Priyadarsi De, Ph.D.
Professor
Polymer Research Centre and Centre for Advanced Functional Materials
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Education and Qualifications:

October, 2018-present
Professor, Indian Institute of Science Education and Research Kolkata, India

December, 2013-October, 2018
Associate Professor, Indian Institute of Science Education and Research Kolkata, India

November, 2009-November, 2013
Assistant Professor, Indian Institute of Science Education and Research Kolkata, India

September, 2008–October, 2009
Distinguished Scientist, PhaseRx Pharmaceuticals, Seattle, WA, USA.

January, 2007–August, 2008 (Advisor: Professor Brent S Sumerlin)
Post-Doctoral Fellow, Dept. of Chemistry, Southern Methodist University, Dallas, TX, USA.

March, 2002–December, 2006 (Advisor: Professor Rudolf Faust)
Post-Doctoral Fellow, Dept. of Chemistry, UMASS Lowell, Lowell, MA, USA.

Ph. D. August, 1997–March, 2002 (PhD advisor: Professor D. N. Sathyanarayana)
Indian Institute of Science, Dept. of Inorganic and Physical Chemistry, Bangalore, India.

M. Sc. August, 1995–July, 1997
Department of Chemistry, Jadavpur University, Kolkata, West Bengal, India.

B. Sc. August, 1992–July, 1995
Department of Chemistry, Jadavpur University, Kolkata, West Bengal, India.

Awards and Recognition:

- *American Chemical Society* recognized us as "Top 3% Highly Cited Authors 2019-2020 from India" in 2022
- *Polymer Chemistry* (Published by Royal Society of Chemistry) Pioneering Investigator, 2021
- Outstanding Reviewers for Polymer Chemistry in 2020, Published by Royal Society of Chemistry, Impact Factor: 5.342.
- Associate editor of Journal of Macromolecular Science, Part A: Pure and Applied Chemistry, Taylor & Francis Group, April, 2019 to Present
- Editorial Advisory Board Member: Joint Editorial Advisory Board Member of Macromolecules and ACS Macro Letters (American Chemical Society Publications), January 2017 to December 2020
- Editorial Advisory Board Member: Polymer Chemistry, Published by Royal Society of Chemistry, September 2015 - Present
- Editorial Board Member: Austin Biomolecules, Published by Austin Publishing Group, June 2016 - Present
- 11th Foundation Polymer Award of the Prof. Sukumer Maiti Polymer Award Foundation, India for the year 2018.
- Kaushal Kishore Memorial Award of the Society of Polymer Science, India (SPSI) for the year 2018.

- Outstanding Reviewers for RSC Advances in 2017, Published by Royal Society of Chemistry, Impact Factor: 2.93.
- Outstanding Reviewers for Polymer Chemistry in 2016, Published by Royal Society of Chemistry, Impact Factor: 5.687.
- Reviewer for International Journals (More than 30 Journals): (1) Langmuir; (2) Polymer; (3) Chemistry of Materials; (4) Biomacromolecules; (5) Analytical Chemistry; (6) Polymer Chemistry; (7) Chemical Communications; (8) Macromolecules; (9) Carbohydrate Polymers; (10) ACS Applied Polymer Materials, etc.
- Member of the American Chemical Society
- Member, The Society for Polymer Science, India
- Visiting Scientist at University of Massachusetts Lowell, USA, May-July, 2017
- Visiting Scientist at University of Massachusetts Lowell, USA, May-July, 2014
- Visiting Scientist at University of Massachusetts Lowell, USA, May-July, 2012
- Visiting Scientist at Université Pierre et Marie Curie, Paris, France, 2002
- Vasudevamurthy-Soundararajan Prize (1999) at Indian Institute of Science, India

Experience and Research Skills:

October, 2018-present: Professor, IISER Kolkata, India

(1) Teaching (a) Physical Chemistry Laboratory, (b) Advanced Physical Chemistry Practical, (c) Polymer Chemistry, and (d) General Physical Chemistry courses.

(2) Several PhD, BS-MS, Integrated PhD, post-doc and project students are doing research in the area of general polymer chemistry to prepare macromolecular architectures for drug and gene delivery, sensing, etc.

December, 2013-present: Associate Professor, IISER Kolkata, India

(1) Teaching (a) Physical and Theoretical Chemistry Laboratory, (b) General Chemistry Practical and (c) Polymer Chemistry courses.

(2) Several PhD, BS-MS, project, summer interns were trained to synthesize vinyl monomers, and polymerization of those monomers and other commercially available monomers to prepare polymers with targeted molecular weights for various types of applications.

November, 2009-November, 2013: Assistant Professor, IISER Kolkata, India

(3) Teaching (a) Physical and Theoretical Chemistry Laboratory, (b) General Chemistry Practical and (c) Polymer Chemistry courses.

(4) Several PhD, BS-MS, project, summer interns were trained to synthesize vinyl monomers, and polymerization of those monomers and other commercially available monomers to prepare polymers with targeted molecular weights for various types of applications.

September, 2008–October, 2009: PhaseRx Pharmaceuticals, Seattle, WA, USA

(1) Synthesis of unique water-soluble homo-polymers and block copolymers having target specific ligands (i. e., Galactose ligands for liver targeting, folate ligands for tumor cell, ligands with specific activity towards kidney and other tissue, etc.) for medicinal applications.

(2) Synthesis of novel water-soluble polymers by RAFT technique and labeling with fluorescent probe for pharmacokinetic and biodistribution studies in the drug delivery applications.

(3) Synthesis of polymer-siRNA bioconjugates for pharmaceutical applications.

January, 2007–August, 2008: Post-Doctoral Fellow, Southern Methodist Univ., Dallas, TX, USA

(1) Functionalization of polymers with biomolecules such as folic acid *via* "click" chemistry

(2) Protein-polymer bioconjugates by *grafting to via* "click" chemistry and *grafting from via* RAFT polymerization

(3) Synthesis of boronic acid polymers and block copolymers by RAFT polymerization for controlled delivery of insulin
(4) Synthesis of novel stimuli-responsive, water-soluble block copolymers by RAFT polymerization; Synthesis of molecular bottle-brushes *via* ATRP and RAFT polymerization

March, 2002–December, 2006: Post-Doctoral Fellow, UMASS Lowell, Lowell, MA, USA

(1) Worked on a collaborative project between UMASS Lowell and Infineum USA LP., involving the study of cationic polymerization mechanisms of mixed C4 feeds, expected to yield better reactor control and higher quality products (motor oil dispersants).
(2) Worked on a National Science Foundation (NSF, USA) sponsored project and developed the "living"/controlled carbocationic polymerization of isobutylene, styrene, and styrene-based monomers in various solvent systems using various Lewis acids and initiating systems.
(3) Studied the synthesis and physical chemistry aspects of capping reactions (functional polymers) in the carbocationic polymerization of isobutylene and styrene-based monomers.
(4) Studied synthesis and characterization of poly(styrene-*b*-isobutylene-*b*-styrene) triblock elastomers, which are currently employed as the polymer drug carrier for the TAXUS™ Express2™ Paclitaxel-Eluting Coronary Stent system (For Boston Scientific Corp., USA).
(5) Studied kinetic and mechanistic studies of the carbocationic precipitation polymerization of isobutylene in polar solvents (Project sponsored by Exxon-Mobil Chemical Co., USA).
(6) Studied the effect of ligand of Lewis acid on the cationic polymerization of isobutylene using $TiCl_4$/$TiBr_4$-mixed coinitiator (Project sponsored by Kaneka Corporation, Japan).

August, 1997–March, 2002: PhD in Polymer Chemistry, IISc, Bangalore, India

(1) Studied physico-chemical properties of new (co)polyperoxide polymers, detailed kinetics of free-radical induced oxidative polymerization and copolymerization, characterization by various spectroscopic and thermal methods, and reactivity ratios studied by different methods.
(2) Studied flexibility and chain dynamics of polyperoxide polymers by ^{13}C-NMR spin-lattice relaxation measurements, and glass transition temperature measurements.
(3) Studied thermal degradation of polyperoxides, copolyperoxides and blends of polystyrene/poly(styrene peroxides) both in solution and in the solid state.

September, 1996–June, 1997: M. Sc. Research, Jadavpur University, Kolkata, India

Studied "Solvent and Electrode Kinetic Effects on the Cathodic Reduction of $3I_2 + 2e^- \rightarrow 2I_3^-$ in Some Pure and Mixed Dipolar Aprotic Solvents" for Master's Degree Thesis.

Personal: Male; Married; Nationality: Indian; *Date of Birth: 10 July 1974*

PUBLICATIONS

Patents/Patent Disclosure Applications:

1. Faust, R.; **De, P**. Capping reactions in cationic polymerization; kinetic and synthetic utility. US Patent. WO 2006110647, **2006**.
2. Johnson, P.; Stayton, P. S.; Hoffman, A. S.; Convertine, A. J.; Overell, R.; Gall, A.; Prieve, M.; Paschal, A.; Diab, C.; **De. P**. Micelles for intracellular delivery of therapeutic agents. US Patent. WO 2009140432, **2009**.
3. Johnson, P.; Stayton, P. S.; Hoffman, A. S.; Convertine, A. J.; Duvall, C. L.; Benoit, D.; Overell, R.; Gall, A.; Prieve, M.; Paschal, A.; Diab, C.; **De. P**. Micellic assemblies comprising a plurality of copolymers. US Patent. WO 2009140429, **2009**.

4. Johnson, P.; Stayton, P. S.; Hoffman, A. S.; Convertine, A. J.; Duvall, C. L.; Benoit, D.; Lee, C. C.; Overell, R.; Gall, A.; Prieve, M.; Paschal, A.; Diab, C.; **De. P**. Targeted polymer bioconjugates and therapeutic uses thereof. US Patent. WO 2009140423, **2009**.
5. Stayton, P. S.; Hoffman, A. S.; Convertine, A. J.; Duvall, C. L.; Benoit, D.; Overell, R.; Johnson, P.; Gall, A.; Prieve, M.; Paschal, A.; Diab, C.; **De. P**. Polymeric carrier for the delivery of polynucleotides into a living cell. US Patent. WO 2009140421, **2009**.
6. Johnson, P.; Stayton, P. S.; Hoffman, A. S.; Overell, R.; Gall, A.; Prieve, M.; Paschal, A.; Diab, C.; **De. P**. Heterogeneous polymeric micelles and conjugates for intracellular delivery. US Patent. WO 2010021770, **2010**.
7. Prieve, M. G.; Johnson, P. H.; Stayton, P. S.; Hoffman, A. S.; Overell, R. W.; Gall, A. S.; Paschal, A. E. E.; Diab, C.; **De. P**.; Declue, M. S.; Monahan, S. D. Multiblock copolymers associated with polynucleotides for pharmaceutical compositions. US Patent. WO 2010054266, **2010**.
8. Johnson, P. H.; Stayton, P. S.; Hoffman, A. S.; Overell, R.; Gall, A.; Prieve, M.; Paschal, A.; Diab, C.; **De. P**. Micelles of hydrophilically shielded membrane-destabilizing copolymers. US Patent. WO 2010053597, **2010**.
9. Monahan, S. D.; Johnson, P. H.; Diab, C.; **De. P**.; Stayton, P. S.; Hoffman, A. S. Hydrophobic block conjugated therapeutic agents. US Patent. WO 2011060281, **2011**.
10. Monahan, S. D.; Johnson, P. H.; Declue, M. S.; **De. P**.; Gall, A.; Stayton, P. S.; Hoffman, A. S. Targeting monomers and polymers having targeting blocks. US Patent. WO 2011062965, **2011**.
11. Johnson, P. H.; Stayton, P. S.; Hoffman, A. S.; Overell, R.; Gall, A.; Prieve, M.; Paschal, A.; Diab, C.; **De. P**. Micelles of hydrophilically shielded membrane-destabilizing copolymers. US Patent. US 20110281934, **2011**.
12. Prieve, M. G.; Johnson, P. H.; Stayton, P. S.; Hoffman, A. S.; Overell, R. W.; Gall, A. S.; Paschal, A. E. E.; Diab, C.; **De, P.**; Declue, M. S.; et al Multiblock copolymers. US Patent. US 20110286957, **2011**.
13. Stayton, P. S.; Hoffman, A. S.; Convertine, A.; Duvall, C. L.; Benoit, D.; Overell, R. W.; Johnson, P. H.; Gall, A. S.; Prieve, M. G.; Paschal, A. E. E.; Diab, C.; De, P. Micellic assemblies. US Patent. US 20110123636, **2011.**
14. Johnson, P. H.; Stayton, P. S.; Hoffman, A. S.; Overell, R.; Gall, A.; Prieve, M.; Paschal, A.; Diab, C.; **De. P**. Heterogeneous polymeric micelles for intracellular delivery. US Patent. US 20120021514, **2012.**
15. Monahan, S. D.; Johnson, P. H.; Diab, C.; **De, P.**; Stayton, P. S.; Hoffman, A. S. Hydrophobic block conjugated therapeutic agents. US Patent. US 20130017167, **2013.**

Book Chapters:

1. **De, P.**; Faust, R. *Carbocationic Polymerization*. In: Macromolecular Engineering; Edited by Matyjaszewski, K.; Gnanou, Y.; Leibler, L. Wiley-VCH, Weinheim, Germany, Vol. 1, Pages 57-101, **2007**.
2. **De, P.**; Faust, R. *Carbocationic Polymerization*. In: Synthesis of Polymers; Edited by Schluter, A. D.; Hawker, C. J.; Sakamoto, J. Wiley-VCH, Weinheim, Germany, Vol. 2, Pages 775-817, **2012**.
3. **De, P.**; Faust, R. *Cationic Initiators*. In: Kirk-Othmer Encyclopedia of Chemical Technology, John Wiley & Sons, Inc. **2015**, 1-14.
4. Maiti, B.; Ruidas, B.; Roy, S. G.; **De, P.** *RAFT Polymerization of Side-Chain L-Proline Containing Methacrylate Monomer: Controlled Synthesis, Thermoresponsiveness and Self-Assembly*. In: Nanospectrum: A Current Scenario; Edited by S. Chakrabarti, P. Mukherjee, G. Khan, A. Adhikary, P. Patra, J. Bal. Allied Publishers Pvt. Ltd., **2015**, pp. 41-48.
5. Roy, S. G.; Banerjee, S.; **De, P.** *Cationic Polymerization of Nonpolar Vinyl Monomers for Producing High Performance Polymers*. In: Saleem Hashmi (editor-in-chief), Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier; **2016**. pp. 1-17.

