

# XV J-NOST 2019

Department of Chemistry, University of Delhi, Delhi-110007 (India)  
(October 18-October 21, 2019)

Venue: Conference Centre, Opposite Department of Botany, Gate No 4  
University of Delhi, Delhi 110007

## Program schedule

Note: All participants are advised to upload their oral presentations in advance

(All Technical sessions will be held in Main Hall of the Conference Centre)

## Day 01: Friday, 18<sup>th</sup> October, 2019

11.00 -13.00	Registration (Conference Centre)
13.00-14.00	Lunch
14.00 -14.30	Inauguration

### Technical Session I: 14.30-16.30

#### Theme: C-H activation

Chairperson: Prof. K. P. Kaliappan, IIT Bombay and Prof. J. M. Khurana, Univ. of Delhi

14.30-14.45	OP-01	<i>Directed, Meta-Selective C-H Functionalisation of Aryl Boronic Acid MIDA Esters</i> <b>Alexander Williams</b> , Imperial College, London
14.45-15.00	OP-02	<i>Ligand-Enabled Pd(II)-Catalyzed Iterative <math>\gamma</math>-C(sp<sup>3</sup>)-H Arylation of Free Aliphatic Acid</i> <b>Jayabrata Das</b> , IIT Bombay
15.00-15.15	OP-03	<i>Cobalt(III) <math>\pi</math>-Catalyzed Allylation of Arene C-H Bonds</i> <b>K. Ramachandran</b> , IIT Madras
15.15-15.30	OP-04	<i>An Orchestrated Unsymmetrical Annulation Episode of C(sp<sup>2</sup>)-H Bonds with Alkynes and Quinones: Access to Spiro-isoquinolones</i> <b>Kallol Mukherjee</b> , University of Hyderabad
15.30-15.45	OP-05	<i>Ru(II)/Rh(III)-Catalyzed Redox-Free C-H allylation/Alkenylation of Coordinating Aromatic Acids and Arylacetamides with Alkenes</i> <b>Subramanian Jambu</b> , IIT Madras
15.45-16.00	OP-06	<i>Unique Avenues in Photocatalysis: Cu(I)- and Cu(II)-catalyzed Chlorosulfonylation of Alkenes and Alkynes</i> <b>Sebastian Engl</b> , University of Regensburg
16.00-16.15	OP-07	<i>Cu(II)-Mediated ortho-C-H Amination of Arenes: Mechanistic Analysis by Capturing Fleeting Intermediates and Theoretical Calculations</i> <b>Manoj Kumar</b> , University of Delhi
16.15-16.30	OP-08	<i>Carboxylate-Assisted Ru(II)-Catalysis for C-H Bond Functionalization Reactions</i> <b>Suman Dana</b> , IIT Madras
16.30-17.00	<b>Tea Break</b> Venue: Dining Hall, Conference Centre	

**Technical Session II: 17.00-19.00****Theme: Heterocycle Synthesis**

Chairperson: Prof. A. K. Sahoo, Univ. of Hyderabad and Prof. D. S. Rawat Univ. of Delhi

17.00-17.15	OP-09	Transition metal-free synthesis of fused quinazolinones by oxidative cyclization of <i>N</i> -pyridylindoles <b>Alankrita Garia</b> , IIT Delhi
17.15-17.30	OP-10	A Cascade Synthesis of <i>S</i> -allyl Benzoylcarbamothioates via Mumm-type Rearrangement <b>Anjali Dahiya</b> , IIT Guwahati
17.30-17.45	OP-11	Flexibility of benzylic position of ethyl arylacetates as electrophilic/nucleophilic centre <b>Anup Kumar Sharma</b> , BHU, Varanasi
17.45-18.00	OP-12	The Halogen Bond: An Efficient Tool for Electron Catalyzed C-I and C-S Bond Formation at Room Temperature <b>Anuradha Nandy</b> , IIT Madras
18.00-18.15	OP-13	Unprecedented Chemistry of Spiro-aziridine Oxindoles in Nucleophilic Domino/Tandem Reaction <b>Atanu Hazra</b> , SGPGIMS Campus, Lucknow
18.15-18.30	OP-14	Synthesis of Carbon-Branched Sugars Involving an Unprecedented 1,5- or 1,6-Alkyl Transposition Reaction <b>Umamaheswara Rao Boddu</b> , University of Hyderabad
18.30-19.00		<b>Guest Lecture</b>
<b>19.30 onward</b>		<b>Dinner</b> Venue: Dining Hall, Conference Centre

