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**|| Professional Experience**

**Nov. 2017–Present** Assistant Professor of Chemistry, IIT Bhilai, Chhattisgarh, India

**Jun 2017–Oct 2017** Ramanujan Fellow, CSIR-NIIST, Thiruvananthapuram

**Jan 2017–May 2017** Research Scientist, Solvay Research & Innovation Centre, Vadodara

**Aug 2015–Dec 2016** ANR Postdoctoral Fellow with Prof. Bruno Ameduri, ENSCM,  
Montpellier, France

**2013–2015** Postdoctoral Fellow with Prof. Rudolf Faust, University of  
Massachusetts Lowell, MA, USA

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**|| Education**

**2013** Ph.D. in Chemistry, Indian Association for the Cultivation of Science, Kolkata, India

**2007** MSc. in Chemistry, University of Calcutta, Kolkata, India

**2005** B.Sc. in Chemistry, Scottish Church College, Kolkata, India

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**|| Awards, Fellowships and Honors**

**2020** Outstanding Reviewer for Royal Society of Chemistry-*Molecular Systems Design & Engineering* Journal in 2019

**2020** Polymer Chemistry Emerging Investigator-2020 by Royal Society of Chemistry-*Polymer Chemistry* Journal

**2019** Early Career Research Award by Science and Engineering Research Board (SERB), Government of India

**2016** Ramanujan Fellowship by Science and Engineering Research Board (SERB), Government of India

**2014** YIM-Young Investigator-2014 by Young Investigator Meeting-Boston held at Massachusetts Institute of Technology, Boston, USA

**2012** Best poster award, Symposium in Polymer, & Rubber Technology for 21st Century 2012, University of Calcutta, Kolkata, India

**2011** Best speaker award in Diamond Jubilee National Seminar Competition 2011 for Research Scholars in POLYMER QUEST 2011, IIT-Kharagpur, India

**2011** Best poster award, Symposium on Polymer Science 2011, IISER-Kolkata, India

**2009** Senior Research Fellowship from Council of Scientific and Industrial Research (CSIR), Government of India

**2007** Junior Research Fellowship from Council of Scientific and Industrial Research (CSIR), Government of India

2007 Graduate Aptitude Test in Engineering (GATE) Fellowship by Ministry of Human Resource Development (MHRD), Government of India

### || Professional Activities



**Journal Reviewer** for peer-reviewed international journals: *ACS Appl. Mater. Interfaces; Biomacromolecules; Nanoscale; Polym. Chem.; Ind. Eng. Chem. Res.; Phys. Chem. Chem. Phys.; Eur. Polym. J.; Prog. Org. Coat.; RSC Adv.; Mol. Syst. Des. Eng.; Small; ChemistrySelect; J. Macromol. Sci. A; New J. Chem.; J. Fluorine Chem.; ACS Appl. Nano Mater., ACS Appl. Polym. Mater.*

**Co-Convener**, Chemical Research Society of India (CRSI)-Chhattisgarh Chapter.

### || Organization of Conferences/Science Camps/Workshops



**November 2-3, 2019:** Convener, Industry-Academia Conclave-2019 organized by Indian Institute of Technology Bhilai, Chhattisgarh, India.

**September 3, 2019:** Convener, Awareness Program on “Support for Entrepreneurial and Managerial development of MSMEs through Incubators” in association with MSME-DI, Raipur, held at Indian Institute of Technology Bhilai, Chhattisgarh, India.

**August 24, 2019:** Convener, One-day National Workshop on “Awareness on Intellectual Property Rights” In association with MeitY” held at Indian Institute of Technology Bhilai, Chhattisgarh, India.

**April 6, 2019:** Co-Convener, One-Day Workshop for “CELEBRATING PERIODIC TABLE” held at Indian Institute of Technology Bhilai, Chhattisgarh, India.

**March 26-27, 2019:** Co-Convener, Virtual Lab Workshop, a Mission Project developed under the aegis of National Mission on Education through ICT (NMEICT), MHRD at Indian Institute of Technology Bhilai, Chhattisgarh, India.

**March 2-3, 2019:** Convener and Single Point of Contact, Smart India Hackathon 2019 - Software Edition, held at Indian Institute of Technology Bhilai, Chhattisgarh, India.

**January 7-10, 2019:** Member of the Organizing Committee, 6th World Congress of Nonmedical Sciences (ISNSCON-2018) held at Vigyan Bhaban, Delhi, India.

**January 5, 2019:** Convener, One-day workshop on Cognitive Skills and Design thinking held at Indian Institute of Technology Bhilai, Chhattisgarh, India.

**September 28, 2018:** Member of the Organizing Committee, One Day National Conference on the “Recent Advances on Functional Nanomaterials” held at Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India.

**August 18-19, 2018:** Convener, Two-day workshop on “Experimental Hands-on Engineering Sciences and Math Workshop” held at Indian Institute of Technology Bhilai, Chhattisgarh, India.

**June 10, 2018:** Member of the Organizing Committee, One-day workshop: Expectations of Industry and Society: A Case of IIT Bhilai held at Bhilai Niwas, Chhattisgarh, India.

**May 8-9, 2018:** Convener, “Teachers Training Program” - Workshop for High School Teachers held at Indian Institute of Technology Bhilai, Chhattisgarh, India.

### || Membership of Professional Societies



- Life member of the Society of Polymer Science, India (SPSI).
- Life member of the Chemical Research Society of India (CRSI).

## || Institute-level Responsibilities



- 2018–Present Faculty-in-charge, Research & Development (R&D), IIT Bhilai
- 2018–Present Convener, Institute Innovation Council (IIC), IIT Bhilai
- 2018–Present Convener, Departmental Postgraduate Committee (DPGC), Dept. of Chemistry, IIT Bhilai
- 2018–Present Member, Science Purchase Committee, IIT Bhilai
- 2018–2019 Faculty-in-charge, Student Mentorship Program, IIT Bhilai