6. Banerjee, S.; Jha, B. N.; Kumar, R.; Maiti, B.; Haldar, U.; **De, P.** *Synthesis of Chain End Functional Polymers by Living Cationic Polymerization Method*. In: Functional Polymers: Design, Synthesis and Applications; Edited by Shanmugam, R. Apple Academic Press, **2017**, pp. 127-147.
7. Roy, S. G.; **De, P.** *Polymers Prepared via Reversible-Deactivation Radical Polymerization (RDRP) for Biomedical Applications.* In: Functional polymers by Reversible Deactivation Radical Polymerization: Synthesis and Applications; Edited by Singha, N. K.; Mays, J. W. Smithers Rapra, UK, **2017**, pp. 269-320.
8. Roy, S. G.; **De, P.** *Polymers Prepared via Reversible-Deactivation Radical Polymerization (RDRP) for Biomedical Applications*. In: Reversible Deactivation Radical Polymerization; Edited by Singha, N. K.; Mays, J. Walter De Gruyter GmbH & Co KG, Belrlin/Boston, **2020**, pp. 221-262.
9. Mukherjee, I.; Goswami, K. G.; **De, P.** *Alternating Copolymers Based on Amino Acids and Peptides*. In: Advances in Sustainable Polymers. Materials Horizons: From Nature to Nanomaterails; Edited by Katiyar, V.; Kumar, A.; Mulchandani. Springer, Singapore, **2020**, pp. 95-119.
10. **De, P.**; Faust, R. *Cationic Macromolecular Engineering*. In: Macromolecular Engineering: From Precise Synthesis to Macroscopic Materials and Applications; Edited by Matyjaszewski, M.; Gnanou, Y.; Hadjichristidis, N.; Muthukumar, M. WILEY-VCH Gmbh, Second Edition, Pages 1-60, **2022**. DOI: 10.1002/9783527815562.mme0003

Journal Publications:

2022

201. Sharma, T.; Tailor, N. V.; Choudhury, N.; Kumar, D.; Saini, S. K.; Mitra, A.; Kumar, M.; De, P.; Satapathi, S.* Observation of Strong Electron-Phonon Interaction in Polymeric Diluted Organic Semiconductor. ***Chemical Physics*** **2023**, *564*, 111706(1-6).

2022

200. Nayak, K.; De, P.* Crosslinked Polymethacrylate Absorbent with Phenylalanine and Stearate Pendants. ***J. Macromol. Sci., Part A: Pure Appl. Chem.*** **2022**, *In Press*.
199. Dey, A.; Haldar, U.; Rajasekhar, T.; Ghosh, P.; Faust, P.; De, P.* Polyisobutylene-Based Glycopolymers as Potent Inhibitors for *in vitro* Insulin Aggregation. ***Journal of Materials Chemistry B*** **2022**, *10*, In Press.
198. Banerjee, A.; Chowdhury, P. Bauri, K.; Saha, B.;* De, P.* Inhibition and Eradication of Bacterial Biofilm Using Polymeric Materials. ***Biomaterials Science*** **2022**, *10*, *In Press*.
197. Deka, N.; Bera, A.; Roy, D.;* De, P.* Methyl Methacrylate (MMA) Based Copolymers: Recent Developments in the Areas of Transparent and Stretchable Active Matrices. ***ACS Omega*** **2022**, *7*, 36929−36944.
196. Samanta, P.; Mete, S.; Pal, S.; P. De.* Polymeric Peroxides: Synthesis, Characterization, Degradation and Applications. ***J. Macromol. Sci., Part A: Pure Appl. Chem.*** **2022**, *59*, 711-730.
195. Chowdhury, P.; Banerjee, A.; Saha, B.; Bauri, K.; De, P. Stimuli-Responsive Aggregation-Induced Emission (AIE)-Active Polymers for Biomedical Applications. ***ACS Biomaterials Science & Engineering***, **2022**, *8*, 4207-4229.
194. Sahoo, S.; Maiti, I.; Laha, A.; De, R.*; Maiti, S.*; De, P.* Cholate Conjugated Cationic Polymers for Regulation of Actin Dynamics. ***Journal of Materials Chemistry B*** **2022**, *10*, 8033-8045.
193. Nayak, K.; Sahoo, S.; De, P.* Chirality and Solvent Assisted Gelation Modulation with Stearoyl Appended Macromolecules. ***Eur. Polym. J.*** **2022**, *177*, 111439(1-11).
192. Bera, A.; Mukhopadhyay, D.; Goswami, K.; Ghosh, P.;* De, R.;* De, P.* Fatty Acid-Based Polymeric Micelles to Ameliorate Amyloidogenic Disorders. ***Biomaterials Science*** **2022**, *10*, 3466-3479.
191. Ghosh, D.; Ghosh Roy, S.*; De, P.* Amino Acid-Based Polymeric Gel Network and Its Application in Different Fields. ***Journal of the Indian Chemical Society*** **2022**, *99*, 100366(1-11).
190. Nayak, K.; Ghosh, P.; Khan, Md E. H.; De, P.* Side-Chain Amino Acid-Based Polymers: Self-Assembly and Bioapplications. ***Polym. Int.*** **2022**, *71*, 411-425.
189. Sahoo, S.; Gordievskaya, Y. D.; Bauri, K.; Gavrilov, A. A.; Kramarenko, E. Y.;* De, P;* Polymerization Induced Self-Assembly (PISA) Generated Cholesterol-Based Block Copolymer Nano-

Objects in Non-Polar Solvent: Combined Experimental and Simulation Study. ***Macromolecules*** **2022**, *55*, 1139-1152.
188. Sahoo, S.; Ghosh, P.; Khan, Md E. H.; De, P.* Recent Progress in Macromolecular Design and Synthesis of Bile Acid-Based Polymeric Architectures. ***Macromolecular Chemistry and Physics*** **2022**, *223*, 2100414(1-16). Invited Talent Article.
187. Sahoo, S.; Hazra, b.; Tarafdar, P. K.*; De, P.* Controlling the Membrane Perturbation by Tuning Charge Variable Cholate-Based Macromolecules. ***ACS Appl. Polym. Mater.*** **2022**, *4*, 1323-1333.

2021

186. Mondal, A.; Khan, Md E. H.; Ghosh, P.;* De, P.* Future Direction of Designing Antioxidant Polymers in Modulating Protein Aggregation Process. ***Journal of Molecular and Engineering Materials*** **2021**, *9*, 2140001(1-16).
185. Pan, S.; Roy, S.; Choudhury, N.; Behera, P. P.; Sivaprakasam, K.; Ramakrishnan, L.; De, P.* From Small Molecules to Polymeric Probes: Recent Advancements of Formaldehyde Sensors. ***Science and Technology of Advanced Materials*** **2021**, *23*, 49-63. Invited Article.
184. Bag, S.; Ghosh, S.; Paul, S.; Khan, Md E. H.; De, P.* Styrene-Maleimide/Maleic Anhydride Alternating Copolymers: Recent Advances and Future Perspectives. ***Macromol. Rapid Commun.*** **2021**, *42*, 2100501(1-26).
183. Paul, S.; Pan, S.; Mukherjee, A.;* De, P.* Polymeric Nitric Oxide Donors: Design, Detection, Biomedical Applications and Future Possibilities. ***Mol. Pharm.*** **2021**, *18*, 3181-3205.
182. Bera, A.; Sahoo, S.; Goswami, K.; Das, S. K.; Ghosh, P.;* De, P.* Modulating Insulin Aggregation with Charge Variable Cholic Acid Derived Polymers. ***Biomacromolecules*** 2021, *22*, 4833-4845.
181. Kumar, V.; Saini, S.; Choudhury, N.; Kumar, A.; Maiti, B.; De, P.; Kumar, M.; Satapathi, S.* Highly Sensitive Detection of Nitro compounds Using Fluorescent Copolymer Based FRET System. ***ACS Appl. Polym. Mater.*** **2021**, *3*, 4017-4026.
180. Choudhury, N.;* De, P.* Recent Progress in Pendant Rhodamine-Based Polymeric Sensors for the Detection of Copper, Mercury and Iron Ions. ***J. Macromol. Sci., Part A: Pure Appl. Chem.*** **2021**, *58*, 835-848.
179. Kumbhakar, K.; Dey, A.; Mondal, A.; De, P.*; Biswas, R.* Interactions and Dynamics in Aqueous Solutions of pH-Responsive Polymers: A Combined Fluorescence and Dielectric Relaxation Studies. ***J. Phys. Chem. B*** **2021**, *125*, 6023-6035.
178. Dey, A.; Haldar, U.; De, P.* Block Copolymer Synthesis by the Combination of Living Cationic Polymerization and Other Polymerization Methods. ***Frontiers in Chemistry*** **2021**, *9*, 354.
177. Ghosh, P.; Bera, A.; Bhadury, P.; De, P.* From Small Molecules to Synthesized Polymers: Potential Role in Combating Amyloidogenic Disorders. ***ACS Chemical Neuroscience*** **2021**, *12*, 1737-1748.
176. Paul, S.; Pan, S.; Chakraborty, A.; De, P.;* Mukherjee, A.* Ultra-Violet Light or pH Triggered Nitric Oxide Release from a Water-Soluble Polymeric Scaffold. ***ACS Appl. Polym. Mater.*** **2021**, *3*, 2310-2315.
175. Choudhury, N.; Das, S.; Samadder, S.;* De, P.* Phenylalanine-Tethered pH-Responsive Poly(2-Hydroxyethyl Methacrylate). ***Chemistry – An Asian Journal*** **2021**, *16*, 1-10.
174. Sahoo, S.; Ghosh, P.; Banerjee, S.;* De, P.* Recent Advances in Biomedical Applications of Cholic Acid-Based Macromolecules. ***ACS Appl. Polym. Mater.*** **2021**, *3*, 1687-1706.
173. Ghosh, P.; Bera, A.; De, P.* Current Status, Challenges and Future Directions in the Treatment of Neurodegenerative Diseases by Polymeric Materials. ***Journal of the Indian Chemical Society*** **2021**, *98*, 100011(1-9).
172. Sahoo, S.; Rehman, J. ur.; Shah, M. R.; De, P.*; Tecilla, P.* Cholate Conjugated Polymeric Amphiphiles as Efficient Artificial Ionophore. ***ACS Appl. Polym. Mater.*** **2021**, *3*, 588-593.
171. Azmeera, V.;* Haldar, U.; Roy, S. G.; Rajasekhar, T.; De, P. Block Copolymers of Poly(ε-caprolactone) with pH-Responsive Side-Chain Amino Acid Moieties. ***Journal of Polymers and the Environment*** **2021**, *29*, 209-218.
170. Choudhury, N.; Saha, B.; De, P;* Recent Progress in Polymer-Based Optical Chemosensors for Cu^{2+} and Hg^{2+} Ions: A Comprehensive Review. ***European Polymer Journal*** **2021**, *145*, 110233(1-35).

