UNIVERSITY OF CALCUTTA
FACULTY ACADEMIC PROFILE /CV

Full name of the faculty member: Dr. Animesh Pramanik
Designation: Professor of Chemistry
Specialisation: Organic Chemistry

Contact information: Department of Chemistry, University of Calcutta,

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Academic qualifications:

College/university	Degree	Results
Presidency College (under CU)	B. Sc. (Chemistry Hons; Phys & Math Pass)	1st Class, 1Q
University of Calcutta	M. Sc. (Chemistry, Organic Special)	1st Class, Rank-1st

Qualified UGC-CSIR NET as CSIR-JRF being among Top 5% Candidates

Ph. D. from Indian Institute of Science (I. I. Sc.), Bangalore, March, 1994

Post doctoral research:

- 1994-1997, with Professor P. Balaram, I. I. Sc. Bangalore.
- 2000-2001, University of Münster, Germany.

Positions held/holding:

Joined as a *Lecturer* to the Department of Chemistry, University of Calcutta, 1st September 1997
Lecturer & *Senior Lecturer* 1997-2005.
Reader 2005-2008.
Associate Professor 2008-2011.
Professor from 16th September, 2011-till date.

Research interests and some recent publications:

(i) Development of New Methodologies for Synthesis of Biologically Important Heterocycles
(ii) Development of Green Synthetic Methodologies, Catalysts & Reagents
(iii) Design, Synthesis & Evaluation of Antioxidant Property of Complex Heterocycles
(iv) Design, Synthesis & Development of Heterocycle based Fluorescence Chemosensors

Eur. J. Org. Chem., 2024, 27(12), e202301195; ***Eur. J. Org. Chem.***, 2023, 26(40), e202300770; ***J. Org. Chem.***, 2023, 88(9), 5377; ***J. Org. Chem.***, 2022, 87(14), 9282; ***J. Org. Chem.***, 2021, 86(7), 5047; ***J. Org. Chem.***, 2021, 86(7), 5213; ***Bioorg. Chem.***, 2020, Vol. 98, Article 103734; ***ACS Sustain. Chem. Eng***., 2020, 8(1), 403; ***Green Chemistry***, 2020, **22**, 4304; ***J. Med. Chem. (ACS)***, 2019, 62(13), 6315; ***Anal. Bioanal. Chem.***, 2019, 411(6), 1157; ***J. Org. Chem.***, 2019, 84(11), 7265; ***J. Org. Chem.***, 2019, 84 (2), 1053.

Research guidance:

Researchers awarded Ph. D. degree

(1) Dr. Sandip Kumar Kundu (2004)
(2) Dr. Suven Das (2007)
(3) Dr. (Mrs.) Anita Dutt (2008)
(4) Dr. (Mrs.) Arpita Dutta (2010)
(5) Dr. (Mrs.) Sudeshna Kar (2011)
(6) Dr. Pradyot Koley (2012)
(7) Dr. Sudipta Pathak (2015)
(8) Dr. Subhendu Maity (2015)
(9) Dr. Ashis Kundu (2016)
(10) Dr. Kamalesh Debnath (2017)
(11) Dr. Chandan Bodhak (2020)
(12) Dr. Sayan Mukherjee (2022)
(13) Dr. Chandan Kumar Mahato (2022, jointly with TCG Lifesciences Pvt Ltd.)
(14) Dr. (Mrs.) Tania Kundu (2023)
(15) Dr. Subhro Mandal (2023)

Researchers pursuing Ph. D.

(1) Mr. Arun Dhurey (SRF, UGC)
(2) Ms. Sayanwita Panja (UGC-CSIR NET qualified)

Post-doctoral fellows (D. S. Kothari)

(1) Dr. Priyabrata Roy (September 2012-March 2015)
(2) Dr. Soumen Sarkar (July 2015-June 2017)
(3) Dr. Subhenjit Hazra (Sept. 2016-Aug. 2019)
(4) Dr. Anupam Jana (Feb. 2018-Nov.2020)
(5) Dr. Nirmal Das Adhikari (Sept. 2017- Oct. 2021)
(6) Dr. Saheli Sarkar (Sept. 2021-Jan. 2024)

Number of M. Sc. project students supervised: 54 (till 2024)

Membership of Learned Societies:

Life member of ***Indian Chemical Society***.
Life member of ***Indian Peptide Society***.
Founder and life member of ***Chemical Biology Society (Estd. 2013)***.
Life member of ***Indian Association for the Cultivation of Science*** **(IACS)**, Jadavpur, Kolkata.
Fellow of ***West Bengal Academy of Science and Technology*** (**FAScT**), 2016.
Member of ***American Chemical Society*** (awarded twice).