**Day 02: Saturday, 19th October, 2019****Technical Session III: 9.00-11.00 am****Theme: Heterocycle Synthesis**

Chairperson: Prof. N. G. Ramesh, IIT Delhi and Dr. S. V. Rama Sastry, IISER Mohali

09.00-09.15	OP-15	Organocatalytic Asymmetric Domino Michael/Acyl Transfer Reaction Between $\alpha$ -Nitroketones and in situ-Generated ortho-Quinone Methides: Route to 2-(1-Arylethyl)phenols <b>Chandan Gharui</b> , IIT Guwahati
09.15-09.30	OP-16	Metal-Free Decarboxylative reactions of Isoxazoles <b>Dinesh S. Barak</b> , CSIR-CDRI Lucknow
09.30-09.45	OP-17	Transition-Metal-Free Addition Reaction for the Synthesis of 3-(amino-benzylidene/aminoalkylidene)indolin-2-one and Its Synthetic Applications <b>Girish Singh Bisht</b> , IISER, Pune
09.45-10.00	OP-18	Manganese-Catalyzed Homo-Coupling of Aryl Boronic Acids and Mechanistic Investigations <b>Gurdeep Singh</b> , IISER Mohali
10.00-10.15	OP-19	Aggregates Assemble: A Novel Class of Solid State Emissive Aroyl-S, <i>N</i> -Ketenacetals With Tunable Aggregation-Induced Emission Characteristics <b>Lukas Biesen</b> , University of Duesseldorf
10.15-10.30	OP-20	Stereoselective Synthesis of Hexahydrofuro[3,4- <i>b</i> ]furan-4-ol and Its Dimer via Tandem Prins and Pinacol Rearrangement <b>Dr. Namita Devi</b> , IIT Guwahati

10.30-10.45	OP-21	<i>Metal-Free Trifluoromethylation of Indazoles</i> <b>Payel Ghosh</b> , Visva-Bharati University
10.45-11.00	OP-22	<i>Enamides as versatile tools for the stereoselective construction of molecular complexity</i> <b>Philipp Kramer</b> TU Kaiserslautern, Germany
11.00-11.45	<b>Photo session</b> <b>Tea Break</b> <i>Venue: Dining Hall, Conference Centre</i>	

#### Technical Session IV: 11.45-13.15

**Chairperson:** Prof. Vibha Tandon, SCMM, JNU and Dr. Anil Mishra INMAS, DRDO

11.45-12.00	OP-23	<i>Benzannulation of in situ generated Diazo-keto Phosphonates with alkynes under Visible-light Catalysis</i> <b>Promita Biswas</b> , IACS Kolkata
12.00-12.15	OP-24	<i>Annulation of Donor-Acceptor Cyclopropane Towards Step-Economic Synthesis of Nitrogen Heterocycles: By Metal and Metal-Free Activation</i> <b>Raghunath Dey</b> , IIT Ropar
12.15-12.30	OP-25	<i>Employing Arynes in Transition-Metal-Free Arylation and Insertion Reactions</i> <b>Rahul N. Gaykar</b> , IISc Bangalore
12.30-12.45	OP-26	<i>Exploratory Studies on the Reactivity of New Class of <math>\alpha\alpha</math>-Dihaloketones</i> <b>Santu Sadhukhan</b> , IIT Madras
12.45-13.00	OP-27	<i>Forging [3+2]-Annulation of Azaoxyallyl Cations and Thiocarbonyls for Diverse Assembly of Thiazolidin-4-ones and Scope for Late Stage Modifications via Latent Reactive Groups</i> <b>Vandana Jaiswal</b> , SGPGIMS Lucknow
13.00-13.15	OP-28	<i>Regioselective Intermolecular Sulfur-Oxygen Difunctionalization (phenoxysulfonylation) of Alkyne: One-pot Construction of (Z)-<math>\beta</math>-phenoxy vinylsulfones</i> <b>Mohd Yeshab Ansari</b> , CDRI Lucknow
13.15-16.30	<b>Lunch and Poster Session I (poster no. 1-50)</b> <i>Venue: Dining Hall, Conference Centre</i>	
16.30-17.00	<b>Tea Break</b> <i>Venue: Dining Hall, Conference Centre</i>	