2020

169. Saha, B.; Gordievskaya, Y. D.; De, P;* Kramarenko, E. Y.;* Unusual Nanostructured Morphologies Enabled by Interpolyelectrolyte Complexation of Polyions Bearing Incompatible Nonionic Segments ***Macromolecules*** **2020**, *53*, 10754–10764.

168. Bauri, K.; Saha, B.; Banerjee, A.; De, P.* Recent advances in the development and applications of nonconventional luminescent polymers. ***Polym. Chem.*** **2020**, *11*, 7293-7315.

167. Choudhury, N.; Ruidas, B.; Mukhopadhyay, C. D.; De, P.* Rhodamine-Appended Polymeric Probe: An Efficient Colourimetric and Fluorometric Sensing Platform for Hg^{2+} in Aqueous Medium and Living Cells. ***ACS Appl. Polym. Mater.*** **2020**, *2*, 5077-5085.

166. Ghosh, P.; De, P.* Modulation of Amyloid Protein Fibrillation by Synthetic Polymers: Recent Advances in the Context of Neurodegenerative Diseases. ***ACS Appl. Bio Mater.*** **2020**, *3*, 6598-6625.

165. Mete, S.; Mukherjee, P.; Goswami, K. G.; Ghorai, P. K.;* De, P.* Polyperoxides from Cyclic Monomers: Synthesis, Characterization and High Pressure Kinetics Study. ***ACS Appl. Polym. Mater.*** **2020**, *2*, 4109-4117.

164. Ghosh, P.; Bera, A.; Ghosh, A.; Bhadury, P.; De, P.* Side-Chain Proline-Based Polymers as Effective Inhibitors for in vitro Aggregation of Insulin. ***ACS Appl. Bio Mater.*** **2020**, *3*, 5407-5419.

163. Goswami, K. G.; Saha, B.; De, P. Alternating Copolymers with Glycyl-Glycine and Alanyl-Alanine Side-Chain Pendants: Synthesis, Characterization and Solution Properties. ***J. Macromol. Sci., Part A: Pure Appl. Chem.*** **2020**, *57*, 675-683.

162. Goswami, K. G.; Mete, S.; Chaudhury, S, S.; Sar, P.; Ksendzov, E.; Mukhopadhyay, C. D.; Kostjuk, S. V.;* De, P.* Self-Assembly of Amphiphilic Copolymers with Sequence Controlled Alternating Hydrophilic-Hydrophobic Pendant Side Chains. ***ACS Appl. Polym. Mater.*** **2020**, *2*, 2035-2045.

161. Sar, P.; Ghosh Roy, S.; De, P.; Ghosh, S.* Synthesis of Glutamic Acid Derived Organogels and their Applications in Dye Removal from Aqueous Medium. ***Macromolecular Materials and Engineering*** **2020**, *305*, 1900809(1-10).

160. Mete, S.; Goswami, K. G.; De, P.* Composition dependent crystallization behaviour of copolyperoxides from methyl methacrylate and 4-vinylbenzyl stearate. ***Journal of Polymer Science*** **2020**, *58*, 766-778.

159. Choudhury, N.; Ruidas, B.; Saha, B.; Srikanth, K.; Das, Chitrangada; De, P.* Multifunctional Tryptophan-Based Fluorescent Polymeric Probes for Sensing, Bioimaging and Removal of Cu^{2+} and Hg^{2+} Ions. ***Polym. Chem.*** **2020**, *11*, 2015-2026.

158. Kumar, V.; Choudhury, N.; Kumar, A.; De, P.; Satapathi, S.* Poly-Tryptophan/Carbazole based FRET-system for Sensitive Detection of Nitroaromatic Explosives. ***Optical Materials*** **2020**, *100*, 109710(1-7).

157. Saha, B.; Ruidas, B.; Mete, S.; Das Mukhopadhyay, C.*; Bauri, K.*; De, P.* AIE-Active Non-Conjugated Poly(*N*-vinylcaprolactam) as Fluorescent Thermometer for Intracellular Temperature Imaging. ***Chemical Science*** **2020**, *11*, 141-147.

2019

156. Kumbhakar, K.; Saha, B.; De, P.*; Biswas, R.* Cloud Point Driven Dynamics in Aqueous Solutions of Thermoresponsive Copolymers: Are They Akin to Criticality Driven Solution Dynamics? ***J. Phys. Chem. B*** **2019**, *123*, 11042-11054.

155. Mete, S.; Goswami, K. G.; Ksendzov, E.; Kostjuk, S. V.;* De, P.* Modulation of side chain crystallinity in alternating copolymers. ***Polym. Chem.*** **2019**, *10*, 6588-6599.

154. Sar, P.; Ghosh, S.; Gordievskaya, Y. D.; Goswami, K. G.; Kramarenko, E. Y.;* De, P.* pH Induced Amphiphilicity-Reversing Schizophrenic Aggregation by Alternating Copolymers. ***Macromolecules*** **2019**, *52*, 8346-8358.

153. Pan, A.; Roy, S. G.; Haldar, U.; Mahapatra, R. D.; Harper, G. R.; Low, W. L.;* De, P.;* Hardy, J. G.* Uptake and Release of Species from Carbohydrate Containing Organogels and Hydrogels. ***Gels*** **2019**, *5*, 43(1-17).

152. Saha, B.; Bhattacharyya, S.; Mete, S.; Mukherjee, A.; De, P.* Redox-Driven Disassembly of Polymer-Chlorambucil Polyprodrug: Delivery of Anticancer Nitrogen Mustard and DNA Alkylation. ***ACS Appl. Polym. Mater.*** **2019**, *1*, 2503-2515.

151. Chini, M. K.; Kumar, V.; Maiti, B.; De, P.; Satapathi, S.* A dual "Turn-On/Turn-Off" "FRET" sensor for highly sensitive and selective detection of Lead and Methylene Blue based on fluorescent

dansyl tagged copolymer and small molecule diketopyrrolopyrrole. ***Polymer Testing*** **2019**, *79*, 105997(1-6).

150. Saha, B.; Choudhury, N.; Bhadran, A.; Bauri, K.; De, P. Amino Acid-Derived Alternating Polyampholyte Luminogen. ***Polym. Chem.*** **2019**, *10*, 3306-3317.

149. Kumar, V.; Maiti, B.; Chini, M. K.; De, P.; Satapathi, S.* Multimodal Fluorescent Polymer Sensor for Highly Sensitive Detection of Nitroaromatics. ***Scientific Reports*** **2019**, *9*, 7269(1-10).

148. Ejaj, T.; Saha, B.; Mukherjee, K.; De, P.*; Biswas, R.* Exploring Aqueous Solution Dynamics of Amphiphilic Diblock Copolymer: Dielectric Relaxation and Time-Resolved Fluorescence Measurements. ***J. Phys. Chem. B*** **2019**, *123*, 5892-5901.

147. Nandi, M.; Pan, S.; Ghosh, D.; De, P. Effects of Main-Chain and Chain-Ends on the Organogelation of Stearoyl Appended Pendant Valine Based Polymers. ***Chinese Journal of Polymer Science*** **2019**, *37*, 903-911.

146. Mukherjee, I.; Ghosh, A.; Bhadury, P.*; De, P.* Matrix Assisted Antibacterial Activity of Polymer Conjugates with Pendant Antibiotics, Bioactive and Biopassive Moieties. ***Journal of Materials Chemistry B*** 2019, *7*, 3007-3018.

145. SomChaudhury, S.; Sannigrahi, A.; Nandi, M.; Mishra, V. K.; De, P.; Chattopadhyay, K.; Mishra, S.; Sil, J.; Das Mukhopadhyay, C. A novel PEGylated block copolymer in new age therapeutics for Alzheimer's disease. ***Molecular Neurobiology*** **2019**, *56*, 6551-6565.

144. Nandi, M.; Banerjee, S.; De, P. Stearoyl-appended Pendant Amino Acid-Based Hyperbranched Polymers for Selective Gelation of Oil from Oil/Water Mixture. ***Polym. Chem.*** **2019**, *10*, 1795-1805.

143. Choudhury, N.; Saha, B.; Ruidas, B.; De, P. Dual-Action Polymeric Probe: Turn-On Sensing and Removal of Hg^{2+}; Chemosensor for HSO_4^-. ***ACS Appl. Polym. Mater.*** **2019**, *1*, 461-471.

142. Saha, B.; Choudhury, N.; Seal, S.; Ruidas, B.; De, P.* Aromatic Nitrogen Mustard-Based Autofluorescent Amphiphilic Brush Copolymer as pH-Responsive Drug Delivery Vehicle. ***Biomacromolecules*** **2019**, *20*, 546-557.

141. Mukherjee, I.; Ghosh, A.; Bhadury, P.*; De, P.* Matrix Assisted Regulation of Antimicrobial Properties: Mechanistic Elucidation with Ciprofloxacin-Based Polymeric Hydrogel Against Vibrio sp. ***Bioconjugate Chemistry*** **2019**, *30*, 218-230.

140. Nandi, M.; Maiti, B.; Banerjee, S.; De, P. Hydrogen Bonding Driven Self-Assembly of Side-Chain Amino Acid and Fatty Acid Appended Poly(methacrylate)s: Gelation and Application in Oil Spill Recovery. ***J. Polym. Sci. Part A: Polym. Chem.*** **2019**, *57*, 511-521.

2018

139. Goswami, K. G.; Saha, B.; Mete, S.; De, P. Alternating Placement of D- and L-Alanine Moieties in the Polymer Side-Chains. ***Macromolecular Chemistry and Physics*** **2018**, 1800398(1-8).

138. Mete, S.; Mukherjee, P.; Maiti, B.; Pal, S.; Ghorai, P. K.; De, P.* Degradable Crystalline Polyperoxides from Fatty Acid Containing Styrenic Monomers. ***Macromolecules*** **2018**, *51*, 8912-8921.

137. Mete, S.; Choudhury, N.; **De, P.** Degradable Alternating Polyperoxides from Poly(ethylene glycol) Substituted Styrenic Monomers with Water Solubility and Thermoresponsiveness. ***J. Polym. Sci. Part A: Polym. Chem.*** **2018**, *56*, 2030-2038.

136. Chakraborty, I.; Mukherjee, K.; De, P.; Bhattacharyya, R.* NMR solvent relaxation across coil to globule transition of thermo-responsive polymers. ***J. Phys. Chem. B*** **2018**, *122*, 6094-6100.

135. Mukherjee, I.; Sinha, S. K.; Datta, S.*; De, P.* Recyclable Thermoresponsive Polymer-*β*-Glucosidase Conjugate with Intact Hydrolysis Activity. ***Biomacromolecules*** **2018**, *19*, 2286-2293.

134. Bauri, K.; Nandi, M.; De, P.* Amino acid-derived stimuli-responsive polymers and their applications. ***Polymer Chemistry*** **2018**, *9*, 1257-1287.

133. Choudhury, N.; Mete, S.; Srikanth, K.; De. P.* Side-Chain Glycylglycine-Based Polymer for Simultaneous Sensing and Removal of Copper(II) from Aqueous Medium. ***J. Polym. Sci. Part A: Polym. Chem.*** **2018**, *56*, 914-921.

132. Mukherjee, I.; Ghosh, A.; Bhadury, P.*; De, P.* Leucine Based Polymer Architecture Induced Antimicrobial Properties and Bacterial Cell Morphology Switching. ***ACS Omega***, **2018**, *3*, 769-780.

131. Taya, P.; Maiti, B.; Ahawalat, V.; De, P.; Satapathi, S.* Design of a novel FRET based fluorescent chemosensor and their application for highly sensitive detection of nitroaromatics. ***Sensors & Actuators: B. Chemical*** **2018**, *255*, 2628-2634.

2017

130. Bauri, K.; Saha, B.; Mahanti, J.; De, P. An Unorthodox Macromolecular Luminogen for Speedy, Selective and Sensitive Detection of Picric Acid in Water. ***Polymer Chemistry*** **2017**, *8*, 7180-7187.

129. Rajasekhar, T.; Haldar, U.; De, P.; Emert, J.; Faust, R. Cationic Co- and Multi-component Polymerization of Isobutylene with C4 Olefins. ***Macromolecules*** **2017**, *50*, 8325−8333.

128. Nandi, M.; Maiti, B.; Srikanth, S.; De, P. Supramolecular Interaction Assisted Fluorescence and Tunable Stimuli-Responsiveness of L-Phenylalanine Based Polymers. ***Langmuir*** **2017**, *33*, 10588-10597.

127. Maiti, B.; Haldar, U.; Rajasekhar, T.; De, P. Functional polymer library through post-polymerization modification of copolymers having oleate and pentaflurophenyl pendants. ***Chemistry - A European Journal*** **2017**, *23*, 15156-15165.

126. Chakraborty, I.; Mukherjee, I.; Haldar, U. De, P.; Bhattacharyya, R.* Monitoring aggregation of a pH-responsive polymer via proton exchange. ***Physical Chemistry Chemical Physics*** **2017**, *19*, 17360-17365.

