

CV-19 Lectures series on “LIGHT AS REACTANT AND PRODUCT”

Background

A few international research groups initiated a tutorial/seminar series to keep students engaged in scholarship during the unprecedented difficult times of the 2020 pandemic. These informal, Saturday, zoom meetings have evolved into an ongoing series since Spring 2020. This series includes talks from budding to advanced researchers covering a wide variety of topics centered around “Photon” as reactant and product in chemical, physical, and biological processes. The highly interactive sessions in the style of Gordon Research Conferences focus on a wide variety of topics that include molecular and supramolecular photochemistry and photophysics, ultrafast dynamics in the excited state, theory of excited state dynamics, concepts and applications of light driven processes, etc. Research, tutorial, topical and historical and instructional lectures are planned. Interested parties are welcome to participate as presenters/listeners by emailing one of the seminar coordinators. We welcome suggestions for topics as well as speakers.

Speakers and Titles April 2020 to May 2026

April 11	Professor V. Ramamurthy, Uni. Miami, <i>Electron Transfer-1</i>
April 18	Professor V. Ramamurthy, Uni. Miami, <i>Electron Transfer-2</i>
April 25	Professor V. Ramamurthy, Uni. Miami, <i>Electron Transfer-3</i>
May 02	Professor V. Ramamurthy, Uni. Miami, <i>Energy Transfer-1</i>
May 09	Professor V. Ramamurthy, Uni. Miami, <i>Energy Transfer-2</i>
May 16	Professor V. Ramamurthy, Uni. Miami, <i>Energy Transfer-3</i>
May 23	Professor V. Ramamurthy, Uni. Miami, <i>Energy Transfer-4</i>
May 30	Professor Sivaguru Jayaraman, Bowling Green State University, “ <i>Chiral Photochemistry</i> ”
June 06	Professor Jean-Luc Ayitou, Illinois Institute of Technology, Chicago, “ <i>Navigating Triplet Photochemistry and Photophysics in Novel Organic Chromophore</i> ”
June 13	Professor Linda Shimizu, Uni. South Carolina, “ <i>Supramolecular Photochemistry</i> ”
June 20	Professor V. Ramamurthy, Uni. Miami, “ <i>Spin, Energy and Electron Transfer across a Capsular Wall</i> ”
June 27	Professor V. Ramamurthy, Uni. Miami, “ <i>Spin, Energy and Electron Transfer across a Capsular Wall</i> ”

July 04	Professor V. Ramamurthy, Uni. Miami, <i>“Dynamics of excited molecules in a confined space”</i>
July 11	Professor Sivaguru Jayaraman, Bowling Green State University, <i>“Catalysis in Photochemistry”</i>
July 18	Professor N. Jayaraman, Indian Institute of Science, Bangalore, <i>“Dendritic Macromolecules as Containers for Photochemical Reactions”</i>
July 25	Professor N. Jayaraman, Indian Institute of Science, Bangalore, <i>“Dendritic Macromolecules”</i>
Aug 01	Professor V. Ramamurthy, Uni. Miami, <i>“Lavoisier, Davy and Faraday”</i>
Aug 08	Professor Malcolm Forbes, Bowling Green State University, <i>Spin</i>
Aug 15	Professor Malcolm Forbes, Bowling Green State University, <i>Spin</i>
Aug 22	Dr. Jayaraj Nithyanandhan, National Chemical Laboratory, Pune, India, <i>“Squaraine Based Dyes for Dye-Sensitized Solar Cell”</i>
Aug 29	Professor Debapratim Das, IIT, Guwahathi, India <i>“Unexpected Supramolecular Aggregates: The Case of KC Peptides”</i>
Sep 05	Professor Dr. Jayamurugan Govindasamy, Institute of Nano Science and Technology, Mohali, India, <i>“Development of fluorescent push-pull chromophores for sensing and biological applications”</i>
Sep 12	Professor Malcolm Forbes, Bowling Green State University, <i>“Fun Facts About Triplet States”</i>
Sep 19	Professor Rajeev Prabhakar, Uni. Miami, <i>“Development of Catalysts, Drugs and Biomaterials: Insights from Theoretical Studies”</i>
Sep 26	Dr. Nandini Vallavoju, Harvard Uni, <i>“Understanding the Pharmacology of Opioid Drugs”</i>
Oct 03	Dr. K. Krishnamoorthy, National Chemical Laboratory, Pune, India, <i>“Design and Synthesis of Molecules and Materials for Energy Storage Devices”</i>
Oct 10	Professor Ehesan Ali, Institute of Nano Science and Technology, Mohali, <i>“Ab Initio Perspectives of Molecular Magnetism: Designing of Diradicals to Device Propositions”</i>
Oct 17	Professor Jared Delcamp, Uni. Mississippi, <i>“Proaromatic and Multiple Donor Dyes for Photoinduced Interfacial Charge Separation Using Near Infrared Photons”</i>
Oct 24	Professor V. Ramamurthy, Uni. Miami, <i>“Einstein’s Role Model”</i>
Oct 31	Professor J Sankar, IISER-Bhopal, <i>“Porphyrin-Rylene Diimide Molecular Platform Having Panchromatic Absorption for Photovoltaic Applications”</i>

