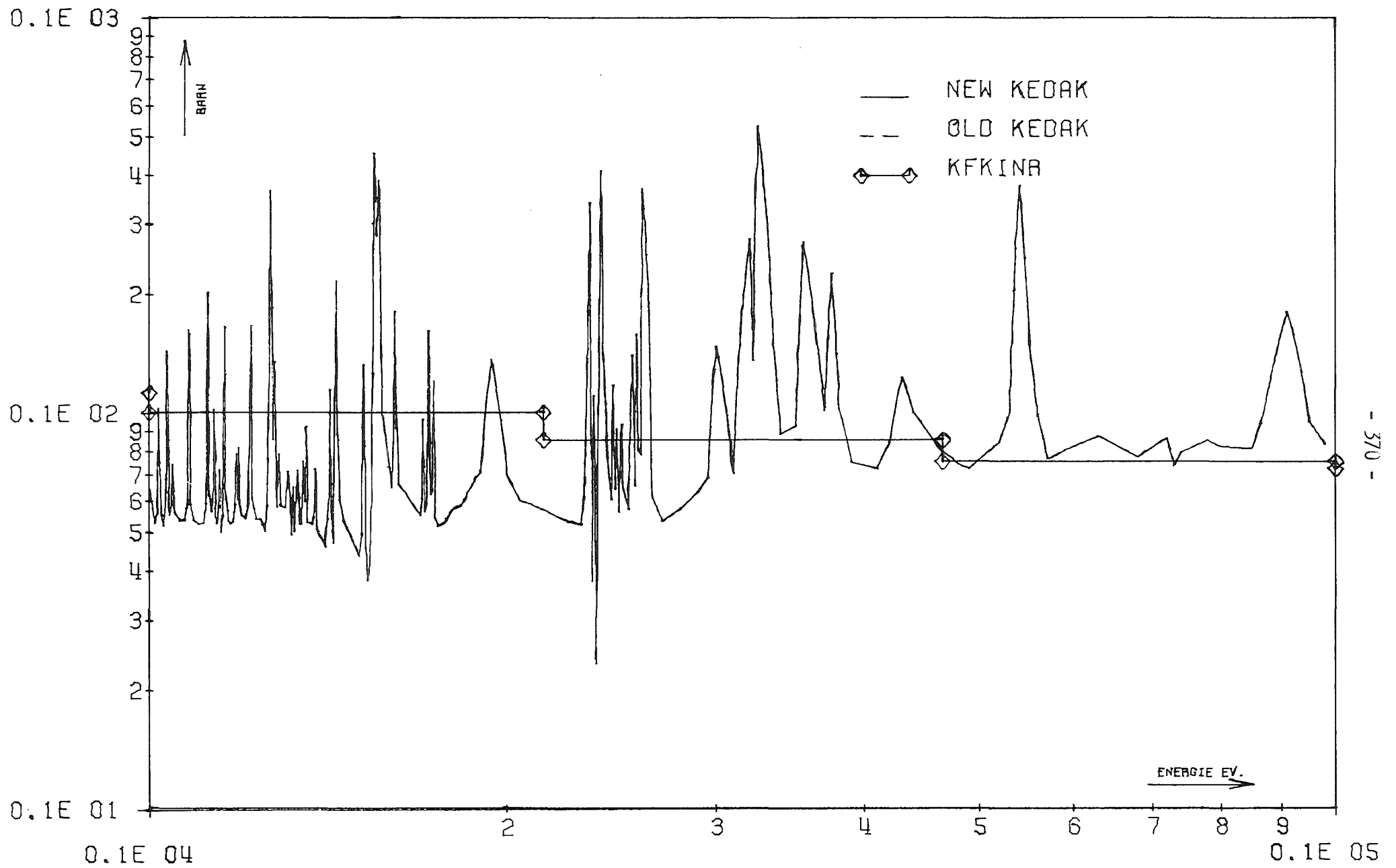


FIG. 25 MØ SGT

INR901MØ 25.01 20.45.

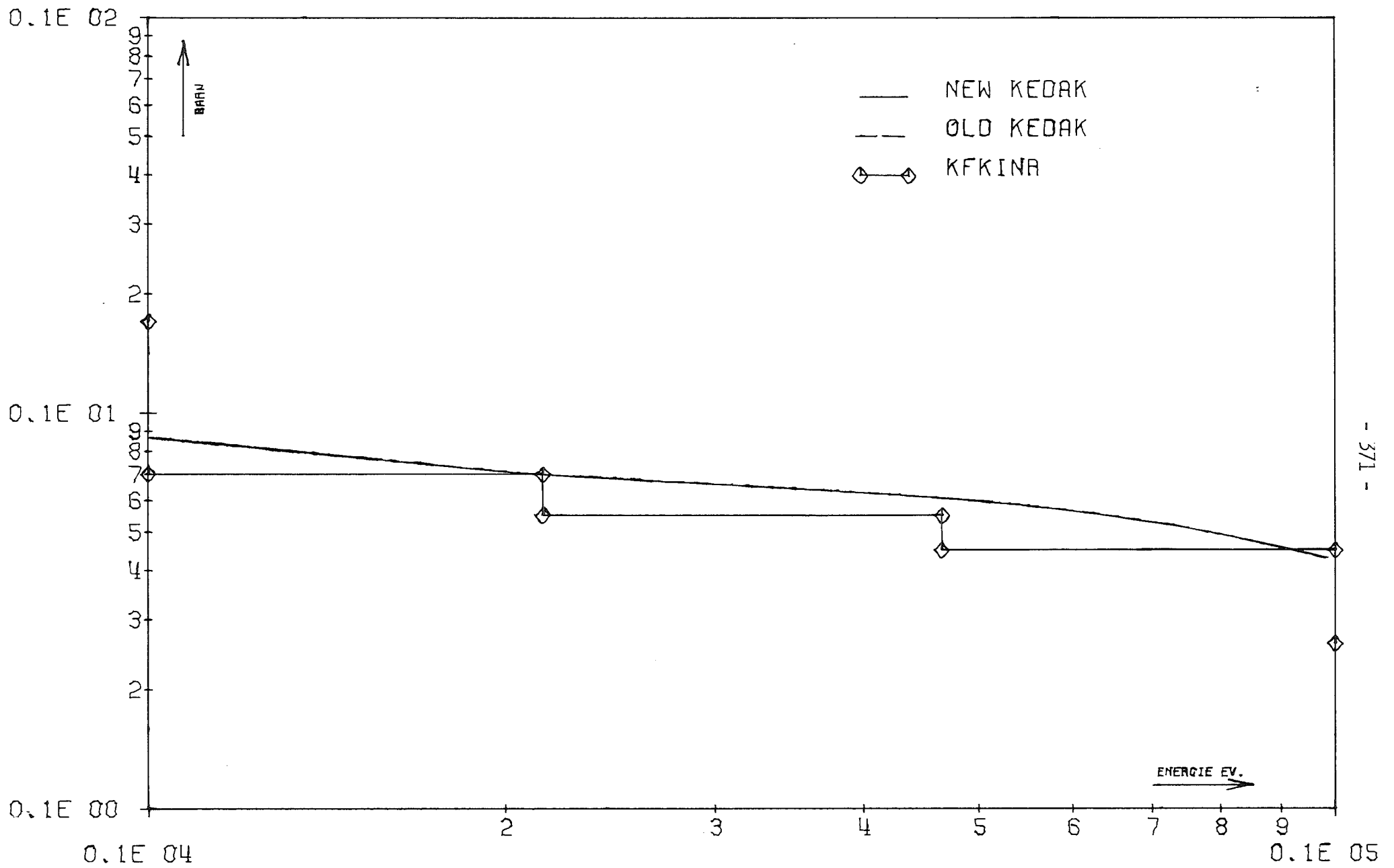
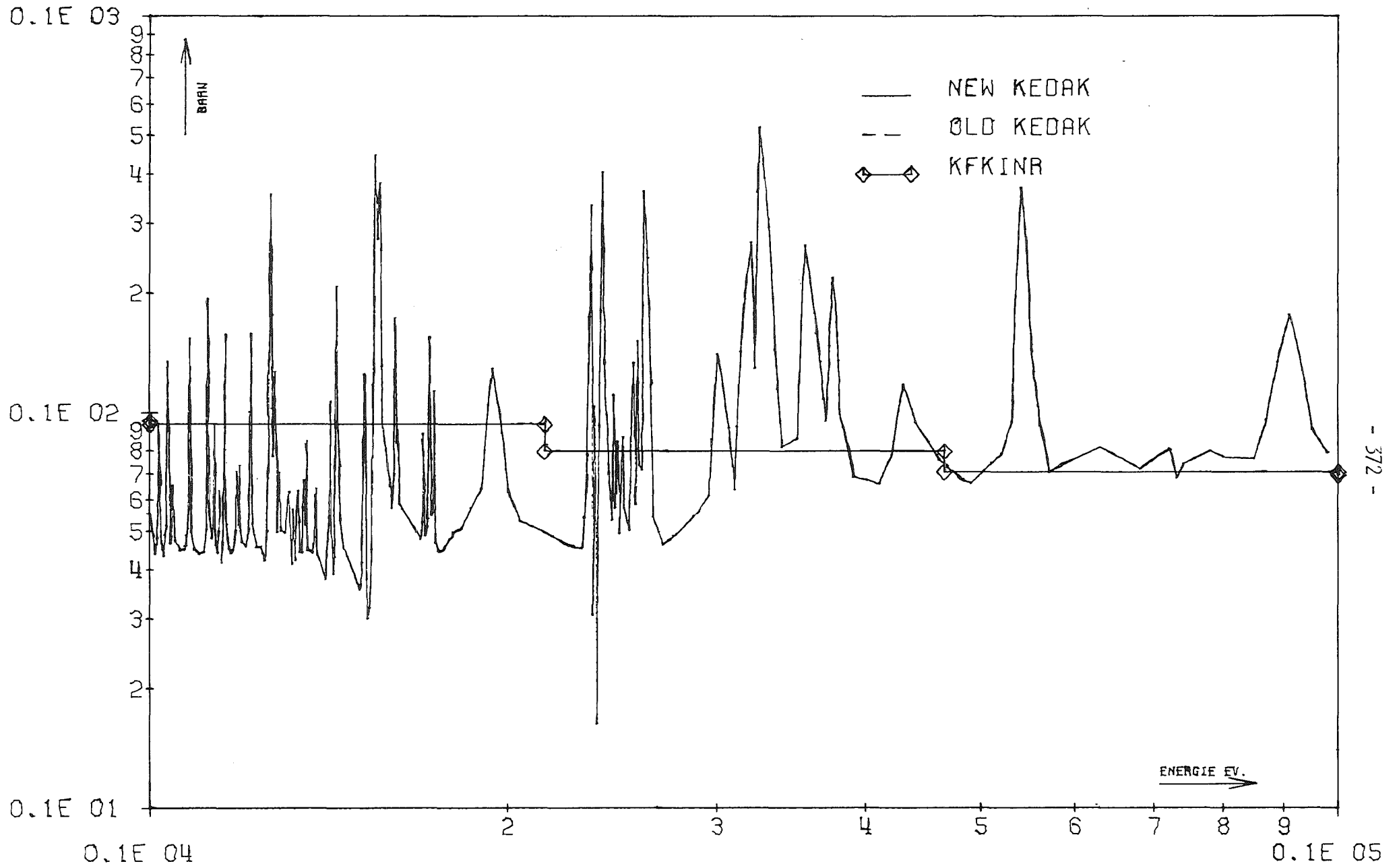


FIG. 26 M0 SGG

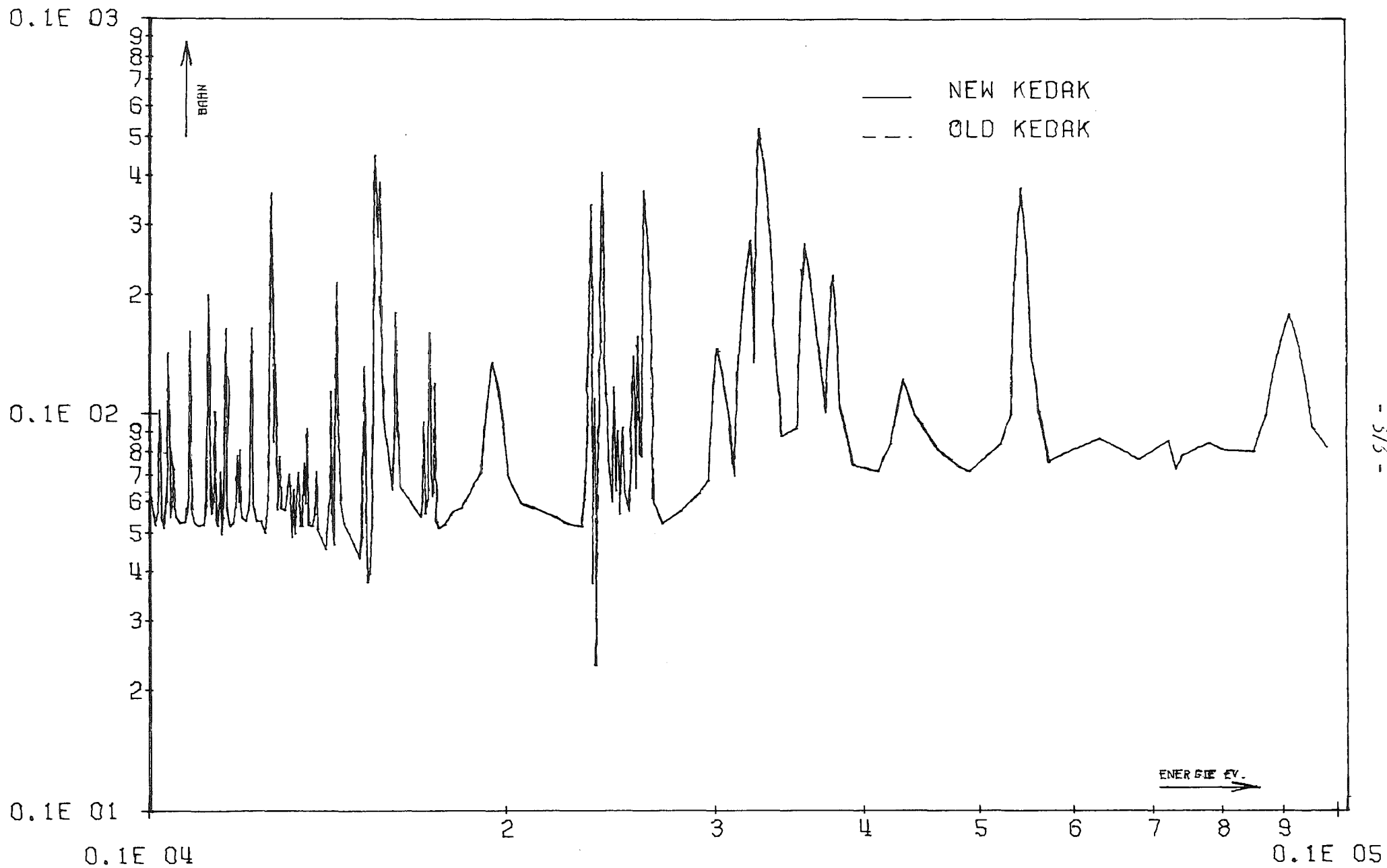
INR901M0 25.01 20.45.



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FIG. 27 MØ SGN

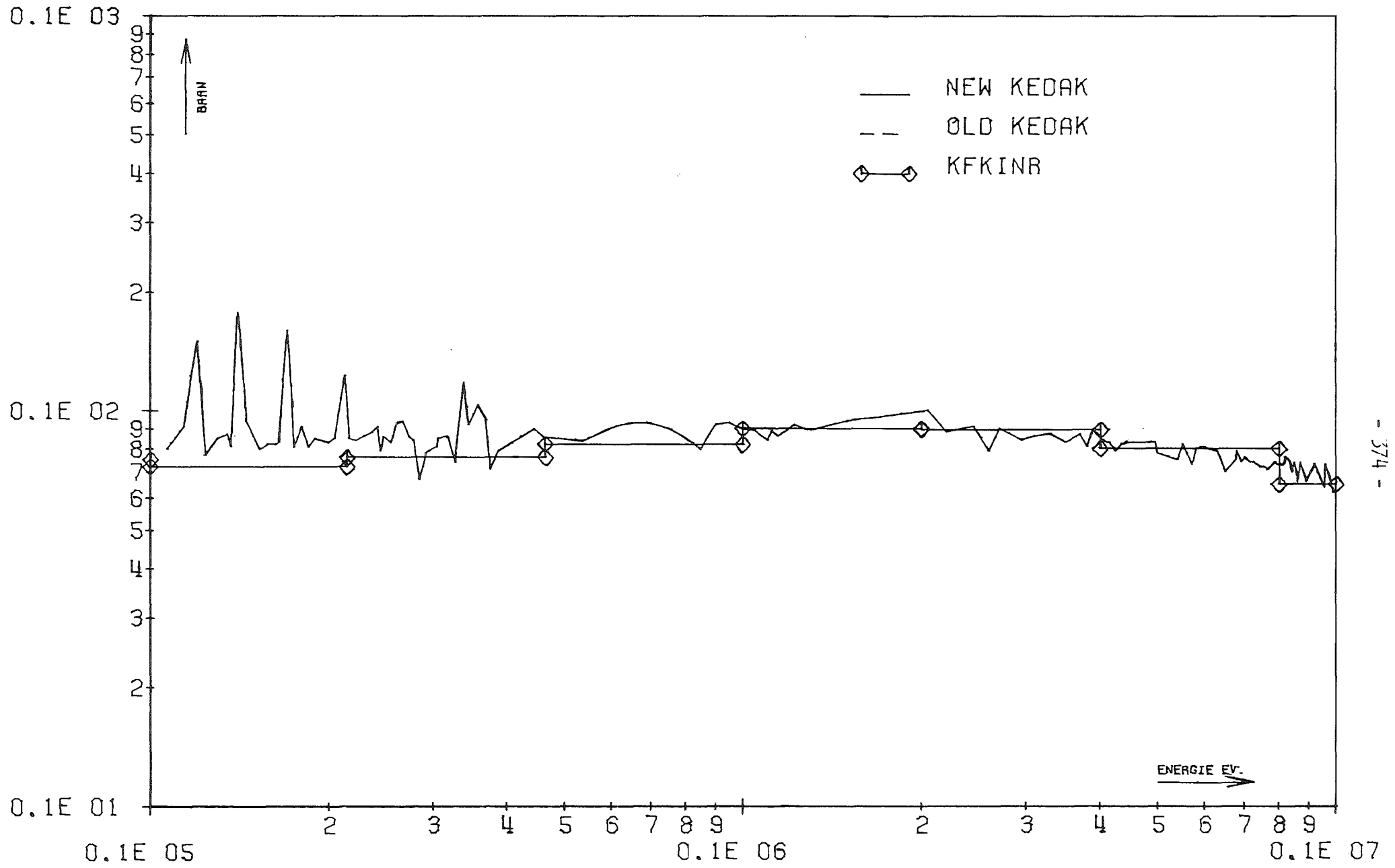
INR901MØ 25.01 20.45.



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FIG. 28 MO SGTR

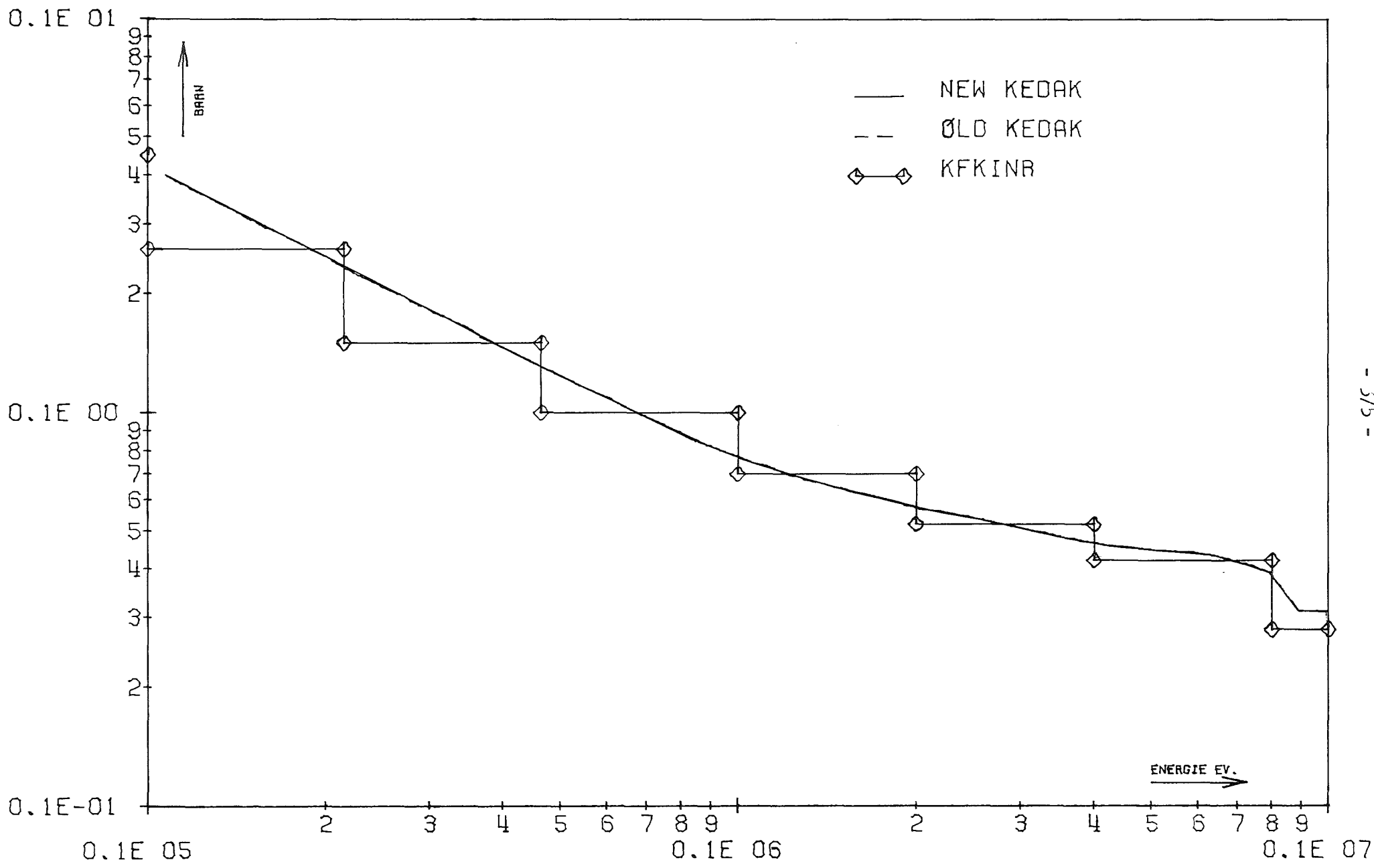
INR901MO 28.02 13.13.

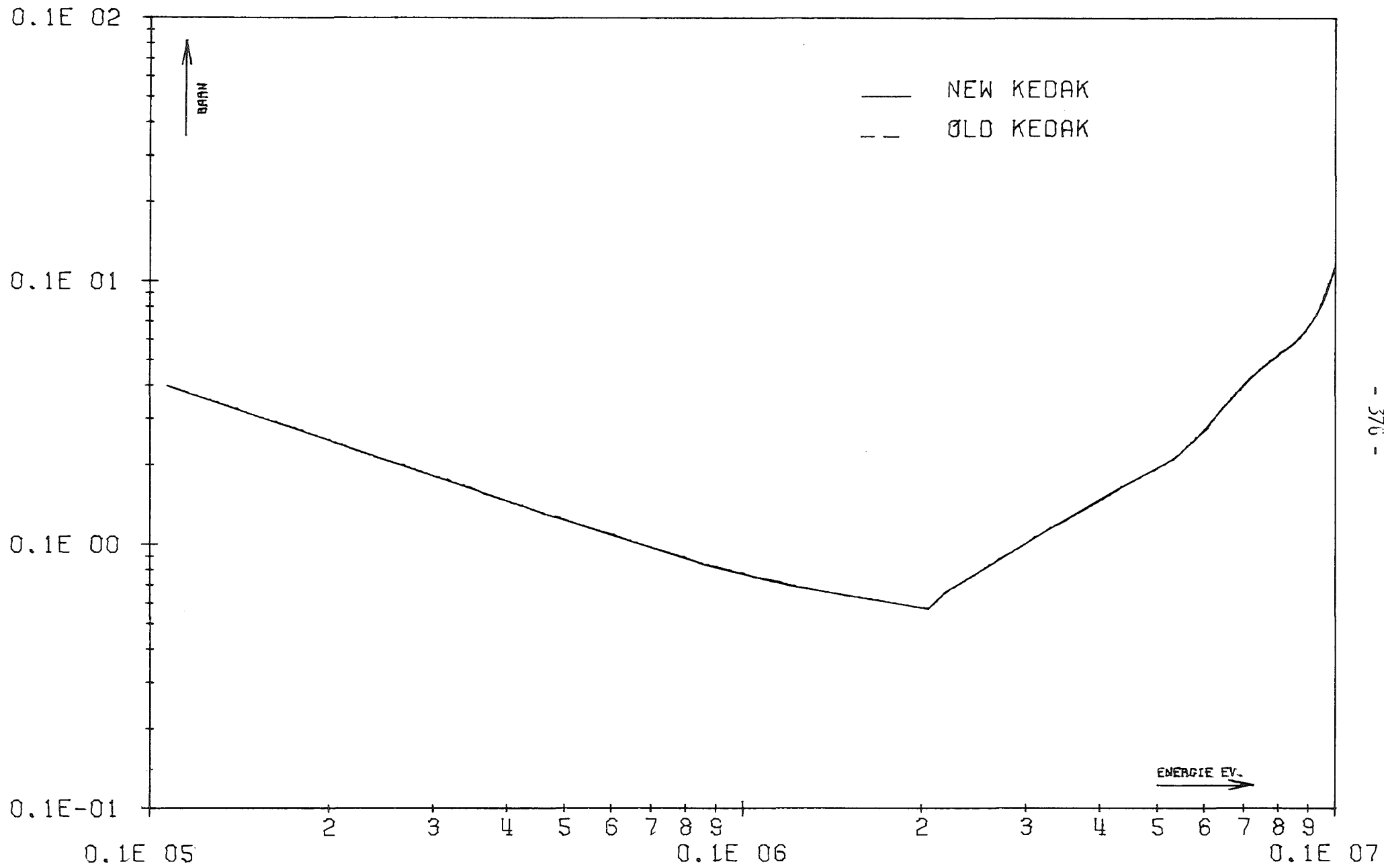


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FIG. 29 MO SGT

INR901M1 26.01 19.22.





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FIG. 31 MØ SGX

INR901ML 25.01 21.17.

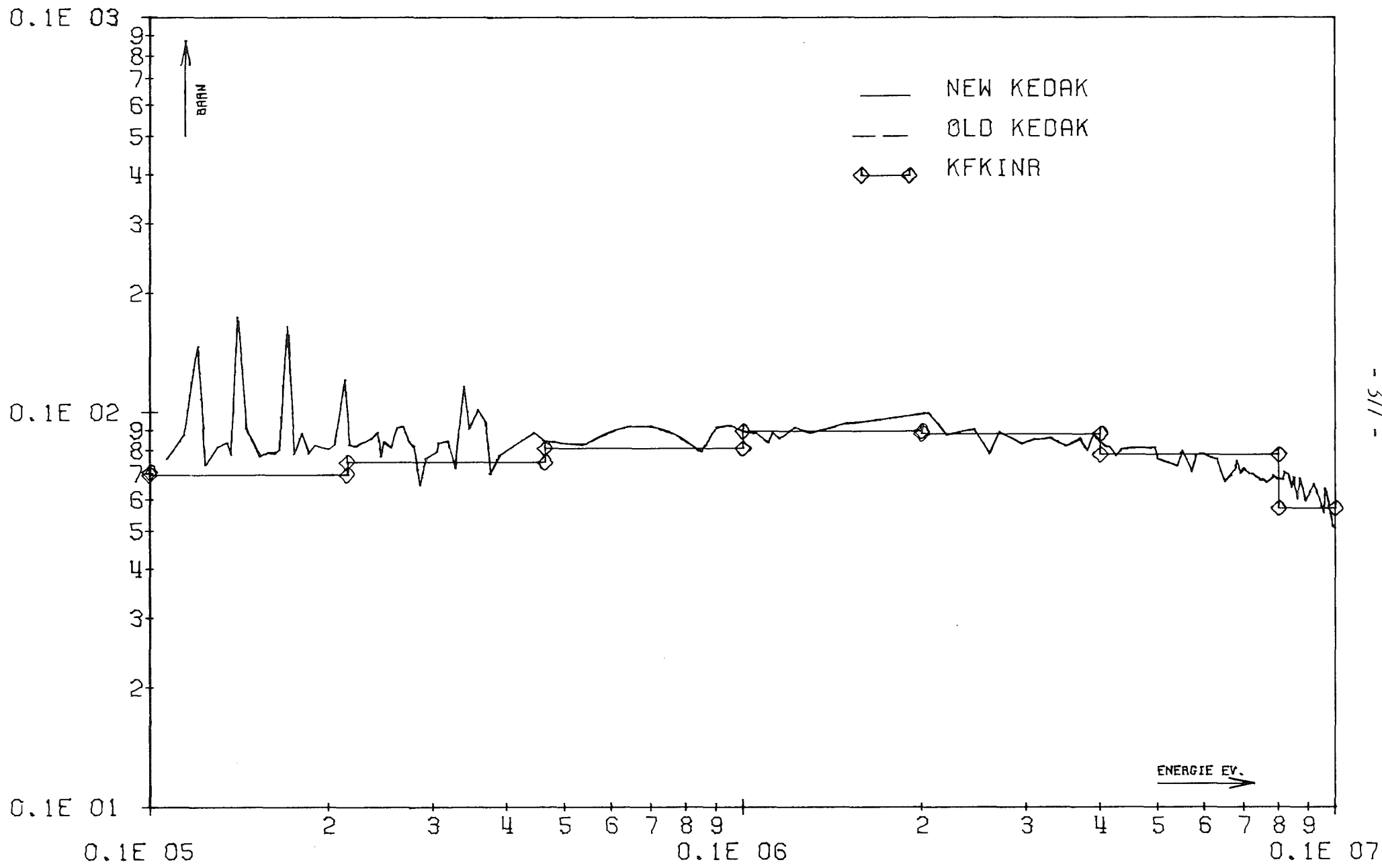
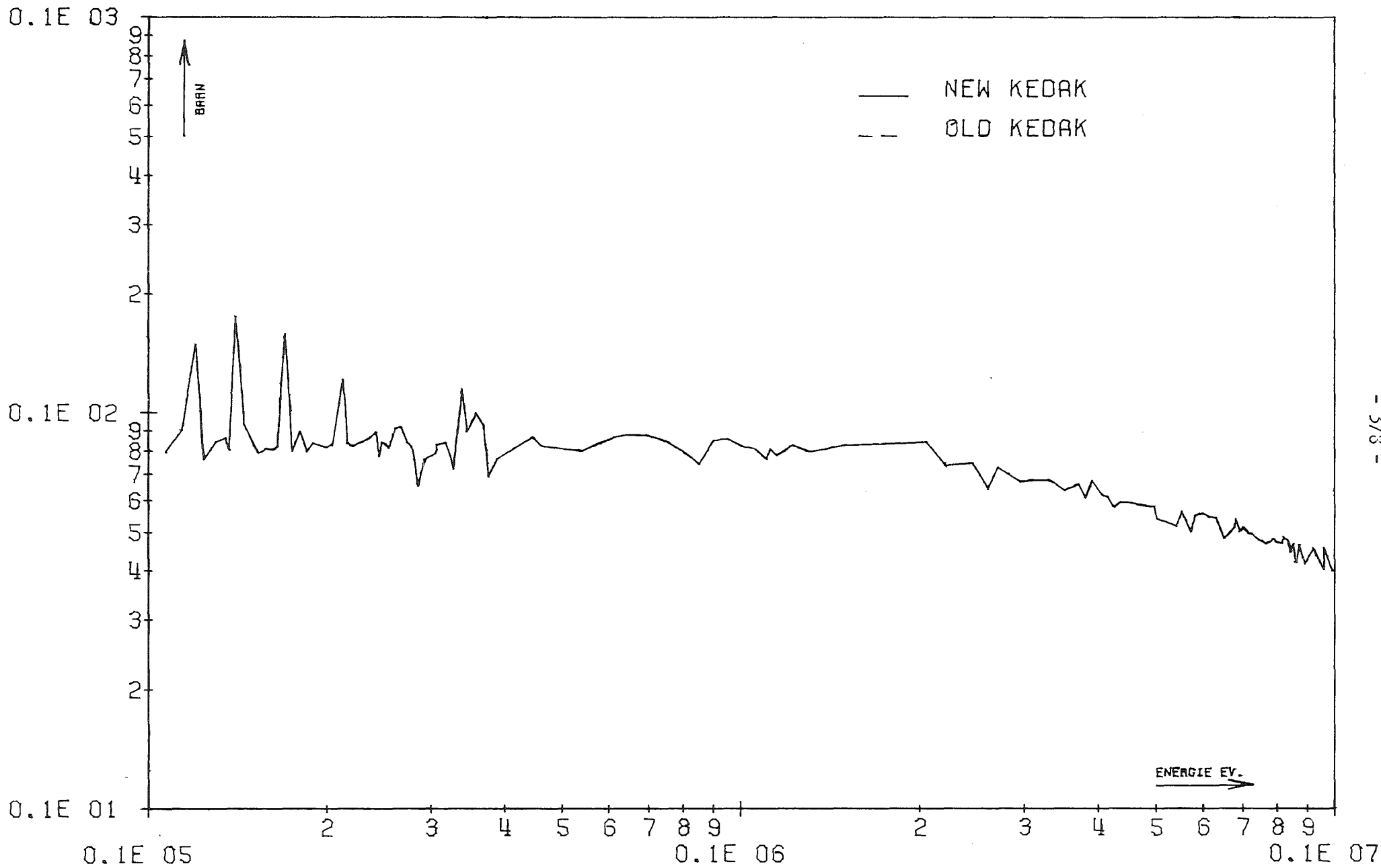


FIG 32 MØ SGN

INR901ML 25.01 21.17.



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FIG. 33 M0 SGTR

INR901M1 26.01 19.22.

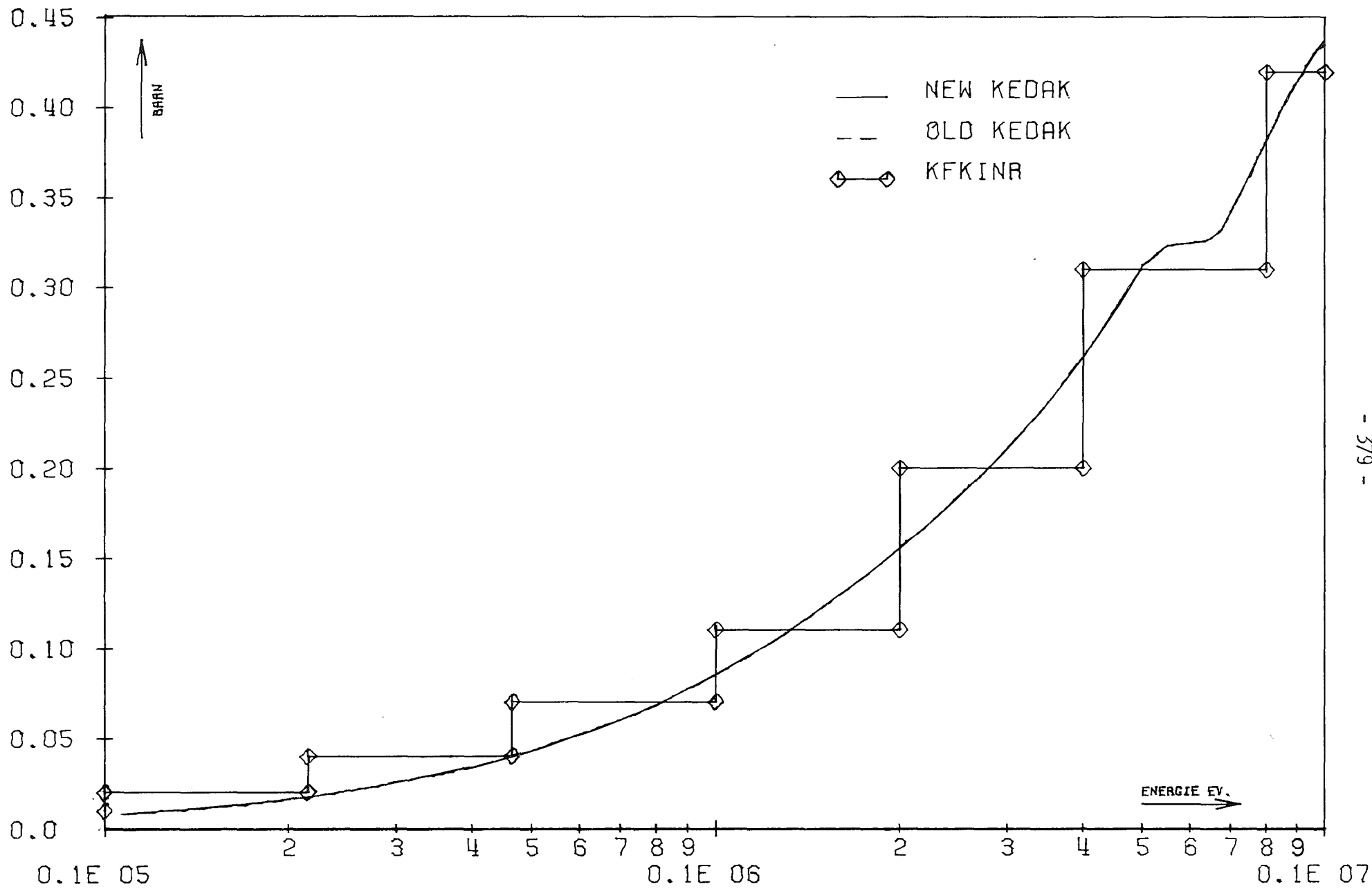
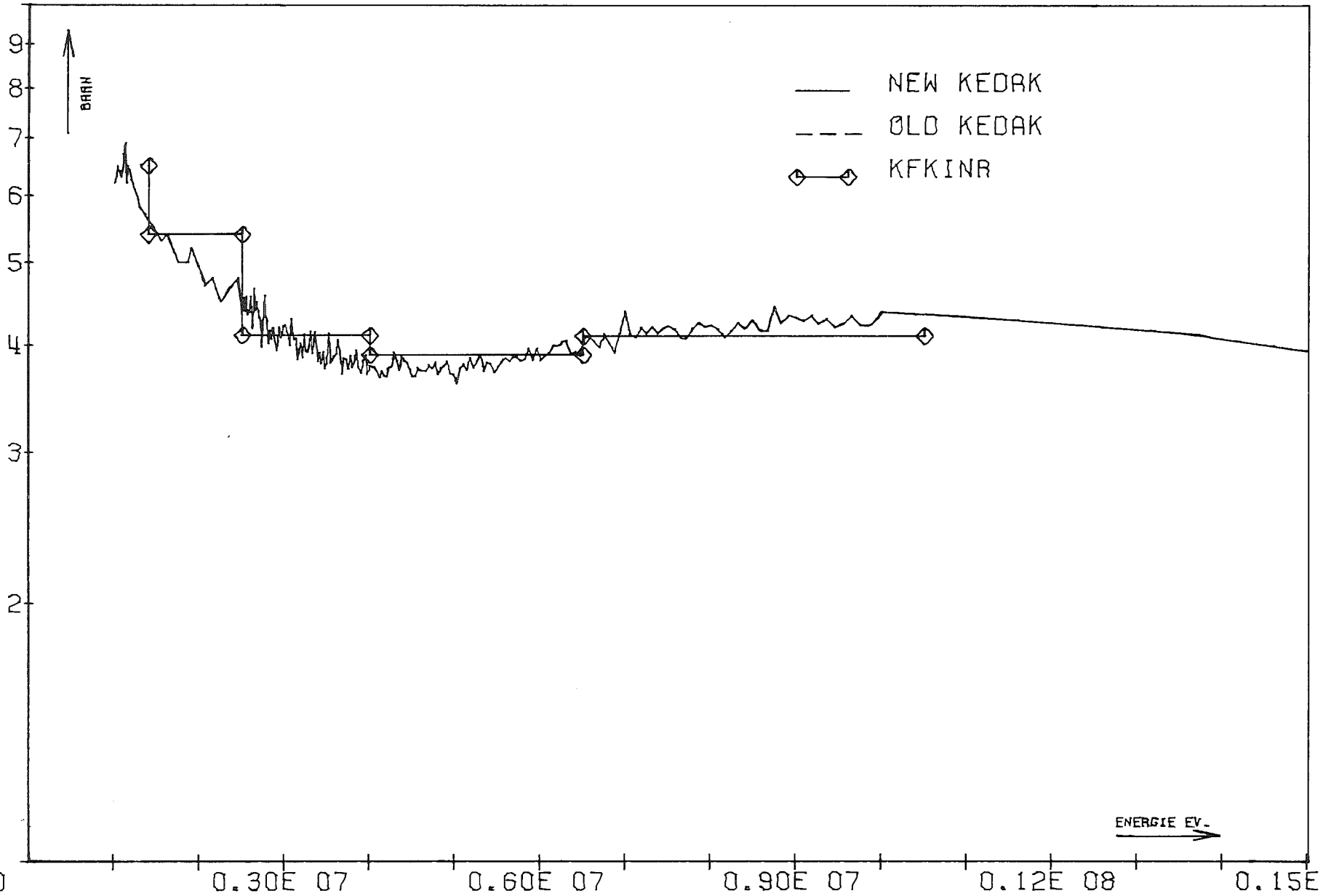


FIG. 34 M0 MUEL

INR901ML 25.01 21.17.

0.1E 02



0.1E 01
0.0

FIG. 35 MO SGT

INR901M1 26.01 19.22.

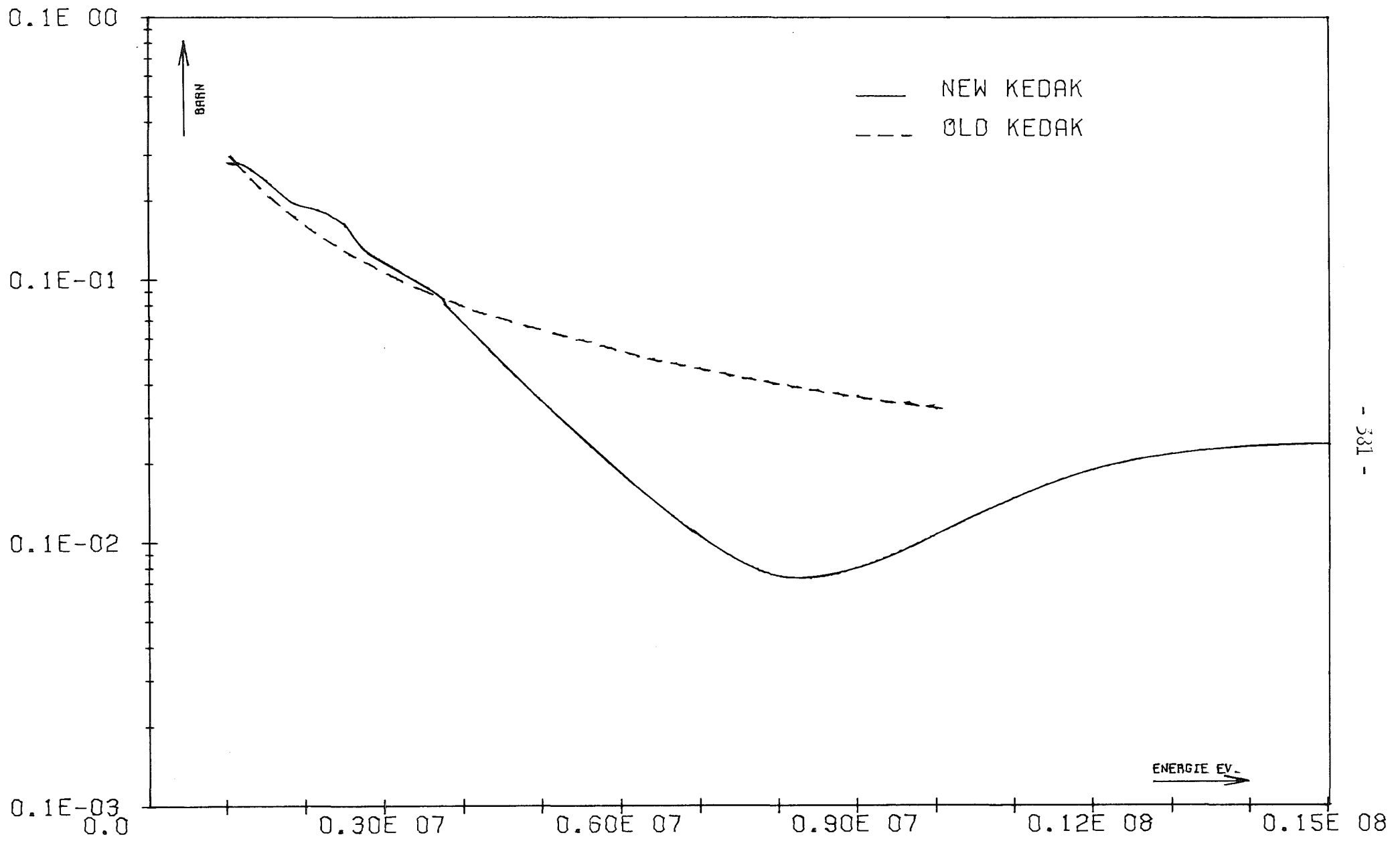


FIG. 36 MO SGG INR901SX 28.01 19.15.