List of total publications in peer-reviewed journals:

123. "CAN Interceded Oxidative Coupling of β-Dicarbonyl Compounds to 2-Aryl/Heteroarylchromenes: A Regio- and Diastereoselective Synthesis of Tetrahydro-benzofuro[3,2-*c*]chromenones", S. Panja, A. Dhurey, G. Maiti and A. Pramanik, ***Eur. J. Org. Chem.***, 2024, 27(12), Article e202301195 (DOI: org/10.1002/ejoc.202301195).

122. "Efficient synthesis of fully substituted and diversely functionalized pyrazoles through *p*-TSA catalyzed one-pot condensation of cyclic *β*-diketones, arylglyoxals and arylhydrazones", A. Dhurey, S. Mandal and A. Pramanik, ***Eur. J. Org. Chem.***, 2023, 26(40), Article e202300770 (DOI: org/10.1002/ejoc.202300770).

121. "Competitor Induced Dissipation of Carbon Quantum Dot Based Hierarchical Vesicular Self-assembly: A Theranostic Nanoplatform towards Hypercholesterolemia", S. Sarkar, S. Mandal and A. Pramanik, ***J. Colloid Interface Sci. Open (JCIS Open)***, 2023, 11, Article 100094 (DOI: org/10.1016/j.jciso.2023.100094).

120. "I_2/DMSO-Promoted Synthesis of Diaryl Sulfide- and Selenide-Embedded Arylhydrazones", A. Dhurey, S. Mandal and A. Pramanik, ***J. Org. Chem.***, 2023, 88(9), p.5377-5390 (DOI:org/10.1021/acs.joc.2c02974).

119. "Pyrrolidine-Oxadiazolone Conjugate as New Organocatalyst for Asymmetric Aldol Condensation", C. K. Mahato, S. Mandal, M. Kundu, and A. Pramanik, ***Synth. Commun.***, 2023, 2023, 53(12), p.932-943 (DOI: org/10.1080/00397911.2023.2205593).

118. "One-pot Three Component Synthesis of Quinazolin-4(3*H*)-one Derivatives: Investigation of Photophysical Properties and FRET Application towards Protein Lysozyme", S. Sarkar, S. Mandal, and A. Pramanik, ***Polycyclic Aromatic Compounds***, 2023, (DOI: org/10.1080/10406638.2023.2209255).

117. "Synthesis of Hydroxylated Polycyclic Pyrrolo/indolo[1,2-*a*]quinoxaline Fused Lactam Derivatives via $PhI(OAc)_2$ Promoted 1,2-Bond Migration and Solvent Insertion", S. Mandal and A. Pramanik, ***J. Org. Chem.***, 2022, 87(14), p.9282-9295 (DOI:org/10.1021/acs.joc.2c01008).

116. "Convenient synthesis and evaluation of antioxidant property of functionalized spiro indolinone-dihydroquinazolinones", T. Kundu and A. Pramanik, ***Bioorganic Chemistry***, 2022, Vol. 124, Article 105830 (DOI. org/10.1016/j.bioorg.2022.105830).

115. "Efficient synthesis of functionalized 2-iminothiazolines by ultrasonication under solvent-free conditions and access to 5-aryl-2-iminothiazolines", C. Bodhak, S. Mandal, P. Dey, S. K. Mukherjee and A. Pramanik, ***Results in Chemistry***, 2022, 4, Article 100301 (DOI: org/10.1016/j.rechem.2022.100301).

114. "Diaryliodonium salt as oxidant in sp^3 C-H activation and synthesis of quinazolin-4(3H)-ones", N. Das Adhikary, S. Mandal, A. Jana and A. Pramanik, ***Results in Chemistry***, 2022, 4, Article 100270 (DOI: org/10.1016/j.rechem.2021.100270).

113. "Mild and Expeditious Synthesis of Sulfenyl Enaminones of L-α-Amino Esters and Aryl/Alkyl Amines through NCS-Mediated Sulfenylation", S. Mukherjee and A. Pramanik, ***ACS Omega***, 2021, 6, 49, p.33805-33821 (DOI. org/10.1021/acsomega.1c05058).