- Nov 07 Dr. Santhosh Babu Sukumaran, Organic Chemistry Division, CSIR-National Chemical Laboratory, Pune, India, “*New Organic Solvent-Free Liquids and Room Temperature Phosphors*”
- Nov 14 Professor A. Winter, Iowa State University, “*Strategies for Photocaging using Visible Light*”
- Nov 21 Professor N. Sathyamurthy, Honorary Professor IISER, Mohali, “*In the beginning it was helium and hydrogen*”
- Nov 28 THANKSGIVING BREAK
- Dec 05 Mr. Shaifali Sartaliya (Institute of Nano Science and Technology, Mohali)
Mr. Md Faizul Islam (Uni. South Carolina)
Mr. Saurav Das (IIT, Guwahati) “*pH clock instructed out-of-equilibrium assembly supramolecular vesicles*”
- Dec 12 Professor V. Ramamurthy, Uni. Miami, “*Light and Life*”
- Dec 19 Professor Dibyendu Das, IISER, Kolkatha, India, “*Systems Chemistry: How complexity can emerge from chemistry*”

January-May 2021

- Jan 16 Inaugural lecture by Professor S. Chandrasekaran, IISc. Bangalore. “*Organic Chemistry Research in India: Quo Vadis*”
Professor S. Thayumanavan, University of Massachusetts, Amherst, MA., Designing Responsive Molecular Assemblies
- Jan 23 Professor Ksenija Glusac, University of Illinois at Chicago & Argonne National Lab, “*Nanocarbon in Photochemistry and Electrochemistry*”
- Jan 30 Professor Mahesh Hariharan, IISER, Trivandrum, India, Tutorial Lecture: *Strategies to Populate the Triplet Excited States of Organic Chromophores*
- Feb 06 Professor Joe Furgal, Bowling Green State Uni. Bowling Green, “*Hybrid Photodynamic Sponges and the Catalytic Depolymerization of Silicone Resins*”
- Feb 13 Professor Ramanarayanan Krishnamurthy, The Scripps Research Institute, La Jolla, CA, “*Rediscovering the (Organic) Chemistry of Origins of Biomolecules and Life*”
- Feb 20 Professor Pratik Sen, IIT, Kanpur, India
“*A New Approach to Estimate Spatial and Dynamic Heterogeneity*”
- Feb 27 Professor Pramod P. Pillai, IISER, Pune, India, “*Photochemistry and Photophysics by Surface Engineered Nanomaterials*”
- Mar 06 Professor José Paulo da Silva, Universidade do Algarve, Portugal, “*Molecules in the gas phase. From cell metabolites to supramolecular complexes and structures*”

- Mar 13 Professor R. H. Schmehl, Tulane University, New Orleans, LA, *"What does it really mean for an excited state to react by coupled proton-electron transfer?"*
- Mar 20 Professor N. D. Pradeep Singh, IIT, Kharagpur, India, *"Photoresponsive fluorescent organic nanoparticles: a smart platform for biomedical and agrochemical applications"*
- Mar 27 Professor Venkataraman Mahalingam, IISER, Kolkatha, India., *Lanthanide-doped nanomaterials: Excellent spectral converters for various applications*
- Apr 03 Professor Nilmoni Sarkar, IIT, Kharagpur, India, *"Understanding The Self-Assembly of Biological Building Block Molecules and Their Impact on Membranes"*
- Apr 10 Professor Petr Klan, Masaryk University, Brno, Czech Republic
- Apr 17 Professor Mahesh Hariharan, IISER, Trivandrum, India, Reserach Lecture: *Ultrafast Excited-State Dynamics in Twisted Aromatics*
- Apr 24 Professor P. Balaram, Former Director, IISc, Bangalore and Professor, NCBS, Bangalore, India, *"G.N.Ramachandran and His Impact on Protein Conformations"*
- May 01 Professor Sugumar Venkataramani, IISER, Mohali, India, *"Azoheteroarene photoswitches : Fundamentals and Application prospects"*
- May 08 Professor Javier Read de Alaniz, University of California, Santa Barbara, *"Exploring and developing negative photochromic molecules"*
- May 15 Tutorial Lecture: Professor N. Satyamurthy, Founding Director and Honorary Professor IISER, Mohali, *"Wave Packets, Conical Intersections and Surface Crossings"*
- May 22 Dr. René M. Williams, Asst. Professor, Van 't Hoff Institute for Molecular Sciences (HIMS), University of Amsterdam, Amsterdam, *"The photochemistry of photodynamic anti-cancer therapy"*
- May 29 Professor Subhajit Bandyopadhyay, IISER, Kolkatha, *"Photoregulated enzyme mimics"*
- June 05 Professor Mahesh Hariharan, IISER, Trivandrum, India, *"Greek Cross Aggregate: A Paradigm for Exciton Isolation"*

