

**2. NAME:** P. E. JAGADEESHBABU

**DESIGNATION:** Associate Professor

**DEPARTMENT:** Department of Chemical Engineering

**INSTITUTION:** National Institute of Technology Karnataka

**PLACE:** Surathkal

**PIN:** 575025

**MOBILE:** +91-824-2474000 Extn. 3640, Mobile: 9632896086

**E-MAIL:** jagadeesh\_78@yahoo.com

### **AREA OF INTEREST**

- Drug Delivery System
- Kinetic Modeling
- Nano Particle synthesis and its application
- Hybrid Membranes

### **LIST OF PUBLICATIONS**

1. D Doddamani, J PonnannEttiappan, "Sacrificial sulphonated polystyrene template-assisted synthesis of mesoporous hollow core-shell silica nanoparticles for drug-delivery application", Bulletin of Materials Science 43 (1), 1-9, 2020.
2. VV Kadam, SD Shanmugam, JP Ettiappan, RM Balakrishnan, "Photocatalytic degradation of p-nitrophenol using biologically synthesized ZnO nanoparticles", Environmental Science and Pollution Research, 1-12, 2020.
3. AK Nelapati, JB PonnannEttiappan, "Computational analysis of therapeutic enzyme uricase from different source organisms", Current Proteomics, 17 (1), 59-77, 2020.
4. VV Kadam, RM Balakrishnan, JP Ettiappan, "Fluorometric detection of bisphenol A using  $\beta$ -cyclodextrin-functionalized ZnO QDs", Environmental Science and Pollution Research, 1-11, 2020.
5. AK Nelapati, BK Das, JBP Ettiappan, D Chakraborty, "In-silico epitope identification and design of Uricase mutein with reduced immunogenicity", Process Biochemistry, 2020.
6. JBPE Anand Kumar Nelapati, Shubham Meena, Aditya Kumar Singh, Narsimha Bhakta, "In Silico Structural and Functional Analysis of Bacillus Uricases", Current Proteomics, 2020.

7. Sushma Havanur, Inayat Batish, Sri Pragnya Cheruku, Karthik Gourishetti, **PE JagadeeshBabu**, Nitesh Kumar, "Poly (N, N-diethyl acrylamide)/functionalized graphene quantum dots hydrogels loaded with doxorubicin as a nano-drug carrier for metastatic lung cancer in mice", Materials Science and Engineering: C 105, 110094, 2019.
10. E Mugunthan, MB Saidutta, **PE JagadeeshBabu**, "Photocatalytic activity of ZnO-WO<sub>3</sub> for diclofenac degradation under visible light irradiation", Journal of Photochemistry and Photobiology A: Chemistry 383, 111993, 2019.
11. D Sharma, DA Rakshana, RM Balakrishnan, **PE JagadeeshBabu**, "One step synthesis of silver nanowires using fructose as a reducing agent and its antibacterial and antioxidant analysis", Materials Research Express 6 (7), 075050, 2019.
12. VV Kadam, JP Ettiyappan, RM Balakrishnan, "Mechanistic insight into the endophytic fungus mediated synthesis of protein capped ZnO nanoparticles", Materials Science and Engineering: B 243, 214-221, 2019.
13. E Mugunthan, MB Saidutta, **PE JagadeeshBabu**, "Photocatalytic degradation of diclofenac using TiO<sub>2</sub>-SnO<sub>2</sub> mixed oxide catalysts", Environmental technology 40 (7), 929-941, 2019.
14. S Havanur, V Farheenand, **PE JagadeeshBabu**, "Synthesis and optimization of poly (N,N-diethylacrylamide) hydrogel and evaluation of its anticancer drug doxorubicin's release behavior", Iranian Polymer Journal 28 (2), 99-112, 2019.
15. E Mugunthan, MB Saidutta, **PE JagadeeshBabu**, "Visible light assisted photocatalytic degradation of diclofenac using TiO<sub>2</sub>-WO<sub>3</sub> mixed oxide catalysts", Environmental nanotechnology, monitoring & management 10, 322-330, 2018.
16. S Havanur, **PE JagadeeshBabu**, "Role of graphene quantum dots synthesized through pyrolysis in the release behavior of temperature responsive poly (N, N-diethyl acrylamide) hydrogel loaded with doxorubicin", International Journal of Polymer Analysis and Characterization 23 (7), 606-620, 2018.
17. GKS Arumugam, D Sharma, RM Balakrishnan, **JBP Ettiyappan**, "Extraction, optimization and characterization of collagen from sole fish skin", Sustainable Chemistry and Pharmacy 9, 19-26, 2018.
18. AK Nair, **PE JagadeeshBabu**, "Ag-TiO<sub>2</sub> Nanofiber Membranes for Photocatalytic Degradation of Dyes", Advanced Science Letters 24 (8), 5764-5767, 2018.