## || Courses Taught @IIT Bhilai



- CY514: Organic Chemistry Lab (M.Sc. course, 2019-20 Winter Semester)
- CY511: Physical Organic Chemistry (M.Sc. course, 2019-20 Winter Semester)
- IC601: Research Methodology (M.Tech./Ph.D. course, 2019-20 Winter Semester)
- CY613: Materials for Emerging Applications (B.Tech./M.Sc. course, 2019-20 Winter Semester)
- IC106: Chemistry Lab (B.Tech. course, 2019-20 Winter Semester)
- CY609: Chemistry of Materials (Ph.D. course, 2019-20 Monsoon Semester)
- CY505: Organic Reactions and Reagents (M.Sc. course, 2019-20 Monsoon Semester)
- IC601: Research Methodology (M.Tech./Ph.D. course, 2019-20 Monsoon Semester)
- CY613: Materials for Emerging Applications (B.Tech./M.Sc. course, 2019-20 Monsoon Semester)
- IC106: Chemistry Lab (B.Tech. course, 2019-20 Monsoon Semester)
- IC103: Materials Chemistry-I (B.Tech. course, 2019-20 Monsoon Semester)
- CY609: Chemistry of Materials (Ph.D. course, 2018-19 Winter Semester)
- IC601: Research Methodology (M.Tech./Ph.D. course, 2018-19 Winter Semester)
- CY200: Smart Functional Materials (B.Tech. course, 2018-19 Winter Semester)
- IC106: Chemistry Lab (B.Tech. course, 2018-19 Winter Semester)
- CY602: Macromolecular Chemistry (Ph.D. course, 2018-19 Monsoon Semester)
- IC601: Research Methodology (M.Tech./Ph.D. course, 2018-19 Monsoon Semester)
- IC103: Materials Chemistry-I (B.Tech. course, 2018-19 Monsoon Semester)
- IC106: Chemistry Lab (B.Tech. course, 2018-19 Monsoon Semester)
- CY1020: Applied Chemistry-I (B.Tech. course, 2017-18 Winter Semester)
- CY1021: Applied Chemistry-II (B.Tech. course, 2017-18 Winter Semester)
- CY7030: Macromolecular Chemistry (Ph.D. course, 2017-18 Winter Semester)

## || Broad Area of Research



- Polymer Chemistry, Bio-inspired Macromolecules, Materials Science.

## || Research @IIT Bhilai



We investigate well-defined polymer-based molecular materials with pre-defined functionality, composition, and molecular architecture. Our particular focus is on materials with tunable properties that are stimuli-responsive. Such "smart" materials have the unique ability to adapt to their surrounding environment by dramatically changing their physicochemical properties upon responding to an external stimulus (e.g., pH, redox, light, mechanical force, temperature, magnetic/electric field, etc.). With the development of a powerful synthetic toolbox, we are extending and pushing the current limits of polymer chemistry. Potential target applications include controlled and targeted drug delivery, surface modification, the synthesis of self-healing materials for photovoltaics, carbon-dioxide capture and recycling, and multi-stimuli responsive polymer for biomedical applications.

In a nutshell, we are working on innovative materials as key elements for healthcare, sustainability and energy applications. For more details, please explore our [research group website](#)

## || Mentoring Record for Research Students

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### **Doctoral Thesis (as Principal Supervisor):**

- **Subrata Dolui:** Smart Polymer Materials with Tunable Properties, (Feb, 2020-Continuing) (at Department of Chemistry, IIT Bhilai).
- **Devendra Kumar:** Design, Synthesis and Applications of Functional Polymer Materials, (Sep, 2019- Continuing) (at Department of Chemistry, IIT Bhilai).
- **Sk. Arif Mohammad:** Functional Polymer Materials: Synthesis and Application, (Jul, 2018-Continuing) (at Department of Chemistry, IIT Bhilai).
- **Shashikant Shingdilwar:** Bioinspired Polymers: Design, Synthesis and Application, (Dec, 2017- Continuing) (at Department of Chemistry, IIT Bhilai).

## || Poster Award by Group Members

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- A poster on “Functional Mesoporous Silica-Polymer Hybrid Nanospheres: Design, Synthesis Application” by Sk. A. Mohammad, S. Shingdilwar and S. Banerjee was selected for the American Chemical Society (ACS) LANGMUIR Poster Presentation Award in the International Conference entitled “Chemical & Biological Sciences in Drug Delivery-2019 (IC-CBSDD2019)”, Berhampur University, India, March 8-10, 2019.
- A poster on “Functional Mesoporous Silica-Polymer Hybrid Nanospheres: Design, Synthesis and Applications” by S. Shingdilwar and S. Banerjee was selected for poster award in **BOSE125**, One Day National Conference on the “Recent Advances on Functional Nanomaterials”, Pt. Ravishankar Shukla University, Raipur, India, September 28, 2018.

## || Publications {\* represents corresponding author(s)}

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### With IIT Bhilai Affiliation

(45) S. A. Mohammad, S. Shingdilwar, **S. Banerjee\*** and B. Ameduri\*, “Macromolecular engineering approach for the preparation of new architectures from fluorinated olefins and their applications”

*Prog. Polym. Sci.* **2020**, *106*, 101255. (I.F. = 24.505)

link:

<https://www.sciencedirect.com/science/article/pii/S0079670020300484?via%3Dihub#!>

(44) S. A. Mohammad, S. Shingdilwar and **S. Banerjee\***, “Recoverable and recyclable nickel-cobalt magnetic alloy nanoparticle catalyzed reversible deactivation radical polymerization of methyl methacrylate at 25 °C”

*Polym. Chem.* **2020**, *11*, 287-291. (I.F. = 4.760)

link: <https://pubs.rsc.org/en/content/articlelanding/2019/py/c9py00942f#!divAbstract>

(43) **S. Banerjee\***, B. V. Tawade and B. Ameduri\*, “Functional Fluorinated Polymer Materials and Preliminary Self-Healing Behavior”

*Polym. Chem.* **2019**, *10*, 1993-1997. (I.F. = 4.760)

link: <https://pubs.rsc.org/en/content/articlelanding/2019/py/c9py00122k#!divAbstract>

(42) **S. Banerjee\***, J. Schmidt, Y. Talmon, H. Hori, T. Asai and B. Ameduri\*, “A Degradable Fluorinated Surfactant for Emulsion Polymerization of Vinylidene Fluoride”

*Chem. Commun.* **2018**, *54*, 11399-11402. (I.F. = 6.164)

link: <https://pubs.rsc.org/en/content/articlelanding/2018/cc/c8cc05290e/unauth#!divAbstract>  
(41) **S. Banerjee\***, M. Guerre, B. Ameduri and V. Ladmiral\*, “Syntheses of 2-(trifluoromethyl)acrylate-containing Block Copolymers via RAFT Polymerization using a Universal Chain Transfer Agent”

*Polym. Chem.* **2018**, 9, 3511-3521. (I.F. = 4.760)

link: <http://pubs.rsc.org/en/content/articlelanding/2018/py/c8py00655e#!divAbstract>  
(40) **S. Banerjee\***, V. Ladmiral, C. Totée and B. Ameduri\*, “Alternating Radical Copolymerization of Vinyl Acetate with *tert*-Butyl 2-Trifluoromethylacrylate”

*Eur. Polym. J.* **2018**, 104, 164-169. (I.F. = 3.621)

link: <https://www.sciencedirect.com/science/article/pii/S0014305718303239>

### **Prior to IIT Bhilai**

(39) S. Jana, M. Anas, T. Maji, **S. Banerjee** and T. K. Mandal\*, “Tryptophan-Based Styryl Homopolymer and Polyzwitterions with Solvent-Induced UCST, Ion-Induced LCST and pH-Induced UCST”