112. "Asymmetric 1,4-Michael Addition in Aqueous Medium Using Hydrophobic Chiral Organocatalysts", C. K. Mahato, S. Mukherjee, M. Kundu, V. P. Vallapure and A. Pramanik, ***J. Org. Chem.***, 2021, 86(7), p.5213-5226 (DOI: org/10.1021/acs.joc.1c00124).

111. "Three-Component Synthesis of Pyrrolo/indolo[1,2-*a*]quinoxalines Substituted with *o*-Biphenylester/*N*-arylcarbamate/*N*-arylurea: A Domino Approach Involving Spirocyclic Ring Opening", S. Mandal and A. Pramanik, ***J. Org. Chem.***, 2021, 86(7), p.5047-5064 (DOI: org/10.1021/acs.joc.0c02973).

110. "Garphene oxide (GO) catalysed MW-assisted one-pot synthesis of densely substituted furan", A. Jana, N. D. Adhikary and A. Pramanik, ***Green Chemistry***, 2020, **22**, 4304-4310 (DOI.org/10.1039/D0GC00723D).

109. "Expeditious and eco-friendly synthesis of new multifunctionalized pyrrole derivatives and evaluation of their antioxidant property", T. Kundu and A. Pramanik, ***Bioorganic Chemistry***, 2020, Vol. 98, Article 103734 (DOI. org/10.1016/j.bioorg.2020.103734).

108. "Catalyst-free One-pot Three-component Synthesis of 4-Hydroxy-3-pyrazolylcoumarins in Ethanol at Room Temperature: Enolisable Aroylhydrazones as Efficient Ambident Nucleophile", S. Mukherjee and A. Pramanik, ***ACS Sustainable Chemistry & Engineering***, 2020, 8, 1, p.403-414 (DOI. org/10.1021/acssuschemeng.9b05682).

107. "Facile synthesis of phthalidyl fused spiro thiohydantoins through silica sulfuric acid induced oxidative rearrangement of ninhydrin adducts of thioureas", S. Mandal and A. Pramanik, ***Tetrahedron***, 2020**,** Vol. 76, Issue 2, Article 130817 (DOI. 10.1016/j.tet.2019.130817).

106. "Synthesis and Biological Assessment of Pyrrolobenzoxazine Scaffold as a Potent Antioxidant", T. Kundu, B. Bhattacharjee, S. Hazra, A. K. Ghosh, D. Bandyopadhyay, and A. Pramanik, ***J. Med. Chem. (ACS)***, 2019, 62, 13, p.6315-6329 (DOI.org/10.1021/acs.jmedchem.9b00717).

105. "One-pot Three Component Synthesis of 5-sulfenyl-2-iminothiazolines by Cross Dehydrogenative C-S Coupling Using I_2/DMSO in Open Air", C. Bodhak and A. Pramanik, ***J. Org. Chem.***, 2019, 84(11), p.7265-7278 (DOI: 10.1021/acs.joc.9b00785).

104. "A novel tryptamine-appended rhodamine-based chemosensor for selective detection of Hg^{2+} present in aqueous medium and its biological applications", S. Hazra, C. Bodhak, S. Chowdhury, D. Sanyal, S. Mandal, K. Chattopadhyay and A. Pramanik, ***Analytical and Bioanalytical Chemistry***, 2019, 411(6), p.1143-1157. (DOI: 10.1007/s00216-018-1546-0).

103. "Expeditious synthesis of diverse spiro fused quinoxaline derivatives using magnetically separable core-shell $CoFe_2O_4$@SiO_2-SO_3H nanocatalysts under ultrasonication", S. Mandal, S. Hazra, S. Sarkar, C. Bodhak and A. Pramanik, ***Applied Organometallic Chemistry***, 2019, e4702 (DOI: 10.1002/aoc.4702).

102. "Pyrrolidine-oxadiazolone Conjugates as Organocatalysts in Asymmetric Michael Reaction", C. K. Mahato, S. Mukherjee, M. Kundu and A. Pramanik, ***J. Org. Chem.***, 2019, 84 (2), p.1053-1063 (DOI: 10.1021/acs.joc.8b02393).

