

**A Brief Report for Online Short Term Course on  
“Advances in Chemical, Biochemical and Allied Industries (ACBAI-2020)”  
05-09 November, 2020**



The screenshot shows a Zoom meeting interface with a grid of participants. The top row includes 'You', 'Dr Ajay Bansal', 'Dr Renu Bansal', 'Dr M K Jha', 'Dr Poonam Chod...', 'Dr A K Jana', 'HOD Chemical', and 'HOD Chemical'. Below the grid is a list of participants with their names and profile pictures, including 'Presentation (STC NITJ)', 'Dr. Diwakar Z. Sh...', 'Dr Deepak Sahu', 'STC NITJ', 'Raj Vyas', 'Lalit Awasthi', 'Kanwardeep Singh', 'PACHAMUTHU P', 'Kunwar Pal', 'Dr Nikhil G N', 'Dr Anurag Kumar ...', 'STC NITJ', 'Dr. Jeelan Basha', 'Harsh Kumar', 'Madan Regar', 'RENUKA GARG', 'Dr JK Ratan', 'Prof. Dr. I. Manavalan', 'rajesh sharma', 'shilpa ohol', 'RAJESH GUPTA', and 'kiranjeet kaur'. At the bottom, a blue banner contains the following text:

**One-Week Online Short Term Course  
ADVANCES IN CHEMICAL, BIOCHEMICAL AND ALLIED INDUSTRIES  
(ACBAI-2020)  
November 05-09, 2020**



The photograph shows five people standing in an office. From left to right: a man in a yellow vest and white kurta, a woman in a red sari, a man in a dark suit, a woman in a blue and white patterned sari, and a man in a light blue shirt and white trousers. They are standing in front of a desk with framed portraits of Mahatma Gandhi and another man, along with various trophies and awards. At the bottom, a blue banner contains the following text:

**One-Week Online Short Term Course  
ADVANCES IN CHEMICAL, BIOCHEMICAL AND ALLIED INDUSTRIES  
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Online Short Term Course (TEQIP-III Sponsored) on “Advances in Chemical, Biochemical and Allied Industries (ACBAI-2020)” was organized jointly by Department of Biotechnology 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. The idea behind this course 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/Biochemical and allied industries which were discussed.

Prof. Lalit Kumar Awasthi, Director of Dr B R Ambedkar National Institute of Technology, Jalandhar was the Chief Guest and Dr. I M Mishra, Professor, IIT(ISM) Dhanbad, was the Guest of Honour in the inaugural ceremony of the course on 5<sup>th</sup> November, 2020. Prof. M K Jha, Head of the Centre for Energy and Environment, Prof. Ajay Bansal, Head of the Department of Biotechnology, Dr A K Jana, Professor, Department of Biotechnology, Dr Sangeeta Garg, Head, Department of Chemical Engineering, Dr Renu Gupta, Associate Professor, Department of Chemical Engineering, Dr Poonam Gera, Associate Professor, Department of Chemical Engineering and other faculty members joined on this occasion through google meet (<https://meet.google.com/fjz-zxcd-gpj>). The course was inaugurated by welcoming the dignitaries/participants and a brief description about the STC ACBAI-2020 was presented by Dr. Ajay Bansal, Convenor of the course. Prof. M. K. Jha, Head of the Centre for Energy and Environment gave an overview of the Centre and highlighted the importance of the short term course. Dr A K Jana gave an overview on the Department of Biotechnology. This was followed by motivational and informative talk by our Chief Guest & worthy Director Prof. Lalit Kumar Awasthi. Dr Awasthi emphasized on growing demand of Chemical/Biochemical and allied industries and that production should have less impact on the environment and should move towards long-term sustainability. Dr. I M Mishra, Guest of honor highlighted the climate change perspective on Chemical/Biochemical and allied industries.

Prof. Lalit Kumar Awasthi appreciated the organising committee of ACBAI 2020 Dr Renu Gupta and Dr Poonam Gera (Coordinators), Dr Ajay Bansal (Convener), Dr M K Jha and Dr A K Jana for organizing the online short term course on “Advances in Chemical, Biochemical and Allied Industries.

The eminent speakers from various premier institutes such as IIT Bombay, IIT Dhanbad, IIT Delhi, IIT Roorkee, MNIT, Jaipur, SLIET, Longowal, Dr S S Bhatnagar UIET, Chandigarh, TIET, Patiala have delivered expert talks during the STC. Dr I M Mishra, Professor, IIT (ISM) Dhanbad has delivered an expert talk on “Whither Chemical and Allied Industries: Climate Change Perspective”, Dr Amrit Pal Toor, Professor & Chairperson from Dr. S. S. Bhatnagar University Institute of Chemical Engineering & Technology, Panjab University, Chandigarh shared her views on “Green Chemistry Engineering and Technology”, Dr Anil Verma, Professor from IIT Delhi has deliberated on “Flow Battery: Energy Storage Platform for EV Charging”, Dr H R Ghatak, Professor, Sant Longowal Institute of Engineering and Technology, Longowal delivered expert talk on “Second Generation Biorefineries: Opportunities and Challenges”; Dr R K

Vyas, Professor, MNIT Jaipur, has discussed on “Advanced Separation Processes and Bioseparations”; Dr S K Kansal, Professor, Dr. S. S. Bhatnagar University Institute of Chemical Engineering & Technology, Panjab University, Chandigarh presented “Utilization of agro residues for pulp and paper manufacturing”; Dr Susheel Mittal, Senior Professor, Thapar Institute of Engineering & Technology, Patiala spoke on “Nano-Particle Modified Microbial Biosensors for Pesticide Detection”; Dr V K Srivastava, Adjunct Professor, MEMS, IITB Mumbai has given expert talk on “Sustainable Technologies for Desalination & Water Security”; Dr V C Srivastava, Professor, IIT Roorkee spoke on “Electrochemical treatment of waste water”.

All the sessions were very informative and interactive. The response from participants was overwhelming and we received participation from 330 individuals belonging to 22 states and UTs of India from both Academia & Industry. We also had some international participants from USA, Canada and neighbouring SAARC countries.

On 9<sup>th</sup> November 2020, the STC ACBAI-2020 was concluded by giving vote of thanks by Dr. Ajay Bansal, Dr. M K Jha, Dr. A K Jana, Dr Renu Gupta and Dr Poonam Gera and inviting feedback of the five day STC from a few participants.