September – December 2021

- Sep 04 Professor Debabrata Goswami, IIT Kanpr, India, *"Towards Light as a Reagent and Product: Spatiotemporal Control with femtosecond lasers"*
- Sep 11 Professor G Jayamurugan, INST Mohali, India, *"Biomass, Carbon dot, Sugar, Light, Fuel, Organic Transformations, Nano & Sustainable Technologies: A Cocktail in Catalysis"*
- Sep 18 Dr. BLV Prasad, CeNS, Bengaluru and CSIR-NCL, Pune, *"Molecular tools for controlling nanoparticle size, dispersional stability and their assemblies"*
- Sep 25 Professor Apurba L Koner, IISER Bhopal, India, *"Understanding Sub-cellular Physical Properties with Molecular Reporter"*

- Oct 02 Dr. Murthy Gudipathi, JPL, Caltech, USA, *“Water, Organics, Energy, and Life - On Earth and Beyond”*
- Oct 09 Dr. V Jayathirtha Rao, CSIR-IICT, India, *“Organic Materials for Emerging Applications: Design, Synthesis, Characterization and Device Fabrication”*
- Oct 16 Professor Massimo Olivucci, BGSU, USA, *“The Chemistry of Conical Intersection”*
- Oct 23 Professor Anna Gudmundsdottir, Univ. Cincinnati, Ohio, USA, *“Elucidating Reaction Mechanism and Photodynamic Behavior of Organic Azide Crystals”*
- Oct 30 Professor Tushar Kanti Mukherjee, IIT Indore, India, *“Understanding and Exploring the Optoelectronic Properties of Hybrid Coacervate Droplet”*
- Nov 06 Professor Arijit K De, IISER Mohali, India, *“A tutorial on coherent multidimensional spectroscopy”*
- Nov 13 Professor Peter H Lu, BGSU, USA, *“Probing Single-Molecule Interfacial Electron Transfer at Organic-Inorganic Interfaces”*
- Nov 20 Professor Saptarshi Mukherjee, IISER Bhopal, India, *“Spectroscopy of Luminescent Metal Nanoclusters”*
- Dec 04 Professor Kana M Sureshan, IISER Trivandrum, India, *“Crystalline Polymers via Topochemical Azide Alkyne Cycloaddition (TAAC) reaction”*
- Dec 11 Mr. Sujit Ghosh, University of Miami, Coral Gables. *“A Study on a Less Investigated Phototrigger: Thiocoumarins”*
- Ms. Neethu K M, INST Mohali, India. *“Nanoreactors mediated formation and transformation of Donor-substituted Tetracyanobutadiene Chromophores”*
- Ms. Lakshmy Kannadi Valloli, BGSU. *“Exploiting Excited State Processes to Uncover New Photochemical Reactivity”*
- Ms. Young Ju Yun, University of Illinois Chicago. *“Triplet Photodynamics and anti-Stokes Photoluminescence in Organic Donor-Acceptor Dyads”*
- Dec 18 Dr. Arunkumar Natarajan, GE Aviation, Mason, Ohio, *“Organic/Photosensitive Materials in 2D-, 3D- Industrial applications”*

Spring 2022 (January 15 – June 04, 2022)

- Jan 15 Professor Challa V. Kumar, University of Connecticut, *“Soft Materials: Playing with Proteins in the Chemistry Lab”*
- Jan 22 Professor Christian G. Bochet, University of Fribourg, Switzerland, *“Probing and tuning photochemical reactions with isotopes”*
- Jan 29 Professor Partha Hazra, IISER-Pune, India, *“Optical Properties and Applications of Novel Stimuli-Responsive Organic Smart Materials”*

Feb 05	Professor Sayan Bagchi, CSIR-NCL, Pune, India, <i>“Visualising Molecular Movies Using Ultrashort Laser Pulses”</i>
Feb 12	Professor Jier Huang, Marquette University, Milwaukee, <i>“Porous Crystalline Materials as Intrinsic Light Absorption and Photocatalytic Materials”</i>
Feb 19	Professor J. N. Moorthy, IIT Kanpur and IISER Trivandrum, India, <i>“Exploitation of Sterics: Control of Photoreactivity and Development of Photoresponsive Materials”</i>
Feb 26	Professor Venkata Krishnan, IIT-Mandi, India, <i>“Materials Design based on Lessons from Nature”</i>
Mar 05	Professor Alexander Greer, CUNY, USA, <i>“Mechanistic Organic Photochemistry: Effect of Dark Process on Photosensitized Oxidation”</i>
Mar 12	Professor S. Varadharajan, IISER Bhopal, India, <i>“Theoretical studies on UV-damage resistance in nucleobases and self-repair in DNA”</i>
Mar 19	Professor Sriram Kanvah Gundimeda, IIT Gandhiagar, India, <i>“Lighting up sub-cellular organelles with fluorescent probes”</i>
Mar 26	Professor Shinsuke Takagi, Tokyo Metropolitan University, Japan, <i>“The effect of flat inorganic surface on the photochemical properties and reactions of molecules”</i>
Apr 02	Dr. Jayashree Nagesh, IISc, Bangalore, <i>“Aggregate photophysics of DPP-core molecules”</i>
Apr 09	Professor Pavel Anzenbacher Jr, BGSU, <i>“Fluorescent Supramolecular Sensors: Toys, Sensors and Assays”</i>
Apr 16	Professor Jyotishman Dasgupta, Tata Institute of Fundamental Research, Mumbai, India, <i>“Photoredox Organic Transformations in Water”</i>
Apr 23	Professor Axel G. Griesbeck, University of Cologne, Germany, <i>“A photochemical way to improve Artemisinin’s anticancer performance”</i>
Apr 30	Professor Angel Marti, Rice University, USA, <i>“Interrogating Biological and Inorganic Supramolecular Structures using Photoactive Metal Complexes”</i>
May 07	Professor John Swierk, Binghamton University (SUNY), <i>“The Obvious Facts and Deceptions of Photoredox Reactions”</i>
May 14	Professor Darrio M. Bassani, Univ. Bordeaux, France, <i>“Supramolecular control of electronic properties in organic materials”</i>
May 21	Professor Axel G. Griesbeck, University of Cologne, Germany, <i>“Photodecarboxylations and application in cyclopeptide synthesis”</i>
May 28	Professor Francisco Raymo, University of Miami, Coral Gables, USA, <i>“Photoswitchable Fluorophores for Bioimaging Applications”</i>
Jun 04	Professor Kankan Bhattacharyya, IISER Bhopal, India, <i>“History of Physical Chemistry in India”</i>