101. "Graphene oxide: An efficient carbocatalyst for the facile synthesis of isoindolo[2,1-*a*]quinazoline-5,11-diones via domino condensation under solvent-free conditions", C. Bodhak, S. Hazra and A. Pramanik, ***ChemistrySelect***, 2018, 3, p.7707-7712 (DOI: 10.1002/slct.201801322).

100. "A Novel Pyrrole fused Coumarin based Highly Sensitive and Selective Fluorescence Chemosensor for Detection of Cu^{2+} Ions and Applications Towards Live Cell Imaging", S. Mukherjee, S. Hazra, S. Chowdhury, S. Sarkar, K. Chattopadhyay and A. Pramanik, ***J. Photochem. Photobiol. A***, 2018 (1 Sept.), Vol. 364, p.635-644 (DOI: 10.1016/j.jphotochem.2018.07.004).

99. "A Sustainable Synthesis of Functionalized Pyrrole Fused Coumarins under Solvent-Free Conditions Using Magnetic Nanocatalyst and a New Route to Polyaromatic Indolocoumarins", S. Mukherjee, S. Sarkar and A. Pramanik, ***ChemistrySelect***, 2018, 3, p.1537-1544 (DOI: 10.1002/slct.201703146).

98. "Solvent free, fast and asymmetric Michael additions of ketones to nitroolefins using chiral pyrrolidine-pyridone conjugate bases as organocatalysts", C. K. Mahato, M. Kundu and A. Pramanik, ***Tetrahedron: Asymmetry***, 2017, Vol. 28, p.511-515 (DOI:10.1016/j.tetasy.2017.03.002).

97. "Excited state intramolecular proton transfer involving a four-membered system: Photophysical exploration of an isoindole fused imidazole system", S. Sen, A. Pramanik and N. Guchhait, ***J. Lumin.***, 2017, Vol. 187, p.78-84 (DOI:10.1016/j.jlumin.2017.02.064).

96. "Synthesis of amino ester embedded benzimidazoles: A one-pot sequential protocol under metal-free neutral conditions", P. Roy, C. Bodhak and A. Pramanik, ***Molecular Diversity***, 2016, Vol. 21, p.89-100 (DOI: 10.1007/s11030-016-9701-z).

95. "A new and efficient synthesis of pyrazole-fused isocoumarins on the solid surface of magnetically separable Fe_3O_4@SiO_2-SO_3H nanoparticles", S. Mukherjee, A. Kundu and A. Pramanik, ***Tetrahedron Letters***, 2016, Vol. 57, p.2103-2108 (DOI: 10.1016/j.tetlet.2016.04.002).

94. "Facile one-pot three-component synthesis of diverse 2,3-disubstituted isoindolin-1-ones using ZrO_2 nanoparticles as a reusable dual acid-base solid support under solvent-free conditions", K. Debnath, S. Mukherjee, C. Bodhak and A. Pramanik, ***RSC Advances***, 2016, 6, p.21127-21138 (DOI:10.1039/C6RA00870D).

93. "Synthesis of multi-functionalized benzofurans through the condensation of ninhydrin and phenols using SSA as a recyclable heterogeneous acid catalyst", A. Kundu and A. Pramanik, ***Molecular Diversity***, 2016, 20, p.619-626 (DOI: 10.1007/s11030-016-9661-3).

92. "Synthesis of a new class of pyrazole embedded spirocyclic scaffolds using magnetically separable Fe_3O_4@SiO_2–SO_3H nanoparticles as recyclable solid acid support", A. Kundu, S. Mukherjee and A. Pramanik, ***RSC Advances***, 2015, 5, p.107847-107856 (DOI: 10.1039/C5RA23599E).

91. "ZrO_2 nanoparticles as a reusable solid dual acid-base catalyst for facile one-pot synthesis of multi-functionalized spirooxindole derivatives under solvent free condition", C. Bodhak, A. Kundu and A. Pramanik, ***RSC Advances***, 2015, 5, p.85202-85213 (DOI:10.1039/C5RA16259A).

90. "Modulation of Excited State Proton Transfer Dynamics of a Lactim-Lactam Tautomeric System in Different Block Copolymer-Surfactant Aggregates", D. Ray, A. Pramanik and N. Guchhait, ***J. Phys. Chem. B***, 2015**,** 119 (6), p.10114-10123 (DOI: 10.1021/acs.jpcb.5b02363).

