

ACBCCU 2018

Workshop on Awareness and Capacity Building Carbon Capture and Utilization

August 29-September 1, 2018, New Delhi



Objectives of ACBCCU-2018

- i) To provide understanding of the need of carbon capture and processes of its utilization and storage
- ii) To learn about recent advances in advances in CO₂ capture technologies and share experience in research challenges for sectoral applications
- iii) To highlight existing and new norms in power plants and impact of development of CCU in their achievement

Workshop Highlights

Carbon Capture and Sequestration: Overview and Status

Recent Advances in CO₂ Capture Technologies

Carbon-Utilization and Value Addition

Sectoral Applications in Oil Refineries, Minerals and Agriculture

Round Table – CCS in Power sector, pros & cons and Issues in environmental norms

Convener / Organizing Secretary:

Dr. (Mrs.) Malti Goel
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**Sponsored by
Ministry of Earth Sciences**
(Government of India)



**Collaborator
IITRAM, Ahmedabad**

Background

The increased emissions of greenhouse gases, particularly carbon dioxide and their accumulation in the atmosphere are giving rise to global warming and climate change. Impending concerns are demanding scientific & technological actions at national and international levels. The Carbon Capture and Utilization (CCU) is an emerging technology to reduce CO₂ concentrations in the atmosphere. It requires capturing CO₂ from its point sources and its chemical, biological or physical utilization for value addition.

The Climate Change Research Institute has been organizing capacity building workshops on CCS every three years for the benefit of youth in the country. The last workshop held in July 2015 on Carbon Capture, Utilization and Storage under the auspices of Ministry of Earth Sciences brought together outstanding academicians and industry experts. The proceedings of ACBCCS-2015 published by Springer can be accessed at <https://www.springer.com/in/book/9789811033513>. This year fourth edition of Awareness and Capacity Building Workshop has a focus on Recent Advances in CO₂ Capture Technology and Its Sectoral Application.

Workshop Theme

Recent Advances in CO₂ Capture Technology and Its Sectoral Application'

Rationale

- ❖ The CO₂ concentrations have reached all-time high as 410ppm in 2017. The CO₂ capture and its utilization provides a future option for dealing with increased accumulation of carbon dioxide in the atmosphere from energy industry. For it to be a viable option, it needs to become cost-effective, reliable and safe through investment in R&D in comparison to other carbon management options.
- ❖ The CO₂ capture technologies are advancing rapidly into second generation and third generation technologies. New areas of research for conservation of energy and saving of materials are being proposed and what did not look promising earlier, is now being considered as an option.
- ❖ Carbon Capture Innovation Challenge is one of the seven areas of Mission Innovation where research and development (R&D) investment is expected to double by 2020. Mission Innovation has 23 countries including India and the European Union as its Members aiming to accelerate the global clean energy innovation. With this in view the proposed ACBCCU 2018 workshop assumes great importance in the national context and would aim to provide larger outreach to industry.
- ❖ India is also among the few developing countries, which has a research programme on CO₂ sequestration beginning 2007 funded by the Government viz. DST, DBT, MOES as well as Industry viz. NTPC, ONGC, and Reliance among others. India has been founder member of Carbon Sequestration Leadership Forum, USA and Global Carbon Capture and Storage Institute, Australia.
- ❖ It is therefore timely that in a changing scenario an exposure is provided to enhance world view on the subject and issues are elaborated for broadening the perspectives on CO₂ sequestration and utilization.

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Dr. (Mrs.) Malti Goel
Chief Executive, Climate Change Research
Institute and Former Adviser & Emeritus
Scientist, MST

Invited Speakers

Prof. Anjan Ray, CSIR-IIP, Dehradun
Dr. S.S.V. Ramkumar, IOCL R&D Center
Prof. P.M.V. Subba Rao, IIT Delhi
Dr. Anshu Nanoti, CSIR-IIP, Dehradun
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Who Should Attend?

The workshop aims at providing information and awareness on latest developments in the field of Carbon Capture and Storage and other related issues. The target participants in this workshop are:

- Nominees of major stakeholder industries and institution in the country
- Power plants and Power Utilities
- Institute like IITs and other private institutes
- Research laboratories like CSIR labs
- State and Central Universities
- Oil companies, Steel and Agriculture industry

Delegate's Registration can be done at www.ccri.in/ACBCCU-2018.html

Vision

Mission

Innovate and become a
Center of Excellence in
Environment and Climate
Change education.

Organizers

Climate Change Research Institute is founded with a mission to promote environment and climate change education, innovation and teachings. It aims to address wide strata of society about the consequences of climate change on our lives and taking control measures. Institute is taking initiative to create awareness on energy security and sustainability through lectures in schools and college, workshops and internet reach. Its future work plan includes development of educational tools on topics of scientific and societal interest; such as energy, health and water in the climate change context. Research and studies would be undertaken on science & technology measures aimed at climate change mitigation and ways of reducing the emission of CO₂.