Fall 2022 (September 10 – December 17, 2022)

- Sep 10 Dr Sri-Rajasekhar Kothapalli, Biomedical Engineering Department, Penn State University, USA, *“Integrated optical and acoustic devices for multimodal imaging and stimulation”*
- Sep 24 Professor Ujjal K. Gautam, IISER, Mohali, India, *“Chemistry with waste plastic: pollution remediation, oxygen harvesting, and solar energy utilization”*
- Oct 15 Professor A. K. Mishra, IIT-Madras, India, *“Understanding & Harnessing Fluorescence Inner Filter Effect”*
- Oct 29 Professor Evgueni E. Nesterov, Northern Illinois University, USA, *“Amplifying Fluorescent Chemo- and Biosensors Based on Conjugated Polymers”*
- Nov 12 Professor Andrei Kutateladze, University of Denver, USA, *“ESIPT in Photoassisted Synthesis: Maximizing Step-Normalized Increases in Molecular Complexity en Route to Polyheterocyclic Molecular Architectures”*
- Nov 19 Professor P. S. Vijayakumar, INST, Mohali, India, *“Nano-Assisted Future Farms”*
- Dec 03 Professor A Ajayaghosh, CSIR-NIIST, Trivandrum, India, *“Revisiting Diels-Alder Type Photocycloaddition Reactions: Attempts to Translate Ideas and Knowledge”*
- Dec 17 Professor Ken D Shimizu, University of South Carolina, USA, *“Studying non-covalent interactions using molecular balances and rotors”*

Spring 2023 (January 14 – May 20, 2023)

- Jan 14 Dr. C. S. Gopinath, CSIR-National Chemical Laboratory, Pune, India on *“Key Issues in Solar Water Splitting and Possible Approaches to Tackle Them”*
- Jan 28 Dr Suraj Soman, CSIR-NIIST, Thiruvananthapuram, India on *“Ambient/Indoor Light Recycling: Realizing a Battery-free World”*
- Feb 11 Dr Srivalleesha Mallidi, Department of Biomedical Engineering, Tufts University on *“Photoacoustic imaging for treatment guidance, dosimetry and tumor recurrence prediction”*
- Feb 18 Professor Suman De Sarkar, IISER Kolkata, India, on *“Electro-organic Synthesis”*
- Feb 25 Mr. Rahul Prakash, University of South Carolina, USA, on *“Cooperative Supramolecular Polymerization of Triphenylamine bis-Urea Macrocycles”*
- Feb 25 Mr. Dipendra Khadka, University of Miami, USA, on *“Value of molecular dynamics (MD) simulation in understanding the excited state behavior of molecules in restricted spaces”*
- Feb 25 Mr. Kiran Ingole, CSIR-NCL, Pune, India, will focus on *“Triazatruxene Amine Donor-Based Visible-Light Responsive Unsymmetrical Squaraine Dyes for Dye-Sensitized Solar Cells”*
- Mar 04 Ms. Debapriya Gupta, IISER Mohali, India, on *“Light-switchable’ metal complexes - Introducing phototunability through azoheteroarenes”*