*Polym. Chem.* **2019**, 10, 526 - 538. (I.F. = 4.760)

link: <https://pubs.rsc.org/en/content/articlelanding/2018/py/c8py01512k#!divAbstract>  
(38) M. Colpaert, **S. Banerjee\***, V. Ladmiral, T. Ono and B. Ameduri\*, “Synthesis and Properties of poly(trifluoroethylene) via a persistent radical mediated polymerization of trifluoroethylene”

*Polym. Chem.* **2018**, 9, 894-903. (I.F. = 4.760)

link: <http://pubs.rsc.org/en/content/articlelanding/2018/py/c7py02018j#!divAbstract>  
(37) **S. Banerjee**, V. Ladmiral, A. Debuigne, C. Detrembleur, R. Poli\* and B. Ameduri\*, “Organometallic Mediated Radical Polymerization of Vinylidene Fluoride”

*Angew. Chem. Int. Ed.* **2018**, 57, 2934 -2937. (I.F. = 12.257)

link: <http://onlinelibrary.wiley.com/doi/10.1002/ange.201712347/full>

(36) **S. Banerjee**, E. V. Bellan, F. Gayet, A. Debuigne, C. Detrembleur, R. Poli\*, B. Ameduri and V. Ladmiral\*, “Bis(formylphenolato)cobalt(II)-Mediated Alternating Radical Copolymerization of *tert*-Butyl 2-Trifluoromethylacrylate with Vinyl Acetate”

*Polymers* **2017**, 9, 702. (I.F. = 3.164)

link: <http://www.mdpi.com/2073-4360/9/12/702>

(35) I. Domenichelli,<sup>†</sup> **S. Banerjee**,<sup>†</sup> S. Taddei, E. Martinelli, E. Passaglia\* and B. Ameduri\*, “Styrene and substituted styrene grafted functional polyolefins via nitroxide mediated polymerization”

*Polym. Chem.* **2017**, 9, 307-314. (<sup>†</sup>These authors contributed equally to this manuscript). (I.F. = 4.760)

link: <http://pubs.rsc.org/en/content/articlelanding/2014/py/c7py01693j#!divAbstract>

(34) M. Wehbi, **S. Banerjee\***, A. Mehdi, A. Alaaeddine, A. Hachem and B. Ameduri\*, “Vinylidene Fluoride-based Polymer Network via Crosslinking of Pendant Triethoxysilane Functionality for Potential Applications in Coatings”

*Macromolecules* **2017**, 50, 9329-9339 (I.F. = 5.997)

link: <http://pubs.acs.org/doi/10.1021/acs.macromol.7b02138>

(33) **S. Banerjee\***, Y. Patil, O. Gimello and B. Ameduri\*, “Well-defined multiblock poly(vinylidene fluoride) and block copolymers thereof: A missing piece of the architecture

puzzle”

*Chem. Commun.* **2017**, 53, 10910-10913. (I.F. = 6.164)

link: <http://pubs.rsc.org/en/content/articlelanding/2017/cc/c7cc06122f#!divAbstract>

(32) H. Hori\*, H. Tanakaa, T. Tsugea, R. Honmaa, **S. Banerjee** and B. Ameduri\*, “Decomposition of Fluoroelastomer: Poly(vinylidene fluoride-*ter*-hexafluoropropylene-*ter*-tetrafluoro-ethylene) Terpolymer in Subcritical water”

*Eur. Polym. J.* **2017**, 94, 322-331. (I.F. = 3.621)

link: <http://www.sciencedirect.com/science/article/pii/S0014305717304135>

(31) T. Maji, **S. Banerjee**, A. Bose and T. K. Mandal\*, “Stimuli-Responsive Methionine-Based Zwitterionic Methacryloyl Sulfonium Sulfonate Monomer and Corresponding Antifouling Polymer with Tunable Thermosensitivity”

*Polym. Chem.* **2017**, 8, 3164-3176. (I.F. = 4.760)

link: <http://pubs.rsc.org/en/content/articlelanding/2017/py/c7py00460e#!divAbstract>

(30) **S. Banerjee**, V. Ladmiraal, A. Debuigne, C. Detrembleur, S. M. W. Rahaman, R. Poli and B. Ameduri\*, “Organometallic-Mediated Alternating Radical Copolymerization of *tert*-Butyl-2-trifluoromethacrylate with Vinyl Acetate and Synthesis of Block Copolymers Thereof”

*Macromol. Rapid Commun.* **2017**, 38, 1700203. (I.F. = 4.078)

link: <http://onlinelibrary.wiley.com/doi/10.1002/marc.201700203/full>

(29) **S. Banerjee\***, B. V. Tawade, V. Ladmiraal, L. X. Dupuy, M. P. MacDonald and B. Ameduri\*, “Poly(fluoroacrylate)s with tunable surface hydrophobicity via radical copolymerization of 2,2,2-trifluoroethyl  $\alpha$ -fluoroacrylate and 2-(trifluoromethyl)acrylic acid”

*Polym. Chem.* **2017**, 8, 1978 - 1988. (I.F. = 4.760)

link: <http://pubs.rsc.org/en/content/articlelanding/2017/py/c7py00209b#!divAbstract>

(28) **S. Banerjee\***, M. Wehbi, A. Manseri, A. Mehdi, A. Alaaeddine, A. Hachem and B. Ameduri\*, “Poly(vinylidene fluoride) Containing Phosphonic Acid as Anti-Corrosion Coating for Steel”

*ACS Appl. Mater. Interfaces* **2017**, 9, 6433-6443 (I.F. = 8.456)

link: <http://pubs.acs.org/doi/abs/10.1021/acsami.6b15408>

(27) **S. Banerjee\***, Y. Patil, T. Ono and B. Ameduri\*, “Synthesis of  $\omega$ -Iodo and Telechelic Diiodo Vinylidene Fluoride-based (Co)polymers by Iodine Transfer Polymerization Initiated by an Innovative Persistent Radical”

*Macromolecules* **2017**, 50, 203-214 (I.F. = 5.997)

link: <http://pubs.acs.org/doi/abs/10.1021/acs.macromol.6b02308>

(26) **S. Banerjee\***, I. Domenichelli and B. Ameduri\*, “Nitroxide-Mediated Alternating Copolymerization of Vinyl Acetate with *tert*-Butyl-2-trifluoromethacrylate Using a SG1-Based Alkoxyamine”

*ACS Macro Lett.* **2016**, 5, 1232–1236 (I.F. = 5.775)

link: <http://pubs.acs.org/doi/abs/10.1021/acsmacrolett.6b00707>

(25) **S. Banerjee**, S. Zaghoul, A. Alaaeddine and B. Ameduri\*, “Kinetics and Mechanistic Aspects of the Iodine Transfer Copolymerization of Vinylidene Fluoride with 2,3,3,3-Tetrafluoro-1-propene and Functionalization into  $\omega$ -Hydroxy Fluorinated Copolymer”

