

Bio-data



1. Name: Prof. Santanu Chattopadhyay
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Mobile: 9434055304, 9932790504, Fax: +91-3222-282292.
3. Institution: Indian Institute of Technology Kharagpur, Kharagpur, WB, India.
4. Date of Birth: First day of August 1971.
5. Gender (M/F/T): Male.
6. Category Gen/SC/ST/OBC: Gen
7. Whether differently abled (Yes/No): No.
8. Academic Qualification (Undergraduate Onwards):

	Degree	Year	Subject	University/Institution	% of Marks/CGPA
1	Bachelor of Science	1992	Chemistry	University of Calcutta, Kolkata, India.	
2	Master of Science	1995	Chemistry	Indian Institute of Technology, Kharagpur, India.	8.2/10
3	Master of Technology	1997	Materials Science and Engineering	Indian Institute of Technology, Mumbai, India.	9.4/10
4	Doctor of Philosophy	2001	Rubber Technology	Indian Institute of Technology, Kharagpur, India.	--

9. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award:
Thesis Title: "Development and Properties of Electron Beam Modified Thermoplastic Elastomeric Polyolefin Blends", Professor Anil Kumar Bhowmick & Professor Tapan Kumar Chaki, Rubber Technology Centre, Indian Institute of Technology Kharagpur, 2001.

10. Work experience (in chronological order).

S. No.	Positions held	Name of the Institute	From	To	Pay Scale
1	Visiting Faculty	Indian Institute of Technology Kharagpur, Kharagpur, WB, India.	December-2004	7th March 2007	20000
2	Asst. Professor	Indian Institute of Technology Kharagpur, Kharagpur, WB, India.	2007	2011	18000-9000
3	Associate Professor	Indian Institute of Technology Kharagpur, Kharagpur, WB, India.	2011	26 th Feb 2018	42800-9500
4	Professor	Indian Institute of Technology Kharagpur, Kharagpur, WB, India.	26 th Feb 2018	Till date	Level 14A

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received:

S.No	Name of Award	Awarding Agency	Year
1	Post Doctoral Fellow	The University of Western Ontario, London, Ontario, Canada	2001-2002
2	Post Doctoral Research Associate	Georgia Institute of Technology, Atlanta, GA, USA.	2002-2004

12. Current Research Interests:

FEA of rubbery/textile material, rubber-based nanocomposites, Rubber compounding and modification, Viscoelastic behavior of rubbers and polymer blends, Synthesis and characterization of block copolymers by controlled polymerization, Smart rubber composites, Biomaterials, and Polymers for health care and energy harvesting.

13. Specialization Subjects:

Science & Technology of rubber and rubber-like materials, Engineering Design with Rubber, Rubber process engineering, Lifetime prediction of rubber, Physical testing of rubber, Rubber compounding & reinforcement, Characterization of Rubber, Composite materials.

14. Technical Experiences:

Compression Molding, Dynamic Mechanical Analyzer (2980, TA Instruments), X-Ray Diffraction (PW-1840, X-ray diffractometer), FESEM (Philips XL30 S FEG, Netherland), Scanning Probe Microscope (XE-100(PSIA), Monsanto Rheometer (Monsanto Rheometer R-100), Differential Scanning Calorimeter (NETZSCH DSC 200 PC, Germany), Thermo Gravimetric Analyzer (TG Analyzer, NETZSCH, TG 209, F1, Germany), Tensile Testing Machine (Hounsfield H10KS), Mixing Mill (6"×12" and 14"×36"), Extruder (hot feed 8" rubber extruder and twin screw extruder), Rubber Process Analyzer (RPA), Gel permeation chromatography (GPC), Atomic force microscopy (AFM), Capillary Rheometer, Goodrich

Flexometer, DIN abrader and Du-Pont abrader for rubber wear measurement.

15. Details of Ph. D students guided / Ongoing:

Ph.D completed 14, Ongoing 17 students

16. Membership of Professional Bodies:

1. Member: Materials Manufacturing Ontario (Ontario, Canada).
2. Life: Society for Polymer Science, India.
3. Member (membership no. 93241963): IEEE Engineering in Medicine and Biology (IEEE EMB).
4. Editorial board member: Journal of Advanced Biotechnology and Bioengineering.

17. Honors and Awards:

1. Editorial Board member of Journal of advanced biotechnology and bioengineering w.e.f. 3rd FEB 2018
2. Appointed as the Board of members of NRC Kolkata, Oct 2018
3. RULA AWARDS for International Innovation and betterment and excellence award in technical research as "Outstanding Young Scientist in Bio-materials", 12 Nov 2018.
4. Best Paper Award on “ Simulation of Extrusion Dies for Rubber Profiles “ at 23rd rubber conference 2018 by IRMRA, Mumbai.

18. Journal reviewer/reviewing:

1. Reviewer: Rubber Chemistry and Technology
2. Reviewer: Biomacromolecules
3. Reviewer: Acta Biomaterialia
4. Reviewer: Polymer
5. Reviewer: Journal of Applied Polymer Science
6. Reviewer: Polymer Composites
7. Reviewer: J. Materials Science
8. Reviewer: Polymer International
9. Reviewer: Polymer Engineering & Science
10. Reviewer: Polymers for Advanced Technologies
11. Reviewer: Composites: Part A
12. Reviewer: J. Polymer Research
13. Reviewer: Composite Science and Technology
14. Reviewer: e-Xpress Polymer Letters
15. Reviewer: RSC Advance
16. Reviewer: ACS Industrial and Engineering Chemical Research
17. Reviewer: Macromolecules
18. Reviewer: Materials Chemistry-B
19. Journal of Industrial Textiles

19. Contributions to Book Chapters and Book:

1. M. Selvakumar, G. B. Nando and **S. Chattopadhyay**, “Thermoset-clay Nanocomposites: An Overview”, *Advances in Polymer Materials and Technology*, CRC Press, Boca Raton, USA, (2016).
2. U. Basuli, S. Panja, T.K. Chaki and **S. Chattopadhyay**, “Preparation and Properties of Nanocomposites Based on Poly(Ethylene-Co-Methyl Acrylate) and Multi-walled Carbon Nanotubes ”-Technological Advancement in polymer nanocomposites of carbon nanotubes: Processing Performance and Applications, published by Springer, (2015).
3. O.P Bajpai, S. Panja, **S. Chattopadhyay**, D.K. Setua, “Process–structure–property relationships in nanocomposites based on piezoelectric-polymer matrix and magnetic nanoparticles”- *Manufacturing of Nanocomposites with Engineering Plastics*, Elsevier, (2015).
4. S. Chatterjee, A.K. Chandra and **S. Chattopadhyay**, “Elastomers based Bio-nanocomposites”-Recent Advances in Elastomers”, Volume-II, Springer, (2011)

20. Patents:

2. S. Kumar, G. B. Nando, S. Nair, G. Unnikrishnan, A. Sreejesh, and **S. Chattopadhyay**, “Bromobutyl Rubber (BIIR) and Polyepichlorohydrin Rubber (ECH) Blend Nanocomposites (Indian Patent Application No: 1428/KOL/2013), filing date December 18, (2014).
3. J. C. Meredith, J. L. Sormana, and **S. Chattopadhyay**, “Organically modified reactive nanocomposites for engineering thermoset polymers and elastomers, *US Patent provisional application*, USPT ID 3624, 2006.