125. Haldar, U.; Sayala, K. D.; Ramakrishnan, L.; Sivaprakasam, K.; De, P. Interfacial polycondensation-derived side-chain poly(ethylene glycol)-containing water-soluble polysulfide weak-link polymers as stabilizer for gold nanoparticles. ***Reactive & Functional Polymers*** **2017**, *115*, 10-17.

124. Mukherjee, I.; Ghosh, A.; Bhadury, P.; De, P. Side-Chain Amino Acid Based Cationic Antibacterial Polymers: Investigating the Morphological Switching of Polymer Treated Bacterial Cell. ***ACS Omega*** **2017**, *2*, 1633-1644.

123. Sao, S.; Mukherjee, I.; De, P. Chaudhuri, D. Encapsulation induced aggregation – A self-assembly strategy for weakly pi-stacking chromophores. ***Chem. Commun.*** **2017**, *53*, 3994-3997.

122. Maiti, B.; Dutta, P.; Seal, S.; Pal, S.; De, P.; Maiti, S. Side-Chain Amino Acid Based Cationic Polymer Induced Actin Polymerization. ***Journal of Materials Chemistry B*** **2017**, *5*, 1218-1226.

121. Datta, L. P.; Chatterjee, A.; Acharya, K.; De, P.; Das, M. Cytotoxicity and Apoptotic Effect of Enzyme Responsive Adenosine Triphosphate Coated Silver Nanoparticles on Human Liver Carcinoma Cells. ***New Journal of Chemistry*** **2017**, *41*, 1538-1548.

120. Maiti, B.; Bauri, K.; Nandi, M.; **De, P.** Surface functionalized nano-objects from oleic acid-derived stabilizer via non-polar RAFT dispersion polymerization. ***J. Polym. Sci. Part A: Polym. Chem.*** **2017**, *55*, 263-273.

2016

119. Bauri, K.; Maiti, B.; **De, P.** Leucine-Based Block Copolymer Nano-Objects via Polymerization-Induced Self-Assembly (PISA). ***Macromolecular Symposia*** **2016**, *369*, 101-107.

118. Saha, B.; Bauri, K.; Bag, A.; Ghorai, P. K.; **De, P.** Conventional Fluorophore-free Dual pH- and Thermo- Responsive Luminescent Alternating Copolymer. ***Polymer Chemistry*** **2016**, *7*, 6895-6900.

117. Haldar, U.; Pan, A.; Mukherjee, I.; **De, P.** POSS Semitelechelic A$\beta_{17\text{-}19}$ Peptide Initiated Helical Polypeptides and Their Structural Diversity in Aqueous Medium. ***Polymer Chemistry*** **2016**, *7*, 6231-6240.

116. Haldar, U.; Saha, B.; Azmeera, V.; **De, P**. POSS End-Linked Peptide Functionalized Poly(ε-Caprolactone)s and Their Inclusion Complexes with α-Cyclodextrin ***J. Polym. Sci. Part A: Polym. Chem.*** **2016**, *54*, 3643-3651.

115. Rumyantsev, A.; Pan, A.; Roy, S. G.; De, P.; Kramarenko, E. Polyelectrolyte Gel Swelling and Conductivity vs Counterion Type, Cross-Linking Density and Solvent Polarity. ***Macromolecules*** **2016**, *49*, 6630-6643.

114. Bauri, K.; Pan, A.; Haldar, U.; Narayanan, A. **De, P**. "Exploring Amino Acid-Tethered Polymethacrylates as CO_2-Sensitive Macromolecules: A Concealed Property" ***J. Polym. Sci. Part A: Polym. Chem.*** **2016**, *54*, 2794–2803.

113. Saha, B.; Haldar, U.; **De, P.** Polymer-chlorambucil drug conjugates: A dynamic platform of anticancer drug delivery. ***Macromolecular Rapid Communications*** **2016**, *37*, 1015-1020.

112. Haldar, U.; Roy, S. G.; **De, P.** POSS tethered hybrid "*inimer*" derived hyperbranched and star-shaped polymers *via* SCVP-RAFT technique. ***Polymer*** **2016**, *97*, 113-121.

111. Maiti, B.; Maiti, S.; **De, P.** Self-assembly of well-defined fatty acid based amphiphilic thermoresponsive random copolymers. ***RSC Advances*** **2016**, *6*, 19322-19330.

110. Bauri, K.; Roy, S. G.; De, P. Side-Chain Amino Acid Derived Cationic Chiral Polymers by Controlled Radical Polymerization. ***Macromolecular Chemistry and Physics*** **2016**, *217*, 365-379. Invited Talent Article.
109. Roy, S. G.; Kumar, A.; **De, P.** Amino Acid Containing Cross-Linked Co-Polymer Gels: pH, Thermo and Salt Responsiveness. ***Polymer*** **2016**, *85*, 1-9.
108. Jena, S. S.; Roy, S. G.; Azmeera, V.; **De, P.** Solvent-Dependent Self-Assembly Behaviour of Block Copolymers Having Side-Chain Amino Acid and Fatty Acid Block Segments. ***Reactive & Functional Polymers*** **2016**, *99*, 26-34.

2015
107. Datta, L. P.; Maiti, B.; **De, P.** Synthetic Polymeric Variant of *S*-Adenosyl Methionine Synthetase. ***Polymer Chemistry*** **2015**, *6*, 7796-7800.
106. Bauri, K.; Sayala, K. D.; Roy, R. S.; **De, P.** Chiral copoly(methacrylate)s carrying amino acid pendants in the side-chains. ***European Polymer Journal*** **2015**, *73*, 237-246.
105. Kumar, S.[*]; Bheemireddy, V.; **De, P.** $A\beta_{17-20}$ Peptide-Guided Structuring of Polymeric Conjugates and Their pH-Triggered Dynamic Response. ***Macromolecular Bioscience*** **2015**, *15*, 1447-1456.
104. Kumar, S.; Maiti, B.; **De, P.** Carbohydrate Conjugated Amino Acid Based Fluorescent Block Copolymers: Their Self-Assembly, pH Responsiveness and/or Lectin Recognition. ***Langmuir*** **2015**, *31*, 9422−9431.
103. Banerjee, S.; Jha, B. N.; **De, P.**; Emert, J.; Faust, R.* Kinetic and Mechanistic Studies of the Polymerization of Isobutylene Catalyzed by $EtAlCl_2$/Bis(2-chloroethyl) Ether Complex in Hexanes. ***Macromolecules*** **2015**, *48*, 5474-5480.
102. Bauri, K.; Narayanan, A.; Haldar, U.; **De, P.** Polymerization-Induced Self-Assembly Driving Chiral Nanostructured Materials. ***Polymer Chemistry*** **2015**, *6*, 6152-6162.
101. Narayanan, A.; Chandel, S.; Ghosh, N.*; **De, P.*** Visualizing Phase Transition Behavior of Dilute Stimuli Responsive Polymer Solutions via Mueller Matrix Polarimetry. ***Analytical Chemistry*** **2015**, *87*, 9120-9125.
100. Haldar, U.; Nandi, M.; Maiti, B.; **De, P.** POSS Induced Enhancement of Mechanical Strength in the RAFT Made Thermoresponsive Hydrogels. ***Polymer Chemistry*** **2015**, *6*, 5077–5085.
99. Maiti, B.; Ruidas, B.; **De, P.** Dynamic covalent cross-linked polymer gels through the reaction between side chain *β*-keto ester and primary amine groups. ***Reactive & Functional Polymers*** **2015**, *93*, 148-155.
98. Narayanan, A.; Maiti, B.; **De, P.** Exploring the post-polymerization modification of side-chain amino acid containing polymers *via* Michael addition reactions. ***Reactive & Functional Polymers*** **2015**, *91-92*, 35-42.
97. Haldar, U.; Bauri, K.; Li, R.; Faust, R.; **De, P**. Polyisobutylene Based pH-responsive Smart Self-Healing Polymeric Gels. ***ACS Applied Materials & Interfaces*** **2015**, *7*, 8779-8788.
96. Haldar, U.; Nandi, M.; Ruidas, B.; **De, P**. Controlled Synthesis of Amino-Acid Based Tadpole-Shaped Organic/Inorganic Hybrid Polymers and Their Self-Assembly in Aqueous Media. ***European Polymer Journal*** **2015**, *67*, 274-283.
95. Bauri, K.; Li, R.; Faust, R.; De, P. Synthesis and Self-assembly of Polyisobutylene Based Thermoresponsive Diblock copolymers *via* combination of Cationic and RAFT Polymerizations. ***Macromolecular Symposia*** **2015**, *349*, 65-73.
94. Haldar, U.; Bauri, K.; Li, R.; Faust, R. **De, P**. Polyisobutylene Containing Organic/Inorganic Hybrid Block Copolymers and Their Crystalline Behavior. ***J. Polym. Sci. Part A: Polym. Chem.*** **2015**, *53*, 1125-1133.
93. Vaish, A.; Roy, S. G.; **De, P.** Synthesis of Amino Acid Based Covalently Cross-Linked Polymeric Gels Using Tetrakis(hydroxymethyl) Phosphonium Chloride as a Cross-Linker. ***Polymer*** **2015**, *58*, 1-8.
92. Pal, S.; Vaish, A.; **De, P.** The Effect of Different Catalysts on the Monomer Reactivity Ratios in Oxidative Copolymerization of Styrene and *α*-Methylstyrene. ***Polymer International*** **2015**, *64*, 541-546.
91. Kumar, R.; De, P.; Zheng, B.; Huang, K.-W.; Emert, J.; Faust, R. Synthesis of Highly Reactive Polyisobutylene by $FeCl_3$/Ether Complexes in Hexanes; Kinetic and Mechanistic Studies. ***Polymer Chemistry*** **2015**, *6*, 322-329.

2014

90. Narayanan, A.; Bauri, K.; Ruidas, B.; Pradhan, G.; Banerjee, S.; **De, P.** Specific Counterion Repercussion on the Thermal, pH-response and Electrochemical Properties of the Side-Chain Leucine Based Chiral Polyelectrolytes. ***Langmuir*** **2014**, *30*, 13430-13437.
89. Sahasrabudhe, A.; Pant, S.; Chatti, M.; Maiti, B.; De, P.; Roy, S. One Step, Microwave Assisted Green Synthesis of Biocompatible Carbon Quantum Dots and Their Composites with [α-$PW_{12}O_{40}^{3-}$] for Visible Light Photocatalysis. ***AIP Conf. Proc.*** **2014**, *1951*, 353-355.
88. Maiti, B.; Kumar, S.; **De, P.** Controlled RAFT Synthesis of Side-Chain Oleic Acid Containing Polymers and Their Post-Polymerization Functionalization. ***RSC Adv.*** **2014**, *4*, 56415–56423.
87. Haldar, U.; Ramakrishnan, L.; Sivaprakasam, K.; **De, P.** Main-chain sulphur containing water soluble poly(*N*-isopropylacrylamide-*co*-*N*,*N*′-dimethylacrylamide sulphide) copolymers *via* interfacial polycondensation. ***Polymer*** **2014**, *55*, 5656-5664.
86. Roy, S. G.; **De, P.** Swelling properties of amino acid containing cross-linked polymeric organogels and their respective polyelectrolytic hydrogels with pH and salt responsive property. ***Polymer*** **2014**, *55*, 5425-5434.
85. Roy, S. G.; **De, P.** Facile RAFT synthesis of side-chain amino acid containing pH responsive hyperbranched and star architectures. ***Polymer Chemistry*** **2014**, *5*, 6365-6378.
84. Kumar, S.; Acharya, R.; Chatterji, U.; De, P. Controlled synthesis of β-sheet polymers based on side-chain amyloidogenic short peptide segments *via* RAFT polymerization. ***Polymer Chemistry*** **2014**, *5*, 6039-6050.
83. Roy, S. G.; **De, P.** pH Responsive Polymers with Amino Acids in the Side Chains and Their Potential Applications. ***J. Apply. Polym. Sci.*** **2014**, *131*, 41084(1-12).
82. Kedia, N.; Roy, S. G.; De, P.; Bagchi, S. Synthesis of a Polymer Bearing Several Coumarin Dyes Along the Side-Chain and Study of its Fluorescence in Pure and Binary Solvent Mixtures as well as Aqueous Surfactant Solutions. ***J. Phys. Chem. B*** **2014**, *118*, 4683-4692.
81. Roy, S. G.; Haldar, U.; **De, P.** Remarkable Swelling Capability of Amino Acid Based Cross-Linked Polymer Networks in Organic and Aqueous Medium. ***ACS Appl. Mater. Interfaces*** **2014**, *6*, 4233-4241.
80. Roy, S. G.; Bauri, K.; Pal, S.; **De, P.** Tryptophan containing covalently cross-linked polymeric gels with fluorescence and pH-induced reversible sol-gel transition properties. ***Polymer Chemistry*** **2014**, *5*, 3624-3633.
79. Pal, S.; Dhawan, A.; **De, P.** Ortho- and meta-substituted polystyrene polyperoxides: synthesis, characterization and thermal decomposition studies. ***Polymer International*** **2014**, *63*, 746-751.
78. Kumar, S.; **De, P.** Fluorescent labelled dual-stimuli (pH/thermo) responsive self-assembled side-chain amino acid based polymers. ***Polymer*** **2014**, *55*, 824-832.
77. Pal, S.; Roy, S. G.; **De, P.** Synthesis *via* RAFT polymerization of thermo- and pH-responsive random copolymers containing cholic acid moieties and their self-assembly in water. ***Polymer Chemistry*** **2014**, *5*, 1275-1284.