Mar 04	Ms. Deepmala Singh, IIT Gandhinagar, India, on “ <i>Imaging of mitochondria/lysosomes in live cells and C. elegans</i> ”
Mar 04	Ms. Shaifali Sartaliya, INST Mohali, India, on “ <i>A new water-soluble drug delivery system via preferential molecular marriage over narcissistic self-sorting</i> ”
Mar 11	Professor Cornelia Bohne, University of Victoria, Canada on “ <i>Building Complexity into the Host-Guest Chemistry of Cucurbit[n]urils</i> ”
Mar 18	Professor Abraham Joy, School of Polymer Science and Polymer Engineering, Univ. of Akron, USA on “ <i>Macromolecular Strategies to Address Biofilms and Bacterial Colonization and Their Application to Wound Healing</i> ”
Mar 25	Professor Vandana Bhalla, Guru Nanak Dev University, India, on “ <i>Development of Supramolecular assemblies for molecular recognition of biologically important analytes</i> ”
Apr 15	Professor Shobhan Gaddameedhi, North Carolina State Univ., Raleigh, USA, on “ <i>Dynamic Interaction between the Biological Clock and Ultraviolet Light and its Impact on Circadian Rhythmicity, UV-DNA Repair and Photocarcinogenesis</i> ”
Apr 22	Professor Raghu Chitta, National Institute of Technology Warangal, India, on “ <i>The Chemistry of Bispyrrolic Dyes: A Cornucopia for Light Harvesting Systems</i> ”
Apr 29	Professor D Sureshkumar, IISER Kolkatta, India, on ““SO ₂ ” Should It Stay or Go: Switchable C- vs S-Centered Radicals Generation from Alkyl Sulfinates by Organophotocatalysis”
May 13	Dr Mintu Porel, IIT Palakad, India, on “ <i>Macromolecules with tunable functional groups for environmental remediation and biological applications</i> ”
May 13	Cultural event by Ms Shreya Arunkumar

Fall 2023 Session (September 02 – December 16, 2023)

Sep 02	Professor E D Jemmis, IISc, Bangalore, India on “Orbital Engineering: Cyclopropenium cation to A Unified Structural Chemistry of Boron”
Sep 09	Professor Kenneth Hanson, Florida State University, USA on “Harnessing Molecular Photon Upconversion Using Self-Assembled Multilayers on Metal Oxide Surfaces”
Sep 16	Professor P V Kamat, Notre Dame University, USA, on “(i) Metal Halide Perovskite-Molecular Hybrids for Capture and Conversion of Light Energy and (ii) How to make your next paper scientifically effective. Mastering the Art of Scientific Publication”
Sep 23	Professor V G Anand, IISER Pune, India, on “Aromatic, Antiaromatic and Radicaloid Porphyrinoids”
Sep 30	Ms Sunandita Paul, TIFR –Mumbai, India on “Vibrational Snapshots of Ultrafast C-H Bond Photoactivation inside a Water-soluble Nanocage”
Sep 30	Ms Ashmita Biswas, INST Mohali, India on “Fixing the challenges of the electrochemical ammonia synthesis: Favoring the unfavored”

Sep 30	Mr Amal Sam Sunny, Univ. Miami, USA on “Acceleration of Diels-Alder Reactions by Confinement”
Oct 07	Professor V Ramamurthy, Univ. Miami, USA on “Normal, Extraordinary and Pathological Science”
Oct 14	Professor Fazalurahman Kuttassery, University of Calicut, India on “Two-Electron Water Oxidation as a Key-Step for Solar Fuel Production”
Oct 21	Professor Carlos E. Crespo-Hernández, Case Western Reserve University, USA on “Photochemistry of Sulfur-Substituted Nucleic Acid and Other Organic Compounds for Application in the Photodynamic Therapy of Cancers”
Oct 28	Professor Silas Blackstock, University of Alabama, USA on “Photo-Electro Switchable Materials”
Nov 04	Professor Igor Alabugin, Florida State University, USA on “Harnessing Transient Antiaromaticity”
Nov 11	Professor Víctor García-López, Louisiana State University, USA on “Light-activated molecular machines and switches operating in lipid membranes”
Nov 18	Professor Bruce Armitage, Corneigie Mellon Univserity, USA on “Illuminating DNA and RNA using Fluorescent PNA Probes”
Nov 24	Thanksgiving Break
Dec 02	Professor Kevin Stamplecoskie, Queen's University, Ontario on “Light Activated Size Focussing of Metal Nanoclusters and their Utility as Photocatalyst/Sensitizers”
Dec 09	Professor Ramendra S Dey, INST-Mohali, India on “Electrochemical Activation of Inert N ₂ Molecules for the Production of Ammonia”
Dec 16	Ms. Garima Bhutani, IISER-, Mohali on “pH-Dependent Ultrafast Excited-State Dynamics of Large Stokes-Shifted Red Fluorescent Proteins (LSS RFPs)”
Dec 16	Mr Vaitheesh Jayapalan, University of Miami on “Enhanced photodimerization of small organic molecules in water”
Dec 16	Mr Himanshu Kumar, IISER, Mohali on “Light-triggered Phase Transition in Azoheteroarenes and their Applications in Solar Thermal Energy Storage Molecular Devices (ESMDs) and Photolithography”

Spring 2024 Session (Jan 27 – Jun 01, 2024)

Jan 27	Professor Masaoki Kawasumi, University of Washington, USA on “UV-Induced DNA Damage Response, Epigenetic Abnormalities, and Skin Cancer”
Feb 03	Professor Rajadurai Chandrasekar, University of Hyderabad, India on “Mechanophotonics & Crystal Photonics Foundry: The Emergence of Organic Crystals as New Materials for Photonic Circuits”

