

## SCIENTIFIC PROGRAMME

**International Carbohydrate Conference (CARBO-XXXIV) on  
“EMERGING FRONTIERS IN CARBOHYDRATE CHEMISTRY AND GLYCOBIOLOGY”  
December 5-7, 2019  
Venue: Malviya Hall, University of Lucknow, Lucknow, India**

**PL:** Plenary lecture (35 Min); **IL:** Invited Lecture (25 Min); **OP:** Oral Presentation (15 Min); **SPP:** Selected Poster Presentation (10 Min)

### December 5, 2019

<b>08.00 AM-09.30 AM</b>		<b>Registration</b>
<b>09.30 AM-11.00 AM</b>		<b>Inauguration and Award Ceremony</b>
<b>11.00 AM-11.20 AM</b>		<b>High Tea</b>
<b>TECHNICAL SESSION-1 (11.20 AM-01.10 PM), Chairpersons</b>		
<b>Prof. David W. Gammon</b> Department of Chemistry and Assistant Dean of the Faculty of Science, University of Cape Town, Cape Town, South Africa		<b>Dr. P.L. Soni</b> Editor-in-Chief, e-TCR Ex- Head and Chief-technical advisor Forest Research Institute, Dehradun, India
<b>Session Convener: Prof. R.M. Naik, Department of Chemistry, University of Lucknow</b>		
<b>11.20 AM -11.55 AM</b> <b>PL-1</b>	<b>Prof. Richard R. Schmidt,</b> Fachbereich Chemie, Universitat Konstanz, Germany	Glycosylation- Efficiency in Glycosyl Acceptor Masking and in Glycosyl Donor Anomeric Stereoselection
<b>11.55 AM-12.20 PM</b> <b>IL-1</b>	<b>Prof. Valentin Wittmann,</b> Fachbereich Chemie, Universitat Konstanz, Germany	Application of Chemoselective Ligation Reactions in Carbohydrate Chemistry
<b>12.20 PM-12.45 PM</b> <b>IL-2</b>	<b>Prof. Tanmay Pathak,</b> Department of Chemistry Indian Institute of Technology Kharagpur, India	Vinyl Sulfones as $2\pi$ Partners in 1,3 Dipolar Cycloadditions Metal Free Routes to Disubstituted 1,2,3- Triazolylated Carbohydrates
<b>12.45 PM-01.10 PM</b> <b>IL-3</b>	<b>Prof. Paul V. Murphy,</b> School of Chemistry, NUI Galway, Ireland	Synthesis and Study of Ligands for Carbohydrate Binding Proteins
<b>01.10 PM-02.10 PM</b>	<b>Lunch and Poster Session</b>	
<b>TECHNICAL SESSION-2 (2.10 PM-04.15 PM), Chairpersons</b>		
<b>Dr. S.J.S. Flora</b> Director National Institute of Pharmaceutical Education and Research (NIPER) Raebareli, India		<b>Dr. K.P.R. Kartha</b> Professor (Retd.) Department of Medicinal Chemistry, National Institute of Pharmaceutical Education and Research (NIPER), Mohali, Punjab, India
<b>Session Convener: Prof. V.S. Yadav, Department of Chemistry, University of Lucknow</b>		
<b>02.10 PM-02.45 PM</b> <b>PL-2</b>	<b>Prof. Tushar K. Chakraborty,</b> Indian Institute of Science, Bengaluru, India	ncRNAs as Therapeutic Targets: A Paradigm Shift in Drug Discovery
<b>02.45 PM-03.10 PM</b> <b>IL-4</b>	<b>Prof. Roland J. Pieters,</b> Utrecht Institute for Pharmaceutical Sciences, Utrecht University, The Netherlands	Multivalent Inhibitors of Protein Carbohydrate Interactions

