

Dr. Priya Goel, Assistant Professor, Chemistry Office at Staff Room No. 02, 2nd Floor,SoT), School of Science, Building **priya.goel@gsfcuniversity.ac.in** Phone No. 0265-3093812

Education

PhD (2018-2023) – IIT Roorkee Thesis titled "Synthesis and Characterization of Ion-Exchange Membranes with Improved Physicochemical and Electrochemical Features" M.Sc. Organic chemistry (2014-2016) – MJPRU, Bareilly, Uttar Pradesh B.Sc. Hons. Chemistry (2011-2024) – Teerthanker Mahaveer University, Moradabad, Uttar Pradesh

Key Skills

Dr. Priya Goel is capable of providing comprehensive solutions to industry and other government bodies in the following areas:

- 1. Synthetic developments of electro-membranes (anion and cation exchange membranes) for separation of ions by electrodialysis and electro-electrodialysis methods
- 2. Synthesis and modification of nanomaterial for different application purpose
- 3. Environmental solutions particularly industrial waste water treatment and desalination of seawater/brackish water

Background

Joined GSFC University in January 2023

Scholarship and Accomplishments

Dr. Goel is a proficient researcher. Broadly defined, Dr.. Goel's research interests are in membranes synthesis (cation and anion exchange membranes) and its application in separation technology, with a special focus on industrial waste treatment, desalination and selective ion separation. She is particularly interested in synthesis of monopolar membranes for selective separation of ions through electrodialysis and electrolysis processes for a variety of applications.

During her 5 Years of doctoral research journey, Dr. Goel published 13 research papers and filed 3 Indian patents and worked under two projects. Project "*Green liquor to white liquor conversion using electrodialysis*" was funded by Science and Engineering Research Board in which environmental friendly electro-electrodialysis process was introduced for NaOH production from green liquor solution of wood/agro-based paper mills. Second project titled "Smart Bipolar Membrane for simultaneous Acid and alkali production for Zero Liquid Discharge application" granted by Ministry of Human Resource Development, Government of India under Uchchatar Avishkar Yojana scheme. The developed technology was adopted by Permionics Membrane Private Limited, Vadodara, Gujarat.

Dr. Goel has a teaching experience of 1.5 years wherein She has served as lecturer, school of science, Vivek College Bijnor and then, GSFC University.

She teaches Organic Chemistry (basic to advance) to science students at M.Sc. and B.Sc. Program. She exposes students to science fundamentals and has chosen teaching to as a way to conduct research in education.

Dr. Priya has many publications with most of them being published in peer-reviewed International Journals with good impact factor. Few publications are published in very renowned journals e.g., *separation and purification technology journal of membrane science, ACS Applied Polymer Materials etc.*

Dr. Priya, is a lifetime member of Society for Polymer Science (SPSI) and Chemical research society of India (CRSI).

Most Three Notable Publications

- Goel P., Mandal P., E. Bhuvanesh, Shahi V.K., Chattopadhyay S., Temperature resistant cross-linked brominated poly phenylene oxide-functionalized graphene oxide nanocomposite anion exchange membrane for desalination, Sep. Purif. Technol. 255 (2021) 117730. doi:10.1016/j.seppur.2020.117730. (I.F.: 9.136)
- Goel P., E. Bhuvanesh, Mandal P., Shahi V.K., Bandyopadhyay A., Chattopadhyay S., Di-quaternized graphene oxide based multi-cationic cross-linked monovalent selective anion exchange membrane for electrodialysis, Sep. Purif. Technol. 276 (2021) 119361. doi:10.1016/j.seppur.2021.119361. (I.F.: 9.136)
- **3. Goel P.**, Mandal P., E. Bhuvanesh, Shahi V.K., Chattopadhyay S., Sulfonated poly (ether ether ketone) composite cation exchange membrane for NaOH production by electro-electrodialysis using agro-based paper mill green liquor, J. Environ. Chem. Eng. 9 (2021) 106409. doi:10.1016/j.jece.2021.106409 (I.F.: 7.968)