2013

76. Patil, N.; Roy, S. G.; Haldar, U, De, P. CdS Quantum Dots Doped Tuning of Deswelling Kinetics of Thermoresponsive Hydrogels Based on Poly(2-(2-methoxyethoxy)ethyl methacrylate). ***J. Phys. Chem. B*** **2013**, *117*, 16292-16302.
75. Kumar, S.; Acharya, R.; Chatterji, U.; De, P. Side-Chain Amino Acid Based pH Responsive Self-Assembled Block Copolymers for Drug Delivery and Gene Transfer. ***Langmuir*** **2013**, *29*, 15375-15385.
74. Khan, E. H.; Pal, S.; **De, P.** N-Hydroxyphthalimide-Mediated Oxidation of Styrene by Molecular Oxygen. ***Macromol. Chem. Phys.*** **2013**, *214*, 2181-2188.
73. Maiti, B.; **De, P.** RAFT Polymerization of Fatty Acid Containing Monomers: Controlled Synthesis of Polymers from Renewable Resources. ***RSC Adv.*** **2013**, *3*, 24983-24990.
72. Bauri, K.; **De, P.**; Shah, P. N.; Li, R.; Faust, R. Polyisobutylene-Based Helical Block Copolymers with Ph Responsive Cationic Side-Chain Amino Acid Moieties by Tandem Living Polymerizations. ***Macromolecules*** **2013**, *46*, 5861-5870.
71. Bartelson, K. J.; **De, P.**; Kumar, R.; Emert, J.; Faust, R. Cationic polymerization of isobutylene by $FeCl_3$/ether complexes in hexanes: An investigation of the steric and electronic effects of ethers. ***Polymer*** **2013**, *54*, 4858-4863.
70. Bauri, K.; Pant, S.; Roy, S. G.; **De, P.** Dual pH and temperature responsive helical copolymer libraries with pendant chiral leucine moieties. ***Polymer Chemistry*** **2013**, *4*, 4052-4060.

69. Pal, S.; **De, P.** Poly(9-vinyl anthracene peroxide): synthesis, characterization, degradation and application as macroinitiator for the polymerization of methyl methacrylate. ***Polymer*** **2013**, *54*, 2652-2657.

68. Bauri, K.; Roy, S. G.; Pant, S.; **De, P.** Controlled Synthesis of Amino Acid-Based pH-Responsive Chiral Polymers and Self-Assembly of Their Block Copolymers. ***Langmuir*** **2013**, 29, 2764−2774.

67. Roy, S. G.; Bauri, K.; Pal, S.; Goswami, A.; Madras, G.; **De, P.** Synthesis, Characterization and Thermal Degradation Studies of Dual Temperature- and pH-Sensitive RAFT-Made Copolymers of N,N-(Dimethylamino)ethyl Methacrylate and Methyl Methacrylate ***Polymer International*** **2013**, 62, 463–473.

66. **De, P.;** Sumerlin, B. S. Precision Control of Temperature Response by Copolymerization of Di(ethylene glycol) Acrylate and an Acrylamide Comonomer. ***Macromolecular Chemistry and Physics*** **2013**, *214*, 272-279.

65. Kumar, S.; Acharya, R.; Chatterji, U.; **De, P.** Controlled Synthesis of pH Responsive Cationic Polymers Containing Side-Chain Peptide Moieties via RAFT Polymerization and Their Self Assembly. ***Journal of Materials Chemistry B*** **2013**, *1*, 946-957.

64. Roy, S. G.; Acharya, R.; Chatterji, U.; **De, P.** RAFT Polymerization of Methacrylates Containing Tryptophan Moiety: Controlled Synthesis of Biocompatible Fluorescent Cationic Chiral Polymers with Smart pH-Responsiveness. ***Polymer Chemistry*** **2013**, *4*, 1141-1152.

63. Bauri, K.; Roy, S. G.; Arora, S.; Dey, R. K. Goswami, A.; Madras, G.; **De, P.** Thermal degradation kinetics of thermoresponsive poly(N-isopropylacrylamide-*co*-*N*,*N*-dimethylacrylamide) copolymers prepared via RAFT polymerization. ***Journal of Thermal Analysis and Calorimetry*** **2013**, *111*, 753-761.

2012

62. Patil, N.; Soni, J.; Ghosh, N.; **De, P.** Swelling Induced Optical Anisotropy of Thermoresponsive Hydrogels Based on Poly(2-(2-methoxyethoxy)ethyl Methacrylate): Deswelling Kinetics Probed by Quantitative Mueller Matrix Polarimetry. ***J. Phys. Chem. B*** **2012**, *116*, 13913-13921.

61. Pal, S.; Das, A.; Maiti, S.; **De, P.** Biodegradation and In-Vitro Biocompatibility of Polyperoxides: An Alternating Copolymers of Vinyl Monomers and Molecular Oxygen. ***Journal of Biomaterials Science, Polymer Edition*** **2012**, *23*, 2105-2117.

60. Pal, S.; Ghorai, P. K.; **De, P.** Oxidative Polymerization of para-Substituted Styrene Derivatives: Synthesis, Characterization and Kinetics Study. ***Polymer*** **2012**, *53*, 3687-3694.

59. Kumar, S.; Roy, S. G.; **De, P.** Cationic Methacrylate Polymers Containing Chiral Amino Acid Moieties: Controlled Synthesis via RAFT Polymerization. ***Polymer Chemistry*** **2012**, *3*, 1239-1248.

58. Pal, S.; **De, P.** Water soluble polyperoxides from 2-(2-methoxyethoxy)ethyl methacrylate: influence of molecular oxygen on thermoresponsive properties and thermal degradation. ***Chem. Commun*****. 2012**, *48*, 4229-4231.

57. Pal, S.; Das, A.; Maiti, S.; **De, P.** Synthesis and characterization of a biodegradable polymer prepared via radical copolymerization of 2-(acetoacetoxy)ethyl methacrylate and molecular oxygen. ***Polymer Chemistry*** **2012**, *3*, 182-189.

56. Pal, S.; Banoth, B.; Rahithya, G.; Dhawan, A.; **De, P.** Copolyperoxides of 2-(acetoacetoxy)ethyl methacrylate with methyl methacrylate and styrene; Synthesis, characterization, thermal analysis, and reactivity ratios. ***Polymer*** **2012**, *53*, 2583-2590.

55. Pal, S.; Ghorai, P. K.; **De, P.** Kinetic and thermochemical study of the oxidative polymerizations of α-substituted styrenes. ***Polymer Bulletin*** **2012**, *69*, 149-161.

……

54. Li, M.; Li, H.; **De, P**.; Sumerlin, B. S. Thermoresponsive Block Copolymer-Protein Conjugates Prepared by Grafting-From via RAFT Polymerization. ***Macromol. Rapid Commun.*** **2011**, *32(4)*, 354-359.

53. Sumerlin, B. S.; Li, M.; Li, H.; **De, P.** Immobilization of RAFT-generated polymers to proteins. ***Polymeric Materials Science and Engineering*** **2010**, *102*, xxx-yyy.

52. Li, M.; **De, P**.; Li, H.; Sumerlin, B. S. Conjugation of RAFT-generated polymers to proteins by two consecutive thiol-ene reactions. ***Polymer Chemistry*** **2010**, *1(6)*, 854-859.

51. Li, M.; Li, H.; Bapat, A. P.; **De, P.**; Sumerlin, B. S. Functional polymers and polymer-protein conjugates prepared by RAFT and thiol-ene reactions. ***Polymer Preprints*** **2010**, *51(2)*, 689-690.

50. **De, P.**; Li, M.; Li, H.; Sumerlin, B. S. Responsive polymer-protein conjugates by grafting-from via RAFT polymerization. ***Polymeric Materials Science and Engineering*** **2009**, *101*, 1475-1476.
49. **De, P**.; Gondi, S. R.; Roy, D.; Sumerlin, B. S. Boronic Acid-Terminated Polymers: Synthesis by RAFT and Subsequent Supramolecular and Dynamic Covalent Self-Assembly. ***Macromolecules*** **2009**, *42(15)*, 5614-5621.
48. **De, P.**; Li, M.; Roy, D.; Sumerlin, B. S. Self-assembly of stimuli-responsive polymer-protein conjugates prepared by RAFT polymerization. ***Polymeric Materials Science and Engineering*** **2009**, *100*, 669-670.
47. **De, P.**; Li, M.; Gondi, S. R.; Sumerlin, B. S. Polymer-protein bioconjugates via grafting-from by RAFT polymerization and azide-alkyne click chemistry. ***Polymer Preprints*** **2008**, *49(1)*, 197-198.
46. **De, P.**; Li, M.; Gondi, S. R.; Sumerlin, B. S. Responsive polymer-protein bioconjugates by grafting-from via RAFT with the R-group approach. ***Polymer Preprints*** **2008**, *49(1)*, 1057-1058.
45. **De, P**.; Li, M.; Gondi, S. R.; Sumerlin, B. S. Temperature-Regulated Activity of Responsive Polymer-Protein Conjugates Prepared by Grafting-from *via* RAFT Polymerization. ***Journal of the American Chemical Society*** **2008,** *130(34)*, 11288-11289.
44. Sumerlin, B. S.; **De, P.**; Li, M.; Gondi, S. R. Polymer-protein bioconjugates via grafting-from and grafting-to with RAFT-generated polymers. ***Polymer Preprints*** **2008**, *49(2)*, 234-235.
43. Sumerlin, B. S.; **De, P.**; Gondi, S. R. Responsive block copolymer micelles functionalized with biologically-relevant ligands. ***Polymer Preprints*** **2008**, *49(2)*, 1085-1086.
42. Li, M.; **De, P**.; Gondi, S. R.; Sumerlin, B. S. End group transformations of RAFT-generated polymers with bismaleimides: functional telechelics and modular block copolymers. ***J. Polym. Sci. Part A: Polym. Chem.*** **2008,** *46(15)*, 5093-5100. This article was recognized as one of the hottest polymer science article in 2008 from Wiley and Wiley-VCH journals.
41. Li, M.; **De, P.**; Gondi, S. R.; Sumerlin, B. S. Responsive polymer-protein bioconjugates prepared by RAFT polymerization and grafting-to via click chemistry. ***Polymer Preprints*** **2008**, *49(1)*, 200-201.
40. Li, M.; **De, P**.; Gondi, S. R.; Sumerlin, B. S. Responsive polymer-protein bioconjugates prepared by RAFT polymerization and Copper-catalyzed azide-alkyne click chemistry. ***Macromol. Rapid Commun*****.** **2008**, *29(12-13)*, 1172-1176. Highlighted in the June 2008 edition of Materials View.
39. Li, M.; **De, P.**; Gondi, S. R.; Sumerlin, B. S. Versatile end group modification strategy for RAFT-generated polymers. ***Polymer Preprints*** **2008**, *49(1)*, 238-239.
38. **De, P**.; Gondi, S. R.; Sumerlin, B. S. Folate-conjugated thermoresponsive block copolymers: highly efficient conjugation and solution self-assembly. ***Biomacromolecules*** **2008**, *9(3)*, 1064-1070**.**
37. **De, P.**; Gondi, S. R.; Sumerlin, B. S. Folate conjugated responsive polymeric micelles: Synthesis by RAFT polymerization and click chemistry. ***Polymer Preprints*** **2008**, *49(1)*, 175-176.
36. **De, P**.; Faust, R. Carbocationic polymerization of isobutylene using methylaluminum bromide coinitiators: synthesis of bromoallyl functional polyisobutylene. ***Macromolecules*** **2006**, *39(22)*, 7527-7533**.**
35. **De, P**.; Faust, R. Relative reactivity of C4 olefins toward the polyisobutylene cation. ***Macromolecules*** **2006**, *39(20)*, 6861-6870**.**
34. **De, P**.; Faust, R. Synthesis of halogen-free polyisobutylene by in situ hydride transfer to living polyisobutylene from tributylsilane. ***Polymer Bulletin*** **2006**, *56(1)*, 27-35**.**
33. **De, P.**; Faust, R. Capping reactions in cationic polymerization; Kinetic and synthetic utility. ***Polymer Preprints*** **2005**, *46(2)*, 847-848.
32. **De, P**.; Faust, R. Determination of the absolute rate constants of propagation for ion pairs and free ions in the living cationic polymerization of isobutylene. ***Macromolecules*** **2005**, *38(26)*, 9897-9900**.**
31. **De, P**.; Faust, R. Determination of the absolute rate constant of propagation for ion pairs in the cationic polymerization of *p*-methylstyrene. ***Macromolecules*** **2005,** *38(13)*, 5498-5505.
30. **De, P.** Comparative study of the chain dynamics of polymers containing peroxy linkages in the backbone. ***Polymer Preprints*** **2005**, *46(2)*, 852-853.

