

Working Group on Noise Analysis & IMORN and SMORN meetings

Imre Pázsit

Chalmers University of Technology
Division of Subatomic, High Energy and Plasma Physics
Nuclear Engineering Group



IMORN-33, Grenoble, France
6 July 2026

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 IMORN reactor noise conference series dates back to Germany, 1969.
- A first meeting 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 16th meeting in Budapest, and was used formally first at the IMORN-18 in Prague in 1985.

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 SMORN and IMORN series were disrupted after 2002 and 2004, respectively.
- The IMORN-30 in Göteborg in 2023 was first meant to be a "nostalgia" meeting. However, the participants showed interest in continuing the series.
- The IMORN-31 in Delft in 2024 and the IMORN-32 in Cambridge: attempt to re-activate the meeting series. Success:
 - IMORN-33 in Grenoble
 - prospective host found for the IMORN-34 in 2027.

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
	SMORN-I Casaccia	Italy	1974
9.	Würenlingen	Switzerland	1975
10.	<i>Jülich</i>	<i>Germany</i>	<i>1976</i>
	SMORN-II Gatlinburg	USA	1977
11.	Rosendorf	East Germany	1978
12.	Studsvik	Sweden	1979

The nuclearly powered NS Otto Hahn (1970-79)



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
	SMORN-I Casaccia	Italy	1974
9.	Würenlingen	Switzerland	1975
10.	<i>Jülich</i>	<i>Germany</i>	<i>1976</i>
	SMORN-II Gatlinburg	USA	1977
11.	Rosendorf	East Germany	1978
12.	Studsvik	Sweden	1979

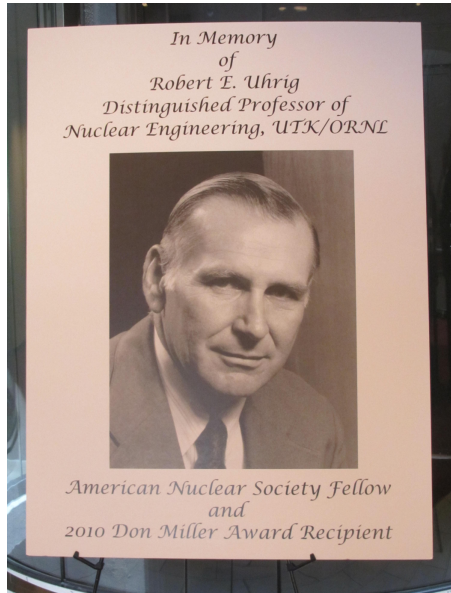
IMORN and SMORN meetings

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

25.	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
	RNKT M	Czechia	2012
	(Reactor Noise Knowledge Transfer Meeting)		
30.	Göteborg	Sweden	2023
31.	Delft	The Netherlands	2024
32.	Cambridge	The UK	2025
33.	Grenoble	France	2026
34.	?		2027

Bob Uhrig, Univ of Florida & UTK (1928 - 2013)



Dieter Wach, GRS, Germany)



Don Miller Award

Dieter H. Wach

Gesellschaft für Anlagen - und
Reaktorsicherheit (GRS)



Julius J. Persensky

(posthumously)
Sr. Human Factors Advisor,
Idaho National Laboratory



Dieter Wach, GRS, Germany)



