



Dr. Sanjukta Bose Goswami

Assistant Professor, Chemical Engineering
Office at Room No. 02 (Staff Room, 2nd Floor,
SoT), School of Technology Building

Education

PhD and Postdoc – Technical University of Denmark, Denmark

Thesis titled “Micromechanical Resonators as a tool for Polymer Characterization”

M.Tech – IIT Delhi, New Delhi

B.Tech – University of Calcutta, Kolkata

B.Sc- St. Xavier’s College, Kolkata

Key Skills

Dr. Sanjukta Bose Goswami is capable of providing comprehensive solutions to industry and other government bodies in the following areas:

1. Processing and Characterization methods development for analysis of polymers.
2. Structure-Property relationships of polymers and composites.
3. Polymer coatings, Degradation behaviour of polymers and drug-polymer interactions study for biomedical fields.

Background

Joined GSFC University in September 2020

Scholarship and Accomplishments

Dr. Sanjukta Bose Goswami is an experienced researcher who worked on developing new polymer characterization techniques and its application in biomedical fields during 3 years of Ph.D. and 4 years of Postdoctoral research from Technical University of Denmark.

She is a gold medalist (M.tech) from IIT Delhi with strong theoretical background and hands on expertise in polymer processing, characterization techniques, structure-property relationships of polymers and composites. She did summer internship and an industrial Master's Thesis in collaboration with SABIC Innovative Plastics, Bangalore and IIT Delhi. Currently working as an Assistant Professor- Chemical Engineering in GSFC University where she is involved in teaching and supervising students in industrial and entrepreneurship projects. Along with the teaching experience, Dr. Sanjukta Bose Goswami is also holding the position of the Program Coordinator of Chemical Engineering Program where she is responsible for coordination for smooth functioning, maintaining and enhancing standard of the program.

She teaches Mass Transfer Operations, Advanced Separation Techniques, Chemical Process Safety, Industrial Pollution Control, Polymer Science and Technology and Polymer Processing at B.Tech Chemical Engineering Program. She has guided many students at undergraduate level for their project work at GSFC University, Masters and PhD students at technical University of Denmark.

Dr. Sanjukta Bose Goswami has many publications with most of them being published in Journals with high impact factor and of international repute like Langmuir, ACS Macro Letters, Polymer Degradation and Stability, Journal of Polymer Science Part B: Polymer Physics, Sensors and Actuators etc. She has also participated in poster/oral presentations in various international conferences and seminars.

Dr. Bose Goswami is a start-up coordinator who is mentoring a project under GSFC University Innovation Incubation Technology Applied Research Centre (GUIITAR) council on Development of Bioplastics from renewable resources which has received Students Start-up and Innovation Policy (SSIP) grant. She is also NIRF (National Institutional Ranking Framework) coordinator in Institution's Innovation Council (IIC) supported by MRHD's Innovation Cell, Govt. of India. Dr. Bose Goswami is the Chapter Adviser for AIChE (American Institute of Chemical Engineers)- GSFC University student chapter where she and her team has received Outstanding Student Chapter Award for the A.Y 2020-2021 on a global platform.

Most Three Notable Publications

1. Bose, S., Keller, S. S., Alstrøm, T. S., Boisen, A., Almdal, K. (2013) Process optimization of ultrasonic spray coating of polymer films. *Langmuir*, 29(23), 6911-6919.
2. Bose, S., Schmid, S., Larsen, T., Keller, S. S., Sommer-Larsen, P., Boisen, A., Almdal, K. (2013) Micromechanical string resonators: analytical tool for thermal characterization of polymers. *ACS Macro Letters*, 3(1), 55-58.
3. Bose, S., Keller, S. S., Boisen, A., Almdal, K. (2015) Microcantilever Sensors for Fast Analysis of Enzymatic Degradation of Poly (D, L-lactide). *Polymer Degradation and Stability* 119, 1-8.