

Curriculum Vitae

Name: Subhendu Bhandari

Address: I-403, Kasliwal Marvel (West), Beed Bypass Road,
Aurangabad, Maharashtra - 431005

E-mail: subhendu.bhandari@mit.asia, subhenduonly@gmail.com

Mobile: 7980065290

Date of Birth: 3rd September, 1980



Academic Credentials

Class/ Degree	Specialization	Institution	University	Year	%/CGPA	Class
Ph.D.	Conducting polymer	IIT Kharagpur	IIT Kharagpur	2015	N.A.	N.A.
M.E./ M. Tech.	Rubber Technology	IIT Kharagpur	IIT Kharagpur	2009	CGPA 7.92	N.A.
B.E./B.Tech.	Jute and Fibre Technology	Institute of Jute Technology	University of Calcutta	2005	65.85 %	II

M. Tech. Project: Studies on Electron Beam Crosslinked Ethylene Methyl Acrylate (EMA), Ethylene Ethyl Acrylate (EEA) and Ethylene Butyl Acrylate (EBA)

Ph. D. Research: Nanostructured Conducting Polyaniline and Its Composites with Special Reference to Supercapacitor Application.

Key Research Areas:

- Conducting polymer
- Nanocomposite
- Supercapacitor

Experience

Sr. No.	Organization	Post	From	To	No. of Years
1	Maharashtra Institute of Technology, Aurangabad	Assistant Professor	1 st June, 2015 to	till date	6

List of Courses Taught/Teaching at UG level

- Fiber Technology
- Polymer Rheology and Morphology
- Instrumental Analysis of Polymers
- Polymer Blends and Composites
- Rubber Technology for Automotive Applications
- Elastomer Technology
- Specialty Polymers
- Polymer Nanocomposites

List of Courses Taught/Teaching at PG level

- Taught 30 hour course on “Polymer Science and Technology” in online mode for Integrated M. Tech in Chemical Engineering (trimester 8) at Institute of Chemical Technology, Marathwada Jalna as Visiting Faculty (2020).

Additional Assignments/Duties

- Working as class teacher of Final Year B. Tech.
- Working as member of Core Committee of NBA.
- Working as departmental Academic Coordinator.
- Working as coordinator of departmental student association (APPES).
- Working as in-charge of Project Laboratory.

- Worked as coordinator of Research Committee of the institute.
- Worked as member of Central Library Committee.
- Worked as in-charge of Departmental Library.
- Worked as in-charge of Polymer Synthesis Laboratory.
- Worked as departmental Teacher Guardian Coordinator.
- Worked as coordinator of departmental E-Magazine.
- Worked as member of SIRO Committee.
- Worked as member of Class Test and Termwork Verification Committee.
- Worked as Class Teacher of Second and Third Year B. Tech.
- Worked as member of Admission Committee.

Membership of Professional Bodies

- Life Member of Asian Polymer Association.
- Life member of International Society of Research and Development.
- Life member of The Indian Society for Technical Education.
- Life member of The Society for Polymer Science, India (Kharagpur chapter).
- Member of the editorial board of Electrical Science & Engineering, published by Bilingual Publishing Co.

Research Projects/Projects Guided

- Guided 12 undergraduate student projects.

Computer/Software Proficiency

- Nova (Electrochemical analysis)
- FullProf (XRD analysis)
- X'Pert HighScore (XRD analysis)
- OriginPro (Graphing software)
- ImageJ (Microscopy software)
- Photoshop (Image processing)
- Microsoft Office (MS Excel, MS Word, MS Powerpoint)

Seminar/Workshop/ Industrial Training/ STTP//FDP/CEP/Conference Attended

- Attended 5-day online Faculty Development Program on “Inculcating Universal Human Values in Technical Education”, organized by All India Council for Technical Education (AICTE) (January 22-28, 2021).
- Attended online Faculty Development Program on “NBA Accreditation of Engineering Programs”, organized by National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (May 11-15, 2020).
- Attended two weeks online Faculty Development Program on "Effective Use of ICT Tools in Online Teaching", organized by IQAC and Department of Electronics and Telecommunication Engineering Department of G. S. Mandal's Maharashtra Institute of Technology, Aurangabad (June 22 – July 4, 2020).
- Attended International Technical Symposium on "Opportunities & Challenges in Industry 4.0", organized by Industry Cell & Electronics and Telecommunication Engineering Department of G. S. Mandal's Maharashtra Institute of Technology, Aurangabad (June 15 - 17, 2020).
- Attended online AICTE Recognized Faculty Development Programme on “NBA Accreditation of Engineering Programs”, organized by Mechanical Engineering Department, Nation Institute of Technical Teachers Training and Research Institute (NITTTR), Chandigarh (May 11 – 15, 2020).
- Attended online certification course (equivalent to 1 week faculty development programme) on "TALE 2: Course Design and Instruction of Engineering Course", organized by NPTEL (July 25 – September 29, 2019) with Elite + Silver certificate.
- Attended faculty development program on "Outcome Based Education & NBA Process" (July 9-14, 2018) at Maharashtra Institute of Technology, Aurangabad.
- Attended workshop on "Outcome Based Education" (December 4-5, 2017) at Maharashtra Institute of Technology, Aurangabad.
- Attended online course on "Educational Technology for Engineering Teachers" organized by Indian Institute of Technology Bombay (January 7 – March 7, 2016).
- Attended workshop on "SciFinder and its new features" at Indian Institute of Technology Kharagpur (January 9, 2014).
- Attended “Author Workshop jointly organized by Springer and IIT Kharagpur” at Indian Institute of Technology Kharagpur (February 12, 2014).