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



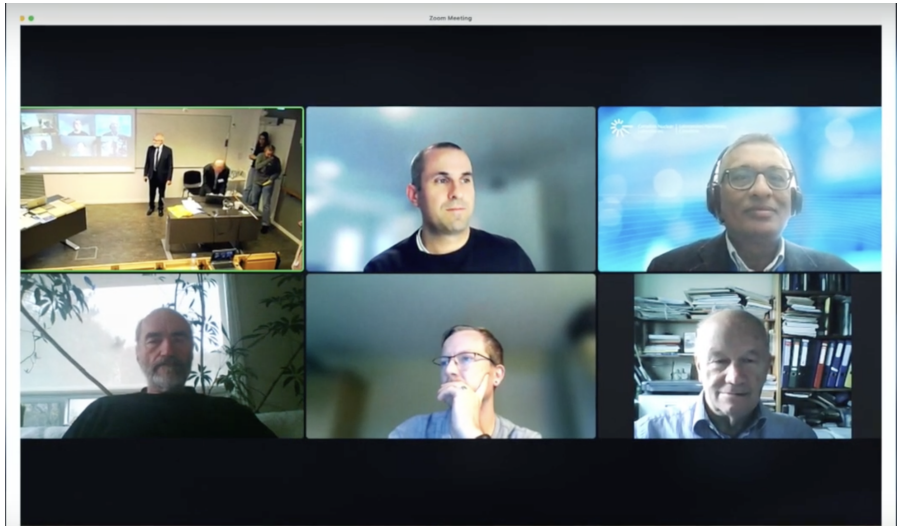
SMORN-8, Göteborg, Sweden, 2002



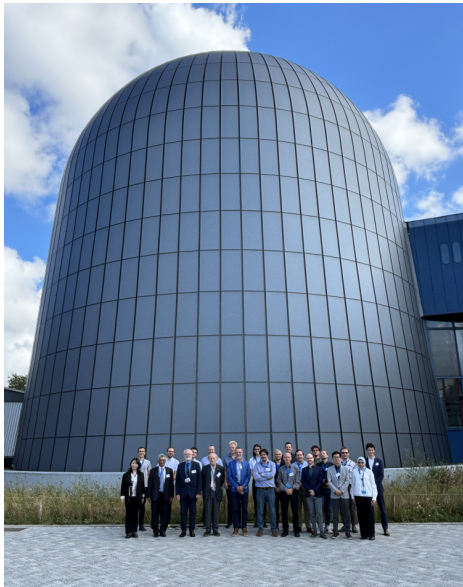
IMORN-30, Chalmers, Göteborg, Sweden, 2023



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



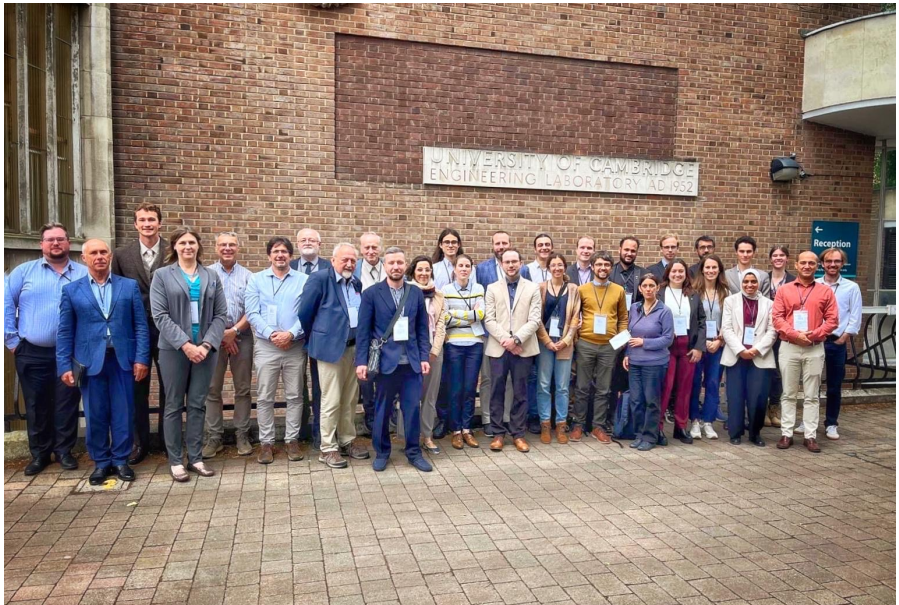
IMORN-31, TU Delft , The Netherlands, 2024



IMORN-31, TU Delft, The Netherlands, 2024



IMORN-32, University of Cambridge, UK, 2025



Epilogue (from last year)

- The IMORN series, as the original name suggests (“International”) were “self-organised” structures, not organised by a nuclear society.
It is similar to the biannual series “ICTT” (International Conference on Transport Theory)
- Conferences organised by initiative of the participants - next meeting was decided by the attendees at the end of the previous meeting (sometimes later), but based on own initiative of the noise community
- Since the re-start in 2023, the initiative was carried on by a very limited number of persons and the host was found by invitation, not by internal volunteer initiative.
- For the series to become sustainable, the old “self-organising” structure should be re-established.
- The question is whether the time is ripe for this. The answer will hopefully be clear at the end of this meeting.