*Polym. Chem.* **2016**, 7, 6099–6109. (I.F. = 4.760)

link: <http://pubs.rsc.org/en/content/articlelanding/2016/py/c6py01152g#!divAbstract>

(24) **S. Banerjee**, T. Soulestin, Y. Patil, V. Ladmiraal and B. Ameduri\*, “Towards New

Strategies for the Synthesis of Functional Vinylidene Fluoride-based Copolymers with Tunable Wettability”

*Polym. Chem.* **2016**, *7*, 4004–4015. (I.F. = 4.760)

link: <http://pubs.rsc.org/is/content/articlelanding/2016/py/c6py00508j#!divAbstract>

(23) H. Zhang, **S. Banerjee**, R. Faust\* and N. Hadjichristidis\*, “Living Cationic Polymerization and Polyhomologation: An Ideal Combination to Synthesize Functionalized Polyethylene-Polyisobutylene Block Copolymers”

*Polym. Chem.* **2016**, *7*, 1217-1220. (I.F. = 4.760)

link: <http://pubs.rsc.org/is/content/articlelanding/2016/py/c5py01892g#!divAbstract>

(22) M. Bag†, **S. Banerjee**†, D. Venkataraman\* and R. Faust\*, “Self-Healing Polymer Sealant for Encapsulating Flexible Solar Cells”

*Sol. Energ. Sol. Mat.* **2016**, *145*, 418–422 (†These authors contributed equally to this manuscript). (I.F. = 6.019)

link: <http://www.sciencedirect.com/science/article/pii/S0927024815005607>

(21) **S. Banerjee**, B. N. Jha, P. De, J. Emert and R. Faust\*, “Kinetic and Mechanistic Studies of the Polymerization of Isobutylene Catalyzed by EtAlCl<sub>2</sub>/Bis(2-chloroethyl) Ether Complex in Hexanes”

*Macromolecules* **2015**, *48*, 5474–5480. (I.F. = 5.997)

link: <http://pubs.acs.org/doi/abs/10.1021/acs.macromol.5b01441>

(20) T. Maji, **S. Banerjee**, Y. Biswas and T. K. Mandal\*, “Dual-Stimuli Responsive L-Serine-Based Zwitterionic Polymer with Tunable Thermosensitivity”

*Macromolecules* **2015**, *48*, 4957–4966. (I.F. = 5.997)

link: <http://pubs.acs.org/doi/abs/10.1021/acs.macromol.5b01099>

(19) A. Saha, T. K. Paira, M. Biswas, S. Jana, **S. Banerjee** and T. K. Mandal\*, “Combined ATRP and ROP to Design Polymer-Polypeptide Copolymer Conjugates towards Self-aggregated Hybrid Micro/Nanospheres for Dye Encapsulation”

*J. Polym. Sci. Part A: Polym. Chem.* **2015**, *53*, 2313-2319. (I.F. = 2.591)

link: <http://onlinelibrary.wiley.com/doi/10.1002/pola.27713/full>

(18) **S. Banerjee**, J. Emert, P. Wright, T. Skourlis, R. Severt and R. Faust\*, “Polymerization of Isobutylene Catalyzed by EtAlCl<sub>2</sub>/Bis(2-chloroethyl) Ether Complex in Steel Vessels”

*Polym. Chem.* **2015**, *6*, 4902-4910. (I.F. = 4.760)

link: <http://pubs.rsc.org/is/content/articlelanding/2015/py/c5py00624d#!divAbstract>

(17) **S. Banerjee**, R. Tripathy, D. Cozzens, T. Nagy, S. Keki, M. Zsuga and R. Faust\*, “Photoinduced Smart, Self-healing Polymer Sealant for Photovoltaics”

*ACS Appl. Mater. Interfaces* **2015**, *7*, 2064-2072. (I.F. = 8.456)

link: <http://pubs.acs.org/doi/abs/10.1021/am508096c>

(16) **S. Banerjee**, P. N. Shah, Y. Jeong, T. Chang, K. Seethamraju and R. Faust\*, “Structural Characterization of Telechelic Polyisobutylene Diol”

*J. Chromatogr. A* **2015**, *1376*, 98-104. (I.F. = 3.858)

link: <http://www.sciencedirect.com/science/article/pii/S0021967314019281>

(15) A. Narayanan, K. Bauri, B. Ruidas, G. Pradhan, **S. Banerjee** and P. De\*, “Specific Counterion Repercussion on the Thermal, pH-response and Electrochemical Properties of

the Side-Chain Leucine Based Chiral Polyelectrolytes”

*Langmuir*, **2014**, *30*, 13430–13437. (I.F. = 3.683)

link: <http://pubs.acs.org/doi/abs/10.1021/la503452f>

(14) T. Maji, **S. Banerjee**, M. Biswas and T. K. Mandal\*, “In Situ Synthesis of Ultra-small Platinum Nanoparticles Using Water Soluble Polyphenolic Polymer with High Catalytic Activity”

*RSC Adv.* **2014**, *4*, 51745-51753. (I.F. = 3.049)

link: <http://pubs.rsc.org/en/content/articlelanding/2014/ra/c4ra08900f#!divAbstract>

(13) **S. Banerjee**, T. Maji and T. K. Mandal\*, “Graft Copolymers via Combination of Cationic Polymerization and Atom Transfer Radical Polymerization and their Phase Separation into Spherical/Worm-like Nanostructures”

*Colloid Polym. Sci.* **2014**, *292*, 2217-2226. (I.F. = 1.906)

link: <http://link.springer.com/article/10.1007/s00396-014-3249-1>

(12) **S. Banerjee**, T. K. Paira and T. K. Mandal\*, “Surface-Confined Atom Transfer Radical Polymerization: Access to Custom Library of Polymer-Based Hybrid Materials for Specialty Applications” (Invited Review Article)

*Polym. Chem.* **2014**, *5*, 4153–4167. (I.F. = 4.760)

link: <http://pubs.rsc.org/en/content/articlelanding/2014/py/c4py00007b#!divAbstract>

(11) T. K. Paira, A. Saha, **S. Banerjee**, T. Das, P. Das, N. R. Jana and T. K. Mandal\*, “Fluorescent Amphiphilic PEG-Peptide-PEG Triblock Conjugate Micelles for Cell Imaging”

*Macromol. Biosci.* **2014**, *14*, 929-935. (I.F. = 2.895)

link: <http://onlinelibrary.wiley.com/doi/10.1002/mabi.201400083/abstract>

(10) **S. Banerjee**, T. Maji, T. K. Paira and T. K. Mandal\*, “Diblock Copolymers with Miscible Blocks via Sequential Cationic Polymerization and their Block Length Dependent Vesicular Aggregation”

