**INTERNATIONAL CONFERENCE ON ‘ADVANCES IN CHEMISTRY AND BIOLOGY OF CARBOHYDRATES’ (CARBO XXXV)**

*Organized by*
Chemistry & Bioprospecting Division, Forest Research Institute, Dehradun

*in association with*
Association of Carbohydrate Chemists and Technologists (India)

*in commemoration of 75th year of India’s Independence*
*(Azadi ka Amrit Mahotsav)*

**Date:** December 04-05, 2021

**Venue:** ICFRE Board Room, Dehradun (in virtual mode)

### DAY 1 (December 04, 2021)

#### Inaugural Session

<table>
<thead>
<tr>
<th>Time Duration</th>
<th>Presentation Title &amp; Speaker</th>
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<tbody>
<tr>
<td>9:20–9:30 hrs</td>
<td>Assemblage at the web</td>
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<tr>
<td>9:30–9:35 hrs</td>
<td>Welcome address and Introductory note by Dr. Vineet Kumar, Scientist-G &amp; Organizing Secretary, Chemistry and Bioprospecting Division, FRI, Dehradun</td>
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<tr>
<td>9:35–9:40 hrs</td>
<td>ACCTI and its activities by Prof. G.S. Chauhan, Vice President, ACCTI and Emeritus Professor, Himachal Pradesh University, Shimla</td>
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<td>9:40–9:45 hrs</td>
<td>Journey of ‘Trends in Carbohydrate Research’ by Dr. P.L. Soni, Chief Editor, e-TCR and Chief Advisor, ACCTI</td>
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<td>9.45–9.55 hrs</td>
<td>Inaugural Address by the Chief Guest Sh. A.S. Rawat, IFS, Director General, Indian Council of Forestry Research &amp; Education, Dehradun.</td>
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<td>9.55–10.00 hrs</td>
<td>Vote of Thanks by Dr. Y.C. Tripathi, Head, Chemistry and Bioprospecting Division, FRI, Dehradun</td>
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#### Technical Session-I

**Chairpersons:** Prof. K.P.R. Kartha and Dr. V.K. Varshney

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<tr>
<th>Time Duration</th>
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| 10:00–10:20 hrs | **Opening Lecture**
   – Dr. Vineet Kumar, Chemistry and Bioprospecting Division, FRI |
| 10:20–10:55 hrs | **IL-2**
   Chemoenzymatic synthesis and applications of carbohydrates and glycoconjugates – Prof. Xi Chen Department of Chemistry, University of California-Davis, One Shields Avenue, Davis, CA95616, USA |
| 10:55–11:30 hrs | **IL-3**
   Carbohydrates: The Sweet World – Prof. Balaram Mukhopadhyay, Sweet Lab, Department of Chemical Sciences, Indian Institute of Science Education and Research, Kolkata, India |
| 11:30–12:05 hrs | **IL-4**
   Glycoproteomic profiling of plasma, synovial fluid cell of Rheumatoid Arthritis and their glyco based mechanistic study: A Potential Prognostic Marker identification – Dr. Sagarika Biswas, Institute Of Genomics And Integrative Biology (CSIR–IGIB), New Delhi, India |
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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker</th>
<th>Venue</th>
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<tr>
<td>12:05–12:40 hrs</td>
<td><strong>IL-5</strong></td>
<td><strong>Carbohydrate based molecules of therapeutic potential</strong> – Prof. Anup Kumar Misra, Bose Institute, Division of Molecular Medicine, Kolkata, India</td>
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<td>12:40–13:00 hrs</td>
<td><strong>SL-1</strong></td>
<td><strong>Polysaccharides role in bridging gut and brain functions</strong> – Dr. Harish Parshanth, Functional Biopolymer Lab, Department of Biochemistry, CSIR-Central Food Technological Research Institute, Mysore 570020, India</td>
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<td><strong>Technical Session-II</strong></td>
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<td>14:00–14:35 hrs</td>
<td><strong>IL-6</strong></td>
<td><strong>Structure and Function of Synthetic Polysaccharides and Glycopeptides</strong> – Prof. Dr. Peter H. Seeberger, Max-Planck Institute for Colloids and Interfaces Am Mühlenberg, Potsdam (Germany) and Department of Chemistry, Freie Universität Berlin (Germany); Editor in Chief, Beilstein Journal of Organic Chemistry</td>
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<td>14.35–15.10 hrs</td>
<td><strong>IL-7</strong></td>
<td><strong>Novel glycan-based fluorescent nanoprobes for biological applications from mammalian cells to plants</strong> – Prof. M. Carmen Galan, School of Chemistry, University of Bristol and Editor-in Chief, Carbohydrate Research</td>
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<td>15.10–15.30 hrs</td>
<td><strong>SL-2</strong></td>
<td><strong>Efficient utilization of Bacillus licheniformis from hot-spring for cellulase production and generation of bioethanol from algal waste</strong> – Dr. Debabrata Baishya, Department of Bioengineering and Technology, GUIST, Guwahati, India</td>
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<td>15.30–15.50 hrs</td>
<td><strong>SL-3</strong></td>
<td><strong>Can nature-inspired sugar-based ionic molecules provide a sustainable future?</strong> – Dr. S. Rajasekhara Reddy School of Advanced Sciences, Department of Chemistry, VIT University, Vellore-632014, India</td>
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<td>15.50–16.25 hrs</td>
<td><strong>IL-8</strong></td>
<td><strong>The use of multivalent carbohydrates against pathogenic targets</strong> – Prof. Roland J. Pieters, Department of Chemical Biology &amp; Drug Discovery, Utrecht Institute for Pharmaceutical Sciences, Utrecht University, Utrecht, The Netherlands</td>
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<td>16.25–17.00 hrs</td>
<td><strong>IL-9</strong></td>
<td><strong>Food industry byproducts, a source of polysaccharides for sustainable and added value applications</strong> – Prof. Manuel A. Coimbra, LAQV-REQUIMTE, Department of Chemistry, University of Aveiro, Portugal and Editor-in Chief, Carbohydrate Polymers</td>
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<td>17.00–17.20 hrs</td>
<td><strong>SL-4</strong></td>
<td><strong>Properties Evaluation of Indian Flax Fibre for Application in Textile</strong> – Dr. Kartick K. Samanta by ICAR-National Institute of Natural Fibre Engineering and Technology, Kolkata- 700040, West Bengal, India</td>
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<td>17.20–17.55 hrs</td>
<td><strong>IL-10</strong></td>
<td><strong>Putting cellulose from bacteria and plants to work</strong> – Prof. Richard A. Gross, Rensselaer Polytechnic Institute (RPI), Constellation Chair: Biocatalysis and Metabolic Engineering, Center for Biotechnology and Interdisciplinary Studies; Professor, Department of Chemistry and Biology, Professor of Biomedical Engineering, New York</td>
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DAY 2 (December 05, 2021)