Feb 10	Professor Soumen De, IISER Thiruvananthapuram, India on “Chiral Photoswitches and their application”
Feb 17	Professor Shanmugaraju, Sankarasekaran, IIT-Palakad, India on “Tröger's base-Amino-1,8-Naphthalimides (TBNaps): An Emerging Supramolecular Scaffolds for Novel Self-Assembly Structures and Materials Design”
Feb 24	Professor Eric Masson, Ohio University, USA on “Supramolecular Lego with Cucurbiturils and Lanthanides”
Mar 02	Professor Subratim Banerjee, IISER Kolkata, India on “Self-assembled Cyano-substituted Stilbenes: Photoluminescent and Photoresponsive Organic Materials in Aqueous Media”
Mar 09	Professor Anunay Samanta, University of Hyderabad, India on “Photo-Excited Lead Halide Perovskite Nanocrystals”
Mar 16	Professor Mathieu Frenette, University of Quebec at Montreal, Canada on “From Mechanisms to Applications and Back: Triumphs and Breakthroughs in (Photo)Chemical Oxidation Reactions”
Mar 23	Professor Jatish Kumar, IISER Tirupathi, India on “Optical Activity at the Nanoscale: From Chiral Light Absorbing to Chiral Light Emitting Materials”
Mar 30	Mr Lloyd Lapoot, Brooklyn College of CUNY, USA on “Photobluening and Truncation of a Cyanine Dye by Singlet Oxygen and Retro-Diels-Alder Processes”
Mar 30	Ms Raina Sharma, INST-Mohali, India on “Thermo-Catalytic Synthesis of Value-Added Chemicals from Biomass Derived Precursors”
Mar 30	Mr Joseph O'Shea, Univ. Illinois Chicago, USA on “Doublet Spin State Mediated Photoluminescence Upconversion in Organic Radical Donor-Triplet Acceptor Dyads”
Apr 06	Professor Leonard R. MacGillivray, University of Sherbrooke, Canada on “Making Molecules in Crystals with Light”
Apr 13	Professor Pengfei Wang, Univ. Alabama at Birmingham, USA on “Application of benzylic bond breaking facilitated by the excited state meta effect”
Apr 20	Professor Y Adithya Lakshmana, IISER Thiruvananthapuram, India on “Early-time structural dynamics upon photoexcitation: A multifaceted spectroscopic perspective”
Apr 27	Professor Linda Shimizu, Univ South Carolina, USA on “Bis-Urea Macrocycles: Assembly to Functional Supramolecular Polymers and Crystals”
May 04	Professor P P Neelakandan, INST-Mohali, India on “Stimuli-responsive and Mechanically Flexible Single Crystals of Imino-Boron Compounds”

- May 11 Professor Cristina Kurachi, University of São Paulo, Brazil on “Physico-chemical challenges and new strategies for antimicrobial PDT in biofilms”
- May 18 Professor Andrew B. Greytak, Univ. South Carolina, USA on “Measuring and visualizing photocurrent in colloidal quantum dot films”
- May 25 Ms Jesna Siby, CSIR-NCL, India on “Design and Synthesis of Dimeric Squaraine Dyes for Dye-Sensitized Solar Cells”
- May 25 Ms Anu Pradeep, Univ. Miami, USA and Mr Cory H Rogers, Univ. Alabama, USA on “Self-assembly of o-nitrosocumene in a solution state and its segregation within supramolecular structures”
- May 25 Ms Serah Essang, Brooklyn College of CUNY, USA on “Production of Bioactive Products via Biomimetic Photooxidation: Adjuvancy Studies in the Photokilling of Ovarian Cancer Cells”
- Jun 01 Professor Tito Scaiano, Univ. Ottawa, Canada on “Decatungstate photochemistry: a wannabe carbonyl triplet”
- Jun 01 Professor Jack Saltiel, Florida State University, USA on “The 2 A State of 1,3-Cyclohexadiene: Is it an Intermediate in 1 B State Photochemical Ring Opening?”
- Jun 01 Professor Dario Bassani, Univ. Bordeaux, France on “Fundamental and practical aspects of double bond photoisomerization”

Fall 2024 (Sep 07-Dec 14, 2024)

- Sept 07 Professor Jagadees J. Vittal, NUS, Singapore on “My adventure with crystals under UV light”
- Sept 21 Professor Francis C Spano, Temple University on “Polarons (and Excitons) in Organic Materials”
- Sept 28 Professor Satish Patil, SSCU, Indian Institute of Science (IISc) on “Science of Triplet Excitons”
- Oct 05 Dr. Alessandra Nara de Souza Rastelli, Department of Restorative Dentistry, School of Dentistry, Araraquara, Sao Paulo State University, Brazil on “Antimicrobial Photodynamic Therapy in Dentistry: From the Basis to the Clinical Applications”
- Oct 12 Dr Thomas S Teets, Uni. Houston on “Advances in the Design and Applications of Molecular Phosphors and Photosensitizers”
- Oct 19 Professor Kumar Biradha, Department of Chemistry, Indian Institute of Technology, Kharagpur-721302, W. B., India on “Light-induced