*Macromol. Chem. Phys.* **2014**, *215*, 440-451. (I.F. = 2.622)

link: <http://onlinelibrary.wiley.com/doi/10.1002/macp.201300741/abstract>

(9) **S. Banerjee**, T. Maji, T. K. Paira and T. K. Mandal\*, “Amino Acid-based Zwitterionic Polymer and its Cu(II)-induced Aggregation into Nanostructures: A Template for CuS and CuO Nanoparticles”

*Macromol. Rapid Commun.* **2013**, *34*, 1480-1486. (I.F. = 4.078)

link: <http://onlinelibrary.wiley.com/doi/10.1002/marc.201300481/abstract>

(8) **S. Banerjee**, T. K. Paira and T. K. Mandal\*, “Control of Molecular Weight and Tacticity in Stereospecific Living Cationic Polymerization of  $\alpha$ -Methylstyrene at 0 °C using FeCl<sub>3</sub>-based Initiators: Effect of Tacticity on Thermal Properties”

*Macromol. Chem. Phys.* **2013**, *214*, 1332-1344. (I.F. = 2.622)

link: <http://onlinelibrary.wiley.com/doi/10.1002/macp.201300092/abstract>

(7) P. Mondal†, **S. Banerjee**†, A. S. Roy, T. K. Mandal\* and S. M. Islam\*, “In-situ Prepared Mesoporous Silica Nanospheres supported Palladium(II) 2-Aminopyridine Complex Catalyst for Suzuki-Miyaura Cross-Coupling Reaction in Water”

*J. Mat. Chem.* **2012**, *22*, 20434-20442. (†These authors contributed equally to this manuscript). (I.F. = 6.626)



link: <http://pubs.rsc.org/en/content/articlelanding/2012/jm/c2jm33835a#!divAbstract>

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(2) **S. Banerjee**, T. K. Paira, A. Kotal and T. K. Mandal\*, "Room temperature Living Cationic Polymerization of Styrene with HX-Styrenic Monomer Adduct/FeCl<sub>3</sub> Systems in the presence of Tetrabutylammonium Halide and Tetraalkylphosphonium Bromide Salts"

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## **|| Book Chapters**



(5) **S. Banerjee\*** and B. Ameduri\* "Emerging Opportunities in (co)Polymerization of Alkyl 2-(Trifluoromethyl)acrylates and 2-(trifluoromethyl)acrylic acid and their Applications" in *Frontiers of Organofluorine Chemistry*, Edited by Iwao Ojima, World Scientific, **2020**, Hardback ISBN: 978-1-78634-732-9; <https://doi.org/10.1142/q0217>.

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(4) S. Shingdilwar, S. A. Mohammad and **S. Banerjee** "Fluoropolymer-Based Tunable Materials for Emerging Applications" in *Reuse and Recycling of Materials Solid Waste Management and Water Treatment*, Edited by Jibin K. P., Nandakumar Kalarikkal, Sabu

Thomas and Ange Nzihou, River Publishers, **2019**, Hardback ISBN: 978-87-7022-058-3; EBook ISBN: 978-87-7022-057-6.

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(2) **S. Banerjee**, B. N. Jha, R. Kumar, B. Maiti, U. Haldar and P. De “Synthesis of Chain End Functional Polymers by Living Cationic Polymerization Method” in *Functional Polymers: Design, Synthesis, and Applications*, Edited by R. Shanmugam. CRC Press, Taylor & Francis, **2017**, ISBN 978-1-77188-297-2.

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(1) S. G. Roy, **S. Banerjee**, and P. De “Cationic Polymerization of Nonpolar Vinyl Monomers for Producing High Performance Polymers” in *Reference Module in Materials Science and Materials Engineering*, Elsevier Inc, **2016**. doi:10.1016/B978-0-12-803581-8.01357-6.

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## || Recent Invited Lectures



- “Functional Polymer Materials with Tunable Properties for Emerging Application”, International Conference on Functional Materials (**ICFM2020**), January 6-8, 2020, IIT Kharagpur, India.
- “Multi-Stimuli Responsive Polymers with Precise Functionalities for Biomedical Applications”, Advances in Polymer Science and Rubber Technology 2019 (**APSRT-2019**), September 24-27, 2019, IIT Kharagpur, India.
- “Smart Polymer Materials: Design, Synthesis and Applications”, Kolkata Chapter Meeting of The Society for Polymer Science (SPS), India, IISER Kolkata, Mohanpur, India” July 5-6, 2019.
- “Smart, Functional Materials for Better Future”, National Conference on “Innovations in Chemistry and Environmental Engineering” (**ICEE-2019**), National Institute of Technology Raipur, April 29, 2019.
- “Smart, Functional Materials for Healthcare industry”, National Conference on Multidisciplinary Innovations for Sustainable Development (**NCMISD-19**), Christian College of Engineering & Technology, Bhilai, March 28, 2019.
- “Stimuli Responsive Polymers for Biomedical Application”, **UGC-SAP (DRS-II)** 3<sup>rd</sup> National Conference on Advances in Environmental & Chemical Sciences, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India, March 26-27, 2019.
- “Smart, Functional Materials for Environmental Protection”, Futuristic Trends in Science, Technology & Management for National Development - **BITCON-2019** Bhilai Institute of Technology, Durg, CG, March 1, 2019.
- “Nanomaterials for Energy Applications an Experimental Point of View”, Workshop on Materials Modeling for Device Applications - **WMMDA-2019** Shri Shankaracharya Technical Campus-SSGI, Bhilai, February 18-23, 2019.

