IIT Bombay Diamond Jubilee Workshop on "Future of Energy Research and Education"



13-14 December 2018 VMCC, IIT Bombay



The energy sector is in transition – moving away from fossil fuels to low carbon energy technologies – renewables and energy efficiency. There are several challenges associated with the energy sector. As a part of the Diamond Jubilee celebration, Department of Energy Science and Engineering, IIT Bombay organizes a workshop on the future of energy research and education.

This workshop will bring together leaders from industry, research organisations, and academia to discuss the challenges and opportunities in the energy sector and create roadmaps and shared vision for the future.

The first day of the workshop focuses on energy research while the second day focuses on energy education. Outcomes from the workshop include recommendations on:

- 1. Identified research gaps and research priorities in short term (next 5 years), medium term (5-15 years), and long term (15-30 years).
- Role of academia, administration, and industry towards development of indigenous technology and manufacturing facilities.
- 3. R&D infrastructure in academia, research organizations, and industry Policy, funding, coordination between the various research institutes and administrative bodies.
- 4. Human resource development Education goals for meeting R&D and academic needs of India, curriculum, training, job market, and coordination and collaboration between various educational institutes.
- 5. Framework for training of faculty members and technical staff.

Programme

Day 1 (13/12/2018): Energy Research

09:00-09:30 Inauguration

09:30-11:15 ONG & CCS, solar PV, wind/hydro/grid

11:15-11:30 Tea break

11:30-13:15 Solar thermal, biomass, storage/EV

13:15-14:15 Lunch break

14:15-16:00 Waste to energy, energy management

16:00-16:15 Tea break

16:15-17:30 Concluding remarks

Day 2 (14/12/2018): Energy Education

09:30-11:15 Common education goals

<u>11:15-11:30</u> Tea break

11:30-13:15 Energy as a discipline

13:15-14:15 Lunch break

14:15-16:00 Curriculum, employability of graduates

16:00-16:15 Tea break

16:15-17:30 Concluding remarks

Guest Speakers

Arun Kumar, IIT Roorkee

Babu Alappat, IIT Delhi

Jignesh Rathod, Waaree Energy

Jyotirmay Mathur, MNIT Jaipur

Kiran Deshpande, SPPU and Thermax

M. K. Surana, HPCL

M. T. Arvind, Amplebit Energy

Mahesh Patankar, MP Ensystems

Pankaj Batra, CEA

Ramkrishna Gadre, Tata Power

Richard Dias, Saligao

S. A. Matthew, NIWE

S. Dasappa, IISc Bangalore

Suman Basu, Mahindra Electric

T. C. Kandpal, IIT Delhi

Vasudeo Joshi, Praj Industries

Venkat Rajaraman, CYGNI