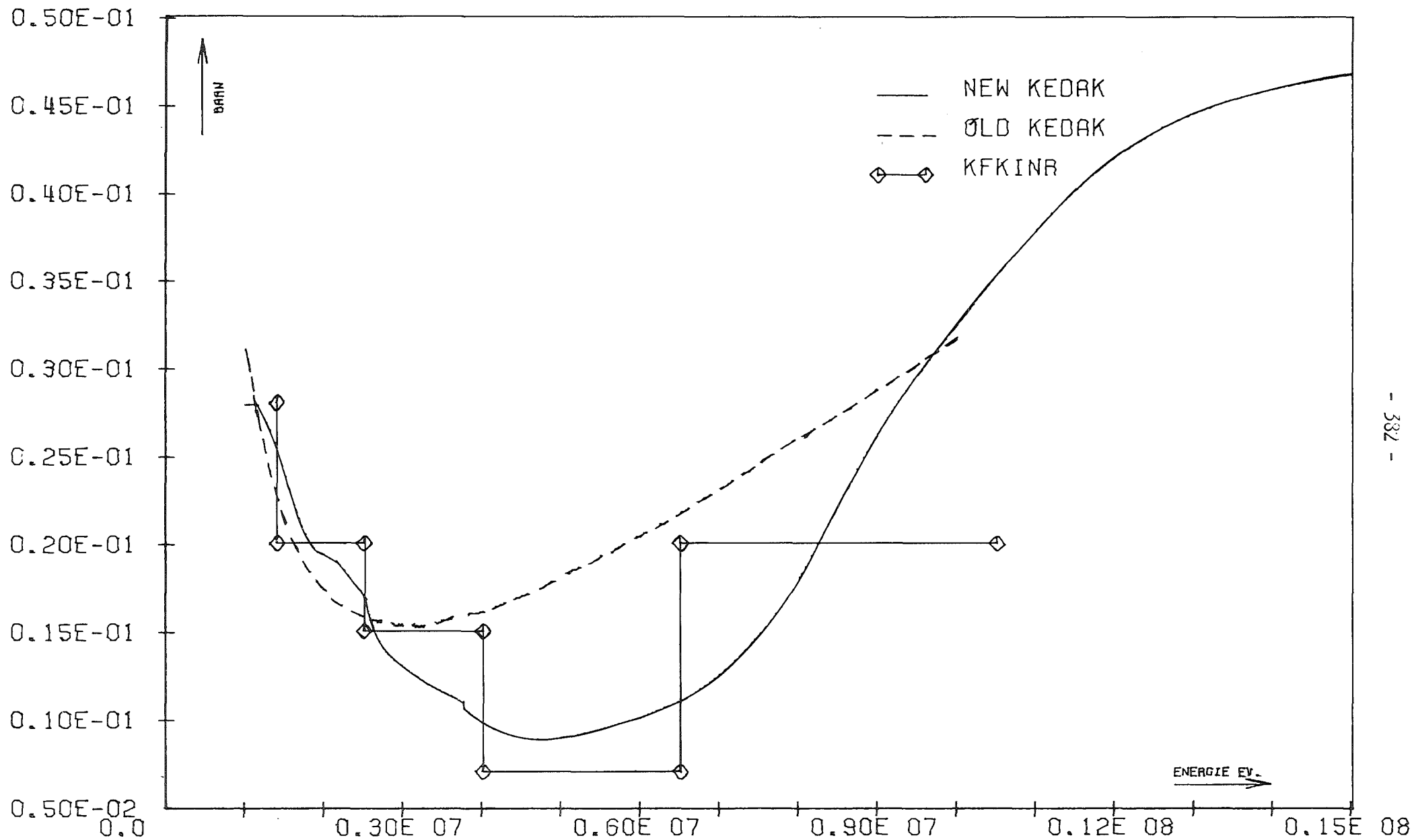


FIG. 37

M0

SGA

INR901SA 26.01 20.15.

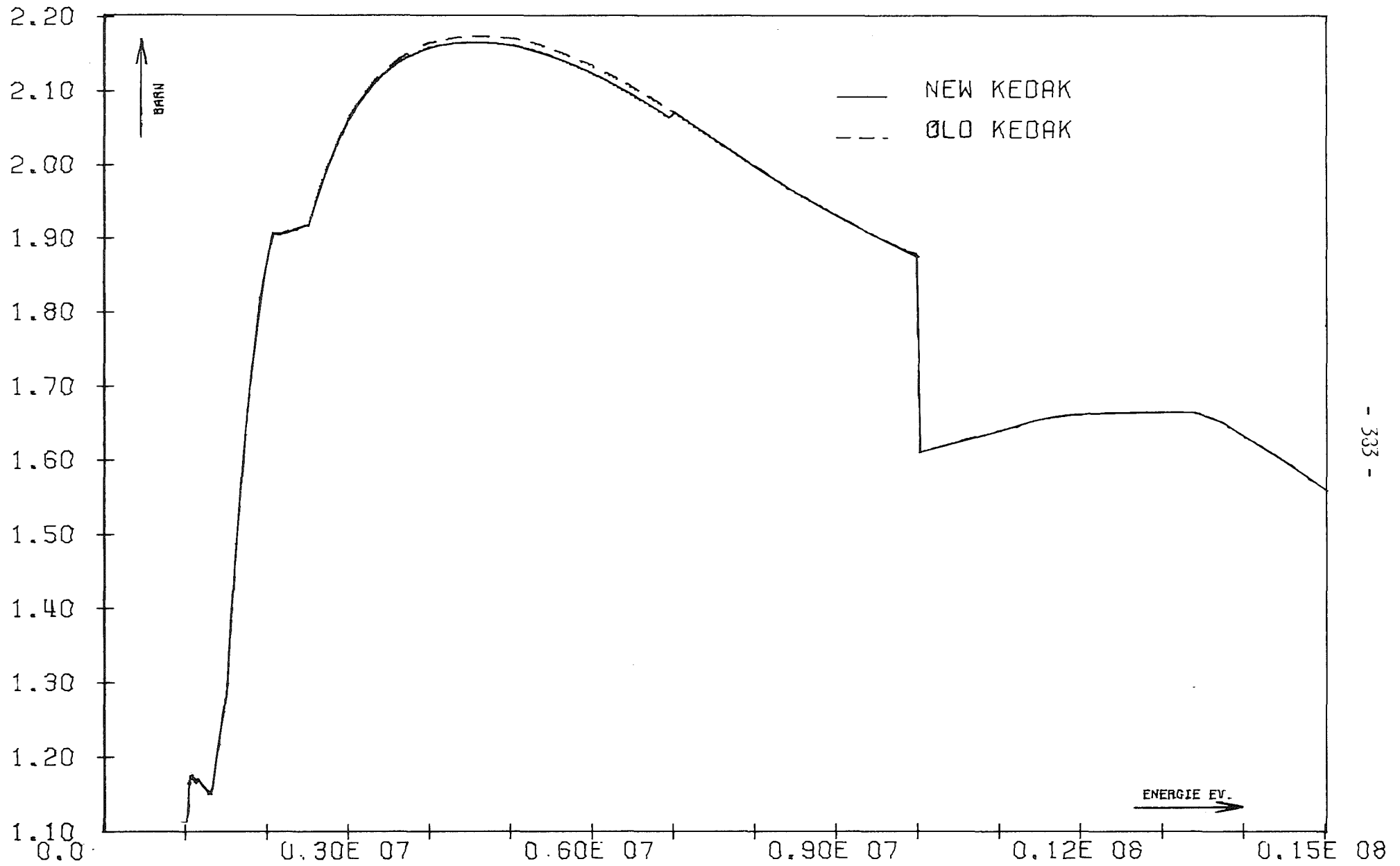


FIG 38 MØ SGX

INR901SX 26.01 21.13.

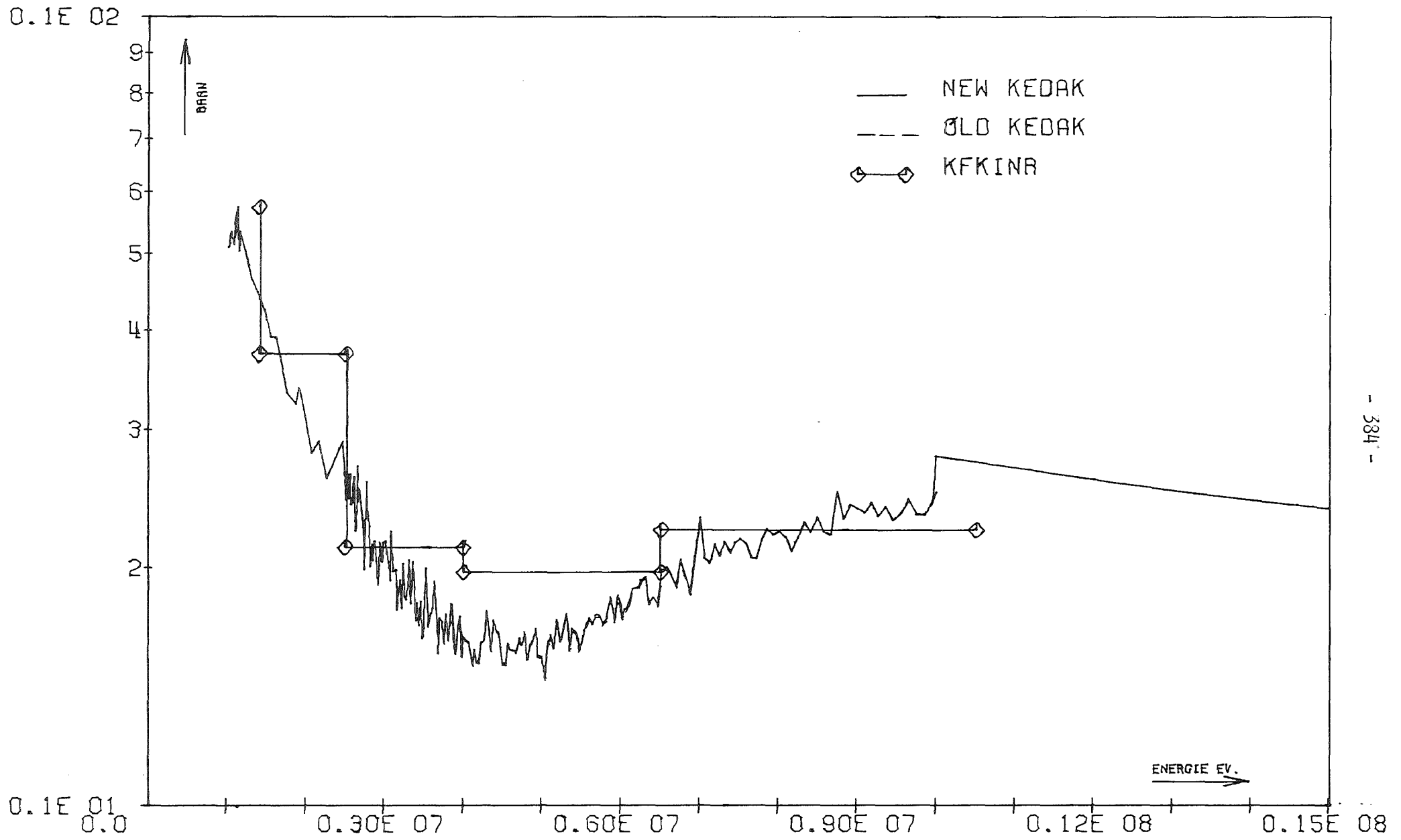


FIG. 39 MØ SGN

INR901M1 26.01 19.22.

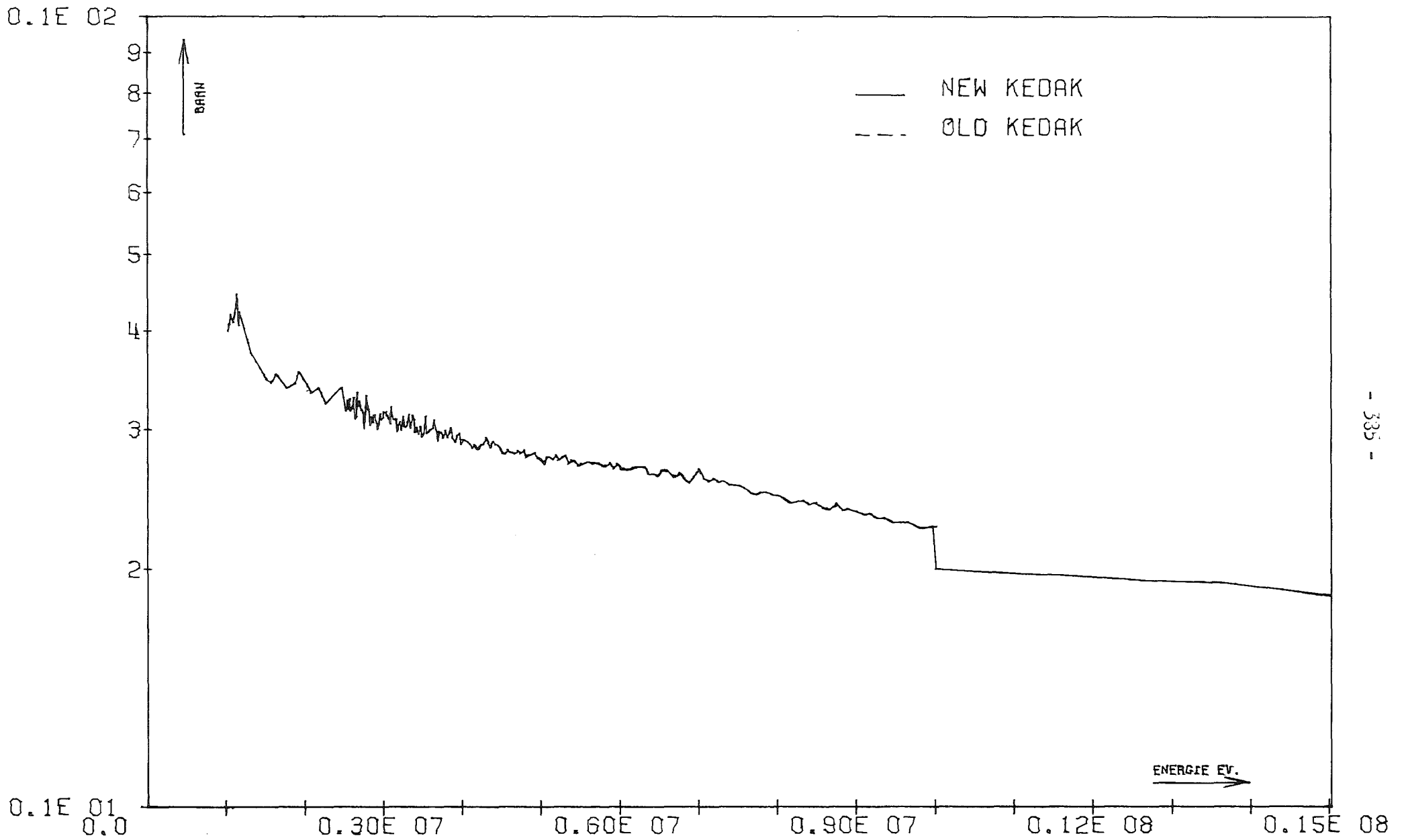


FIG. 40 MØ SGTR

INR901M1 26.01 19.22.

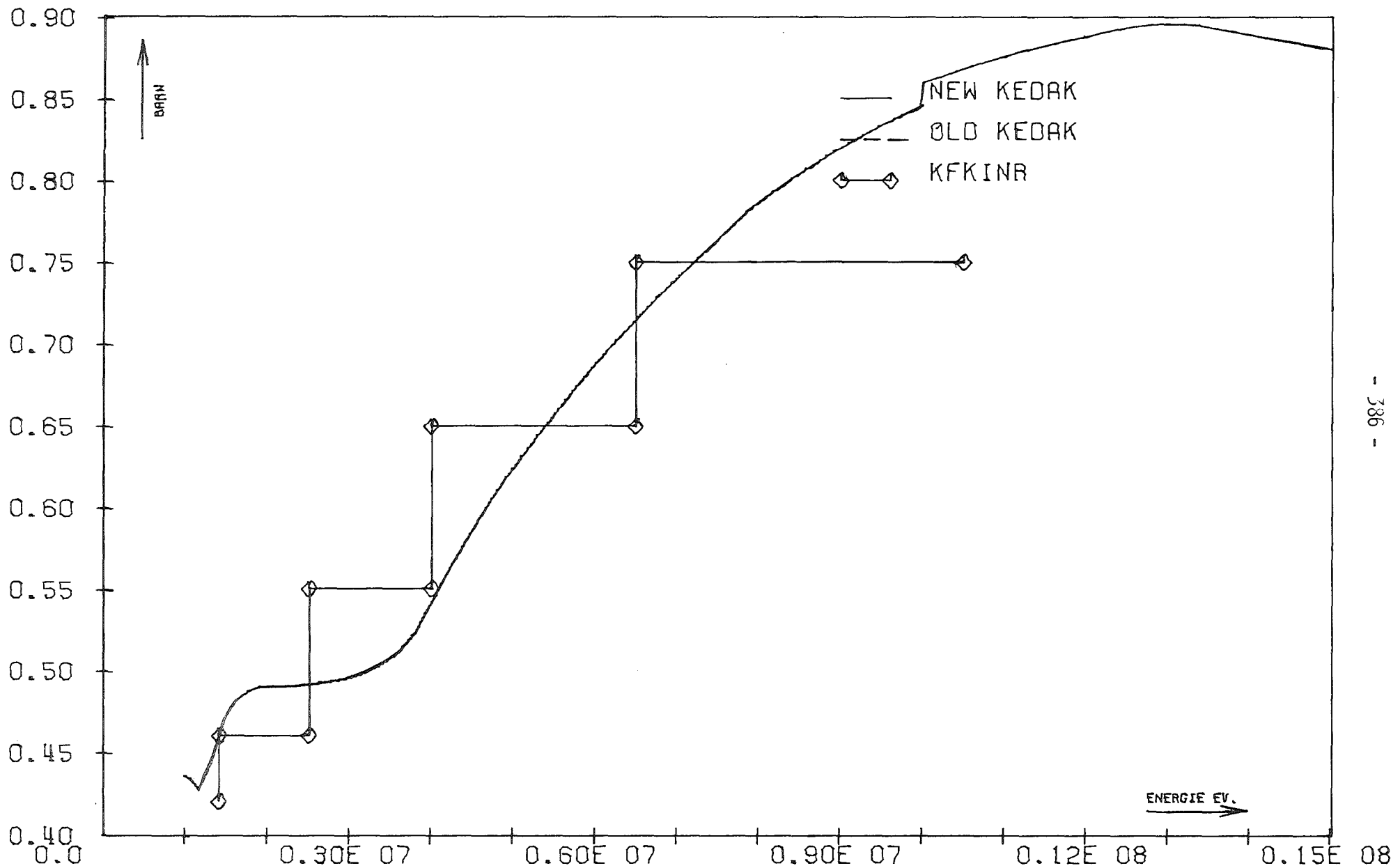


FIG. 41 M0 MUEL

INR901M1 26.01 19.22.

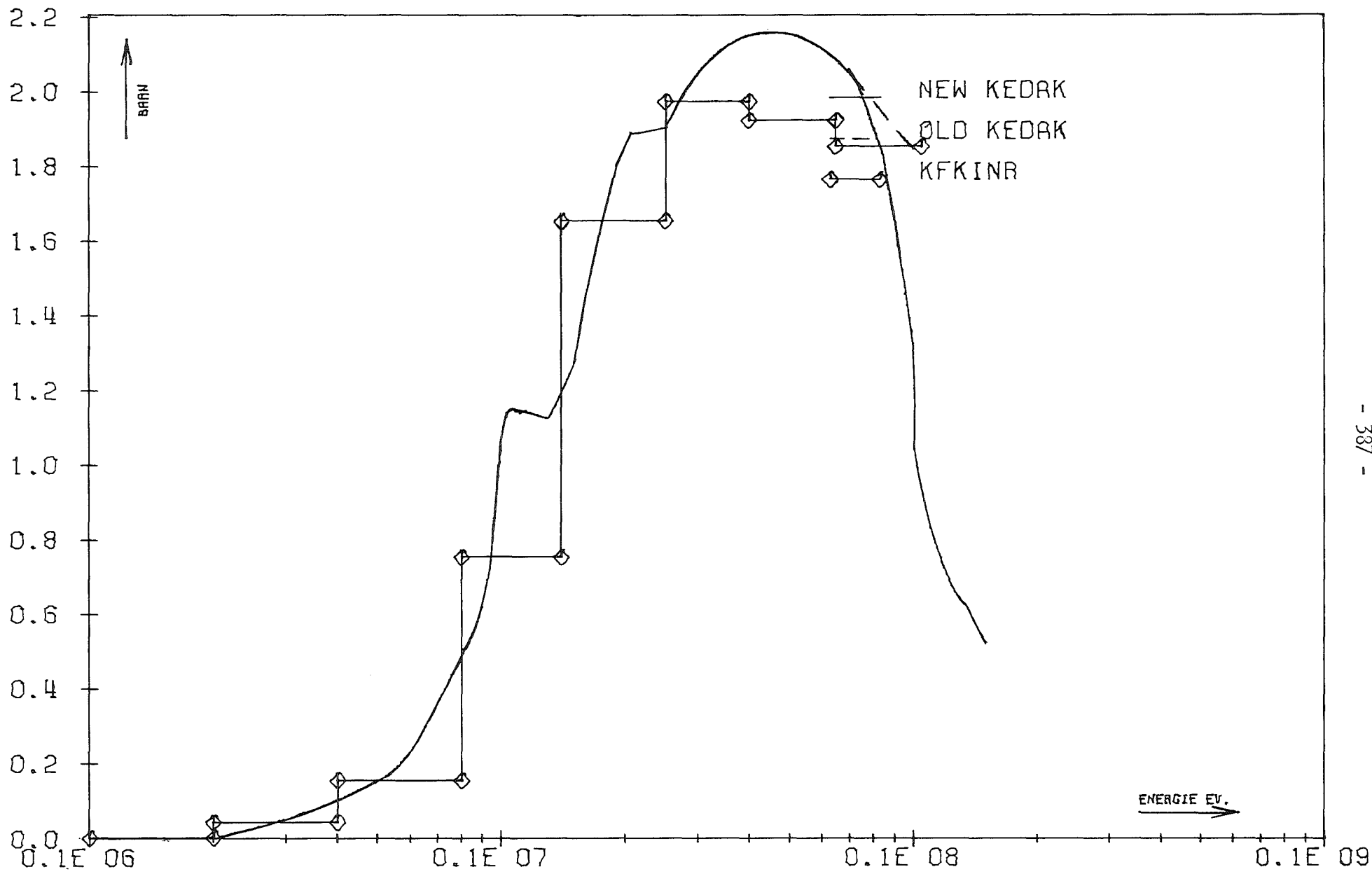


FIG. 42 MO SGI INR901M1 26.01 19.22.

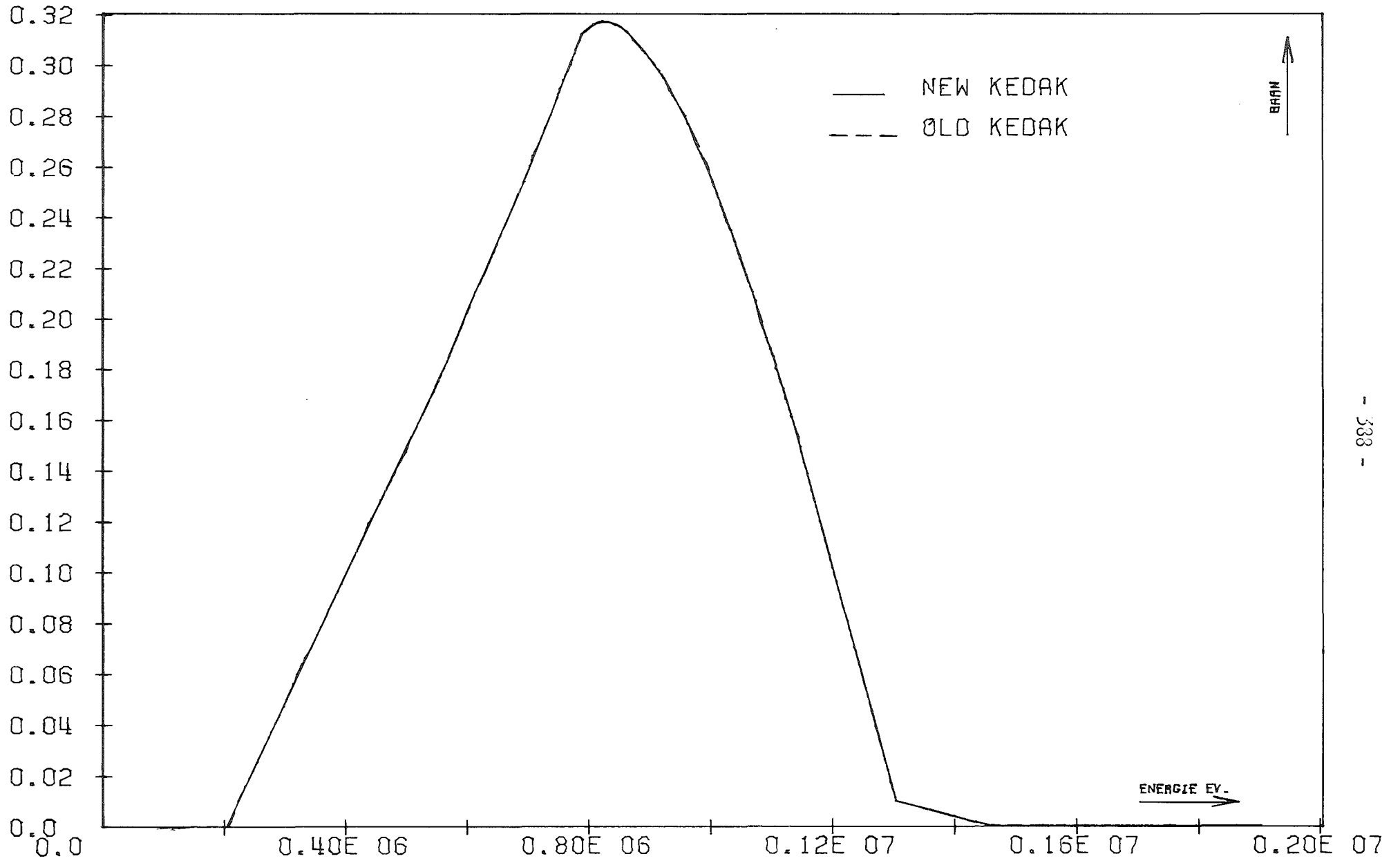


FIG. 43 MØ SGIZ 0.203D+06

INR901ML 25.01 21.17.

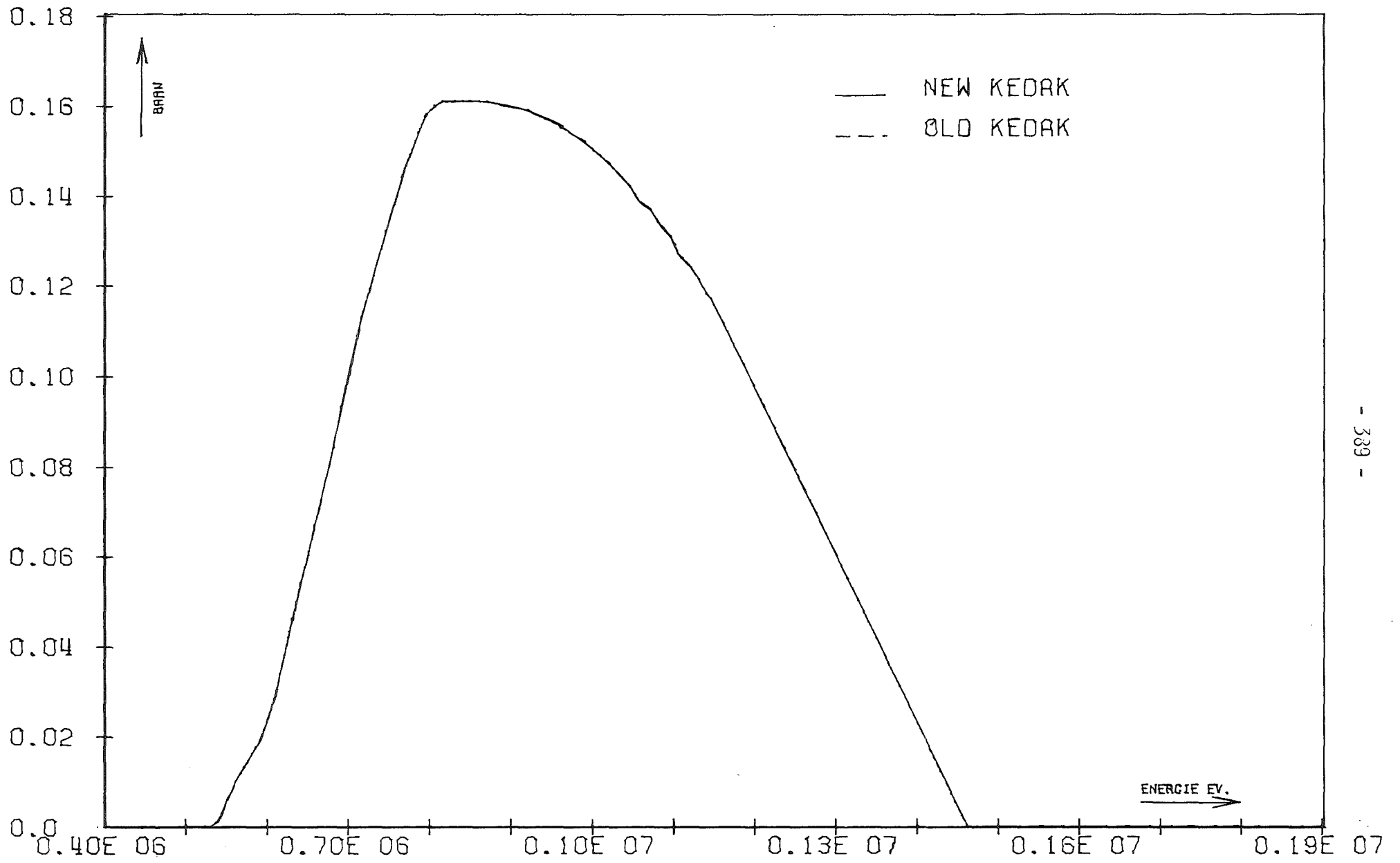
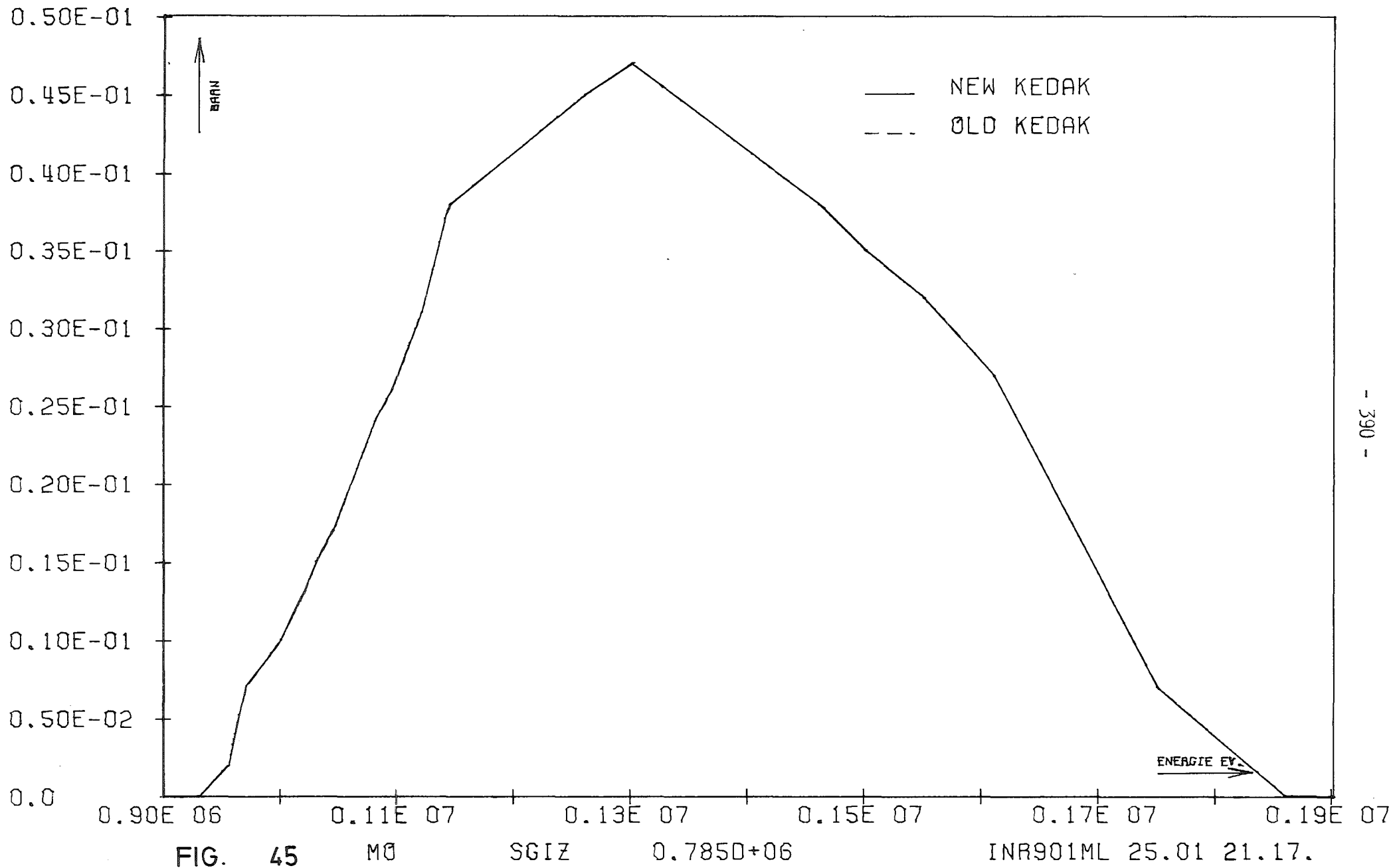


FIG. 44 M0 SGIZ 0.5300+06 INR901M1 26.01 19.22.



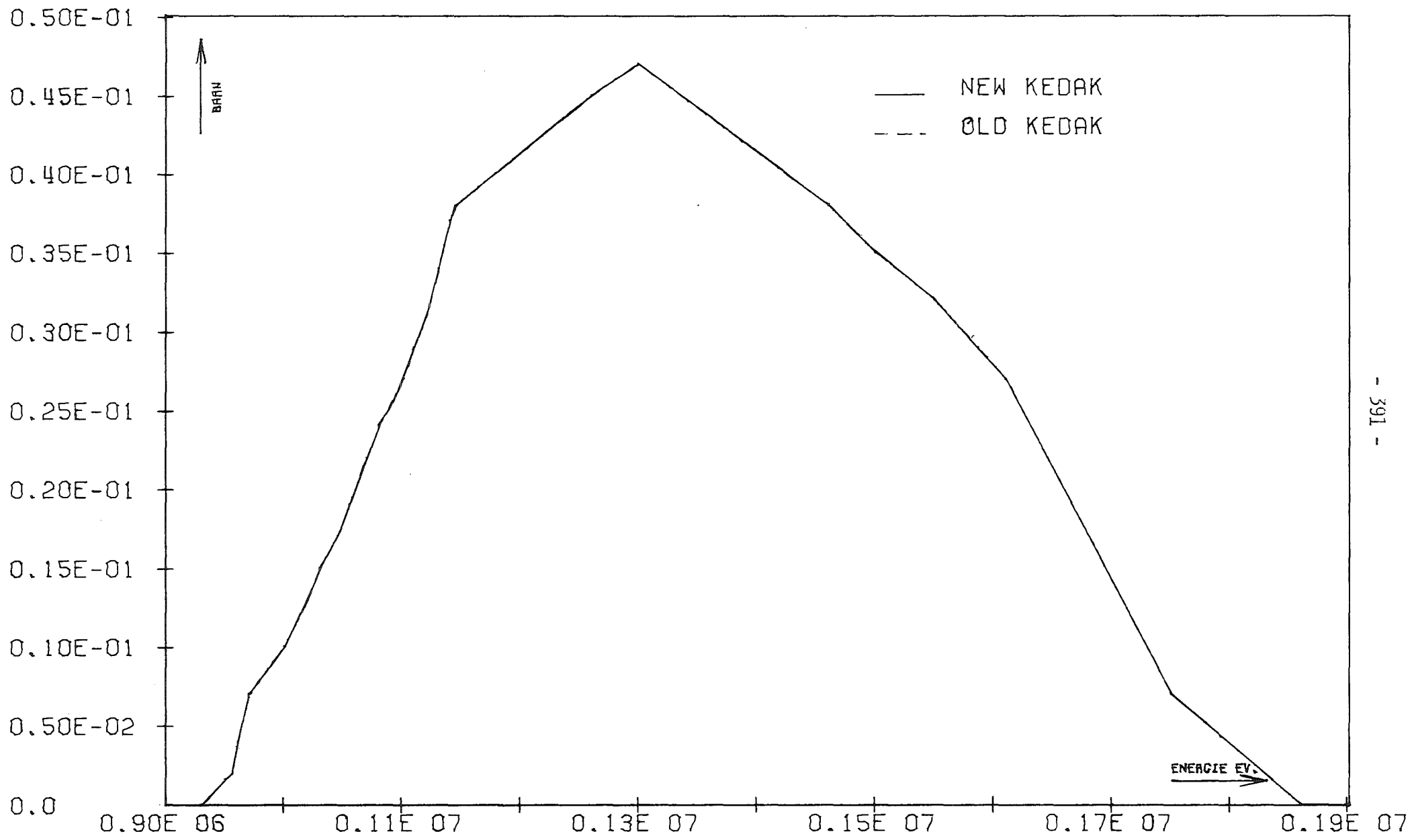


FIG. 46 MØ SGIZ 0.9300+06 INR901ML 25.01 21.17.

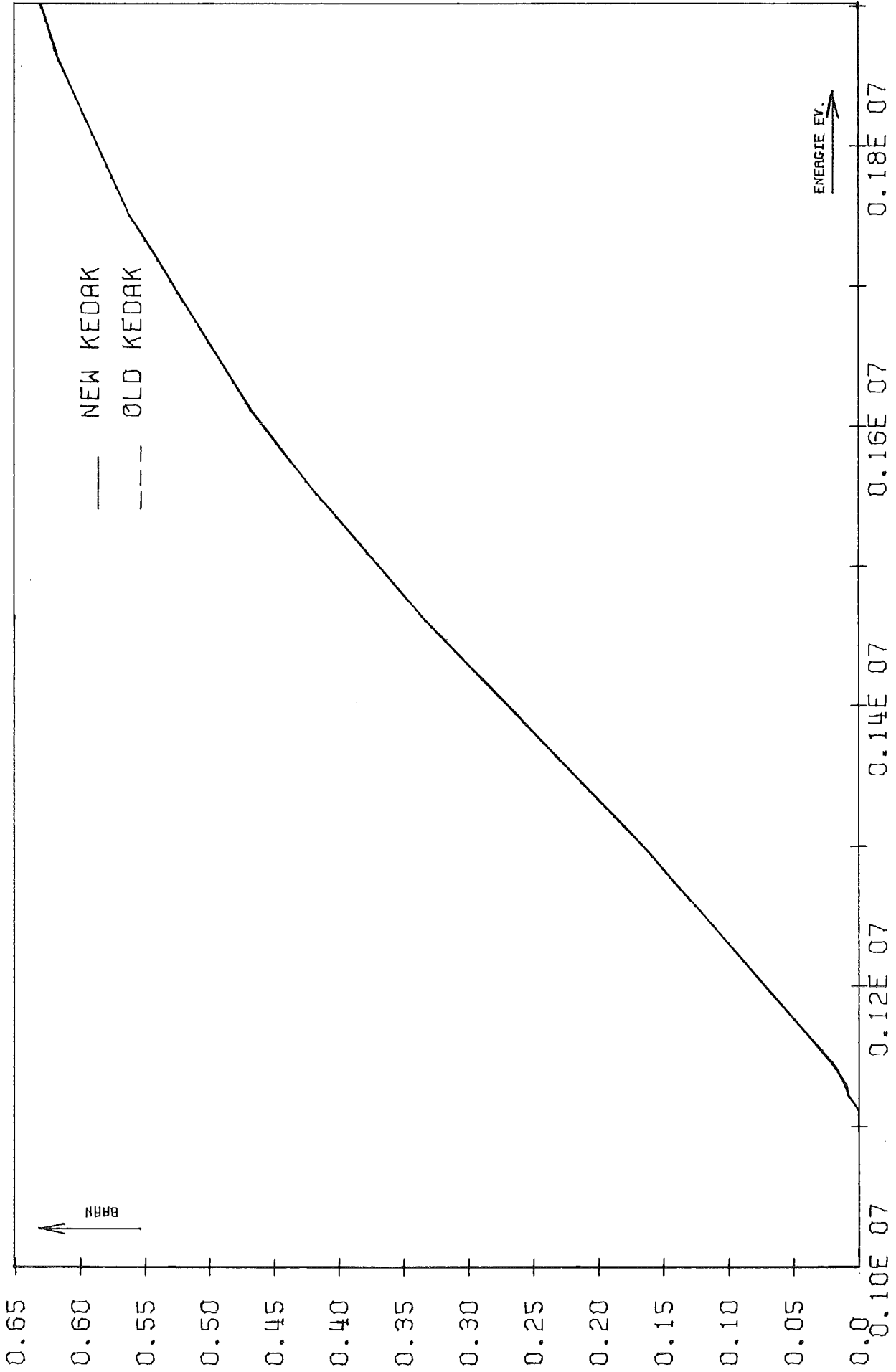


FIG. 47 MØ SGIZ 0.1100+07 INR901M1 26.01 19.22.

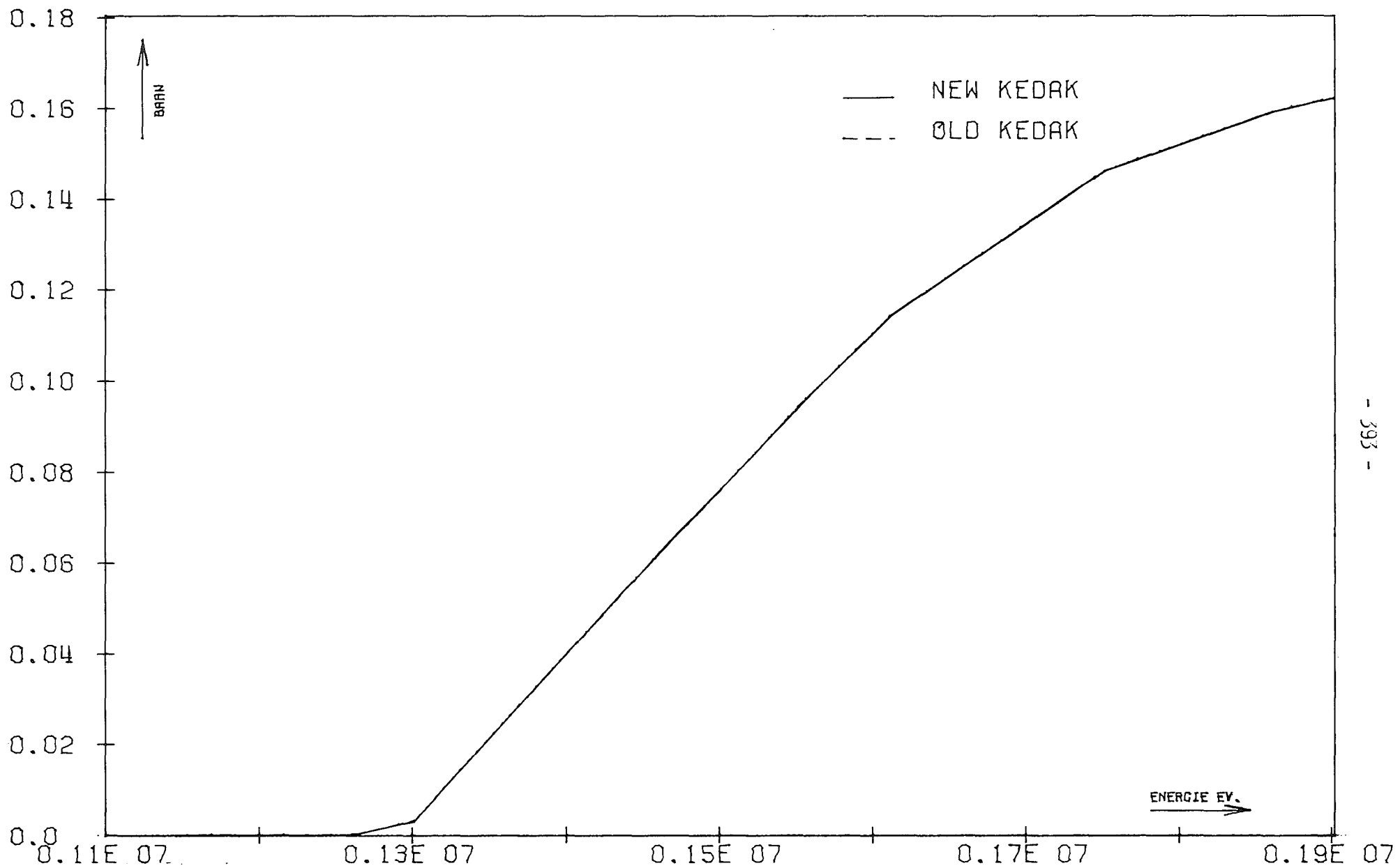


FIG. 48

M0

SGIZ

0.1260+07

INR901M1 26.01 19.22.

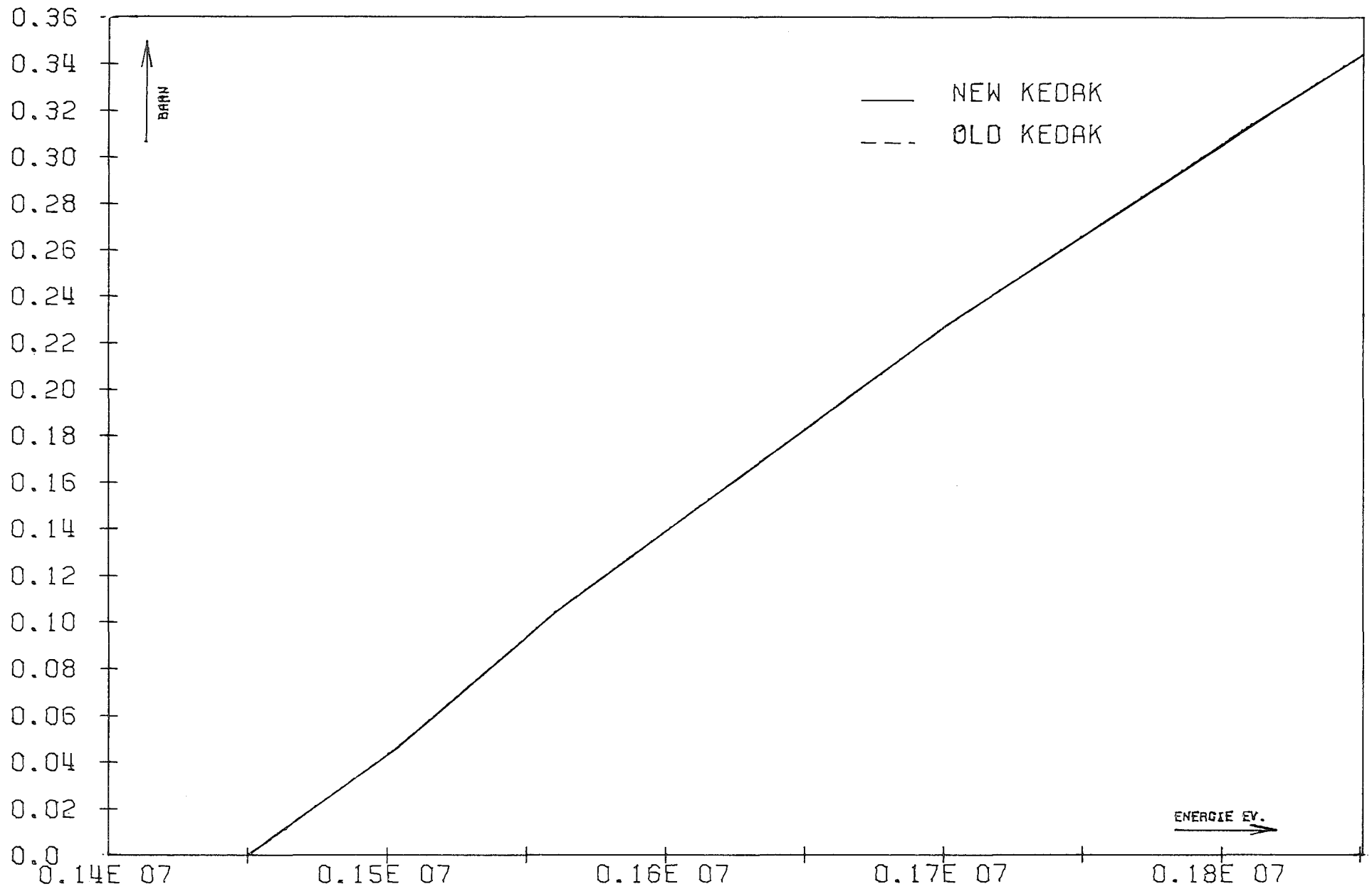


FIG. 49 MO SGIZ 0.1500+07 INR901M1 26.01 19.22.

