

## List of Publications

### Journal Publication

- I. **Naresh K. Sethy**, Zeenat Arif, P. K. Mishra, Pradeep Kumar Green synthesis of TiO<sub>2</sub> nanoparticles from *Syzygium cumini* extract for photo-catalytic removal of lead (Pb) in explosive industrial wastewater. *Green Processing and Synthesis* (2020) 171-181.
- II. **Naresh K. Sethy**, Zeenat Arif, P. K. Mishra, Pradeep Kumar, Nanocomposite film with green synthesized TiO<sub>2</sub> nanoparticles and hydrophobic polydimethylsiloxane polymer: synthesis, characterization, and antibacterial test. *Journal of Polymer Engineering* (2020) 211-220.
- III. **Naresh K. Sethy**, Zeenat Arif, P. K. Mishra, Pradeep Kumar, Synthesis of SiO<sub>2</sub> nanoparticle from bamboo leaf and incorporated in PDMS membrane to enhance its separation properties. *Journal of Polymer Engineering* 39(7) (2019) 679-687
- IV. Zeenat Arif, **Naresh K. Sethy**, P. K. Mishra, B. Verma, Study on thermo-kinetic modeling of green route synthesized inorganic loading on PVDF membrane for Cr(VI) removal and its optimization. *Journal of Polymer Research* 27(2020)257
- V. Zeenat Arif, **Naresh K. Sethy**, P. K. Mishra, B. Verma, Development of Eco-friendly, self-cleaning, antibacterial membrane for the elimination of chromium (VI) from tannery wastewater. *International Journal of Environmental Science and Technology*. 17 (2020) 4265-4280
- VI. Zeenat Arif, **Naresh K. Sethy**, P. K. Mishra, B. Verma, Green approach for the

- synthesis of ultrafiltration photocatalytic membrane for tannery wastewater: Modeling and optimization. International Journal of Environmental Science and Technology. [Accepted, 2020] <https://doi.org/10.1007/s13762-020-02719-8>
- VII. Zeenat Arif, **Naresh K. Sethy**, Lata Kumari, P. K. Mishra, B. Verma, Green Synthesis of TiO<sub>2</sub> nanoparticle using *Cajanus cajan* extract and their Use in Controlling the Fouling of Ultrafiltration PVDF Membranes. Korean Journal of Chemical Engineering (2019) 36(7):1148-1156
- VIII. Zeenat Arif, **Naresh K. Sethy**, Lata Kumari, P. K. Mishra, B. Verma, Development of antimicrobial and anti-fouling nanocomposite membranes by a phase inversion technique. Journal of Polymer Engineering [Accepted 2019] (10.1515/polyeng-2019-0007)
- IX. Zeenat Arif, **Naresh K. Sethy**, Lata Kumari, P. K. Mishra, B. Verma, Antifouling Behaviour of PVDF/TiO<sub>2</sub> Composite Membrane: A Quantitative and Qualitative Assessment. Iranian Polymer Journal (2019) 28:301-312.
- X. Zeenat Arif, **Naresh K. Sethy**, P. K. Mishra, S. N. Upadhyay, B. Verma, Swelling and sorption behavior of PVA and PVA/silica nanocomposite membrane at different silica loadings. Indian Journal of Chemical technology (2019) 26:44-51
- XI. Zeenat Arif, **Naresh K. Sethy**, P. K. Mishra, S. N. Upadhyay, B. Verma, “ Investigating the influence of sol gel derived PVA/SiO<sub>2</sub> nano composite membrane on pervaporation separation of azeotropic mixture I. Effect of operating condition”. Journal of Porous Materials (2018) 25: 1203-1211
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**Book Chapter Publication**

- I. **Naresh K. Sethy**, Zeenat Arif, K S Sista, P. K. Mishra, Avnish K Kushwaha “Advancement in membrane technology used in wastewater treatment process”. *Pollutants and Water Management: Resources, Strategies and Scarcity*, Wiley (accepted 2020).
- II. **Naresh K. Sethy**, Zeenat Arif, K S Sista, Pradeep Kumar, P. K. Mishra, Rajesh Saha “Zero Valent Iron (ZVI) for groundwater remediation”. *Groundwater Geochemistry: Pollution and Remediation*, Wiley (accepted 2020).
- III. Zeenat Arif, **Naresh K. Sethy**, P. K. Mishra “Impact on groundwater quality resources due to Industrial effluent”. *Groundwater Geochemistry: Pollution and Remediation*. Wiley (accepted 2020).
- IV. Zeenat Arif, **Naresh K. Sethy**, Swati, P. K. Mishra, B. Verma “Grossly Polluting Industries And Its Effect On Water Resources In India”. *Pollutants and Water Management: Resources, Strategies and Scarcity*, Wiley (accepted 2020).
- V. Zeenat Arif, **Naresh K. Sethy**, Lata Kumari, P. K. Mishra Recent advances in functionalized polymer-based composite photocatalysts for wastewater treatment. *Nano- Materials as Photocatalysts for Degradation of Environmental Pollutants*. Elsevier <https://doi.org/10.1016/B978-0-12-818598-8.00003-1>.