21. Sponsored Projects Handled:

Project support as PI:

Grant agency	Title of the project and reference number	From and to (date/month)	Duration	Amount in lakh Rs.
1. DST, First Track Project	Nanotechnology and radiation processing of organic-inorganic hybrid materials based on thermoplastic elastomer	January 2006 to January 2009	36 Months (Completed)	9.1
2.DMSRDE, DRDO, Kanpur	The Influence of magnetic Nanocomposite to Enhance Thermo-mechanical Properties of SMPs	09-10-2009 to 31-10-2011	One year (Completed)	9.9
3.NPOL, DRDO, Kochin	Development of Rubber Nanocomposite based encapsulant	06-09-2011 to 05-03-2013	One and half year (Completed)	9.0
4.Small Industry	Analysis of polymer/rubber block	01-11-2016 to 31-12-2016	Two months (Completed)	1.5

consultancy				
5.Usha Martin, Ranchi, JH	Analysis of polymer for composite wire rope	20-04-2016 to 05-06-2016	Two months (Completed)	4.5
6.IGCAR, Tamilnadu	Visual, Dimensional and physico-mechanical evaluation of 2-meter diameter inflatable seals, green and slab specimens: module I	15-06-2017 to 26-03-2018	9 months (Completed)	18.15
7.CEAT LTD, Mumbai	Understanding and characterization of rubber fatigue and viscoelastic behavior for dynamic applications	27-04-2017 to 23-04-2020	Three years (ongoing)	17.65
8.DST	Multifunctional polymer/ mesoporous bioactive glass composite nanoparticles as a targeted drug delivery platform for bone	22-09-2017 to 21-09-2020	Three years (ongoing)	21.50
9. Usha Martin, Ranchi, JH	Analysis of polymer for composite wire	Oct 2018 to March 2019	06 Months (Completed)	3.5
10. ICICI Lombard	Analysis of Special Type of SBR	01-08-2018 to 31-08-2018	01 months (Completed)	0.5
11. Apollo Tyres Ltd.	Development of green NR compounds for tire by replacing carbon black with silica filler restricting its flocculation without compromising wear and abrasion	01.04.2019 to 31 Mar 2022	03 years (Ongoing)	34.776
12. DST-DFG	Development and investigation of flexible structures for UV- and electromagnetic radiation shielding	In process		39.853

22. Project support as Co-PI:

Grant agency	Title of the project and reference number	From and to (date/month)	Duration	Amount in lakh Rs.
1. ISRO, Bangalore	Segmented polyurethane (SPU) based nanocomposites from functionalized nanoclays with special reference to fire and flammability	05-01-2006 to 31-01-2008	Two years (Completed)	6.3
2. DAE, BARC	Development of electron beam irradiated composites based on multiwalled carbon nanotubes in polymeric matrices	08-06-2007 to 07-06-2010	Three years (Completed)	14.5
3. CEAT	Application of nanotechnology	17-08-2011	Four Years	24

MUMBAI	for improving impermeability of gas and moisture of TBR/PCR inner liner materials	to 31-07-2015	(Completed)	
4. RCMA Nashik	Ageing, failure analysis and life estimation of rubber seals of military aircraft.	13-07-2007 to 2-07-2008	One year (Completed)	9.2
5. ISIRD, SRIC, IIT Kharagpur	An approach for recycling of polymeric wastes	01-02-2006 to 31-01-2007	One year (Completed)	2.0
6.IGCAR, Tamilnadu	Studies on the technical requirements of elastomeric inflatable seals	01-01-2006 to 30-06-2007	Six months (Completed)	9.0
7. Phoenix Yule Ltd., Kalyani, W.B	Elimination of pit mark on platen during vulcanization of FR conveyor belt	02-07-2007 to 31-03-2008	Nine Months (Completed)	2.0
8. NAC group, Aurangabad	Development of Dough Moulding Compound	01-06-2006 to 01-08-2007	Two Months (Completed)	1.0
9. IMPRINT 2, SERB	Invention of Smart Process Technology for Production of Valuable Products including Oil and Carbon Black from Waste Tire	January 2019 to December 2021	Ongoing (Ongoing)	87.56

23. Publications (List of papers published in SCI Journals, in year wise descending order, Incomplete List).

S. No	Author(s)	Title	Name of Journal	Vol. (issue)	Pages	Year
1	Koley R., Kasilingam R, Sahoo S, Chattopadhyay S, and Bhowmick A.K.	Synthesis and Characterization of Phenol Furfural Resin from Moringa Oleifera Gum and Biophenol and its Application in Styrene Butadiene Rubber	ACS Industrial and Engineering Chemistry Research (Accepted)			2019
2	Panja S, Bharti R, Dey G, Nathaniel Lynd N, and Chattopadhyay S.	Co-ordination Assisted Self-assembled Polypeptide Nanogel to Selectively Combat Bacterial Infection	ACS Applied Material Interfaces	11(37)	33599-33611	2019
3	Ghorai S.K, Maji S, Bhuvaneshwaran S, Tapas Kumar Maiti T.K, and Chattopadhyay S.	Promoted Osteoconduction of Polyurethane-Urea Based 3D Nanohybrid Scaffold through Nanohydroxyapatite Adorned Hierarchical Titanium Phosphate	ACS Applied Bio Materials	2(9)	3907-3925	2019
4	Das S,	Reactive grafting of 3-octanoylthio-	Polymer	179(28)	121693	2019

	Chattopadhyaya S, Dhanania S, and Bhowmick A.K.	1-propyltriethoxysilane in styrene butadiene rubber: Characterization and its effect on silica reinforced tire composites				
5	Basu D, Airit Agasty A, Das A, Chattopadhyay S, Sahu P, and Heinrich G.	Phase changing stearate ions as active fillers in multifunctional carboxylated acrylonitrile–butadiene composite: Exploring the role of zinc stearate	Journal of Applied Polymer Science	136	48271	2019
6	Mandal P, Somnath Maji S, Panja S, Bajpai O.P, Maiti T.K, and Chattopadhyay S.	Magnetic particle ornamented dual stimuli responsive nanogel for controlled anticancer drug delivery	New Journal of Chemistry	43(7)	3026-3037	2019
7	B. Subramanian, T. Agarwal, S. K. Ghorai, T. K. Maiti, S. Chattopadhyay S. and Guha K.	Biocompatible polyvinyl alcohol and RISUG® blend polymeric films with spermicidal potential	Biomedical Materials:	14(3)	035017	2019
8	Ghorai S. K, Maji S., Bhuvaneshwaran S., Maiti T. K., and Chattopadhyay S.	Coining Attributes of Ultra-low Concentration Graphene Oxide and Spermine: An Approach for High Strength, Anti-microbial and Osteoconductive Nanohybrid Scaffold for Bone Tissue Regeneration	Carbon	141	370-389	2019
9	Subramanian B., Rameshbabu A. B, Ghosh K., Jha P., K., Jha R., Selvakumar M., Chattopadhyay S., Dhara S., Mondal K. C., Basak P and Guha S. K.	Impact of Styrene maleic Anhydride (SMA) Based hydrogel on Rat Fallopian Tube as Contraceptive Implant with Selective Antimicrobial Property	Materials Science & Engineering C	94	94-107	2019
10	Pradhan S., Chattopadhyay S., and Ratna D.	Graphene Nanoplatelets in Polychloroprene Matrix: An Insight to Dispersion with a Special Emphasize to Electro-Mechanical Properties	Polymer Composites	40	1-13	2018
11	Kumar S., Partheban M., Sofana Reka S, and Chattopadhyay S.	A Brief Insight into the Prediction of Water Vapor Transmissibility in Highly Impermeable Hybrid Nanocomposites Based on Bromobutyl/Epichlorohydrin Rubber Blends	Open Chemistry	16(1)	1207–1213	2018
12	Roy T., Maity P. P., Rameshbabu A. P., Das B, John A.,	Core-Shell Nanofibrous Scaffold Based on Polycaprolactone-Silk Fibroin Emulsion Electrospinning	Bioengineering	5	68	2018

	Dutta A., Sanjoy Kumar Ghorai S. K., Chattopadhyay S. and Dhara S.	for Tissue Engineering Applications				
13	Bajpai O. P., Mandal S., Ananthkrishnan R., Mandal P., Khastgir D. and Chattopadhyay S.	Structural Features, Magnetic Properties and Photocatalytic Activity of Bismuth Ferrite Nanoparticles Grafted on Graphene Nanosheets	New Journal of Chemistry	42	10712-10723	2018
14	Bajpai O. P., Kumar S., Bhandari S., Dhar A., Khastgir D., and Chattopadhyay S.	Electrolyte and Current Density Determines the Fate of Electrodeposited Polythiophene from Waveguide to Photovoltaics	Solar Energy Materials and Solar Cells	183	107-119	2018
15	Dhanania S., Mahato D., Cornish K., Prabhavale O., Nando G. B, and Chattopadhyay S.,	Phosphorylated Cardanol Prepolymer Grafted Guayule Natural Rubber: an Advantageous Green Natural Rubber	Iranian Polymer Journal	27(5)	307-318	2018
16	Basuli U., Palaninathan E., Chaki T. K. and Chattopadhyay S.	Effect of Plasma, Gamma and Chemically Surface Modified MWNTs on the Rheological and Electrical Properties of Ethylene Methyl Acrylate (EMA) Nanocomposites	Journal of Nanoscience and Nanotechnology	18	4621-4633	2018
17	Anas K., David S., Babu R. R., Selvakumar M. and Chattopadhyay S.	Energy Dissipation Characteristics of Crosslinks in Natural Rubber: an Assessment Using Low and High-frequency Analyzer	Journal of Polymer Engineering	38(8)	723-730	2018
18	Dey A., More P., Khanna P. K., Sikder A. K., Chattopadhyay S.	Polymer based Graphene/Zinc Oxide Nano Crystal (GZnNC): An Outstanding Thermoelectrical Energy Conversion Material	Open Access Text, DOI: 10.15761/AMS.1000119	--	--	2017
19	Sarkar K., Das D., Chaki T. K. and Chattopadhyay S.	"Macro-Structured Carbon Clusters for Developing Waterproof, Breathable Conductive Cotton Fabric"	Carbon	116	1-14	2017
20	Selvakumar M., Das B., Dhara S. and Chattopadhyay S.	"Structurally Tuned Antimicrobial Mesoporous Hydroxyapatite Nanorods by Cyclic Oligosaccharides Regulation to Release a Drug for Osteomyelitis"	ACS Crystal Growth & Design	17(2)	433-445	2017
21	Sarkar K., Das D., and Chattopadhyay S.	"Smart conductive cotton fabric by macro-structured carbon clusters for electromagnetic interference shielding"	Procedia Engineering, Elsevier	216	127-134	2017