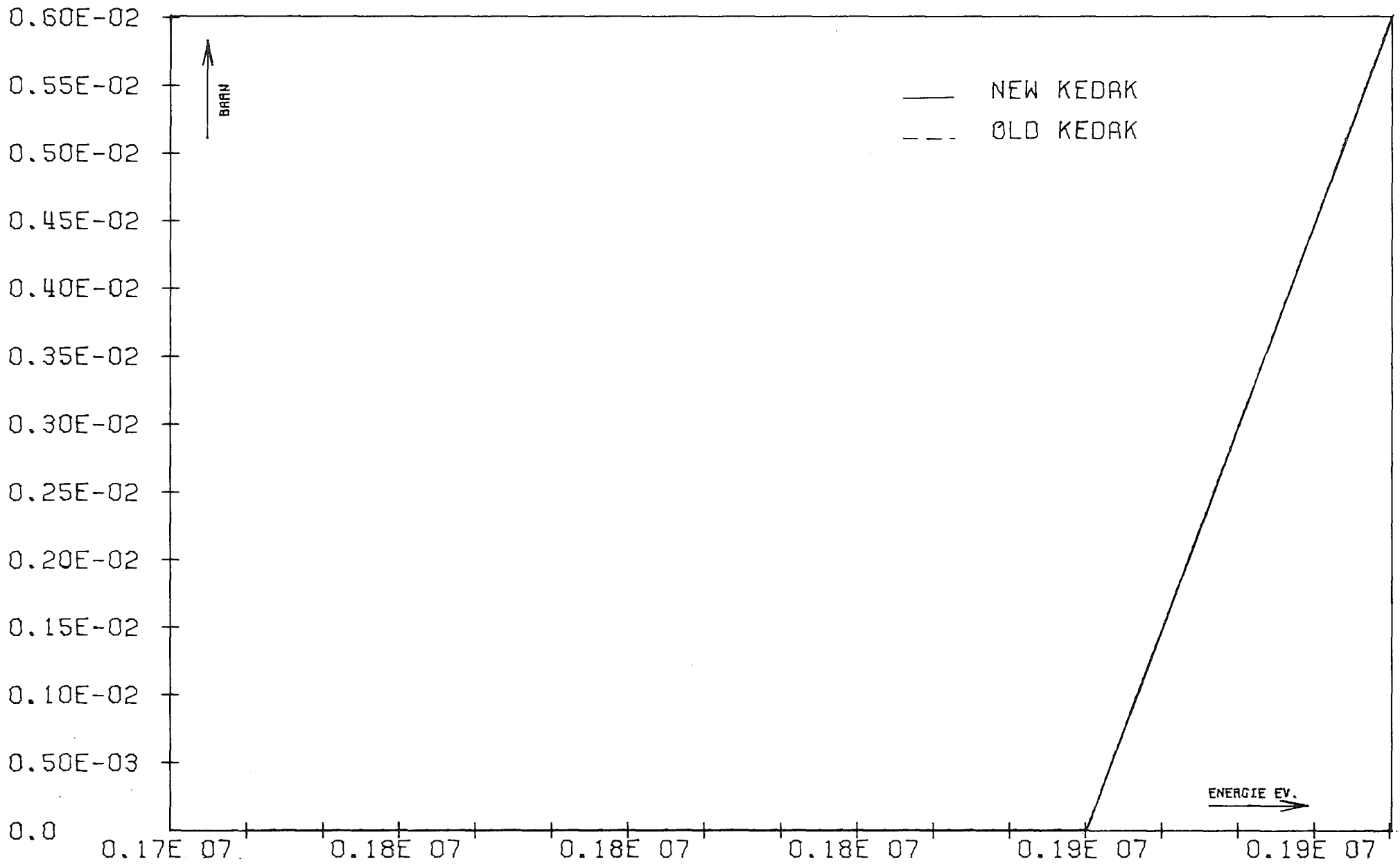


FIG. 50

M0

SGIZ

0.1860+07

INR901M1 26.01 19.22.

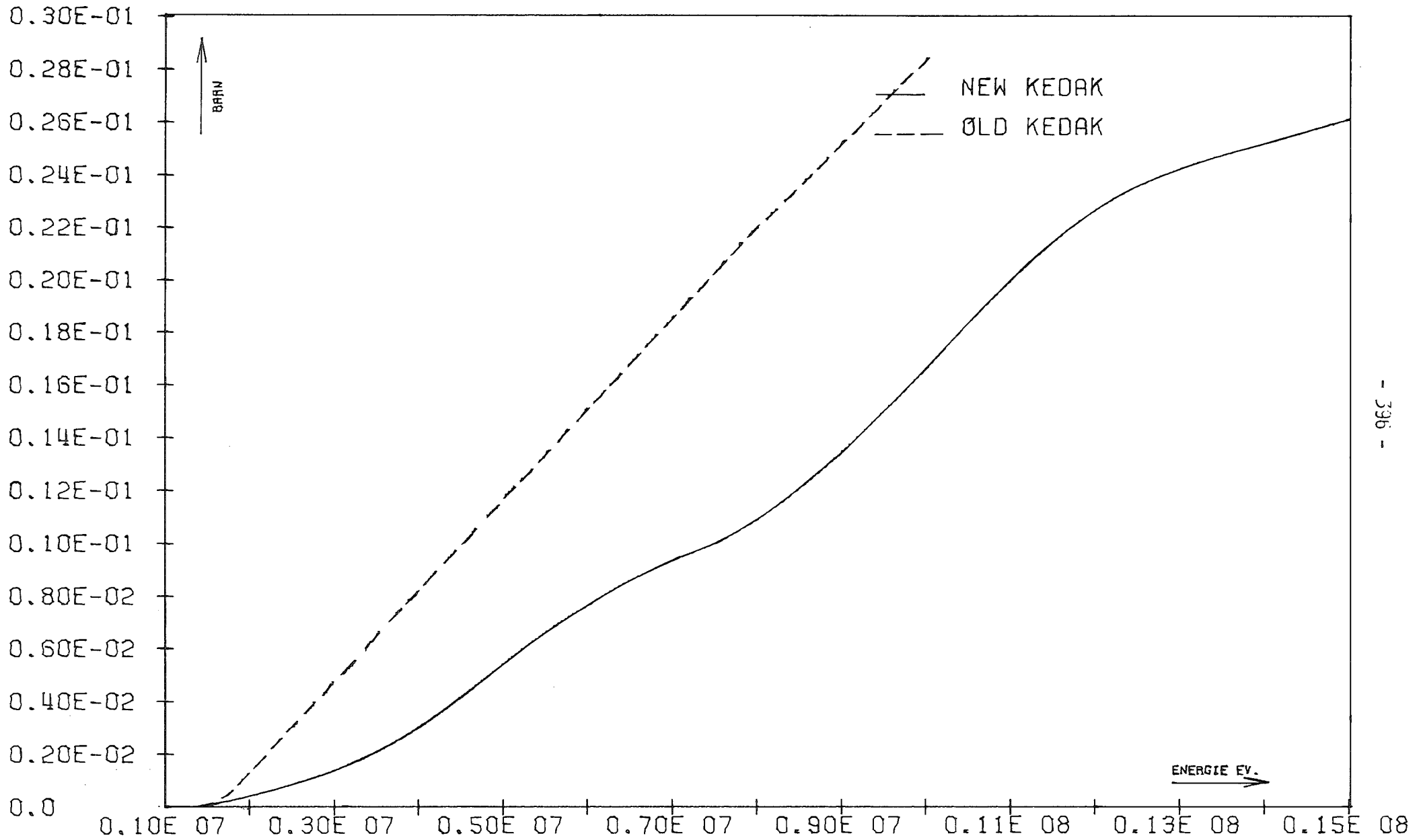


FIG. 51 MØ SGP

INR901M1 26.01 19.22.

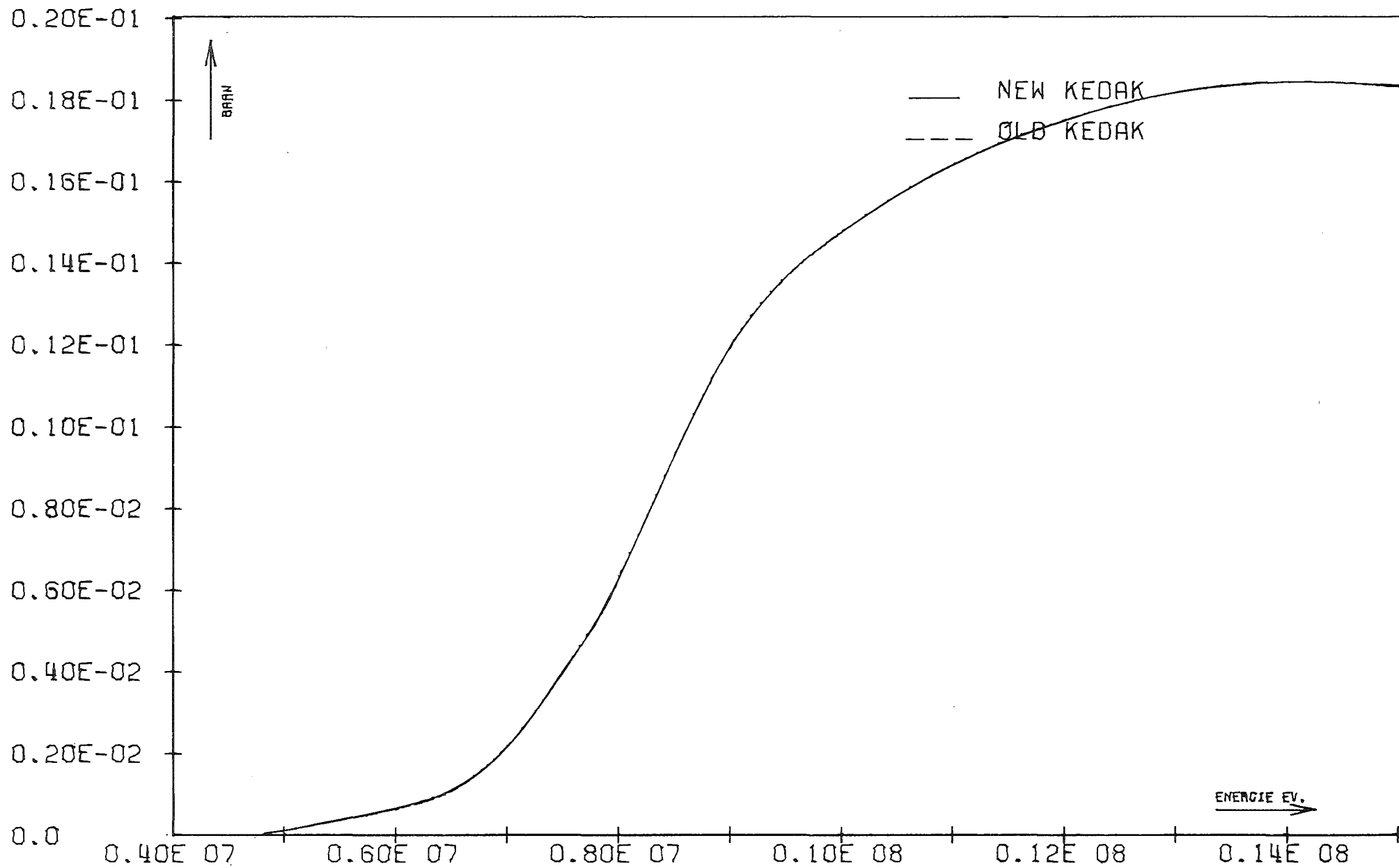


FIG. 52 M0

SGALP

INR901M1 26.01 19.22.

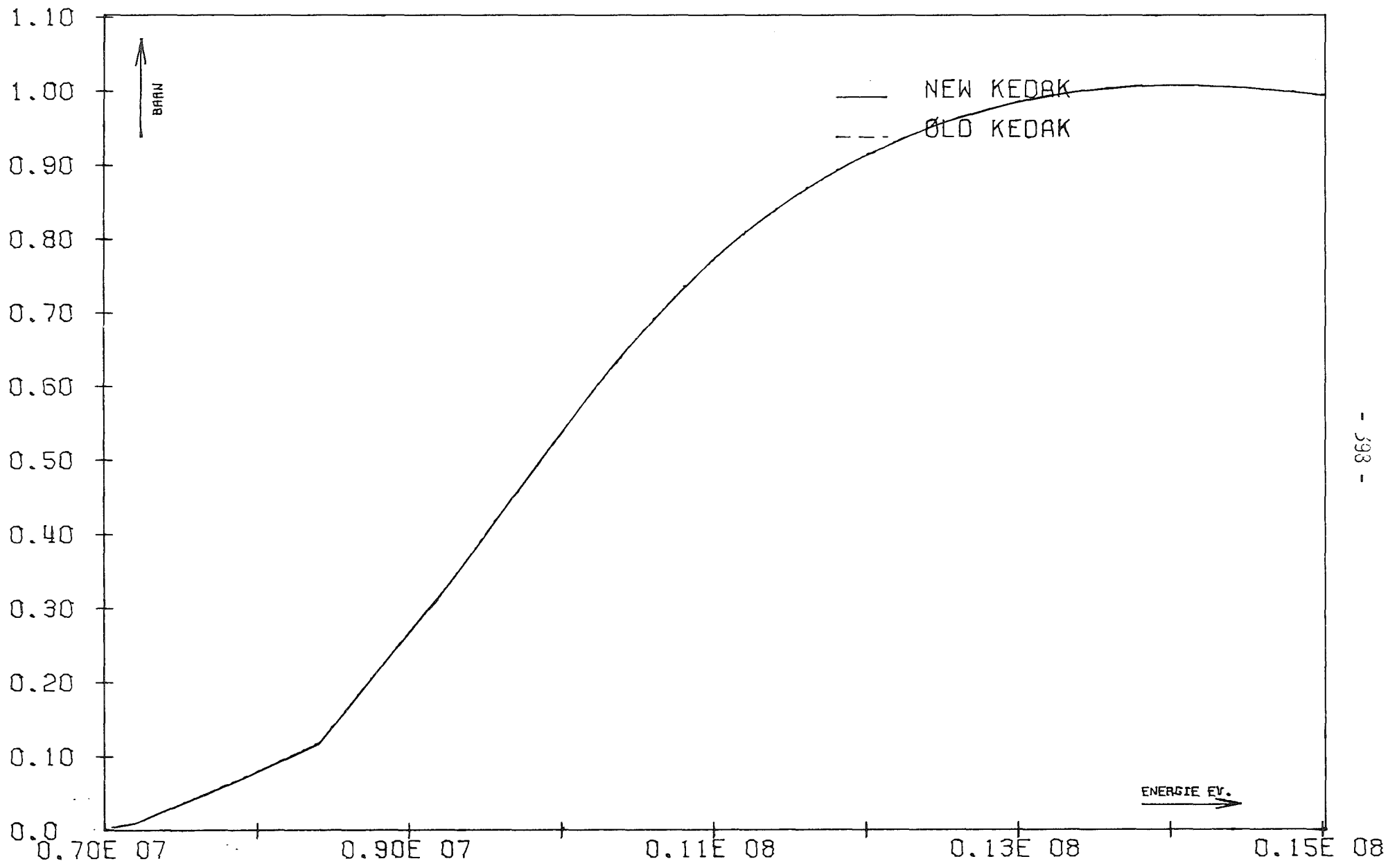


FIG. 53 M0 SG2N

INR901M1 26.01 19.22.

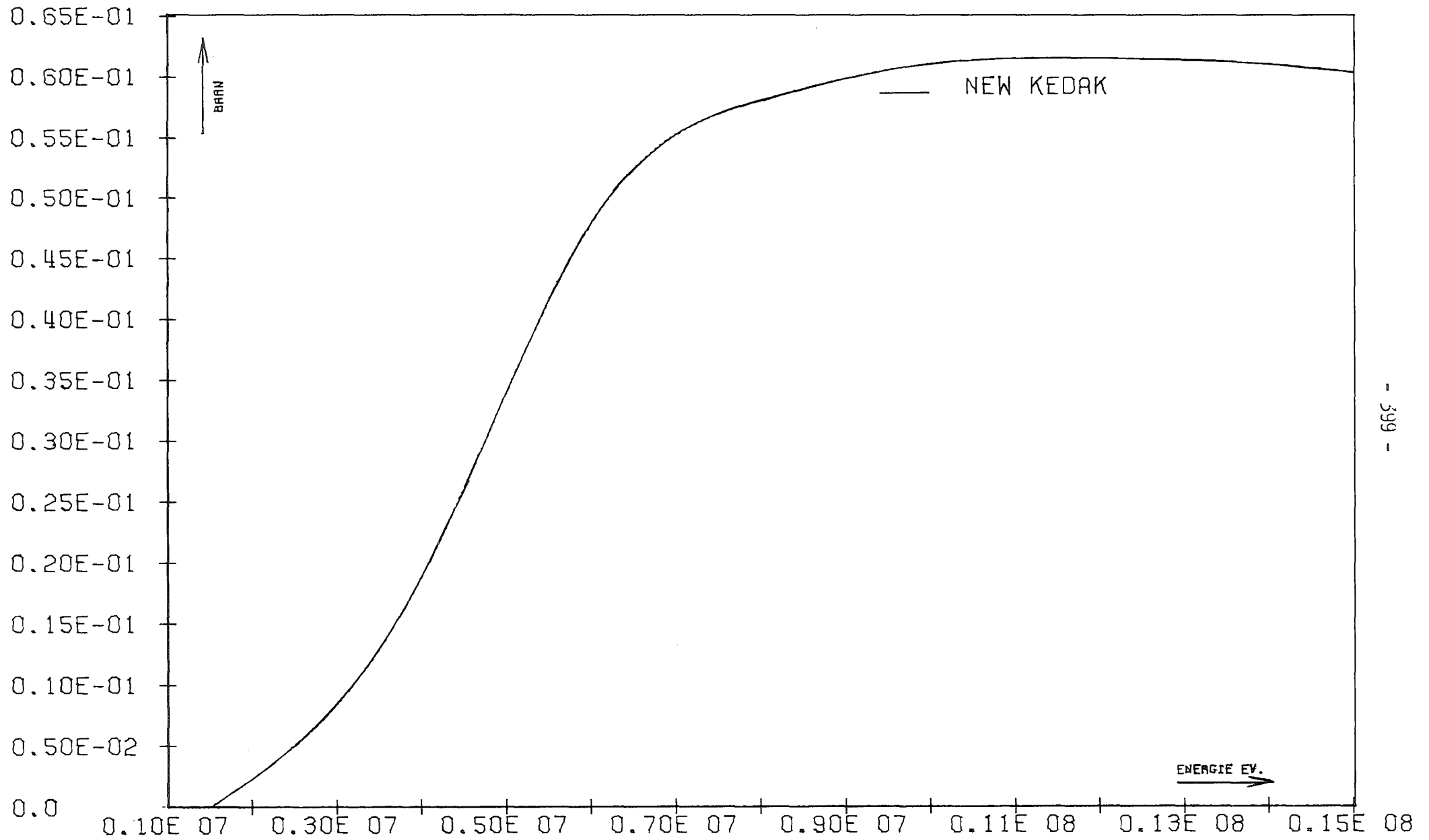


FIG. 54 MØ 92 SGP

INR901M1 26.01 19.22.

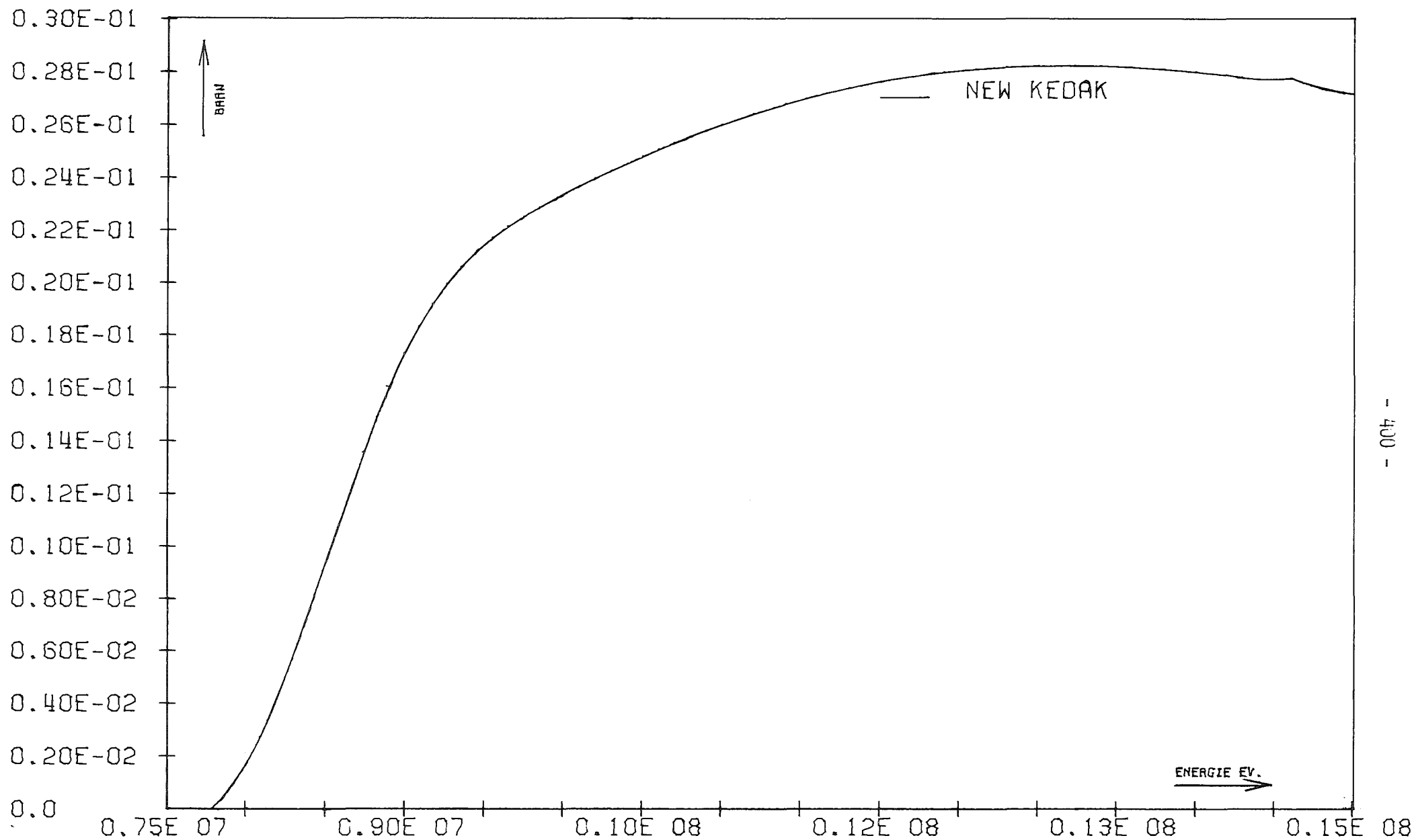


FIG. 55 MØ 92 SGALP

INR901M1 26.01 19.22.

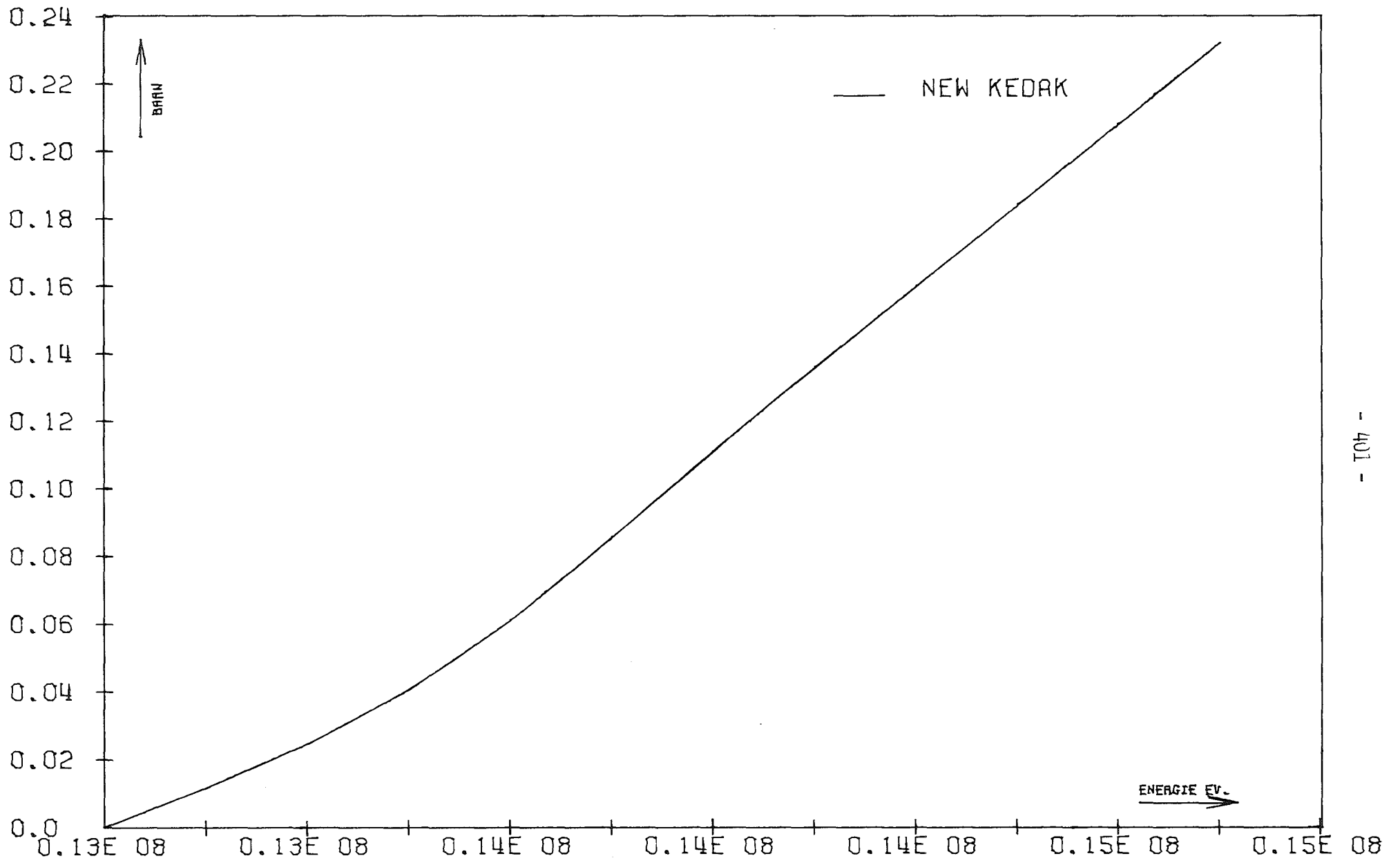


FIG. 56 MO 92 SG2N 1 INR901M1 26.01 19.22.

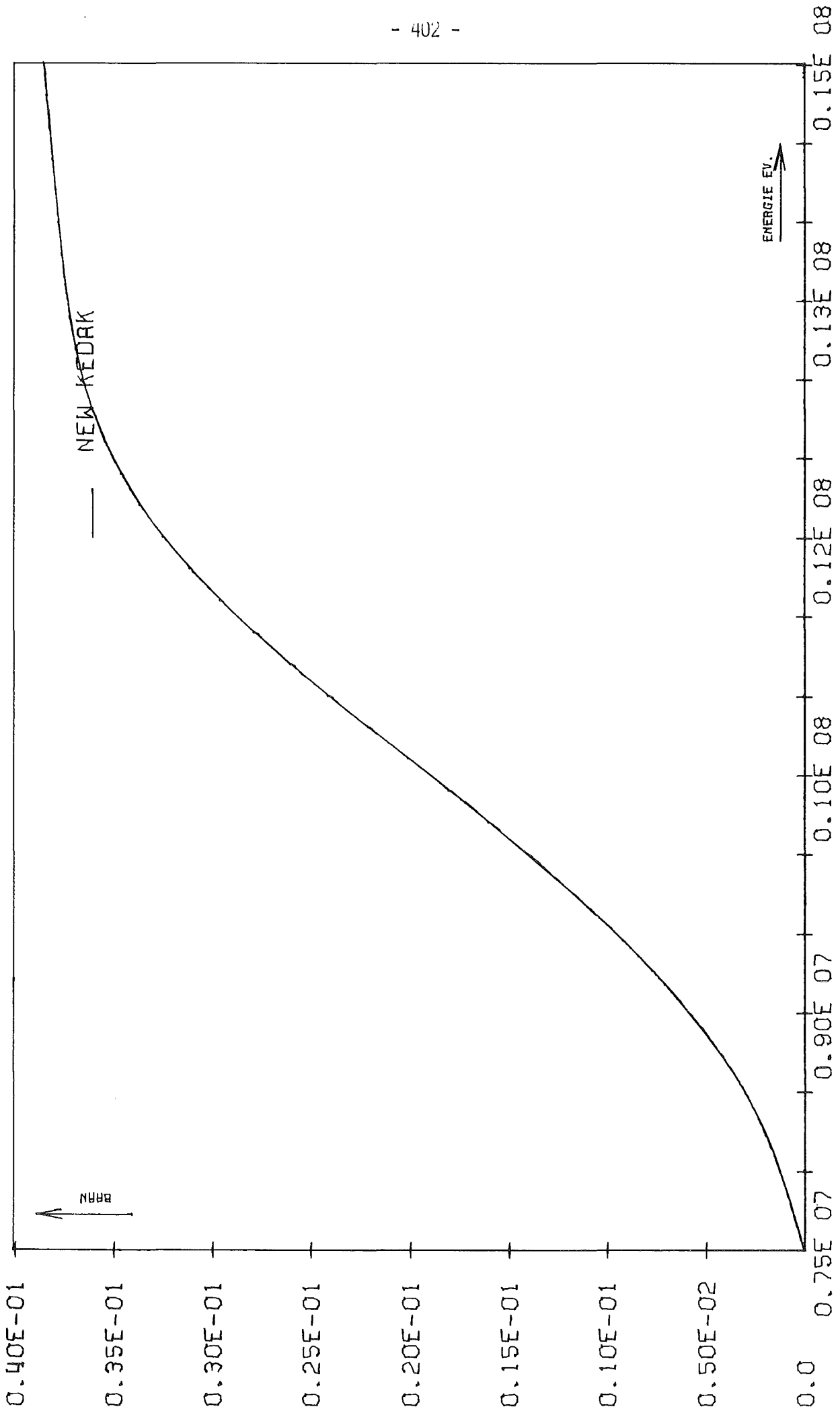


FIG. 57 MO 94 SGP

INR901M1 26.01 19.22.

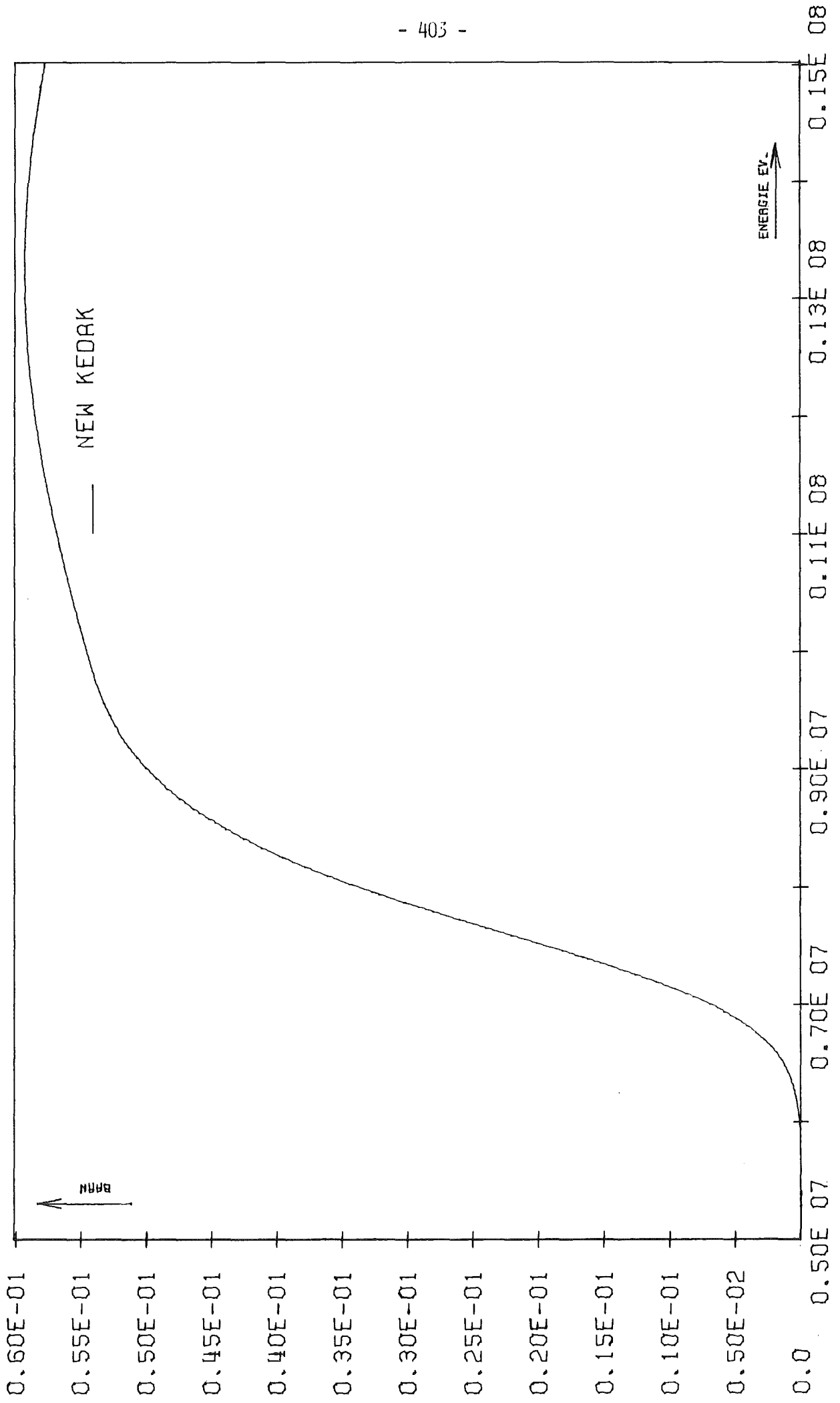


FIG. 58 M0 94 SCALP

INR901M1 26.01 19.22.

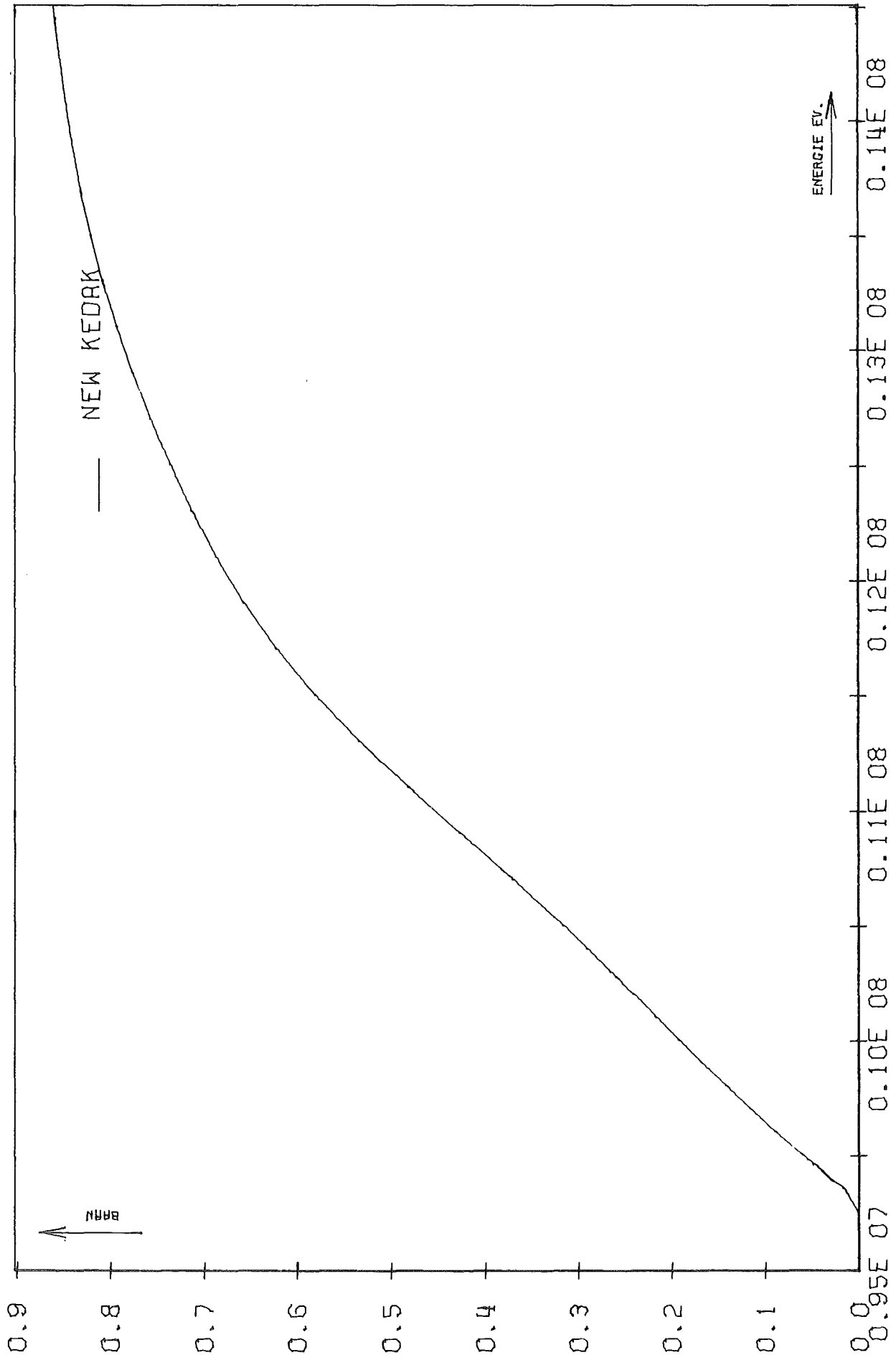


FIG. 59 MØ 94 SG2N INR901M1 26.01 19.22.

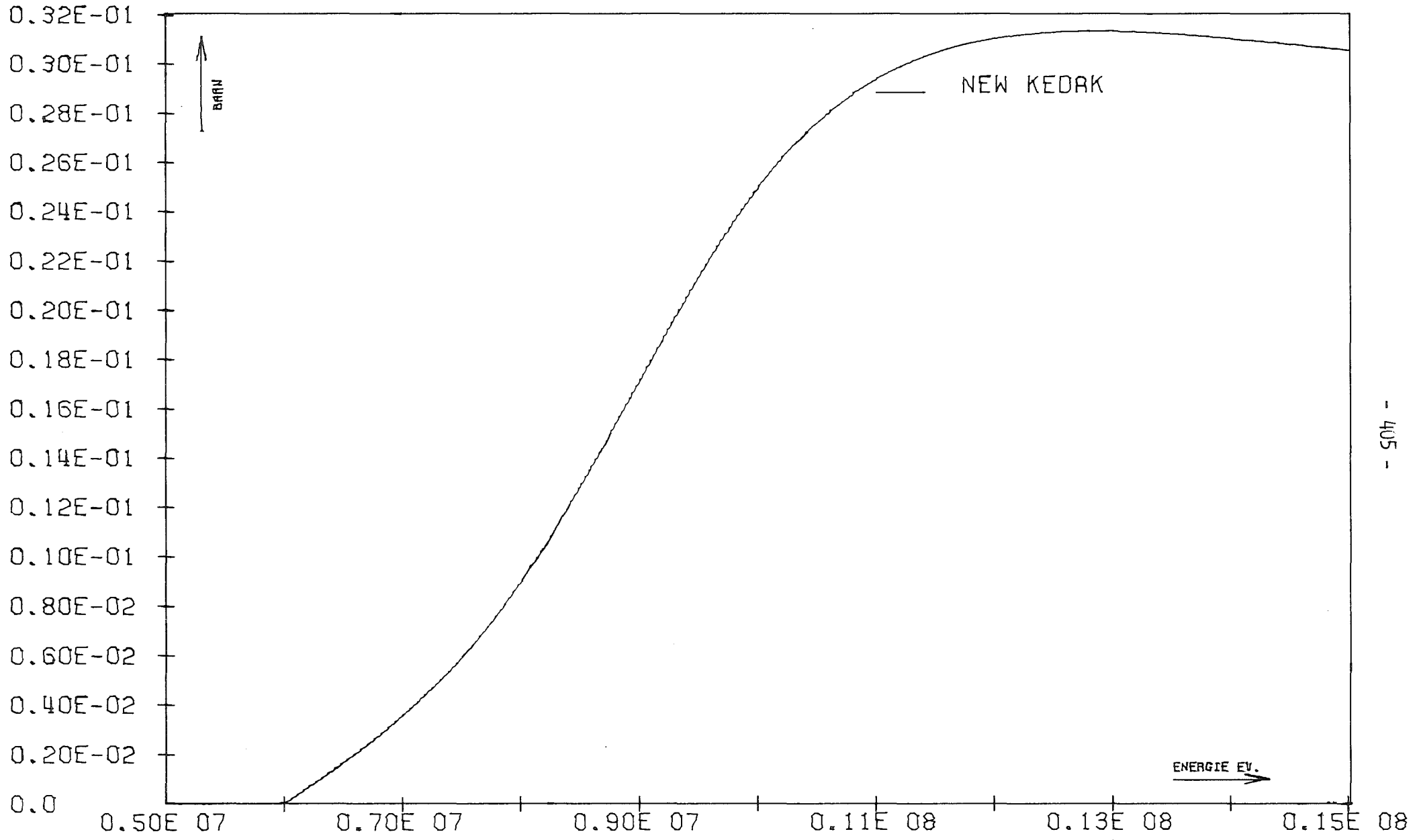


FIG. 60 MØ 95 SGP

INR901M1 26.01 19.22.

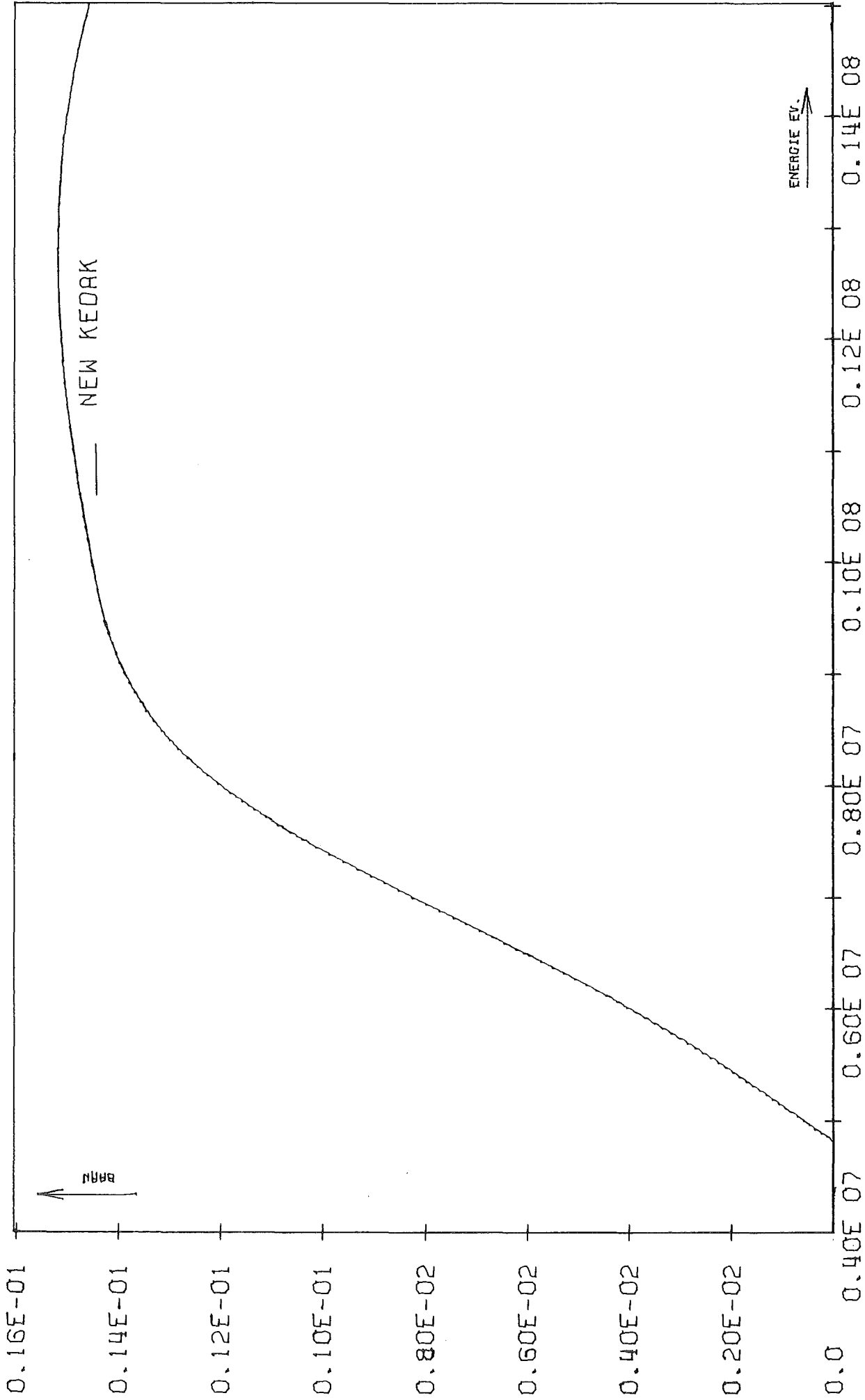


FIG. 61 M0 95 SGALP INR901M1 26.01 19.22.