89. "Synthesis of biologically important, fluorescence active 5-hydroxy benzo[*g*]indoles through four-component domino condensations and their fluorescence "Turn-off" sensing of Fe(III) ions", S. Maity, A. Kundu and A. Pramanik, ***RSC Advances***, 2015, 5, p. 52852-52865 (DOI: 10.1039/c5ra05780a).

88. "Magnetically separable Fe3O4-SO3H nanoparticles as an efficient solid acid support for the facile synthesis of two types of spiroindole fused dihydropyridine derivatives under solvent free conditions", K. Debnath, K. Singha and A. Pramanik, ***RSC Advances***, 2015 , 5, p.31866-31877 (DOI: 10.1039/C5RA00737B).

87. "Novel synthesis of a series of spiro 1,3-indanedione-fused dihydropyridines through the condensation of a tetrone with *N*-aryl/alkylenamines in presence of solid support silica sulfuric acid", A. Kundu and A. Pramanik, ***Molecular Diversity***, 2015, 19, p.459-471 (DOI: 10.1007/s11030-015-9582-6).

86. "Heterogeneous bimetallic $ZnFe_2O_4$ nanopowder catalysed facile four component reaction for the synthesis of spiro[indoline-3,2′-quinoline] derivatives from isatins in water medium", K. Debnath, and A. Pramanik, ***Tetrahedron Letters***, 2015, Vol. 56, Issue 13, p.1654-1660 (DOI: 10.1016/j.tetlet.2015.02.030).

85. "Synthesis of 4-hydroxyindole fused isocoumarin derivatives and their fluorescence "Turn-off" sensing of Cu(II) and Fe(III) ions", S. Pathak, D. Das, A. Kundu, S. Maity, N. Guchhait and A. Pramanik, ***RSC Advances***, 2015, 5, p.17308-17318 (DOI: 10.1039/C5RA01060H).

84."Slow proton transfer dynamics of a four member intramolecular hydrogen bonded isoindole fused imidazole system: A spectroscopic approach to photophysical properties", D. Ray, A. Pramanik and N. Guchhait, ***J. Photochem. Photobiol. A***, 2015, Vol. 302, p.42-50.

83."An efficient and recyclable chitosan supported copper(II) heterogeneous catalyst for C-N cross coupling between aryl halides and aliphatic diamines", C. Bodhak, A. Kundu and A. Pramanik, ***Tetrahedron Letters***, 2015**,** Vol. 56, Issue 2, p. 419-424 (DOI:10.1016/j.tetlet.2014.11.120).

82. "Exploring the interaction of a micelle entrapped biologically important proton transfer probe with the model transport protein Bovine Serum Albumin", D. Ray, A. Kundu, A. Pramanik, N. Guchhait, ***J. Phys. Chem. B***, 2015, 119 (6), p.2168-2179 (DOI: 10.1021/jp504037y).

81. "Electron donating group stimulated aggregation induced emission enhancement of oligophenylenevinylene-cored luminogens", P. Roy, D. Jana, A. Kundu and A. Pramanik, ***RSC Advances***, 2014, **4**, p. 62684-62688 (DOI: 10.1039/c4ra08663e).

80. "Synthesis of 2-pyrolyl-2-hydroxy-2-cyanoacetamide through $FeCl_3$-TBHP mediated hydroxylation of captodative stabilized radical intermediate", S. Maity and A. Pramanik, ***Tetrahedron Letters***, 2014, Vol. 55, Issue 41, p. 5676-5679 (DOI: 10.1016/j.tetlet.2014.08.074).

79. "Synthesis of different isoindolone embedded heterocycles with phenolic subunits from a common intermediate, 3-(2′-hydroxyaroyl)-2, 3-dihydroisoindol-1-ones", A. Kundu and A. Pramanik, ***Tetrahedron Letters***, 2014, Vol. 55, Issue 32, p.4466-4474 (DOI:10.1016/j.tetlet.2014.06.064).

78. "Substituted benzo[*a*]carbazoles and indole acetic acids from arylglyoxals and enamines through domino condensation and thermal cyclization and aromatization", S. Maity, S. Pathak and A. Pramanik, ***Eur. J. Org. Chem.***, 2014, p. 4651-4662 (DOI: 10.1002/ejoc.201402085).