22	Sarkar K., Das D., and Chattopadhyay S.	“Smart and economic conductive textile for electromagnetic interference shielding”	Procedia Engineering, Elsevier	216	93-100	2017
23	Panja S, Dey G., Bharti R., Mandal P., Mandal M. and Chattopadhyay S.	“Metal Ion Ornamented Ultrafast Light-Sensitive Nanogel for Potential in-Vivo Cancer Therapy”	Chemistry of Materials	28 (23)	8598–8610	2016
24	Sankaran K., Manoharan P., Chattopadhyay S., Nair S., Govindan U., Arayambath S. and Nando G. B.	“Effect of Hybridization of Organoclay with Carbon Black on the Transport, Mechanical, and Adhesion Properties of Nanocomposites Based on Bromobutyl/Epoxidized Natural Rubber Blends”	RSC Advances	6(40)	33723-33732	2016
25	Panja S., Dey G., Bharti R., Kumari K., Maiti T. K., Mandal M. and Chattopadhyay S.	“Tailor-Made Temperature-Sensitive Micelle for Targeted and On-Demand Release of Anticancer Drugs”	ACS Applied Materials and Interfaces	8(19)	12063-12074	2016
26	Annadura P., Sankaran K., Mukundan T., Joseph R., Sarkar P. and Chattopadhyay S.	“Effect of Nanostructures of Modified Clay-Carbon Black on Physico-Mechanical, Electrical, and Acoustic Properties of Elastomer-Based Composites”	Polymer Composites	37(6)	1786-1796	2016
27	Dey A., Bajpai O.P., Sikder A.K., Chattopadhyay S. and Khan M.A.S.	“Recent Advances in CNT/Graphene Based Thermoelectric Polymer Nanocomposite: a Proficient Move towards Waste Energy Harvesting”	Renewable and Sustainable Energy Reviews	53	653-671	2016
28	Panja S., Maji S, Maiti T.K. and Chattopadhyay S.,	“A Smart Magnetically Active Nano Vehicle for On-demand Drug Delivery: where van der Waals Force Balances the Magnetic Interaction”	ACS Applied Materials and Interfaces	7 (43)	24229–24241	2015
29	Payyappilly S.S., Panja S., Mandal P., Dhara S. and Chattopadhyay S.	“Organic Solvent-free Low Temperature Method of Preparation of Self Assembled Amphiphilic Poly (Caprolactone)-Poly(Ethylene Glycol) Block Copolymer Based Nanocarriers for Protein Delivery”	Colloids and Surface B: Biointerfaces	135	510-517	2015
30	Dey A., Hadawale S., Khan M.A.S., More P., Khanna P.K., Sikder A.K. and Chattopadhyay S.	“Polymer Based Graphene/Titanium Dioxide Nanocomposite (GTNC): an Emerging and Efficient Thermoelectric Material”	Dalton Transactions	44(44)	19248-19255	2015
31	Dey A., Nangare V., More P.V., Khan M.A.S.,	“A Grapheme Titanium Dioxide Nanocomposite (GTNC): One Pot Green Synthesis and its Application	RSC Advances	5(78)	63777-63785	2015

	Khanna P.K., Sikder A.K. and Chattopadhyay S.	in a Solid Rocket Propellant”				
32	Selvakumar M., Jaganathan S. K., Nando G.B. and Chattopadhyay S.	“Synthesis and Characterization of Novel Polycarbonate Based Polyurethane/Polymer Wrapped Hydroxyapatite Nanocomposites: Mechanical Properties, Osteoconductivity and Biocompatibility”	Journal of Biomedical Nanotechnology	11(2)	291-305	2015
33	Kumar S., Chattopadhyay S., Sreejesh A., Nair S., Unnikrishnan G. and Nando G. B.	“Analysis of air permeability and WVTR characteristics of highly impermeable novel rubber nanocomposite”	Material Research Express,	2	025001	2015
34	Kumar P. S., Selvakumar M., GaneshBabu S., Karuthapandian S. and Chattopadhyay S.	“CdO Nanospheres: Facile Synthesis and Bandgap Modification for the Superior Photocatalytic Activity”	Materials Letters	151	45-48	2015
35	Panja S., Maji S., Maiti T.K. and Chattopadhyay S.	“A Branched Polymer as a pH Responsive Nanocarrier: Synthesis, Characterization and Targeted Delivery”	Polymer	61	75-86	2015
36	Dey A., Athar J., Varma P., Prasant H., Sikder A. K. and Chattopadhyay S.	“Graphene-iron Oxide Nanocomposite (GINC): an Efficient Catalyst for Ammonium Perchlorate (AP) Decomposition and Burn Rate Enhancer for AP Based Composite Propellant”	RSC Advances	5(3)	1950–1960	2015
37	Kumar S., Nando G. B., Nair S., Unnikrishnan G., Sreejesh A. and Chattopadhyay S.	“Effect of Organically Modified Montmorillonite Clay on Morphological, Physicomechanical, Thermal Stability, and Water Vapor Transmission Rate Properties of BIIR-CO Rubber Nanocomposites”	Rubber Chemistry and Technology	88(1)	176-196	2015
38	Kumar S., Chattopadhyay S., Padmanabhan R., Sreejesh A., Nair S., Unnikrishnan G. and Nando G.B.	“Tailoring Permeation Characteristics of Bromobutyl Rubber with Polepichlorohydrin and Graphene Nanoplatelets”	Materials Research Express	2(10)	105007, 1-17	2015
39	Dey A., Panja S., Sikder A. K. and Chattopadhyay S.	“One Pot Green Synthesis of Graphene–iron Oxide Nanocomposite (GINC): an Efficient Material for Enhancement of Thermoelectric Performance”	RSC Advance	5(14)	10358–10364	2015
40	Kumar S., Nando G.B.,	“Influence of Hybrid Nanostructures and its Tailoring	RSC Advances	5(107)	87864-87875	2015

	Padmanabhan R., Nair S., Unnikrishnan G., Sreejesh A. and Chattopadhyay S.	Mechanism on Permeability, Rheology, Conductivity, and Adhesion Properties of a Novel Rubber Blend Nanocomposite”				
41	Bajpai O.P., Setua D. K. and Chaattopadhyay S.	“A Brief Overview on Ferrite (Fe ₃ O ₄) Based Poly Nanocomposites: Recent Developments and Challenges”	Journal of Research Updates in Polymer Science	3(4)	184-204	2014
42	Panja S., Nayak S., Selvakumar M., Ghosh S. and Chattopadhyay S.	“Self-assembly of Biodegradable Branched PEPCL-b-PEC Amphiphilic Polymer: Synthesis, Characterization and Cancer Cell Targeted Drug Delivery”	RSC Advances	4(93)	51766– 51775	2014
43	Payyappilly S., Dhara S. and Chattopadhyay S.	“The Heat–chill Method for Preparation of Self-assembled Amphiphilic Poly(ϵ -Caprolactone)– Poly(Ethylene Glycol) Block Copolymer Based micellar Nanoparticles for Drug Delivery”	Soft Matter	10(13)	2150- 2159	2014
44	Sarkar P., Mohanty A. K., Bandyopadhyay P, Chattopadhyay S. and Banerjee S.	“Proton Exchange Properties of Flexible Diamine-based New Fluorinated Sulfonated Polyimides”	RSC Advances	4(23)	11848- 11858	2014
45	Payyappilly S., Dhara S. and Chattopadhyay S.	“Thermoresponsive Biodegradable PEG-PCL-PEG Based Injectable Hydrogel for Pulsatile Insulin Delivery”	Journal of Biomedical Materials Research Part A	102(5)	1500- 1509	2014
46	Bajpai O.P., Kamdi J.B., Selvakumar M., Ram S., Khasgir D. and Chattopadhyay S.	“Effect of Surface Modification of BiFeO ₃ on the Dielectric, Ferroelectric, Magneto-Dielectric Properties of Polyvinylacetate/BiFeO ₃ Nanocomposites”	Express Polymer Letters	8(9)	669-681	2014
47	Panja S., Saha B., Ghosh S. K. and Chattopadhyay S.	“Synthesis of Novel Four Armed PE-PCL Grafted Superparamagnetic and Biocompatible Nanoparticles”	Langmuir	29(40)	12530- 12540	2013
48	Mohanty T. R., Bhandari V., Chadra A. K., Chattopadhyay P. K. and Chattopadhyay S.	“Role of Calcium Stearate as a Dispersion Promoter for New Generation Carbon Black- Organoclay Based Rubber Nanocomposites for Tyre Application”	Polymer Composites	34(2)	214-224	2013
49	Chattopadhyay P.K. and Chattopadhyay S.	“Role of Epoxy Functionality Microstructure-Property Relationships within Elastomeric Nanocomposites”	Plastics Rubber and Composites	42(8)	340-348	2013
50	Chattopadhyay P.K., Praveen S.,	“Contribution of Organomodified Clay on Hybrid Microstructures and	Polymer Engineering &	53(5)	923-930	2013