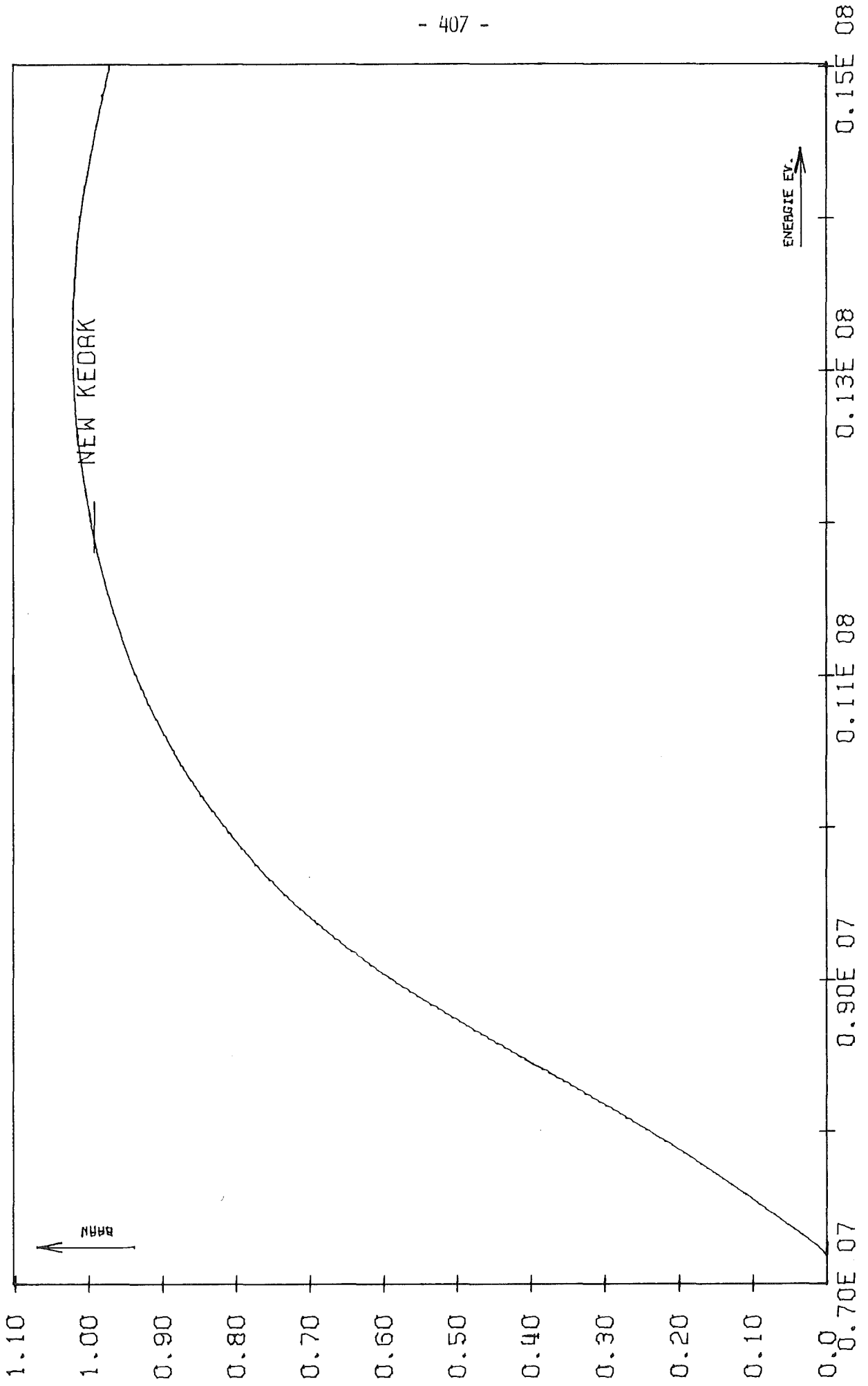


FIG. 62 M0 95 SG2N

INR901M1 26.01 19.22.

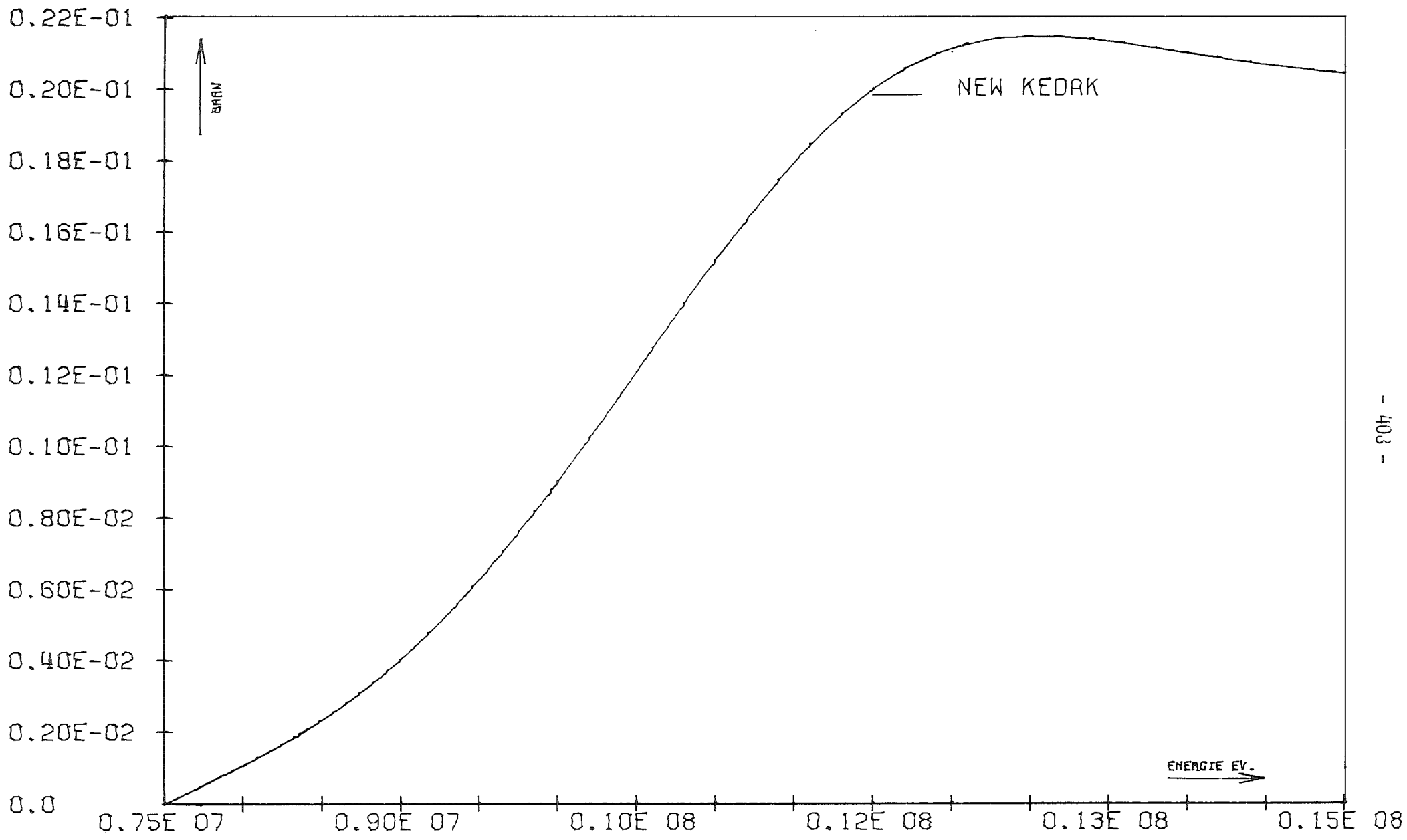


FIG. 63 MØ 96 SGP

INR901M1 26.01 19.22.

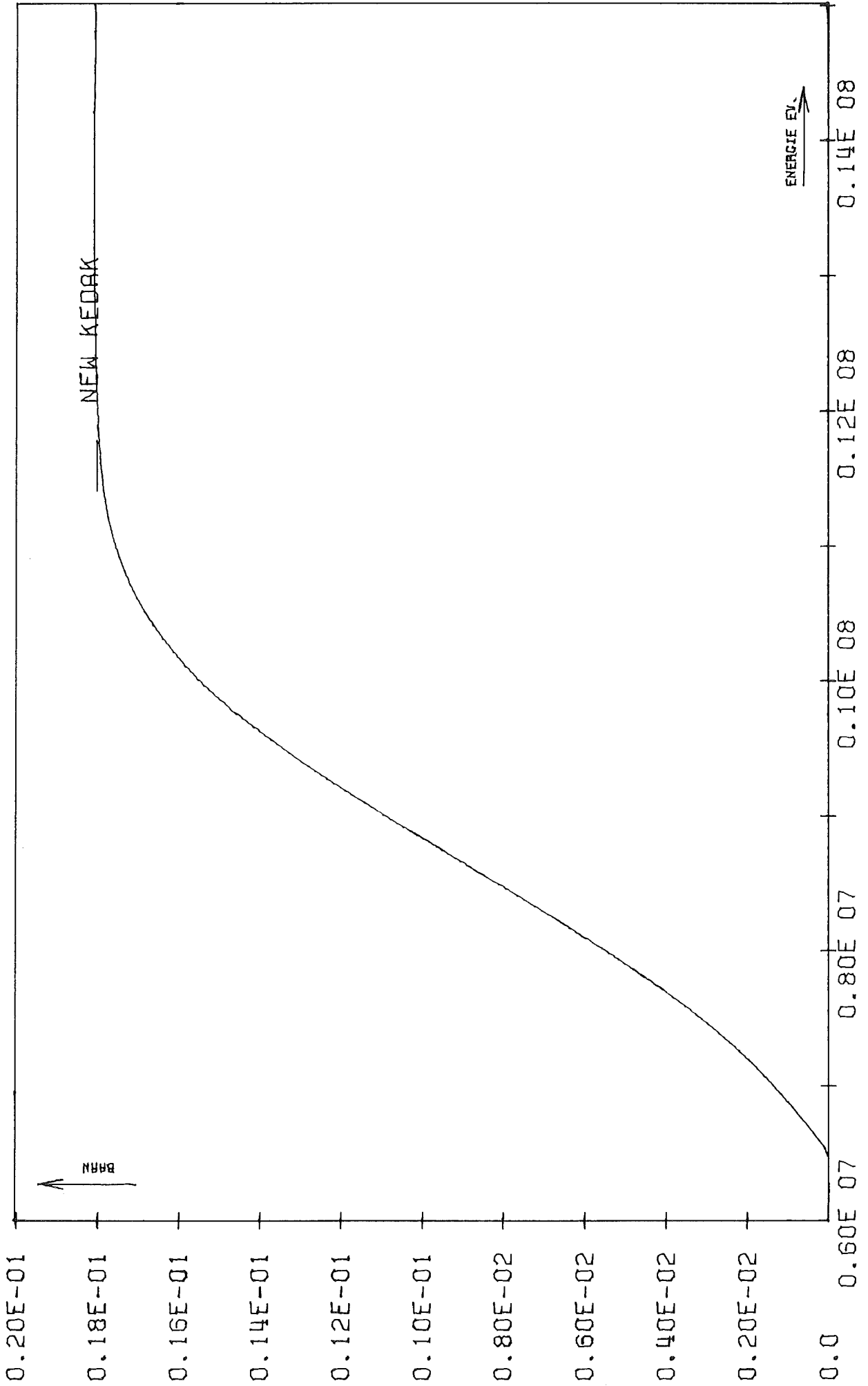
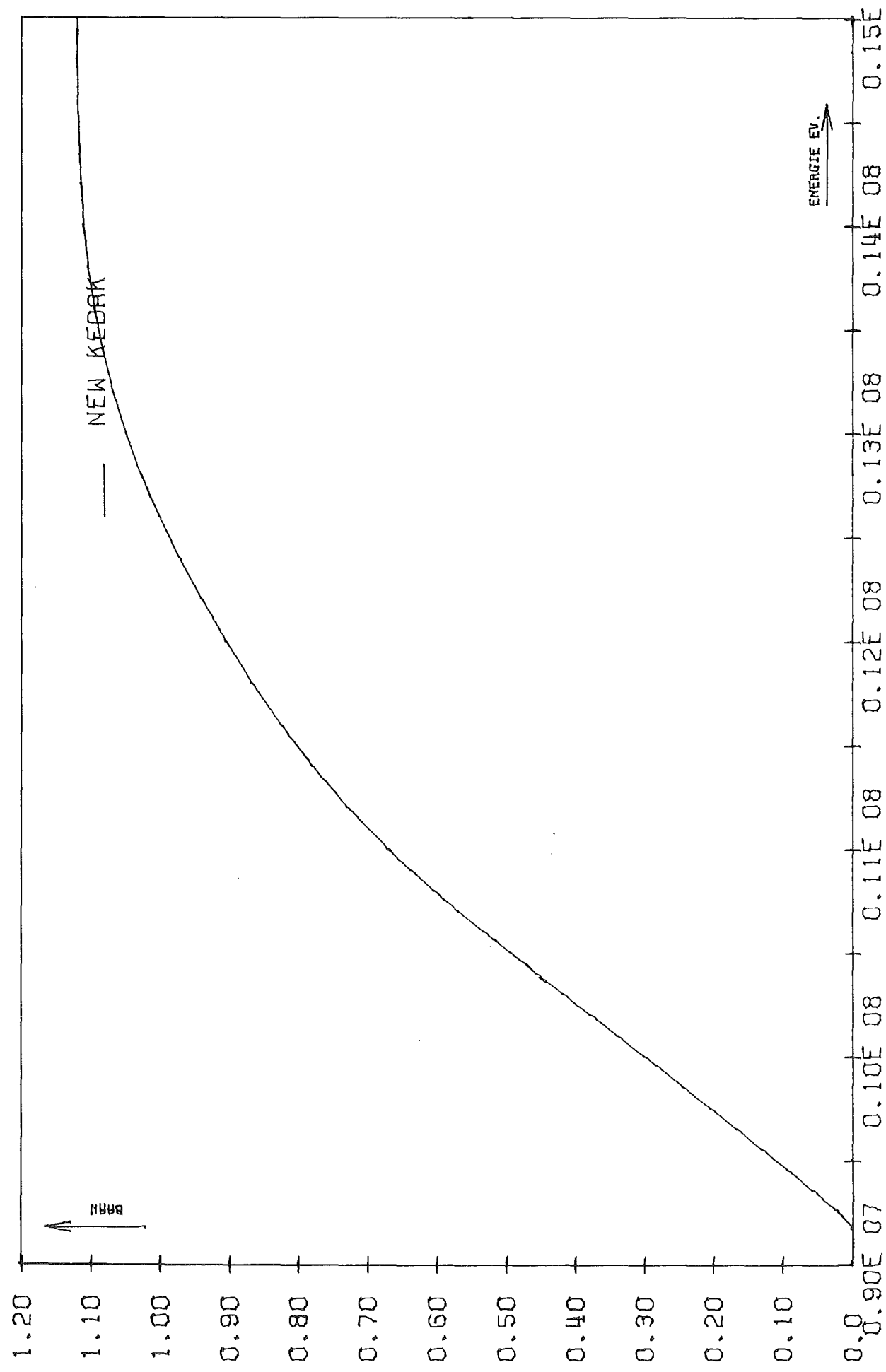


FIG. 64 M0 96 SGALP

INR901M1 26.01 19.22.



INR901M1 26.01 19.22.

FIG. 65 M0 96 SC2N

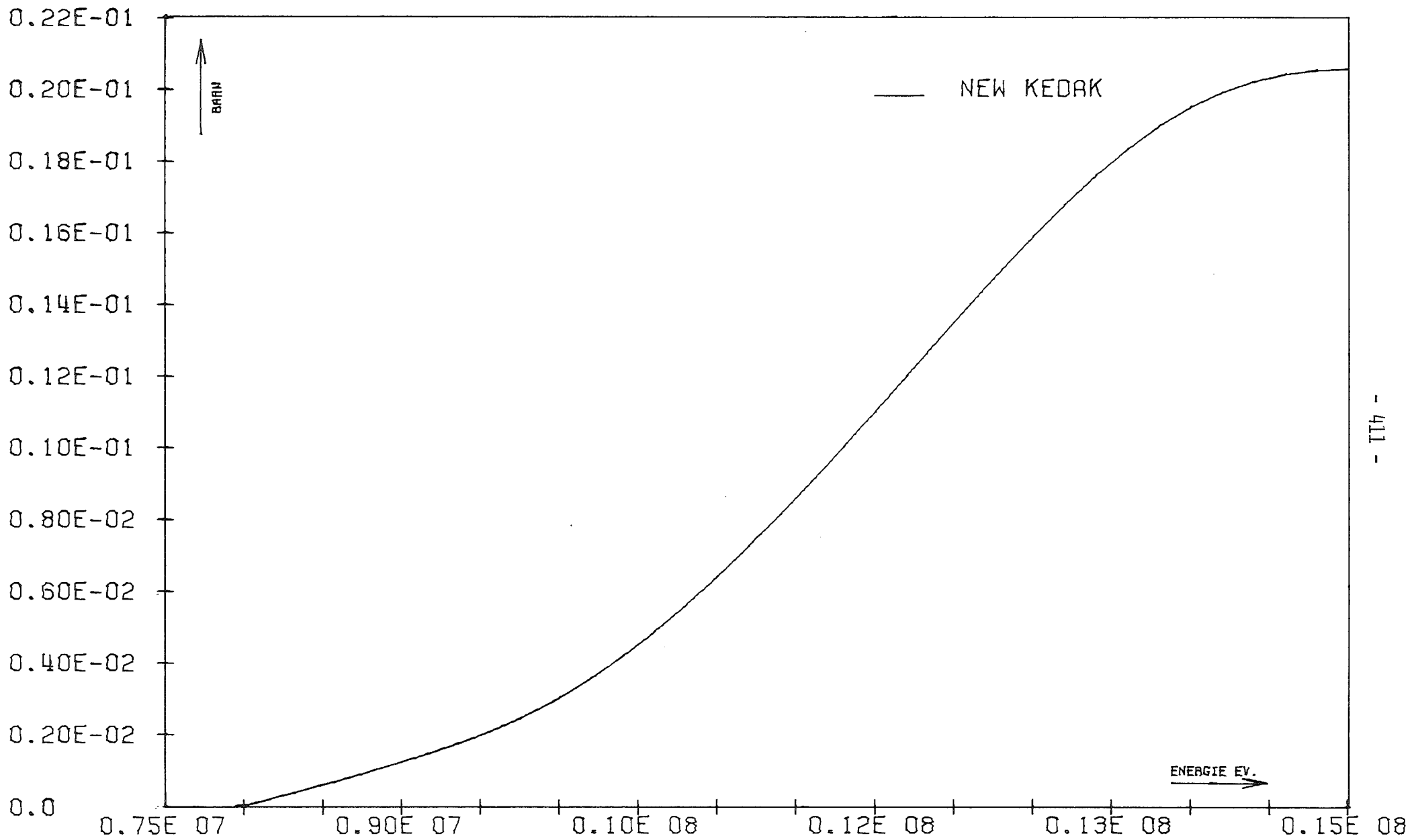


FIG. 66 MO 97 SGP

INR901M1 26.01 19.22.

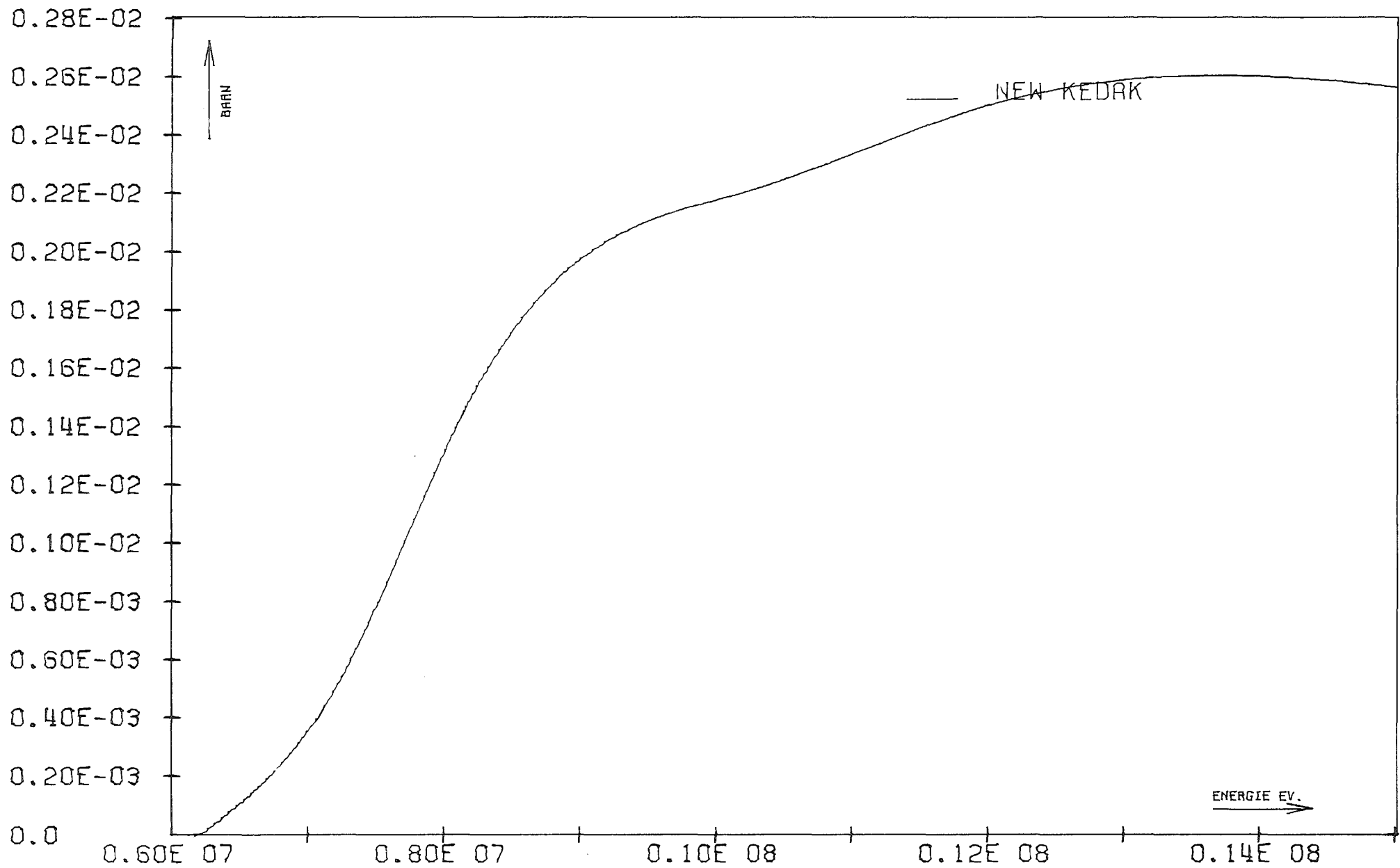


FIG. 67 M0 97 SGALP

INR901M1 26.01 19.22.

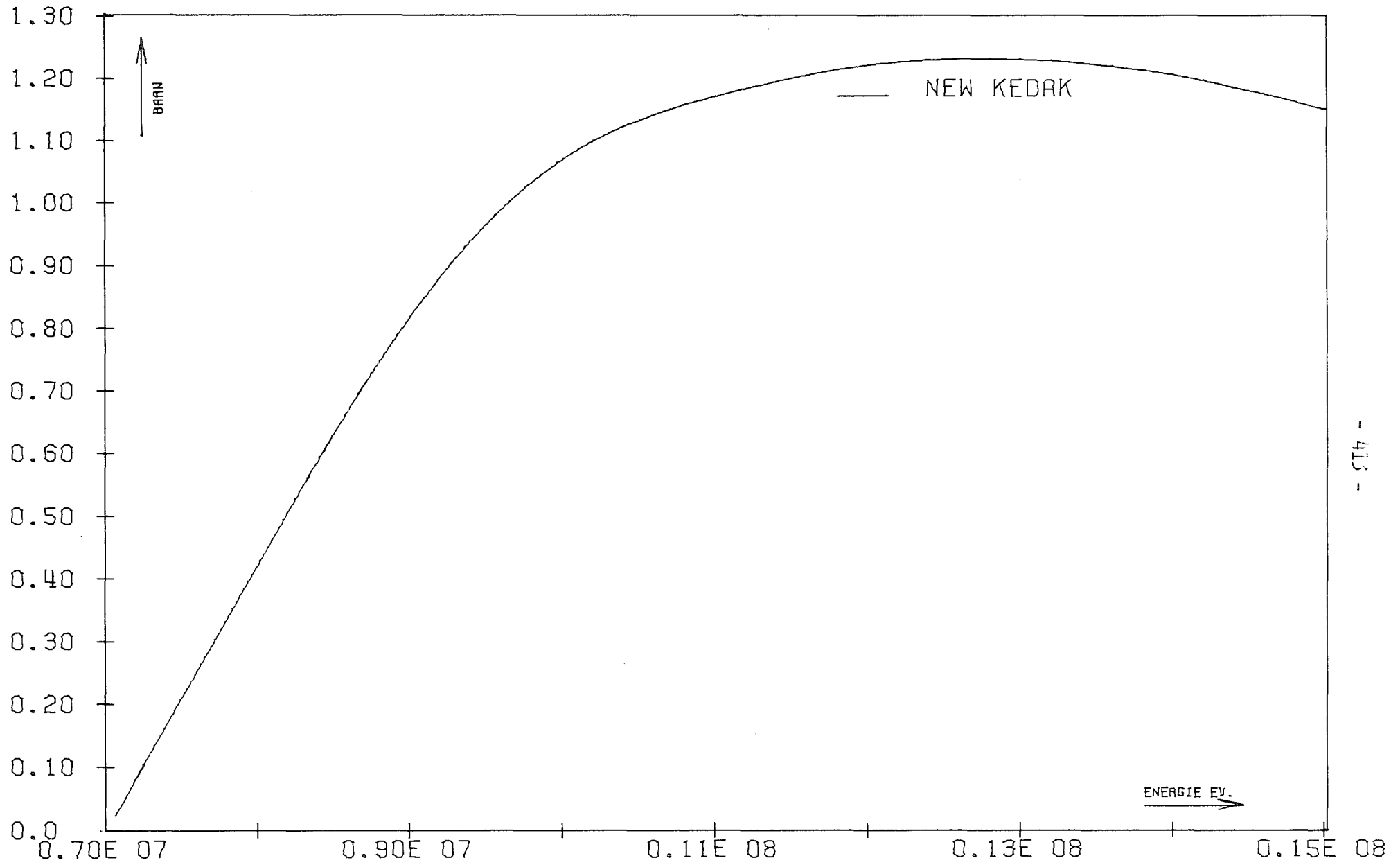


FIG. 68 MØ 97 SG2N

INR901M1 26.01 19.22.

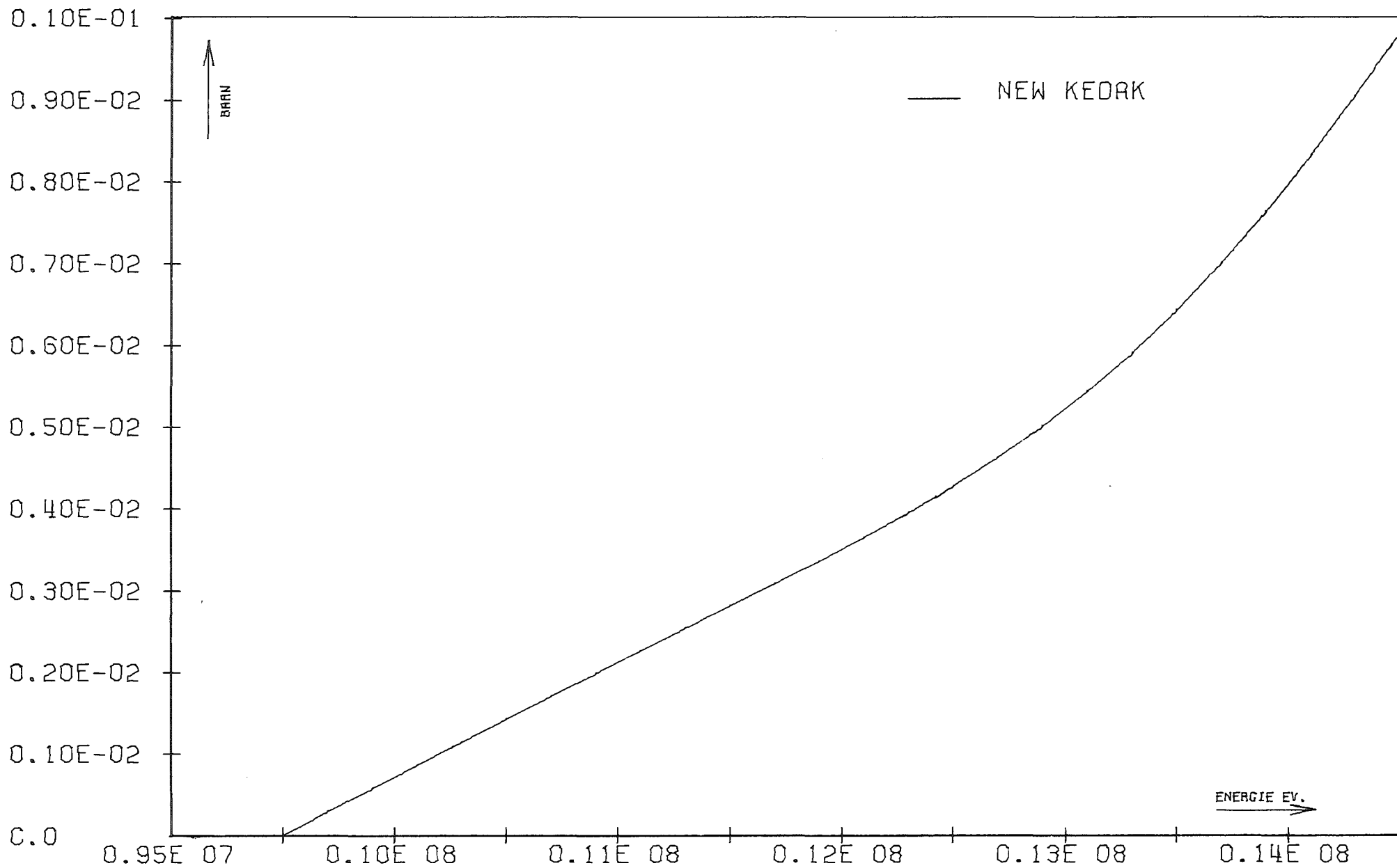


FIG. 69 M0 98 SGP

INR901M1 26.01 19.22.

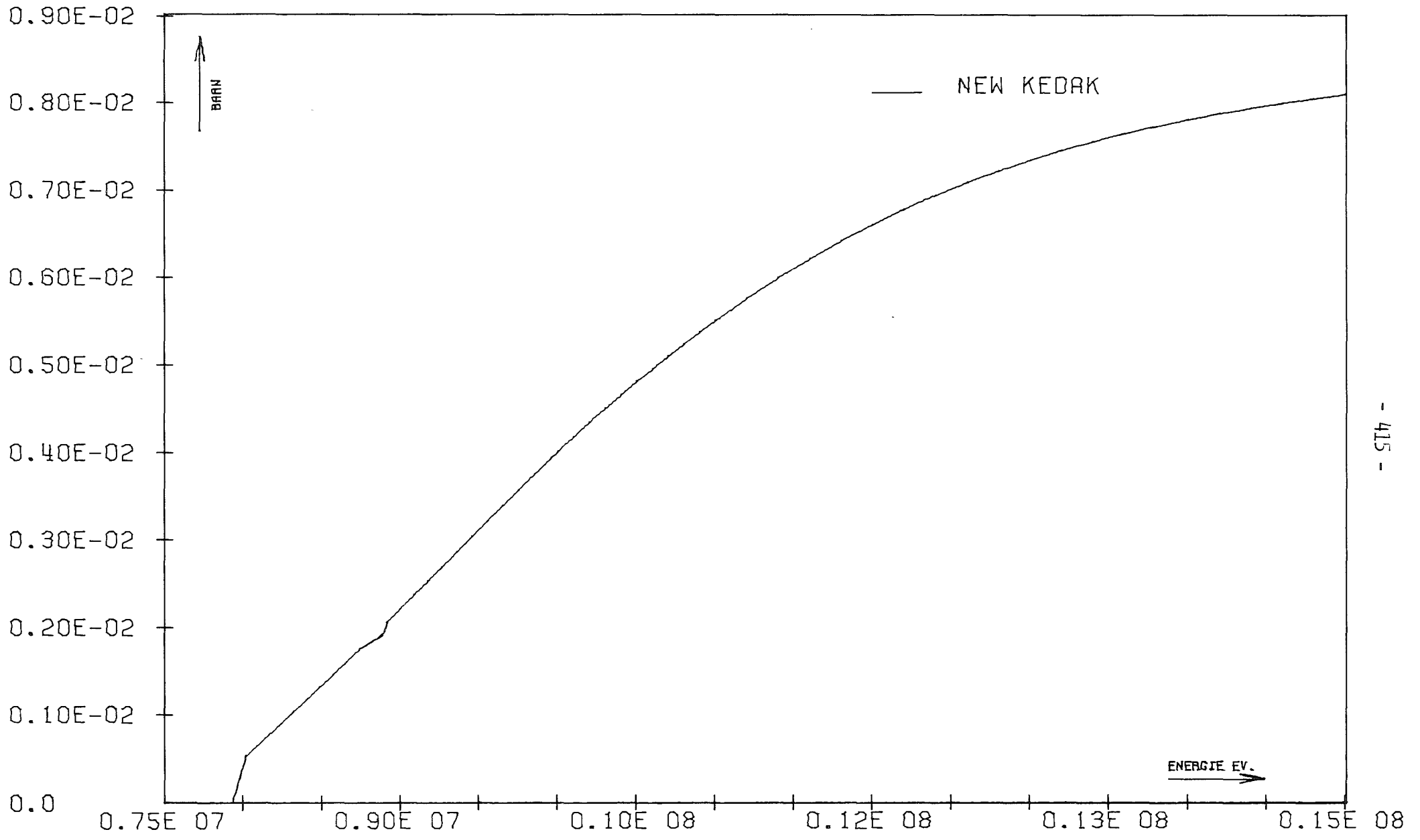


FIG. 70 M0 98 SGALP

INR901M1 26.01 19.22.

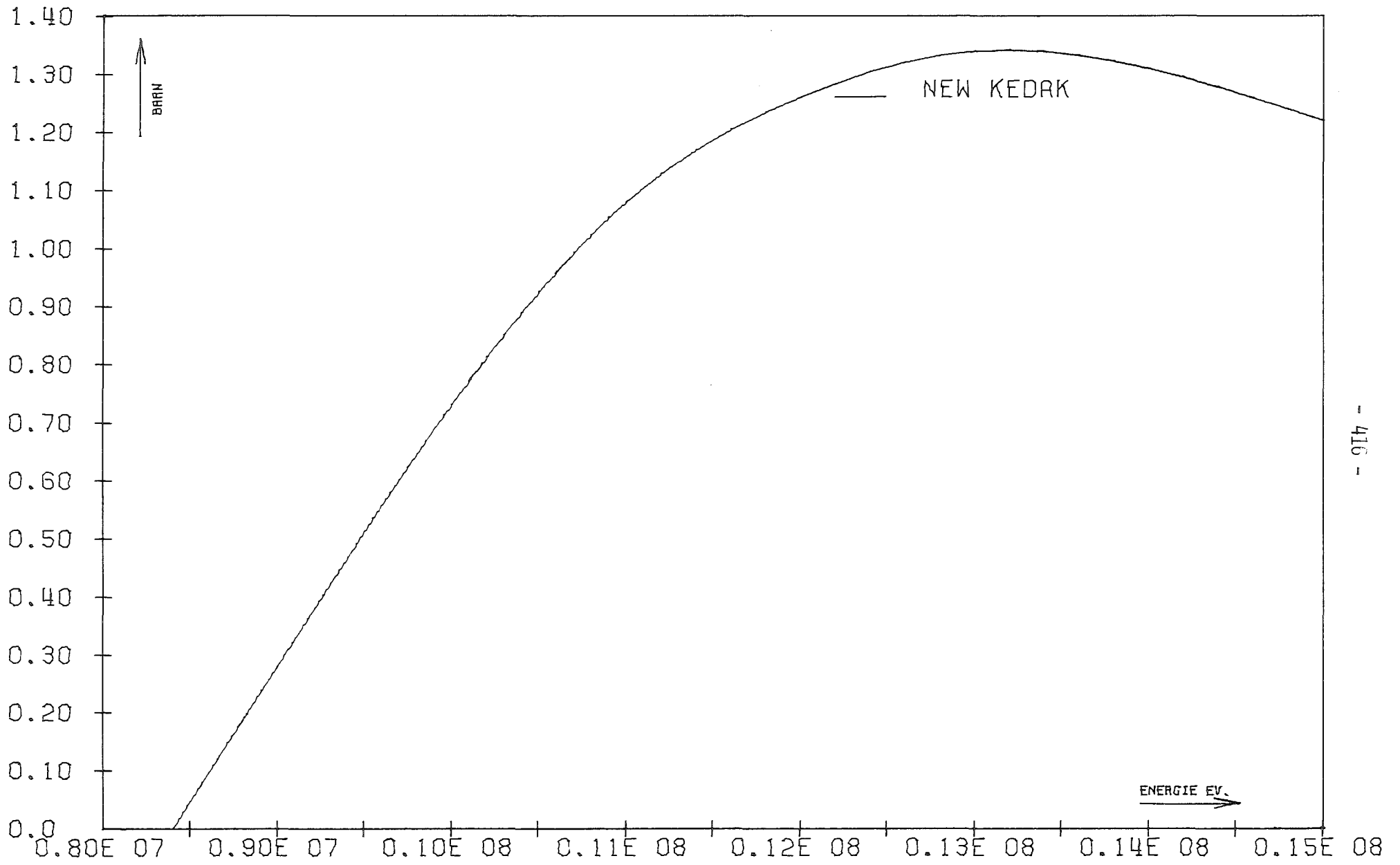


FIG. 71 M0 98 SG2N

INR901M1 26.01 19.22.

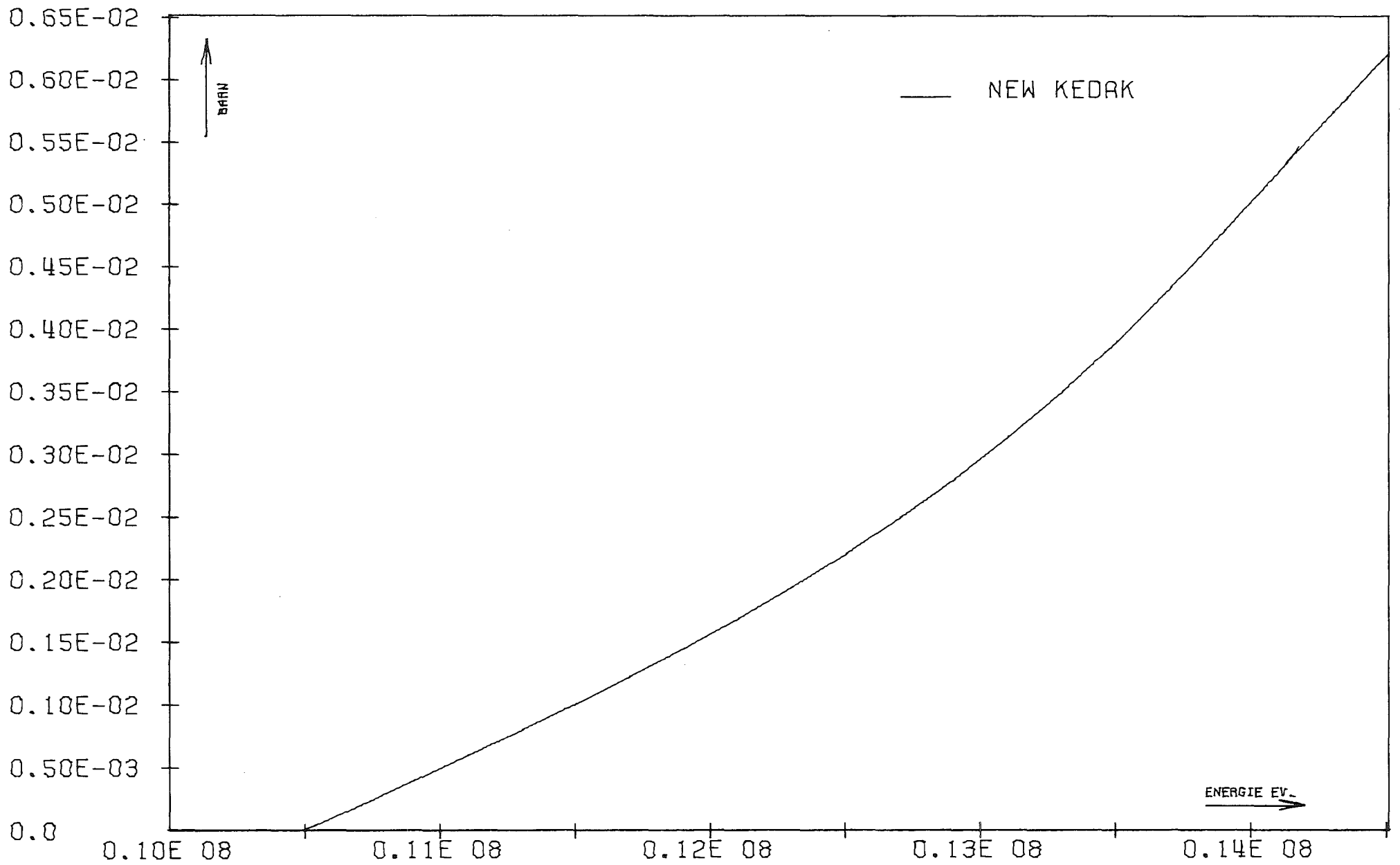


FIG. 72 M0100 SGP

INR901M1 26.01 19.22.

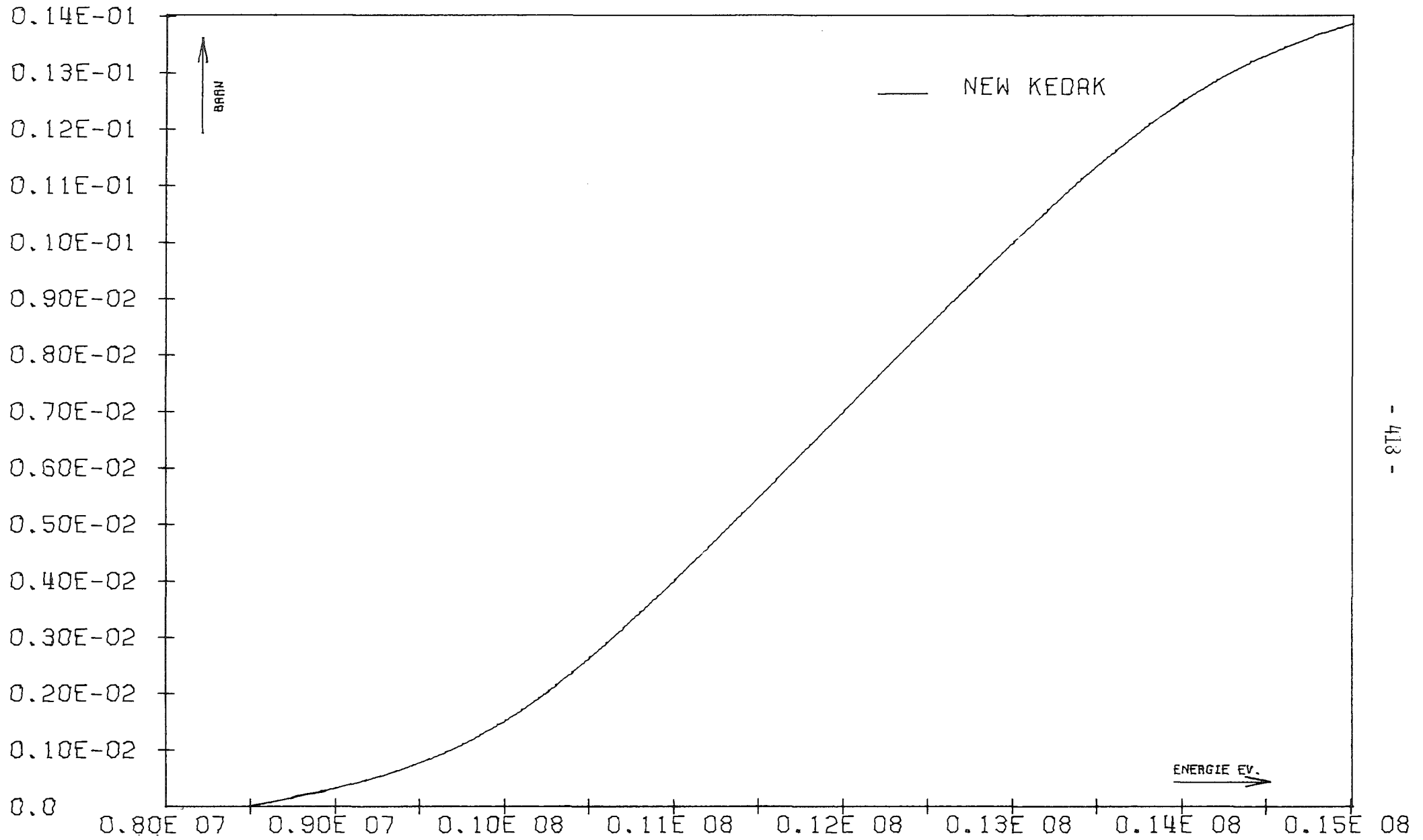


FIG. 73

M0100

SGALP

INR901M1 26.01 19.22.

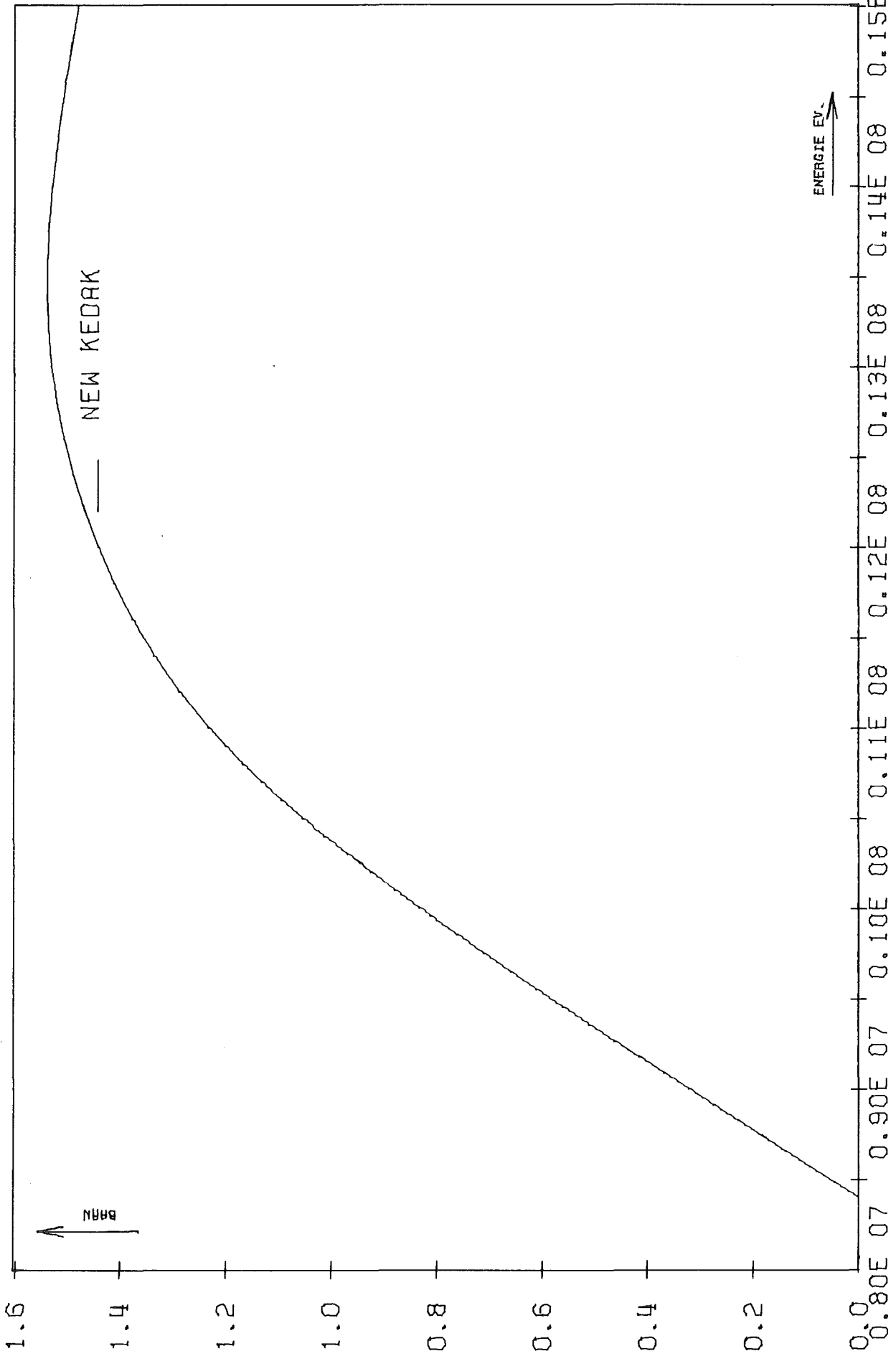


FIG. 74 M0100 SG2N

INR901M1 26.01 19.22.