77. "Facile cyclization in the synthesis of highly fused diaza cyclooctanoid compounds using retrievable nano magnetite-supported sulfonic acid catalyst", S. Pathak, K. Debnath, Md. Masud Rahaman Mollick and A. Pramanik, ***RSC Advances***, 2014, 4, p. 23779-23789 (DOI: 10.1039/C4RA03384A).

76. "Facile synthesis of 3*H*, 3′*H*-spiro[benzofuran-2,1′-isoindole]-3, 3′-diones using monobromomalononitrile (MBM) as an efficient organo-brominating agent", A. Kundu, S. Pathak, K. Debnath and A. Pramanik, ***Tetrahedron Letters***, 2014, Vol. 55, Issue 29, p. 3960-3968 (DOI:10.1016/j.tetlet.2014.04.027).

75. "Differential modulation of lactim-lactam tautomerism process of an isoindole fused imidazole system in three different micellar assemblies of varying surface charge: A Spectroscopic approach to various photophysical properties", D. Ray, A. Pramanik and N. Guchhait, ***RSC Advances***, 2014, 4(20), p. 13256-13265 (DOI: 10.1039/C3RA47322H).

74. "Monobromomalononitrile: An efficient regioselective mono brominating agent towards active methylene compounds and enamines under mild condition", S. Pathak, A. Kundu and A. Pramanik, ***RSC Advances***, 2014, 4(20), p.10180-10187(DOI: 10.1039/C3RA46687F).

73. "Silica sulfuric acid: An efficient reusable heterogeneous solid support for the synthesis of 3H, 3´H-spiro[benzofuran-2,1´ isobenzofuran]-3,3´-diones under solvent-free condition", K.

Debnath, S. Pathak, and A. Pramanik, ***Tetrahedron Letters***, 2014, Vol. 55, Issue 10, p.1743-1748 (DOI: 10.1016/j.tetlet.2014.01.109).

72. "pH-sensitive morphological transition from nanowire to nanovesicle of a single amino acid based water soluble molecule", P. Koley and A. Pramanik, ***Journal of Material Science***, 2014, 49, p. 2000-2012 (DOI: 10.1007/s10853-013-7887-3).

71. "Lactim-lactam tautomerism through four member hydrogen bonded network in isoindole fused imidazole system: A combined Spectroscopic and Theoretical approach to photophysical properties", D. Ray, A. Pramanik and N. Guchhait, ***J. Photochem. Photobiol. A***, 2014, Vol. 274, 30, p.33-42.

70. "Silica sulfuric acid: a reusable solid catalyst for one pot synthesis of densely substituted pyrrole-fused isocoumarins under solvent-free condition", S. Pathak, K. Debnath and A. Pramanik, ***Beilstein J. Org. Chem.***, 2013, 9, p.2344-2353 (DOI:10.3762/bjoc.9.269).

69. "Synthesis and fluorescence properties of isatin based spiro compounds: Switch off Chemosensing of Cu(II) Ion", A. Kundu, S. Pathak and A. Pramanik, ***Asian J. Org. Chem.***, 2013, Vol. 2, Issue 10, p. 869-876 (DOI: 10.1002/ajoc.201300153).

68."Synthesis of 1,2-diaryl-6,6-dimethyl-5,6-dihydro-1*H*-indole-4,7-diones from arylglyoxals and enamines through domino condensation and allylic hydroxylation", S. Maity and A. Pramanik, ***Synthesis***, 2013, 45(20): p. 2853-2860 (DOI: 10.1055/s-0033-1339651).

67. "One-pot sequential synthesis of 1,2-disubstituted benzimidazoles under metal-free conditions", P. Roy and A. Pramanik, ***Tetrahedron Letters***, 2013, Vol. 54, Issue 38, p. 5243-5245(DOI: 10.1016/j.tetlet.2013.07.083).

66. "Facile synthesis of ninhydrin and isatin based hydrazones in water using PEG-OSO_3H as a highly efficient and homogeneous polymeric acid surfactant combined catalyst", K. Debnath, S. Pathak, and A. Pramanik, ***Tetrahedron Letters***, 2013, Vol. 54 Issue 31, p. 4110-4115 (DOI: 10.1016/j.tetlet.2013.05.105).