<b>03.10 PM-03.35 PM</b> <b>IL-5</b> (Excellence in Carbohydrate Research Award Lecture)	<b>Dr. Vinod K. Tiwari,</b> Department of Chemistry, Banaras Hindu University, Varanasi, India	Click Inspired Synthesis of Glycohybrid Molecules of Chemotherapeutic Potential
<b>03.35 PM -04.00 PM</b> <b>IL-6</b>	<b>Prof. Indrapal Singh Aidhen,</b> Department of Chemistry, Indian Institute of Technology Madras, Chennai, India	Synthesis of C-Glycosides of Biologically Important Lead Molecules
<b>04.00 PM-04.15 PM</b> <b>OP-1</b>	<b>Dr. Debabrat Baishya,</b> Department of Bioengineering and Technology, Gauhati University, Guwahat, India	Thermostable Cellulose Degrading Bacteria from Dirang Hotspring and its Utility in Bioethanol Production from Agrowaste
<b>04.15 PM-05.40 PM</b>	<b>Tea and Poster Presentation</b>	
<b>05.40 PM-06.10 PM</b>	<b>Industry-Academia Panel Discussion</b> <b>Panel List: 1. Dr. P.L. Soni</b> <b>2. Prof. K.P.R. Kartha</b> <b>3. Dr. Rene Roy</b> <b>4. Prof. Serge Mignani</b> <b>5. Dr. Raju Adhikari</b> <b>6. Dr. Brij Raj Sharma</b> <b>7. Dr. Nishodh Saxena</b>	
<b>06.10 PM -06.40 PM</b>	<b>Annual General Body Meeting</b>	
<b>06.40 PM-07.40 PM</b>	<b>Cultural Programme</b>	
<b>07.40 PM-09.30 PM</b>	<b>Dinner</b>	

## **December 6, 2019**

<b>TECHNICAL SESSION-3 (09.00 AM-10.55 AM), Chairpersons</b>		
<b>Prof. Richard R. Schmidt</b> Fachbereich Chemie, Universitat Konstanz, Germany	<b>Dr. G. Muralikrishna</b> Retd. Head & Chief Scientist, Department of Biochemistry CSIR-CFTRI, Mysore, India	
<b>Session Convener: Prof. V.K. Sharma, Department of Chemistry, University of Lucknow</b>		
<b>09.00 AM-09.35 AM</b> <b>PL-3</b>	<b>Prof. David W. Gammon,</b> University of Cape Town, South Africa	Challenges in the Synthesis of Unusual Sugars and Glycoconjugates
<b>09.35 AM-10.00 AM</b> <b>IL-7</b> (CG Merchant Memorial Award Lecture)	<b>Dr. Brij Raj Sharma,</b> Quality Assurance/Research & Development, Sunita Hydrocolloids Pvt.Ltd. Rajasthan, India	Guar Gum: A versatile Industrial Hydrocolloid
<b>10.00 AM-10.25 AM</b> <b>IL-8</b>	<b>Dr. Raju Adhikari,</b> RMIT University, Victoria, Australia	Biodegradable Polymers for Agriculture and Packaging Applications
<b>10.25 AM-10.40 AM</b> <b>OP-2</b>	<b>Dr. Ritu Mahajan,</b> Institute of Nanoscience and Technology, Mohali, Punjab, India	Comparative Study of Pesticide Delivery using Polysaccharide Nanocomposites/ Polysaccharide Composites /Lignin-Clay/ Modified Clay-Polyethyleneimine

<b>10.40 AM-10.55 AM OP-3</b>	<b>Dr. Koushik Mazumder,</b> Food and Nutritional Biotechnology Department National Agri-Food Biotechnology Institute (NABI), Mohali, India	Development of Carbohydrate Based Edible Coatings to Extend the Post- Harvest Shelf Life of Perishable Fruit Crops
<b>10.55 AM-11.10 AM</b>	<b>TEA BREAK</b>	
<b>TECHNICAL SESSION-4 (11.10 AM-01.25 PM), Chairpersons</b>		
<b>Dr. Pradeep Jauhari</b> Formerly Director Ministry of Chemical and Fertilizer, Government of India, Shastri Bhavan, New Delhi, India		<b>Prof. Ashok K. Prasad</b> Department of Chemistry University of Delhi Delhi, India
<b>Session Convener: Dr. Abha Bishnoi, Department of Chemistry, University of Lucknow</b>		
<b>11.10 AM -11.45 AM PL-4</b>	<b>Prof. Vito Ferro,</b> University of Queensland, Brisbane, Australia	Synthesis of Disaccharide Standards for Quantitation of Heparin Sulfate in Biological Samples
<b>11.45 AM-12.10 PM IL-9</b>	<b>Prof. Hiromune Ando,</b> Faculty of Applied Biological Sciences, Gifu University, Japan	A Simple and Powerful Solution of Stereoselective Silylation
<b>12.10 PM-12.35 PM IL-10</b>	<b>Prof. Mathieu Sollogoub,</b> Sorbonne Université, Institut Parisien de chimie Molculaire Paris, France	Cyclodextrins Imitating Proteins
<b>12.35 PM-01.00 PM IL-11</b>	<b>Prof. Srinivas Hotha,</b> Indian Institute of Science Education and Research, Pune, India	Burgeoning Influence of Gold-catalysed Glycosidations on Glycosaminoglycans and Tuberculosis
<b>01.00 PM-01.25 PM IL-12</b> (Prof. M. P. Khare Memorial Award Lecture)	<b>Dr. Amritpal Kaur,</b> Guru Nanak Dev University, Amritsar, Punjab, India	Diversity in Starch and Flour Functionality Amongst Indian Wheat Varieties
<b>01.25 PM-02.30 PM</b>	<b>Lunch and Poster Session</b>	
<b>TECHNICAL SESSION-5 (02.30 PM-04.00 PM), Chairpersons</b>		
<b>Dr. R.P. Tripathi</b> Dean and Course Coordinator National Institute of Pharmaceutical Education and Research, Raebarelli, India		<b>Prof. Balaram Mukhopadhyay</b> Department of Chemical sciences, IISER Kolkata, West Bengal, India
<b>Session Convener: Prof. R.N. Singh, Department of Chemistry, University of Lucknow</b>		
<b>02.30 PM-02.55 PM IL-13</b>	<b>Prof. Bruno J. Linclau,</b> University of Southampton, Highfield, Southampton, United Kingdom	Insights in Carbohydrate Lipophilicity
<b>02.55 PM-03.20 PM IL-14</b>	<b>Prof. M.S. Shashidhar,</b> National Chemical Laboratory, Pune, India	<i>myo</i> -Inositol to Natural Products: Enantiomeric Scaffolding Appears to be the Key
<b>03.20 PM-03.45 PM IL-15</b>	<b>Dr. Pradeep K. Srivastava,</b> Ex. Senior Principal Scientist, CSIR-CDRI, Lucknow, India	Glycobiology: Promising Future Ahead