	Das N.C. and Chattopadhyay S.	Properties of Epoxidized Natural Rubber-Based Nanocomposites”	Science			
51	Chatterjee S., Chandra A.K. and Chattopadhyay S.	“Elastomer-Based Bio-Nanocomposites”	Advances in Elastomers II	--	205-226	2013
52	Basuli U., Chaki T. K. and Chattopadhyay S.	“Rheological Signatures of Ethylene Methyl Acrylate-multiwalled Carbon Nanotube Nanocomposites”	Polymers for Advanced Technologies	23(1)	65-76	2012
53	Basuli U., Chaki T.K. and Chattopadhyay S.	“Mechanical, Thermal and Rheological Behavior of Ethylene Methyl Acrylate-MWNT Nanocomposites”	Polymer Engineering and Science	52 (2)	277-288	2012
54	Basuli U., Chattopadhyay S., Nah C., and Chaki T.K.	“Electrical Properties and Electromagnetic Interference Shielding Effectiveness of Multi-walled Carbon Nanotubes-reinforced EMA Nanocomposites”	Polymer Composites	33(6)	897-903	2012
55	Basuli U., Chattopadhyay S., Nah C. and Chaki T.K.	“Rheological Behaviours and Electrical Properties of Nanocomposites Based on Poly(Ethylene-co-Methyl Acrylate) and Multi-walled Carbon Nanotubes”	Advanced Science Letters	17(1)	27-39	2012
56	Mishra A. K., Chattopadhyay S., Rajamohanan P.R. and Nando G.B.	“Effect of Tethering on Structure-property Relationship of TPU-dual Modified Laponite Clay Nanocomposites by Ex-situ and In-situ Techniques”	Polymer	52(4)	1071-1083	2011
57	Mitra S., Chattopadhyay S. and Bhowmick A. K.	“Dynamic Stress Relaxation Behavior of Nanogel Filled Elastomers”	Journal of Polymer Research	18(4)	489-497	2011
58	Mishra A.K, Rajamohanan P. R., Nando J. B. and Chattopadhyay S.	“Structure-Property of Thermoplastic Polyurethane-Clay Nanocomposite Based on Covalent and Dual-modified Laponite”	Advanced Science Letters	4(1)	65-73	2011
59	Hui S., Chaki T.K. and Chattopadhyay S.	“Effect of Controlled Electron Beam Irradiation on Rheological Properties of Nano Silica-Filled LDPE-EVA Based Thermoplastic Elastomer”	Journal Applied Polymer Science	119(4)	2153-2166	2011
60	Basuli U., Chaki T.K. and Chattopadhyay S.	“Thermo-mechanical and Rheological Behavior of Polymer Nanocomposites Based on Ethylene-methyl Acrylate (EMA) and Multi-walled Carbon Nanotube (MWNT)”	Plastics, Rubber and Composites: Macromolecular Engineering	40 (5)	213-222	2011
61	Basuli U., Chaki T.K., Setua D.K. and Chattopadhyay	“A Comprehensive Assessment on Degradation of Multi-walled Carbon Nanotubes-reinforced EMA	Journal of thermal analysis and calorimetry	108 (3)	1223-1234	2011

	S.	Nanocomposites”				
62	Mitra S., Chattopadhyay S. and Bhowmick A. K.	“Studies of Reinforcement Behavior of Unique Elastomer Based Nanocomposite Gels”	Polymer Composites	32(1)	103-113	2011
63	Chattopadhyay P. K. and Chattopadhyay S.	“Prediction of Swelling in Ternary Particulate Rubber-nanocomposites: Development of Modified Kraus equation”	Rubber Chemistry and Technology	84(1)	1-23	2011
64	Mondal M., Chattopadhyay P. K., Setua D.K., Das N.C. and Chattopadhyay S.	“Influence of Surface Modified Nanoclay in Self-organized Nanostructure of Segmented Polyurethane Composites”	Polymer International	60(9)	1334- 1341	2011
65	Chattopadhyay P.K., Das N.C. and Chattopadhyay S.	“Influence of Interfacial Roughness and the Hybrid Filler Microstructures on the Properties of Ternary Elastomeric Composites”	Composite: Part A, Applied Science and Manufacturing	42(8)	1049- 1059	2011
66	Chattopadhyay P. K., Chattopadhyay S., Das N. C. and Bandyopadhyay P. P.	“Impact of Carbon Black Substitution with Nanoclay in Microstructure and Tribological Properties of Ternary Elastomeric Composites”	Journal of Materials and Design	32 (10)	4696- 4704	2011
67	Mondal M., Chattopadhyay P. K., Chattopadhyay S. and Setua D. K.	“Thermal and Morphological Analysis of Thermoplastic Polyurethane-clay Nanocomposites: Comparison of Efficacy of Dual Modified Laponite vs. Commercial Montmorillonites”	Thermochemica Acta	510(1)	185-194	2010
68	Mishra A.K., Mushtaq S., Nando G.B. and Chattopadhyay S.	“Effect of Cloisite and Modified Laponite Clays on the Rheological Behavior of TPU-clay Nanocomposites”	Rheologica Acta,	49(8),	865-478	2010
69	Mishra A.K., and Chattopadhyay S.	“Thermoplastic Polyurethane- Modified Laponite Clay Nanocomposites”	Indian Institute of Technology, Thesis,	--	--	2010
70	Hui S., Chaki T. K. and Chattopadhyay S.	“Dielectric Properties of EVA/LDPE TPE Systems: Effect of Nano-Silica and Electron Beam Radiation”	Polymer Engineering and Science	50(4)	730-738	2010
71	Hui S., Chaki T. K. and Chattopadhyay S.	“Dynamic and Capillary Rheology of LDPE-EVA Based Thermoplastic Elastomer (TPE): Effect of Silica Nano-Filler”	Polymer Composites	31(3)	377-391	2010
72	Maji S., Chattopadhyay P.K., Khastgir D. and Chattopadhyay S.	“Transition Metal Catalyzed Oxidative Aging of Low Density Polyethylene: Effect of Manganese (III) Acetate”	Journal of Polymer Research	17(3)	325-334	2010