9:10–9:20 hrs | Assemblage at the web

Technical Session-III

Chairpersons: Dr. P.K. Gupta and Dr. Vikas Rana

9:20–9:50 hrs
IL-11 | Nanocellulose as a promising reinforced material for the papermaking process – Dr. R.M. Mathur, Avantha Centre for Industrial Research & Development (ACIRD), Thapar Institute of Engineering & Technology, Patiala, India

9:50–10:20 hrs
IL-12 | Synthesis of Janus-faced Homoazanucleosides and Study of their Self Organization through Watson-Crick and Hoogsteen Base Pairing – Namakkal G. Ramesh, Department of Chemistry, Indian Institute of Technology Delhi, Hauz Khas, New Delhi, India

10:20–10:40 hrs
SL-5 | Understanding Relationship between Properties of V-type Starch Crystal and Enzyme Resistant Starch Type V – Soumya Ranjan Purohit, South Dakota State University, USA

Technical Session-IV

Chairpersons: Prof. K.P.R. Kartha and Prof. G.S. Chouhan

10.40–13.10 hrs | Oral Presentation by Young Researchers

Technical Session-V

Chairpersons: Dr. Vasudev Singh, Dr. S.S. Bisht and Dr. K. Murli

14:05–16:25 hrs | Poster Presentations

Valedictory Session

16.25–17.00 hrs
– Remarks on the Conference
– Remarks by Participants
– Concluding Remarks of ACCTI
– Valedictory Speech
– Vote of Thanks

Presentation-wise adherence to time duration

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<tr>
<th>Presentation Type</th>
<th>Time allotted (min)</th>
<th>Breakup of Allotted time (min)</th>
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<tr>
<td></td>
<td>Speaker's Introduction</td>
<td>Presentation</td>
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<tr>
<td>Invited Lecture (IL)</td>
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<tr>
<td>Short Lecture (SL)</td>
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<tr>
<td>Oral Presentation (OP)</td>
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All presenters are requested to adhere with the allotted time.
JOIN WEBEX MEETING on December 04, 2021
https://icfre1.webex.com/icfre1/j.php?MTID=mc26a48c4e9b9667a22778f4b0b5b28a8
Meeting number (access code): 2518 065 9537
Meeting password: 41257369
TAP TO JOIN FROM A MOBILE DEVICE (ATTENDEES ONLY)
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Global call-in numbers
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Meeting number (access code): 2513 953 7768
Meeting password: 41725369
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