Dimerizations/Polymerizations of Olefins and Implications of Photochromism on Conductivity and Magnetism in the Crystalline Solids”

- Oct 26 Dr. Enrico Tapavicza, Universität Regensburg, Germany on “Computational chemistry meets photochemistry - Insights from non-adiabatic molecular dynamics”
- Nov 02 Professor J Sivaguru, BGSU on “Channeling Excited State Reactivity In Molecular Scaffolds”
- Nov 09 Professor Vladimir Popik, University of Georgia on “The photo-click: spatiotemporal control of SPAAC ligation”
- Nov 16 Professor Clemens Burda, Case Western Reserve University on “Teaching An Old Dog New Tricks: Femtosecond Time-resolved Spectroscopy of Betaine-30 in Novel Solvent Environments”
- Nov 23 Ms. Pabasara Samarawickrama, College of Staten Island of CUNY on “A Polymer Supported Photosensitizer for Water Disinfection: Effect of Diffusion on Reactions with Singlet Oxygen”
- Nov 23 Ms. Wegood M. Awad, Global Fellowship Program, New York University (NYU) & NYU Abu Dhabi (NYUAD), Graduate School of Arts and Science (GSAS) on “UV-Triggered Explosive Nanocrystals for Inducing Cell Death without Initiating Inflammatory Responses”
- Dec 07 Professor Sherri A. McFarland, UTA on “Light-triggered metallodrugs for cancer therapy”
- Dec 14 Professor P Rajamalli, MRC, IISc on “Materials for light emitting devices”

Spring 2025 Session (Jan 25 – May 24, 2025)

- Jan 25 Professor Yoshimi Yasuharu University of Fukui Faculty of Engineering, Japan on “Two-Molecule Photoredox System for Organic Synthesis”
- Feb 01 Professor Yohei Ishida, Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, Fukuoka, Japan on “Photochemistry of Molecular Assemblies on Two-Dimensional Coulombic Fields”
- Feb 08 Professor Marc Knecht, Department of Chemistry, University of Miami, Coral Gables, FL 33146 on “Exploiting Light for Catalytic Environmental Remediation”
- Feb 15 Professor Padmabati Mondal, IISER-Tirupati, India on “Computational photophysics and photochemistry of organic chromophores”
- Feb 22 Professor Henry Dube, Chair of Organic Chemistry I, Department Chemistry and Pharmacy, Friedrich Alexander University Erlangen-Nürnberg, Germany on

“Indigoid dyes and beyond for light responsive nanosystems and molecular machines”

- Mar 01 Professor Jeffrey Rack, Uni New Mexico on “A New Look at the Magneto-Optical Activity of Metalloporphyrins”
- Mar 08 Professor Shuichi Hashimoto, Gunma Kogyo Koto Senmon Gakko: Maebashi, Gunma, JP on “How easy it is to melt ice microparticles photothermally?”
- Mar 15 Professor Judy I-Chia Wu, Univ. Houston on “Finding Ways to Cheat Transition State Theory Better)in Chemical Reactions”
- Mar 22 Professor Barney Ellison, University of Colorado, Boulder on “1991, Josef Michl Comes to the Univ. of Colorado”
- Mar 22 Dr. Murthy S. Gudipati , Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA on “Low-temperature Chemistry: From Lab to Space”
- Mar 22 Dr Massimo Olivucci, BGSU on “The photochemistry of anti-Bredt olefins is driven by a conical intersection with a nonclassical carbocation structure ”
- Mar 29 Professor Pance Naumov, NYU Abu Dhabi; Global Network Professor of Chemistry, NYU on “The crystal *is* the machine: Amplifying motion from the molecular to the macroscopic scale”
- Apr 05 Professor Francis D'Souza, UNT on “Nano Carbons in Mimicking the Early Events of Photosynthetic Antenna and Reaction Center”
- Apr 12 Professor Mainak Banerjee, Chemistry, BITS Pilani, Goa Campus on “Azole-based AIE/ESIPT-active small-molecule fluorophores as molecular and supramolecular sensors”
- Apr 19 Professor Anindya Datta, Chemistry, IIT-B, India on “The intrigue and prospects of fluorogens”
- Apr 26 Professor Dominik Heger, Masaryk University, Brno, Czech Republic on “Photochemistry and Photophysics in Frozen Solutions”
- May 03 Professor Cornelia Bohne, Univ. Victoria, Canada on “A Systems Chemistry Approach for Building Functional Host-guest Supramolecular Systems”
- May 03 Professor Miguel Garcia-Garibay, UCLA on “Photochemistry in Anisotropic Media: Exploring Uncharted Territories with a Mentor and Good Friend”
- May 03 Professor Frank H Quina Universidade de São Paulo, São Paulo, Brazil on “Dick Weiss and his impact on chemistry in South America”
- May 10 Dr Tomáš Slanina, Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences, Praha 6, Czech Republic on “Towards Reversible and Multimodal Photochemistry”

