



SCIENTIFIC PROGRAM SCHEDULE

29th Carbohydrate Conference: CARBO – XXIX

on

Carbohydrates: ChemBio Innovations for BioProducts

Organized by

Center of Innovative & Applied Bioprocessing (CIAB), Mohali

Jointly with

Association of Carbohydrate Chemists & Technologists (India), ACCT(I)

December 29-31, 2014

Conference Pre-Evening (Dec 28, 2014): Sunday	
Early Registration at CIAB: C-127, 2nd Floor, Phase 8, Industrial Area, Mohali-160071 (14:00 - 17:30 hrs)	
ACCT(I) Executive Committee Meeting at CIAB Conference Room (18:00-19:30 hrs)	
29th December 2014 (Monday) Venue: IISER, Mohali, Lecture Hall Complex- LH-5	
Registration at Conference Venue: IISER, Mohali (8:00-9:30 hrs)	
Inaugural Session (10:00 – 11:35 hrs) Chief Guest: <i>Dr. Paramvir Singh Ahuja, Director General CSIR</i> Guest of Honour: <i>Prof. N. Sathyamurthy, Director, IISER, Mohali</i> Keynote Speaker: <i>Prof. B.P. Chatterjee, ISCA-Sir Ashutosh Mukherjee Fellow & Emeritus Scientist, West Bengal University of Technology</i>	
Time	Event
9:30 hrs	Lighting of Lamp
9:33 hrs	Welcome Address (<i>Dr. RS Sangwan, Organizing Secretary</i>)
9:36 hrs	Brief About ACCTI (<i>Prof. KPR Kartha, President, ACCTI</i>)
9:39 hrs	Address by <i>Dr. P. L. Soni, Editor-in-Chief, TCR</i>
9:45 hrs	Address by Guest of Honour
9:50 hrs	Presidential Address by Chief Guest
10:00 hrs	Release of Souvenir & Book of Abstract
10:05 hrs	Announcement of Awards (<i>Prof. Ashok K. Prasad</i>)
10:10 hrs	Presentation of Awards
10:20 hrs	Keynote Lecture (<i>“Recent Innovations in Carbohydrate-Based Bioproducts”</i>)
10:50 hrs	Vote of Thanks
10:55 hrs	National Anthem
High Tea (11:00 -11:30 noon)	





Technical Session I (Time: 11:30 – 12:45 hrs): Award Lectures Chairs: Prof. Naveen Khare (University of Lucknow) and Dr. Sanjay Modi (Lucid Colloids Ltd.) Convener/Rapporteur: Dr. Meena Krishania and Ms. Pankaj Preet Sandhu	
Lecture/ Time	Speaker
Award Lecture- 1 11:30-11:55 hrs	Life Time Achievement Award: Dr. P. V. Salimath, CSIR- CFTRI, Mysore <i>Excitement of Working with Complex Carbohydrates for the Last Three Decades</i>
Award Lecture- 2 11:55-12:20 hrs	Excellence in Carbohydrate Research Award: Dr. Indrapal Singh Aiden, IIT Madras <i>C-aryl-glycosides and Glycosylated Phenstatins</i>
Award Lecture- 3 12:20- 12:45 hrs	CG Merchant Award: Prof. Ghanshyam S. Chauhan, HP University <i>Modification of Polysaccharides for Specialty Applications</i>
Award Lecture- 4	H. C. Srivastava Young Scientist Award: Dr. Anup Mishra, Bose Institute, Kolkata
Award Lecture- 5	TCR Best Paper Award: Prof. C. P. Rao, IIT Bombay, Mumbai
Lunch (12:45 – 13:30 hrs)	
Technical Session II (Time: 13:30 – 14:55 hrs): Innovative Chemistry of Carbohydrates: Natural & Synthetic Chairs: Dr. Sandeep Kale (ICT, Mumbai) and Prof. V. S. Bisaria (IIT, Delhi) Convener/Rapporteur: Dr. B. B. Mishra and Sh. Umesh Singh	
Plenary Lecture 13:30 – 14:05 hrs	Dr. Ashok K. Prasad, University of Delhi <i>Innovative Use of Chemo-enzymatic Processes in Nucleoside Chemistry and Drug Delivery Applications</i>
Invited Lecture 14:05 – 14:30 hrs	Dr. R. P. Tripathi, CSIR- CDRI, Lucknow <i>Application of Sugars in Development of New Chemotherapeutic Agents</i>
Invited Lecture 14:30 – 14:55 hrs	Dr. Vinod K. Tiwari, Banaras Hindu University <i>Synthesis of Diverse Glycoconjugates of Chemotherapeutic Potential</i>
Tea Break (14:55- 15:05 hrs)	
Technical Session III (Time 15:05 – 17:30 hrs): Excitements and Future Life with Carbohydrates Chairs: Dr. Balaram Mukhopadhyay (IISER, Kolkata) and Dr. P. L. Soni (FRI, Dehradun) Convener/Rapporteur: Dr. B. B. Mishra and Sh. Umesh Singh	
Special Session	
Plenary Lecture 15:05 – 15:40 hrs	Dr. Virendra S. Bisaria, IIT, Delhi <i>Whither Cellulases in Second Generation Ethanol from Lignocellulosic Residues</i>
Invited Lecture 15:40 – 16:05 hrs	Dr. Shashank T. Mhaske, ICT, Mumbai <i>Effect of Cellulose Nano-whiskers on Performance Properties of Carbohydrate Based Film as Packaging Material</i>
Invited Lecture 16:05 – 16:30 hrs	Dr. Sandeep Kale, ICT, Mumbai <i>Advancement in Processing of Production of Sugars and Polysaccharides</i>