65. "Diastereospecific Synthesis of Isoindole Fused Diazacyclooctaindenones from Spirochromenes through Domino Reactions with Aliphatic 1,2-Diamines", S. Pathak and A. Pramanik, ***Eur. J. Org. Chem.***, 2013, p. 4410-4417 (DOI: 10.1002/ejoc.201300096).

64. "Synthesis of biologically important phthalazinones, 2,3-benzoxazin-1-ones and isoindolinones from ninhydrin and their antimicrobial activity", S. Pathak, K. Debnath, Sk T. Hossain, S. K. Mukherjee and A. Pramanik, ***Tetrahedron Letters***, 2013, Vol. 54, Issue 24, p. 3137-3143 (DOI: dx.doi.org/10.1016/j.tetlet.2013.04.015).

63. "Microwave assisted synthesis of 2,3-diaryl-6,7-dihydro-5*H*-pyrrolo[1,2-*a*]imidazoles through direct condensation of aryl 1,2-diketones and L-proline under solvent-free condition", S. Maity, S. Pathak, and A. Pramanik, ***Tetrahedron Letters***, 2013, Vol. 54, Issue 20, p.2528-2532 (DOI: 10.1016/j.tetlet.2013.03.017).

62. "Synthesis of 1,2-diaryl-1*H*-indol-4-ols and 7-ethoxy-1,2-diaryl-1,5,6,7-tetrahydro-indol-4-ones from arylglyoxals and enamines through domino reactions", S. Maity, S. Pathak and A. Pramanik, ***Eur. J. Org. Chem.***, 2013, p.2479-2485 (DOI: 10.1002/ejoc.201201616).

61. "Synthesis of 5-aryl-3*H*-[1,3,4]oxadiazol-2-ones from N′-(chloro-aryl-methylene)-tert-butylcarbazates using basic alumina as an efficient and recyclable surface under solvent-free condition", K. Debnath, S. Pathak, and A. Pramanik, ***Tetrahedron Letters***, 2013, Vol. 54, Issue 8, p. 896-899.

60. "Regioselective synthesis of two types of highly substituted 2-pyridones through similar multicomponent reactions", S. Pathak, A. Kundu and A. Pramanik, ***Tetrahedron Letters***, 2012, Vol. 53, Issue 24, p. 3030-3034.

59. "Multilayer vesicles, tubes, various porous structures and organo gel through solvent-assisted self-assembly of two modified tripeptides and their different applications", P. Koley and A. Pramanik, ***Soft Matter***, 2012, 8(19), p.5364-5374, (DOI:10.1039/C2SM25205H) [among top 10 (2^{nd}) most-read Soft Matter articles in April, 2012].

58. "Design and self-assembly of a leucine-enkephalin analogue in different nanostructures: Application of nanovesicles", P. Koley, A. Gayen, M. G. B. Drew, C. Mukhopadhyay and A. Pramanik, ***Small***, 2012, Vol. 8, Issue 7, p.984-990, (DOI: 10.1002/smll.201101685).

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3. "Aromatic Claisen rearrangements in carbohydrates: Stereo-control of rearrangement rates in unsaturated sugar substrates", K. K. Balasubramanian, N. G. Ramesh, A. Pramanik and J. Chandrasekhar, ***J. Chem. Soc., Perkin Trans. 2***, 1994, p.1399.

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Projects:

Completed Projects:

a. **UGC Major Research Project, Sanctioned on 22 Feb., 2007, Completed on 31st March, 2010 (Rs. 6, 93, 100/-):** Title of the project: *Amyloid fibrils and various nanostructures through self-assembly of designed synthetic peptides and model studies of neurodegenerative diseases*.

b. **CSIR Major Research Project, Sanctioned on 15 Dec., 2011, Completed on 15th Jan, 2015 (Rs. 22,00,000/-):** Title of the project: *Synthesis of biologically active and spectroscopically important heterocycles and dendrimeric compounds from ninhydrin*.