- “Multi-Stimuli Responsive Macromolecules for Biomedical Applications”, 6<sup>th</sup> World Congress on Nanomedical Sciences - **ISNSCON-2018** Vigyan Bhawan, New Delhi January 7-10, 2019.
- “Multi-Stimuli Responsive Materials: Design, Synthesis and Applications”, **SPSI-MACRO 2018**, International Conference on Polymer Science and Technology, IISER Pune, Pune, India, December 19-22, 2018.
- “Smart, Functional Mesoporous Nanomaterials: Design, Synthesis and Applications”, **BOSE125**, One Day National Conference on the “Recent Advances on Functional Nanomaterials”, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India, September 28, 2018.
- “Fluoropolymer-based Smart, Functional Materials”, **AICON-18**, Chhatrapati Shivaji Institute of Technology, Durg, Chhattisgarh, India, April 20-21, 2018 (Key Note Speaker).
- “Fluoropolymer-based Tunable Materials for Emerging Applications”, **UGC-SAP (DRS-II)** 2<sup>nd</sup> National Conference on Advances in Environmental & Chemical Sciences, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India, March 22-23, 2018.
- “Fluoropolymer-based Smart Coating Materials”, **ICRM – 2018**, Fourth International Conference on Reuse and Recycling of Materials, Mahatma Gandhi University, Kottayam, Kerala, India, March 9-11, 2018.
- “Macromolecular Engineering for the Design of High-Performance Polymer Materials” Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bengaluru, India, August 12, 2016.
- “High Performance Polymer-based Materials: Synthesis and Applications” Department of Applied Chemistry, Indian Institute of Technology (ISM), Dhanbad, India, August 10, 2016.
- “Macromolecular Engineering for the Design of Stimuli Responsive Polymer Materials” Department of Chemistry, Indian Institute of Science Education and Research, Mohali, India, August 8, 2016.
- “Emerging Applications of High-Performance Polymer-based Materials” Materials Science Centre, Indian Institute of Technology Kharagpur, India, August 5, 2015.
- “Design, Synthesis and Applications of the Stimuli Responsive Polymers” Department of Chemistry, Indian Institute of Technology Patna, India, July 29, 2016.
- “Specialty Polymers via Controlled/living Polymerizations for Emerging Applications” CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram India, July 21, 2016.
- “Synthesis of High-Performance Polymer-based Materials via Controlled/living Polymerizations” Department of Chemistry, Indian Institute of Science Education and Research, Thiruvananthapuram, India, September 2, 2015
- “Specialty Polymers via Controlled/living Polymerizations for Emerging Applications” Department of Materials engineering & Materials Science, Indian Institute of Technology Kharagpur, India, August 26, 2015.
- “Smart, High Performance Polymer Materials via Controlled Polymerizations” Department of Chemistry, Indian Institute of Technology Ropar, India, August 19, 2015.
- “Smart, High Performance Polymer Materials for Emerging Applications” Department of Materials engineering & Materials Science, Indian Institute of Technology Bombay, India, August 5, 2015.
- “Smart, High Performance Polymer Materials for Emerging Applications” **Young Investigator Meeting (YIM) Boston -2014**, Massachusetts Institute of Technology, USA, October 11-13, 2014.

*\*The presenting author is underlined*

- (40) S. A. Mohammad, S. Shingdilwar and **S. Banerjee** “Recoverable and recyclable magnetic alloy nanoparticles: Design, Synthesis and Application in controlled polymerization of vinyl monomers” in the International Conference on Nano Science and Technology (**ICONSAT-2020**), March 5-7, 2020, Kolkata Convention Center, Kolkata, India.
- (39) S. Dolui, D. kumar, S. A. Mohammad, S. Shingdilwar and **S. Banerjee** “Multi-stimuli Responsive Molecular Materials” in the International Conference on Functional Materials 2020 (**ICFM-2020**), January 6-8, 2020, IIT Kharagpur, India.
- (38) S. Shingdilwar, S. A. Mohammad, S. Dolui, D. Kumar and **S. Banerjee** “Developing Functional Organic Mesoporous materials by ATRP and its Application in CO<sub>2</sub> capture technology” in the International Conference on Functional Materials 2020 (**ICFM-2020**), January 6-8, 2020, IIT Kharagpur, India.
- (37) S. A. Mohammad, S. Shingdilwar, S. Dolui, D. Kumar and **S. Banerjee** “Ni-Co Magnetic Alloy Nanoparticle Mediated Synthesis of Well -defined Polymers via Reversible Deactivation Radical Polymerization” in the International Conference on Functional Materials 2020 (**ICFM-2020**), January 6-8, 2020, IIT Kharagpur, India.
- (36) S. Shingdilwar, Sk. A. Mohammad and **S. Banerjee** “Mesoporous Materials for Emerging Applications” in the Advances in Polymer Science and Rubber Technology 2019 (**APSRT-2019**), September 24-27, 2019, IIT Kharagpur, India.
- (35) S. A. Mohammad, S. Shingdilwar and **S. Banerjee** “Synthesis of Stimuli Responsive Amino Acid Based Zwitterionic Polymers via RAFT Polymerization” in the Advances in Polymer Science and Rubber Technology 2019 (**APSRT-2019**), September 24-27, 2019, IIT Kharagpur, India.
- (34) M. Wehbi, **S. Banerjee**, A. Hachem, A. Alaaddine, A. Mehdi and B. Améduri, “A Journey from the Synthesis of Functional 2-Trifluoromethacrylate Monomers to their Radical Copolymerizations with Vinylidene Fluoride, and Applications” [International Joint Science Congress for Materials and Polymers \(ISCMP 2019\)](#), Pristina, Kosovo, September 12-14, 2019.
- (33) M. Guerre, **S. Banerjee**, V. Ladmiral and B. Améduri, “Recent Advances on Controlled Radical Polymerization of Fluoroalkenes and Architectures Therefrom” [19<sup>th</sup> European Symposium on Fluorine Chemistry](#), Warsaw, Poland, August, 25-31, 2019.
- (32) M. Wehbi, **S. Banerjee**, A. Hachem, A. Alaaddine, A. Mehdi and B. Améduri, “2-Trifluoromethacrylic acid (MAF) : Versatile Monomer for Insertion of Monomer in PVDF” [Third French-Polish Chemistry Congress](#), Paris, France, July 4-6, 2019.
- (31) M. Wehbi, **S. Banerjee**, A. Hachem, A. Alaaddine, A. Mehdi and B. Améduri, “A Journey from the Synthesis of Functional 2-Trifluoromethacrylate Monomers to their Radical Copolymerizations with Vinylidene Fluoride and Applications” Mini Symposium on “**The future of Polymer Chemistry**”, Deajeon, South Korea, May 21, 2019.
- (30) M. Wehbi, **S. Banerjee**, A. Hachem, A. Alaaddine, A. Mehdi and B. Améduri, “A Journey from the Synthesis of Functional 2-Trifluoromethacrylate Monomers to their Radical Copolymerizations with Vinylidene Fluoride and Applications” [13<sup>th</sup> International Conference on “Advanced Polymers via Macromolecular Engineering” \(APME 2019\)](#), Stellenbosch, South Africa, April 15–18, 2019.
- (29) S. A. Mohammad, S. Shingdilwar and **S. Banerjee**, “Functional Mesoporous Silica-Polymer Hybrid Nanospheres: Design, Synthesis Application” in the International Conference entitled [“Chemical & Biological Sciences in Drug Delivery-2019 \(IC-](#)

[CBSDD2019](#)”, Berhampur University, India, March 8-10, 2019.

(28) **S. Banerjee** and B. Ameduri, “Functional Fluoropolymers: Design, Synthesis and Applications” [SPSI-MACRO 2018](#), International Conference on Polymer Science and Technology, IISER Pune, Pune, India, December 19-22, 2018.