#### Technical Session V: 17.00-19.00

Theme: Metal-Catalyzed Reaction

**Chairperson:** Prof. Oliver Reiser, Germany and Dr. S. Mehta, DTU

17.00-17.15	OP-29	<i>Phosphine free Manganese complex catalyzed <math>\alpha</math> alkylation of Ketones and Nitriles with primary alcohols and Friedlander Quinoline Synthesis</i> <b>Akash Jana</b> , IISER Kolkata
17.15-17.30	OP-30	<i>Silver-Catalyzed Three-Component Route to Trifluoromethylated 1,2,3-Triazolines Using Aldehydes, Amines, and Trifluorodiazethane</i> <b>Anuj Kumar</b> , CSIR-CDRI, Lucknow

17.30-17.45	OP-31	<i>Chiral Metal-Indapybox Catalysed Asymmetric Mukaiyama-Michael Reactions of <math>\alpha,\beta</math>-Unsaturated 2-Acyl Imidazoles</i> <b>Arko Das</b> , IIT Kanpur
17.45-18.00	OP-32	Fe(III)-Catalyzed Diastereoselective Friedel–Crafts Alkylation–Hemiketalization–Lactonization Cascade for the Synthesis of Polycyclic Bridged 2-Chromanol Lactones <b>Balasaheb R. Borade</b> , CSIR-NCL, Pune
18.00-18.15	OP-33	<i>Enantioselective [4+2]-Annulation of Azlactones with Copper-Allenylidenes under Cooperative Catalysis: Synthesis of <math>\alpha</math>-Quaternary <math>\alpha</math>-Acylaminoamides</i> <b>Biki Ghosh</b> , IISc, Bangalore
18.15-18.30	OP-34	<i>An Efficient Synthesis of Aryl Nitriles, 2-Alkynylpyridines and Aryl Thiocyanates via Transition Metal Catalyzed Chemoselective [2+2+2] Cycloaddition Reactions</i> <b>Divya Bhatt</b> , IIT Ropar
18.30-19.00	GL	<b>Guest Lecture</b>
<b>19.30 onwards</b>	<b>Dinner</b> <i>Venue: Dining Hall, Conference Centre</i>	

### Day 03: Sunday, 20th October, 2019

**Technical Session VI: 9.00-11.30**

Theme: Metal-Catalyzed Reaction

**Chairperson:** Prof. S. K. Awasthi, Univ. of Delhi and Dr. Ravi P. Singh IIT Delhi

09.00-09.15	OP-35	<i>Synthesis of Oxindole, Indole and Cinnoline derivatives via Ir (III)-Catalyzed Carbenoid Functionalization</i> <b>Gongutri Borah</b> CSIR-NEIST, Assam
09.15-09.30	OP-36	<i>Ligand Enabled Gold-Catalyzed C(sp<sup>2</sup>)-N Cross-Coupling Reactions of Aryl Iodides and Amines</i> <b>Manjur O. Akram</b> , IISER Bhopal
09.30-09.45	OP-37	<i>Stereospecific Copper(II)-Catalyzed Tandem Ring Opening/Oxidative Alkylation of Donor-Acceptor Cyclopropanes with Hydrazones: expeditious access to Tetrahydropyridazines</i> <b>Manmath Mishra</b> , IIT Guwahati
09.45-10.00	OP-38	<i>Copper Catalyzed Oxidative C–C bond Cleavage of 1,2-Diketones: A Direct Route to 1,8-Naphthalimides, Biphenyl-2,2'-Dicarboxamides and N-Heterocyclic Amides</i> <b>Priyanka R. Sakhare</b> , IIT Bombay
10.00-10.15	OP-39	<i>A Fe(II)-Based Metalloradical Activation Approach: Overriding Traditional Click Chemistry Towards Denitrogenative Annulation</i> <b>Satyajit Roy</b> , CBMR, Lucknow
10.15-10.30	OP-40	<i>Substituent-Guided Palladium-Ene Reaction for the Synthesis of Carbazoles and Cyclopenta[b]indoles</i> <b>Sonu Yadav</b> , IISER Mohali
10.30-10.45	OP-41	<i>Metal-Catalyzed [2 + 2 + 2] Dehydrogenative Cross-Coupling: Direct Access to Fulvene &amp; Quinone fused Benzene</i> <b>Soumyadip Hore</b> , IIT Delhi