29. **De, P**.; Sipos, L.; Faust, R.; Moreau, M.; Charleux, B.; Vairon, J –P. Effect of temperature and determination of the propagation rate constant in the carbocationic polymerization of 2,4,6-trimethylstyrene. ***Macromolecules*** **2005,** *38(1),* 41-46.
28. **De, P.**; Faust, R. Living cationic polymerization of *p*-methylstyrene using $SnCl_4$ in dichloromethane and determination of absolute rate constant of propagation. ***Polymer Preprints*** **2005**, *46(2)*, 935-936.
27. **De, P**.; Faust, R. Determination of the absolute rate constants of propagation for ion pairs in the carbocationic polymerization of *p*-chlorostyrene. ***Macromolecules*** **2004,** *37(24),* 9290-9294.
26. **De, P.**; Faust, R. Living carbocationic polymerization of *p*-methoxystyrene using *p*-methoxystyrene hydrochloride/$SnBr_4$ initiating system. ***Polymer Preprints*** **2004**, *45(2)*, 736-737.
25. **De, P**.; Faust, R. Living carbocationic polymerization of *p*-methoxystyrene by the *p*-methoxystyrene hydrochloride/$SnBr_4$ initiating system: determination of the absolute rate constant of propagation. ***Macromolecules*** **2004,** *37(21),* 7930-7937.
24. **De, P**.; Faust, R; Schimmel, H.; Ofial, A. R.; Mayr, H. Determination of rate constants in the carbocationic polymerization of styrene: effect of temperature, solvent polarity and Lewis acid. ***Macromolecules*** **2004,** *37(12),* 4422-4433.
23. Balaban, A. T.; Ghiviriga, I.; Czerwinski, E. W.; **De, P**.; Faust, R. Simple synthesis of a weak nucleophilic base (4-ethyl-2,6-diisopropyl-3,5-dimethylpyridine) evidencing a double Janus Group effect. ***J. Org. Chem.*** **2004**, *69(2)*, 536-542.
22. **De, P.**; Faust, R. Determination of the propagation rate constant in the cationic polymerization of *p*-chlorostyrene. ***Polymer Preprints*** **2004**, *45(2)*, 734-735.
21. Sivalingam, G.; **De, P**.; Karthik, R.; Giridhar, M. Thermal degradation kinetics of vinyl polyperoxide copolymers. ***Polym. Degrad. Stab.*** **2004**, *84(1)*, 173-179.
20. **De, P.**; Faust, R. Cationic polymerization kinetics of styrene and styrene derivatives. Manuscript published in **MACRO 2004 - 40th IUPAC World Polymer Congress**.
19. **De, P.**; Faust, R.; Schimmel, H.; Mayr, H.; Moreau, M.; Charleux, B.; Vairon, J. -P. Determination of the propagation rate constant in the carbocationic polymerization of 2,4,6-trimethylstyrene. ***Polymer Preprints*** **2003**, *44(2)*, 804-805.
18. Sipos, L.; **De, P**.; Faust, R. Effect of temperature, solvent polarity, and nature of Lewis acid on the rate constants in the carbocationic polymerization of isobutylene. ***Macromolecules*** **2003,** *36*, 8282-8290.
17. **De, P.**; Munavalli, M. V.; Faust, R. On line visible spectroscopic study on the capping reaction of styrene cations with ditolylethylene. ***Polymer Preprints*** **2003**, *44(2)*, 920-921.
16. **De, P**.; Sathyanarayana, D. N.; Sadasivamurthy, P.; Sridhar, S. Synthesis, spectral characterization and thermochemical studies on poly(phenyl methacrylate peroxide). ***J. Appl. Polym. Sci.*** **2003**, *88(9)*, 2364-2368.
15. **De, P.**; Munavalli, M. V.; Faust, R. Determination of the propagation rate constant in the carbocationic polymerization of styrene. ***Polymer Preprints*** **2003**, *44(1)*, 1071-1072.
14. **De, P**.; Sathyanarayana, D. N. Synthesis and characterization of copolyperoxides of indene with styrene, α-methylstyrene and α-phenylstyrene**. *J. Polym. Sci. Part B: Polym. Phys.*** **2002**, *40(18)*, 2004-2017.
13. **De, P**.; Sathyanarayana, D. N. High-pressure kinetics of oxidative copolymerization of styrene with α-methylstyrene. ***Macromol. Chem. Phys*****.** **2002**, *203(15)*, 2218-2224.
12. **De, P**.; Sathyanarayana, D. N. Free-radical oxidative copolymerization of indene with vinyl acetate and isopropenyl acetate: synthesis and characterization. ***J. Appl. Polym. Sci.*** **2002**, *86(3)*, 639-646.
11. **De, P**.; Chattopadhyay, S.; Giridhar, M.; Sathyanarayana, D. N. Thermal degradation kinetics of *para*-substituted poly(styrene peroxide)s in solution. ***J. Appl. Polym. Sci.*** **2002**, *86(4)*, 957-961.
10. **De, P**.; Chattopadhyay, S.; Giridhar, M.; Sathyanarayana, D. N. Kinetics of thermal degradation of vinyl polyperoxides in solution. ***Polym. Degrad. Stab.*** **2002**, *76(1)*, 161-170.

9. **De, P**.; Chattopadhyay, S.; Giridhar, M.; Sathyanarayana, D. N. Thermal degradation studies of *para*-substituted poly(styrene peroxide)s. ***Polym. Degrad. Stab.*** **2002**, *76(3)*, 511-514.
8. **De, P**.; Sathyanarayana, D. N.; Sadasivamurthy, P.; Sridhar, S. Reactivity ratios for the oxidative copolymerizations of indene with methyl methacrylate and methacrylonitrile. ***Eur. Polym. J.*** **2002**, *38(5)*, 847-855.
7. **De, P**.; Sathyanarayana, D. N. Reactivity ratios for the terpolymerization of methyl methacrylate, vinyl acetate and molecular oxygen. ***J. Polym. Sci. Part A: Polym. Chem.*** **2002**, *40(4)*, 564-572.
6. **De, P**.; Sathyanarayana, D. N. Determination of the reactivity ratios for the oxidative copolymerizations of indene with methyl, ethyl and butyl acrylates. ***Macromol. Chem. Phys.*** **2002**, *203(3)*, 573-579.
5. **De, P**.; Sathyanarayana, D. N. Oxidative copolymerization of indene with *p*-tert-butylstyrene: synthesis, characterization, thermal analysis and reactivity ratios. ***J. Polym. Sci. Part A: Polym. Chem.***, **2002**, *40(1)*, 9-18.
4. **De, P**.; Sathyanarayana, D. N. Para-substituted poly(styrene peroxide)s: synthesis, characterization, thermal reactivities and chain dynamics studies in solution. ***Macromol. Chem. Phys.*** **2002**, *203(2)*, 420-426.
3. **De, P**.; Sathyanarayana, D. N. Synthesis of poly(1,3-diisopropenylbenzene peroxide). ***Indian J. Chem.*** **2001**, *40A(9)*, 1009-1011.
2. **De, P**.; Sathyanarayana, D. N. Polymerization of vinyl acetate with styrene and α-methylstyrene under high oxygen pressure. ***Indian J. Chem.*** **2001**, *40A(12)*, 1282-1287.
1. **De, P**.; Sathyanarayana, D. N.; Sadasivamurthy, P.; Sridhar, S. Synthesis, structural characterization, thermal studies and chain dynamics of poly(methacrylonitrile peroxide) by NMR spectroscopy. ***Polymer*** **2001**, *42(21)*, 8587-8593.

Selected Seminars and Contributions to Meetings:

81. September 24, 2022. Presentation at the Raghunathpur College, Purulia, West Bengal. Title of Presentation: Polymers and Plastics in Everyday Life.
80. September 15, 2022. 14th International Symposium on Ionic Polymerization (IP 2022), 11-16 September, 2012 at Ghent, Belgium. Title of Presentation: Combination of Living Cationic and Reversible Addition-Fragmentation Chain Transfer (RAFT) Polymerizations for Macromolecular Engineering.
79. December 24, 2021. Presentation to Boğaziçi University, Turkey. Title of Presentation: Sequence Controlled Alternating Copolymers as pH-Responsive Drug Delivery Vehicle.
78. December 13, 2021. Presentation in Science City Kolkata at the 47th ACBICON 2021. Title of Presentation: Charge Variable Cholic Acid Derived Polymers: A Platform for Ameliorating the Treatment of Diabetes.
77. September 02, 2021. Presentation to the Online Faculty Development Program on "Emerging Areas in Biological and Chemical Sciences", JIS University. Title of Presentation: Polymers and Plastics in Everyday Life.
76. March 17, 2021. Presentation at the UGC-HRDC-University of Calcutta. Title of Presentation: Polymers and Plastics in Everyday Life.
75. January 21, 2021. Presentation in "The University of Akron (UA) and Indian Institute of Science Education and Research (IISER) Kolkata (UA-IISERK) Webinar Series". Title of Presentation: Sequence Controlled Alternating Copolymers as pH-Responsive Drug Delivery Vehicle.
74. January 20, 2021. Presentation in NIT Calicut at the "National Conference on Changing Trends in Polymer Science and Technology (CTPST-2021)". Title of Presentation: Sequence Controlled Alternating Copolymers as pH-Responsive Drug Delivery Vehicle.
73. November 27, 2020. Presentation in the Webinar Series at NIT Manipur. Title of Presentation: Sequence Controlled Alternating Copolymers as pH-Responsive Drug Delivery Vehicle.
72. November 03, 2020. Presentation at the Centre for Professional Development in Higher Education (CPDHE), UGC-HRDC, University of Delhi. Title of Presentation: Polymers and Plastics in Everyday Life.