(27) **S. Shingdilwar**, S. A. Mohammad and **S. Banerjee**, “Design, Synthesis and Applications of Functional Mesoporous Molecular Materials” [SPSI-MACRO 2018](#), International Conference on Polymer Science and Technology, IISER Pune, Pune, India, December 19-22, 2018.

(26) M. Guerre, **S. Banerjee**, V. Ladmiral and **B. Améduri**, “Recent Advances on Controlled Radical Polymerization of Fluoroalkenes and Architectures Therefrom” [The Polymer Society of Korea 2018 Fall Meeting](#), Gyeongju Hwabaek International Convention Center, Gyeongju, South Korea October 11-12, 2018.

(25) M. Wehbi, **S. Banerjee**, A. Hachem, A. Alaaddine, A. Mehdi and **B. Améduri**, “A Journey from the Synthesis of Functional 2-Trifluoromethacrylate Monomers to their Radical Copolymerizations with Vinylidene Fluoride and Applications” [22<sup>nd</sup> ISFC \(International Conference on Fluorine Chemistry\)](#), University of Oxford, Oxford, UK, July 22-27, 2018.

(24) M. Guerre, **S. Banerjee**, V. Ladmiral and **B. Améduri**, “Recent Advances on Controlled Radical Polymerization of Fluoroalkenes and Architectures Therefrom” [Fluoropolymer 2018](#), Embassy Suites Hotel, Denver, CO, USA, June 24-27, 2018.

(23) H. Hori, H. Tanaka, T. Tsuge, R. Honma, **S. Banerjee**, A. Manseric and **B. Améduri**, “Efficient Mineralization of PVDF-Related Fluoropolymers Using Subcritical Water in the Presence of Hydrogen Peroxide” [Fluoropolymer 2018](#), Embassy Suites Hotel, Denver, CO, USA, June 24-27, 2018.

(22) **S. Banerjee**, M. Guerre, B. Améduri, C. Totée, G. Silly, A. Debuigne, C. Detrembleur, R. Poli and **V. Ladmiral**, “Recent Advances in Fluoropolymers Synthesis and Macromolecular Engineering” [Macro 18](#), Queensland, Australia, July 1-5, 2018.

(21) **S. Banerjee**, S. M. W. Rahaman, V. Ladmiral, A. Debuigne, C. Detrembleur, B. Ameduri and **R. Poli**, “Organometallic Mediated Radical Polymerization of Vinylidene Fluoride” [Congress SCF 18](#), Montpellier, France, June 30-July 4, 2018.

(20) **S. Banerjee**, W. Rahaman, V. Ladmiral, A. Debuigne, C. Detrembleur, B. Ameduri and **R. Poli**, “Organometallic Mediated Radical Polymerization of Vinylidene Fluoride” [Bordeaux Polymer Conference 2018](#), Bordeaux, France, May 28-31, 2018.

(19) **S. Banerjee** and B. Ameduri, “Fluoropolymer-based Tunable Materials for Application in Functional Coatings” [ICRM - 2018](#), Fourth International Conference on Reuse and Recycling of Materials, Kottayam, Kerala, India, March 9-11, 2018.

(18) **S. Banerjee** and B. Ameduri, “Fluoropolymer-based Smart Coating Materials” [EAS8](#), 8<sup>th</sup> East Asia Symposium on Functional Dyes and Advanced Materials, Thiruvananthapuram, India, September 20-22, 2017.

(17) **M. Wehbi**, **S. Banerjee**, A. Mehdi, A. Alaeddine and B. Ameduri, “Development of Silane-functionalized Poly(vinylidene fluoride)” Forum Doctoral, Ecole Doctorale en Sciences et Technologie 2017 (**FDEDST'17**), Lebanese University, Lebanon, September 20-21, 2017.

(16) **M. Wehbi**, **S. Banerjee**, A. Mehdi, A. Alaeddine and B. Ameduri, “Recent Advances on the synthesis of 2-Trifluoromethyl Monomers and their Radical Copolymerization with Vinylidene Fluoride” Colloque Français de Chimie du Fluor 2017 (**CFCF 2017**), Murol, May 15-18, 2017.

(15) **S. Banerjee**, V. Ladmiral, A. Debuigne, C. Detrembleur, R. Poli and B. Ameduri,

“Expanding the Scope of Cobalt-Mediated Radical Polymerization towards the Synthesis of Novel Poly(vinyl acetate-*alt-tert*-butyl-2-trifluoromethacrylate) Alternating Fluoro-copolymers” **Fluoropolymer 2016**, Harrah’s Hotel and Conference Center, New Orleans, LA USA, October 2 - 5, 2016.

(14) [S. Banerjee](#), V. Ladmiral, A. Debuigne, C. Detrembleur, R. Poli and B. Ameduri, “Expanding the Scope of Cobalt-Mediated Radical Polymerization towards the Synthesis of Novel Poly(vinyl acetate-*alt-tert*-butyl-2-trifluoromethacrylate) Alternating Fluoro-copolymers” **Journée des Polyméristes Languedociens 2016**, Faculté de Pharmacie, Montpellier, France, May 19, 2016.

(13) [T. Maji](#), [S. Banerjee](#) and T. K. Mandal, “pH and Thermoresponsive Amino Acid-Based Zwitterionic Polymers” **MACRO 2015**, An International Conference on Polymer Science & Technology, Indian Association for the Cultivation of Science, Kolkata, India, January 23-26, 2015.

(12) [S. Banerjee](#) and R. Faust, “Smart, High Performance Polymer Materials for Emerging Applications” **Young Investigator Meeting (YIM) Boston -2014**, Massachusetts Institute of Technology, USA, October 11-13, 2014.

(11) [S. Banerjee](#), R. Tripathy, D. Cozzens, T. Nagy, S. Keki, M Zsuga and [R. Faust](#), “Smart, self-healing coatings” **SMART 2014**, International Conference on Smart Functional Materials for Shaping Our Future, University of Debrecen, Debrecen, Hungary, September 19 – 20, 2014.

(10) [S. Banerjee](#), [T. Maji](#) and T. K. Mandal, “Amino Acid-based Zwitterionic Polymers and their Stimuli Responsive Behavior” **RAPT 2014**, An International Conference and Expo on Recent Advances in Polymer & Rubber Science & Technology, University of Calcutta, Kolkata, India, January 22-25, 2014.

(9) [A. Saha](#), T. K. Paira, [S. Banerjee](#), M. Dule and T. K. Mandal, “Poly(methyl methacrylate)-*b*-polytyrosine hybrid block copolymers and their solution aggregation into nanospheres” **RAPT 2014**, An International Conference and Expo on Recent Advances in Polymer & Rubber Science & Technology, University of Calcutta, Kolkata, India, January 22-25, 2014.