10.45-11.00	OP-42	<i>Design and Synthesis of Peptide Based Organocatalysts for Asymmetric Michael Addition Reactions</i> <b>Vinita Yadav</b> , NCL Pune
11.00-11.15	OP-43	<i>Enantio- and diastereoselective approach to substituted tetrahydropyrroloquinolines from 2-imonochalcone by Michael addition</i> <b>Tousif</b> , SCMM, JNU, Delhi
11.15-11.30	OP-44	<i>Organocatalytic Asymmetric Formal [3+2] Cycloaddition as a Versatile Platform to Access Methanobenzo[7]annulenes</i> <b>Mohd Anif Pasha</b> , University of Hyderabad
11.30-13.00	<b>Tea Break + Poster Session (PP no. 51 onwards)</b> <i>Venue: Conference Centre</i>	
13.00-13.45	<b>Lunch</b> <i>Venue: Dining Hall, Conference Centre</i>	

### Technical Session VII: 13.45-15.15 pm

Theme: Natural product

Chairperson: Dr. Rakesh Parashar, Univ. of Delhi and Dr. Nidhi Jain, IIT Delhi

13.45-14.00	OP-45	<i>Asymmetric Syntheses of Paraconic Acids: Application to the Total Syntheses of Bioactive Chiral Natural Products</i> <b>Abhijeet M. Sarkale</b> , IIT Gandhinagar
14.00-14.15	OP-46	<i>Tandem IBX-Promoted Primary Alcohol Oxidation/Opening of Intermediate Diolcarbonate Aldehydes to (E)-<math>\gamma</math>-Hydroxy-<math>\alpha,\beta</math>-enals</i> <b>Anupama Kumari</b> , IIT Bombay
14.15-14.30	OP-47	<i>Addition of 3-Sulfonyl Phthalide to p-Quinone methides; a Facile Route Towards the Synthesis of Indenofurans, Benzofurans and Spiro-lactones</i> <b>Arindam Maity</b> , IISER, Bhopal
14.30-14.45	OP-48	<i>One-Pot Synthesis of Cyclopropane-Fused Cyclic Amidines: An Oxidative Carbanion Cyclization</i> <b>Nazar Hussain</b> , IIIM, Jammu
14.45-15.00	OP-49	<i>Total synthesis guided stereochemical revision of peribysin family natural products</i> <b>Paresh Athawale</b> , NCL Pune
15.00-15.15	OP-50	<i>Atom Economical Cycloadditions and Cross-Coupling Reactions"</i> <b>Andrew Dalling</b> , University of Bristol, UK
15.15-15.45	<b>Tea Break</b> <i>Venue: Dining Hall, Conference Centre</i>	

### Technical Session VIII: 15.45-18.00

Theme: Biochemistry

Chairperson: Prof. S. Kukreti, Univ. of Delhi and Prof. Suman Kundu, Delhi University

15.45-16.00	OP-51	<i>Pyranone Derived Fluorescent Dyes for Biomedical Applications</i> <b>Jagriti Singh</b> , CSIR-CDRI, Lucknow
16.00-16.15	OP-52	<i>Synthesis and studies of tripodal arylazoisoxazole based systems</i> <b>Pravesh Kumar</b> , IISER Mohali