Figure	Reaction type	Energy range	Material name
1	SGT	0.001 eV to 10 eV	Cd
2	SGG	" "	
3	SGN	" "	
4	SGTR	" "	
5	SGT	10 eV to 100 eV	
6	SGG	" "	
7	SGN	" "	
8	SGTR	" "	
9	SGT	100 eV to 300eV	
10	SGG	" "	
11	SGN	" "	
12	SGTR	" "	
13	SGT	300 eV to 600 eV	
14	SGG	" "	
15	SGN	" "	
16	SGTR	" "	
17	SGT	600 eV to 1 keV	
18	SGG	" "	
19	SGN	" "	
20	SGTR	" "	
21	SGT	1 keV to 15 MeV	
22	SGG	" "	
23	SGA	" "	
24	SGX	" "	
25	SGN	" "	
26	SGTR	" "	
27	MUEL	" "	
28	SGI	Thr. to 15 MeV	
29	SGIZ		
	E*= 0.300 MeV	Thr. to 1.4 MeV	
30	E*= 0.600 MeV	" "	
31	SGP	Thr. to 15 MeV	
32	SGALP	" "	
33	SG2N	" "	

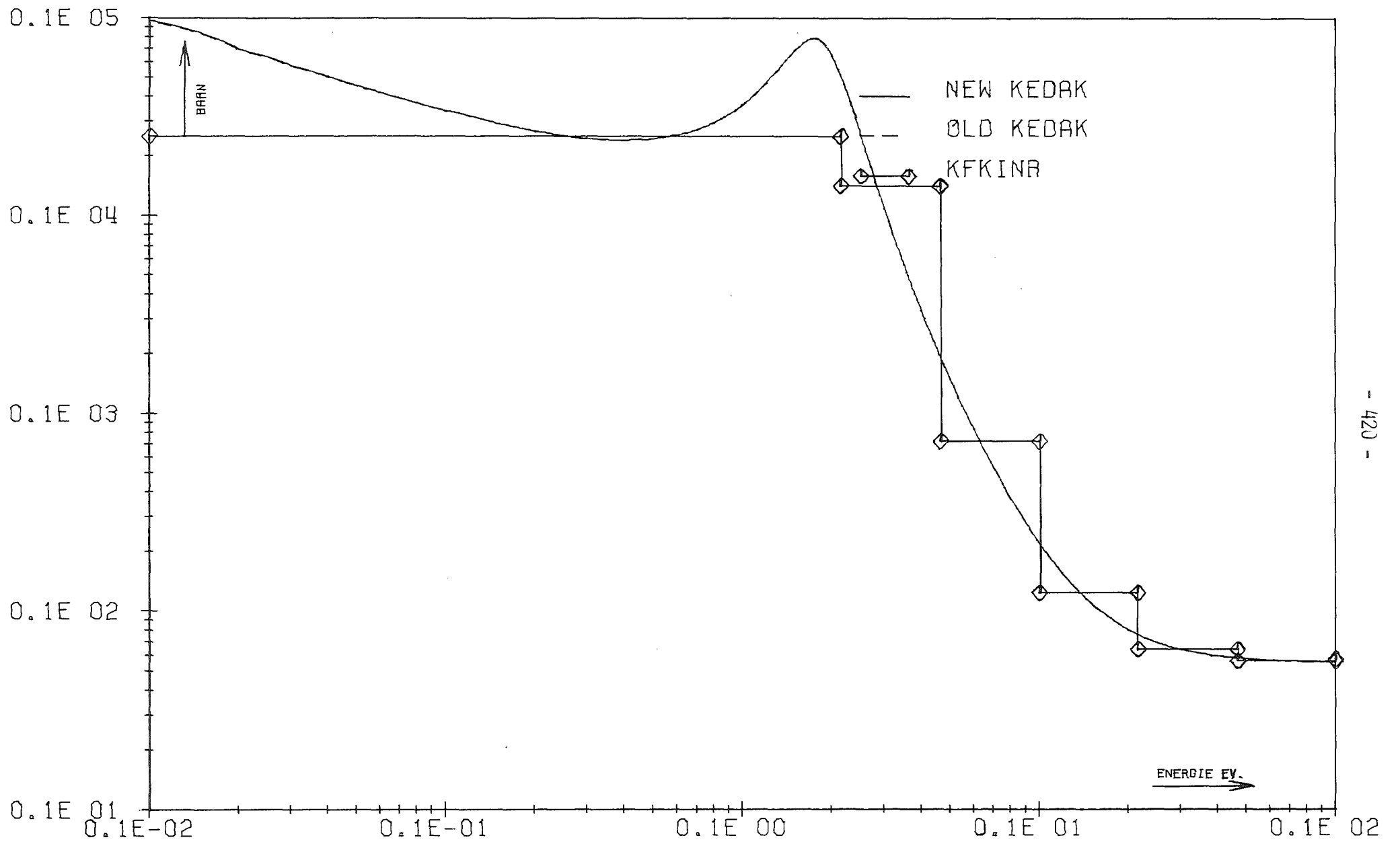


FIG. 1 CD SGT

INR901CD 21.01 19.27.

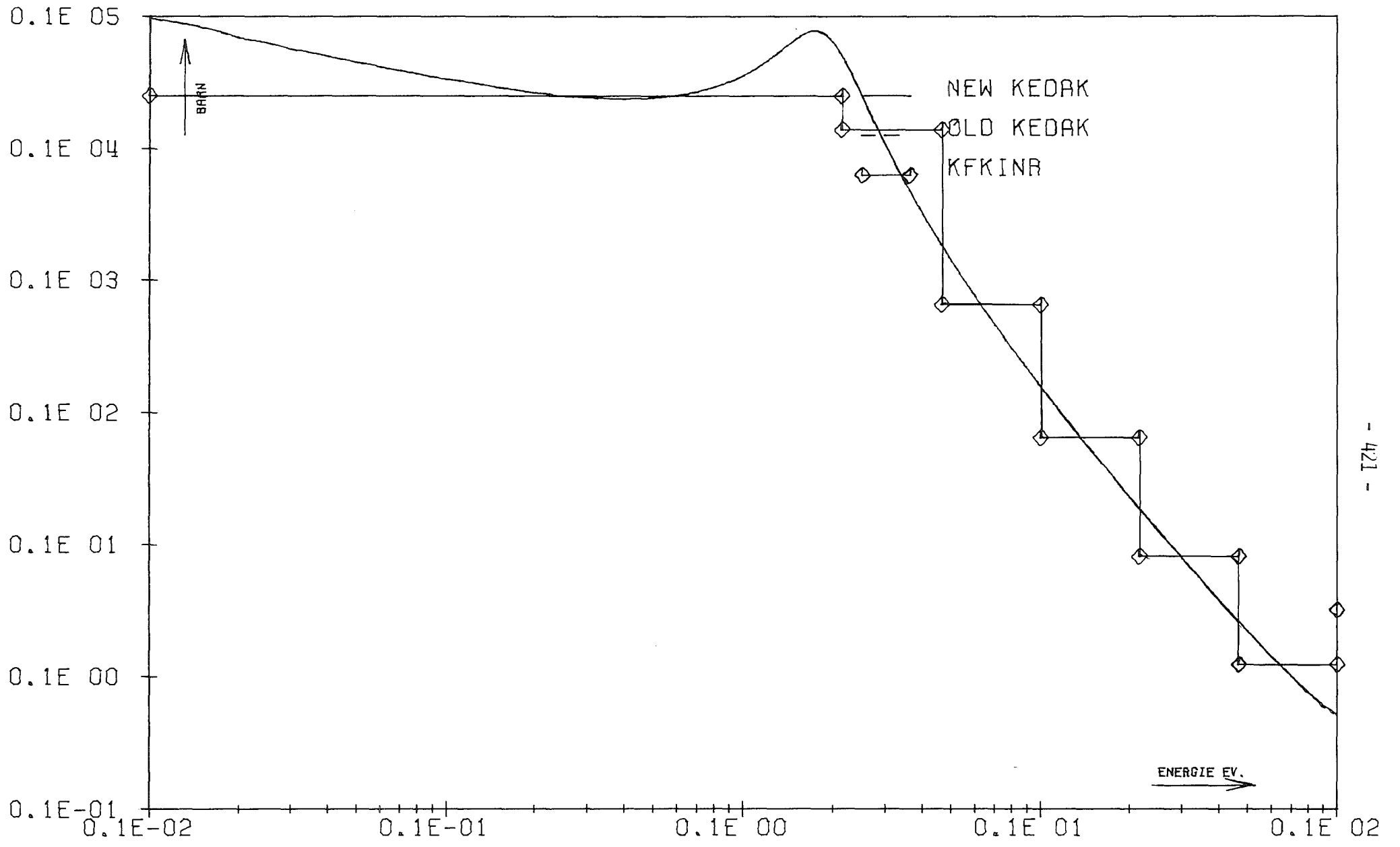


FIG. 2 CD SGG INR901CD 21.01 19.27.

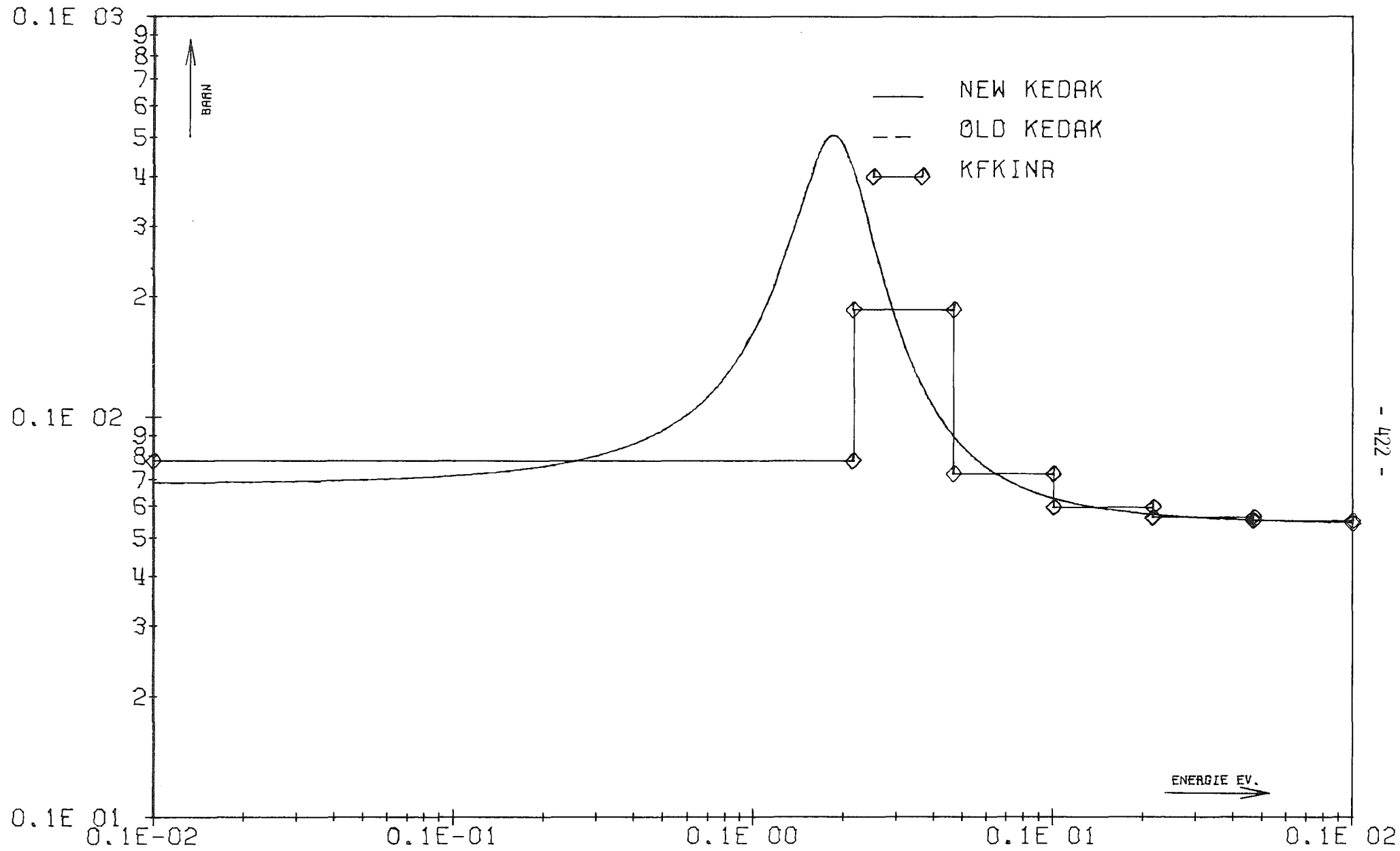
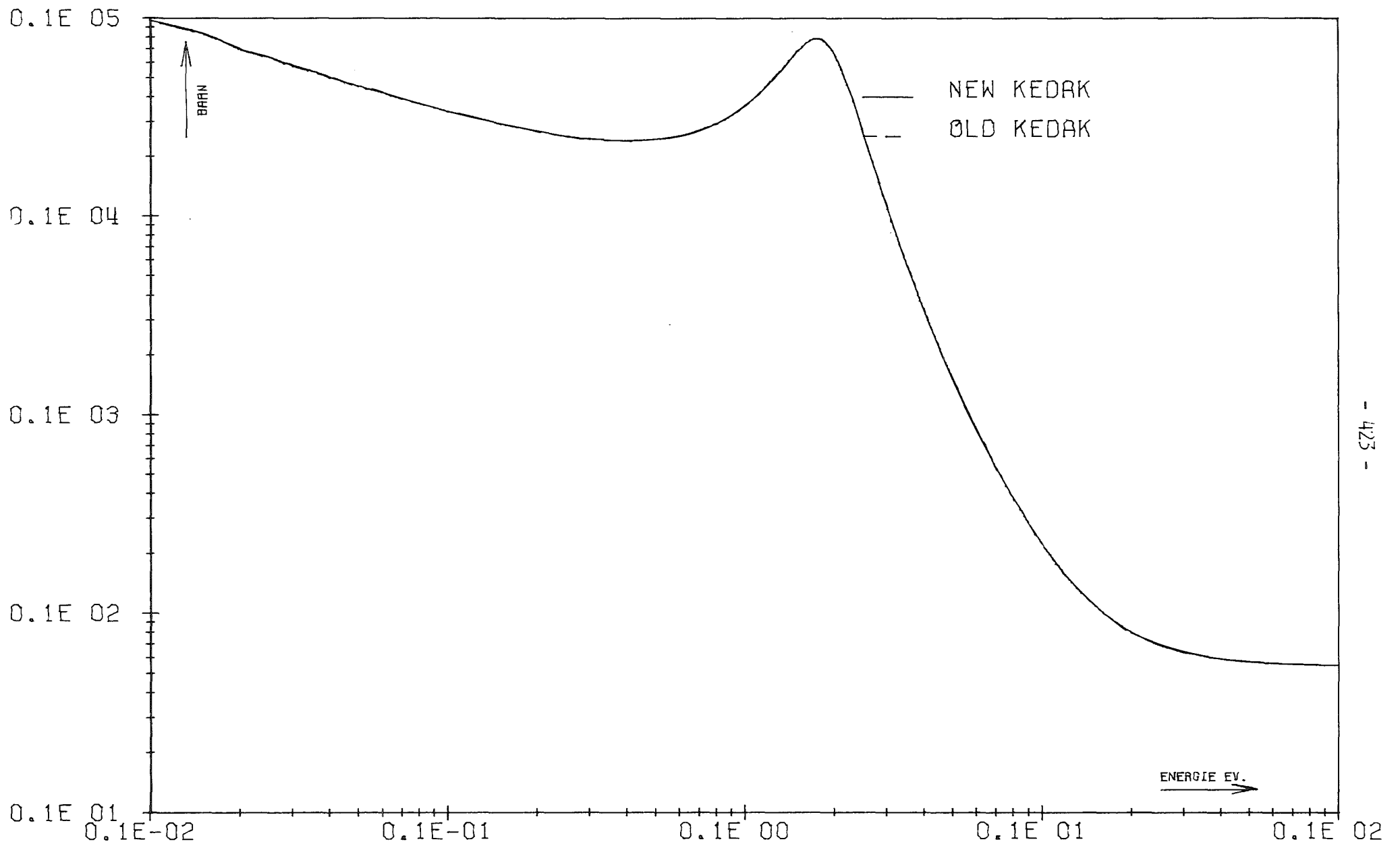


FIG. 3

CD SGN

INR901CD 21.01 19.27.



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FIG. 4 CD SGTR

INR901CD 21.01 19.27.

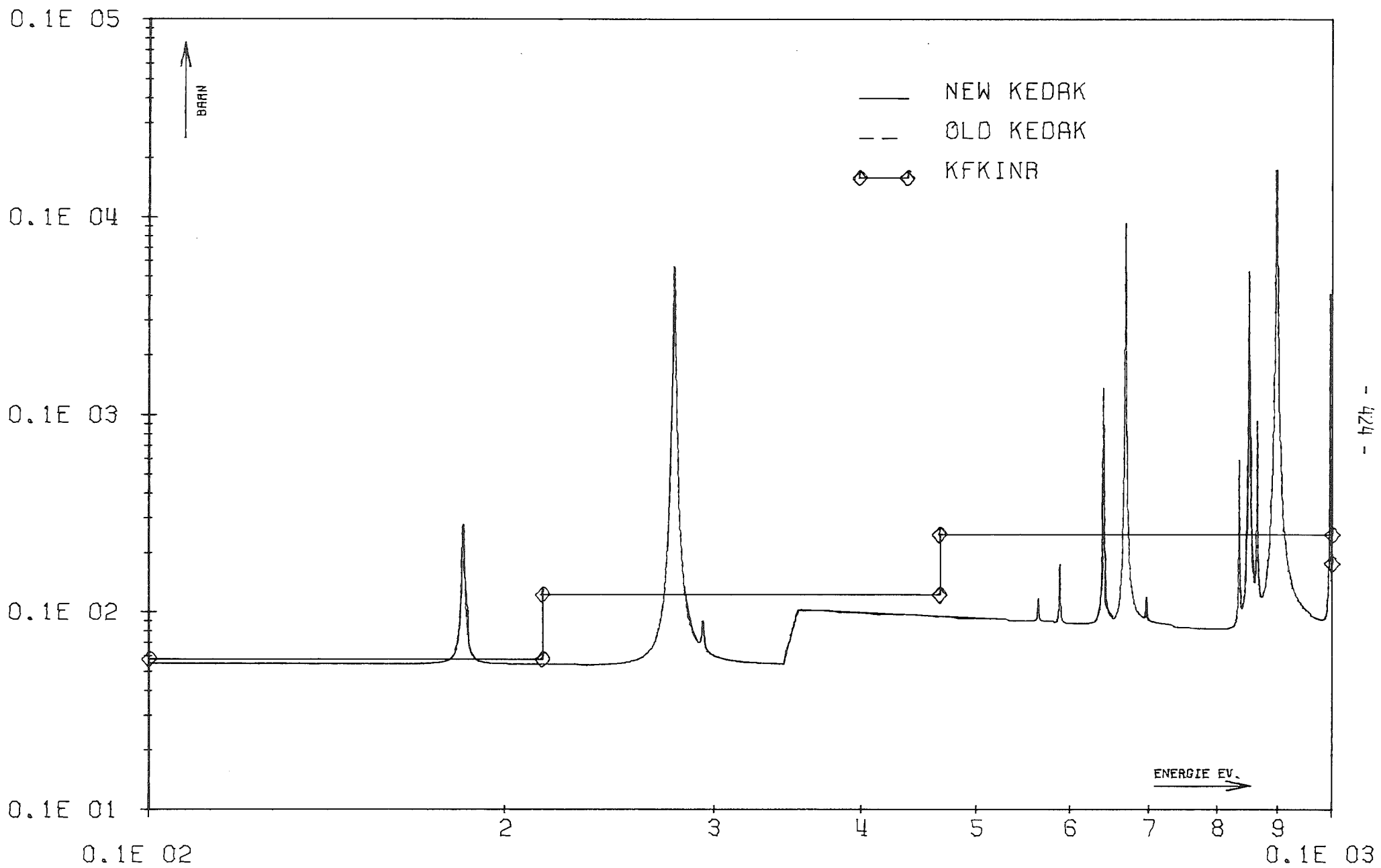
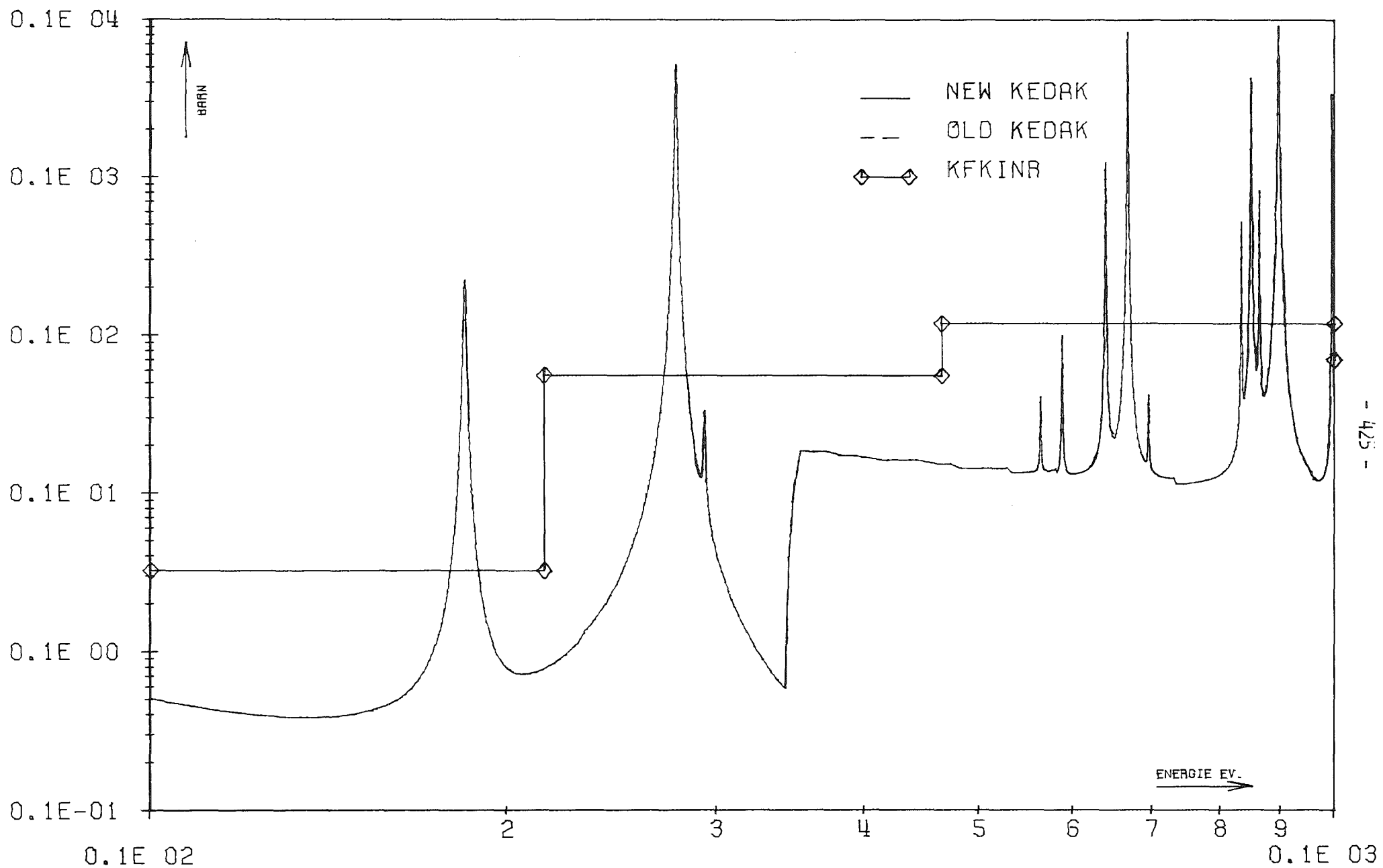


FIG. 5 CD SGT

INR901CD 21.01 19.27.



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FIG. 6 CD SGG

INR901CD 21.01 19.27.

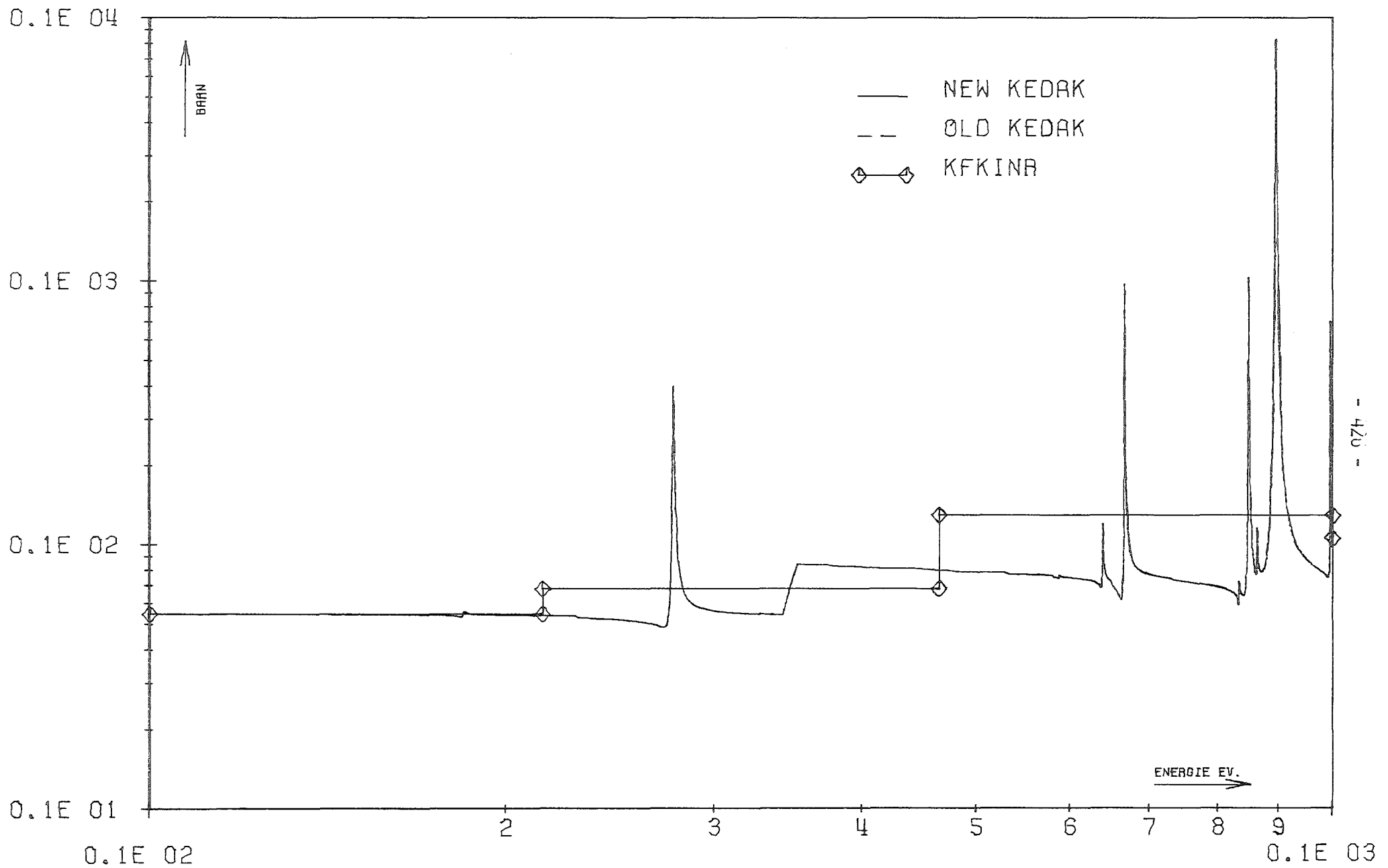
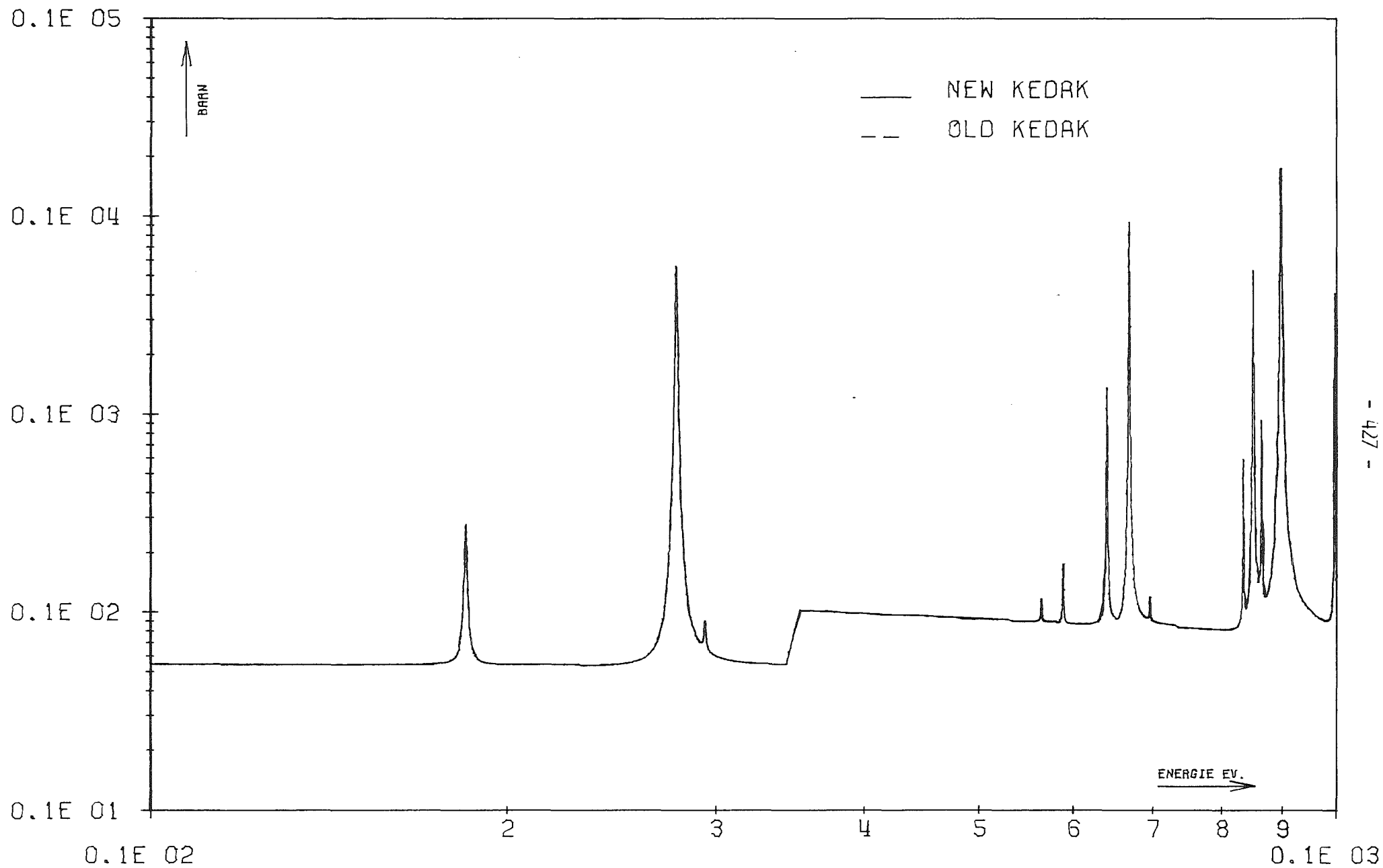


FIG. 7 CD SGN

INR901CD 21.01 19.27.



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FIG. 8 CD SGTR

INR901CD 21.01 19.27.

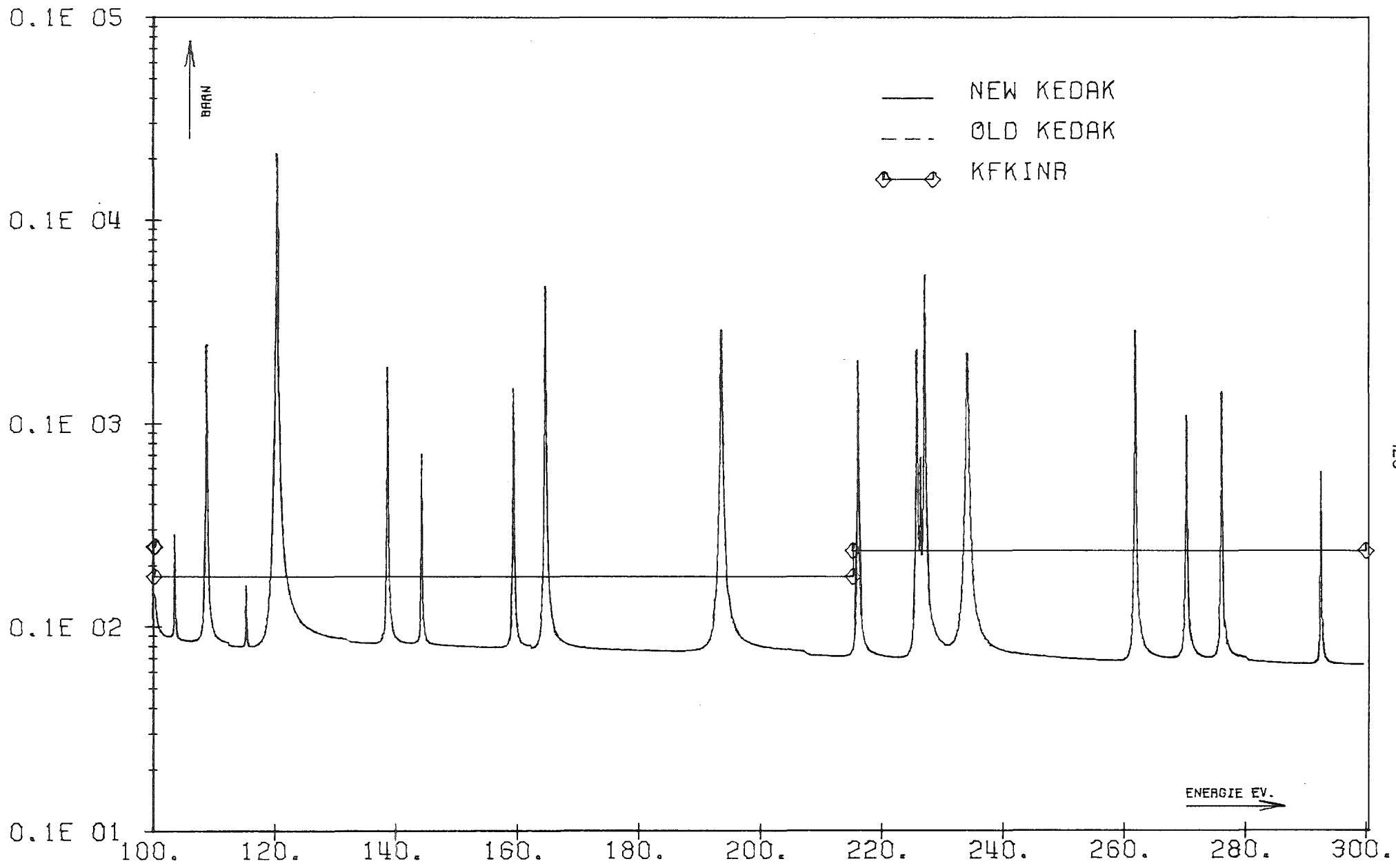


FIG. 9 CD SGT

INR901CD 21.01 19.27.

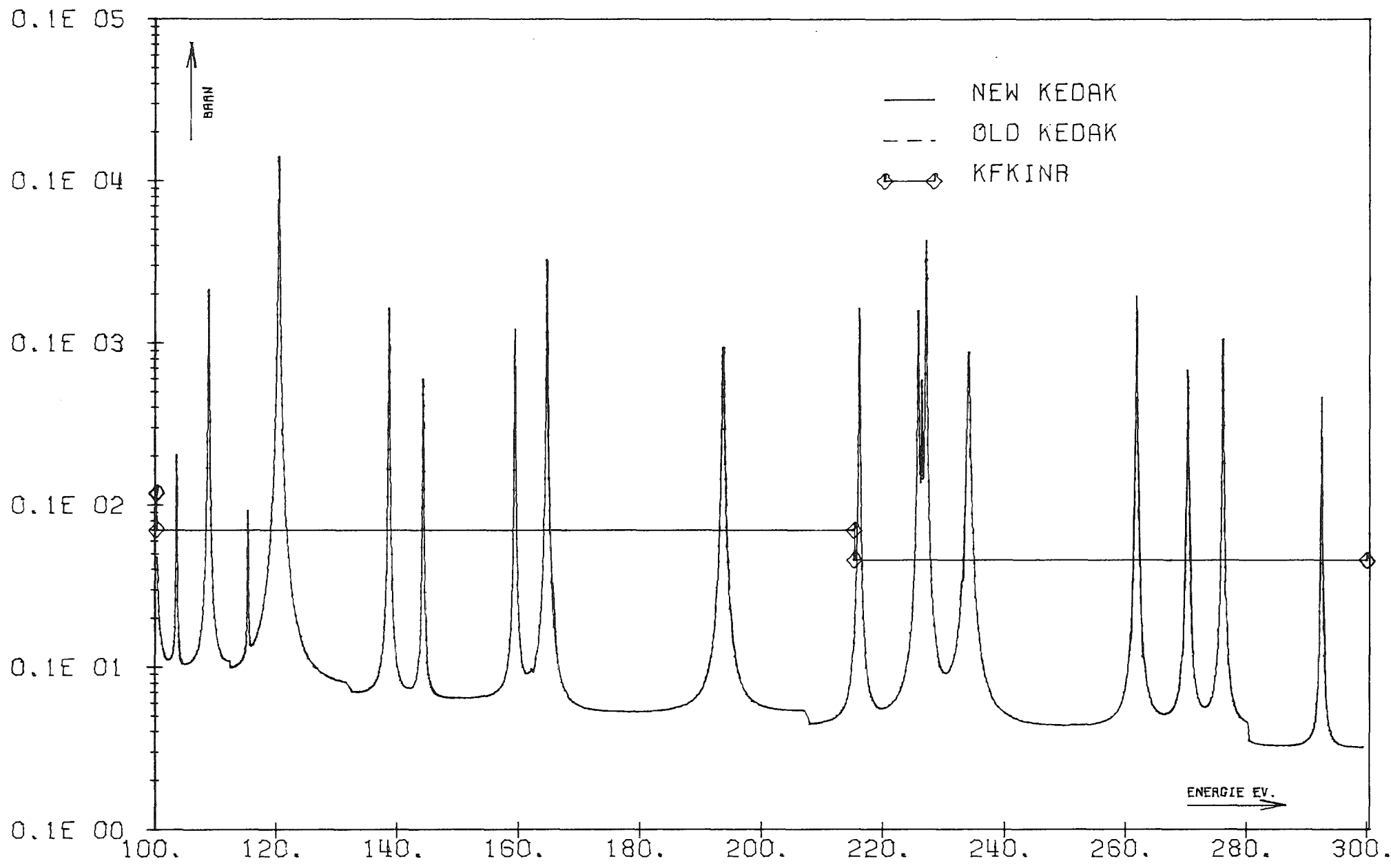
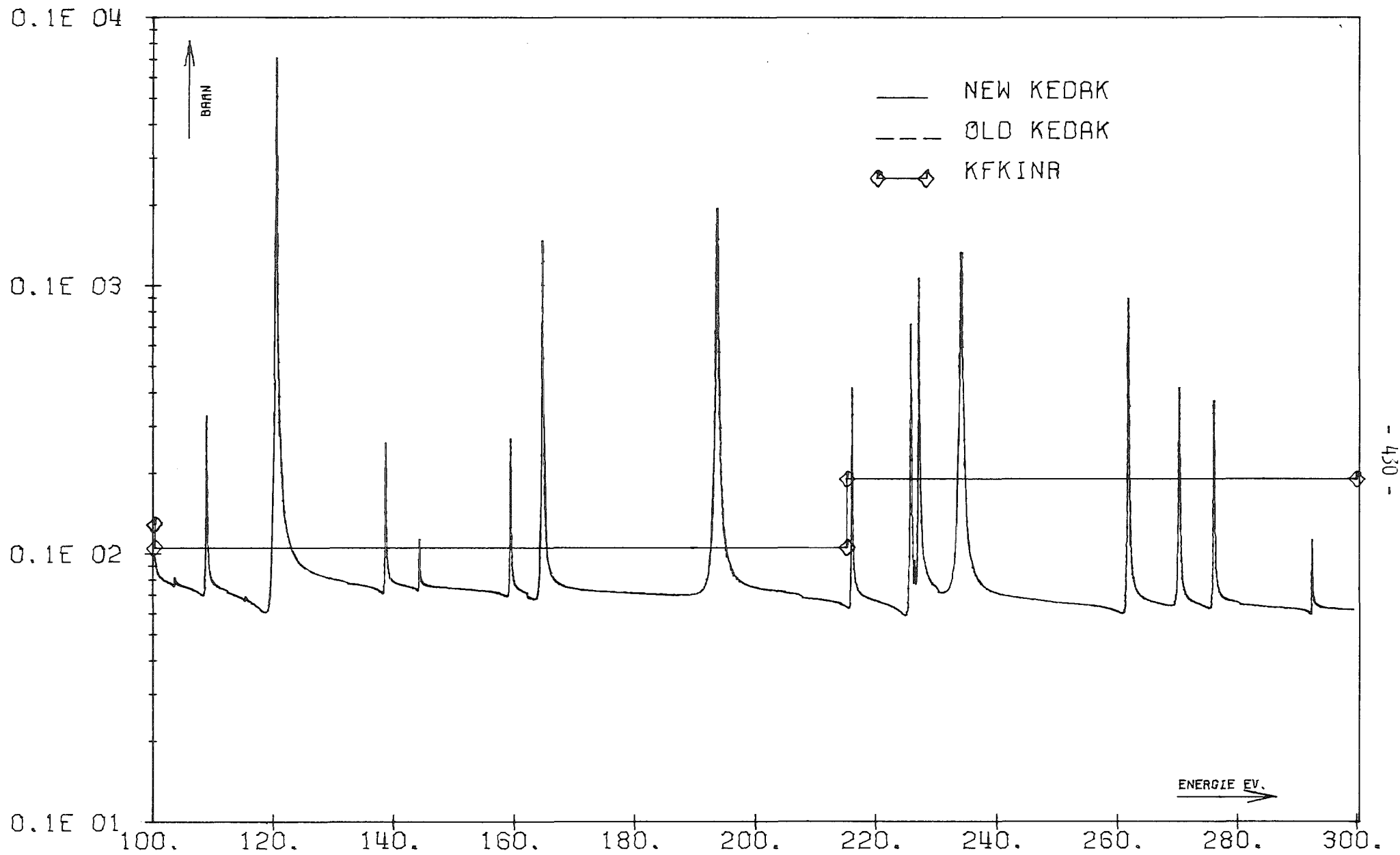


FIG. 10

CD

SGG

INR901CD 21.01 19.27.



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FIG. 11

CD SGN

INR901CD 21.01 19.27.

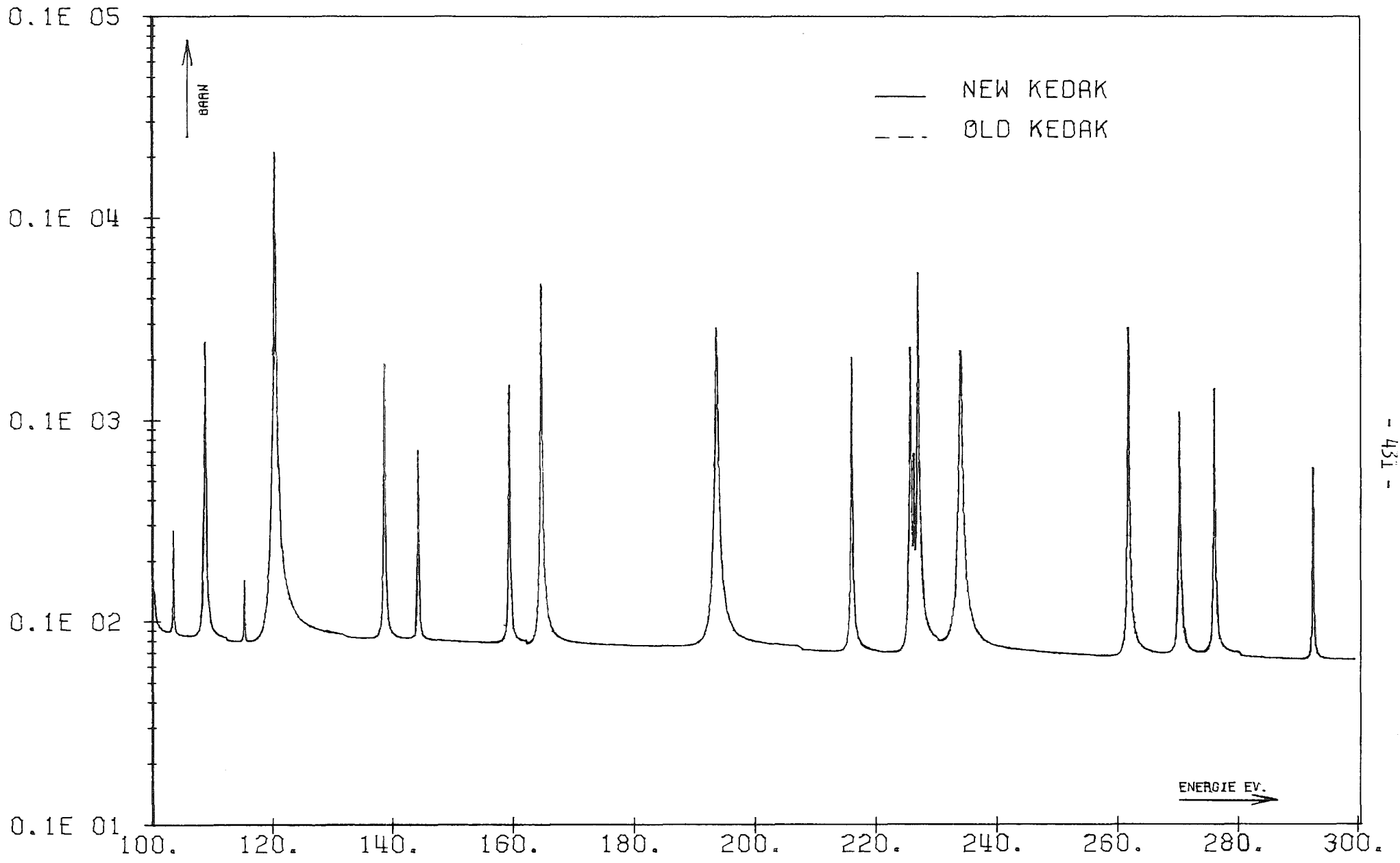


FIG. 12 CD SGTR

INR901CD 21.01 19.27.