Seminar/Workshop/ Industrial Training/ STTP//FDP/CEP/Conference organized

- Organized International e-Poster Conference on "Current Outlook in Material Science and Engineering" online in Facebook platform as Co-Convener (May 15 - 16, 2020).
- Organized 2nd national conference on “Materials for Advanced Technology & Application” (August 22-23, 2019) at Maharashtra Institute of Technology, Aurangabad as Co-Convener.
- Organized workshop on “Intellectual Property Rights” (December 21-22, 2018) at Maharashtra Institute of Technology, Aurangabad as Joint Organizing Secretary.
- Organized faculty development programme on “Advanced Analytical Testing and Characterization” (July 2-7, 2018) at Maharashtra Institute of Technology, Aurangabad as Coordinator.
- Organized workshop on “Intellectual Property Rights & Opportunities for Funded Research” (January 5-6, 2018) at Maharashtra Institute of Technology, Aurangabad as member of the organizing committee.
- Organized national conference on “Materials for Advanced Technology & Application” (September 20-21, 2016) at Maharashtra Institute of Technology, Aurangabad as Joint Organizing Secretary.

Invited talks delivered

- Delivered invited talk on “Synergistic improvement of thermal degradation and dielectric characteristics of simultaneously doped polyaniline synthesized via solid state polymerization” in International Online Conference on Nano Materials (ICN 2021), organized by Mahatma Gandhi University, P.D Hills P.O, Kottayam, Kerala, India, Wroclaw University of Technology, Wroclaw, Poland, Gdansk University of Technology, Poland, Wuhan University, China (April 9-11) (2021).
- Delivered invited talk on “Nanostructured conducting polymers for supercapacitor application” in Online Workshop cum Faculty Development Program on Quality Engineering and Technological Advances in Materials and Devices, organized by Department of Physics, SBSR, Sharda University, Greater Noida (March 8-12) (2021).

Projects, Research Grants and Consultancy

Nil

Intellectual Property Rights

- Subhendu Bhandari, Nikhil K. Singha, Dipak Khastgir, Synergistic Combination Of Dual Dopants For Improved Electrical Conductivity In Conducting Polymer (Indian Patent, 987/KOL/2013 A, Published on 26/08/2016)

List of Research Publications

Papers in National/ International Journal (*Web of Science/ Scopus indexed/ UGC approved*)

International Journal:

- Uday Shankar, Subhendu Bhandari, Dipak Khastgir, Carbon Black-Filled Nitrile Rubber Composite as a Flexible Electrode for Electrochemical Synthesis of Supercapacitive Polyaniline, *Polymer Composites* Vol. 40, Issue S2, pp E1537-E1547 (2019) [Impact Factor: 3.171].
- Om Prakash Bajpai, Sujit Kumar, Subhendu Bhandari, Achintya Dhar, Dipak Khastgir, Santanu Chattopadhyay, Electrolyte and current density determines the fate of electrodeposited polythiophene from waveguide to photovoltaics, *Solar Energy Materials and Solar Cells* Vol. 183, pp 107–119 (2018) [Impact Factor: 7.267].
- Mostafizur Rahaman, Ali Aldalbahi, Periyasami Govindasami, Noorunnisa P. Khanam, Subhendu Bhandari, Peter Feng, Tariq Altalhi, A New Insight in Determining the Percolation Threshold of Electrical Conductivity for Extrinsicly Conducting Polymer Composites through Different Sigmoidal Models, *Polymers* Vol. 9, Issue 10, pp 527/1-527/17 (2017) [Impact Factor: 4.329].
- Dipankar Ghosh, Subhendu Bhandari, Dipak Khastgir, Synthesis of MnO₂ nanoparticle and its effective utilization as UV protector for outdoor high voltage polymeric insulator used in power transmission line, *Physical Chemistry Chemical Physics* Vol. 18, Issue 48, pp 32876-32890 (2016) [Impact Factor: 3.676].

