

CURRICULUM VITAE

Dr. Jyotirmoy Maity

Department of Chemistry
St. Stephen's College
University of Delhi, Delhi

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Career objective: To serve as a dedicated academic by sharing my expertise in organic and bioorganic chemistry through teaching, research, and student mentoring. I strive for continuous professional development and the advancement of scientific knowledge through impactful research, collaboration, and lifelong learning, with the aim of making meaningful contributions to academia and society. I want to inspire students to embrace challenges in the chemical sciences for cultivating scientific curiosity and critical thinking.

Teaching experience:

- **Assistant Professor** in the Department of Chemistry, St. Stephen's College, University of Delhi, Delhi, India (July 2016 – till date)
- **Assistant Professor (Ad-hoc)** in the Department of Chemistry, University of Delhi, Delhi, India (January 2009 – September 2009)

Researcher Positions:

- **Research Associate** with Professor Ashok K Prasad, Department of Chemistry, University of Delhi, Delhi (**August 2015 – June 2016**)
- **Post-doctoral Researcher**, Johnston Group, Department of Organic Chemistry, Stockholm University, Sweden (**March 2015 – June 2015**)
- **Post-doctoral Researcher**, Stromberg Group; Department of Biosciences and Nutrition, Novum, Karolinska Institute, SE-141 83 Huddinge, Sweden (**May 2011- February 2015**)
- **Post-doctoral Fellow** in Koksche group, Department of Chemistry and Biochemistry, Free University of Berlin, Takustrasse 3, 14195 Berlin, Germany (**October 2009- March 2011**)
- **Research Scientist** in the Chiral Catalysis Department, API, R&D Centre, Jubilant Organosys Limited, Noida, India (**August 2008- January 2009**)

Educational Qualifications:

- **Doctor of Philosophy** (Bioorganic Chemistry; September 2002- February 2008)
Department of Chemistry, University of Delhi, Delhi, India;
Title of thesis: Novel synthesis of unnatural/ modified nucleosides of biological importance.
- **Master of Science** (Organic Chemistry, July 2000- May 2002)
Department of Chemistry, University of Delhi, Delhi, India
- **Bachelor of Science** (Chemistry Hons., July 1997- June 2000)
RKMR College, Calcutta University, Narendrapur, West Bengal, India
- **12th (Higher Secondary)** 1997 RK Mission Vidyamandir, Belur, West Bengal (WBCHSE)
- **10th (Secondary)** 1995 RK Mission Ashram Vidyalaya, Narendrapur, West Bengal (WBBSE)

Academic Distinctions:

- **Postdoctoral Fellow** of Dahlem Research School, FU Berlin, Germany (Oct 2009 – March 2011)
- **Visiting Research Fellow** at Nucleic Acid Centre, University of Southern Denmark, Denmark (October 2004 – April 2006)
- **CSIR-JRF** (Jan 2003 – Sept 2004) & **CSIR-SRF** (May 2006 - Dec 2007)
- **Project Fellow** of **ISIS Pharmaceuticals Ltd.** (August 2002 - December 2002)
- **Qualified NET** (June 2002) & **GATE** (Feb 2002)

Professional Summary:

Teaching experience

- **Under-graduate**
 1. Fundamental of Organic Chemistry, Stereochemistry, Aliphatic Hydrocarbon
 2. Carbohydrate chemistry & Heterocyclic Chemistry
 3. Amino acids, Proteins and Peptide Chemistry & Nucleic acids
 4. DSE Polymer Chemistry
 5. DSE Green Chemistry
 6. SEC Pharmaceutical Chemistry
 7. SEC Cosmetic Chemistry
 8. Environmental Science
- **Post-graduate**
 1. Chemistry of Life Processes
- **Supervision of thesis (M. Tech.)**

Mr. Pinaki Saha for successful submission of his thesis entitled 'Synthesis of proline-leucine chimera' in a joint course organised by Free University of Berlin, Berlin, Germany and University of Delhi, Delhi, India (thesis submitted in December 2010).

Administrative experience

Staff advisor of societies:

1. **Bengali Literature Society** (January 2022 – till now)
2. **Chemistry Society** (October 2023- June 2025)
3. **North-East Society** (July 2019- June 2021)

Member of College Admission team: 2019-20, 2021-22, 2022-23, 2023-24, 2024-25, 2025-26.

Member of Steering Committee of NAAC team: Academic session **2020-2021**

Educational trips: with **Chemistry Society (3) & Environmental Society (3)**

Research expertise

- **Developed biocatalytic methodology** for separation of 1-(α/β -D-pentofuranosyl)thymine from corresponding mixtures of pentofuranosyl/ pyranosyl thymine. Synthesized triazolyl sugars and their derivatives by **biocatalytic acylation** (DU).
- **Expertise in Solid phase peptide synthesis** of peptide sequences containing natural and unnatural amino acids using Fmoc-strategy. Expert in designing synthetic schemes, **synthesis of unnatural/ modified amino acid analogues and synthesis of peptides** with biological importance. Experienced in **NMR and CD spectroscopic studies of short peptides** and fluorometric studies of fluorescent amino acid monomers (FU Berlin).
- Synthesized **2'-O-modified thymidine** and **several derivatives of 5-methylcytosine-2'-amino-LNA** for their incorporation into an oligonucleotide. Capable of performing hybridization and fluorescence studies of decamer oligonucleotides with 2'-amino-LNA monomer (KI Stockholm).
- **Efficient benzoylation** process developed for ribo- and 2'-deoxyribonucleosides using benzoyl cyanide reagent. **Developed efficient bromination methodology** for nucleosides (DU).
- **Industrial Research experience** of synthesizing enantiomerically pure drugs and separation of chiral molecules from their racemic mixtures by **biocatalytic dynamic kinetic resolution**. (Jubilant Pharma. Noida).