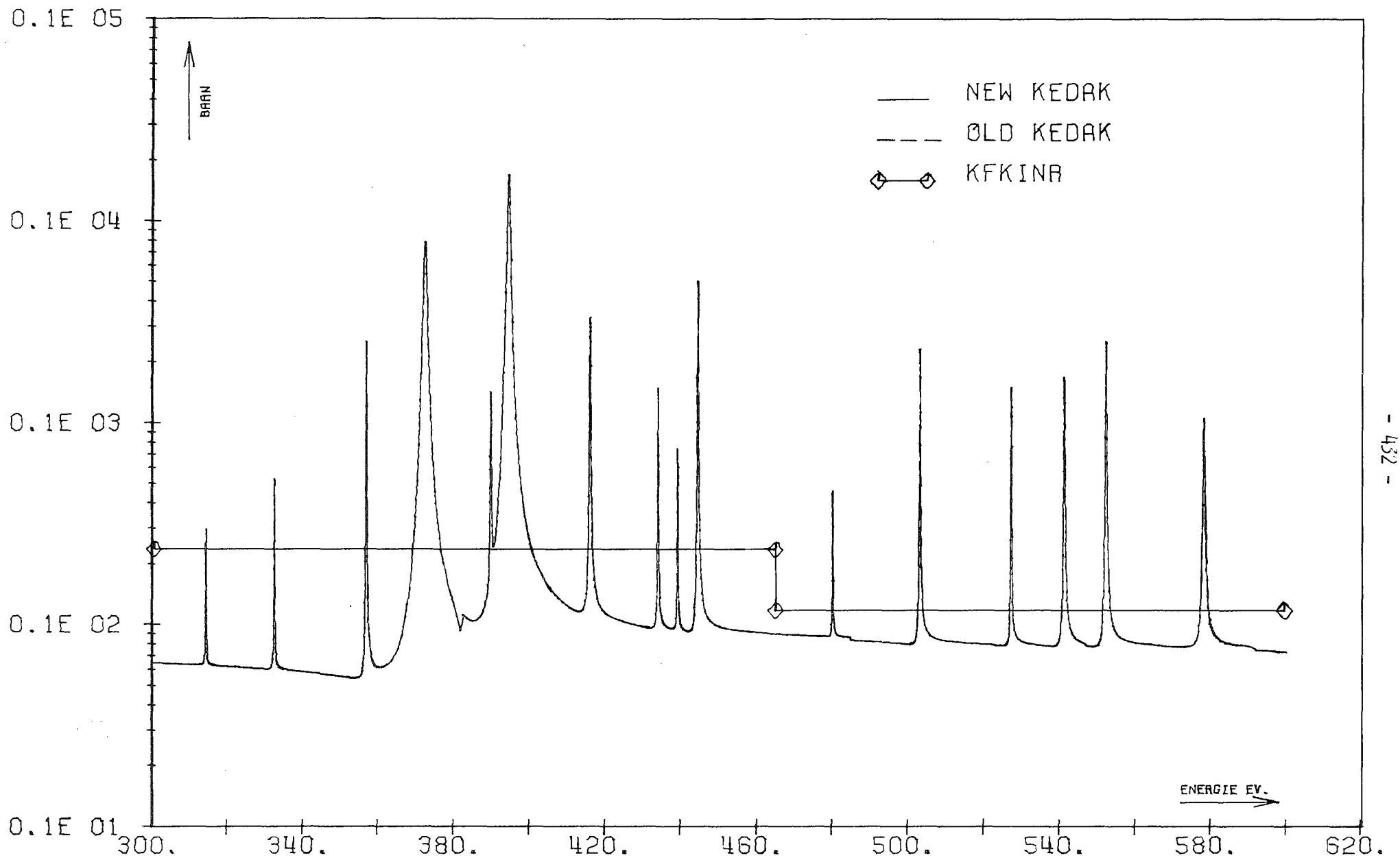


FIG. 13

CD

SGT

INR901CD 21.01 19.27.

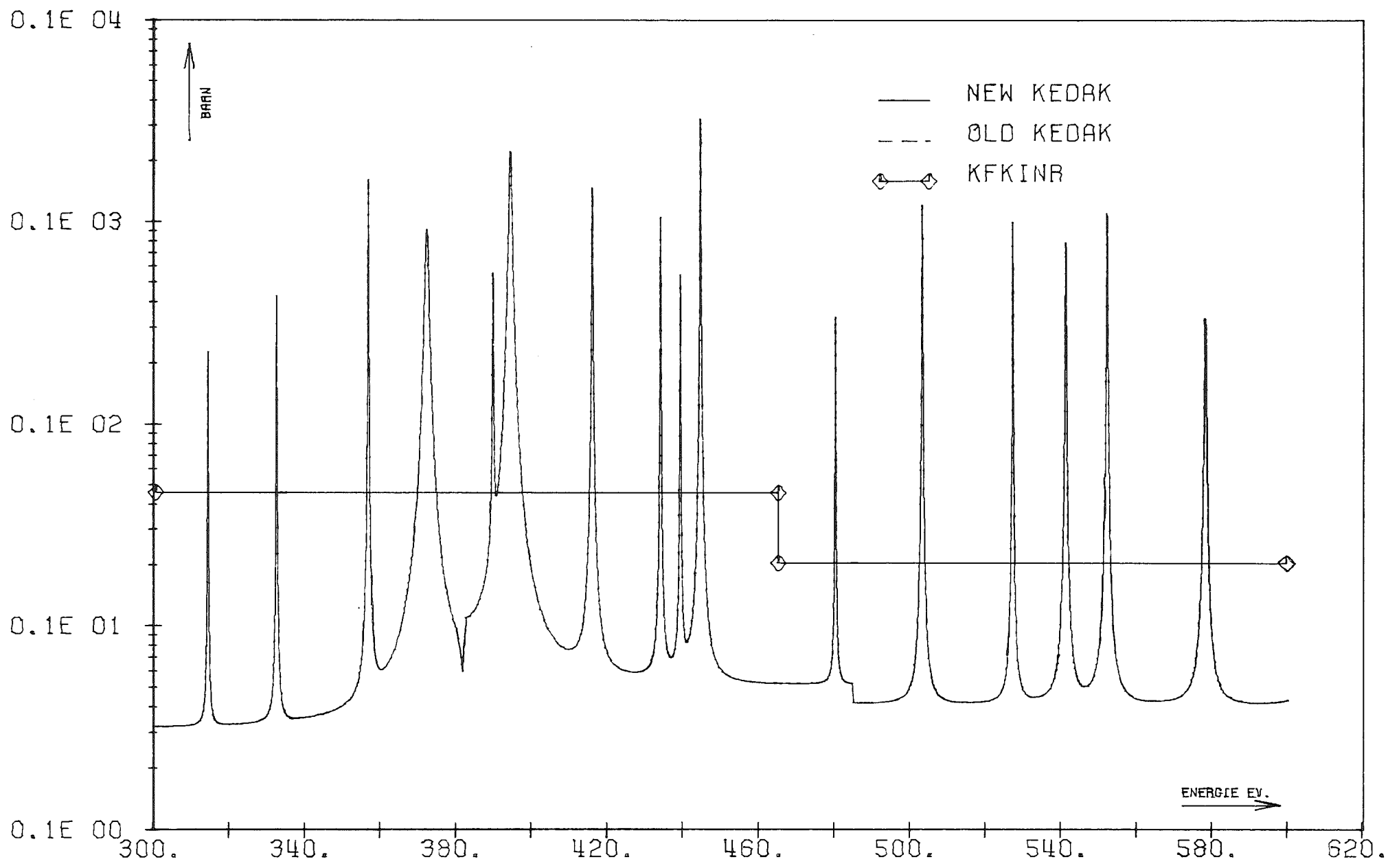


FIG. 14 CD SGG INR901CD 21.01 19.28.

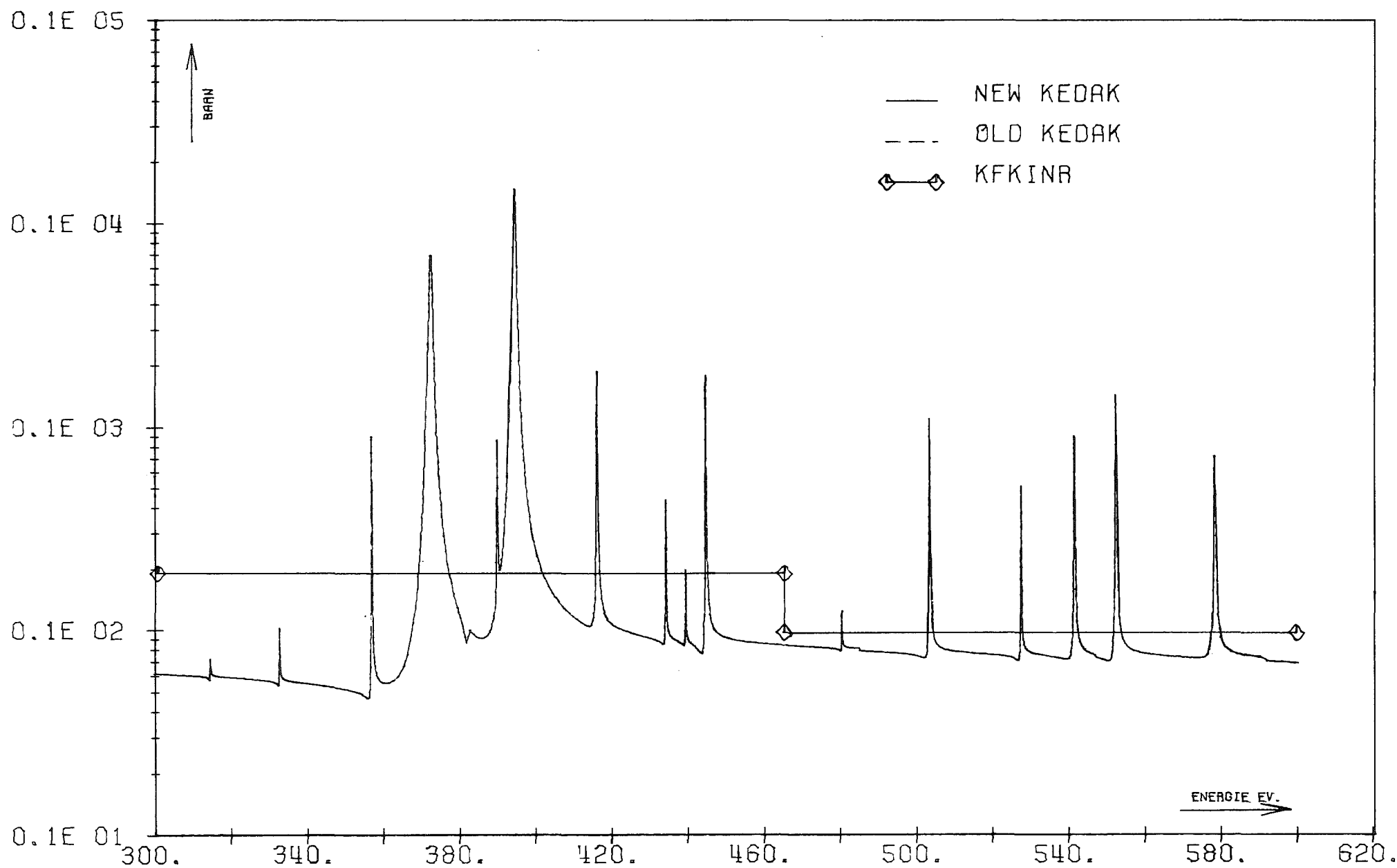


FIG. 15 CD SGN

INR901CD 21.01 19.28.

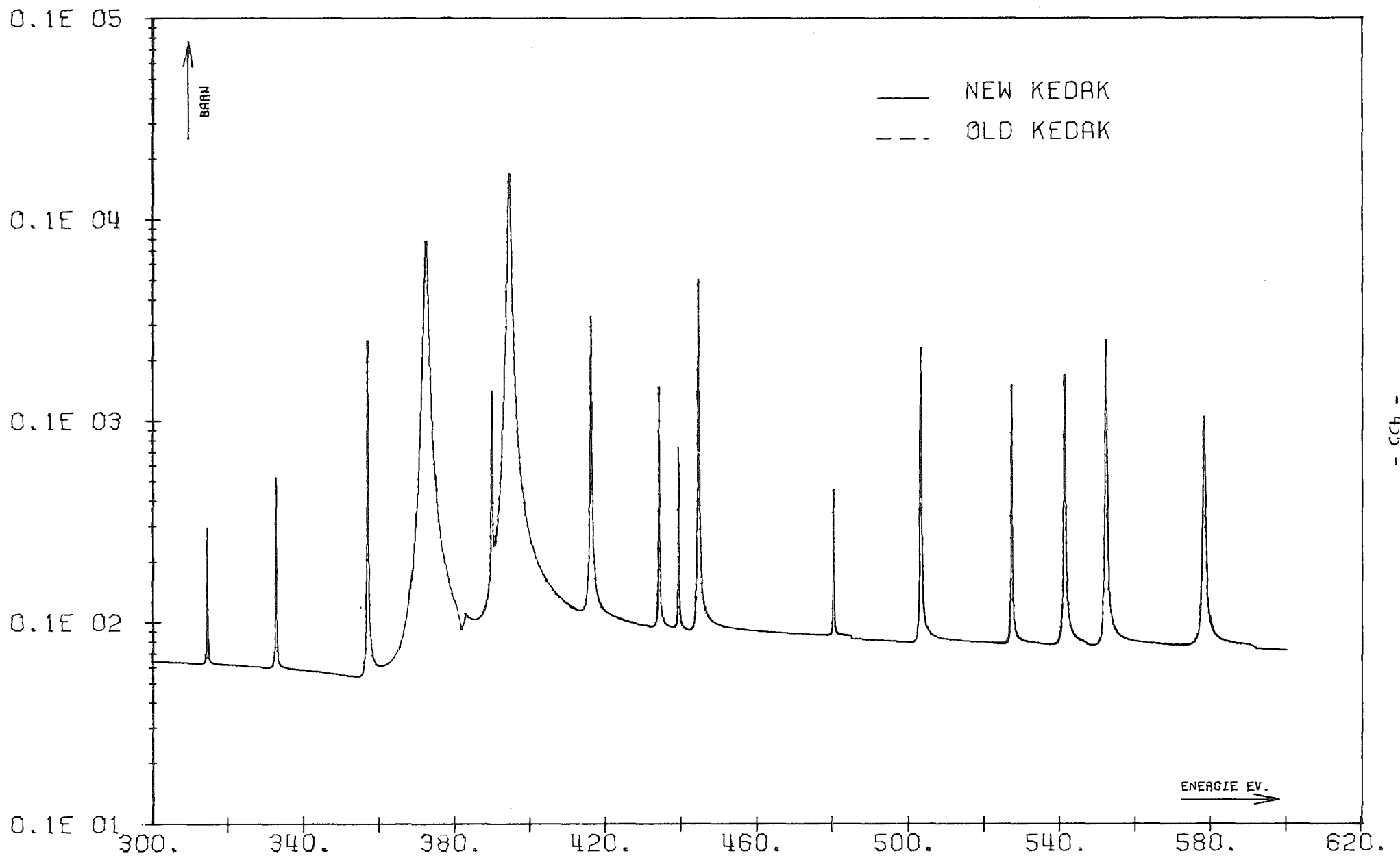


FIG. 16

CD

SGTR

INR901CD 21.01 19.28.

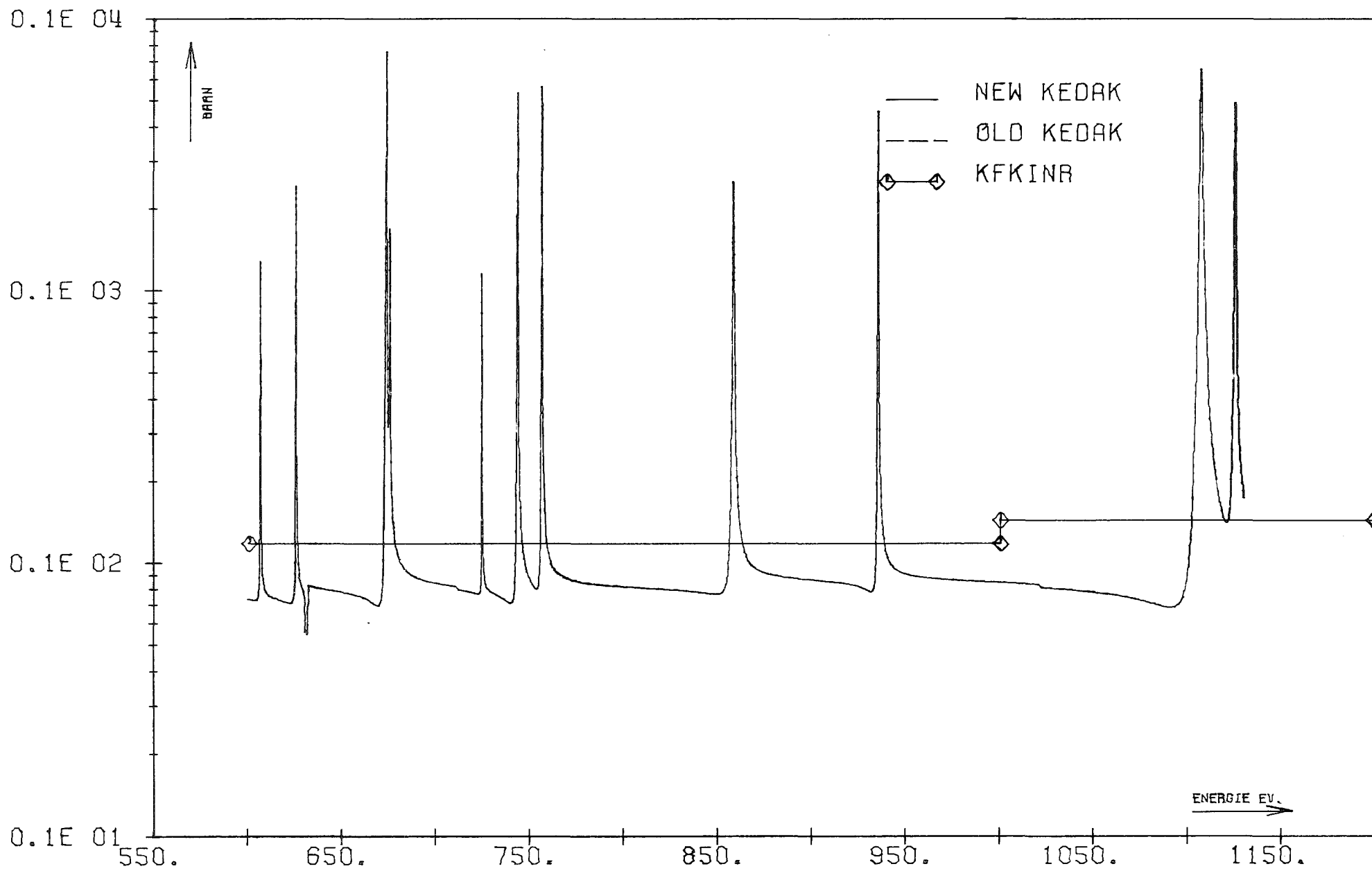


FIG. 17 CD SGT

INR901CD 21.01 19.28.

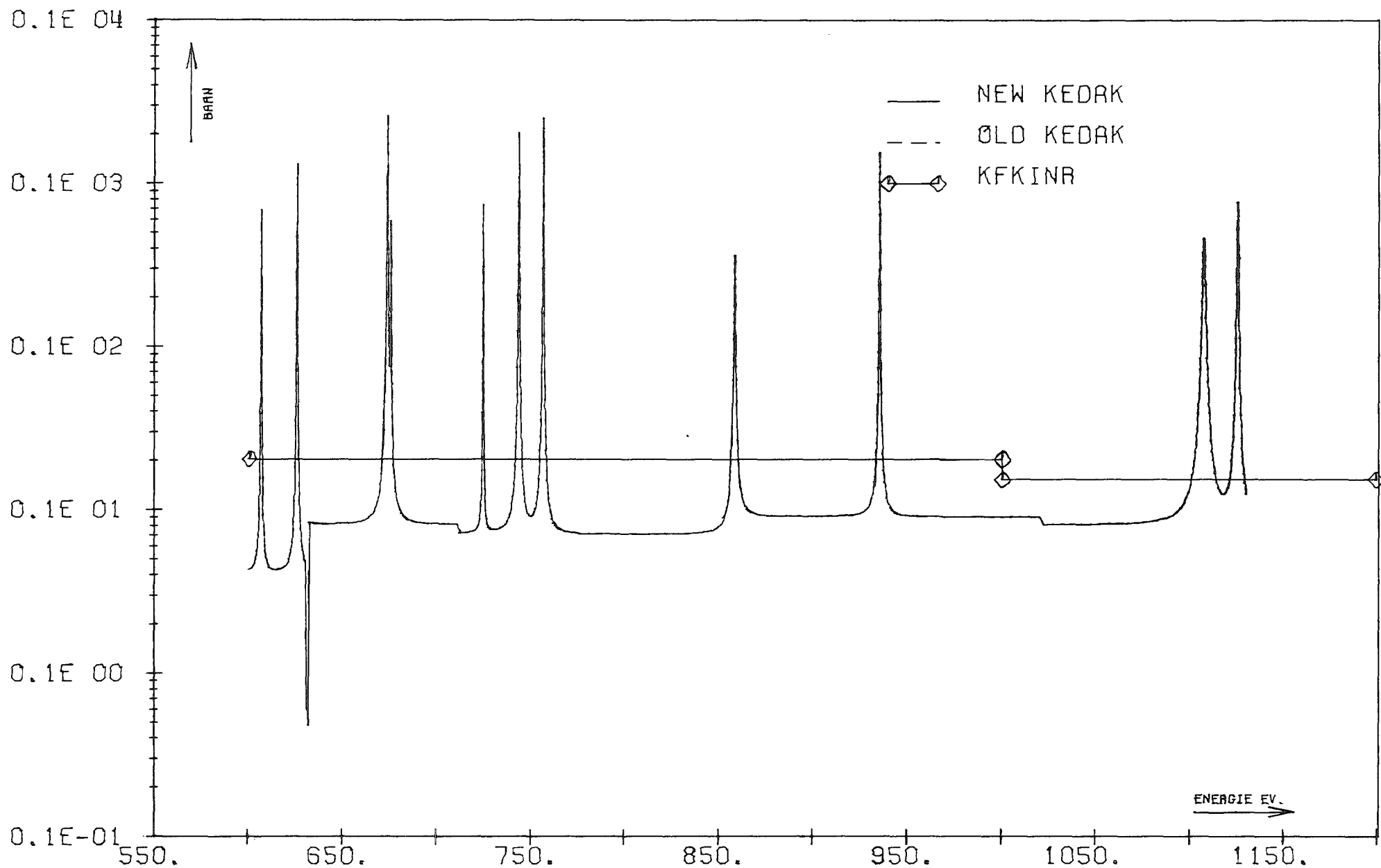


FIG. 18

CD

SGG

INR901CD 21.01 19.28.

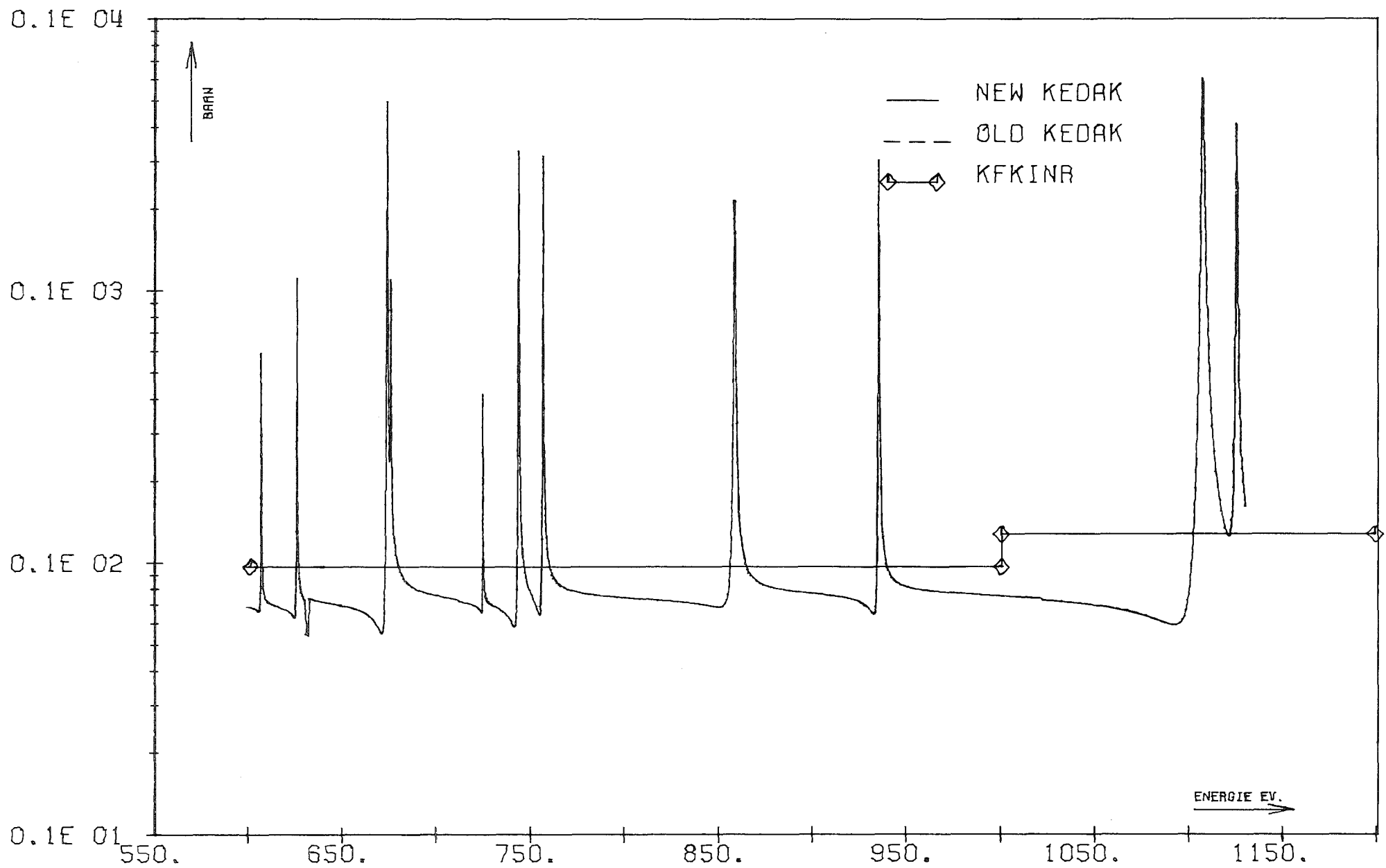


FIG. 19

CD

SGN

INR901CD 21.01 19.28.

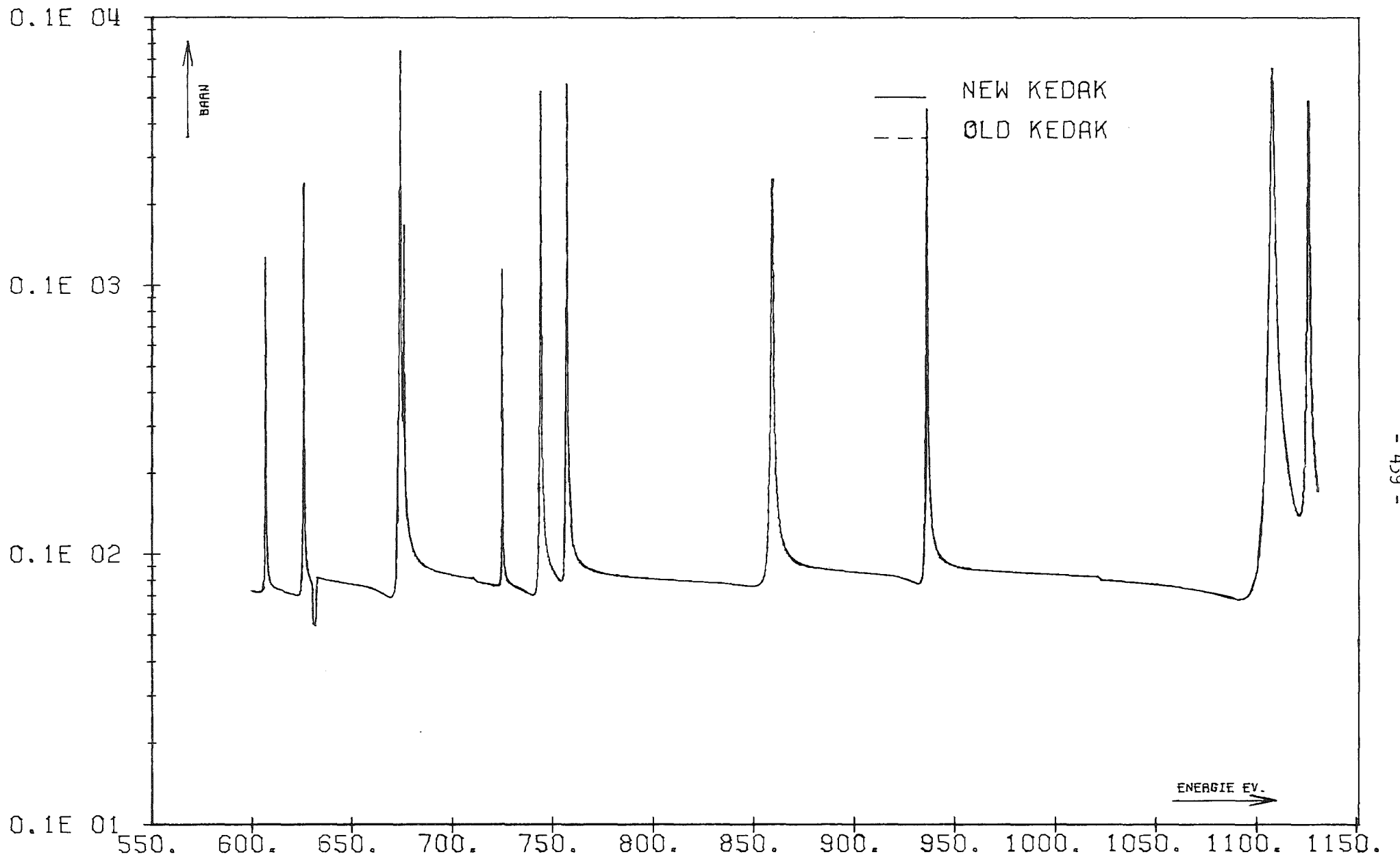


FIG. 20

CD

SGTR

INR901CD 21.01 19.28.

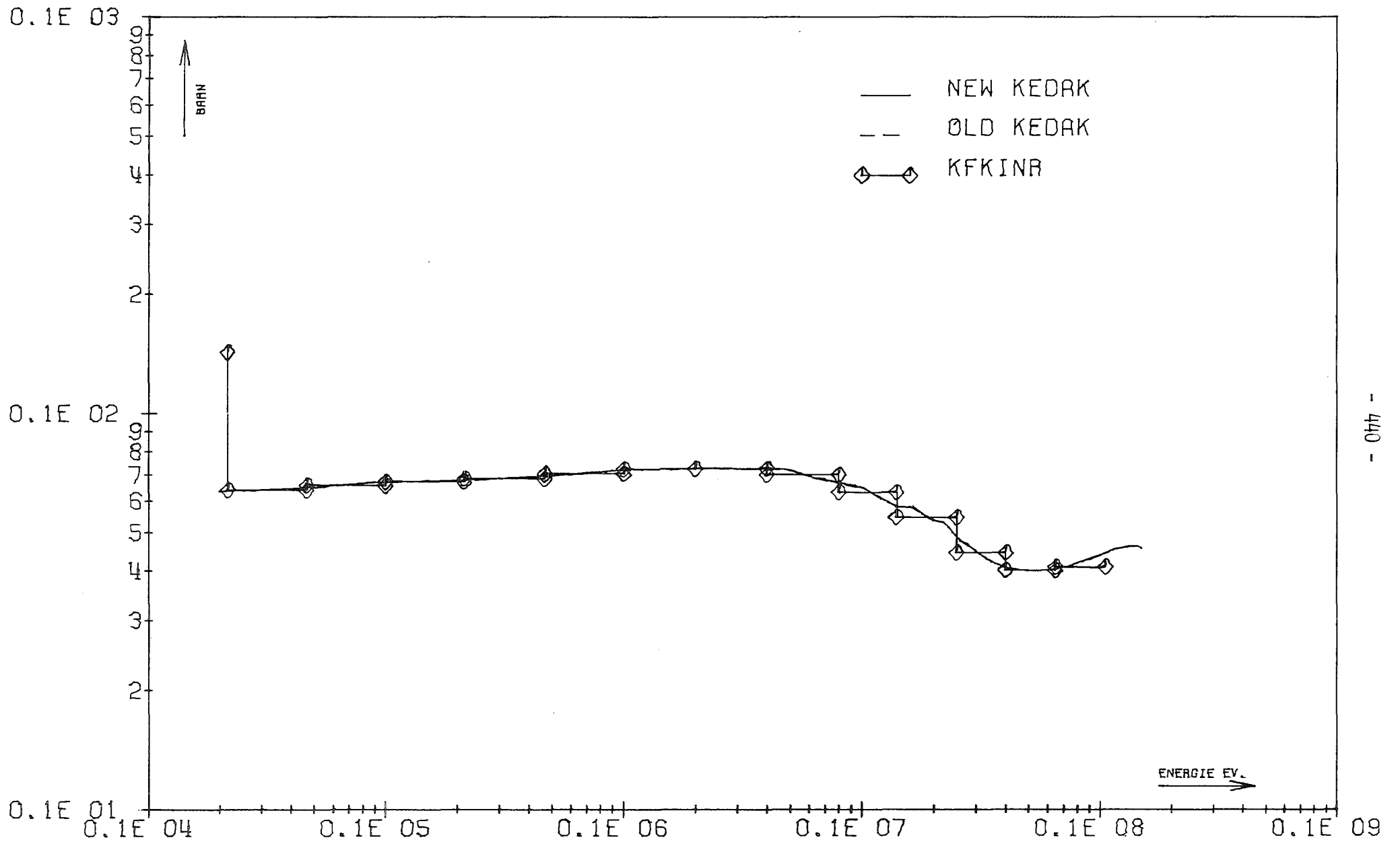


FIG. 21 CD SGT

INR901CD 21.01 19.28.

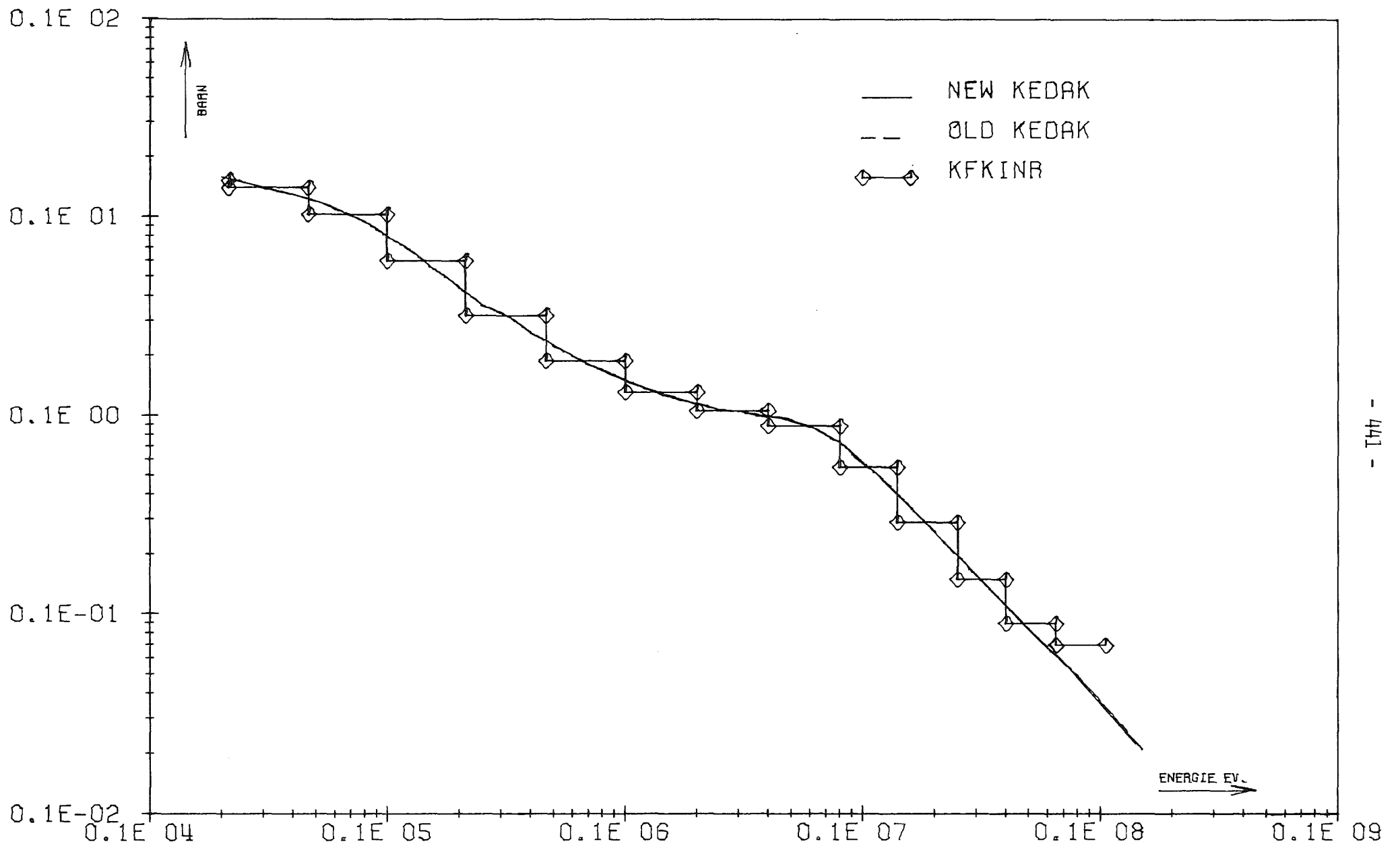


FIG. 22

CD

SGG

INR901CD 21.01 19.28.

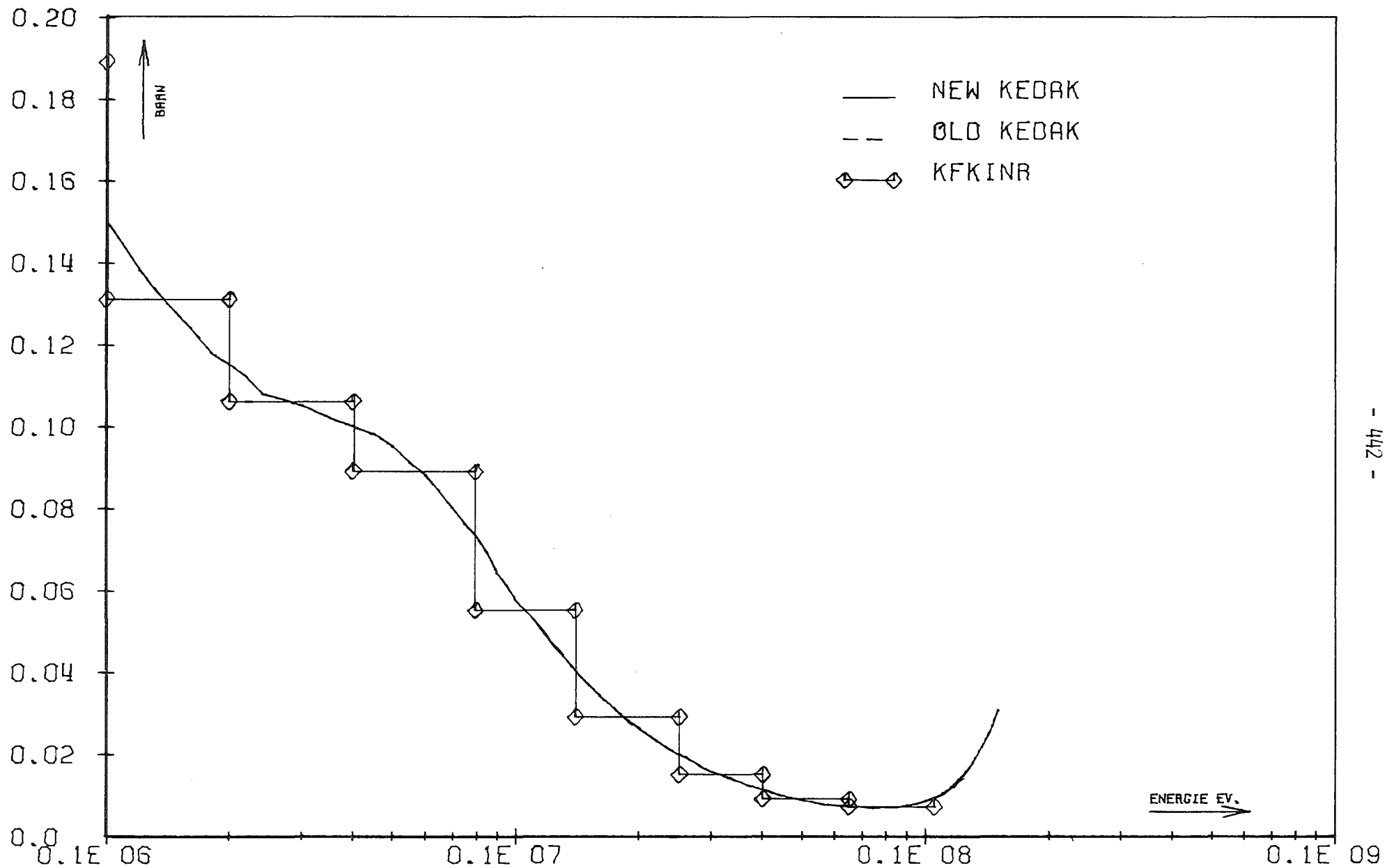


FIG. 23

CD

SGA

INR901SA 26.01 20.15.

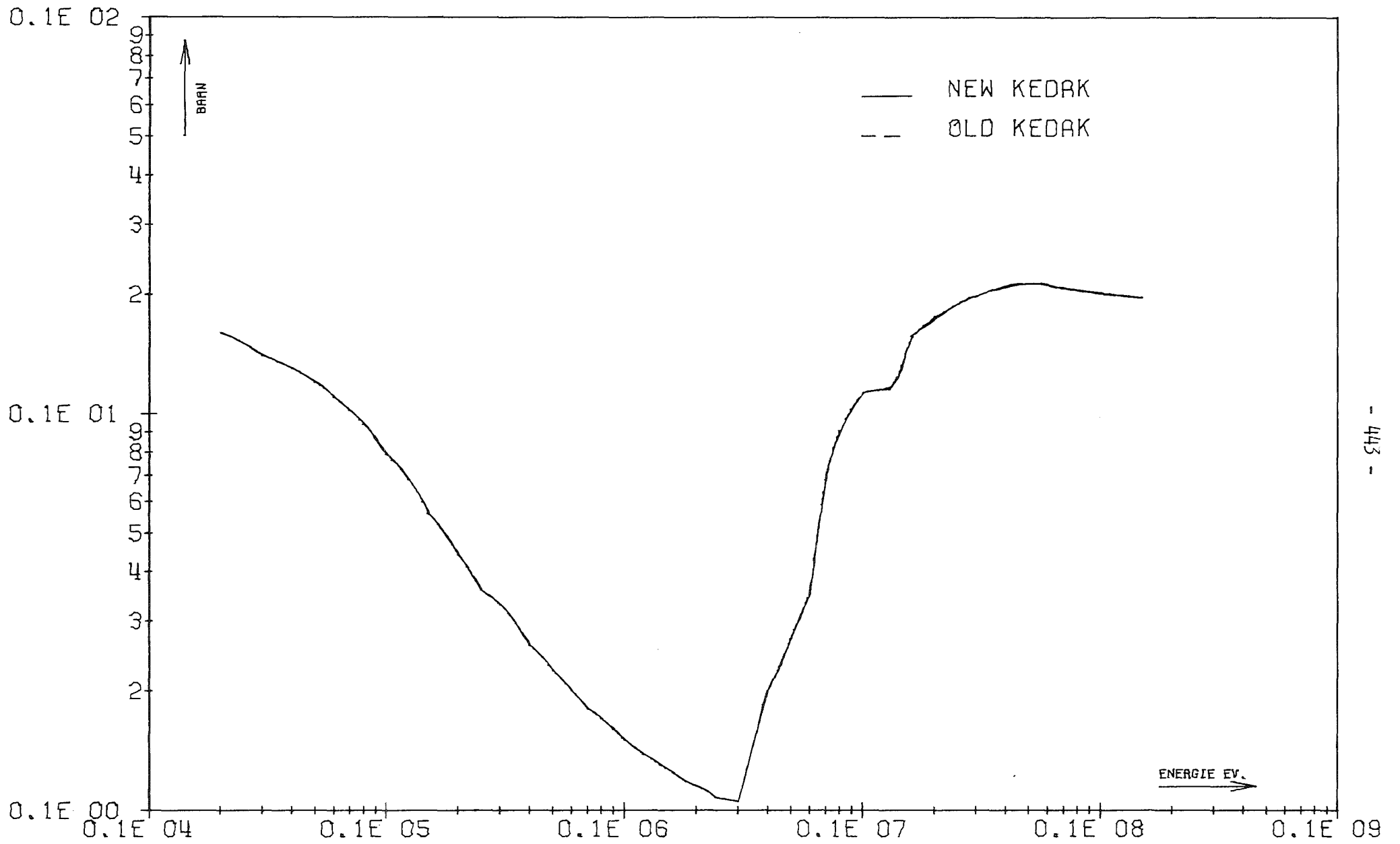


FIG. 24 CD SGX

INR901CD 21.01 19.28.