- May 17 Ms. Akshaya Iyer, Brooklyn College of CUNY, USA on “Semi-Curtin-Hammett Behavior in the $^1\text{O}_2$ Oxidation of a Prenyl Phenol and Phenolate Anion: Mechanistic Studies”
- May 17 Ms Isuri Wijesekera, University of South Carolina, USA on “Kinetic Control and Trapping in the Supramolecular Polymerization of m-Terphenyl Bis-Urea Macrocycles”
- May 17 Ms. Sarita Rawool, Univ. Illinois Chicago, USA on “Triplet Exciton Delocalization in Organic-Quantum Dots Hybrid Photo-Systems: A Pathway to Improved Phototherapy and Theragnostics”
- May 17 Ms. Anu Pradeep, Univ. Miami, Coral Gables, USA on “Confinement as a tool to control multiple equilibria between o-nitrosocumene species in aqueous solutions”
- May 24 Dr Debanjana Ghosh, Southern Illinois University Illinois on “Under the Spotlight: Exploring the Photophysics of Triazoles”

Fall 2025 Session (Sept 06 – Dec 06, 2025)

- Sept 06 Prof Shane Parkar, Case Western Reserve University on “Unraveling Photochemistry with First Principles Simulations”
- Sept 13 Prof Lei Zhu, Florida State University on “Photoconversion of Triazoles to Indoles”
- Sept 20 Prof Satrajit Adhikari, IACS, India on “The Role of Electron-Nuclear Coupling on Photo-Electron/Emission Spectroscopy, Reactive Scattering of Chemical Reaction, Phase Transition of Perovskites, Chemisorption of Gas Molecules on Surfaces”
- Sept 27 Professor Ashwani K. Tiwari, IISER Kolkata, India on “Dynamics of atoms and molecules under intense ultrashort laser pulses”
- Oct 04 Professor Dr. Oriol Vendrell, Heidelberg University, Germany on “Molecular Polaritonics: Modifying Chemistry with Confined Light”
- Oct 25 Professor Mrinmoy De, IISc, Bengaluru on “Nanomaterials in Photocatalyzed Organic Transformations”
- Nov 01 Professor Kana Takematsu, Bowdoin College, USA on “The Challenges and Joys of Moving Protons”
- Nov 08 Professor Jonathan Rochford, University of Massachusetts Boston, USA on “Mechanistic Studies of Mn(I) and Re(I) Tricarbonyl CO_2 Reduction Electro- and Photo-Catalysts”

Dec 06 Professor Elena Galoppini, Rutgers University, Newark, USA on “Light at Interfaces: Functionalization of Nanostructured Semiconductor Surfaces with Light Harvesters Using Linker Design”

Spring 2026 Session (Jan 31 – May 09, 2026)

Jan 31 Professor Prashanth Paddutoori, University of Minnesota, Duluth, USA on “Main-Group Porphyrin Chemistry: Advances and Opportunities”

Feb 07 Professor Stephen Craig, Duke University, USA on "The Interplay of Light and Mechanochemistry"

Feb 14 Robert J. McMahon, Univ. Wisconsin Madison, USA on "Spectroscopy and Photochemistry of Relevance to Astrochemistry”

Feb 21 Professor Inamur Rahaman Laskar, BITS Pilani, India on "Luminescent Probes: A Robust Platform for Multi-Analyte Sensing"

Feb 28 Professor Animesh Samanta, Shiv Nadar University, Delhi, India on “IndiFluors: Interesting Chemical Tools for Optical Imaging”

May 07 Professor Wenfang Sun, University of Alabama, USA on “Developing Ir(III) Complexes as Photosensitizers for Photodynamic and Photothermal Therapy”

May 14 Professor Fabiano Rodembusch Univ. Federal do Rio Grande do Sul (UFRGS), Brazil on “Excited State Intramolecular Proton Transfer (ESIPT): A General Overview”

May 21 Professor Ankit Jain, Brooklyn College, CUNY, USA on "Supramolecular control of internal architecture in biomolecular condensates"

Mar 28 Professor Nail Saleh Ibrahim, UAE University, UAE on “Global Fitting of Exciton Dynamics in Solid Optical Materials: From Molecular Chemistry to Solid Physics”

Apr 04 Professor Erik Leite Bastos, University of São Paulo, Brazil on “Finding and Reshaping Natural Chromophores”

Apr 11 Professor Carlos A Chesta, Universidad Nacional de Río Cuarto, Argentina on “From light to heat: a thermodynamic framework for quantifying photothermal efficiency”

Apr 25 Professor Mauricio Baptista, University of São Paulo, Brazil on "The visible light action spectra on mitochondria activity"

May 02 Professor Claudio Borsarelli, Universidade Nacional de Santiago del Estero, Argentina on "The role of oxygen in the photosensitized crosslinking of proteins"

May 09 Professor Cassius V. Stevani, University of São Paulo, Brazil on "History, ecology, mechanism, biochemistry and applications of fungal bioluminescence"