Research Publications:

1. Sumit Kumar, Aditi Arora, Gautam Deo, Mrityunjay K. Tiwari, **Jyotirmoy Maity**, Brajendra K. Singh. Microwave-Assisted Synthesis of Base Modified Furo [3,2-c] quinolone Nucleosides and Insights into Their Photophysical Properties. *Dyes and Pigments*, **2025**, 240, 112826.
2. K Kavita, Sumit Kumar, Vipin K Maikhuri, Gautam Deo, Mrityunjay K. Tiwari, **Jyotirmoy Maity**, Brajendra K. Singh, Design, Synthesis, and In Silico Studies of Coumarin-Chalcone Hybrids Linked via 1,2,3-Triazole as Potential Antifungal Agents. *Synlett*, **2025**, DOI: 10.1055/a-2577-0837.
3. Neetu Bhattacharya, Pooja Jha Maity, **Jyotirmoy Maity**, Amitabh Bhattacharya. Discovery, biological activities and repurposing of artemisinins: A narrative review. *Journal of microbiology, biotechnology and food sciences*, **2025**, 15 (2), e11276.
4. Aditi Arora, Sumit Kumar, **Jyotirmoy Maity**, Brajendra K. Singh, Microwave-assisted synthesis of base-modified fluorescent 1, 4-dihydropyridine nucleosides: photophysical characterization and insights. *RSC Adv.*, **2024**, 14, 39833-39843.
5. Sumit Kumar, Aditi Arora, Sandeep Kumar, **Jyotirmoy Maity**, Amita Dua, Brajendra K. Singh, Synthesis of base-modified fluorescent furo[3,2-c]coumarin nucleosides and their photophysical studies. *Journal of Molecular Structure*, **2024**, 1321 (3), 139915.
6. **Jyotirmoy Maity***, Pooja Jha Maity, Satyakam Guha, Smriti Srivastava, Naturally occurring coumarin glycosides: A review, *Trends in Carbohydrate Research*, **2024**, 16 (1), 46-88.
7. Aseem Grover, Laxmi Devi, **Jyotirmoy Maity**, Gurvinder Singh Bumbrah, Anirban Das, A comprehensive review on the detection of latent fingerprints using carbon dots, *Egyptian Journal of Forensic Sciences*, **2024**, 14 (1), 16.
8. S Kumar, A Arora, S Kumar, R Kumar, **Jyotirmoy Maity**, Brajendra K. Singh, Passerini reaction: Synthesis and applications in polymer chemistry, *European Polymer Journal*, **2023**, 190, 112004.
9. Harbansh Singla, Sandeep Kumar, **Jyotirmoy Maity**, Ashok K. Prasad, Chemoenzymatic synthesis of bridged homoloxofuranosyl pyrimidine nucleosides: Bicyclic AZT analogues, *Carbohydrate Research*, **2023**, 527, 108813.
10. Kavita, Vipin K Maikhuri, Harbansh Singla, **Jyotirmoy Maity**, Ashok K. Prasad, A highly efficient and facile one pot synthesis of novel 1-glycopyranosyl-4-biaryl butenone derivatives, *Synthetic Communications*, **2023**, 53 (9), 640-647.
11. Harbansh Singla, **Jyotirmoy Maity**, Sandeep Kumar, K Kavita, Riya Chaudhary, Ashok K. Prasad, Chemoenzymatic Synthesis of arabino-Configured Bicyclic Nucleosides, *Synthesis*, **2023**, 55, 1-8.
12. Vineet Verma, Himshikha Sharma, **Jyotirmoy Maity**, Ravi Kumar, Vipin K. Maikhuri, Phosphoric acid-catalyzed synthesis of fused pyridocoumarins and their acidochromic applications, *Journal of Molecular Structure*, **2023**, 1291, 136026.
13. Akash Anand, Rajneesh Kumar, **Jyotirmoy Maity**, Vipin K. Maikhuri, Recent progress in the Cu-catalyzed multicomponent synthesis of 1,4-disubstituted 1,2,3-triazole, *Synthetic Communication*, **2023**, 53 (5), 345-375.

