

STATE OF THE ART PAPER SESSION IN SMiRT CONFERENCES

The IASMiRT Board agreed, in its meeting during SMiRT 21 in New Delhi in 2011, to my proposal of holding special session with state-of-the-art (SoA) paper on selected topics in future SMiRT conferences.

First such session was organised by me on the topic of NPP concrete structure in SMiRT 22. The session consisted of a SoA paper and three expert presentations followed by Q/A. The SoA paper, 'NPP Concrete Structures' was authored by Pierre Labbe of France, Dan J Naus of USA and me from India. Three expert presentations were 1) 'Future Trend of Research on Concrete Material, Mixture and Practices' by Daman Panesar of Canada, 2) 'Response of Onagawa NPP Reactor Building during the Tohoku-Pacific Ocean Earthquake' by Hiroshi Sawabe of Japan, and 3) 'Non-linear Structural Analysis for Extreme Loading' by Alexander Siefert of Germany. Large number of delegates attended the session (the accommodation was inadequate though it was held in a larger room). The Q/A spanning over ½ hour was lively.

I am also coordinating the SoA session on component fragility of nuclear power plant covering seismic, flood and wind hazards in SMiRT 23. Like previous occasion, this session will consists of a SoA paper and three expert presentations followed by Q/A. Yoshinori Mihara of Japan, M. K. Ravindra of USA and I from India will author the SoA paper. Ovidu Coman of IAEA, Larry Twisdell of USA and an expert from USNRC will contribute to the expert presentations on the challenges, issues and resolution for derivation of NPP component fragility against seismic, wind and flood hazards respectively. Unlike in SMiRT22, papers on expert presentations will be contributed to the SMiRT 23 Transaction, which would be an improvement over the last occasion.

The success of SoA session of SMiRT 22 encouraged me to organise similar one in SMiRT 23. Till now, organising SoA session remains to individual centric, though I received unstinting support from the Chairman SMiRT 22. I may continue for one more in SMiRT 24 if the organiser supports it. The importance of SoA paper on the topics related to nuclear safety and design and deliberation on it needs no further elaboration. If IASMiRT desires to continue the special session with SoA paper in future, its organization needs to be institutionalised within the frame work of SMiRT conference. Some of my thoughts in this direction are:

- The session should have a distinct generic name other than plenary session or special session or workshop. A suggested name is State-of-the-Art (SoA) Session.
- The session may have the similar stature of a plenary session.
- The session should be organised in the frame work of a Division with the mandate from the International Scientific Committee (ISC) of SMiRT Conference.
- The session will be organised on selected topic. It will be of typically 2 hr duration and consist of a SOA and expert presentations/paper on areas related to the topic followed by extended Q/A.
- The authors of SoA paper and expert presentations should be selected from countries of different continents so that state-of-the practice pertinent to the topic in nuclear industries of different parts of the world is reflected in the session.
- SoA paper should be recommended for publication in SMiRT special issue of NED.

Further details may be worked out after deliberation in the IASMiRT Board and Advisory Board.