73	Praveen S., Chattopadhyay P.K., Jayendran S., Chakraborty B.C. and Chattopadhyay S.	“Effect of Nanoclay on the Mechanical and Damping Properties of Aramid Short Fibre-filled Styrene Butadiene Rubber Composites”	Polymer International	59(2)	187-197	2010
74	Mitra S., Chattopadhyay S., and Bhowmick A. K.	“Electron Beam Cross-linked Gels- Preparation, Characterization and Their Effect on the Mechanical, Dynamic Mechanical and rheological Properties of Rubbers”	Radiation Physics and Chemistry	79(3)	289-296	2010
75	Basuli U., Chaki T. K., Sabharwal S. and Chattopadhyay S.	“Influence of Acrylate Content on the Properties of Ethylene Methyl Acrylate-Multi Walled Carbon Nanotube Composites”	Advanced Science Letters	3(1)	10-19	2010
76	Mitra S., Chattopadhyay S. and Bhowmick A. K.	“Preparation and Characterization of Elastomer Based Nanocomposite Gels Using a Unique Latex Blending Technique”	Journal of Applied Polymer Science	118(1)	81-90	2010
77	Chattopadhyay P. K., Basuli U. and Chattopadhyay S.	“Studies on Novel Dual Filler based Epoxidized Natural Rubber Nanocomposite”	Polymer Composite	31(5)	835-846	2010
78	Mishra A. K., Chattopadhyay S. and Nando G. B.	“Effect of Modifiers on Morphology and Thermal Properties of Novel Thermoplastic Polyurethane- peptized Laponite Nanocomposites”	Journal of Applied Polymer Science	115(1)	558-569	2010
79	Hui S., Chattopadhyay S. and Chaki T. K.	“Thermal and Thermo-oxidative Degradation Study of a Model LDPE/EVA Based TPE system: Effect of Nano Silica and Electron Beam Irradiation ”	Polymer Composites	31(8)	1387- 1397	2010
80	Basuli U., Chaki T.K., Chattopadhyay S. and Sabarwal S.	“Thermal and Mechanical Properties of Polymer- Nanocomposites Based on Ethylene Methyl Acrylate and Multi-walled Carbon Nanotube”	Polymer Composites	31(7)	1168- 1178	2010
81	Praveen S., Chattopadhyay P.K., Jayendran S., Chakraborty B.C. and Chattopadhyay S.	“Effect of Rubber Matrix Type on the Morphology and Reinforcement Effects in Carbon Black-nanoclay Hybrid Composites - A Comparative Assessment”	Polymer Composites	31(1)	97-104	2010
82	Mondal M., Chattopadhyay P.K., Setua D.K., Das N.C. and Chattopadhyay S.	“Self-Organization of Macromolecules in Novel TPU-clay Nanocomposites”	Advanced Materials Research	123	435-438	2010
83	Mishra A. K., Rajamohanam P. R., Nando G. B.	“ Effects of Covalent and Dual Modification of Clays on the Structure and Property of TPU-	Advanced Science Letters	4	1	2010

	and Chattopadhyay S.	Laponite Clay Nanocomposites”				
84	Praveen S., Chattopadhyay P.K., Albert P., Dalvi V.G., Chakraborty B.C. and Chattopadhyay S.	“Synergistic Effect of Carbon Black and Nano-clay Fillers in Styrene Butadiene Rubber Matrix: Development of Dual Structure”	Composite Part A	40(3)	309-316	2009
85	Hui S., Chaki T. K. and Chattopadhyay S.	“Exploring the Simultaneous Effect of Nano Silica Reinforcement and Electron Beam Irradiation on a Model LDPE-EVA Based TPE System”	Polymer International	58(6)	680-690	2009
86	Praveen S., Chakraborty B.C., Jayendran S., Raut R.D., and Chattopadhyay S.	“Effect of Filler Geometry on Viscoelastic Damping of Graphite/Aramid and Carbon Short Fiber-Filled SBR Composites: A New Insight”	Journal of Applied Polymer Science	111(1)	264-272	2009
87	Mitra S., Chattopadhyay S. and Bhowmick A. K.	“Influence of Nanogels on Mechanical, Dynamic Mechanical and Thermal Properties of Elastomers”	Nanoscale Research Letters	4(5)	420-430	2009
88	Mitra S., Chattopadhyay S., Sabharwal S. and Bhowmick A. K.	“Rheological Behavior of Gel-Filled Raw Natural Rubber and Styrene-Butadiene Rubber with Reference to Gel-Matrix Intermixing”	Polymer Engineering and Science	49(6)	1050-1062	2009
89	Ganguly A., Saha S., Bhowmick A. K. and Chattopadhyay S.	“Augmenting the Performance of Acrylonitrile–Butadiene–Styrene Plastics for Low-Noise Dynamic Applications”	Journal of Applied Polymer Science	109(3)	1467-1475	2008
90	Mishra A. K., Nando G. B. and Chattopadhyay S.	“Exploring Preferential Association of Laponite and Cloisite with Soft and Hard Segments in TPU-clay Nanocomposite Prepared by Solution Mixing Technique”	Journal of Polymer Science, Part B: Polymer Physics	46(21)	2341-2354	2008
91	Sormana J. L., Chattopadhyay S. and Meredith J. C.	“Mechanical and Thermal Properties of Poly(Urethane Urea) Nanocomposites Prepared with Diamine-Modified Laponite”	Journal of Nanomaterials	--	1-9	2008
92	Mishra A. K., Chattopadhyay S., Nando G. B. and Devadoss E.	“Synthesis and Characterization of Elastomeric Polyurethane-Laponite Nanocomposite”	Design Monomers and Polymers	11	395	2008
93	Hui S., Chaki T. K. and Chattopadhyay S.	“Effect of Silica-Based Nanofillers on the Properties of a Low-Density Polyethylene/Ethylene Vinyl Acetate Copolymer Based Thermoplastic Elastomer”	Journal of Applied Polymer Science	110(2)	825-836	2008
94	Bhadra S.,	“Improvement of Conductivity of	Journal of	108(1)	57-64	2008

	Chattopadhyay S., Singha N.K. and Khastgir D.	Electrochemically Synthesized Polyaniline”	Applied Polymer Science			
95	Mitra S., Chattopadhyay S. and Bhowmick A. K.	“Synthesis and Characterization of Chemically Cross-linked Styrene-Butadiene Rubber Nano-gels and Their Effect on Various Properties of the Rubber”	Rubber Chemistry and Technology	81 (5)	842-864	2008
96	Mitra S., Chattopadhyay S. and Bhowmick A. K.	“Effects of Quasi-nanogel Particles on the Rheological and Mechanical Properties of Natural Rubber - A New Insight”	Journal of Applied Polymer Science	107 (5)	2755-2767	2008
97	Mitra S., Chattopadhyay S., Bharadwaj Y. K., Sabharwal S. and Bhowmick A. K.	“Effect of Electron Beam-cross-linked Gels on the Rheological Properties of Raw Natural Rubber”	Radiation Physics and Chemistry	77(5)	630-642	2008
98	Bhadra S., Singha N. K., Chattopadhyay S. and Khastgir D.	“Effect of Different Reaction Parameters on the Conductivity and Dielectric Properties of Polyaniline Synthesized Electrochemically and Modeling of Conductivity against Reaction Parameters through Regression Analysis”	Journal of Polymer Science-polymer physics	45(15)	2046-2059	2007
99	Rincon C., Chattopadhyay S. and Meredith J. C.	“Development of Semi-conductor Bio-materials for Regulating Cell Growth”	The 2007 Annual Meeting	--	--	2007
100	Satapathy S., Chattopadhyay S., Chakrabarty K. K., Nag A., Tiwari K.N., Tikku V.K. and Nando G.B.	“Studies on the Effect of Electron Beam Irradiation on Waste Polyethylene and its Blends with Virgin Polyethylene”	Journal of Applied Polymer Science	101(1)	715-726	2006
101	Rincon C., Chattopadhyay S. and Meredith J. C.	“Combinatorial Bio-surface Chips for Quantitative Characterization of Polymer-Cell Interactions”	The 2006 Annual Meeting	--	--	2006
102	Chattopadhyay S. and Meredith J. C.	“Combinatorial Screening of Organic Electronic Materials: Thin Film Stability”	Journal of Measurement Science and Technology	16,	128-136	2005
103	Sormana J. L., Chattopadhyay S. and Meredith J. C.	“High-Throughput Mechanical Characterization of Free-Standing Polymer Films”	Review of Scientific Instruments	76 (6)	062214	2005
104	Meredith J. C., Chattopadhyay S., Andres G. and Zorina G.	“Design of Polymers for Electronics and Bio-medicine with Combinatorial Methods”	Polymeric Materials Science and Engineering	90	760	2004
105	Chattopadhyay S. and Meredith J. C.	“Instability and Dewetting of Conducting-Insulating Polymer Thin Film Bilayers”	Macromolecular Rapid. Comm.	25(1)	275-279	2004