14. Sandeep Kumar, Rajni Johar Chhatwal, **Jyotirmoy Maity**, Nihar Nalini Senapati, Ashok K. Prasad, Fujiwara-Moritani assisted synthesis of conjugated 2,3-dihydrofuran trienes and corresponding 2,3-dihydrobenzofuran derivative. *ChemistrySelect* **2023**, 8 (2), e202204064. doi.org/10.1002/slct.202204064.
15. Sandeep Kumar, Sumit Kumar, Aditi Arora, Ashok K. Prasad*, **Jyotirmoy Maity***, 5-Formyluridine and its synthetic applications. *ChemistrySelect*, **2022**, 7 (45), e202203432. doi.org/10.1002/slct.202203432.
16. Vipin K. Maikhuri, **Jyotirmoy Maity**, Smriti Srivastava and Ashok K. Prasad, Transition metal-catalyzed double Cvinyl-H bond activation: synthesis of conjugated dienes. *Organic and Biomolecular Chemistry*, **2022**, 20, 9522-9588.
17. Suman Das, **Jyotirmoy Maity***, Tarun K Panda*, Metal/non-metal catalyzed activation of organic nitriles, *The Chemical Record*, **2022**, 22 (12), e202200192. DOI: 10.1002/tcr.202200192.
18. Arkaja Goswami, Ashok K. Prasad, **Jyotirmoy Maity**, Neerja Khaneja, Synthesis and applications of bicyclic sugar modified locked nucleic acids: A review. *Nucleosides, Nucleotides and Nucleic Acids*, **2022**, 41, 5-6, 503-529.
19. Dmytro Honcharenko, Cristina S.J. Rocha, Karin E. Lundin, **Jyotirmoy Maity**, Stefan Milton, Ulf Tedebark, Merita Murlota, Malgorzata Honcharenko, Andis Slaitas, CI Edvard Smith, Rula Zain, Roger Stromberg, 2'-O-(N-(Aminoethyl)carbamoyl)methyl modification allows for lower phosphorothioate content in splice-switching oligonucleotides with retained activity. *Nucleic Acid Therapeutics*, **2022**, 32(3), 221-233.
20. Rajesh Kumar, **Jyotirmoy Maity**, Divya Mathur, Abhishek Verma, Neha Rana, Manish Kumar, Sandeep Kumar and Ashok K. Prasad; Green synthesis of triazolo-nucleoside conjugates via azide-alkyne C-N bond formation. *Physical Sciences Review*, **2022**, doi.org/10.1515/psr-2021-0090.
21. Sandeep Kumar, **Jyotirmoy Maity**, Banty Kumar, Sumit Kumar, and Ashok K. Prasad; Chemical and chemoenzymatic routes to bridged homoarabinofuranosyl pyrimidines: Bicyclic AZT analogues. *Beilstein Journal of Organic Chemistry*, **2022**, 18, 95-101.
22. Sandeep Kumar, Sumit Kumar, **Jyotirmoy Maity**, Banty Kumar, Shilpika Bali Mehta and Ashok K. Prasad; Synthesis and photophysical properties of 5-(3''-alkyl/aryl-amino-1''-azaindolizin-2''-yl)-2'-deoxyuridines. *New Journal of Chemistry*, **2021**, 45, 16635-16647.
23. Vineet Verma, **Jyotirmoy Maity**, Vipin K. Maikhuri, Ritika Sharma, Himel K. Ganguly and Ashok K. Prasad; Double-headed nucleosides: Synthesis and applications. *Beilstein Journal of Organic Chemistry*, **2021**, 17, 1392-1439.
24. Banty Kumar, **Jyotirmoy Maity**, Bhawani Shankar, Sandeep Kumar, Kavita, Ashok K. Prasad; Synthesis of D-glycopyranosyl depsipeptides using Passerini reaction. *Carbohydrate Research*, **2021**, 500, 108236-108243.
25. **Jyotirmoy Maity**, Smriti Srivastava, Vinod Khatri, Rituparna Saha, Shramana Ghosh and Ashok K. Prasad; Biochemically Synthesized Potential Aminocoumarin-Glycoside Antibiotics. *Trends in Carbohydrate Research*, **2020**, 12, 2, 1-16.