(8) [S. Banerjee](#), T. Maji, T. K. Paira and T. K. Mandal, “Mesoporous Polymer/Carbon Nanospheres Synthesized via Surface-Confined Atom Transfer Radical Polymerization for Applications as Functional Materials” **FAPS-MACRO 2013**, 3<sup>rd</sup> FAPS Polymer Congress and MACRO-2013, Indian Institute of Science, Bangalore, India, May 15-18, 2013.

(7) [A. Saha](#), T. K. Paira, [S. Banerjee](#), M. Dule and T. K. Mandal, “Synthesis and Aggregation Behaviour of Poly(Methyl Methacrylate)-*b*-Polytyrosine Block Copolymer” **FAPS-MACRO 2013**, 3<sup>rd</sup> FAPS Polymer Congress and MACRO-2013, Indian Institute of Science, Bangalore, India, May 15-18, 2013.

(6) [T. K. Paira](#), A. Saha, [S. Banerjee](#) and T. K. Mandal, “Fluorophore-labeled Poly(Ethylene Glycol)-Peptide-Poly(Ethylene Glycol) Biohybrid Block Copolymer: Synthesis and Aggregation” **POLYTECH 2012**, International Symposium on Advances in Polymeric Materials & Nanotechnology, Bharati Vidyapith University, Pune, India, December 15-17, 2012.

(5) [S. Banerjee](#) and T. K. Mandal, “Facile Synthesis of Block/Graft Copolymers by Concurrent Cationic and Atom Transfer Radical Polymerization” **APSRT 2011**: International Conference on Advances in Polymer Science and Rubber Technology, IIT-Kharagpur, India, March 3 - 5, 2011.

(4) [S. Banerjee](#), T. K. Paira and T. K. Mandal, “Room Temperature Cationic Polymerization of Vinyl Monomers using FeCl<sub>3</sub>: Synthesis of Block Copolymers” **MACRO 2010**, 11<sup>th</sup> International Conference on Frontiers of Polymers & Advanced Materials, IIT-Delhi, India, December 15 - 17, 2010.

(3) T. K. Paira, **S. Banerjee**, and T. K. Mandal, "Peptide-Polyester Conjugates: Synthesis and Self-Aggregation into Nanostructures" **MACRO 2010**, 11<sup>th</sup> International Conference on Frontiers of Polymers & Advanced Materials, IIT-Delhi, India, December 15 - 17, 2010.

(2) T. K. Paira, **S. Banerjee**, and T. K. Mandal, "Synthesis of Peptide-Polymer Bioconjugates via Atom Transfer Radical Polymerization and Their Self-Assembly" **MACRO 2009**, Recent Advances in Polymeric Materials, IIT-Madras, India, March 9 - 11, 2009.

(1) **S. Banerjee** and T. K. Mandal, "Room Temperature Living Cationic Polymerization of Styrene using  $\alpha$ -Methylstyrene-HCl/FeCl<sub>3</sub> System in Presence of Added Salts" **MACRO 2009**: Recent Advances in Polymeric Materials, IIT-Madras, India, March 9 - 11, 2009.

## || National Conference



*\*The presenting author is underlined*

(11) S. Shingdilwar, S. A. Mohammad and **S. Banerjee**, "Functional Polymer Materials for CO<sub>2</sub> Capture" in the National Conference on Advances in Chemical Engineering & Sciences (**ACES2019**), IISER Bhopal, India, March 7-8, 2019.

(10) S. Shingdilwar and **S. Banerjee**, "Functional Mesoporous Silica-Polymer Hybrid Nanospheres: Design, Synthesis and Applications" **BOSE125**, One Day National Conference on the "Recent Advances on Functional Nanomaterials", Pt. Ravishankar Shukla University, Raipur, India, September 28, 2018.

(9) S. Shingdilwar and **S. Banerjee**, "Synthesis of Mesoporous Silica-Polymer Hybrid Nanospheres via Surface-Confined Atom Transfer Radical Polymerization" **CRSI NSC 23**, 23<sup>rd</sup> CRSI National Symposium in Chemistry, IISER Bhopal, Bhopal, India, July 13-15, 2018.

(8) **S. Banerjee** and R. Faust, "Self-healing Sealants for Photovoltaics" **CRSI NSC 22**, 22<sup>nd</sup> CRSI National Symposium in Chemistry, Pt. Ravishankar Shukla University, Raipur, India, February 2-4, 2018.

(7) **S. Banerjee**, T. K. Paira and T. K. Mandal, "Functional Mesoporous Polymer/Carbon Nanospheres via Surface-Confined Atom Transfer Radical Polymerization" **PRC 2012**, A National Symposium on Polymer & Rubber Technology for 21st Century 2012, University of Calcutta, India, October 12-13, 2012

(6) T. K. Paira, A. Saha, **S. Banerjee** and T. K. Mandal, "Fluorophore-labeled Poly(Ethylene Glycol)-Peptide-Poly(Ethylene Glycol) Biohybrid Block Copolymer: Synthesis and Aggregation" **PRC 2012**, A National Symposium on Polymer & Rubber Technology for 21st Century 2012, University of Calcutta, India, October 12-13, 2012.

(5) **S. Banerjee** and T. K. Mandal, "Functional Mesoporous Polymer/Carbon Nanospheres with Faithful Shape Replication via Surface-Confined Atom Transfer Radical Polymerization" **Young Scientist Colloquium-2012** (MRSI, Kolkata Chapter), CGCRI, Jadavpur, India, August 8, 2012.

(4) **S. Banerjee**, T. K. Paira and T. K. Mandal, "Synthesis of Block/Graft Copolymers by Cationic and Combined Cationic and Atom Transfer Radical Polymerization and Their Aggregation/Phase-Separation Study" **SPS 2011**, Symposium on Polymer Science 2011, IISER-Kolkata, India, December 10, 2011.

(3) T. K. Paira, **S. Banerjee**, and T. K. Mandal, "Peptide-Polyester Conjugates: Synthesis and Self-Aggregation into Nanostructures" **SPS 2011**, Symposium on Polymer Science 2011, IISER-Kolkata, India, December 10, 2011.

(2) **S. Banerjee** and T. K. Mandal, "Block/Graft Copolymers by Cationic and Combined Cationic and Atom Transfer Radical Polymerization: Synthesis, Aggregation and Phase-Separation Morphology" **Polymer Quest 2011**: National Seminar Competition 2011 for Research Scholars, IIT-Kharagpur, India, November 4 - 5, 2011.

(1) T. K. Paira, **S. Banerjee**, and T. K. Mandal, "Synthesis of Peptide-Polymer Hybrid

Nanostructures” **Polymer Colloquium 2010**, Colloquium on Perspective in Polymer Science & Technology, IACS, Kolkata, India, November 27, 2010.

A handwritten signature in black ink, appearing to read "SBaner", with a long horizontal flourish extending to the right.