106	Chattopadhyay S. and Meredith J.C.	“Combinatorial Studies of Polymeric Conducting-Insulating thin Film Dewetting”	Abstract of Papers of the ACS	226	U367	2003
107	Shaikh S., Chattopadhyay S. and Puskas J.	“New Approach to Measure Copolymerization Reactivity Ratios by Real Time FTIR Spectroscopy”	Polymer Preprints (A CS Division of Polymer Chemistry)	43(1)	258	2002
108	Chattopadhyay S., Chaki T.K., Ghosh R.N. and A.K. Bhowmick	“Surface Analysis and Printability Studies on Electron Beam-irradiated Thermoplastic Elastomeric Films from LDPE and EVA Blends”	Journal of Adhesion Science and Technology	15(3)	303-320	2001
109	Chattopadhyay S., Chaki T.K. and Bhowmick A.K.	“New Thermoplastic Elastomer from Poly(Ethylene-octene) (Engage), Poly(Ethylene-vinyl acetate) and Low-density Polyethylene by Electron Beam Technology: Mechanical Properties and Structural Characterization”	Rubber Chemistry and Technology	74(5)	815-833	2001
110	Chattopadhyay S., Chaki T.K. and Bhowmick A. K.	“Structural Characterization of Electron-beam Cross-linked Thermoplastic Elastomeric Films from Polyethylene and Ethylene Vinyl-acetate Copolymers”	Journal of Applied Polymer Science	81	1936-1950	2001
111	Chattopadhyay S., Chaki T.K. and Bhowmick A.K.	“Development of New Thermoplastic Elastomers from Blends of Polyethylene and Ethylene Vinyl Acetate Copolymer by Electron Beam Technology”	Journal of Applied Polymer Science	79	1877-1889	2001
112	Chattopadhyay S., Chaki T.K. and Bhowmick A.K.	“Electron Beam Modification of Thermoplastic Elastomeric Blends Made from Polyolefins”	Journal Material Science	36(18)	4323-4330	2001
113	Chattopadhyay S., Khastgir D., Chaki T.K. and Bhowmick A.K.	“Electrical Properties of Electron Beam Modified Films of Thermoplastic Elastomeric LDPE and EVA Blends”	Polymers and Polymer Composites	8 (5)	345-354	2000
114	Chattopadhyay S., Chaki T.K. and Bhowmick A.K.	“Heat Shrinkability of Electron Beam Modified Thermoplastic Elastomeric Films from Blend of Ethylene Vinyl Acetate Co-polymer and Polyethylene”	Radiation Physics Chemistry	59(5)	501-510	2000

24. International/National Conference/Symposium

1. D. Ganguly and S. Chattopadhyay at IRC 2019, London, 3-5th September, 2019 on Coining the attributes of cement like ceramics in hydrogenated NBR for smart applications.

2. D. Ganguly and S. Chattopadhyay at International Conference on Emerging Technologies for Sustainable Development 2019, Kolkata, March 19 on Smart Cement Rubber Composites Having Cyclic Responsive Characteristics.
3. D. Goswami and S. Chattopadhyay at National Metallurgist's Day Annual Technological Meeting 2018, Kolkata, Nov 2018 on Effect of ball milling on the magnetocaloric performance of a NiMnGa alloy.
4. S. Khanra and S. Chattopadhyay at NRC Kolkata, by AIRIA, Nov 2018 on Advanced Polymer Architecture (APA) Technology-based Fluoroelastomers
5. A. Kumar and S. Chattopadhyay at NRC Kolkata, by AIRIA, Nov 2018 on An approach of predicting tensile response with varying filler loading in rubbers using Finite Element Analysis
6. D. Ganguly and S. Chattopadhyay at NRC Kolkata, by AIRIA, Nov 2018 on Smart Stimuli Responsive Cement Rubber Composites
7. S. Sharma and S. Chattopadhyay at NRC Kolkata, by AIRIA, Nov 2018 on Design and Simulation of Extrusion Dies to Obtain Precise Rubber Profiles
8. A. Kumar and S. Chattopadhyay at 23rd Rubber Conference by IRMRA, Mumbai, Dec 2018 on Prediction of tensile response with varying filler loading in rubbers – A validation using Finite Element Analysis
9. S. Sharma and S. Chattopadhyay at 23rd Rubber Conference by IRMRA, Mumbai, Dec 2018 on Simulation of Extrusion Dies for Rubber Profiles
10. D. Goswami and S. Chattopadhyay at Innovation in Materials Science and Technology 18, Kolkata, Dec 18 on Enhanced vibration damping capabilities of a Ni-Mn-Ga alloy – Polysulfone composite material
11. L. Mukundan and S. Chattopadhyay at Innovation in Materials Science and Technology 18, Kolkata, Dec 18 on Polymeric templating approach using amphiphilic block copolymers for ordering the mesopores of sol-gel derived bioactive glass
12. S. Chattopadhyay, "Design and simulation of extrusion dies: an introduction to make perfect dies for rubber product", NRC, AIRIA, 23-24 Feb 2018, India.
13. S. K. Ghorai and S. Chattopadhyay, at 5th TERMIS World Congress- 2018, Kyoto, Japan, Sept 18 on New Generation Spermine Based Polyurathane-Urea Dderievd High Strenght Osteoconductive Scaffold
14. T. Roy and S. Chattopadhyay at 5th TERMIS World Congress- 2018, Kyoto, Japan, Sept 18 on Biopolymer based electrospinning of synthetic polyester for tissue engineering applications.
15. O. P Bajpai and S. Chattopadhyay, "Tuning Morphology and Functional Properties of Electrochemically Synthesized Polythiophene for Photovoltaic Applications: Effect of Solvent and Current Density", Advanced Energy Materials Congress – 25- 28 March 2018, Sweden, (Committed).
16. K. Sarkar, D. Das, and S. Chattopadhyay, "Smart conductive cotton fabric by macro-structured carbon clusters for electromagnetic interference shielding", ICMAT-2017, Suntec City, Singapore, 18-23 June 2017.

17. K. Sarkar, D. Das, and S. Chattopadhyay, "Smart and economic conductive textile for electromagnetic interference shielding", Suntec City, Singapore, 18-23 June 2017.
18. K. Sarkar, D. Das, T. K. Chaki and S. Chattopadhyay, "Macro-structured carbon composites and their electrical properties for developing conductive textiles by coating process", TCPFT-2017, CRNN, University of Calcutta, Kolkata, 3-5 January 2017.
19. K. Sarkar, D. Das, T. K. Chaki and S. Chattopadhyay, "Smart conductive cotton fabric by structurally modified carbon particles", 44th Textile Research Symposium, IIT Delhi, New Delhi, 14-16 December 2016.
20. S. Panja and S. Chattopadhyay, "Synthesis and morphological study of branched PE-PCL immobilized superparamagnetic nanocomposite", Macro-2015, IACS, Kolkata, 23-26 January 2015.
21. A. Dey, M. A. S. Khan, J. Athar, A. K. Sikder and S. Chattopadhyay, "Effect of microstructure on HTPB based polyurethane (HTPB-PU)", Macro-2015, IACS, Kolkata, 23-26 January 2015.
22. S. Kumar, G.B. Nando, S. Nair, G. Unnikrishnan, A. Sreejesh and S. Chattopadhyay, "Application of nanotechnology for TBR/PCR tire innerliner materials", Tire Technology Expo 2015, Cologne, Germany, 10-12 February 2015.
23. S. Kumar, G.B. Nando, S. Nair, G. Unnikrishnan, A. Sreejesh and S. Chattopadhyay, "Development, characterization and properties of novel quaternary rubber nanocomposites", 186th International elastomer conference, Rubber Division, ACS, Nashville, TN, USA, 14-16 October 2014.
24. M. Selvakumar, S. K. Jaganathan, G. B. Nando and S. Chattopadhyay, "Structure property relationship of novel in-situ prepared thermoplastic polyurethane/hydroxylapatite nanocomposites with improved antithrombic property for biomedical applications", 186th International elastomer conference, Rubber Division, ACS, Nashville, TN, USA, 14-16 October 2014.
25. S. Kumar, G.B. Nando, S. Nair, G. Unnikrishnan, A. Sreejesh and S. Chattopadhyay, "Development, characterization and properties of BIIR-CO rubber nanocomposites", Rubber Conference 2014, Beijing, China, 16-18 September 2014.
26. A. Dey, J. Athar, A. K. Sikder, M. Ghosh, S. J. Pawar, A. Tripathi, H. Prasanth and S. Chattopadhyay, "Graphene-iron oxide nanocomposite: An efficient catalyst for ammonium perchlorate(AP) decomposition reaction", International Conference on Functional Materials (ICFM-2014), Materials Science Centre, IIT, Kharagpur, 5 -7 February 2014.
27. S. Payyappilly, S. Dhara and S. Chattopadhyay, "Self assembled block copolymer nanoparticles for drug delivery", International Conference on rubber and rubber-like materials (ICRRM 2013), RTC, IIT Kharagpur, 6-9 March 2013.
28. S. Panja and S. Chattopadhyay, "Synthesis and characterization of armed PE-PCL grafted superparamagnetic nanoparticles", International Conference on rubber and rubber-like materials (ICRRM 2013), RTC, IIT Kharagpur, 6-9 March 2013.
29. S. Payyappilly, S. Dhara and S. Chattopadhyay, "Self assembled PEG-PCL-PEG for insulin delivery", FAPS-MACRO-2013, IISc, Bangalore, 15-18 May 2013.