26. Neha Rana, Manish Kumar, Harbansh Singla, **Jyotirmoy Maity** and Ashok K. Prasad; Synthesis of conformationally restricted C-4'-spirofurano-ribonucleosides. *Trends in Carbohydrate Research*, **2020**, 12, 3, 16-24.
27. Smriti Srivastava, **Jyotirmoy Maity**, Vipin K. Maikhuri, Amitabh Jha, and Ashok K. Prasad, Synthesis and Application of Coumarin Glycosides: A Review, *Trends in Carbohydrate Research*, **2020**, 12, 3, 25-48.
28. Banty Kumar, Bhawani Shankar, Sandeep Kumar, **Jyotirmoy Maity**, Ashok K. Prasad, Multicomponent one pot synthesis of C-glycosides of 1-azaindolizines. *Synthetic Communications*, **2020**, 18, 2853-2859.
29. Rajesh Kumar, Devla Bimal, Kavita, Manish Kumar, Divya Mathur, **Jyotirmoy Maity**, Sunil K. Singh, M. Thirumal, Ashok K. Prasad, Synthesis and Antitubercular Activity of 4,5-Disubstituted N^1 -(5'-deoxythymidin-5'-yl)-1,2,3-triazoles, *Chemistry Select*, **2020**, 5, 8839-8845.
30. Sandeep Kumar, Harbansh Singla, **Jyotirmoy Maity**, Priyanka Mangla, Ashok K. Prasad, Chemo-enzymatic route to bridged homolycofuranosyl-pyrimidines. *Carbohydrate Research*, **2020**, 492, 108013.
31. **Jyotirmoy Maity**, Smriti Srivastava, Rhea Rana, Bhavani Shankar, Neena Khanna, Ashok K. Prasad, Biochemical synthesis of coumarin glycosides: A review. *Journal of Indian Chemical Society*, **2020**, 97, 117-134.
32. Priyanka Mangla, **Jyotirmoy Maity**, Pallavi Rungta, Vineet Verma, Yogesh S. Sanghvi and Ashok K. Prasad; Synthesis of 6'-methyl-2'-O,4'-C-methylene- α -L-ribofuranosyl-pyrimidine nucleosides. *Chemistry Select*, **2019**, 4, 3241-3246.
33. Balram Singh, Sandeep Kumar, **Jyotirmoy Maity**, Indrajit and Ashok K. Prasad; Bamford-Stevens reaction assisted synthesis of styrene C-glycosides. *Synthetic Communication*, **2019**, 49, 1906-1912.
34. Dmytro Honcharenko, Alok Juneja, Firoz Roshan, **Jyotirmoy Maity**, Lorena Galan-Acosta, Henrik Biverstal, Erik Hjorth, Jan Johnsson, Andre Fisahn, Lennart Nilsson and Roger Stromberg; Amyloid- β peptide targeting peptidomimetics for prevention of neurotoxicity. *ACS Chemical Neuroscience*, **2019**, 10, 1462-1477.
35. Smriti Srivastava, Vipin K. Maikhuri, Rajesh Kumar, Kapil Bohra, Harbansh Singla, **Jyotirmoy Maity**, Ashok K. Prasad; Synthesis and Photophysical Studies on $N1$ -(2'-O,4'-C-Methyleneribofuranonucleoside-3'-yl)-C4-(coumarin-7-oxymethyl)-1,2,3-triazoles; *Carbohydrate Research*, **2018**, 470, 19-25.
36. Pallavi Rungta, Priyanka Mangla, Vinod Khatri, **Jyotirmoy Maity** and Ashok K. Prasad; Biocatalytic route to C-4'-spiro-oxetano-xylofuranosyl pyrimidine nucleosides. *Biocatalysis and Biotransformation*, **2018**, 36, 1-11.
37. Smriti Srivastava, Devla Bimal, Kapil Bohra, Balram Singh, Prija Ponnann, Ruchi Jain, Mandira Varma Basil, **Jyotirmoy Maity**, M. Thirumal and Ashok K. Prasad; Synthesis and Anti-tubercular Activity of 1- β -D-Ribofuranosyl-4-coumarinyloxymethyl- / -coumarinyl-1,2,3-triazole, *European Journal of Medicinal Chemistry*, **2018**, 150, 268-281.

38. Neha Rana, Manish Kumar, Ankita Singh, **Jyotirmoy Maity**, Poonam Shukla and Ashok K. Prasad; Synthesis of novel 3'-azido-3'-deoxy- α -L-ribo configured nucleosides: A comparative study between chemical and chemo-enzymatic methodologies. *Nucleoside, Nucleotide and Nucleic Acids*, **2018**, 37, 217-231.
39. Banty Kumar, **Jyotirmoy Maity**, Amit Kumar, Vinod Khatri, Bhawani Shankar and Ashok K. Prasad. Synthesis of Novel 1-Glycosyl-4-aminomethyl-1,2,3-triazoles. *Chemistry of Heterocyclic Compounds*, **2018**, 54, 362-368.
40. Neha Rana, Manish Kumar, Vinod Khatri, **Jyotirmoy Maity** and Ashok K. Prasad; Enzymatic separation of epimeric 4-C-hydroxymethylated furanosugars: Synthesis of bicyclic nucleosides. *Beilstein Journal of Organic Chemistry*, **2017**, 13, 2078-2086.
41. Rajesh Kumar, Manish Kumar, Neetu Singh, Ankita Singh, **Jyotirmoy Maity** and Ashok K. Prasad; Chemo-enzymatic route to C-4'-spiro-oxetano- α -L-ribonucleosides. *Carbohydrate Research*, **2017**, 445, 88 -92.
42. Rajesh Kumar, Manish Kumar, **Jyotirmoy Maity** and Ashok K. Prasad; Chemo-enzymatic synthesis of 3'-O,4'-C-methylene-linked α -L-arabinonucleosides. *RSC Advance*, **2016**, 6, 82432-82438.
43. **Jyotirmoy Maity**, Dmytro Honcharenko and Roger Stromberg; Synthesis of Triamino Acid Building Blocks with Different Lipophilicities. *PLoS One*, **2015**, e0124046.
44. **Jyotirmoy Maity**, Dmytro Honcharenko and Roger Stromberg; Synthesis and fluorescence properties of two aromatic D-amino acids, (R)-2-amino-3-(4'-acetamido-[1,1'-biphenyl]-4-yl)propanoic acid and (R)-2-amino-4-(4'-N,N-dimethylamino-1',8'-naphthalimido)butanoic acid. *Tetrahedron Letters*, **2015**, 56, 4780-4783.
45. **Jyotirmoy Maity**, Ulla IM Gerling, Stella Vukelic, Andreas Schäfer, Beate Kokschi; Conformational investigation of short linear peptide containing proline-glutamate chimeras using NMR and CD spectroscopy. *Amino Acids*, **2014**, 46, 177-186.
46. **Jyotirmoy Maity***, Roger Stromberg*; *N*²-tert-Butoxycarbonyl-*N*⁵-[N-(9-fluorenylmethyloxy carbonyl)-2-aminoethyl]-(*S*)-2,5-diaminopentanoic acid. *Molbank*, **2014**, 3, M833.
47. Dmytro Honcharenko, Partha Pratim Bose, **Jyotirmoy Maity**, Firoz Roshan Kurudenkandy, Alok Juneja, Erik Flöistrup, Henrik Bivstøl, Jan Johansson, Lenart Nilsson, Andre Fisahn and Roger Stromberg; Synthesis and evaluation of antineurotoxicity properties of an amyloid- β peptide targeting ligand containing the triamino acid *N*²-(2-aminoethyl)-2,4-diaminobutanoate. *Organic & Biomolecular Chemistry*, **2014**, 12, 6684-6693.
48. **Jyotirmoy Maity***, Roger Stromberg*; An efficient and facile methodology for bromination of pyrimidine and purine nucleosides with sodium monobromoisocyanurate (SMBI). *Molecules*, **2013**, 18, 12740-12750.
49. **Jyotirmoy Maity**, Pinaki Saha, Ulla IM Gerling, Dieter Lentz and Beate Kokschi; An approach for simultaneous synthesis of *cis*- and *trans*-3-substituted proline-glutamic acid chimeras, *Synthesis*, **2012**, 44, 3063-3070.
50. Michael E. Østergaard, **Jyotirmoy Maity**, B. Ravindra Babu, Jesper Wengel, Patrick J. Hrdlicka; Novel insights into the use of Glowing LNA as nucleic acid detection probes – influence of labeling density and nucleobases. *Bioorganic & Medicinal Chemistry Letters*, **2010**, 20, 7265-7268.