Invited lectures delivered:

- Fourth CRSI (Kolkata Chapter) symposium, August 04, **2006**, University of Kalyani. Talked on "*Indane 1,3-dinone as a precursor for synthesis of various heterocyclic compounds*".
- Acharya Prafulla Chandra Ray and Chemistry Today (**2007**), The Indian Chemical Society and Department of Chemistry, CU, 02-03 August, 2007. Talked on "*Synthesis of heterocycles and cage molecules from indane-1,3-dione and fluorescence studies of isoindolo-imidazoles*".
- Sixth CRSI (Kolkata Chapter) symposium, August 02, **2008**, North Bengal University (NBU). Talked on "*Supramolecular chemistry of designed synthetic peptides*".
- Symposium on "Recent Trends in Peptide Research" organized by Indian Peptide Society (IPS) and Bose Institute, Kolkata, January 08, **2010**. Talked on "*Nanomaterials through self-assembly of peptides and modified peptides*".
- One day national Seminar entitled "Emerging Frontiers in Chemistry-Series I" organized by St. Xavier's College (Autonomous), Arts & Science Department, on 5th March, **2010**. Talked on "*Molecules to Materials through self-assembly of synthetic peptides*".
- Two days national Symposium on "Molecules to Materials" organized by Department of Chemistry, Haldia Govt. College, WB, on 16-17 March, **2011**. Talked on "*Nano Materials through Self-Assembly of Peptides*".
- Delivered talk on "*Peptides as building blocks of Bionanomaterials"* at the Department of Chemistry, Vidyasagar University on 22nd June, **2011**.
- Delivered talk on "*Design of peptides and pseudopeptides for generation of amyloid-like fibrils and nanovesicles, nanotubes and gels for drug delivery*" on 20 Oct. 2011 in four days (18-21 Oct., **2011**) national workshop on "In silico Approaches for Designing Bioactive Peptides" organized by Institute of Microbial Technology (IMTECH), Chandigarh.
- Delivered talk on "*Organic molecule based nanomaterials and their applications*" on 27 June, 2012, in a Summer School on Frontiers of nano materials, structures and devices (nanoMASTD-12) during June 20-July 10, **2012**, organized by the Department of Radio Physics and Electronics, University of Calcutta.
- Delivered talk on "*Design of peptide based nano bio-materials and their applications*" on March 16, **2016**, in National Seminar of "Chemistry of Functional Materials of Current Interest (CFMCI-2016)", organized by Department of Chemistry, Jadavpur University.

Other notable activities:

(a) **Teaching Assignments in the Department of Chemistry, CU:**

Theoretical Courses:

(i) Organic Photochemistry and Radicals in Organic Synthesis (M.Sc. 2nd Semester)

(ii) Green Chemistry (M.Sc. 3rd Semester, CBCC)

(iii) Bioorganic Chemistry (M.Sc. 4th Semester)

(iv) Green Chemistry (M.Sc. 4th Semester)

Practical and Projects:

(v) Practical: Organic Preparations (M.Sc. 2nd and 3rd Semester)

(vi) Supervision of Project and Review (M.Sc. 4th Semester)

(b) **Ph. D. Committee:**

(i) Member of Ph. D. Committee (Organic Chemistry Section, CU): 2010-2022

(ii) Convener of Ph. D. Committee (Organic Chemistry Section, CU): 2014-2018

(c) **Acted as Examiner of Ph. D. Thesis and Viva-Voce:**

(i) Acted as Ph. D. thesis and Viva-Voce examiner of several Institutes (IACS-Kolkata, IICB-Kolkata, IMTECH-Chandigarh, IISER-Kolkata, IIEST-Shibpur) and Universities (Jadavpur University, Jawaharlal Nehru University, Visva-Bharati University, Vidyasagar University, Gauhati University, BITS Pilani (Goa University), Bharathidasan University, University of Madras, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal)

(d) **Organization of Symposium, Conference and Courses:**

(i) Joint Course coordinator of **Refresher Course in Chemistry**, **2002**, UGC-Academic Staff College, University of Calcutta.

(ii) Joint convener of the International Symposium on "**Frontiers of Functional Materials**" organized by Department of Chemistry, University of Calcutta, during 6-7 January, **2009**.

(iii) Joint Course coordinator of Special Summer School on "**Science & Technology: Biomedical, Engineering and Environmental issues**", 12 June-02 July, **2014**, UGC-Academic Staff College, University of Calcutta.

(iv) Joint Course coordinator of 120th **Orientation Program (OP)**, 1-30 Dec., **2015**, UGC-Academic Staff College, University of Calcutta.

(e) **Acted as Reviewer of International Journals:**

Acted as reviewer for several journals of American Chemical Society (ACS), Royal Society of Chemistry (RSC), Wiley, Elsevier, Springer and Taylor & Francis