71. March 20, 2020. Presentation at "National Seminar on Contribution of Chemistry to the Well-being of Mankind", March 20, 2020, Raghunathpur College, West Bengal. Title of Presentation: Polymers and Plastics in Everyday Life.
70. February 8, 2020. Presentation at "Green and Sustainability in Polymers and Functional Materials: Opportunity and Challenges", February 7-8, 2020, IIT Kharagpur. Title of Presentation: Sequence Controlled Alternating Copolymers.
69. January 6, 2020. Presentation at "International Conference on Functional Materials ICFM 2020", January 6-8, 2020, IIT Kharagpur. Title of Presentation: Sequence Controlled Alternating Copolymers.
68. December 19, 2019. Presentation at "ICANN2019", December 18-21, 2019, IIT Guwahati. Title of Presentation: Sequence Controlled Alternating Copolymers as pH-Responsive Drug Delivery Vehicle.
67. December 17, 2019. Presentation at "Convergence of Chemistry & Materials CCM-2019", December 17-18, 2019, BITS Pilani Hyderabad Campus. Title of Presentation: Sequence Controlled Alternating Copolymers.
66. September 26, 2019. Presentation at "Advances in Polymer Science and Rubber Technology", September 24-27, 2019, IIT Kharagpur. Title of Presentation: Sequence Controlled Alternating Copolymers.
65. September 11, 2019. International Symposium on Ionic Polymerization (IP 2019), 8-13 September, 2019 at Beijing, China. Title of Presentation: Crystalline Polyperoxides from Fatty Acid Appended Styrenic Monomers.
64. August 23, 2019. Presentation at "International Symposium on Sustainable Polymers & National Symposium on Chemistry Education for Sustainable Engineering", August 23-25, 2019, IIT Guwahati. Title of Presentation: Sequence Controlled Alternating Copolymers.
63. August 22, 2019. IIT Guwahati, Department of Chemistry. Title of Presentation: Sequence Controlled Alternating Copolymers.
62. June 10, 2019. Moscow State University. Title of Presentation: Micro-phase separation in random copolymers due to oppositely charged polyelectrolyte interaction.
61. April 05, 2019. Presentation at INDO-GERMAN WORKSHOP, 5-6th April 2019, University of Delhi. Title of Presentation: Sequence Controlled Strictly Alternating Polymers.
60. March 09, 2019. Presentation at "School of Applied and Interdisciplinary Sciences (SAIS) Symposium 2019", March 8-9, 2019. IACS, Kolkata. Title of Presentation: Amino Acid Based Cationic Polymer Induced Actin Polymerization.
59. December 23, 2018. Presentation at "National Conference on Polymers: Usefulness & Current Concerns", December 23-24, 2018, Motilal Nehru National Institute of Technology Allahabad, Prayagraj. Award Lecture for the 11th Award Function of Professor Sukumar Maiti Polymer Award Foundation. Title of Presentation: Side-Chain Amino Acid Containing Alternating Copolymers.
58. December 22, 2018. Presentation at SPSI-MACRO-2018 during December 19-22, 2018, IISER Pune and NCL Pune. Kaushal Kishore Memorial Award Lecture of the Society of Polymer Science, India (SPSI). Title of Presentation: Crystalline Polyperoxides from Fatty Acid Containing Styrenic Monomers.
57. December 17, 2018. Presentation at **"**One day discussion on Supramolecular Chemistry**"** IISER Kolkata. Title of Presentation: Crystalline Polyperoxides.
56. January 9, 2018. Presentation at ASP-17 during January 8-11, 2018, IIT Guwahati. Title of Presentation: Amino Acid/Peptide Containing Alternating Copolymers.
55. November 21, 2017. Presentation at TCG Lifesciences Chembiotek at Salt Lake, Kolkata, India. Title of Presentation: Sequence Controlled Polymers.
54. September 19, 2017. International Symposium on Ionic Polymerization (IP 2017), 17th-22nd September, 2017 at Durham University, England. Title of Presentation: Design, Synthesis, Characterization and Applications of Side-Chain Amino Acid Based Synthetic Polymers.
53. May 17, 2017. Invited lecture at Infineum USA, Linden, New Jersey, USA. Title of Presentation: Sequence controlled Polymers.
52. April 20, 2017. 'Smart Materials: Methods and Applications (SMMA-2017)' during 20-22 April 2017 at IISER Kolkata. Title of Presentation: Sequence controlled Polymers.
51. January 11, 2017. Macro 2017 Advances in Polymer Science and New Generation Technologies, January 08-11, 2017 at Thiruvananthapuram. Title of Presentation: Side Chain Amino Acid/Peptide Containing Synthetic Macromolecular Architectures.

50. January 05, 2017. Discussion Meeting on Supramolecular and Polymer Assembly, January 05, 2017 at IACS Kolkata. Title of Presentation: Alanine Containing Synthetic Polymers for Actin Dynamics.
49. December 19, 2016. Ishan Vikas Programme Winter 2016, December 7-22, 2016 at IISER Kolkata. Title of Presentation: Polymers and Plastics in Everyday Life.
48. December 13, 2016. International Conference on Functional Materials, December 12-14, 2016 at Indian Institute of Technology Kharagpur. Title of Presentation: Design, Synthesis and Properties of Side Chain Amino Acid/Peptide Containing Macromolecular Architectures.
47. January 30, 2016. IUPAC sponsored International Conference on "Polymer –Solvent Complexes and Intercalates, POLYSOLVAT-11" at Indian Association for the Cultivation of Science, Jadavpur. Title of Presentation: Polyisobutylene Based pH-Responsive Self-Healing Polymeric Gels.
46. December 10, 2015. Moscow State University. Title of Presentation: Polyisobutylene Based pH-Responsive Self-Healing Gels.
45. July 08, 2015. IUPAC International Symposium on Ionic Polymerization, Bordeaux, France. Title of Presentation: Polyisobutylene Based pH-Responsive Self-Healing Gels.
44. June 28, 2015. 13th International Conference of Polymers for Advanced Technologies (PAT 2015), Hangzhou (China). Title of Presentation: Polyisobutylene Based pH-Responsive Self-Healing Polymeric Gels.
43. Department Day Talk on December 07, 2014, Mohanpur, IISER Kolkata. Title of Talk: Macromolecular Engineering for Nano-Architectures.
42. Invited lecture in the national conference on Nanoscience and Nanotechnology on September 19, 2014, Kolkata. Title of Talk: Well-Defined Nanostructured Polymeric Materials for Drug Delivery Applications.
41. Invited presentation at University of Florida, Gainesville, USA on July 10, 2014. Title of Talk: Design, Synthesis and Applications of Polymeric Architectures with Amino Acids in the Side-Chain.
40. RAPT 2014, Kolkata on January 24, 2014. Title of Talk: Helical Block Copolymers by Combination of Living Cationic and RAFT Polymerizations.
39. Indo-US Workshop on December 15, 2013 at Trivandrum. Title of Talk: Helical Block Copolymers with Polyisobutylene and Side-Chain Amino Acid Segments by Combination of Living Cationic and RAFT Polymerizations.
38. National Seminar on Recent delelopments in research in Chemistry. West Bengal State University, Barasat. November 23, 2013. Title of Talk: Helical Block Copolymers with Polyisobutylene and Side-Chain Amino Acid Segments by Combination of Living Polymerization Techniques.
37. IUPAC International Symposium on Ionic Polymerization 2013, Japan. Polyisobutylene Based Helical Block Copolymers by Combination of Living Cationic and RAFT Polymerizations.
36. Macro 2013 Conference, Bangalore. Title of Talk: Side Chain Amino Acid/Peptide Containing Stimuli Responsive 'Smart' Polymers.
35. Indo-German Workshop, University of Delhi, Januray 14, 2013. Title of Talk Controlled Synthesis of Chiral Cationic Polymers with Amino Acid Side Chains via RAFT Polymerization.
34. Seminar at JIS College of Engineering, Kalyani, 2012. Title of Talk: Well-Defined Nanostructured Polymeric Materials for Drug Delivery Applications.
33. Symposium: Recent Trends in Chemical Science and Technology, IIT Patna, 2012. Title of Talk: Living/Controlled RAFT Made Cationic Chiral Polymers Containing Amino Acid Moieties as Pendants.
32. Seminar at University of Massachusetts Lowell, USA. July 13, 2012. Title of Talk: Living/Controlled RAFT Made Cationic Chiral Polymers Containing Amino Acid Moieties as Pendants
31. Seminar at Henkel Corporation, USA. July 24, 2012. Title of Talk: Living/Controlled Polymerization of Vinyl Monomers Using Cationic Polymerization and RAFT Techniques
30. Advances in Polymer Nanotechnology, University of Calcutta, January 21, 2012. Title of Talk: Synthesis of Chiral Cationic Polymers with Amino Acid Side Chains *via* Living/Controlled RAFT Polymerization.

29. Symposium on Polymer Science 2011, IISER-Kolkata, December 10, 2011.
28. Frontiers in Polymer Chemistry, IIT Kharagpur, November 29-30, 2011. Title of Talk: Cationic Chiral Polymers Containing Amino Acid Moieties as Pendants: Controlled Synthesis *via* RAFT Polymerization.
27. Frontiers in Synthetic and Bioorganic Chemistry at IISER-Kolkata on March, 2011
26. 1st In-House Symposium organized by Department of Chemical Sciences, IISER-Kolkata, Mohanpur, December 30-31, 2010.
25. IISc-DBT-UNSW-UQ Research Workshop, Bangalore. Title of Talk: Advanced Materials by Living/Controlled RAFT Polymerization Technique. 2011.
24. Macro-2010, 11th International Conference on Frontiers of Polymers and Advanced Materials, Delhi, December 15-17, 2010. Title of talk: Synthesis of "Smart" Polymer-Protein Bioconjugates *via* RAFT Polymerization
23. Colloquium on Perspectives in Polymer Science & Technology, on November 27, 2010 at Indian Association for the Cultivation of Science, Kolkata.
22. Sumerlin, B. S.; De, P.; Roy, D.; Cambre, J. N. *Smart Polymer Bioconjugates and 'Sweet Tooth' Micelles.* Zing Polymer Chemistry Conference. February 2009.
21. Sumerlin, B. S.; De, P.; Roy, D.; Cambre, J. N. *Materials of the Future-Science of Today*. IUPAC conference in Melbourne, Australia. February 2009.
20. De, P.; Li, M.; Roy, D.; Sumerlin, B. S. *Self-assembly of stimuli-responsive polymer-protein conjugates prepared by RAFT polymerization.* ACS National Meeting in Salt Lake City, UT, March 2009.
19. Sumerlin, B. S.; De, P.; Li, M.; Gondi, S. R. *Polymer-protein bioconjugates via grafting-from and grafting-to with RAFT-generated polymers*. ACS National Meeting in Philadelphia, PA, August 17-21, 2008.
18. Sumerlin, B. S.; De, P.; Gondi, S. R. *Responsive block copolymer micelles functionalized with biologically-relevant ligands*. ACS National Meeting in Philadelphia, PA, August 17-21, 2008.
17. De, P.; Gondi, S. R.; Sumerlin, B. S. *Folate conjugated responsive polymeric micelles: Synthesis by RAFT polymerization and click chemistry*. ACS National Meeting in New Orleans, LA, April 6-April 10, 2008.
16. De, P.; Li, M.; Gondi, S. R.; Sumerlin, B. S. *Polymer-protein bioconjugates via grafting-from by RAFT polymerization and azide-alkyne click chemistry*. ACS National Meeting in New Orleans, LA, April 6-April 10, 2008.
15. De, P.; Li, M.; Gondi, S. R.; Sumerlin, B. S. *Responsive polymer-protein bioconjugates by grafting-from via RAFT with the R-group approach*. ACS National Meeting in New Orleans, LA, April 6-April 10, 2008.
14. Li, M.; De, P.; Gondi, S. R.; Sumerlin, B. S. *Versatile end group modification strategy for RAFT-generated polymers*. ACS National Meeting in New Orleans, LA, April 6-April 10, 2008.
13. Li, M.; De, P.; Gondi, S. R.; Sumerlin, B. S. *Responsive polymer-protein bioconjugates prepared by RAFT polymerization and grafting-to via click chemistry*. ACS National Meeting in New Orleans, LA, April 6-April 10, 2008.
12. De, P. *Comparative study of the chain dynamics of polymers containing peroxy linkages in the backbone*. ACS National Meeting in Washington, DC, August 28-September 1, 2005.
11. De, P.; Faust, R. *Capping reactions in cationic polymerization; Kinetic and synthetic utility*. ACS National Meeting in Washington, DC, August 28-September 1, 2005.
10. De, P.; Faust, R. *Living cationic polymerization of p-methylstyrene using $SnCl_4$ in dichloromethane and determination of absolute rate constant of propagation*. ACS National Meeting in Washington, DC, August 28-September 1, 2005.
9. De, P.; Faust, R. *Living carbocationic polymerization of p-methoxystyrene using p-methoxystyrene hydrochloride/$SnBr_4$ initiating system*. ACS National Meeting in Philadelphia, PA, August 22-26, 2004.

8. De, P.; Faust, R. *Determination of the propagation rate constant in the cationic polymerization of p-chlorostyrene*. ACS National Meeting in Philadelphia, PA, August 22-26, 2004.
7. De, P.; Faust, R. *Cationic polymerization kinetics of styrene and styrene derivatives*. MACRO 2004 – 40th IUPAC World Polymer Congress, Paris, France.
6. De, P.; Munavalli, M. V.; Faust, R. *Determination of the propagation rate constants in the cationic polymerization of styrene*. *IUPAC* International Symposium on Ionic Polymerization, June 30-July 4, Boston, MA, 2003.
5. De, P.; Munavalli, M. V.; Faust, R. *On line visible spectroscopic study on the capping reaction of styrene cations with ditolylethylene*. ACS National Meeting in New York, NY, Sept. 7-11, 2003.
4. De, P.; Faust, R.; Schimmel, H.; Mayr, H.; Moreau, M.; Charleux, B.; Vairon, J –P. *Determination of the propagation rate constant in the carbocationic polymerization of 2,4,6-trimethylstyrene*. ACS National Meeting in New York, NY, September 7-11, 2003.
3. De, P.; Munavalli, M. V.; Faust, R. *Determination of the propagation rate constant in the carbocationic polymerization of styrene.* ACS National Meeting in New Orleans, Louisiana, 23–27 March 2003.
2. Two weeks intensive training on carbocationic polymerization at the Laboratoire de Chimie Macromoléculaire, Université Pierre et Marie Curie, T44 E1, 4 Place Jussieu, 75252 Paris, Ce0dex 05, France (2002). Presented a seminar: De, P *Determination of the propagation rate constant in the carbocationic polymerization*.
1. De, P.; Sathyanarayana, D. N. *Comparative study of the chain dynamics of polyperoxides of vinyl monomers*. "SIF-USERS' ONE-DAY SYMPOSIUM" held at Indian Institute of Science, Bangalore, India, May 5, 2000.