51. Pankaj Kumar, **Jyotirmoy Maity**, Gaurav Shakya, Ashok K Prasad, Virinder S Parmar and Jesper Wengel; Synthesis and hybridization studies of α -configured arabino nucleic acids. *Organic & Biomolecular Chemistry*, **2009**, 7, 2389-2401.
52. **Jyotirmoy Maity**, Gaurav Shakya, Sunil K. Singh, Vasulinga T. Ravikumar, Virinder S. Parmar and Ashok K. Prasad; Efficient and regioselective enzymatic acylation reaction: separation of furanosyl and pyranosyl nucleosides. *Journal of Organic Chemistry*, **2008**, 73, 5629-5632.
53. Ashok K. Prasad, Vineet Kumar, **Jyotirmoy Maity**, Zhiwei Wang, Vasulinga T. Ravikumar, Yogesh S. Sanghvi and Virinder S. Parmar; Benzoyl Cyanide: A Mild and Efficient Reagent for Benzoylation of nucleosides. *Synthetic Communications*, **2005**, 35, 935–945.
54. Ashok K. Prasad, Vineet Kumar, **Jyotirmoy Maity**, Yogesh S. Sanghvi, Vasulinga T. Ravikumar and Virinder S. Parmar; Mild, efficient, selective and “green” benzoylation of nucleosides using benzoyl cyanide in ionic liquid. *Nucleosides, Nucleotides and Nucleic Acids*, **2005**, 24, 747–751.
55. Elena A. Markvicheva, Vladimir I. Lozinsky, Fatima M. Plieva, Konstantin A. Kochetkov, Lev D. Rumsh, Vitali P. Zubov, **Jyotirmoy Maity**, Rajesh Kumar, Virinder S. Parmar, and Yury N. Belokon; Gel-immobilized enzymes as promising biocatalysts: Results from Indo-Russian collaborative studies. *Pure and Applied Chemistry*, **2005**, 77, 227–236.
56. Anupam Bhattacharya, Ashok K. Prasad, **Jyotirmoy Maity**, Himansu, Poonam, Carl E. Olsen, Richard A. Gross and Virinder S. Parmar; Highly efficient and selective biocatalytic acylation studies on triazoylsugars. *Tetrahedron*, **2003**, 59, 10269-10277.

Conference Proceeding:

