

Dr. Gourav Mishra (Biotechnology)

Specialization

M.Tech: Biotechnology

Ph.D: Nanotech. (Chemical Engineering)

Area of Interest

Research: Nanotechnology, Clean Energy, Environmental Biotechnology

Other: Awards and Academic Achievements: Received fund Rs. 2,06,414/- as a Young Scientist category under International Travel Grant (ITS) Scheme (Number: ITS/2018/004297) from Science and Engineering Research Board(SERB) (A statutory body under Department of Science & Technology, Govt. of India) for the participation in AIChE 2018 Annual Meeting at Pittsburgh, Pennsylvania, United States of America during 28th October to 2nd November 2018

Participated - In Specialized Training / Certified Courses: "1. Biotechnology Division, Defence Research and Development Establishment (DRDE), Gwalior.

Topic: "Molecular & Immunological Techniques"

Duration: 45 Days

Year: 2009

Department: Bioinformatics

Supervisor: Dr D.V. Kamboj Scientist "E"

2. Department of Biotechnology and Bioinformatics Centre, Barkatullah University, Bhopal.

Topic: "Bioinformatics and Structural Bioinformatics- Hands on Training"

Duration: 1 month

Year: 2011-12

Department: Bioinformatics

Supervisor: Dr Kishore Shinde, Assistant Professor

3. Biotechnology Division, Defence Research and Development Establishment (DRDE), Gwalior.

Topic: "Anaerobic Co-digestion of Jatropha Cake"

Duration: 45 Days

Year: 2010

Department: Biotechnology Division

Supervisor: Mr Arvind Tomar Scientist "B"

" **Publication - Books / Chapters / Papers / Articles / Blogs:** Journal Publications: (Citations: 45, h-index: 03, i10-index: 02)

- 1) Gourav Mishra and Mausumi Mukhopadhyay, TiO₂ decorated functionalized halloysite nanotubes (TiO₂@HNTs) and photocatalytic PVC membranes synthesis, characterization and its application in water treatment. Scientific Reports (Nature Publication), 2019. (<https://doi.org/10.1038/s41598-019-40775-4>) (Impact Factor-4.52)
- 2) Gourav Mishra and Mausumi Mukhopadhyay, Enhanced antifouling performance of halloysite nanotubes (HNTs) blended poly(vinyl chloride) (PVC/HNTs) ultrafiltration membranes: For water treatment. Journal of Industrial and Engineering Chemistry (Elsevier), 2018. (<https://doi.org/10.1016/j.jiec.2018.02.037>) (Impact Factor-4.97)
- 3) Gourav Mishra and Mausumi Mukhopadhyay, Flux improvement, rejection, surface energy and antibacterial properties of synthesized TiO₂-Mo.HNTs/PVC nanocomposite ultrafiltration membranes. New Journal of Chemistry (Royal Society of Chemistry), 2017. (<https://doi.org/10.1039/C7NJ02774E>) (Impact Factor-3.20)
- 4) Vivekanand Mishra P.N. Patel, Suchitra Kumari and Gourav Mishra , Dengue NS1 Detection used Chemically Modified Porous Silicon Microcavity (PSMC), Silicon (Springer) 2016. (<https://link.springer.com/article/10.1007/s12633-014-9268-1>) (Impact factor 1.24)
- 5) Gourav Mishra and Mausumi Mukhopadhyay, Improved rejection performance of CeO₂@HNTs nanofiller mixed matrix poly(vinyl chloride) ultrafiltration membrane for separation of humic acid. Separation Science and Technology (Taylor & Francis), (Under Review)
- 6) Parul Rajpur, Rupali Saxena, Gourav Mishra, S. R. Mohanty, Archana Tiwari, Biogeochemical Aspect of Atmospheric Methane and Impact of Nanoparticles on Methanotrophs, Environmental & Analytical Toxicology (OMICS), 2013. (<http://dx.doi.org/10.4172/2161-0525.1000195>) (Impact Factor-1.51)
- 7) Rupali Saxena, Gourav Mishra, Batul Diwan, Archana Tiwari, HIV/AIDS Vaccine Design and Strategies, Journal of Vaccines & Vaccination (OMICS), 2013. (<http://dx.doi.org/10.4172/2157-7560.1000190>) (Impact Factor-1.8)
- 8) Gourav Mishra, Rupali Saxena, Archana Tiwari, Recent Techniques for the Detection of β -Thalassemia: A Review. J Biosens Bioelectron (OMICS), 2012. (<https://doi.org/10.4172/2155-6210.1000123>) (Impact Factor-2.76)

Conference Papers/Posters:

- Ø Gourav Mishra and Mausumi Mukhopadhyay, Improved performance of halloysite nanotubes mixed matrix poly(vinyl chloride) ultrafiltration membrane for humic acid separation. Oral Presentation presented in 6th IWA Regional Membrane Technology Conference (IWA-RMTC2018) at Maharaja Sayajirao University of Baroda, 10th December to 12th December 2018, Gujarat, India.
- Ø Gourav Mishra and Mausumi Mukhopadhyay, Interfacial Surface Energy Study of the PVC/TiO₂-HNTs Ultrafiltration Membrane for Its Suitability As an Antifouling Membrane. Oral Presentation presented in 2018 AIChE Annual Meeting USA, 28th October to 2nd November 2018 Pittsburgh USA.
- Ø Gourav Mishra and Mausumi Mukhopadhyay, Study of surface morphology and role of extracellular polymeric substances in membrane biofouling. Poster presented in CHEMCON-2015, 27-30 December at Indian Institute of Technology-Guwahati, India. (Abstract ID: WW-199)

Ø Attended an TEQIP-II sponsored International Conference on “Nanotechnology for Chemical, Energy and Environmental Applications (NACEE-2017). 22nd-23rd March 2017 at S.V. National Institute of Technology, Surat, India.