<b>03.45 PM-04.00 PM OP-4</b>	<b>Dr. Vishwa Deepak Tripathi,</b> Department of Chemistry, M. K. College, Lalit Narayan Mithila University, Bihar, India	Glycorandomisation: A Powerful Tool in Drug Discovery
<b>04.15-05.20 PM</b>	<b>Tea and Poster Session</b>	
<b>TECHNICAL SESSION-6 (05.20 PM-06.45 PM), Chairpersons</b>		
<b>Dr. Vasudev Singh</b> Emeritus Medical Scientist (ICMR, Department of Studies in Food Science and Nutrition, University of Mysore, Mysore, India		<b>Dr. Manjoosha Srivastava</b> Senior Scientist, CSIR-National Botanical Research Institute, Lucknow, India
<b>Session Conveners: Dr. Amrita Srivastava &amp; Dr. Ashok K. Singh,</b> Department of Chemistry, University of Lucknow		
<b>05.20 PM-05.45 PM IL-16</b>	<b>Dr. Kikkeri Raghavendra,</b> Indian Institutes of Science Education and Research, Pune, India	Thinking Outside the Cells: How Heperan Sulfate Micro Heterogeneity Control Cell Functions
<b>05.45 PM-06.10 PM IL-17</b>	<b>Dr. Jeyakumar Kandasamy,</b> Department of Chemistry, IIT BHU, Varanasi, India	Stereospecific Synthesis of C-Aryl Glycosides <i>via</i> Heck Type Cross- Coupling Reactions
<b>06.10 PM-06.35 PM IL-18</b>	<b>Dr. Ram Sagar Misra,</b> Department of Chemistry, Banaras Hindu University, Varanasi, India	Regioselective Synthesis of Chirally Enriched Tetrahydrocarbazolones and Tetrahydrocarbazoles
<b>06.35 PM-06.45 PM OP-5</b>	<b>Dr. Bhuwan B. Mishra,</b> Center of Innovative and Applied Bioprocessing (CIAB), Mohali, Punjab, India	Chemical Processing of Spent Aromatic Biomass to Xylose, Levulinic Acid and Lignin
<b>07.15 PM-10.00 PM</b>	<b>Conference Dinner at Hotel Clarks Avadh, Lucknow</b>	

## December 7, 2019

<b>TECHNICAL SESSION-7 (09.00 AM-10.40 PM), Chairpersons</b>		
<b>Dr. Bijoy Kundu</b> Former Chief Scientist, CSIR-Central Drug research Institute, Lucknow, India		<b>Dr. Vineet Kumar</b> Head and Scientist G, Forest Research Institute, Dehradun India
<b>Session Conveners: Dr. Sangeeta Srivastav &amp; Dr. N.K. Singh,</b> Department of Chemistry, University of Lucknow		
<b>09.00 AM-09.35 AM PL-5</b>	<b>Dr. Rene Roy,</b> Department of Chemistry, Université du Québec à Montréal, Canada	Newer Synthetic Strategies and Applications of Glycodendrimers
<b>09.35 AM-10.00 AM IL-19</b>	<b>Prof. A.J. Varma,</b> CSIR-National Chemical Laboratory, Pune, India	Cellulose Chemistry: Applications in Nanoscience & Energy
<b>10.00 AM-10.25 AM IL-20</b>	<b>Prof. Serge Mignani,</b> Glycovax pharma, Developpement scientifique, 424, Montréal (Québec) H3J1S6, Canada	Dendrimer-Enabling Therapeutic Oligonucleotide Delivery Systems as Innovative Nanomedicine
<b>10.25 AM-10.40 AM OP-6</b>	<b>Dr. Anupam K. Srivastava,</b> Mylan Laboratories ltd., Department of Bio-analytical & Complex Analytics, Hyderabad	Challenges and Techniques involved in the Characterization of Carbohydrate based Bio similar (Low Molecular weight Heparin like Enoxaparin, Daltaparin etc)
<b>10.40 AM-11.10 AM</b>	<b>TEA BREAK</b>	