57. **Jyotirmoy Maity**, Roger Stromberg and Ashok K. Prasad; Bromination of Nucleosides by Sodium Monobromoisocyanurate (SMBI). *Seminar Proceeding of Recent Innovations in Chemical Sciences and Environment Technology*, 3rd -4th March **2017**, 19-20.
58. Lars Verdonck, **Jyotirmoy Maity**, Dmytro Honcharenko, A. Madder and Roger Stromberg; Imidazole containing building blocks for incorporation in oligonucleotides and PNA. *Collection of Czechoslovak Chemical Communication, Collection Symposium Series* **2014**, 14, 401-402.
59. **Jyotirmoy Maity**, Dmytro Honcharenko, Partha P. Bose, J. Johansson and Roger Strömberg; Ligands that Stabilize the Amyloid β -Peptide in a Helical Conformation Reduces A β Toxicity. *Proceeding of 32nd European Peptide Symposium*, **2012**, 458-459.
60. Sunil K. Singh, Raman K Sharma, **Jyotirmoy Maity**, Jesper Wengel, Virinder S. Parmar and Ashok K. Prasad; Greener Biocatalytic approach to the Nucleosides and their Precursors. *Nucleic Acids Symposium Series No. 52*, September 8, **2008**, 273-274.
61. Michael E. Ostergaard, **Jyotirmoy Maity**, Jesper Wengel, Patrick J. Hrdlicka; 2'-N-(Pyren-1-yl)carbonyl-2'-amino-LNA (locked nucleic acid): A versatile label for nucleic acid detection. *Abstracts of Papers, 235th ACS National Meeting*, New Orleans, United States, April 6-10, **2008**.

Patent Application:

1. Roger Stromberg, Dmytro Honcharenko, **Jyotirmoy Maity**, Firoz Roshan Kurudenkandy, Alok Juneja, Lennart Nilsson, Jan Johansson, Jerry Presto, Andre Fishan; Novel ligands for prevention of neurotoxicity of the Alzheimer's disease related amyloid-beta peptides; **US 2018/0305404 A1**.

2. Roger Stromberg, Dmytro Honcharenko, **Jyotirmoy Maity**, Firoz Roshan Kurudenkandy, Alok Juneja, Lennart Nilsson, Jan Johansson, Jerry Presto, Andre Fishan; Novel ligands for prevention of neurotoxicity of the Alzheimer's disease related amyloid-beta peptides; **US 2016/0340387 A1**.

Book Chapter:

1. Aseem Grover, **Jyotirmoy Maity**, and Anirban Das; Advanced Nanomaterials for Thermal Imaging. *Advancing Thermal Technologies*. Page: 261 – 268. Elsevier **2026**.
2. Laxmi Devi, Komal, Sunita Kanwar, **Jyotirmoy Maity**, Kamal Nayan Sharma and Anirban Das; Novel metal nanoparticles in organic catalysis. *Heterogeneous Catalysis in Organic Transformations*, **2022**, ISBN 9780367647872.
3. **Jyotirmoy Maity**, Archana Jain and Tarun K Panda; Six-Membered Rings with Two or More Heteroatoms with at Least One Arsenic to Bismuth. *Reference Module in Chemistry, Molecular Sciences and Chemical Engineering*; **2021**, doi.org/10.1016/B978-0-12-818655-8.00103-7.
4. **Jyotirmoy Maity**, Smriti Srivastava, Yogesh S Sanghvi, Ashok K Prasad and Roger Stromberg; Facile Access to Bromonucleosides using Sodium Monobromoisocyanurate (SMBI). *Current Protocols in Nucleic Acids Chemistry*; **2017**, 68:1.39.1-1.39.9.

Resource person:

1. **Summer Research and Innovation Program 2026** organized by Department of Physics and the Department of Chemistry at St. Stephen's College, University of Delhi; 29th June - 15th July 2026.
2. **Summer Research and Innovation Program 2025** organized by Department of Physics and the Department of Chemistry at St. Stephen's College, University of Delhi; 9th – 28th August 2025.
3. Guest lecture in **IIMT University, School of Basic Sciences & Technology** organized on 24th February 2025.
4. **'Prevention of Neurotoxicity by Amyloid- β Peptide Targeting'**, Seminar Series SXIII-L 5 organized by Amity University, Gurugram, 7th November 2024.
5. **Skill development and Upgradation workshop for laboratory personnel** organized by Guru Angad Dev Teaching Learning Centre (PMMMNMST) and St. Stephen's College, University of Delhi; 8th – 9th August 2023.
6. **'Introduction to Cosmetic Chemistry'** in DGHE Sponsored International Blended Value-Added Certificate Course on 'Chemistry in Day-to-Day Life'; Pt. NRS Government College, Rohtak, India, 24th March 2023.

Oral presentations delivered in the International and National Conferences:

- **Cell penetrating oligonucleotides: Synthesis and Biological activity**. 2nd International Conference on Advanced Developments in Chemistry and Allied Sciences-2023. Deshbandhu Chhotu Ram University of Science and Technology, Murthal (Sonapat), India, 17th -18th January, 2023.
- **Cell penetrating oligonucleotides: Synthesis and Biological activity**. International Conference on Nanomedicine: Chemistry Medicine Interface (NCMI-2022), Department of Chemistry, University of Delhi, Delhi, India. 6th December 2022.
- **Antisense oligonucleotides with 2'-O-(N-(Aminoethyl)-carbamoyl)methyl modification and their biological activity**. International Conference on Recent Advances in Chemical Sciences:

Health, Environment and Society (ICRACS-2022). Department of Chemistry, Deshbandhu College, University of Delhi, India. 8th- 9th April 2022.