16.15-16.30	OP-53	<i>Nucleic acid inspired supramolecular hydrogels</i> <b>Tanima Bhattacharyya</b> , IACS Kolkata
16.30-16.45	OP-54	<i>Exfoliating a Cd II–Purine Framework: Conversion of Nanosheets-to-Nanofibers and Studies of Elastic and Capacitive Properties</i> <b>Ilesha Avasthi</b> , IIT Kanpur
16.45-17.00	OP-55	<i>Eosin Y as a Hydrogen Atom Transfer Photocatalyst for the Construction of 1,2,4-Dithiazolidines from <math>\beta</math>-Ketothioamides at Room Temperature</i> <b>Monish A. Ansari</b> , BHU, Varanasi
17.00-17.15	OP-56	<i>Application of Reductive Aminases in Biocatalytic Cascade Synthesis</i> <b>Jeremy Ramsden</b> , University of Manchester, UK
17.15-17.30	OP-57	<i>Identification, optimization and evaluation of IPCS inhibitors as new anti-leishmanials”</i> <b>Courtney Covington</b> , Durham University, UK
17.30-17.50	OP-58	<i>Antiparasitic activity of hydroxyethylamine analogs: Synthesis, biological activity of plasmepsins inhibitors</i> <b>Snigdha Singh</b> , University of Delhi
17.50-18.20	GL	Guest Lecture
18.20-19:20	<b>Cultural programme</b>	
<b>19.30 onwards</b>	<b>Special Dinner</b> <i>Venue: Department of Chemistry</i>	

### Day 04: Monday, 21<sup>st</sup> October, 2019

**Technical Session IX: 9.00-11.00 am**

Theme: **Miscellaneous**

**Chairperson:** Prof. A. K. Prasad, Univ. of Delhi and Prof. M. Nath Univ. of Delhi

09.00-09.15	OP-59	<i>Base-free Enantioselective C(1)-Ammonium Enolate Catalysis Exploiting Aryloxides</i> <b>Calum McLaughlin</b> , University of St Andrews, UK
09.15-09.30	OP-60	<i>Charge Transfer Liquid: A Stable Donor-Acceptor Interaction in Solvent-free Liquid State</i> <b>Vivek Chandrakant</b> , NCL Pune
09.30-09.45	OP-61	<i>Synthesis of Sulfonimidamides from Sulfenamides via an Unprecedented Alkoxy-amino-<math>\lambda</math>6-sulfanenitrile Intermediate</i> <b>Edward Briggs</b> , Imperial College, London
09.45-10.00	OP-62	<i>Enantioselective ketone reduction using borane catalysts</i> <b>Joanne Dunne</b> , University of Edinburgh, UK
10.00-10.15	OP-63	<i>Accessing [g]-face <math>\pi</math>-expanded fluorescent coumarins by Scholl cyclization</i> <b>Nitisha</b> , IIT Madras
10.15-10.30	OP-64	<i>Facile access to novel 3,4-fused indole motifs via Rh(III)-catalyzed C-H activation based annulations</i> <b>Puppala Sathish</b> , IICT Hyderabad
10.30-10.45	OP-65	<i>Nickel-Catalyzed Regioselective C-H Alkenylation of Indoles: Scope and Mechanistic Aspect</i> <b>Rahul Angadrao Jagtap</b> , NCL Pune

10.45-11.00	OP-66	<i>On Water: Metal-free Synthesis of Highly Functionalized Benzothiazolylidene from ortho-Haloanilines</i> <b>Kapil Mohan Saini</b> , University of Delhi
11.00-11.30	<b>Tea Break</b> <i>Venue: Dining Hall, Conference Centre</i>	

**Technical Session X: 11.30-12.30**

Theme: **Miscellaneous**

**Chairperson:** Prof. S. K. Sharma, Univ. of Delhi, Dr. R. P. Singh, DRDO

11.30-11.45	OP-67	<i>Metal Free C(sp<sup>3</sup>)-H Amination of Nitrosoarene and N-amination of Amine using Nitrosoarenes</i> <b>Anisha Purkait</b> , IIT Guwahati
11.45-12.00	OP-68	An Integrated Continuous Flow Micro-Total Ultrafast Process System ( $\mu$ -TUFPS) for the Synthesis of Celecoxib and Other Cyclooxygenase Inhibitors <b>S. Vinay Kumar</b> , IICT Hyderabad
12.00-12.15	OP-69	Metal-free Synthesis of Polysubstituted Pyrroles using Surfactants in Aqueous medium <b>Amrendra Kumar</b> , CDRI, Lucknow
12.15-12.35	<i>Synthesis and NMR</i> <b>Jayati Banerjee</b> , Labindia Analytical Instruments (P) Ltd., Kolkata	
12.35-13.15	<b>Best Poster award &amp; SAILIFE-NOST Best Thesis Award Presentation / XVI J-NOST Announcement</b>  <b>Concluding Remarks</b>	
13.15 onwards	<b>Lunch and departures/ Sightseeing</b>	