Oral Presentation- 1 16:30 – 16:45 hrs	Dr. Kalpana Chauhan, Shoolini University, Solan <i>Functionalized Biopolymer: Fascinating Sustainable Material of Future Prospective</i>
Oral Presentation- 2 16:45 – 17:00 hrs	Dr. Santanu Mandal, University of Manchester, UK <i>Fabrication and Study of Oligosaccharides using High-Throughput Gold Plate Array in Search for Novel Glycobiomarkers</i>
Oral Presentation- 3 17:00 – 17:15 hrs	Dr. Baljeet Singh Yadav, M. D University, Rohtak <i>In Vitro Digestibility of Native and Chemically Modified Pearl Millet Starches</i>
Oral Presentation- 4 17:15 – 17:30 hrs	Dr. Ritika B. Yadav, M. D University, Rohtak <i>Partial Characterization of Native and Modified Mothbean (<i>Vigna aconitifolia</i>) Starches</i>
General Body Meeting at IISER, Mohali (17:30 – 18:10 hrs)	
Cultural Program at IISER, Mohali (18:10 – 19:00 hrs)	
Departure for Dinner at Hotel Hometel, Chandigarh by Bus Facility Provided by Organizers (19:00 onwards)	
Dinner (19:30 hrs onwards)	
Return From Hotel by Bus Facility Provided by Organizers (21:30 hrs onwards)	

30th December 2014 (Tuesday)	
Venue: IISER, Mohali, Lecture Hall Complex- LH-5	
Technical Session IV (Time: 9:30 – 11:25 hrs): Synthesis, Pharmacology and Applications of Carbohydrate Conjugates	
Chairs: Dr. Chitra Mandal (CSIR-IICB) and Prof. Yasuhiro Ozeki (YCU, Yokohama, Japan)	
Convener/Rapporteur: Dr. Nitin Singhal and Dr. Kaushik Mazumder	
Lecture/ Time	Speaker
Plenary Lecture 9:30 – 10:05 hrs	Dr. Chitra Mandal, CSIR-IICB, Kolkata <i>Sialylation of Outer Membrane Porin Protein-D Impedes β-Lactam Antibiotic Resistance in <i>Pseudomonas aeruginosa</i></i>
Invited Lecture 10:05 – 10:30 hrs	Prof. Asish Kumar Sen, CSIR-IICB, Kolkata <i>Application of Nano-Domain Cuprous Oxide for the Synthesis of Oligosaccharides and Sugar Containing Heterocycles</i>
Invited Lecture 10:30 – 10:55 hrs	Dr. Balaram Mukhopadhyay, IISER, Kolkata <i>H₂SO₄-Silica: A Versatile Reagent for Carbohydrate Transformations and Synthesis of Oligosaccharides</i>
Oral Presentation- 1 10:55 – 11:10 hrs	Dr. Rahul Sharma, Shoolini University, Solan <i>Microwave Assisted Greener Synthesis of Chitosan Stabilized Silver Nanocomposites for Biological Applications</i>
Oral Presentation- 2 11:10 – 11:25 hrs	Dr. Ajay K. Sah, BITS, Pilani <i>Design Synthesis and Reactivities of Amino Acid derived Glycoconjugates</i>