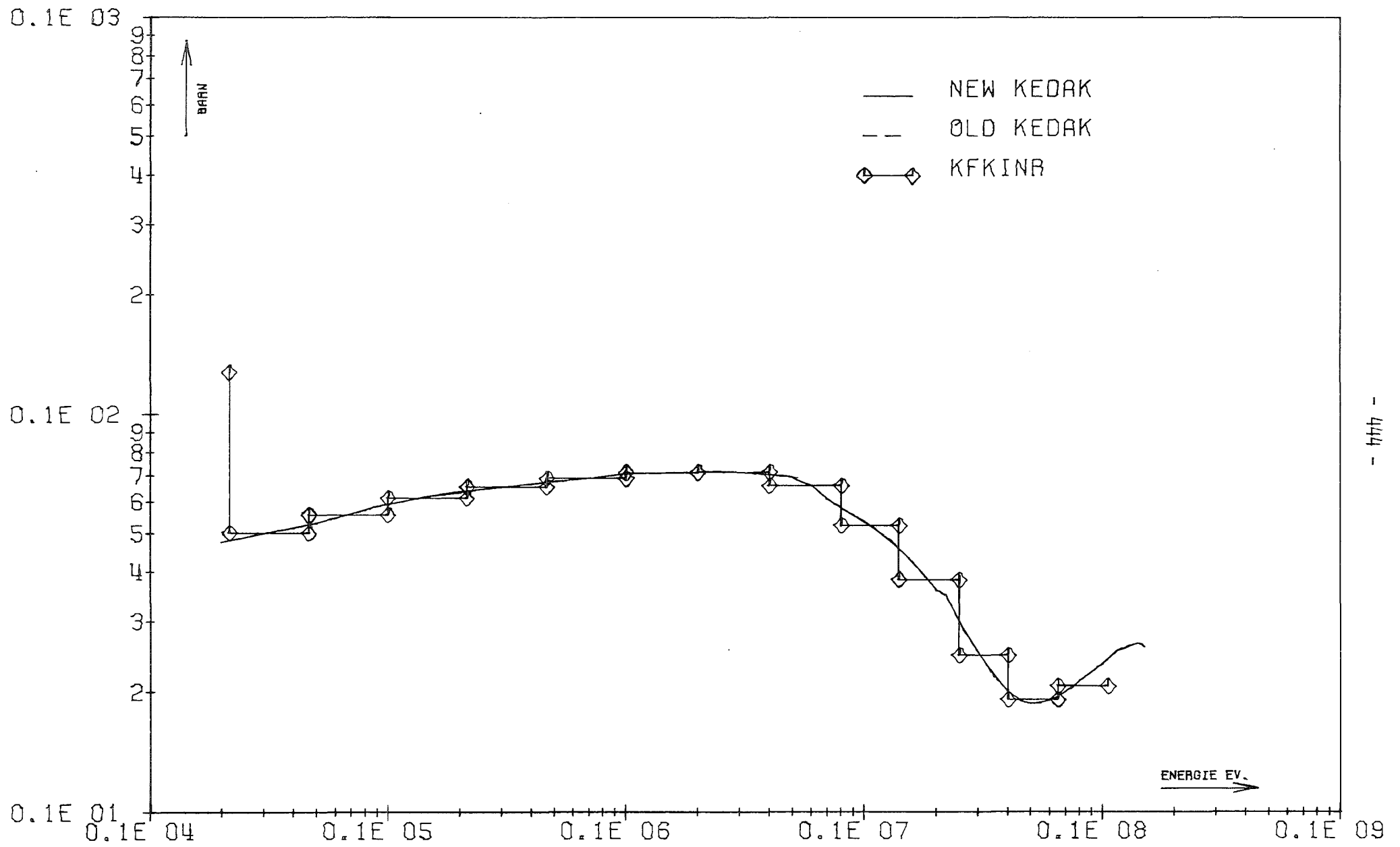
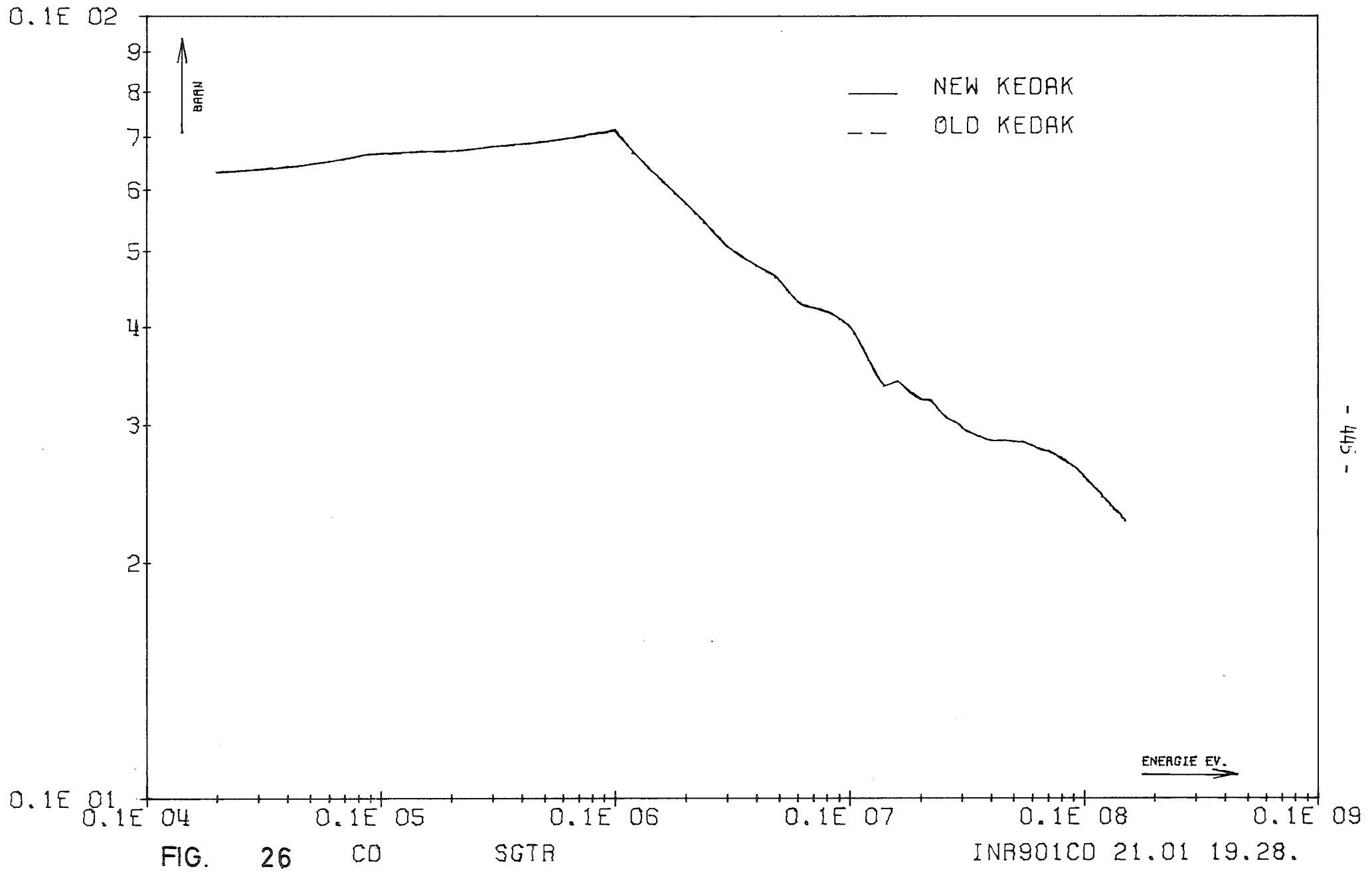


FIG. 25 CD SGN

INR901CD 21.01 19.28.



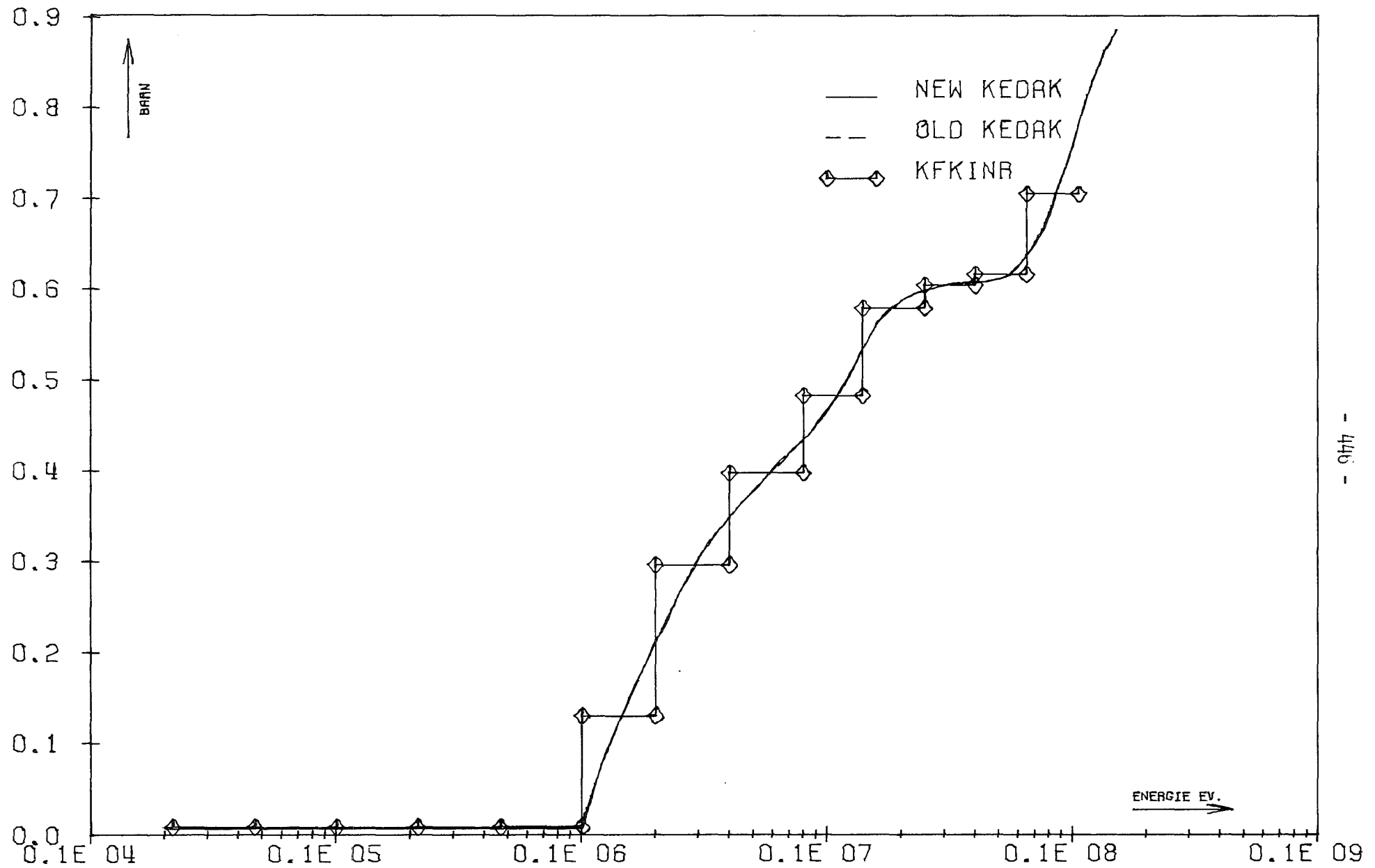


FIG. 27 CD MUEL

INR901CD 21.01 19.28.

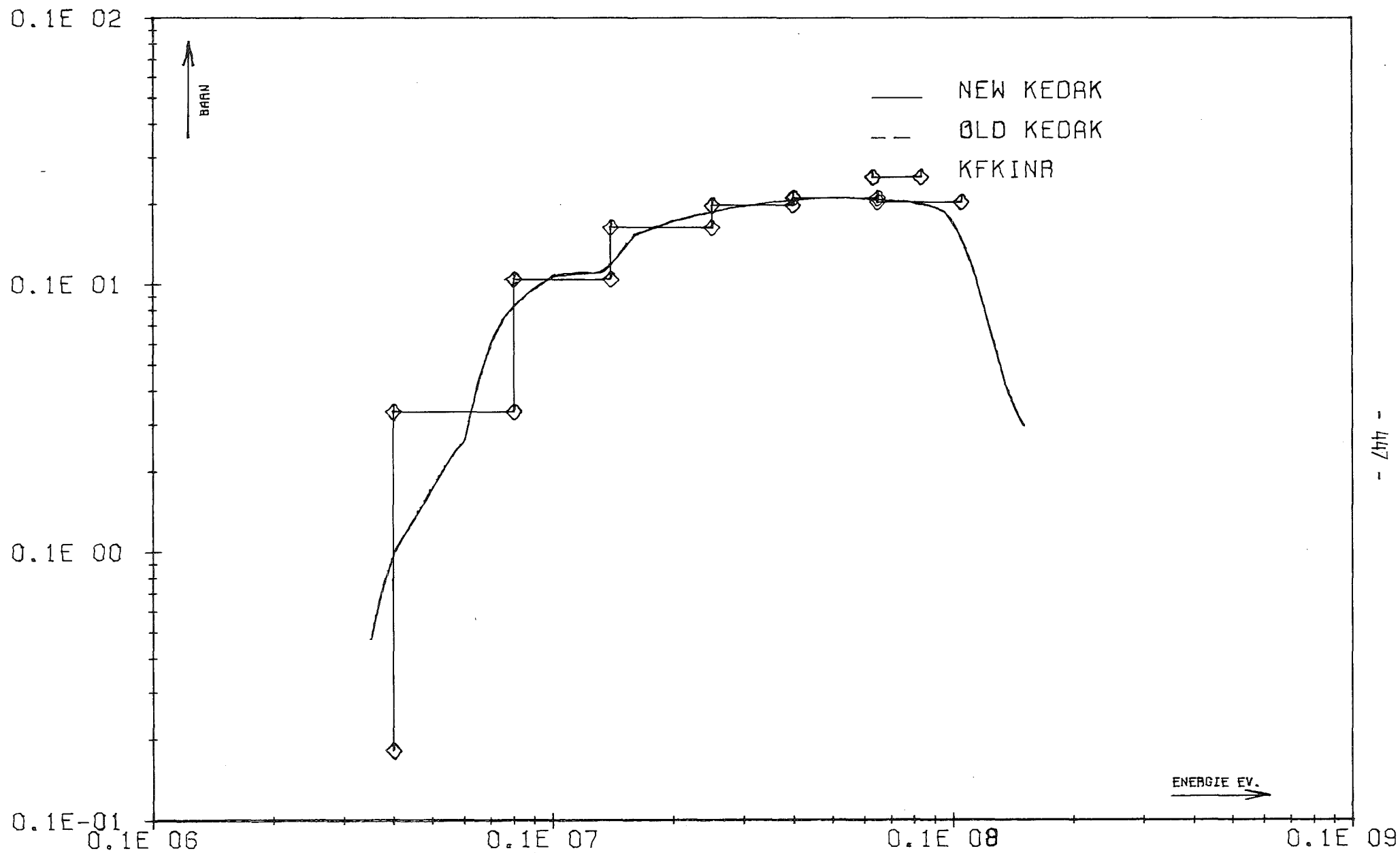


FIG. 28

CD

SGI

INR901CD 21.01 19.28.

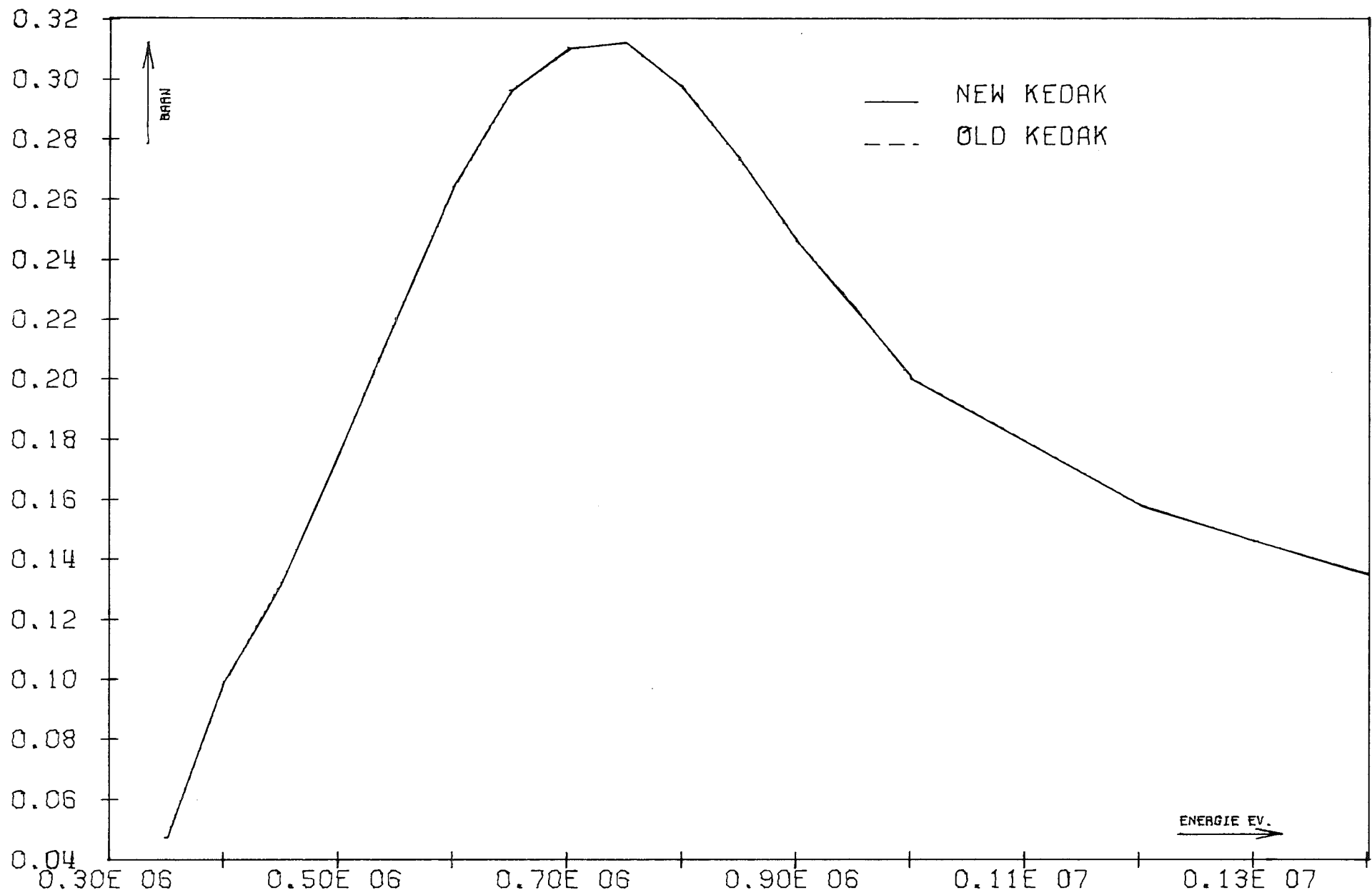


FIG. 29 CD SGIZ 0.3000+06 INR901CD 21.01 19.28.

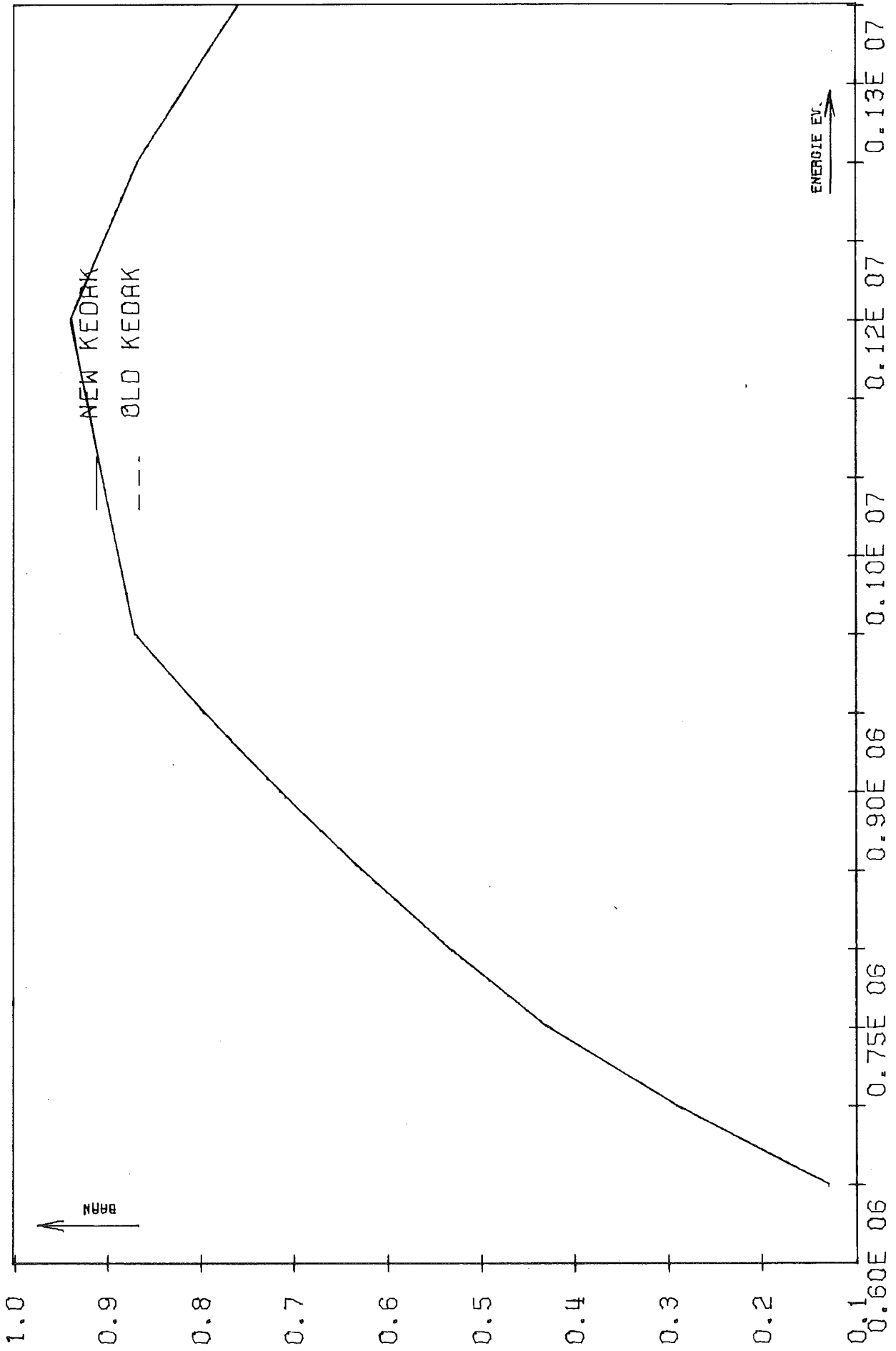


FIG. 30 CD SGIZ 0.6000+06 INR901CD 21.01 19.28.

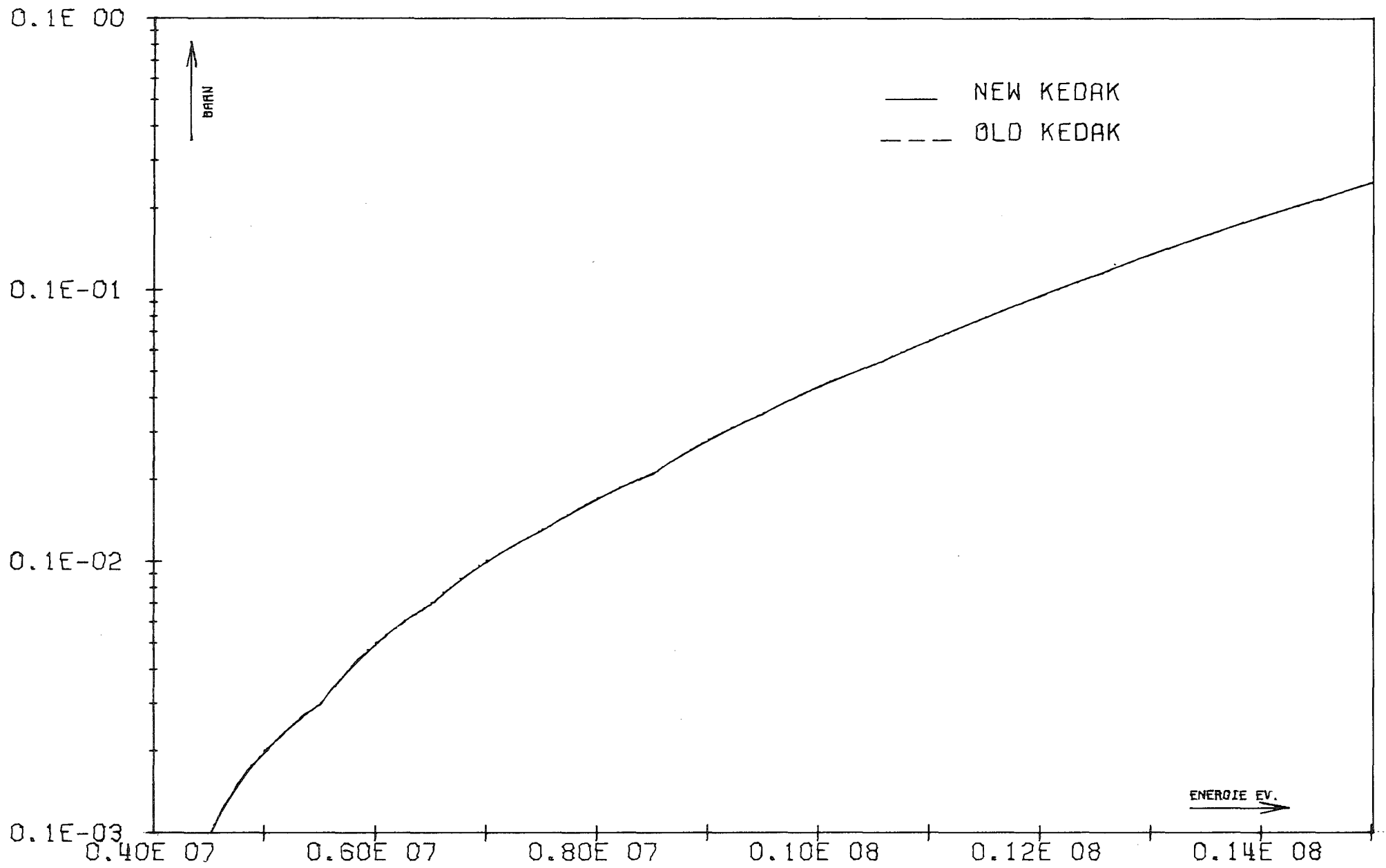


FIG. 31

CD

SGP

INR901CD 21.01 19.28.

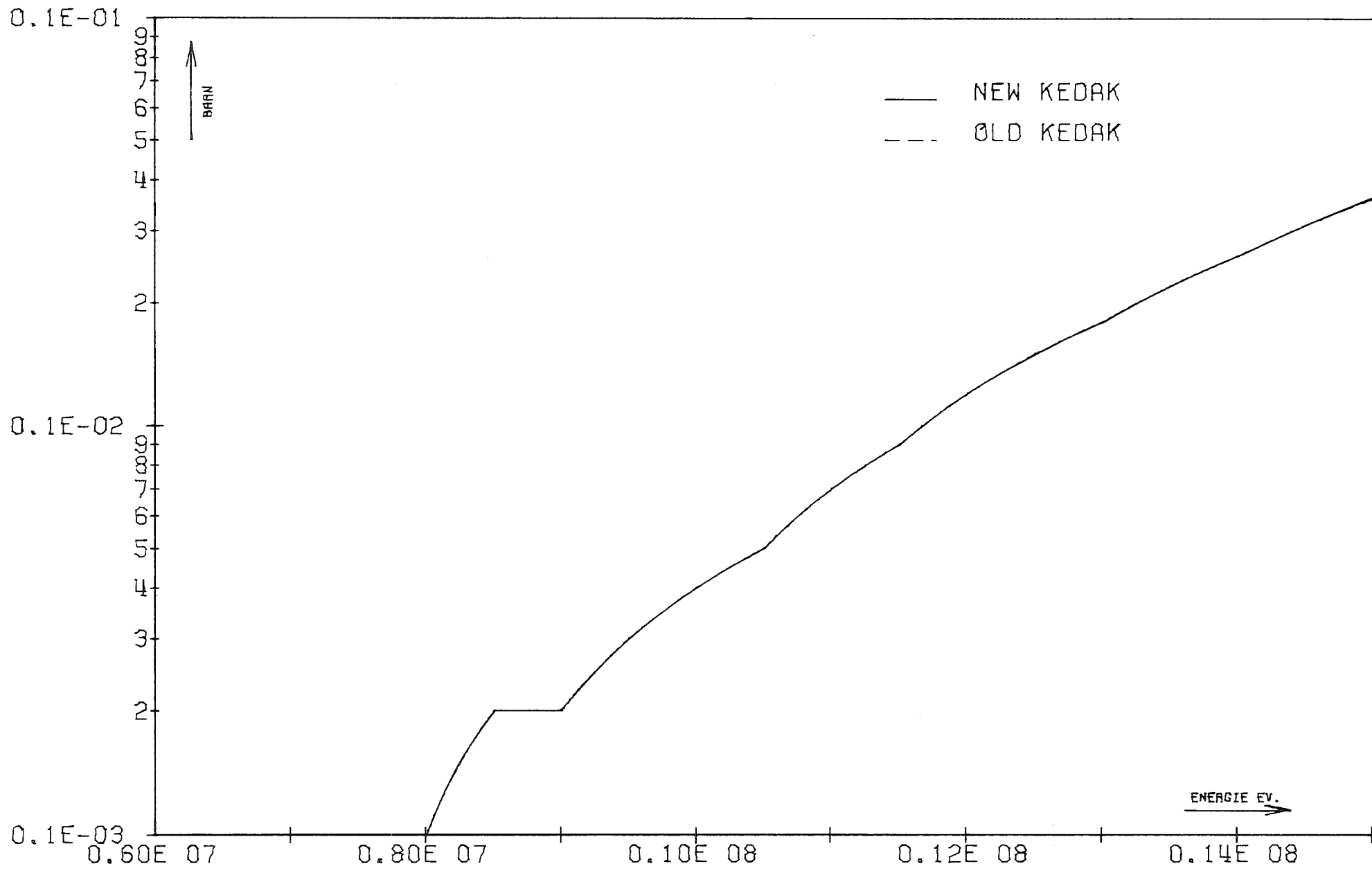
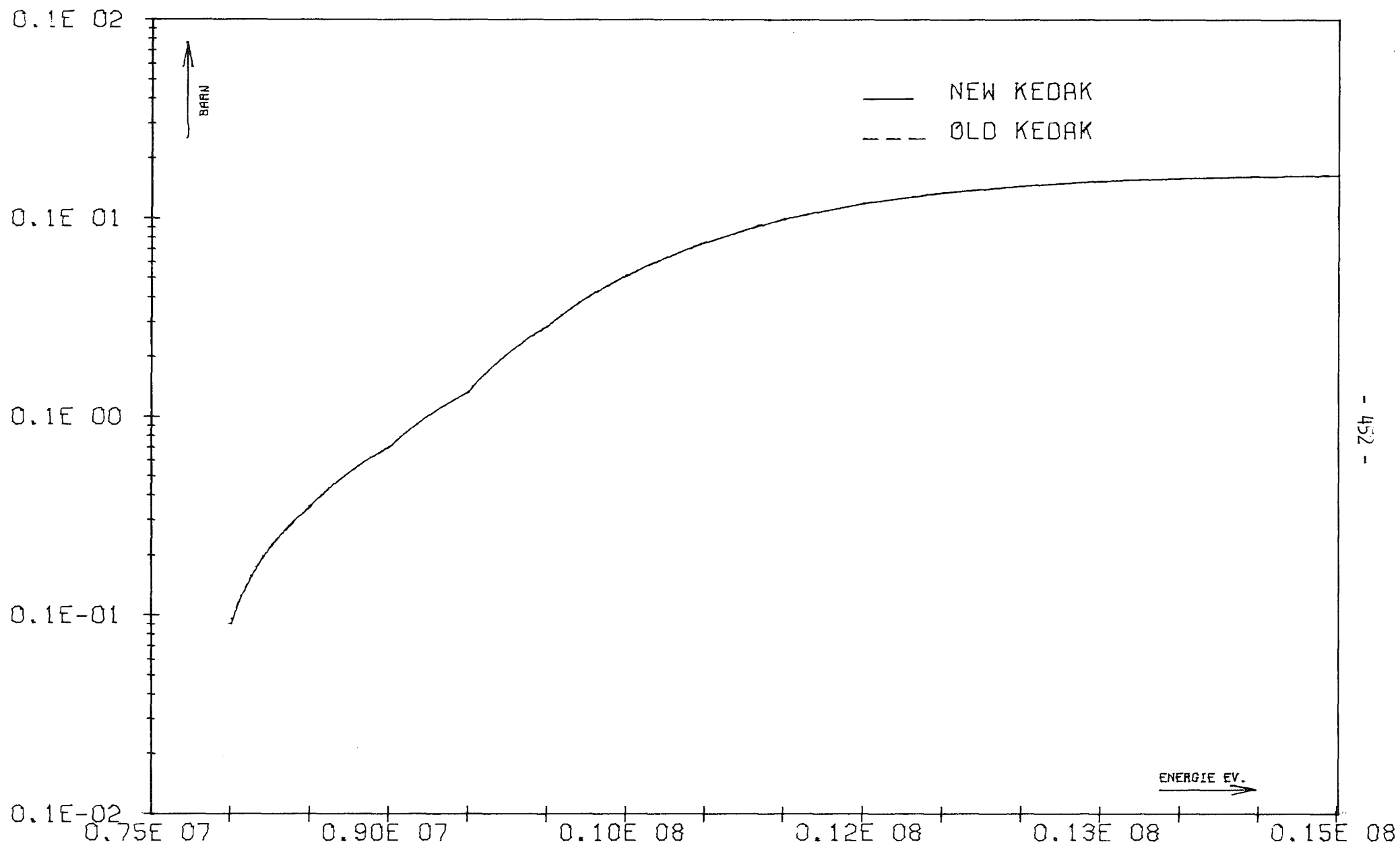


FIG. 32

CD SGALP

INR901CD 21.01 19.28.



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FIG. 33

CD

SG2N

INR901CD 21.01 19.28.

APPENDIX

TABLE 1: Status of the evaluation for different KEDAK-3 materials

Material name	References	Comments
H 1		Only ISOT1 and ISOT2 are available.
H H1 (H Bound in H ₂) H O1 (H bound in H ₂ O)	J.J.Schmidt KFK 120 (1966) R.Mayer KFK 1272/2 (1972) p. 122-12 ff B. Goel 1975 to be published	1971: Data extended to 15 MeV Revision of data for σ_t above 700 keV, σ_c throughout the energy range (0.001 eV to 15 MeV), angular distri- bution for elastic scattering and $\bar{\mu}_1$. 1975: σ_t and $\sigma(n,n)$ revised below 700 keV, for H O1.
H 2 (d)	J.J.Schmidt KFK 120 (1966) B. Goel 1975 to be published	1975: Data extended to 15 MeV and revised for σ_c , σ_t , σ_n and $\sigma(n,2n)$ above 1 keV.
He 3	J.J.Schmidt KFK 120 (1966)	Only data for $\sigma(n,p)$ available between 0.01 keV and 10 MeV.
He 4	J.J.Schmidt KFK 120 (1966)	Data only upto 10 MeV.
C 12	J.J.Schmidt KFK 120 (1966) R. Meyer KFK 1272 (1972) B. Goel 1975 to be published	1971: Data extended to 15 MeV. Revision of data for $\sigma(n,n')$, $\sigma(n,p)$, $\sigma(n,\alpha)$, $\sigma(n,3\alpha)$ and 4 levels of inelastic scatter- ing 1975: Data revised for σ_c above 1 eV and σ_t below 1,4 MeV.
N	B. Hinkelmann et al. KFK 1340 (1971)	Only angular distributions of neutron elastic scattering for 48 energies between 100 keV and 15.8 MeV are available
O 16	J.J.Schmidt KFK 120 (1966) F. Weller and B. Goel 1975 to be published	1975: Data extended to 15 MeV. Data revised for scattering cross sections, σ_c , $\sigma(n,p)$ $\sigma(n,d)$ and $\sigma(n,\alpha)$.

Material name	References	Comments
Na 23	J.J.Schmidt KFK 120 (1966) R. Meyer unpublished (1973) B. Goel 1975 to be published	1970: Data extended to 15 MeV. New evaluation for $\sigma(n,p)$, $\sigma(n,\alpha)$, $\sigma(n,2n)$ and σ_c above 1 MeV. 1971: Reevaluation of Resonance data in the energy range 1 keV to 60 keV. 1975: Scattering data revised above 4 MeV and σ_c revised between 60 keV and 1 MeV.
Al 27	J.J. Schmidt KFK 120 (1966) B. Hinkelmann et al. B. Goel 1975 to be published	1967-1969: Reevaluation of data for resolved and statistical resonance parameter, elastic scattering and its angular distribution above 100 keV. 1975: Data for 5.9 keV resonance revised σ_c revised between 0.1 eV and 7 keV. The data for $\sigma(n,n')$ $\sigma(n,p)$ and $\sigma(n,\alpha)$ are also modified above 10 MeV.
Cl	B. Schatz unpublished	Data originates from UNC-5067 (1963)
Cl 35 Cl 37		Only ISOT1 and ISOT2 are available
Cr	J.J.Schmidt KFK 120 (1966) R. Meyer unpublished (1970) B. Goel 1975 to be published	1970: Data extended to 15 MeV Data improved for σ_c above 1 MeV and for $\sigma(n,p)$, $\sigma(n,\alpha)$, and $\sigma(n,2n)$ 1975: Data revised for σ_c above 100 keV and (n,n') above 4 MeV.
Cr 50 Cr 52 Cr 53 Cr 54	R. Meyer unpublished (1970)	Only data for resonance parameters, $\sigma(n,p)$, $\sigma(n,\alpha)$, $\sigma(n,2n)$, ISOT1 and ISOT2 are available

Table 1 cont.

Material name	References	Comments
Fe	J.J.Schmidt KFK 120 (1966) R. Meyer unpublished (1970)	1970: Data extended to 15 MeV Reevaluation of σ_c above 1 MeV and of $\sigma(n,p)$, $\sigma(n,\alpha)$ and $\sigma(n,2n)$ 1975: Data are being revised
Fe 54 Fe 56 Fe 57 Fe 58	R. Meyer, unpublished (1970)	Only data for resonance parameter, $\sigma(n,\alpha)$, $\sigma(n,2n)$, ISOT1 and ISOT2 are available Only data for $\sigma(n,p)$, $\sigma(n,\alpha)$, average level spacing, ISOT1 and ISOT2 are available.
Ni	J.J.Schmidt KFK 120 (1966) R. Meyer, unpublished (1970) B. Goel 1975 to be published	1970: Data extended to 15 MeV. Reevaluation of σ_c above 1 MeV and of $\sigma(n,p)$, $\sigma(n,\alpha)$ and $\sigma(n,2n)$ 1975: σ_c revised above 200 keV. $\sigma(n,n')$ revised above 4 MeV.
Ni 58 Ni 60 Ni 61 Ni 62 Ni 64	R. Meyer, unpublished (1970)	Only data for resonance parameters, $\sigma(n,p)$, $\sigma(n,\alpha)$, $\sigma(n,2n)$, ISOT1 and ISOT2 are available.
Mo	J.J.Schmidt KFK 120 (1966) R. Meyer, unpublished (1973)	1970: Data extended to 15 MeV. Reevaluation of σ_c above 1 MeV, and of $\sigma(n,p)$, $\sigma(n,\alpha)$ and $\sigma(n,2n)$
Mo 92 Mo 94 Mo 95 Mo 96 Mo 97 Mo 98 Mo 100	R. Meyer, unpublished (1973)	Data available only for resonance parameters, $\sigma(n,p)$, $\sigma(n,\alpha)$, $\sigma(n,2n)$, ISOT1 and ISOT2.
Cd	J.J.Schmidt KFK 120 (1966)	No change in data except that mentioned in introduction

Material name		Comments
U 235	J.J.Schmidt KFK 120 (1966) B. Schatz KFK 1629 (1973) F. Weller and B. Goel 1975 to published	1973: New evaluation of $\bar{\nu}$ and all other data above the resolved resonance region. 1975: New evaluation of σ_f and σ_t above 100 keV.
U 238	J.J.Schmidt KFK 120 (1966) B. Goel, H. Küsters and F. Weller Wash.-Conference 1975 and specialist meeting Harwell 1975 and to be published	1975: Extensive revision of all the data
Pu 238	M. Caner and S. Yiftah IA 1301 (1974) B. Goel and B. Krieg 1975 to be published	New material on KEDAK
Pu 239	J.J.Schmidt KFK 120 (1966) B. Hinkelmann et al. KFK 1340 (1971) B. Goel, H. Küsters, and F. Weller, Washington Conf. 1975 and to be published	Extensive revision of most of the data
Pu 240	M. Caner and S. Yiftah IA -1243 (1972) F. Weller, B. Goel and F. Fröhner 1975 to be published	1975: New evaluation of resonance parameters and storage of pointwise data in resonance region
Pu 241	M. Caner and S. Yiftah IA 1275(1973) and IA 1276(1973)	1975: Storage of pointwise cross sections in the resonance region
Pu 242	F. Weller 1975 to be published	

TABLE 2: List of contents of KEDAK-3 (October 1975)

```
*****
*           *
* H 1      *
*           *
*****
```

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD ⁺	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--

```
*****
*           *
* H H1     *
*           *
*****
```

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	81	--	--	--
MUEL	1	1	21	1.0000E-03	--	1.5000CE+07
SGA	1	1	100	1.0000E-03	--	1.5000CE+07
SGALP	1	1	2	1.0000E-03	--	1.5000CE+07
SGG	1	1	100	1.0000E-03	--	1.5000CE+07
SGI	1	1	2	1.0000E-03	--	1.5000CE+07
SGN	1	1	77	1.0000E-03	--	1.5000CE+07
SGP	1	1	2	1.0000E-03	--	1.5000CE+07
SGT	1	1	76	1.0000E-03	--	1.5000CE+07
SGTR	1	1	81	1.0000E-03	--	1.5000CE+07
SGX	1	1	100	1.0000E-03	--	1.5000CE+07
SG2N	1	1	2	1.0000E-03	--	1.5000CE+07
SGNC	1	1	FCR	19 ENERGIES BETWEEN	5.000000E+04 EV AND	1.600000E+07 EV

```
*****
*           *
* H 01     *
*           *
*****
```

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	50	--	--	--
MUEL	1	1	26	1.0000E-03	--	1.5000CE+07
SGA	1	1	100	1.0000E-03	--	1.5000CE+07
SGALP	1	1	2	1.0000E-03	--	1.5000CE+07
SGG	1	1	100	1.0000E-03	--	1.5000CE+07
SGI	1	1	2	1.0000E-03	--	1.5000CE+07
SGN	1	1	54	1.0000E-03	--	1.5000CE+07
SGP	1	1	2	1.0000E-03	--	1.5000CE+07
SGT	1	1	55	1.0000E-03	--	1.5000CE+07
SGTR	1	1	66	1.0000E-03	--	1.5000CE+07
SGX	1	1	100	1.0000E-03	--	1.5000CE+07
SG2N	1	1	2	1.0000E-03	--	1.5000CE+07
SGNC	1	1	FCR	19 ENERGIES BETWEEN	5.000000E+04 EV AND	1.600000E+07 EV

⁺ lowest energy for which nonzero sigma value is stored on KEDAK

Table 2 cont.

*
* H 2 *
*

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	54	--	--	--
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	23	1.0000E-03	--	1.5000CE+07
SGA	1	1	151	1.0000E-03	--	1.5000CE+07
SGALP	1	1	2	1.0000E-03	--	1.5000CE+07
SGG	1	1	151	1.0000E-03	--	1.5000CE+07
SGI	1	1	2	1.0000E-03	--	1.5000CE+07
SGN	1	1	28	1.0000E-03	--	1.5000CE+07
SGP	1	1	2	1.0000E-03	--	1.5000CE+07
SGT	1	1	27	1.0000E-03	--	1.5000CE+07
SGTR	1	1	39	1.0000E-03	--	1.5000CE+07
SGX	1	1	141	1.0000E-03	--	1.5000CE+07
SG2N	1	1	31	1.0000E-03	3.40000E+06	1.5000CE+07
SGNC	1	1	FOR 14 ENERGIES BETWEEN		5.000000E+04 EV AND	1.410000E+07 EV

*
* HE 3 *
*

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	18	--	--	--
MUEL	1	1	2	1.0000E-03	--	1.0000CE+07
SGA	1	1	77	1.0000E-03	--	1.0000CE+07
SGALP	1	1	2	1.0000E-03	--	1.0000CE+07
SGG	1	1	2	1.0000E-03	--	1.0000CE+07
SGI	1	1	2	1.0000E-03	--	1.0000CE+07
SGN	1	1	2	1.0000E-03	--	1.0000CE+07
SGP	1	1	77	1.0000E-03	--	1.0000CE+07
SGT	1	1	2	1.0000E-03	--	1.0000CE+07
SGX	1	1	2	1.0000E-03	--	1.0000CE+07
SG2N	1	1	2	1.0000E-03	--	1.0000CE+07

*
* HE 4 *
*

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	18	--	--	--
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	41	1.0000E-03	--	1.0000CE+07
SGA	1	1	2	1.0000E-03	--	1.0000CE+07
SGALP	1	1	2	1.0000E-03	--	1.0000CE+07
SGG	1	1	2	1.0000E-03	--	1.0000CE+07
SGI	1	1	2	1.0000E-03	--	1.0000CE+07
SGN	1	1	59	1.0000E-03	--	1.0000CE+07
SGP	1	1	2	1.0000E-03	--	1.0000CE+07
SGT	1	1	59	1.0000E-03	--	1.0000CE+07
SGTR	1	1	58	1.0000E-03	--	1.0000CE+07
SGX	1	1	2	1.0000E-03	--	1.0000CE+07
SG2N	1	1	2	1.0000E-03	--	1.0000CE+07
SGNC	1	1	FOR 26 ENERGIES BETWEEN		1.000000E+05 EV AND	1.470000E+07 EV

Table 2 cont.

 * C 12 *
 * * *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASATUS	1	1	90	--	--	--
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	156	1.0000E-03	--	1.5000E+07
RANGRES	0	4	1	--	--	--
RES	3	8	14	2.0760E+06	--	1.2080E+07
SGA	1	1	204	1.0000E-03	--	1.5000E+07
SGALP	1	1	58	1.0000E-03	7.2000E+06	1.5000E+07
SGG	1	1	155	1.0000E-03	--	1.5000E+07
SGI	1	1	122	1.0000E-03	4.7500E+06	1.5000E+07
SGI3A	1	1	27	1.0000E-03	9.0000E+06	1.5000E+07
SGN	1	1	233	1.0000E-03	--	1.5000E+07
SGP	1	1	3	1.0000E-03	1.5000E+07	1.5000E+07
SGT	1	1	219	1.0000E-03	--	1.5000E+07
SGTR	1	1	242	1.0000E-03	--	1.5000E+07
SGX	1	1	270	1.0000E-03	--	1.5000E+07
SG2N	1	1	2	1.0000E-03	--	1.5000E+07
SGNC	1	1	FOR	42 ENERGIES BETWEEN	5.000000E+04 EV AND	1.420000E+07 EV
SGIZ	1	1	FOR	5 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
4.4300E+06	120	1.0000E-03	4.7500E+06	1.5000E+07
7.6500E+06	26	1.0000E-03	9.0000E+06	1.5000E+07
9.6600E+06	12	1.0000E-03	1.0800E+07	1.5000E+07
1.0840E+07	6	1.0000E-03	1.2000E+07	1.5000E+07
1.1820E+07	4	1.0000E-03	1.3000E+07	1.5000E+07

 * N *
 * * *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASATUS	1	1	18	--	--	--
SGNC	1	1	FOR	41 ENERGIES BETWEEN	1.000000E+05 EV AND	1.583000E+07 EV

Table 2 cont.