- Subhendu Bhandari, Nikhil K. Singha, Dipak Khastgir, Synthesis of graphene-like ultrathin polyaniline and its post-polymerization coating on nanosilica leading towards superhydrophobicity of composites, *Chemical Engineering Journal* Vol. 313, pp 1302-1310 (2017) [Impact Factor: 13.273].
- Subhendu Bhandari, Dipak Khastgir Effect of unsaturation in bicarboxylic acid dopants for solid-state synthesized polyaniline, *Polymer International* Vol. 65, Issue 6, pp 698-705 (2016) [Impact Factor: 2.990].
- Subhendu Bhandari, Dipak Khastgir, Corrosion-free electrochemical synthesis of polyaniline using Cu counter electrode in acidic medium, *International Journal of Polymeric Materials and Polymeric Biomaterials* Vol. 65, Issue 11, pp 543-549 (2016) [Impact Factor: 2.604].
- Subhendu Bhandari, Dipak Khastgir, Synergistic effect of simultaneous dual doping in solvent-free mechanochemical synthesis of polyaniline supercapacitor comparable to the composites with multiwalled carbon nanotube, *Polymer* Vol. 81, pp 62-69 (2015) [Impact Factor: 4.430].
- Dipankar Ghosh, Subhendu Bhandari, Tapan Kumar Chaki, Dipak Khastgir, Development of high performance high voltage insulator for power transmission line from blends of polydimethylsiloxane/ethylene vinyl acetate containing nanosilica, *RSC Advances* Vol. 5, pp 57608-57618 (2015) [Impact Factor: 3.361].
- Subhendu Bhandari, Dipak Khastgir, Synergistic effect of dopant combination and switchover in formation mechanism of polyaniline nanowire, *Journal of Applied Polymer Science* Vol. 132, pp 41520/1-41520/9 (2015) [Impact Factor: 3.125].
- Subhendu Bhandari, Dipak Khastgir, Template-free solid state synthesis of ultra-long hairy polyaniline nanowire supercapacitor, *Materials Letters* Vol. 135, pp 202-205 (2014) [Impact Factor: 3.423].
- Subhendu Bhandari, Nikhil Kumar Singha, Dipak Khastgir, Preferential distribution of polyaniline in different phases of acrylate triblock copolymer, *Materials Express* Vol. 4, pp 115-124 (2014) [Impact Factor: 1.650].
- Subhendu Bhandari, Nikhil Kumar Singha, Dipak Khastgir, Electrochemical Synthesis of Nanostructured Polyaniline: Heat Treatment and Synergistic Effect of Simultaneous Dual Doping, *Journal of Applied Polymer Science* Vol. 129, Issue 3, pp 1264-1273 (2013) [Impact Factor: 3.125].

- Uday Shankar, Subhendu Bhandari, Dipak Khastgir, Electrodeposition of nanostructured silver particles and it's composite with polyaniline on flexible electrode, Journal of Basic and Applied Research International Vol. 19, Issue 4, pp 267-271 (2016).
- Devesh Kumar Mahla, Subhendu Bhandari, Mostafizur Rahaman, Dipak Khastgir, Morphology and cyclic voltammetry analysis of in situ polymerized polyaniline/graphene composites, Journal of Electrochemical Science and Engineering Vol. 3, Issue 4, pp 157-166 (2013).
- P. K. Guchhait, S. Bhandari, S. Singh, M. Rahaman, Study on the effect of nanosilica particles on morphology, thermo-mechanical and electrical properties of liquid polysulfide modified epoxy hybrid nanocomposites, International Journal of Plastics Technology Vol. 15, Issue 2, pp 150-162 (2011).

National Journal:

- R. S. Chanda, Ms. R. Banerjee, S. Bhandari, S. Nath, Optimal Machine Scheduling Using Fuzzy Linear Programming, Journal of the Institution of Engineers (India) (Computer Divn.) Vol. 89, pp 17-21 (2008).

Books/ Book Chapter

Monograph:

Subhendu Bhandari, Dipak Khastgir, Nikhil Kumar Singha, Nanostructured Conducting Polyaniline: Synthesis, Characterization and Supercapacitor Application, Lambert Academic Publishing [ISBN: 978-3659921353] (2016).