<b>TECHNICAL SESSION-8 (11.10 AM-12.50 PM)</b>		
<b>SELECTED POSTERS FOR ORAL PRESENTATION (SPP)</b>		
PANELIST: Prof. Richard R. Schmidt, Prof. David W. Gammon, Prof. Rene Roy, Prof. A.J. Varma, Prof. K.P.R. Kartha, Dr. Manjoosha Srivastava		
<b>11.10 AM-11.20 AM</b>	<b>SPP-1</b>	
<b>11.20 AM-11.30 PM</b>	<b>SPP-2</b>	
<b>11.30 AM-11.40 PM</b>	<b>SPP-3</b>	
<b>11.40 PM-11.50 PM</b>	<b>SPP-4</b>	
<b>11.50 PM-12.00 PM</b>	<b>SPP-5</b>	
<b>12.00 PM-12.10 PM</b>	<b>SPP-6</b>	
<b>12.10 PM-12.20 PM</b>	<b>SPP-7</b>	
<b>12.20 PM-12.30 PM</b>	<b>SPP-8</b>	
<b>12.30 PM-12.40 PM</b>	<b>SPP-9</b>	
<b>12.40 PM-12.50 PM</b>	<b>SPP-10</b>	
<b>12.50 PM-02.00 PM</b>	<b>LUNCH</b>	
<b>TECHNICAL SESSION-9 (02.00 PM-03.45 PM), Chairpersons</b>		
<b>Dr. V. P. Sharma,</b> Senior Principal Scientist Head, Quality Assurance CSIR-Indian Institute of Toxicology Research, Lucknow, India		<b>Prof. Arun Sethi</b> Chemistry Department, University of Lucknow Lucknow
<b>Session Conveners: Dr. Indu Saxena &amp; Dr. Abhinav Kumar,</b> Department of Chemistry, University of Lucknow		
<b>02.00 PM-02.25 PM</b> <b>IL-21</b>	<b>Dr. Laurence Mulard,</b> Institut Pasteur, Unité de Chimie des Biomolécules, Paris, France	Synthetic Oligosaccharide-Based Conjugates as Promising <i>Shigella</i> Vaccine Candidates
<b>02.25 PM-02.50 PM</b> <b>IL-22</b>	<b>Dr. Rajasekhara Reddy,</b> Department of Chemistry, VIT University, Vellore, India	Synthesis of Sugar Based Ionic Liquids for Sustainable Societal Applications
<b>02.50 PM-03.15 PM</b> <b>IL-23</b>	<b>Dr. Christain M. Pedersen,</b> University of Copenhagen, Copenhagen, Denmark	New Findings in Catalytic Glycosylations
<b>03.15 PM-03.30 PM</b> <b>OP-7</b>	<b>Dr. (Ms) Mahtab Z. Siddiqui,</b> Processing & Product Development Division, ICAR-IINRG, Ranchi, India.	Development and Antimicrobial Evaluation of <i>Acacia Nilotica</i> Gum Induced Silver Nanoparticles
<b>03.30 PM-03.45 PM</b> <b>OP-8</b>	<b>Dr. Ravindra Pal Singh</b> (Ramalingaswami Re-entry fellow) National Agri-Food Biotechnology Institute (NABI), Mohali, India	Structurally Diverse Pectin Oligosaccharides with Prebiotic Attributes
<b>03.45 PM-04.00 PM</b> <b>OP-9</b>	<b>Dr. Nihar Ranjan,</b> National Institute of Pharmaceutical Education and Research, Raebareli, India	A Fluorescent Aminosugar for High- throughput Screening of Nucleic Acid Binders
<b>04.00 PM-04.15 PM</b>	<b>Tea</b>	
<b>04.15 PM-05.15 PM</b>	<b>Poster Award Ceremony and Valedictory Session</b>	