19. D Deepika, **JB PonnannEttiappan**, "Synthesis and characterization of microporous hollow core-shell silica nanoparticles (HCSNs) of tunable thickness for controlled release of doxorubicin", *Journal of Nanoparticle Research* 20 (7), 187, 2018.
20. **PEJB** Abhinav K. Nair, B. Vinay Kumar, Gopinath Kalaiarasan, "TiO<sub>2</sub> nanosheet incorporated polysulfone ultrafiltration membranes for dye removal", *Desalination and Water Treatment* 107, 324–331, 2018.
21. AK Nair, **PE JagadeeshBabu**, "Ag-TiO<sub>2</sub> nanosheet embedded photocatalytic membrane for solar water treatment", *Journal of environmental chemical engineering* 5 (4), 4128-4133, 2017.
22. AK Nair, **PE JagadeeshBabu**, "TiO<sub>2</sub> nanosheet-graphene oxide based photocatalytic hierarchical membrane for water purification", *Surface and Coatings Technology* 320, 259-262, 2017.
23. KS Sri, AK Nair, PEJ Babu, "Synthesis and characterization of silver decorated polysulfone/cellulose acetate hybrid ultrafiltration membranes using functionalized TiO<sub>2</sub> nanoparticles", *Desalination and Water Treatment* 76, 112-120, 2017.
24. SD Neelapala, AK Nair, **PE JagadeeshBabu**, "Synthesis and characterisation of TiO<sub>2</sub> nanofibre/cellulose acetate nanocomposite ultrafiltration membrane", *Journal of Experimental Nanoscience* 12 (1), 152-165, 2017.
25. P Nanda, **PE JagadeeshBabu**, JR Raju, "Production and Optimization of Site-Specific monoPEGylated Uricase Conjugates Using mPEG-Maleimide Through RP–HPLC Methodology", *Journal of Pharmaceutical Innovation* 11 (4), 279-288, 2016.
26. P Nanda, **PE JagadeeshBabu**, P Gupta, AG Prasad, "Development of a spectrophotometric biphasic assay for the estimation of mPEG-maleimide in thiol PEGylation reaction mixtures", *Chemical Engineering Communications* 203 (11), 1464-1472, 2016.
27. AK Nair, PM Shalin, **PE JagadeeshBabu**, "Performance enhancement of polysulfone ultrafiltration membrane using TiO<sub>2</sub> nanofibers", *Desalination and Water Treatment* 57 (23), 10506-10514, 2016.
28. AK Nair, BV Kumar, **PE JagadeeshBabu**, "Photocatalytic Degradation of Congo Red Dye Using Silver Doped TiO<sub>2</sub> Nanosheets", *Recent Advances in Chemical Engineering*, 211-217, 2016.
29. P Nanda, **PE JagadeeshBabu**, "Studies on the Site-specific PEGylation Induced Interferences Instigated in Uricase Quantification Using the Bradford Method", *International Journal of Peptide Research and Therapeutics*, 1-8, 2016.

30. SK Ram, K Raval, **PE JagadeeshBabu**, "Enhancement of a novel extracellular uricase production by media optimization and partial purification by aqueous three-phase system", *Preparative Biochemistry and Biotechnology* 45 (8), 810-824, 2015.
31. **PEJBMBS** K. Satheesha, "Two-step Biodiesel Production and its Kinetics Studies Using Indion-190/AmberliteIRA-900 from Waste Cooking Oil", *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 37(1), 92-100, 2015.