Tea Break (11:25 – 11:40 hrs)	
Technical Session V (Time: 11:40- 13:05 hrs): Structural & Functional Diversity of Carbohydrates Chairs: Dr. Vasudev Singh (CSIR- CFTRI) and Prof. Sunil K. Sharma (University of Delhi) Convener/Rapporteur: Dr. Nitin Singhal and Dr. Kaushik Mazumder	
Plenary Lecture 11:40 – 12:15 hrs	Prof. Yasuhiro Ozeki, YCU, Yokohama, Japan <i>Lectin-Glycomics and Their Application in Biomedical Research</i>
Invited Lecture 12:15 – 12:40 hrs	Prof. Naveen Khare, University of Lucknow <i>Phytochemical Investigation of Indian Medicinal Plant for Rare Deoxyoligosaccharides/Glycosides with Their Proposed Biosynthesis</i>
Invited Lecture 12:40 - 13:05 hrs	Prof. Desh Deepak, University of Lucknow <i>2D NMR Studies of Milk Oligosaccharides</i>
Lunch (13:05 – 13:35 hrs)	
Interactions on Poster Presentations (13:35 –16:00 hrs)	
Tea Break (16:00 – 16:30 hrs)	
Technical Session VI (Time: 16:30- 19:05 hrs): Carbohydrate-based Foods, Nutraceuticals & Other Materials Chairs: Dr. B.P. Chatterjee (W.B University) and) Dr. R. S. Sangwan (CIAB, Mohali) Convener/Rapporteur: Dr. Sasikumar Elumalai and Dr. Vinod Kumar	
Lecture/ Time	Speaker
Plenary Lecture 16:30 – 17:05 hrs	Prof. Narpinder Singh, Guru Nanak Dev University, Amritsar <i>Cereals And Pulses Starch: Functionality And Applications In Food Industry</i>
Invited Lecture 17:05 – 17:30 hrs	Dr. B. S. Khatkar, GJUS&T, Hisar <i>Nutraceutical Properties, Processing and Food Applications of Aloe Vera Gel</i>
Invited Lecture 17:30 - 17:55 hrs	Prof. T. Satyanarayana, University of Delhi <i>Applicability of Native and Recombinant Endoxylanase and β-Xylosidase of the Extremely Thermophilic Bacterium Geobacillus Thermodenitrificans in Generating Prebiotic Xylooligosaccharides and Alkylxylosides</i>
Invited Lecture 17:55 - 18:20 hrs	Dr. A. N. Jyothi, Central Tuber Crops Research Institute, Thiruvananthapuram <i>Synthesis and Properties of Cassava Starch based Hydrogels and Composites with Multifaceted Applications</i>
Oral Presentation- 1 18:20 - 18:35 hrs	Dr. Charanjiv Singh Saini, Sant Longowal Institute of Engg. and Tech., Sangrur <i>Edible Coatings from Pectin and Alginates in OSMEMB process</i>
Oral Presentation- 2 18:35 – 18:50 hrs	Dr. Amritpal Kaur, Guru Nanak Dev University, Amritsar <i>Physico-chemical, Pasting, Granule Size Distribution and Morphological Characteristics of Starches from Potato, Kidney Bean and Banana</i>





Oral Presentation- 3 18:50 – 19:05 hrs	Dr. R. Parimalavalli, Periyar University, Salem <i>Characteristics of Ready-To-Eat Extruded Complementary Foods</i>
Open house discussion on Carbohydrate Moderator: Dr. Asish Kumar Sen (IICB, Kolkata) (19:05- 20:05 hrs)	
Departure for Dinner at Hotel Hometel, Chandigarh by Bus Facility Provided by Organizers (20:05 hrs)	
Dinner (20:15– 21:30 hrs)	
Return From Hotel by Bus Facility Provided by Organizers (21:30 hrs)	

31st December 2014 (Wednesday)		Venue: CIAB, Mohali, Conference Hall (2nd Floor), Interim Facility (C-127, Phase-8, Industrial Area, Mohali)
Technical Session VII (Time: 09:00- 10:40 hrs): Poster Award Presentations Chairs: Prof. T. Satyanarayana (Delhi University) and Dr. Vineet Kumar (FRI, Dehradun) Convener/Rapporteur: Dr. Jitendra Kumar Singh		
Lecture/ Time	Speaker	
Oral Presentation- 1 09:00 – 09:10 hrs	Selected poster for consideration for Award	
Oral Presentation- 2 09:10– 09:20 hrs	Selected poster for consideration for Award	
Oral Presentation- 3 09:20 – 09:30 hrs	Selected poster for consideration for Award	
Oral Presentation- 4 09:30 – 09:40 hrs	Selected poster for consideration for Award	
Oral Presentation- 5 09:40 – 09:50 hrs	Selected poster for consideration for Award	
Oral Presentation- 6 09:50 – 10:00 hrs	Selected poster for consideration for Award	
Oral Presentation- 7 10:00 – 10:10 hrs	Selected poster for consideration for Award	
Oral Presentation- 8 10:10– 10:20 hrs	Selected poster for consideration for Award	
Oral Presentation- 9 10:20 – 10:30 hrs	Selected poster for consideration for Award	
Oral Presentation- 10 10:30 – 10:40 hrs	Selected poster for consideration for Award	
Tea Break (10:40 – 10:55 hrs)		