Book Chapter:

- Ayan Dey, Suranjana Mandal, Subhendu Bhandari, Chandrika Pal, Jonathan Tersur Orasugh, Dipankar Chattopadhyay, "Characterization methods" in Fiber-Reinforced Nanocomposites: Fundamentals and Applications. Ed. Baoguo Han, Sumit Sharma, Tuan Anh Nguyen, Li Longbiao, K. Subrahmanya Bhat. Elsevier pp. 7-68 [ISBN: 978-0-12-819904-6] (2020).
- Prashant Gupta, Subhendu Bhandari, "Chemical Depolymerization Of PET Bottles Via Ammonolysis And Aminolysis" in Recycling of Polyethylene Terephthalate Bottles. Ed. Sabu Thomas, Ajay Vasudeo Rane, Krishnan Kanny, Abitha V.K., Martin George Thomas. Elsevier: pp 109-134. [ISBN: 9780128113615] (2019).
- Subhendu Bhandari, "Polymer/Carbon Composites for Sensor Application" in Carbon-Containing Polymer Composites Ed. Mostafizur Rahaman, Dipak Khastgir, Ali Kanakhir Aldalbahi. Springer: pp 503-531 [ISBN: 978-981-13-2688-2] (2019).
- Purabi Bhagabati, Mostafizur Rahaman, Subhendu Bhandari, Indranil Roy, Ayan Dey, Prashant Gupta, M. A. Ansari, Astha Dutta, Dipankar Chattopadhyay, "Synthesis/Preparation of Carbon Materials" in Carbon-Containing Polymer Composites Ed. Mostafizur Rahaman, Dipak Khastgir, Ali Kanakhir Aldalbahi. Springer: pp 1-16 [ISBN: 978-981-13-2688-2] (2019).
- Subhendu Bhandari, Prashant Gupta. "Chemical Depolymerization of Polyurethane Foam via Ammonolysis and Aminolysis" in Recycling of Polyurethane Foams. Ed. Sabu Thomas, Ajay Vasudeo Rane, Krishnan Kanny, Abitha V.K. Elsevier: pp 77-87. [ISBN: 978-0-323-51133-9] (2018).

- Subhendu Bhandari. “Polyaniline: Structure and Properties Relationship” in Polyaniline Blends, Composites, and Nanocomposites. Ed. P. M. Visakh, Cristina Della Pina, Ermelinda Falletta. Elsevier: pp 23-60. [ISBN: 978-0-12-809551-5] (2017).

Papers in National /International Conference Proceedings

- Mechanochemical route to synthesize nanostructured polyaniline for supercapacitor application by Subhendu Bhandari, Dipak Khastgir International Conference on Polymers and Allied Materials (Oral Presentation) Indian Institute of Technology Patna (May, 30-31) (2014).
- Electrochemical synthesis of acid doped polyaniline using copper electrode by Subhendu Bhandari, Nikhil K. Singha, Dipak Khastgir International Conference on Rubber and Rubber-Like Materials (Oral Presentation) Indian Institute of Technology Kharagpur (March, 6-9) (2013).
- Study on reactive nanoclay filled polysulfide modified polyurethane nanocomposites by Prasanta Kumar Guchhait, Subhendu Bhandari International Conference on Rubber and Rubber-Like Materials (Oral Presentation) Indian Institute of Technology Kharagpur (March, 6-9) (2013).
- Effect of processing condition of Electrochemical synthesis of Polyaniline on its structure and properties by Subhendu Bhandari, Nikhil K. Singha, Dipak Khastgir Advances in Polymer Science and Rubber Technology (Poster Presentation) Indian Institute of Technology Kharagpur (March, 3-5) (2011).
- Electron beam crosslinking of ethylene alkyl acrylate copolymers by T. K. Chaki, S. Bhandari NAARRI International Conference (Oral Presentation) Mumbai (December, 13-15) (2010).

NPTEL Certification

Start Date	End Date	Duration (in Weeks)	Course Name	Marks (Out of 100)	Performance
29 th July, 2019	29 th September, 2019	8	TALE 2: Course Design and Instruction of Engineering Course	78	Elite + Silver Certificate

Awards, Achievements and Recognition

- Reviewed papers in the following journals/ conferences:
 - ◆ Advanced Materials Interfaces (*Impact Factor 6.147*)
 - ◆ Scientific Reports (*Impact Factor 4.379*)
 - ◆ Colloids and Surfaces A (*Impact Factor 4.539*)
 - ◆ Polymer Testing (*Impact Factor 4.282*)
 - ◆ Polymer International (*Impact Factor 2.990*)
 - ◆ Journal of Applied Polymer Science (*Impact Factor 3.125*)
 - ◆ Journal of Polymer Research (*Impact Factor 3.097*)
 - ◆ Journal of the Brazilian Chemical Society (*Impact Factor 1.838*)
 - ◆ E-Polymers (*Impact Factor 2.025*)
 - ◆ Polymers and Polymer Composites (*Impact Factor 2.000*)
 - ◆ Materials Research Innovations
 - ◆ Global Conference on Polymer and Composite Materials
 - ◆ International Conference on New Energy and Future Energy System
 - ◆ Material Science Research India
 - ◆ Journal of Analysis and Testing
- Senior Research Fellow at Indian Institute of Technology Kharagpur with fellowship from MHRD.
- All India rank 9 with score 446 in Graduate Aptitude Test in Engineering (GATE) in Textile Engineering and Fibre Science in 2007.

Date: 20th July, 2021

Place: Aurangabad