Teaching

❖ ***Courses Taught (2010-2013)***

CH222: Physical Chemistry Practical
ID426: General Polymer Chemistry
CH212: Chemistry Laboratory
ID414: Introduction to Polymer Chemistry
CH1202: Physical and Theoretical Chemistry Practical
ID4103: Chemistry of Macromolecules

2014-2015:	Spring Semester:	Physical Chemistry Lab, CH-1202
	Autumn Semester:	CH3104: Chemistry of Macromolecules and ID4107: Polymer Chemistry CH3105: Advanced Physical Chemistry Laboratory
2016:	Spring Semester:	Physical Chemistry Lab, CH-1202
	Autumn Semester:	CH3105: Advanced Physical Chemistry Laboratory
2017-2019:	Spring Semester:	Physical Chemistry Lab, CH-1202 Polymer Chemistry, ID-4210
	Autumn Semester:	CH3105: Advanced Physical Chemistry Laboratory
2020:	Spring Semester:	General Physical Chemistry, CH-1201 Polymer Chemistry, ID-4210
2021:	Spring Semester:	General Physical Chemistry, CH-1201 Polymer Chemistry, CH4212
	Autumn Semester:	CH3105: Advanced Physical Chemistry Laboratory Polymer Chemistry, CH-4109
2022:	Spring Semester:	General Physical Chemistry, CH-1201
	Autumn Semester:	CH3105: Advanced Physical Chemistry Laboratory Polymer Chemistry, CH-4109

Dissertation, & Research-Scholar Advising

- ***Ph.D. Advising***

1. Sunirmal Pal (May, 2010 – October, 2013)
2. Saswati Ghosh Roy (February, 2010 – November, 2014)
3. Sonu Kumar (May, 2011 – November, 2015)
4. Kamal Bauri (January, 2011 - May, 2016)
5. Ujjal Haldar (August, 2012 – October, 2016)
6. Binoy Maiti (October, 2012 - August, 2017)
7. Ishita Mukherjee (November, 2014-April, 2019)
8. Biswajit Saha (November, 2014- March, 2020)
9. Sourav Mete (August, 2015 – July, 2020)
10. Neha Choudhury (January, 2016 – November, 2020)
11. Krishna Gopal Goswami (January, 2016 - November, 2020)
12. Subhasish Sahoo (February, 2018-Present)
13. Avisek Bera (January, 2018-Present)
14. Asmita Dey (March, 2019-Present)
15. Kasturee Nayak (August, 2019-Present)
16. Desoshree Ghosh (January, 2020-Present)
17. Subhadip Roy (January, 2020-Present)
18. Sagar Bag (January, 2020-Present)
19. Soumya Paul (May, 2020 - Present)
20. Anushree Mondal (August, 2020-Present)
21. Swagata Pan (January, 2021 - Present)

Late Abhishek Pan (PhD Student, August, 2014 - January, 2019)

- ***Integrated Ph.D. Advising***

1. Mridula Nandi (January, 2014 - April, 2019)
2. Arnab Banerjee (January, 2019-Present)
3. Pampa Chowdhury (September, 2019-Present)

- ***Post-Doc Advising***

1. Dr. Chandra Sekhar Reddy L. (September, 2013-January, 2014)
2. Dr. Badri Nath Jha (September, 2014-July, 2015)
3. Dr. Venkanna Azmeera (December, 2014-March, 2016)
4. Dr. Saswati Ghosh Roy (December, 2015 – April, 2016)
5. Dr. Kamal Bauri (March, 2017-July, 2017)
6. Dr. Rita Das Mahapatra (October, 2017-April, 2018)
7. Dr. Sipra Ghosh (April, 2017-March 2019)
8. Dr. Saswati Ghosh Roy (September, 2018 – March, 2019)
9. Dr. Pintu Sar (September, 2017- September, 2019)
10. Dr. Pooja Ghosh (March, 2019-Present)
11. Dr. Namrata Deka (December, 2021-Present)
12. Dr. Pousali Samanta (March, 2022-Present)

- ***Project Student Advising***

1. Bhuban Ruidas (December, 2012-March, 2015)
2. Lakshmipriya Datta (September, 2013-March, 2016)
3. Raju Biswas (April, 2016- June, 2016)
4. Arijit Rauth (June, 2016- November, 2016)
5. Kaustuv Mukherjee (November, 2016-November, 2017)
6. Dr. Arijit Bag (January, 2017-August, 2017)
7. Rohan Chowdhury (September, 2017-October, 2018)
8. Asmita Dey (March, 2019-July, 2019)
9. Swagata Pan (November, 2020-December 2020)
10. Swagata Mandal (February, 2018-March, 2021)

11. Amar Sain (March, 2022-June 2022)
12. Tanmoy Maity (June, 2022-Present)
13. Chandan Dey (March, 2015-Present)

❖ ***Undergraduate Advising***

1. Manish Roshan Aind (July, 2010-May, 2011)
2. Nagaraj Patil (May, 2011 – April, 2012)
3. Khusnud Shahidi (May, 2012 – April, 2013)
4. Md Ezaz Hasan Khan (May, 2012 – June, 2013)
5. Avichal Vaish (May, 2013 - April, 2014)
6. Anupam Kumar (May, 2013 - April, 2014)
7. Balaraju Banoth (May, 2013 - April, 2014)
8. Malay Kumar Singh (May, 2014 - April, 2015)
9. Sudhansu Sekhar Jena (May, 2014 - April, 2015)
10. Amal Narayanan (May, 2014 - April, 2015)
11. Mridula Nandi (May, 2014 – April, 2015)
12. Akhil P (June, 2015 – April, 2016)
13. Kapil Dev Sayala (May, 2016 – April, 2017)
14. Jnansankar Mahanti (May, 2017-November, 2017)
15. Abhi Bhadran (August, 2016 - May, 2018)
16. Ritwik Barman (January, 2016 - April, 2018)
17. Abhishek Kumar (August, 2017 - April, 2018)
18. Soham Banerjee (August, 2017 - April, 2018)
19. Midhuna S. Joy (August, 2018 - April, 2019)
20. Chythra J N (August, 2018 - April, 2019)
21. Soumya Paul (May, 2019 - July, 2020)
22. Swagata Pan (May, 2019 - July, 2020)
23. Dipannita Ghosh (August, 2019 - July, 2020)
24. Manish Kumar (February, 2021 - May, 2022)
25. Harshit Kumar (February, 2021 - May, 2022)
26. Pampa Chowdhury (August, 2021- May, 2022)
27. Soumyadeep Ghosh (August, 2021- May, 2022)

❖ ***Short Term Advising***

1. Simran Arora, IISER-Bhopal (May 13, 2011-July 13, 2011)
2. G. Rahithya, JNTU-Hyderabad (May 16, 2011-July 16, 2011)
3. Banoth Balaraju, IISER-Kolkata (May 10, 2011-July 10, 2011)
4. Rajib Kumar Dey, NIT Rourkela (May 16, 2011-July 16, 2011)
5. Saloni Gautam, IIT Guwahati (May 28, 2011-July 28, 2011)
6. Shaivya Vashishtha, IIT Delhi (May 27, 2011-July 27, 2011)
7. Goutam Pradhan, Ramakrishna Mission Vidyamandira Belur Math, February-June, 2013
8. Payel Halder, NIT Durgapur, 2 Months during 2013 summer
9. Imon Mandal, Presidency College, 2 Months during 2013 summer
10. Bhumika Chaudhary, Delhi University, 2 Months during 2013 summer
11. Bodhisattya Bhattacharya, IIT KGP, 2 Months during 2013 summer
12. Tathagata Srimani, IIT KGP, 2 Months during 2013 summer
13. Sudhansu Sekhar Jena, IISER-Kolkata, 2 Months during 2013 summer
14. Pritam Dey, Ramakrishna Mission Vidyamandira Belur Math, February-April, 2014
15. Suman Basak, Ramakrishna Mission Vidyamandira Belur Math, February-April, 2014
16. Mahadeb Maity, West Bengal State University, April-May, 2014
17. Preyasi De (September, 2013 – July, 2014)
18. Arnab Chatterjee, Ramakrishna Mission Vidyamandira Belur Math, February-April, 2015
19. Sandipan Saha, Ramakrishna Mission Vidyamandira Belur Math, February-April, 2015
20. Kushanava Bhaduri, Indian School of Mines, 3 Months during 2015 summer
21. Tamanna Mallick, University of Kalyani, 2 Months during 2015 summer
22. Tanmay Bera, RMVCC, Rahara, 2 Months during 2016 summer

23. Hritwika Roy, Sree Chaitanya College, March, 2017-July-2017
24. S Kapil, Tirunelveli, Tamil Nadu, 2 Months during 2018 summer
25. Indranil Dey, Calcutta University, 2 Months during 2018 summer
26. Swagata Pan, IISER Kolkata, 2 Months during 2018 summer,
27. Aayushi Kundu, Thapar University, 2 Months during 2018 summer
28. Kaustuv Mukherjee (January, 2017-June, 2018)
29. Dipannita Roy (March, 2018-July, 2018)
30. Dr Banti Ganguly, Bir Bikram Memorial College, Tripura, 2 Months during 2019 summer
31. Bhyravabhotla S V S M Ganesh, 2 Months during 2019 summer
32. Indranil Dey, Calcutta University, 2 Months during 2019 summer
33. Jyotishka Nath, Calcutta University, January, 2020-July, 2020
34. Sagnik Bhattacharya, NISER, November, 2021-December, 2021
35. Aritra Konar, May, 2022-July, 2022
36. Sagnik Bhattacharya, NISER, May, 2022-July, 2022
37. Priyanka Priyadarshini Behera, December, 2021-Present
38. Kundan Patel, December, 2021-Present
39. Sayan Chattopadhyay, January, 2022-Present

Research Support Availed from Different External Sources

Sl. No	Grant Agency	Title of the project and Reference number	Duration	Amount
1	CSIR, India	Green Synthesis of Novel Degradable Polyperoxides	3 years from May, 2011	Rs. 16,00,000/-
2	DST, India	Design and Synthesis of Amino Acid Based Macromolecular Architectures	3 years from March, 2011	Rs. 41,47,000/-
3	DRDO, India	Polymer Chains with Inorganic Nano-Objects	3 years from August, 2012	Rs. 19,40,000/-
4	NSF, USA	CNIC: US-India Collaborative Research to Decipher Function and Evolution of GABAergic Neurotransmission in Planaria	September, 2013 to August, 2014	29570 USD IISER-K Share: 8000 USD
5	FIRE, IISER-K	Design, Synthesis and Optical Characterization of Amino Acid Based Chiral Gel Architectures	January, 2014 to March, 2015	Rs. 16,00,000/-
6	BRNS, India	Polymer Networks Assembled by Host-Guest Inclusion between Cyclodextrins and Amino Acid/Peptide Substituents on the Polymer Side-Chain	3 years from June, 2014	Rs. 18,45,950/-
7	DST-RFBR	Non-covalent interactions as instrument for control of water uptake and mechanical properties of side chain amino acid containing hydrogels: complex experimental and theoretical study	2 years from June, 2015	Rs. 24,84,680/-
8	Unilever	Development of novel stimuli-responsive gel forming polymers as non-aluminium antiperspirant	3 years from June, 2016	Rs. 39,15,900/-
9	Indo-Belarus	Well-defined Amphiphilic Block Copolymers for Pharmaceutical Applications	3 years February, 2017	Rs. 19,03,500/-
10	CSIR, India	Polymerization Induced Nanostructured Materials from Fatty Acid Based Renewable Resources	3 years from January, 2017	Rs. 21,00,000/-
11	DST, SERB	Bile Acid Containing Amino Acid Based Cationic Polymeric Architectures for Enhanced Actin Polymerization	3 years from April, 2017	Rs. 57,19,560/-
12	DST-RFBR	Effect of Ion Specificity on Nano-Structuring in Ion-Containing Polymer Systems Caused by Ion Association in Organic and Aqueous Media: Complex Experimental and Theoretical Study	2 years from January, 2019	Rs. 30,52,720/-
13	IUGA	Efficacy of *Beta*-Sitosterol in Female Overactive Bladder	12 months from January, 2022	10,000 USD Co-PI
14	MHRD-STARS	Fluorometric polymeric sensor for speedy formalin detection in commercial fishes	3 years from February 14, 2020	Rs. 49,43,000/-
15	SERB	Polyisobutylene Based Polymeric Architectures by	3 years from	Rs. 62,37,000/-

		Tandem Living Polymerizations	December, 2021	
16	DRDO	Flexible Transparent Polymeric Sheet for Underwater Stealth Applications	18 months from January, 2022	Rs. 9,79,000/-
17	ExxonMobil	Stereoselective cationic (co)polymerization of suitable polar and non-polar monomers and their kinetic studies	18 months from March, 2022	USD 45,000