Technical Session VIII (Time: 10:55- 13:15 hrs): Consolidated Processing of Carbohydrate Rich Bioresources Chairs: Prof. Narpinder Singh (GNDU, Amritsar) and Dr. B. S. Khatkar (GJUS&T, Hisar) Convener/Rapporteur: Dr. Vinod Kumar and Dr. Sasikumar Elumalai	
Plenary Lecture 10:55 – 11:30 hrs	Dr. Vineet Kumar, FRI, Dehradun <i>Chemical Innovations of Bio-polysaccharides: Structural Investigation and functionalization</i>
Invited Lecture 11:30 – 11:55 hrs	Dr. Praveen K. Gupta, FRI, Dehradun <i>Cellulose Crystal Structure and Polymorphic Transformation</i>
Invited Lecture 11:55 – 12:20 hrs	Dr. Sunil K. Sharma, University of Delhi <i>Cleaner & Greener Chemo-enzymatic Synthesis of Glycerol Based Value Added Products for Biomedical Applications</i>
Invited Lecture 12:20 - 12:45 hrs	Dr. R. K. Saxena, University of Delhi South Campus <i>Biosynthesis of Bacterial cellulose: Research progress, Development and Newer Industrial Applications</i>
Oral Presentation- 1 12:45 - 13:00 hrs	Dr. R. K. Jain, Central Pulp & Paper Research Institute, Saharanpur <i>Rice Straw a Waste Biomass as a Source of Biofuel and Value Added Chemicals</i>
Oral Presentation- 2 13:00 – 13:15 hrs	Dr. Vikas Rana, FRI, Dehradun <i>Pulping and Strength Properties Evaluation of the Mixture Of Areca and Bagasse Fibres</i>
Lunch (13:15 - 13:45 hrs)	
Technical Session IX (Time: 13:45- 14:45 hrs): Biotechnology and Omics of Carbohydrate Chairs: Dr. Rakesh Tuli (Panjab University) and Dr. P.V.Salimath (CFTRI, Mysore) Convener/Rapporteur: Dr. Joy K Roy and Dr. Jitendra Kumar Singh	
Plenary Lecture 13:45 – 14:20 hrs	Prof. Purnananda Guptasarma, IISER, Mohali <i>Fun with Some Carbohydrate-Processing Enzymes</i>
Invited Lecture 14:20 - 14:45 hrs	Prof. Prince Sharma, Panjab University <i>GREEN TECH: Use of Microbial Enzymes in Paper Industry</i>
Technical Session X (Time: 14:45 – 16:10 hrs): Carbohydrate Linked Industries: Status and Scopes Co-ordinator: Mr. Bharat Joshi, PFP Technologies, USA Convener/Rapporteur: Ms. Pankaj Preet Sandhu and Dr. Meena Krishania	
Lecture/ Time	Coordinator
Opening Remarks 14:45– 15:10 hrs	Dr. Rakesh Tuli, Panjab University, Chandigarh Dr. S. S. Marwaha, Punjab Biotechnology Institute, Mohali Dr. Rajesh Kapur, Advisor DBT
15:10 – 16:10 hrs	Panel Discussion & Open Interaction
	Dr. Neelima Jerath, Punjab State Council for Science & Technology
	Dr. Jatinder Arora, Punjab State Council for Science & Technology
	Dr. P.L. Soni, Forest Research Institute, Dehradun





	Mr. Bharat Joshi, PFP Technologies, USA
	Mr. Jyoti Saroop, Unnati Co-Operative Marketing-Cum-Processing Society Ltd., Punjab
	Mr. Kamalnetar Sharma, Unnati Co-Operative Marketing-Cum-Processing Society Ltd., Punjab
	Dr. Sanjay Modi, Lucid Colloids
	Mr. B. R. Sharma, Sunita Hydrocolloids Ltd., Jodhpur
Valedictory Session (Coordinator: Prof. KPR Kartha, NIPER, Mohali) (16:10 – 16:25 hrs)	
High Tea (16:25 – 16:45 hrs)	

Technical Management of Presentations	Sh. Sukhjinder, Sh. Srikant Mantri
Administrative Management	Sh. S. Krishnan, Sh. Hardeep Singh, Sh. Aman Sethi
Finance Management	Sh. Suneet Verma, Sh. Vishal Kumar, Ms. Hema Rawat
Logistics Management	Sh. Balwan Singh, Sh. Sushant Vatsa, Sh. Jaspreet Singh, Sh. Arun Kumar, Sh. Sabir Ali, Ms. Anu Kiran