30. O. P. Bajpai, S. Panja, S. Chattopadhyay and D. K. Setua, "Nanocomposite based on piezoelectric polymer matrix and magnetic nanoparticles", ICRRM, IIT Kharagpur, 6-9 March 2013.
31. S. Payyappilly, S. Dhara and S. Chattopadhyay, "Biodegradable injectable hydrogel for drug delivery", 7th International Conference on materials for advanced technologies (ICMAT-2013), Suntec, Singapore, 30th June-6th July 2013.
32. S. Panja and S. Chattopadhyay, "Branched polymer-based pH responsive micelle for delivery of doxorubicin selectively on cancer cell: synthesis, characterization, cell uptake and release", (ICMAT 2013), Suntec, Singapore, 30th June-6th July 2013.
33. A.K. Mishra, G.B. Nando and S. Chattopadhyay, "Novel morphology development of TPU-clay nanocomposites based on single & dual modified Laponite", Processing and Fabrication of Advanced Materials (PFAM-19), Auckland, New Zealand, 14-17 January 2011.
34. U. Basuli, T.K. Chaki and S. Chattopadhyay "Studies on nanotube networks in polymer nanocomposites by dynamic and steady shear rheology", Processing and Fabrication of Advanced Materials (PFAM-19), Auckland, New Zealand, 14-17 January 2011.
35. U. Basuli, T.K. Chaki and S. Chattopadhyay, "Polymer –nanosilica-carbon nanotube nanocomposites: unique nanofiller synergistic effect", Proceedings of Advances in Polymer Science and Rubber Technology (APSRT-2011) Challenges towards 2010 and beyond., IIT, Kharagpur, India, March 3-5, 2011.
36. P.K. Chattopadhyay and S. Chattopadhyay, "Investigation of the hybrid filler microstructure in the performance property development within epoxidized natural rubber based ternary particulate nanocomposites", Oral presentation in International Rubber Conference and Exhibition-2010, Mumbai, 17-19 November 2010.
37. S. Praveen, B.K. Chattopadhyay and S. Chattopadhyay, "Vibration damping and energy loss in bromobutyl rubber –Effect of filler size and shape", Oral presentation in International Rubber Conference and Exhibition-2010, Mumbai, 17-19 November 2010.
38. U. Basuli, T.K. Chaki, and S. Chattopadhyay "Thermo-mechanical, electrical and morphological characteristics of ethylene methyl acrylate (EMA)/CNT nanocomposites", 2nd Indo Swiss Bonding International Symposium 2010, Sikkim Manipal University (SMU), 11-13 February 2010.
39. S. Maji, P.K. Chattopadhyay, D. Khastgir and S. Chattopadhyay, "Oxidative degradation of polyolefin – a novel avenue plastics recycling", National Seminar on E-waste, NASEW-10, NML, Jamshedpur, January 21-22, 2010.
40. M. Mondal, P.K. Chattopadhyay, D.K. Setua, N. C. Das and S. Chattopadhyay "Self organization of macromolecules in novel TPU-clay Nanocomposites", Oral presentation in the 3rd International Conference on Multi-Functional Materials and Structures Jeonju, South Korea, September 14-18, 2010.
41. S. Hui, T. K. Chaki and S. Chattopadhyay, "Electron beam modified LDPE/EVA based thermoplastic elastomeric nano-composites with improved properties", India Rubber Expo 2009, 5th International Exhibition, Conference and Reverse Buyer-Seller Meet, Hyatt Regency Kolkata, 2009.

42. S. Hui, T. K. Chaki and S. Chattopadhyay, "Effect of silica nano-filler on the dynamic and capillary rheology of LDPE-EVA based thermoplastic elastomer", 25th Annual Meeting of The Polymer Processing Society (PPS 25), Goa, India, 2009.
43. S. Hui, T. K. Chaki and S. Chattopadhyay, "Electrical properties and morphological study of LDPE/EVA based nanocomposites", International Conference on Hi-Tech Materials (ICHTM-09), Indian Institute of Technology, Kharagpur, India, 11-13 February 2009.
44. S. Hui, T. K. Chaki and S. Chattopadhyay, "Electron beam modified thermoplastic elastomer nanocomposites based on inorganic nanofiller", International Conference on Electron Beam Irradiation: An Eco-Friendly Technology for Processing of Food and Industrial Products", The Maurya, New Delhi, India, 30-31 July 2009.
45. A. K. Mishra, S. Chattopadhyay and G. B. Nando, "Polyurethane-laponite clay nanocomposites", IRE-09, Hyatt Regency, Kolkata, 2009.
46. A. K. Mishra, S. Chattopadhyay and G. B. Nando, "Effect of aspect ratio and state of dispersion on the rheological behavior of TPU-clay nanocomposite", PPS-25, Goa, India, 2009.
47. A. K. Mishra, S. Chattopadhyay and G. B. Nando, "Effect of modifiers on thermal properties of TPU- peptised laponite clay nanocomposite", MACRO-09, IIT, Madras, 2009.
48. A. K. Mishra, S. Chattopadhyay and G. B. Nando, "Preparation and characterization of segmented polyurethane-laponite clay nanocomposites", ICHTM-09, IIT Kharagpur, 2009.
49. U. Basuli, T.K. Chaki and. S Chattopadhyay, "Flexible composites based on EMA and modified conducting carbon black", IRE-09, Hyatt Regency, Kolkata, 2009.
50. U. Basuli, T.K. Chaki, and S. Chattopadhyay, "Morphology and thermal properties of solution and melt-mixed multi-walled carbon nanotube/ EMA nanocomposites: a comparative study", PPS - 25, Goa, India, 2009.
51. S. Praveen, P. K. Chattopadhyay, B. C. Chakraborty, and S. Chattopadhyay, "Indulgence of novel ternary structures comprising nanoclay-carbon black and elastomers: cooperative effect on property development", IRE-09, Hyatt Regency, Kolkata, 2009.
52. S. Mitra, S. Chattopadhyay, Y. K. Bhardwaj, S. Sabharwal and A. K. Bhowmick, "Chemically crosslinked gels – new generation modifiers for elastomers", India Rubber Expo 2009, Hyatt Regency, Kolkata, 2009.
53. S. Mitra, S. Chattopadhyay, and A. K. Bhowmick, "Improvement in processability of unfilled natural rubber by the addition of chemically crosslinked quasi-nano gels", PPS-25, Goa, India, 2009.
54. P. K. Chattopadhyay and S. Chattopadhyay, "Thermal and dynamic rheological studies on nanostructure development within novel ENR based ternary nano-composites", IRE-09, Hyat Regency, Kolkata, 2009.
55. S. Hui, T. K. Chaki and S. Chattopadhyay, "Dynamic and steady state rheology of radiation processed nano-silica filled model TPE blend systems", Second International

- Conference on Polymer Blends, Composites, IPNs, Membranes, Polyelectrolytes and Gels: Macro to Nano Scales (ICBC-2008), Kottayam, Kerala, 2008.
56. S. Hui, T. K. Chaki and S. Chattopadhyay, "A comprehensive study of degradation of nano-silica filled model TPE blend systems", International Conference on Advances in Polymer Technology, Kochi, Kerala, 2008.
 57. S. Hui, T. K. Chaki and S. Chattopadhyay, "Thermoplastic elastomer with nanofiller", International Conference on Rubber & Rubber-like materials (ICRRM-2008), Indian Institute of Technology, Kharagpur, India, 8-10 January 2008.
 58. A. K. Mishra, S. Chattopadhyay and G. B. Nando, "Synthesis and characterization of polyurethane laponite nanocomposite", Polychar-16, Lucknow, 2008.
 59. S. Praveen, A. Pradeesh, B.C. Chakraborty and S. Chattopadhyay, "Augmenting structural vibration damping: effect of filler geometry in SBR – a comparative study", IRMRA 20th Rubber conference, Ramada, Powai, Mumbai, 2008. (Awarded for best Student's paper).
 60. S. Mitra, S. Chattopadhyay, Y. K. Bharadwaj, S. Sabharwal and A. K. Bhowmick; "Effect of electron beam cross-linked gels on the rheological properties of raw natural rubber", ICRRM – 2008, IIT Kharagpur, India, 8-10 January 2008.
 61. S. Mitra, S. Chattopadhyay, S. Sabharwal and A. K. Bhowmick, "Electron beam crosslinked gels – preparation, characterization and their effect on the mechanical, dynamic mechanical and rheological properties of rubbers", IRaP – 2008, Rio de Janeiro, Brazil, 2008.
 62. G. B. Nando, A. K. Mishra, and S. Chattopadhyay, "Preparation and characterization of segmented polyurethane-laponite clay nanocomposites", Internationale Fachtagung Polymerwerkstoffe 2008, Halle/Saale Universitätsplatz, 2008.
 63. C. Rincon, S. Chattopadhyay, and J. C. Meredith, "Combinatorial biosurface chips for quantitative characterization of polymer –cell interactions", AICHE Annual Meeting, San Francisco, California, 12-17 November 2006.
 64. S. Bhadra, N. K. Singha, S. Chattopadhyay and D. Khastgir, "Controlled conductive polyaniline by electropolymerization (Determination of structure-property relationship)", 12th International Conference on Polymers and Organic Chemistry (Under IUPAC auspices), Okazaki, Japan, 02-07 July 2006.
 65. S. Chattopadhyay, A. Ganguly, S. Saha and A.K. Bhowmick, "Modification of damping and frictional behaviour of ABS plastics with thermoplastic elastomer", India International Rubber Conf. & Expo 2007, 1-3 November 2007.
 66. G.K. Abraham, B. George, K.T. Thomas, S. Chattopadhyay and N.M. Mathew, "Effect of curing system and modification of EPDM on vulcanizate properties of ENR/EPDM blends", Asia Rubtech Expo '06, Kochi, Kerala, 23-25 November 2006.
 67. S. Maji, D. Khastgir and S. Chattopadhyay, "Oxidative degradation of polyolefins – a novel avenue of recycling", Asia Rubtech Expo, Kochi, Kerala, November 2006.
 68. T.K. Chaki, A.K. Bhowmick and S. Chattopadhyay, "Printability and peel adhesion studies of electron beam irradiated thermoplastic elastomeric film from LDPE and EVA",