- **Prevention of neurotoxicity caused by amyloid- β peptide using peptidomimetics.** International conference on Recent Trends in Drug Discovery and Development, Maitreyi College, University of Delhi, Delhi, India, 8th – 9th October 2021.
- **Peptidomimetics for prevention of Neurotoxicity caused by amyloid- β peptide.** Emerging Trends and Future Challenges in Chemical Sciences (ETFC-2020), Kirori Mal College, University of Delhi, India. 10-11th January 2020.
- **Prevention of neurotoxicity by amyloid- β peptide targeting.** International Conference on Integrative Chemistry, Biology and translation medicine. Hindu College, University of Delhi, Delhi, India. February 2019.
- **Cell penetrating oligonucleotides: Synthesis and Biological activity.** FDP cum National Workshop on Greening an Undergraduate Chemistry laboratory. Sri Venkateswara College, University of Delhi, Delhi, August 2018.
- **Cell penetrating oligonucleotides: Synthesis and Biological activity.** Indo-US Colloquium on Recent developments in Interdisciplinary research. Hansraj College, University of Delhi, Delhi, India. July 2018.
- **Peptide ligands enabled of stabilizing the amyloid β -peptide in α -helical conformation to reduce A β toxicity.** International Conference; Advancing Green Chemistry: Building a sustainable tomorrow. Hindu College, University of Delhi, Delhi, India. October 2017.
- **Bromination of Nucleosides by Sodium Monobromoisocyanurate (SMBI).** National Seminar, Sri Aurobindo College, University of Delhi, Delhi, India. March 2017.
- **From milligram to gram scale: An efficient method for bromination of nucleosides.** INCLAT 2017, Zakir Husain College, University of Delhi, Delhi, India. February 2017.
- **Peptide ligands enabled of stabilizing the amyloid β -peptide in α -helical conformation to reduce A β toxicity.** National Conference in Chemistry; Environmental and Harmonious development; Shyam Lal College, University of Delhi, Delhi, India. April 2016.
- **Peptide ligands enabled of stabilizing the amyloid β -peptide in α -helical conformation to reduce A β toxicity.** National Conference at Maitreyi College, University of Delhi, Delhi, India. February 2016.
- **The peptide ligands enabled of stabilizing the amyloid β -peptide in α -helical conformation to reduce A β toxicity.** International Conference on Nascent Developments in Chemical Sciences, BITS Pilani, Rajasthan, India, October 2015.
- **An Efficient Method for Bromination of Nucleosides.** 21st International Round Table Conference, Poznan, Poland, August 2014.
- **Efficient and Selective Enzymatic Acylation Reaction: Separation of furanosyl and pyranosyl nucleosides.** APCHNE-I, Indian Council of Agricultural Research, Delhi, India. January 2008.
- **Synthesis of α -L- and α -D-Arabino-configured Nucleosides of Etiological Importance.** CARBO-XXI, Recent Developments in Carbohydrate Chemistry, University of Delhi, Delhi, India. November 2006.
- **Novel Lipase-catalysed Reactions on Polyols.** Indo-Italian Workshop on Synthesis, Testing and Application of Inhibitors of Lipolytic Enzymes, University of Rome, Rome, Italy. July 2004.

Title of Posters Presented at International and National Symposium or Conferences

- **From Miligram to Gram Scale: An Efficient Method for Bromination of Nucleosides.** Carbo-XXXI, Delhi, India. 14th – 16th November 2016.
- **Cell Penetrating Oligonucleotides.** 9th Oligonucleotide Therapeutic Society Meeting, Naples, Italy. 6th-8th October 2013.
- **Ligands that Stabilize the Amyloid β -Peptide in a Helical Conformation Reduces A β Toxicity.** 32nd European Peptide Symposium, Athens, Greece. 2nd-7th September 2012.

- **Highly Efficient and Selective Enzymatic Acylation: Separation of the Furanosyl and Pyranosyl Nucleosides.** National Seminar on Green Chemistry and Natural Products, University of Delhi, Delhi, India. 26th-27th November, 2007.
- **Synthesis of α -L-, α -D-, β -L-, β -D-Arabino-configured Nucleosides of Biological Importance.** 9th CRSI (Chemical Research Society of India) National Symposium, Univ. of Delhi, Delhi, India. 1st-4th Feb., 2007.
- **Synthesis and Evaluation of Hybridization Properties of Functionalized 2'-amino-LNA.** CARBO-XXI, Recent Developments in Carbohydrate Chemistry, Univ. of Delhi, Delhi, India. 26th-29th Nov., 2006.
- **Functionalized 2'-amino-LNA.** 2nd Nucleic Acid Chemical Biological (NACB) PhD Summer School, University of Southern Denmark, Odense, Denmark. 19th-23rd June, 2005.
- **Synthesis of Arabino-configured Nucleosides: Towards Chemo-etiological Studies.** Biomolecular Chemistry- ISBOC-7, University of Sheffield, Sheffield, UK. 27th June-1st July 2004.
- **Benzoyl Cyanide a Mild, Efficient and Selective Benzoylating Agent.** 6th CRSI (Chemical Research Society of India) National Symposium, Indian Institute of Technology, Kanpur, Uttar Pradesh, India. 6th-8th February 2004.
- **Chemo-Enzymatic Synthesis and Modification of arabinofuranosyl nucleosides.** International Conference on Biodiversity and Natural Products: Chemistry and Medicinal Applications, New Delhi, India. 26th-31st January 2004.
- **Novel Chemo-enzymatic Synthesis of 1-Acetoxymethyl-6-amino-3,4-O-isopropylidene-2-oxabicyclo[3.2.0]heptane: Precursor for the Synthesis of Bicyclo-AZT Analogue.** 17th National Carbohydrate Conference, CFTRI, Mysore, Karnataka, India. 21st-22nd November 2002.

