Theme Meeting on "Role of Safety Research in Nuclear Regulation: Current Status and Future Directions"

A two-day Theme meeting on **"Role of Safety Research in Nuclear Regulation: Current Status and Future Directions"** was organized by SRI-AERB at the DAE Convention Centre, Anupuram during 20-21 June 2024. Around 120 delegates from AERB, IGCAR, BARC, NPCIL, BHAVINI and academic institutions participated in the Theme Meeting.

The Theme Meeting was inaugurated by Shri S. B. Chafle, Executive Director, AERB. In his inaugural address, Shri Chafle stressed that the main goal of nuclear safety research should be to focus on the radiological impact on the people and the environment. He mentioned that safety research should support regulatory decision-making and ensure that regulatory processes remain robust. He highlighted a few gap areas of research relevant to regulation and the importance of collaborative research.

Director, IGCAR, Shri C.G. Karhadkar was the Chief Guest of the inaugural function. In his keynote address, he brought out the imminent role of safety research for scaling up the nuclear power programme of India in near future to meet the challenges of climate change. In this context he mentioned the need for focused research to reduce conservatism in analysis and design to meet the growing requirement of energy from nuclear power. He highlighted the need for advanced instrumentation capabilities to reduce the bias in measurement that has an impact on the estimation of radiation dose. The need for a probabilistic model to address conservatism was also brought out in his address. Finally, he suggested that the research works should aim to change the public perception about nuclear technology.

Shri. K. V. Suresh Kumar, CMD, BHAVINI as the guest of honor, delivered a special address during the inaugural function. While highlighting the importance of independent safety analysis, he mentioned the support provided by SRI in independently verifying the core safety parameters while raising the FBTR power to 40 MWt that gave confidence to the utility.

Chairman, AERB, Shri D. K. Shukla presided over the function and delivered the presidential address at the end of the inaugural function. In his address, Chairman brought out the unique role of SRI in providing support for regulatory decision making. He indicated that SRI has to acquire inputs from various regulatory processes and translate them to credible research problems that would be of interest to AERB. He further stated the importance of collaborative research that would harness the huge technical infrastructure available at the R&D organizations of DAE and other academic centers of excellence within the country. Chairman also highlighted that SRI should strive to become a center of excellence for fast reactor safety studies with its proximity and access to the various facilities available in IGCAR campus. He underscored the need for an Apex Committee on Safety Research under the aegis of AERB that would play a key role in providing direction and guidance for undertaking various safety research programmes in line with the mission and vision of AERB.

The inaugural function was also attended by Dr. B. Venkatraman, Former Director, IGCAR; Shri M. Seshaiah, Station Director, MAPS; Dr. T. V. Krishna Mohan, Facilities Director, BARCF and other senior dignitaries from IGCAR and BHAVINI.

The technical sessions of the Theme Meeting consisted of fourteen invited lectures covering the important contemporary topics in nuclear safety research. These lectures were delivered by experts from BARC, IGCAR, NPCIL, AERB and IISc. The technical talks were well received by the participants who interacted with the speakers during the Q&A sessions. The concluding remarks were given by ED and Chairman, AERB. In his concluding remarks, Chairman, AERB thanked the speakers and participants for their deep interest, meticulous presentations and fruitful interactions. He suggested to conduct such theme meetings in periodic intervals with focus on specific topics of interest to maintain continuous interaction and integration among the research community to resolve the present and future safety issues.

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Chairman, AERB delivering the presidential address during the inaugural function Dignitaries from Left to Right: Dr. D.K. Mohapatra, Head, SRI, AERB, Shri S.B.Chafle, ED, AERB Shri C.G. Karhadkar, Director, IGCAR and Shri K.V.Suresh kumar, CMD, Bhavini



Participants of the Theme Meeting