# Working Group on Noise Analysis & IMORN and SMORN meetings

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IMORN-31, Delft, The Netherlands 9 September 2024

# Early meetings and proceedings on reactor noise

**Uhrig, R.E.** (Ed.): *Noise analysis in nuclear systems.* 

Proc. of a Symposium held at the University of Florida, AEC Symposium Series No. 4, 4-6 November 1963, USAEC, Oak Ridge, Tennessee (1964)

**Uhrig, R.E.** (Ed.): Neutron noise, waves and pulse propagation. Proc. of a Symposium held at the University of Florida, AEC Symposium Series No. 9, 1966, USAEC, Oak Ridge, Tennessee (1967)

**Preprints, Japan - US seminar** on Nuclear Reactor Noise Analysis. 2-7 September 1968, Tokyo and Kyoto

### The beginnings

- The origins of the reactor noise conference series dates back to Germany, 1969.
- A first meeeting was organised by Drs. W. H. Dio (Siemens) and W. Bastl (ISTec Garching), with the participation of about 10 German scientists.
- The meeting was successful and it was decided to have another meeting a year later. The meeting series "Informal Meeting on Reactor Noise" was born.
- The scope of the meetings got extended to include participants from all over Europe, the US and Japan. However, all meetings were held in Europe (with one exception, see soon).
- The acronym "IMORN" was suggested by Hugo van Dam in 1983 at the Budapest meeting and was used formally first at the IMORN-15 in Prague.

#### The continuation

- A more formal conference series was started in 1974: Specialists' Meeting on Reactor Noise (SMORN). Organised under the auspices of OECD and IAEA.
- SMORN meetings were held every 4th year.
- The 25th "Jubilee" IMORN was held at the NCSU, North Carolina, USA in 1994.
- The IMORN and SMORN series were disrupted after 2002 and 2004, respectively.
- The IMORN-30 in Göteborg in 2023 and the present meeting are an attempt to re-activate the meeting series.

# Working Group on Noise Analysis & IMORN and SMORN meetings

1.	Garching	Germany	1969
2.	NS "Otto Hahn", Hamburg	Germany	1970
3.	Erlangen	Germany	1971
4.	Karlsruhe	Germany	1971
5.	Obrigheim	Germany	1972
6.	Hannover	Germany	1973
7.	Petten	The Netherlands	1973
8.	Berlin	Germany	1974
9	SMORN-I Casaccia	Italy	1974
9.	Würenlingen	Switzerland	1975
10.	Jülich	Germany	1976
9	SMORN-II Gatlinburg	USA	1977
11.	Rossendorf	East Germany	1978
12.	Studsvik	Sweden	1979

# The nuclearly powered NS Otto Hahn (1970-79)



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# **IMORN** and **SMORN** meetings

13. Cadarache	France	1980
14. St. Englmar	Germany	1981
SMORN-III Tokyo	Japan	1981
15. Petten	The Netherlands	1982
16. Budapest	Hungary	1983
17. Karlsruhe	Germany	1984
SMORN-IV Dijon	France	1984
18. Prague	Czechoslovakia	1985
19. Rome	Italy	1986
SMORN-V Munich	Germany	1987
20. Istanbul	Turkey	1988
21. Würenlingen	Switzerland	1989
22. Delft	The Netherlands	1990
SMORN-VI Gatlinburg	USA	1991
23. Nyköping	Sweden	1992
24. Oybin	Germany	1993

# **IMORN** and **SMORN** meetings

<b>25</b> .	Raleigh	USA	1994		
SMORN-VII Avignon		France	1995		
26.	Piestany	Slovakia	1996		
27.	Valencia	Spain	1997		
28.	Athens	Greece	2000		
SMORN-VIII Göteborg		Sweden	2002		
29.	Budapest	Hungary	2004		
RNKTM		Czechia	2012		
(Reactor Noise Knowledge Transfer Meeting)					
30.	Göteborg	Sweden	2023		
31.	Delft	The Nederlands	2024		

#### IMORN-12 Studsvik, Sweden 1979



# IMORN-14 St Englmar, Germany, 1981



#### IMORN-15 Petten, The Netherlands, 1982



## IMORN-18, Prague, Czechoslovakia, 1985



### IMORN-21, PSI Villigen, Switzerland, 1989



# IMORN-23 Nyköping, Sweden, 1992



### IMORN-25, Raleigh, NC, USA, 1994



# SMORN-8, Göteborg, Sweden, 2002



## SMORN-8, Göteborg, Sweden, 2002



### IMORN-30, Chalmers, Göteborg, Sweden, 2023



# IMORN-30 (the on-line participants), Chalmers, Göteborg, Sweden, 2023