19th Internationales symposium SWISSBONDING, Zurich, Switzerland 23-25 May 2005.

69. P. Zapata, J. Su, S. Chattopadhyay, C. Rincón, A. García and J. C. Meredith, "Combinatorial biosurface chip to study polymer - cell interactions", BIO 2005 Annual International Convention, Philadelphia, PA, 22 June 2005.
70. S. Chattopadhyay and J. C. Meredith, "High-throughput screening of semiconducting-insulating polymer interfacial stability", Proceedings of the Annual Meeting of the Adhesion Society, 2004.
71. J. C. Meredith and S. Chattopadhyay, "Controlling dewetting and instability in conducting polymers and conducting/insulating polymer interfaces", Technical Presentation, AIChE Annual Meeting, San Francisco, CA, USA, 16-21 November 2003.
72. S. Chattopadhyay and J. C. Meredith, "Combinatorial studies of polymeric conducting-insulating thin film bilayer dewetting", Technical Paper, 226th ACS National Meeting, New York, NY, United States, 7-11 September 2003.
73. S. Chattopadhyay, Y. Kwon, A.K. Naskar, A.K. Bhowmick, and J.E. Puskas, "Novel dendritic (arborescent) polyisobutylene-polystyrene thermoplastic elastomers", Technical Papers - ACS, Rubber Division, 162nd, Pittsburgh, PA, United States, 8-11 October 2002.
74. S. Chattopadhyay, T.K. Chaki and A.K. Bhowmick, "Thermoplastic elastomeric films from ethylene vinyl acetate and polyethylene blend and its heat shrinkability", Rub. Tech. 2000, New Delhi, India, 21-23 February 2000.
75. S. Shaikh, S. Chattopadhyay, J. E. Puskas, "A new approach to measure the copolymer reactivity ratios by real time FTIR spectroscopy", Polymer Preprints (ACS, Division of Polymer Chemistry), 2002.

25. Coordinated:

1. 5th Research Scholars' Day of Rubber Technology Centre, IIT Kharagpur, 6th April 2018 with Prof. N. K. Singha.
2. Short Term Course On "Rubber Technology" at Rubber Technology Centre, IIT Kharagpur, 12-15 Nov 18 with Prof. A.K. Bhowmik.

26. Conference session chaired and invited talks delivered:

1. Session Chair and Speaker at NRC Kolkata and International Conference and Exhibition on Polymers, Mani Ram Dewan Trade Centre, Guwahati on 24th Feb 2018 "Design and Simulation of Extrusion dies, An introduction to make perfect dies for rubber products."
2. Invited Talk at National Rubber Conference, Mumbai, 1st - 2nd Oct 18 on "Stimuli Responsive Smart Rubber-Cement and Cement-like Composites"
3. Plenary Speaker at National Rubber Conference, Kolkata, 26th -27th Nov 18 on Futuristic Design for Rubber Products with Special Reference to Applications in E-Automotive, High Speed Railways & Strategic Defense

4. Invited speaker at Innovation in Materials Science and Technology 18, Kolkata 14-16 Dec 18 on Pentaerythritol Poly(caprolactone)-b-poly(acrylic acid) Based Light-responsive Nanogel for on Demand and Targeted Cancer therapy
5. Invited speaker at 23rd National Rubber Conference by IRMRA, Mumbai, 14-15 Dec 18 on Augmenting Feathers of Macro-Structured Carbon Black to Textiles: Development of Smart Conductive Fabric
6. Invited Speaker at J.K. Tyre, Hasetry, Mysore on “Microscopy of Rubbers for Tyre industries” 16th July 2018
7. Guest Speaker at Cochin University of Science and Technology (CUSAT), 12th – 14th August 18 on “Extrusion Die Design – Way to Obtain Precise Shapes for Rubber Profiles.”
8. Invited speaker at Saint Gobain, Mori 1-2nd Oct 18, on Science and Technology of rubber mixing
9. Invited speaker at IIT Guwahati 24-25 DEC,18 Co-ordination assisted self-assembled nanostructure: a futuristic engineered Nano-formulation for advanced therapeutic application
10. Invited lecturer at International Rubber Expo (IRE) Mumbai 17-19 Jan 19, 4hours Lecture in workshop on Rubbers.

27. Short Term Courses:

1. Delivered lectures in Short Term Course On “Rubber Technology” at Rubber Technology Centre, IIT Kharagpur, 12-15 Nov 18 coordinated by Prof. A.K. Bhowmick and Prof. Santanu Chattopadhyay.
2. Delivered lectures in Short Term Course On “Recent Advancement in Rubber Technology” at Rubber Technology Centre, IIT Kharagpur, 12-15 Feb 19, coordinated by prof. K Naskar and Dr. N. C. Das.
3. Delivered lectures in off-campus Short Term Course On “Adhesion & Polymer basics at Asian Paints” at Asian Paints Limited, Mumbai, Feb 28 - March 2 2019, coordinated by Prof. A.K. Bhowmick and Prof. N. K. Singha.

28. Extra-Curricular Activities:

1. Involved with the departmental administrative works (Prof-in-charge examination, training, purchase currently), Up to 2017 Spring for seven years acted as Seminar-in-charge). Accompanying students for Industrial visits every year.
2. Associated Faculty, School of nanoscience and technology, IIT Kgp, since inception.
3. (Acted as the Warden, Patel Hall, IIT Kharagpur, October 2015 to October 2017.
4. Acted as the Vice Chairman, Technology Aquatic Society, October 2014 to October 2017.
5. Volunteered in the four convocations (2012, 2013, 2015 and 2016).
6. Acted as the Warden, Patel Hall of Residence, July 2013 to December 2013.

7. Acted as an Assistant Warden, MMM Hall from November 2010 to July 2013.
8. Actively involved with Gymkhana activities with the students, worked as a sports advisor and Gymkhana student's election since joining.
9. Actively involved with the GATE and JEE activities and confidential operations.
10. Participated in every year for night vigilance in student hostels. In 2010, given night vigilance for one month along with four other team members in RP and RK halls.
11. Actively taking part in inter IIT staff sports meets and accompanying students.
12. Involved with M. Tech. counseling, PhD interviews (every summer vacations since joined as a faculty).
13. Development of laboratory facility, maintaining several sophisticated Instruments, Lab-in-charge.
14. Organized short-term course as a coordinator and organized two international conferences in the capacity of Treasurer.
15. Organizing members of IRI entrance examination since 2006.
16. Delivered lectures for manpower training for several CEP sponsored short-term courses.

Computer Awareness:

C- Programming, Origin, MATLAB, AutoCAD, ABAQUS, ANSYS, Material Studio (BIOVIA) and other computer applications

Languages are known:

English, Bengali, Hindi.

Declaration:

I hereby solemnly declare that all the statements given above are true and genuine to the best of my knowledge and belief.

Place: Kharagpur, WB.

Date: 21-09-2019

Prof. Santanu Chattopadhyay
(Signature in Full)