 * *
 * 0 16 *
 * *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASSTATUS	1	1	45	--	--	--
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	275	1.0000E-03	--	1.5000E+07
RANGRES	0	4	1	--	--	--
RES	3	8	39	4.4200E+05	--	1.1300E+07
SGA	1	1	388	1.0000E-03	--	1.5000E+07
SGALP	1	1	219	1.0000E-03	3.65000E+06	1.5000E+07
SGD	1	1	14	1.0000E-03	1.10000E+07	1.5000E+07
SGG	1	1	166	1.0000E-03	--	1.5000E+07
SGI	1	1	130	1.0000E-03	6.50000E+06	1.5000E+07
SGN	1	1	407	1.0000E-03	--	1.5000E+07
SGP	1	1	32	1.0000E-03	1.04000E+07	1.5000E+07
SGT	1	1	488	1.0000E-03	--	1.5000E+07
SGTR	1	1	495	1.0000E-03	--	1.5000E+07
SGX	1	1	460	1.0000E-03	--	1.5000E+07
SG2N	1	1	2	1.0000E-03	--	1.5000E+07
SGNC	1	1	FOR 131 ENERGIES BETWEEN	1.000000E+05 EV AND		1.583000E+07 EV
SGIZ	1	1	FOR 24 EXCITED LEVELS			

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
6.05200E+06	167	1.0000E-03	6.50000E+06	1.50000E+07
6.13100E+06	150	1.0000E-03	6.54000E+06	1.50000E+07
6.91700E+06	113	1.0000E-03	7.40000E+06	1.50000E+07
7.11900E+06	97	1.0000E-03	7.60000E+06	1.50000E+07
8.87200E+06	41	1.0000E-03	9.50000E+06	1.50000E+07
9.59700E+06	33	1.0000E-03	1.10000E+07	1.50000E+07
9.84700E+06	33	1.0000E-03	1.10000E+07	1.50000E+07
1.03540E+07	27	1.0000E-03	1.20000E+07	1.50000E+07
1.09520E+07	35	1.0000E-03	1.17960E+07	1.50000E+07
1.10800E+07	34	1.0000E-03	1.17960E+07	1.50000E+07
1.10960E+07	34	1.0000E-03	1.20000E+07	1.50000E+07
1.12600E+07	29	1.0000E-03	1.21000E+07	1.50000E+07
1.14400E+07	30	1.0000E-03	1.22480E+07	1.50000E+07
1.15210E+07	29	1.0000E-03	1.24000E+07	1.50000E+07
1.16300E+07	30	1.0000E-03	1.24000E+07	1.50000E+07
1.20530E+07	25	1.0000E-03	1.30000E+07	1.50000E+07
1.24420E+07	20	1.0000E-03	1.34000E+07	1.50000E+07
1.25280E+07	23	1.0000E-03	1.34000E+07	1.50000E+07
1.27950E+07	14	1.0000E-03	1.37850E+07	1.50000E+07
1.29670E+07	15	1.0000E-03	1.40000E+07	1.50000E+07
1.31500E+07	15	1.0000E-03	1.40000E+07	1.50000E+07
1.34500E+07	11	1.0000E-03	1.44000E+07	1.50000E+07
1.37500E+07	7	1.0000E-03	1.47000E+07	1.50000E+07
1.40500E+07	3	1.0000E-03	1.50000E+07	1.50000E+07

Table 2 cont.

* *
* NA 23 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	180	--	--	--
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	118	1.0000E-03	--	1.5000E+07
RANGRES	0	4	1	--	--	--
RES	3	8	233	2.8500E+03	--	8.5750E+05
SGA	1	1	719	1.0000E-03	--	1.5000E+07
SGALP	1	1	167	1.0000E-03	5.74000E+06	1.5000E+07
SGG	1	1	516	1.0000E-03	--	1.5000E+07
SGI	1	1	246	1.0000E-03	4.70000E+05	1.5000E+07
SGN	1	1	839	1.0000E-03	--	1.5000E+07
SGP	1	1	222	1.0000E-03	4.00000E+06	1.5000E+07
SGT	1	1	853	1.0000E-03	--	1.5000E+07
SGTR	1	1	863	1.0000E-03	--	1.5000E+07
SGX	1	1	828	1.0000E-03	--	1.5000E+07
SG2N	1	1	12	1.0000E-03	1.32000E+07	1.5000E+07
ST	2	6	2	0.0	--	0.0
STD	0	3	1	--	--	--
SGNC	1	1	FCR	63 ENERGIES BETWEEN	1.000000E+04 EV AND	1.430000E+07 EV
SGIZ	1	1	FCR	7 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
4.39000E+05	220	1.0000E-03	4.70000E+05	4.00000E+06
2.07800E+06	120	1.0000E-03	2.18000E+06	4.00000E+06
2.39300E+06	98	1.0000E-03	2.52000E+06	4.00000E+06
2.64100E+06	68	1.0000E-03	2.81000E+06	4.00000E+06
2.70500E+06	98	1.0000E-03	2.83000E+06	4.00000E+06
2.98300E+06	50	1.0000E-03	3.12000E+06	4.00000E+06
3.68000E+06	25	1.0000E-03	3.85000E+06	4.00000E+06

* *
* AL 27 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	81	--	--	--
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	210	6.0000E-04	--	1.5000E+07
RANGRES	0	4	1	--	--	--
RES	3	8	62	5.9060E+03	--	4.4500E+05
SGA	1	1	340	6.0000E-04	--	1.5000E+07
SGALP	1	1	59	6.0000E-04	6.20000E+06	1.5000E+07
SGG	1	1	280	6.0000E-04	--	1.5000E+07
SGI	1	1	75	6.0000E-04	1.07000E+06	1.5000E+07
SGN	1	1	339	6.0000E-04	--	1.5000E+07
SGP	1	1	100	6.0000E-04	2.74000E+06	1.5000E+07
SGT	1	1	342	6.0000E-04	--	1.5000E+07
SGTR	1	1	354	6.0000E-04	--	1.5000E+07
SGX	1	1	313	6.0000E-04	--	1.5000E+07
SG2N	1	1	4	6.0000E-04	1.40000E+07	1.5000E+07
ST	2	6	2	0.0	--	0.0
STD	0	3	1	--	--	--
SGNC	1	1	FOR	36 ENERGIES BETWEEN	1.000000E+04 EV AND	1.430000E+07 EV
SGIZ	1	1	FOR	9 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
8.42000E+05	66	1.0000E-03	1.07000E+06	4.5000E+06
1.01300E+06	70	1.0000E-03	1.07000E+06	4.5000E+06
2.21000E+06	35	1.0000E-03	2.40000E+06	4.5000E+06
2.73000E+06	28	1.0000E-03	3.00000E+06	4.5000E+06
2.98000E+06	32	1.0000E-03	3.20000E+06	4.5000E+06
3.00000E+06	24	1.0000E-03	3.20000E+06	4.5000E+06
3.68000E+06	19	1.0000E-03	4.20000E+06	4.5000E+06
3.95000E+06	12	1.0000E-03	4.20000E+06	4.5000E+06
4.05000E+06	11	1.0000E-03	4.40000E+06	4.5000E+06

Table 2 cont.

* *
* CL *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	18	--	--	--
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
ISOT3	1	1	2	3.5000E+01	--	3.7000E+01
MUEL	1	1	102	1.0000E-03	--	1.5000E+07
RANGRES	0	4	1	--	--	--
RES	3	8	27	-2.1000E+02	--	2.0200E+05
SGA	1	1	346	1.9000E-02	--	1.5000E+07
SGALP	1	1	40	1.9000E-02	2.00000E+06	1.5000E+07
SGG	1	1	348	1.9000E-02	--	1.5000E+07
SGI	1	1	50	1.9000E-02	1.04200E+06	1.5000E+07
SGN	1	1	280	1.9000E-02	--	1.5000E+07
SGP	1	1	295	1.9000E-02	--	1.5000E+07
SGT	1	1	263	1.9000E-02	--	1.5000E+07
SGTR	1	1	272	1.9000E-02	--	1.5000E+07
SGX	1	1	340	1.9000E-02	--	1.5000E+07
SG2N	1	1	7	1.9000E-02	1.27000E+07	1.5000E+07

* *
* CL 35 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--

* *
* CL 37 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--

Table 2 cont.

* *
* CR *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	81	--	--	--
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
ISOT3	1	1	4	5.0000E+01	--	5.4000E+01
MUEL	1	1	179	1.0000E-03	--	1.5000E+07
RANGRES	0	4	1	--	--	--
RES	3	8	67	4.2500E+03	--	6.3600E+05
SGA	1	1	188	1.0000E-03	--	1.5000E+07
SGALP	1	1	55	1.0000E-03	3.9900E+06	1.5000E+07
SGG	1	1	189	1.0000E-03	--	1.5000E+07
SGI	1	1	168	1.0000E-03	5.7900E+05	1.5000E+07
SGN	1	1	493	1.0000E-03	--	1.5000E+07
SGP	1	1	59	1.0000E-03	2.2000E+06	1.5000E+07
SGT	1	1	530	1.0000E-03	--	1.5000E+07
SGTR	1	1	516	1.0000E-03	--	1.5000E+07
SGX	1	1	267	1.0000E-03	--	1.5000E+07
SG2N	1	1	37	1.0000E-03	8.1200E+06	1.5000E+07
SGNC	1	1	FOR	45 ENERGIES BETWEEN	1.000000E+04 EV AND	1.450000E+07 EV
SGIZ	1	1	FOR	8 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
5.6500E+05	114	1.0000E-03	5.7900E+05	3.1900E+06
7.8200E+05	89	1.0000E-03	8.0000E+05	3.1900E+06
1.0070E+06	76	1.0000E-03	1.0300E+06	3.1900E+06
1.4340E+06	20	1.0000E-03	1.4500E+06	3.1900E+06
1.8350E+06	39	1.0000E-03	2.0000E+06	3.1900E+06
2.3270E+06	32	1.0000E-03	2.4000E+06	3.1900E+06
2.6200E+06	23	1.0000E-03	2.6810E+06	3.1900E+06
2.9650E+06	15	1.0000E-03	3.0280E+06	3.1900E+06

* *
* CR 50 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	5	6.6000E+03	--	9.5000E+04
SGALP	1	1	58	1.0000E-03	3.9900E+06	1.5000E+07
SGP	1	1	34	1.0000E-03	2.2000E+06	1.5000E+07
SG2N	1	1	9	1.0000E-03	1.3500E+07	1.5000E+07
ST	2	6	1	0.0	--	1.0000E+00
STD	0	3	1	--	--	--

Table 2 cont.

* *
* CR 52 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	58	5.1000E+04	--	6.3600CE+05
SGALP	1	1	48	1.0000E-03	5.03000E+06	1.5000CE+07
SGP	1	1	68	1.0000E-03	5.03000E+06	1.5000CE+07
SG2N	1	1	12	1.0000E-03	1.25000E+07	1.5000CE+07
ST	2	6	1	0.0	--	1.0000CE+00
STD	0	3	1	--	--	--

* *
* CR 53 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	1	4.2500E+03	--	0.0
SGALP	1	1	27	1.0000E-03	4.02000E+06	1.5000CE+07
SGP	1	1	52	1.0000E-03	4.02000E+06	1.5000CE+07
SG2N	1	1	32	1.0000E-03	8.12000E+06	1.5000CE+07
ST	2	6	2	0.0	--	0.0
STD	0	3	1	--	--	--

* *
* CR 54 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	3	2.3500E+04	--	1.19000E+05
SGALP	1	1	35	1.0000E-03	7.02000E+06	1.5000CE+07
SGP	1	1	22	1.0000E-03	1.02500E+07	1.5000CE+07
SG2N	1	1	21	1.0000E-03	9.98000E+06	1.50000E+07
ST	2	6	1	0.0	--	1.0000CE+00
STD	0	3	1	--	--	--

Table 2 cont.

* * *
* FE *
* * *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	54	--	--	--
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
ISOT3	1	1	4	5.4000E+01	--	5.8000E+01
MUEL	1	1	558	1.0000E-03	--	1.5000E+07
RANGRES	0	4	1	--	--	--
RES	3	8	96	-4.3900E+03	--	6.4500E+05
SGA	1	1	464	1.0000E-03	--	1.5000E+07
SGALP	1	1	69	1.0000E-03	4.0600E+06	1.5000E+07
SGG	1	1	421	1.0000E-03	--	1.5000E+07
SGI	1	1	249	1.0000E-03	8.6320E+05	1.5000E+07
SGN	1	1	1025	1.0000E-03	--	1.5000E+07
SGP	1	1	125	1.0000E-03	5.2860E+05	1.5000E+07
SGT	1	1	1039	1.0000E-03	--	1.5000E+07
SGTR	1	1	1044	1.0000E-03	--	1.5000E+07
SGX	1	1	564	1.0000E-03	--	1.5000E+07
SG2N	1	1	37	1.0000E-03	7.9600E+06	1.5000E+07
SGNC	1	1	FCR 45 ENERGIES BETWEEN	1.000000E+04 EV AND		1.450000E+07 EV
SGIZ	1	1	FCR 10 EXCITED LEVELS			

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
8.4500E+05	232	1.0000E-03	8.6320E+05	4.9900E+06
1.4080E+06	110	1.0000E-03	1.44470E+06	4.9900E+06
2.0800E+06	83	1.0000E-03	2.1400E+06	4.9900E+06
2.6550E+06	55	1.0000E-03	2.7100E+06	4.9900E+06
2.9360E+06	43	1.0000E-03	2.9600E+06	4.9900E+06
3.1180E+06	37	1.0000E-03	3.1900E+06	4.9900E+06
3.3670E+06	30	1.0000E-03	3.4500E+06	4.9900E+06
3.5990E+06	28	1.0000E-03	3.6800E+06	4.9900E+06
3.8250E+06	25	1.0000E-03	3.9100E+06	4.9900E+06
4.0380E+06	21	1.0000E-03	4.1400E+06	4.9900E+06

* * *
* FE 54 *
* * *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	44	8.0000E+03	--	5.0650E+05
SGALP	1	1	39	1.0000E-03	4.0600E+06	1.5000E+07
SGP	1	1	111	1.0000E-03	5.2860E+05	1.5000E+07
SG2N	1	1	7	1.0000E-03	1.4000E+07	1.5000E+07
ST	2	6	1	C.0	--	1.0000E+00
STD	0	3	1	--	--	--

Table 2 cont.

* FE 56 *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	50	-4.3900E+03	--	6.4500CE+05
SGALP	1	1	52	1.0000E-03	5.04000E+06	1.5000CE+07
SGP	1	1	69	1.0000E-03	4.55000E+06	1.5000CE+07
SG2N	1	1	14	1.0000E-03	1.17500E+07	1.5000CE+07
ST	2	6	1	0.0	--	1.0000CE+00
STD	0	3	1	--	--	--

* FE 57 *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	2	3.9000E+03	--	6.0000CE+03
SGALP	1	1	61	1.0000E-03	5.04000E+06	1.5000CE+07
SGP	1	1	34	1.0000E-03	4.06000E+06	1.5000CE+07
SG2N	1	1	33	1.0000E-03	7.96000E+06	1.5000CE+07
ST	2	6	2	0.0	--	0.0
STD	0	3	1	--	--	--

* FE 58 *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
SGALP	1	1	27	1.0000E-03	7.04000E+06	1.5000CE+07
SGP	1	1	40	1.0000E-03	4.06000E+06	1.5000CE+07
STD	0	3	1	--	--	--

Table 2 cont.

* NI *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	81	--	--	--
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
ISOT3	1	1	5	5.8000E+01	--	6.4000E+01
MUEL	1	1	302	1.0000E-03	--	1.5000E+07
RANGRES	0	4	1	--	--	--
RES	3	8	19	-2.8500E+04	--	2.0650E+05
SGA	1	1	575	1.0000E-03	--	1.5000E+07
SGALP	1	1	57	1.0000E-03	2.0800E+06	1.5000E+07
SGG	1	1	512	1.0000E-03	--	1.5000E+07
SGI	1	1	76	1.0000E-03	1.4000E+06	1.5000E+07
SGN	1	1	896	1.0000E-03	--	1.5000E+07
SGP	1	1	141	1.0000E-03	7.9200E+05	1.5000E+07
SGT	1	1	919	1.0000E-03	--	1.5000E+07
SGTR	1	1	912	1.0000E-03	--	1.5000E+07
SGX	1	1	548	1.0000E-03	--	1.5000E+07
SG2N	1	1	25	1.0000E-03	8.0230E+06	1.5000E+07
SGNC	1	1	FCR	46 ENERGIES BETWEEN	1.000000E+04 EV AND	1.400000E+07 EV
SGIZ	1	1	FOR	12 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
1.33200E+06	55	1.0000E-03	1.40000E+06	3.99300E+06
1.45200E+06	39	1.0000E-03	1.50000E+06	3.99300E+06
2.15800E+06	54	1.0000E-03	2.25000E+06	3.99300E+06
2.28700E+06	42	1.0000E-03	2.45000E+06	3.99300E+06
2.45800E+06	55	1.0000E-03	2.51200E+06	3.99300E+06
2.50200E+06	63	1.0000E-03	2.56400E+06	3.99300E+06
2.63000E+06	41	1.0000E-03	2.69000E+06	3.99300E+06
2.77200E+06	46	1.0000E-03	2.82500E+06	3.99300E+06
3.03500E+06	43	1.0000E-03	3.09500E+06	3.99300E+06
3.13000E+06	34	1.0000E-03	3.20400E+06	3.99300E+06
3.26000E+06	30	1.0000E-03	3.33700E+06	3.99300E+06
3.52000E+06	30	1.0000E-03	3.61000E+06	3.99300E+06

* NI 58 *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	9	-2.8500E+04	--	2.0650E+05
SGALP	1	1	56	1.0000E-03	2.0800E+06	1.5000E+07
SGP	1	1	143	1.0000E-03	7.9200E+05	1.5000E+07
SG2N	1	1	12	1.0000E-03	1.2750E+07	1.5000E+07
ST	2	6	1	0.0	--	1.0000E+00
STD	0	3	1	--	--	--

Table 2 cont.

* *
* NI 60 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	9	1.2500E+04	--	1.9900CE+05
SGALP	1	1	38	1.0000E-03	4.15400E+06	1.5000CE+07
SGP	1	1	72	1.0000E-03	4.00300E+06	1.5000CE+07
SG2N	1	1	12	1.0000E-03	1.17500E+07	1.5000CE+07
ST	2	6	1	0.0	--	1.0000CE+00
STD	0	3	1	--	--	--

* *
* NI 61 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
SGALP	1	1	36	1.0000E-03	6.02100E+06	1.5000CE+07
SGP	1	1	70	1.0000E-03	4.05100E+06	1.5000CE+07
SG2N	1	1	27	1.0000E-03	8.02300E+06	1.5000CE+07
STD	0	3	1	--	--	--

* *
* NI 62 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	1	4.6000E+03	--	0.0
SGALP	1	1	42	1.0000E-03	8.02300E+06	1.5000CE+07
SGP	1	1	66	1.0000E-03	6.07100E+06	1.5000CE+07
SG2N	1	1	17	1.0000E-03	1.10000E+07	1.5000CE+07
STD	0	3	1	--	--	--

* *
* NI 64 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
SGALP	1	1	12	1.0000E-03	1.27500E+07	1.5000CE+07
SGP	1	1	14	1.0000E-03	1.22500E+07	1.5000CE+07
SG2N	1	1	21	1.0000E-03	9.95400E+06	1.5000CE+07
STD	0	3	1	--	--	--

Table 2 cont.

* MO *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	63	--	--	--
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
ISOT3	1	1	7	5.2000E+01	--	1.0000E+02
MUEL	1	1	139	1.0000E-03	--	1.5000E+07
RANGRES	0	4	1	--	--	--
RES	3	8	51	1.2000E+01	--	1.6660E+04
SGA	1	1	1356	1.0000E-03	--	1.5000E+07
SGALP	1	1	464	1.0000E-03	4.83300E+06	1.5000E+07
SGG	1	1	1390	1.0000E-03	--	1.5000E+07
SGI	1	1	108	1.0000E-03	2.2000E+05	1.5000E+07
SGN	1	1	1378	1.0000E-03	--	1.5000E+07
SGP	1	1	54	1.0000E-03	1.5500E+06	1.5000E+07
SGT	1	1	1585	1.0000E-03	--	1.5000E+07
SGTR	1	1	1582	1.0000E-03	--	1.5000E+07
SGX	1	1	1338	1.0000E-03	--	1.5000E+07
SG2N	1	1	38	1.0000E-03	7.0540E+06	1.5000E+07
SGNC	1	1	FCR	39 ENERGIES BETWEEN	1.000000E+04 EV AND	1.400000E+07 FV
SGIZ	1	1	FCR	8 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
2.03000E+05	66	1.0000E-03	2.20000E+05	2.06000E+06
5.30000E+05	49	1.0000E-03	5.40000E+05	2.06000E+06
7.80000E+05	34	1.0000E-03	7.95000E+05	2.06000E+06
9.30000E+05	25	1.0000E-03	9.55000E+05	2.06000E+06
1.10000E+06	17	1.0000E-03	1.12000E+06	2.06000E+06
1.26000E+06	12	1.0000E-03	1.30000E+06	2.06000E+06
1.50000E+06	8	1.0000E-03	1.55000E+06	2.06000E+06
1.86000E+06	5	1.0000E-03	1.90000E+06	2.06000E+06

* MD 92 *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	5	3.4680E+02	--	1.6660E+04
SGALP	1	1	37	1.0000E-03	7.85200E+06	1.5000E+07
SGP	1	1	44	1.0000E-03	1.55000E+06	1.5000E+07
SG2N	1	1	10	1.0000E-03	1.30000E+07	1.5000E+07
ST	2	6	1	C.0	--	1.0000E+00
STD	0	3	1	--	--	--

* MU 94 *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	3	1.5190E+03	--	5.3800E+03
SGALP	1	1	55	1.0000E-03	6.00200E+06	1.5000E+07
SGP	1	1	47	1.0000E-03	7.51100E+06	1.5000E+07
SG2N	1	1	30	1.0000E-03	9.85200E+06	1.5000E+07
ST	2	6	1	0.0	--	1.0000E+00
STD	0	3	1	--	--	--

Table 2 cont.

* *
* MO 95 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	14	4.5100E+01	--	7.4000E+02
SGALP	1	1	35	1.0000E-03	4.83300E+06	1.5000E+07
SGP	1	1	44	1.0000E-03	6.00200E+06	1.5000E+07
SG2N	1	1	40	1.0000E-03	7.24300E+06	1.5000E+07
ST	2	6	2	0.0	--	0.0
STD	0	3	1	--	--	--

* *
* MO 96 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	4	1.1350E+02	--	3.3000E+03
SGALP	1	1	43	1.0000E-03	6.52300E+06	1.5000E+07
SGP	1	1	49	1.0000E-03	7.51100E+06	1.5000E+07
SG2N	1	1	30	1.0000E-03	9.26300E+06	1.5000E+07
ST	2	6	1	0.0	--	1.0000E+00
STD	0	3	1	--	--	--

* *
* MO 97 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	10	7.0900E+01	--	1.2550E+03
SGALP	1	1	52	1.0000E-03	6.20100E+06	1.5000E+07
SGP	1	1	47	1.0000E-03	8.00600E+06	1.5000E+07
SG2N	1	1	25	1.0000E-03	7.05400E+06	1.5000E+07
ST	2	6	2	0.0	--	0.0
STD	0	3	1	--	--	--

* *
* MO 98 *
* *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	9	1.2000E+01	--	9.0000E+03
SGALP	1	1	26	1.0000E-03	8.00600E+06	1.5000E+07
SGP	1	1	19	1.0000E-03	1.06000E+07	1.5000E+07
SG2N	1	1	29	1.0000E-03	8.48200E+06	1.5000E+07
ST	2	6	1	0.0	--	1.0000E+00
STD	0	3	1	--	--	--

Table 2 cont.

 * *
 * MD100 *
 * *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	6	9.7700E+01	--	1.93600E+03
SGALP	1	1	39	1.0000E-03	8.56800E+06	1.50000E+07
SGP	1	1	20	1.0000E-03	1.12000E+07	1.50000E+07
SG2N	1	1	28	1.0000E-03	8.48200E+06	1.50000E+07
ST	2	6	1	0.0	--	1.00000E+00
STD	0	3	1	--	--	--

 * *
 * CD *
 * *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	36	--	--	--
ISOT1	0	3	1	--	--	--
ISOT3	1	1	8	1.0600E+02	--	1.16000E+02
MUEL	1	1	46	1.0000E-03	--	1.50000E+07
RANGRES	0	4	1	--	--	--
RES	3	8	60	1.7800E-01	--	1.12500E+03
SGA	1	1	4160	1.0000E-03	--	1.50000E+07
SGALP	1	1	11	1.0000E-03	7.00000E+06	1.50000E+07
SGG	1	1	4150	1.0000E-03	--	1.50000E+07
SGI	1	1	44	1.0000E-03	3.50000E+05	1.50000E+07
SGN	1	1	3175	1.0000E-03	--	1.50000E+07
SGP	1	1	19	1.0000E-03	4.00000E+06	1.50000E+07
SGT	1	1	3673	1.0000E-03	--	1.50000E+07
SGTR	1	1	3690	1.0000E-03	--	1.50000E+07
SGX	1	1	4145	1.0000E-03	--	1.50000E+07
SG2N	1	1	17	1.0000E-03	8.00000E+06	1.50000E+07
SGIZ	1	1	FCR	4 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
3.00000E+05	19	1.0000E-03	3.50000E+05	1.40000E+06
6.00000E+05	13	1.0000E-03	6.50000E+05	1.40000E+06
1.20000E+06	4	1.0000E-03	1.30000E+06	1.40000E+06
1.30000E+06	3	1.0000E-03	1.40000E+06	1.40000E+06

Table 2 cont.

 * *
 * U 235 *
 * *

TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	234	--	--	--
ALPHA	1	1	5248	1.0000E-03	--	1.5000CE+07
CHICR	1	3	1	0.0	--	2.2900CE-06
CHIF	1	1	219	1.0000E-03	--	1.0000CE+07
ETA	1	1	5335	1.0000E-03	--	1.5000CE+07
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	52	1.0000E-03	--	1.5000CE+07
NUE	1	1	16	1.0000E-03	--	1.5000CE+07
PLNUE	0	4	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	197	-9.5000E-01	--	1.47330E+02
SGA	1	1	8432	1.0000E-03	--	1.5000CE+07
SGALP	1	1	2	1.0000E-03	--	1.5000CE+07
SGF	1	1	8274	1.0000E-03	--	1.5000CE+07
SGG	1	1	8381	1.0000E-03	--	1.5000CE+07
SGI	1	1	131	1.0000E-03	2.09999E+04	1.5000CE+07
SGN	1	1	8096	1.0000E-03	--	1.5000CE+07
SGP	1	1	2	1.0000E-03	--	1.5000CE+07
SGT	1	1	9543	1.0000E-03	--	1.5000CE+07
SGTR	1	1	9567	1.0000E-03	--	1.5000CE+07
SGX	1	1	8428	1.0000E-03	--	1.5000CE+07
SG2N	1	1	60	1.0000E-03	5.40000E+06	1.5000CE+07
SG3N	1	1	21	1.0000E-03	1.26000E+07	1.5000CE+07
ST	2	6	6	0.0	--	1.00000E+00
STD	0	3	1	--	--	--
STGF	3	8	66	5.0000E+01	--	2.5000CE+05
SGNC	1	1	FCR	43 ENERGIES BETWEEN	1.000000E+04 EV AND	1.520000E+07 EV
SGIZ	1	1	FOR	10 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
1.00000E+04	65	1.0000E-03	2.09999E+04	2.4000CE+06
6.00000E+04	61	1.0000E-03	8.50000E+04	2.4000CE+06
9.00000E+04	57	1.0000E-03	1.20000E+05	2.4000CE+06
2.00000E+05	43	1.0000E-03	2.40000E+05	2.4000CE+06
3.00000E+05	46	1.0000E-03	3.40000E+05	2.4000CE+06
5.00000E+05	38	1.0000E-03	5.20000E+05	2.4000CE+06
1.00000E+06	16	1.0000E-03	1.10000E+06	2.4000CE+06
1.50000E+06	12	1.0000E-03	1.60000E+06	2.4000CE+06
1.75000E+06	10	1.0000E-03	1.80000E+06	2.4000CE+06
2.00000E+06	7	1.0000E-03	2.10000E+06	2.4000CE+06

Table 2 cont.

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 * U 238 *
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TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	50	--	--	--
CHICR	1	3	1	0.0	--	2.29000E-06
CHIF	1	1	206	1.0000E-03	--	1.00000E+07
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	55	1.0000E-03	--	1.50000E+07
NUE	1	1	8	1.0000E-03	--	1.50000E+07
PLNUE	0	4	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	318	4.3930E+00	--	4.59270E+03
SGA	1	1	4395	1.0000E-03	--	1.50000E+07
SGALP	1	1	2	1.0000E-03	--	1.50000E+07
SGF	1	1	112	1.0000E-03	5.00000E+05	1.50000E+07
SGG	1	1	4385	1.0000E-03	--	1.50000E+07
SGI	1	1	95	1.0000E-03	4.70000E+04	1.50000E+07
SGIZC	1	1	60	1.0000E-03	2.30000E+06	1.50000E+07
SGN	1	1	6545	1.0000E-03	--	1.50000E+07
SGP	1	1	2	1.0000E-03	--	1.50000E+07
SGT	1	1	6704	1.0000E-03	--	1.50000E+07
SGTR	1	1	6727	1.0000E-03	--	1.50000E+07
SGX	1	1	4348	1.0000E-03	--	1.50000E+07
SG2N	1	1	32	1.0000E-03	6.10000E+06	1.50000E+07
SG3N	1	1	15	1.0000E-03	1.16000E+07	1.50000E+07
ST	2	6	5	0.0	--	2.00000E+00
STD	0	3	1	--	--	--
SGNC	1	1	FGR	42 ENERGIES BETWEEN	1.000000E+04 EV AND	1.400000E+07 EV
SGIZ	1	1	FCR	26 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
4.50000E+04	49	1.0000E-03	4.70000E+04	4.50000E+06
1.46000E+05	17	1.0000E-03	1.80000E+05	3.80000E+06
3.08000E+05	8	1.0000E-03	4.08000E+05	3.80000E+06
6.80000E+05	20	1.0000E-03	7.00000E+05	3.80000E+06
7.32000E+05	17	1.0000E-03	8.00000E+05	3.80000E+06
8.27000E+05	14	1.0000E-03	9.00000E+05	3.80000E+06
9.30000E+05	18	1.0000E-03	9.50000E+05	3.80000E+06
9.67000E+05	17	1.0000E-03	1.00000E+06	3.80000E+06
1.00000E+06	17	1.0000E-03	1.10000E+06	3.80000E+06
1.04100E+06	20	1.0000E-03	1.10000E+06	3.80000E+06
1.06000E+06	21	1.0000E-03	1.10000E+06	3.80000E+06
1.12000E+06	18	1.0000E-03	1.20000E+06	3.80000E+06
1.16000E+06	11	1.0000E-03	1.20000E+06	3.80000E+06
1.22000E+06	12	1.0000E-03	1.30000E+06	3.80000E+06
1.27000E+06	11	1.0000E-03	1.30000E+06	3.80000E+06
1.30000E+06	10	1.0000E-03	1.40000E+06	3.80000E+06
1.36100E+06	10	1.0000E-03	1.40000E+06	3.80000E+06
1.40900E+06	9	1.0000E-03	1.50000E+06	3.80000E+06
1.43700E+06	10	1.0000E-03	1.50000E+06	3.80000E+06
1.47000E+06	12	1.0000E-03	1.50000E+06	3.80000E+06
1.62500E+06	14	1.0000E-03	1.65000E+06	4.50000E+06
1.87500E+06	12	1.0000E-03	1.90000E+06	4.50000E+06
1.95000E+06	28	1.0000E-03	2.50000E+06	1.50000E+07
2.95000E+06	23	1.0000E-03	3.50000E+06	1.50000E+07
3.95000E+06	20	1.0000E-03	4.50000E+06	1.50000E+07
4.95000E+06	18	1.0000E-03	5.50000E+06	1.50000E+07

Table 2 cont.

 * *
 * PU238 *
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TYPE	ARGUMENTS	FUNCT.-VALUFS	CATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	27	--	--	--
ALPHA	1	1	1091	1.0000E-03	--	1.5000CE+07
CHICR	1	3	2	1.0000E-03	--	1.5000CE+07
ETA	1	1	992	1.0000E-03	--	1.5000CE+07
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	70	1.0000E-03	--	1.5000CE+07
NUE	1	1	2	1.0000E-03	--	1.5000CE+07
PLNUE	0	4	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	52	-4.0000E-01	--	4.9600CE+02
SGA	1	1	2222	1.0000E-03	--	1.5000CE+07
SGF	1	1	2195	1.0000E-03	--	1.5000CE+07
SGG	1	1	2236	1.0000E-03	--	1.5000CE+07
SGI	1	1	75	1.0000E-03	4.9900E+04	1.5000CE+07
SGN	1	1	2100	1.0000E-03	--	1.5000CE+07
SGT	1	1	2176	1.0000E-03	--	1.5000CE+07
SGTR	1	1	2176	1.0000E-03	--	1.5000CE+07
SGX	1	1	2223	1.0000E-03	--	1.5000CE+07
SG2N	1	1	15	1.0000E-03	7.0300E+06	1.5000CE+07
SG3N	1	1	6	1.0000E-03	1.3500E+07	1.5000CE+07
ST	2	6	3	0.0	--	1.0000CE+00
STD	0	3	1	--	--	--
STGF	3	8	33	5.0000E+01	--	2.5000CE+05
SGNC	1	1	FCR 126 ENERGIES BETWEEN	4.649998E+02 EV AND		1.5000CE+07 EV
SGIZ	1	1	FOR 19 EXCITED LEVELS			

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
4.40800E+04	48	1.0000E-03	4.99000E+04	1.70000E+06
1.45960E+05	36	1.0000E-03	2.02000E+05	1.70000E+06
3.03600E+05	28	1.0000E-03	6.64000E+05	1.70000E+06
6.05180E+05	22	1.0000E-03	6.64000E+05	1.70000E+06
6.61450E+05	23	1.0000E-03	7.43000E+05	1.70000E+06
9.41500E+05	18	1.0000E-03	9.66000E+05	1.70000E+06
9.62770E+05	18	1.0000E-03	9.73000E+05	1.70000E+06
9.68900E+05	17	1.0000E-03	9.87000E+05	1.70000E+06
9.83000E+05	16	1.0000E-03	9.89000E+05	1.70000E+06
9.85460E+05	15	1.0000E-03	1.00000E+06	1.70000E+06
1.02850E+06	13	1.0000E-03	1.07400E+06	1.70000E+06
1.06990E+06	11	1.0000E-03	1.08700E+06	1.70000E+06
1.08260E+06	11	1.0000E-03	1.20700E+06	1.70000E+06
1.20270E+06	10	1.0000E-03	1.23300E+06	1.70000E+06
1.22860E+06	8	1.0000E-03	1.26900E+06	1.70000E+06
1.26420E+06	8	1.0000E-03	1.35000E+06	1.70000E+06
1.44730E+06	6	1.0000E-03	1.50000E+06	1.70000E+06
1.62140E+06	4	1.0000E-03	1.64300E+06	1.70000E+06
1.63660E+06	3	1.0000E-03	1.70000E+06	1.70000E+06

Table 2 cont.

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 * PU239 *
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TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	117	--	--	--
ALPHA	1	1	7230	1.0000E-03	--	1.500CCE+07
CHICR	1	3	1	0.0	--	2.000CCE-C6
CHIF	1	1	175	1.0000E-03	--	1.000CCE+07
ETA	1	1	6134	1.0000E-03	--	1.500CCE+07
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	48	1.0000E-03	--	1.500CCE+07
NUE	1	1	7	1.0000E-03	--	1.500CCE+07
PLNUE	0	4	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	258	-1.2000E+00	--	6.5829CE+02
SGA	1	1	8453	1.0000E-03	--	1.500CCE+07
SGALP	1	1	2	1.0000E-03	--	1.500CCE+07
SGF	1	1	7157	1.0000E-03	--	1.500CCE+07
SGG	1	1	8336	1.0000E-03	--	1.500CCE+07
SGI	I	1	110	1.0000E-03	8.50000E+03	1.500CCE+07
SGN	1	1	5547	1.0000E-03	--	1.500CCE+07
SGP	1	1	2	1.0000E-03	--	1.000CCE+07
SGT	1	1	7028	1.0000E-03	--	1.500CCE+07
SGTR	1	1	454	1.0000E-03	--	1.500CCE+07
SGX	1	1	8465	1.0000E-03	--	1.500CCE+07
SG2N	1	1	30	1.0000E-03	5.80000E+06	1.500CCE+07
SG3N	1	1	8	1.0000E-03	1.28000E+07	1.500CCE+07
ST	2	6	5	0.0	--	1.000CCE+00
STD	0	3	1	--	--	--
STGF	3	8	55	5.0000E+01	--	2.500CCE+05
SGNC	1	1	FCR	43 ENERGIES BETWEEN	1.000000E+04 EV AND	1.5200CCE+C7 EV
SGIZ	1	1	FOR	7 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
8.00000E+03	38	1.000CE-03	8.50000E+03	5.5000CE+05
5.70000E+04	23	1.000CE-03	6.00000E+04	5.50000E+05
7.60000E+04	25	1.0000E-03	8.00000E+04	5.5000CE+05
1.64000E+05	16	1.0000E-03	1.70000E+05	5.50000E+05
2.86000E+05	13	1.0000E-03	2.90000E+05	5.50000E+05
3.31000E+05	9	1.0000E-03	3.40000E+05	5.5000CE+05
3.92000E+05	7	1.0000E-03	4.00000E+05	5.50000E+05

Table 2 cont.

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 * PU240 *
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TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	72	--	--	--
ALPHA	1	1	186	1.0000E-03	--	1.5000CE+07
CHICR	1	3	2	1.0000E-03	--	1.5000CE+07
ETA	1	1	78	1.0000E-03	--	1.5000CE+07
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	46	1.0000E-03	--	1.5000CE+07
NUE	1	1	2	1.0000E-03	--	1.5000CE+07
PLNUE	0	4	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	204	1.0580E+00	--	3.9900CE+03
SGA	1	1	138	1.0000E-03	--	1.5000CE+07
SGF	1	1	2445	1.0000E-03	--	1.5000CE+07
SGG	1	1	2498	1.0000E-03	--	1.5000CE+07
SGI	1	1	59	1.0000E-03	4.99000E+04	1.5000CE+07
SGN	1	1	2392	1.0000E-03	--	1.5000CE+07
SGT	1	1	2417	1.0000E-03	--	1.5000CE+07
SGTR	1	1	99	1.0000E-03	--	1.5000CE+07
SGX	1	1	123	1.0000E-03	--	1.5000CE+07
SG2N	1	1	12	1.0000E-03	6.70000E+06	1.5000CE+07
SG3N	1	1	5	1.0000E-03	1.22000E+07	1.5000CE+07
ST	2	6	5	0.0	--	2.0000CE+00
STD	0	3	1	--	--	--
STGF	3	8	55	5.0000E+01	--	2.5000CE+05
SGNC	1	1	FCR	70 ENERGIES BETWEEN	1.000000E+03 EV AND	1.5000CE+07 EV
SGIZ	1	1	FOR	20 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
4.30000E+04	35	1.0000E-03	4.99000E+04	1.5000CE+06
1.42000E+05	23	1.0000E-03	2.47000E+05	1.5000CE+06
2.94000E+05	23	1.0000E-03	5.50000E+05	1.5000CE+06
5.97000E+05	21	1.0000E-03	6.49000E+05	1.5000CE+06
6.49000E+05	19	1.0000E-03	7.05000E+05	1.5000CE+06
7.42000E+05	18	1.0000E-03	8.61000E+05	1.5000CE+06
8.61000E+05	17	1.0000E-03	9.00000E+05	1.5000CE+06
9.00000E+05	15	1.0000E-03	9.38000E+05	1.5000CE+06
9.38000E+05	13	1.0000E-03	9.59000E+05	1.5000CE+06
9.59000E+05	14	1.0000E-03	1.00200E+06	1.5000CE+06
1.00200E+06	13	1.0000E-03	1.03100E+06	1.5000CE+06
1.03100E+06	11	1.0000E-03	1.03800E+06	1.5000CE+06
1.03800E+06	11	1.0000E-03	1.09100E+06	1.5000CE+06
1.09100E+06	10	1.0000E-03	1.11600E+06	1.5000CE+06
1.11600E+06	5	1.0000E-03	1.41100E+06	1.5000CE+06
1.13700E+06	8	1.0000E-03	1.16100E+06	1.5000CE+06
1.16100E+06	4	1.0000E-03	1.41100E+06	1.5000CE+06
1.30800E+06	4	1.0000E-03	1.43800E+06	1.5000CE+06
1.41100E+06	4	1.0000E-03	1.43800E+06	1.5000CE+06
1.43800E+06	3	1.0000E-03	1.50000E+06	1.5000CE+06

Table 2 cont.

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 * PU241 *
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TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	36	--	--	--
ALPHA	1	1	1007	0.0	--	1.50000E+07
CHICR	1	3	2	1.0000E-03	--	1.50000E+07
ETA	1	1	653	1.0000E-03	--	1.50000E+07
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	54	1.0000E-03	--	1.50000E+07
NUE	1	1	2	1.0000E-03	--	1.50000E+07
PLNUE	0	4	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	123	2.6000E-01	--	1.60500E+02
SGA	1	1	1203	1.0000E-03	--	1.50000E+07
SGF	1	1	1157	1.0000E-03	--	1.50000E+07
SGG	1	1	1217	1.0000E-03	--	1.50000E+07
SGI	1	1	53	1.0000E-03	4.99000E+04	1.50000E+07
SGN	1	1	820	1.0000E-03	--	1.50000E+07
SGT	1	1	1144	1.0000E-03	--	1.50000E+07
SGTR	1	1	1142	1.0000E-03	--	1.50000E+07
SGX	1	1	1200	1.0000E-03	--	1.50000E+07
SG2N	1	1	16	1.0000E-03	6.07000E+06	1.50000E+07
SG3N	1	1	7	1.0000E-03	1.22000E+07	1.50000E+07
ST	2	6	6	0.0	--	1.00000E+00
STD	0	3	1	--	--	--
STGF	3	8	66	5.0000E+01	--	2.50000E+05
SGNC	1	1	FCR	72 ENERGIES BETWEEN	9.999997E+01 EV AND	1.50000E+07 EV
SGIZ	1	1	FOR	20 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
4.00000E+04	25	1.0000E-03	4.99000E+04	1.00000E+06
9.20000E+04	24	1.0000E-03	1.00000E+05	1.00000E+06
1.63000E+05	22	1.0000E-03	1.67000E+05	1.00000E+06
1.67000E+05	17	1.0000E-03	1.72000E+05	1.00000E+06
1.69000E+05	19	1.0000E-03	1.72000E+05	1.00000E+06
1.72000E+05	18	1.0000E-03	2.00000E+05	1.00000E+06
2.30000E+05	17	1.0000E-03	2.35000E+05	1.00000E+06
2.35000E+05	14	1.0000E-03	2.44000E+05	1.00000E+06
2.35100E+05	13	1.0000E-03	2.96000E+05	1.00000E+06
2.44000E+05	14	1.0000E-03	2.96000E+05	1.00000E+06
2.96000E+05	13	1.0000E-03	3.34000E+05	1.00000E+06
3.34000E+05	13	1.0000E-03	4.00000E+05	1.00000E+06
4.44000E+05	11	1.0000E-03	4.99000E+05	1.00000E+06
4.95000E+05	10	1.0000E-03	5.68000E+05	1.00000E+06
5.68000E+05	8	1.0000E-03	8.09000E+05	1.00000E+06
8.09000E+05	7	1.0000E-03	8.35000E+05	1.00000E+06
8.35000E+05	6	1.0000E-03	8.75000E+05	1.00000E+06
8.75000E+05	5	1.0000E-03	9.31000E+05	1.00000E+06
9.31000E+05	4	1.0000E-03	9.94000E+05	1.00000E+06
9.94000E+05	3	1.0000E-03	1.00000E-03	1.00000E+06

Table 2 cont.

 * *
 * PU242 *
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TYPE	ARGUMENTS	FUNCT.-VALUES	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
AASTATUS	1	1	36	--	--	--
CHICR	1	3	2	1.0000E-03	--	1.5000CE+07
ISOT1	0	3	1	--	--	--
ISOT2	0	3	1	--	--	--
MUEL	1	1	53	1.0000E-03	--	1.5000CE+07
NUE	1	1	2	1.0000E-03	--	1.5000CE+07
PLNUE	0	4	1	--	--	--
RANGRES	0	4	1	--	--	--
RES	3	8	37	2.6500E+00	--	4.5480CE+02
SGA	1	1	1736	1.0000E-03	--	1.5000CE+07
SGF	1	1	1179	1.0000E-03	5.0000E-01	1.5000CE+07
SGG	1	1	1745	1.0000E-03	--	1.5000CE+07
SGI	1	1	55	1.0000E-03	4.99000E+04	1.5000CE+07
SGN	1	1	1656	1.0000E-03	--	1.5000CE+07
SGT	1	1	1696	1.0000E-03	--	1.5000CE+07
SGTR	1	1	1691	1.0000E-03	--	1.5000CE+07
SGX	1	1	1738	1.0000E-03	--	1.5000CE+07
SG2N	1	1	12	1.0000E-03	6.70000E+06	1.5000CE+07
SG3N	1	1	5	1.0000E-03	1.22000E+07	1.5000CE+07
ST	2	6	3	0.0	--	1.0000CE+00
STD	0	3	1	--	--	--
STGF	3	8	33	5.0000E+01	--	2.5000CE+05
SGNC	1	1	FCR	74 ENERGIES BETWEEN	2.000000E+02 EV AND	1.5000CE+C7 EV
SGIZ	1	1	FOR	17 EXCITED LEVELS		

LEVEL	DATA SETS	FIRST ARGUM.	THRESHOLD	LAST ARGUM.
4.40000E+04	32	0.2912E-79	4.99000E+04	1.50000E+06
1.46000E+05	23	1.0000E-03	2.47000E+05	1.50000E+06
2.94000E+05	23	1.0000E-03	5.50000E+05	1.50000E+06
5.97000E+05	20	1.0000E-03	6.49000E+05	1.50000E+06
6.49000E+05	18	1.0000E-03	7.05000E+05	1.50000E+06
7.42000E+05	17	1.0000E-03	8.61000E+05	1.50000E+06
9.56000E+05	12	1.0000E-03	9.95000E+05	1.50000E+06
9.95000E+05	12	1.0000E-03	1.00200E+06	1.50000E+06
1.00200E+06	11	1.0000E-03	1.03100E+06	1.50000E+06
1.03100E+06	10	1.0000E-03	1.03800E+06	1.50000E+06
1.03800E+06	9	1.0000E-03	1.09100E+06	1.50000E+06
1.09100E+06	8	1.0000E-03	1.10700E+06	1.50000E+06
1.10700E+06	7	1.0000E-03	1.16100E+06	1.50000E+06
1.16100E+06	6	1.0000E-03	1.41100E+06	1.50000E+06
1.30800E+06	5	1.0000E-03	1.41100E+06	1.50000E+06
1.41100E+06	4	1.0000E-03	1.43800E+06	1.50000E+06
1.43800E+06	3	1.0000E-03	1.50000E+06	1.50000E+06