National and International conferences attended:

- **2nd Indo-US Symposium on Chemical Biology and Drug Discovery,** Hansraj College, University of Delhi, Delhi, India; 27th June 2023.
- **Covid19 and its psychological effects:** Department of Chemistry, Rajdhani College, University of Delhi, India. 30th April 2021.
- National Conference on Emerging Trends and Advancements in Chemical Sciences, St. Stephen's College, University of Delhi, **Delhi, India.** 25th-26th September 2018.
- National Conference on Chemical Sciences: Opportunities & Challenges, St. Stephen's College, University of Delhi, **Delhi, India.** 19th-20th March 2018.
- DU-JAIST Indo-Japan symposium on Chemistry of Functional molecules/ materials - Department of Chemistry, University of Delhi, **Delhi, India.** 26th – 27th February 2016.
- 1st National Conference on Emerging Trends and Future Challenges in Chemical Sciences, Kirori Mal College, University of Delhi, **Delhi, India.** 3rd-4th February 2016.
- Amyloid Fibrils, Prion & Precursors: University of Halle, **Halle, Germany.** 24th-29th Aug 2011.
- 10th German Peptide Symposium, Free Univ. of Berlin, **Berlin, Germany.** 7th-10th March 2011.

Faculty development Programme attended:

1. **Faculty Induction Program (Guru Dakshata)** by Mahatma Hansraj – Malaviya Mission Teacher Training Centre (MH-MMTTC) from 4th June – 3rd July, 2026.
2. **Faculty development Program** on Sustainable & Alternate Energy Resources (SEAR-II-2025) organized by **Amity University**, Haryana during 2nd – 6th June, 2025.
3. **Faculty development Program** on Sustainable & Alternate Energy Resources organized by **Amity University**, Haryana during 17th – 21st June, 2024.
4. **Modern Scientific Technologies – Ways to enhance research skills:** Mahatma Hansraj

Faculty Development Centre, University of Delhi, Delhi, 26th -31st December 2022.

5. **Chemistry – the Catalyst for Change:** Ramanujan College and Miranda House, University of Delhi, Delhi, 14th – 28th July 2021.
6. **Applied Chemistry: A Catalyst for Scientific Transformations:** Department of Chemistry, Faculty of Sciences, SGT University, 23rd -28th August, 2021.
7. **Environmental Sciences and Public Health:** Kirori Mal College, University of Delhi, and Mizoram University, 1st- 5th February 2022.
8. **Chemistry – The Catalyst for Change,** Online Faculty Development Programme, ARSD College, University of Delhi, Delhi, 14th – 28th July 2021.
9. **Applied Chemistry: A catalyst for Scientific Transformations,** Online Faculty Development Programme, SGT University, Gurugram, Haryana, 23rd – 28th August 2021.
10. **Research methodology: Tools and techniques,** Online Faculty Development Programme, ARSD College, University of Delhi, Delhi, 5th – 11th June 2020.
11. **E-Learning and Developing MOOCs for Teaching Process in Higher Education:** Department of Statistics and IQAC, Hindu College, University of Delhi, 14th – 20th December, 2020.

Online Workshop attended:

1. **DST & ACS Virtual Workshop:** Department of Science and Technology, India & American Chemical Society, USA, 11th August 2021.
2. **Tools for Exploring Chemistry:** Department of Chemistry, Rajdhani College, University of Delhi, Delhi, India, 12-13th July, 2021.
3. **DST & ACS Virtual Workshop:** Department of Science and Technology, India & American Chemical Society, USA, 11th August 2021.
4. **DST & ACS Virtual Workshop:** Department of Science and Technology, India & American Chemical Society, USA, 5th March 2021.
5. **IQAC SSC NAAC Workshop:** IQAC, St. Stephen's College, University of Delhi, Delhi, India, 1st – 2nd December 2020.

Online Symposium attended:

1. **Chemical Wisdom by Her:** Department of Chemistry, Deshbandhu College, University of Delhi, India, 31st January 2021.
2. **Covid-19 Disease Control – Opportunities and Challenges for Vaccines, Bio-therapeutics and Diagnostics:** Centre for Bio-Separation Technology, Vellore Institute of Technology, Vellore, India, 9th -10th July 2020.

Judge in poster presentation competition:

1. **Amity University,** Gurgaon Haryana, India, 23rd September 2021.
2. **Amity University,** Gurgaon Haryana, India, 26th September 2020.

Memberships of Professional societies:

- European Peptide Society (Life Membership)
- International Society of Nucleosides, Nucleotides and Nucleic Acids (2014-2016)
- Oligonucleotide Therapeutic Society (2013-2014)
- Royal Society of Chemistry (2004-2005)

Personal: Male, Married, Indian. **Languages known:** English, Hindi & Bengali.