

**A Brief Report on Online National Conference on
“Sustainable Research in Energy and Environment (SREE-2021)”
15-16 January, 2021**



Online National Conference (TEQIP-III Sponsored) on “Sustainable Research in Energy and Environment (SREE-2021)” was organized jointly by Department of Biotechnology, Department of Chemical Engineering and Centre for Energy and Environment at Dr B R Ambedkar National Institute of Technology, Jalandhar, Punjab under the aegis of TEQIP-III, Ministry of Education, Government of India during **15-16 January, 2021**. The idea behind this conference was to have an insight into the strategies and methods of sustainable processes, quantification of waste generation, implementation and use of alternate resources. During the last two decades, spectacular progress has been made to develop eco-friendly, sustainable and green-tech processes and policies in the field of Chemical and allied industries were discussed.

Prof. Lalit Kumar Awasthi, Director of Dr B R Ambedkar National Institute of Technology, Jalandhar was the Chief Guest. Prof. M K Jha, Head of the Centre for Energy and Environment, Prof. Ajay Bansal, Head of the Department of Biotechnology, Dr Sangeeta Garg, Associate Professor and Head, Department of Chemical Engineering, Dr Renu Gupta, Associate Professor, Department of Chemical Engineering, Dr Poonam Gera, Associate Professor, Department of Chemical Engineering, Dr Shashikant Yadav, Assistant Professor, Department of Chemical Engineering and other faculty members joined on this occasion through google meet (meet.google.com/tqo-qhvs-och). The course was inaugurated by welcoming the dignitaries/participants and a brief description about SREE-2021 was presented by Dr. Ajay Bansal, Conference Chair. Prof. M. K. Jha, Head of the Centre for Energy and Environment gave an overview of the Centre and highlighted the importance of the conference. Dr Sangeeta Garg gave an overview on the

Department of Chemical Engineering. This was followed by motivational and informative talk by our Chief Guest & worthy Director Prof. Lalit Kumar Awasthi. Dr Awasthi emphasized on sustainable technologies on energy that should have less impact on the environment.

Prof. Lalit Kumar Awasthi appreciated the organising committee of SREE-2021 Dr Ajay Bansal (Conference Chair), Dr Renu Gupta (Organizing Secretary) and Dr Poonam Gera (Organizing Secretary), Dr Shashikant Yadav (Convener) for organizing the online National conference on “**Sustainable Research in Energy and Environment**”.

Dr M V Reddy, Research Scientist from Institute of Research Hydro-Québec, Canada delivered an expert talk on “Materials for Energy and Environmental applications”. Dr Ashok Matani, Professor, Govt. College of Engineering, Amravati, presented on “Optimizing renewable energy systems towards enhanced energy systems infrastructure efficiency” and highlighted how *artificial intelligence, big data and internet of things* can be embedded into energy systems. The response from delegates/participants was overwhelming and we received participation from nearly 200 individuals belonging to 16 states and UTs of India from both Academia & Industry. We also had some international participants from Canada and neighbouring SAARC countries. Twelve technical sessions were held and around 130 delegates from various premier institutes in India (BITS Pilani, IITs, NITs, Central/State Universities and Research Institutes) and abroad presented their research papers. All the sessions were very informative and interactive and some new areas of research on suitability in energy and environment were discussed. The conference provided a platform to the young researchers to explore new fields of research. The session chairs appreciated the quality of the research papers presented.

On 16th January 2021, the National Conference SREE-2021 was concluded by proposing a vote of thanks by Dr. Ajay Bansal, Dr Renu Gupta, Dr Poonam Gera and Dr Shashikant Yadav and obtained feedback from the delegates/participants. The conference was well appreciated by all.

I hope this conference will serve the intended purpose and focus on the issues facing the scientific community and help in identifying the new areas of research like design of new and renewable energy sources, green technology and clean energy devices with minimum impact on the environment and pristine energy resources. This conference emerged from the recognition that energy, environment and ecosystems are dynamically and inextricably connected. The energy environment system must be addressed in its totality, so that we can devise sustainable solutions that incorporate both economic growth and environmental conservation. Hence, it is pertinent to be deliberate and work collectively on sustainable development in the field of Energy and Environment.