DAE-BRNS Theme Meeting on Membrane Separations for Fuel Cycle Applications (MEMSEP-2013): A Report

The DAE-BRNS Theme Meeting on “Membrane Separations for Fuel Cycle Applications (MEMSEP-2013)” was held at BARC Training School Hostel, Anushaktinagar, Mumbai during September 16 – 18, 2013. The objective of this Theme Meeting was to provide a forum to scientists, engineers and young researchers to discuss the recent advances in the membrane separations with particular emphasis on nuclear fuel cycle applications. The Theme Meeting was inaugurated by Dr. P. R. Vasudeva Rao, Director, IGCAR who was the chief guest. He delivered a key note address on the role of membrane science in society in general and in nuclear fuel cycle in particular. Dr. A. Goswami, Head, Radiochemistry Division who welcomed the delegates also gave a brief introduction on the importance of membrane separations in energy sector, particularly in the area of renewable energy. Dr. P. K. Mohapatra, Convenor, MEMSEP-2013 introduced to the delegates the scope of the Theme Meeting and also the need to develop radiation resistant membranes which may find application in membrane separations aimed at radioactive waste processing. Dr. K. L. Ramakumar, Director, Radiochemistry & Isotope Group, BARC gave the presidential address and mentioned how the large scale applications of membrane separations in water desalination can be extended to industrial waste water treatment including those emanating from nuclear industry. Dr. S. A. Ansari, Secretary, MEMSEP-2013 delivered the vote of thanks.

There were about 125 delegates who attended MEMSEP-2013. There were 2 plenary and 21 invited speakers including 3 from overseas, one each from USA, Poland and Spain and 31 contributory papers received from various research / academic institutions, viz. BARC, CSIR Labs, IITs, etc. The opening plenary lecture was delivered by Prof. Miriam Balaban, a very senior professor, and Editor-in-Chief of the International Journal, “Desalination and Water Treatment”.

A wide range of topics related to membrane separation processes were covered including preparation and characterization of membranes, design and development of membrane modules for various applications, membrane stability / membrane fouling, ceramic membranes, membrane photocatalytic reactors, supported liquid membranes and emulsion liquid membranes. The valedictory function saw very positive remarks from the participants. Association of Separation Scientists and Technologists (ASSET), which co-organized the event, encouraged four young researchers with the “Best Paper” prizes (selected by a distinguished jury) given by Dr. K. L. Ramakumar, who is also the President of ASSET. Finally, the Theme Meeting was concluded with a hope for directed and collaborative efforts between various research groups.