Dr. N. Balasubramanian

Professor, Department of Chemical Engineering,

A.C. Tech Campus, Anna University

List of Publications:

1. Saravanabhavan, S. S., Natarajan, K., Elumalai, S., Zsolt, S., Selvam, M. K., Janakiraman, M.,. & Natesan, B. Nagaraj Balasubramanian, (2018). Study on the Inflammatory Response of PMMA/Polystyrene/Silica Nanocomposite Membranes for Drug Delivery and Dental Applications. *BioRxiv*, 499160.

2. Sathya, U., Nithya, M., & Balasubramanian, N. (2019). Evaluation of advanced oxidation processes (AOPs) integrated membrane bioreactor (MBR) for the real textile wastewater treatment. *Journal of environmental management*, *246*, 768-775.

3. Harshini Priyaa, V. S., Saravanathamizhan, R., & Balasubramanian, N. (2019). Preparation of Biomass Based Carbon for Electrochemical Energy Storage Application. *Journal of Electrochemical Science and Technology*, *10*(2), 159-169.

4. Rengaswamy, K., Sakthivel, D. K., Muthukaruppan, A., Natesan, B., Venkatachalam, S., & Kannaiyan, D. Balasubramanian, N (2018). Electromagnetic interference (EMI) shielding performance of lightweight metal decorated carbon nanostructures dispersed in flexible polyvinylidene fluoride films. *New Journal of Chemistry*, *42*(15), 12945-12953.

5. Nithya, M., Praveen, K., Sathya, U., Balasubramanian, N., & Pandurangan, A. (2018). Green synthesis of α-Fe 2 O 3/BiPO 4 composite and its biopolymeric beads for enhanced photocatalytic application. *Journal of Materials Science: Materials in Electronics*, *29*(17), 14733-14745.

6. Kannan, N., Shanmuga, S., Balaji, S., Arul Amuthan, L., Anil Kumar, N. V., & Balasubramanian, N. (2018). Physiochemical characterization and cytotoxicity evaluation ofmercury-based formulation for the development of anticancer therapeuticals. *PLos One*, *13*(04), 01-13.

7. Vanitha, M., Joni, I. M., Camellia, P., & Balasubramanian, N. (2018). Tailoring the properties of cerium doped zinc oxide/reduced graphene oxide composite: Characterization, photoluminescence study, antibacterial activity. *Ceramics International*, *44*(16), 19725-19734.

8. Karunagaran, J. R., Janakiraman, M., Jonna, N., Natesan, B., & Nallamuthu, P. (2018). A PDDA functionalized nitrogen and sulphur doped graphene composite as the counter electrode for dye-sensitized solar cells. *New Journal of Chemistry*, *42*(12), 10184-10190.

9. Vadivel, S., Saravanakumar, B., Kumaravel, M., Maruthamani, D., Balasubramanian, N., Manikandan, A., ... & Hariganesh, S. (2018). Facile solvothermal synthesis of BiOI microsquares as a novel electrode material for supercapacitor applications. *Materials Letters*, *210*, 109-112.

10. Palani, R., AbdulGani, A., & Balasubramanian, N. (2017). Treatment of tannery effluent using a rotating disc electrochemical reactor. *Water Environment Research*, *89*(1), 77-85.

11. Ibrahim, D. S., Sami, N. A., & Balasubramanian, N. (2017). Effect of barite and gas oil drilling fluid additives on the reservoir rock characteristics. *Journal of Petroleum Exploration and Production Technology*, *7*(1), 281-292.

12. Kumaran, R., Kumar, S. D., Balasubramanian, N., Alagar, M., Subramanian, V., & Dinakaran, K. (2016). Enhanced electromagnetic interference shielding in a Au–MWCNT composite nanostructure dispersed PVDF thin films. *The Journal of Physical Chemistry C*, *120*(25), 13771-13778.

13. Vadivel, S., Kamalakannan, V. P., Kavitha, N. P., Priya, T. S., & Balasubramanian, N. (2016). Development of novel Ag modified BiOF squares/g-C3N4 composite for photocatalytic applications. *Materials Science in Semiconductor Processing*, *41*, 59-66.

14. Kalaivani, K., & Balasubramanian, N. (2016). Energy Consumption and Greenhouse Gas Emission Studies of Jatropha Biodiesel Pathway by Life Cycle Assessment in India. *Indian Chemical Engineer*, *58*(3), 255-267.

15. Wang, L., Wu, B., Li, P., Zhang, B., Balasubramanian, N., & Zhao, Y. (2016). Kinetics for electro-oxidation of organic pollutants by using a packed-bed electrode reactor (PBER). *Chemical Engineering Journal*, *284*, 240-246.

16. Vijayakumar, V., Saravanathamizhan, R., & Balasubramanian, N. (2016). Electro oxidation of dye effluent in a tubular electrochemical reactor using TiO2/RuO2 anode. *Journal of Water Process Engineering*, *9*, 155-160.

17. Vadivel, S., Theerthagiri, J., Madhavan, J., Priya, T. S., & Balasubramanian, N. (2016). Enhanced photocatalytic activity of degradation of azo, phenolic and triphenyl methane dyes using novel octagon shaped BiOCl discs/MWCNT composite. *Journal of Water Process Engineering*, *10*, 165-171.

18. Bharathi, P., Balasubramanian, N., Anitha, S., & Vijayabharathi, V. (2016). Improvement of membrane system for water treatment by synthesized gold nanoparticles. *Journal of Environmental Biology*, *37*(6), 1407.

19. Saravanathamizhan, R., Harsha Vardhan, K., Gnana Prakash, D., & Balasubramanian, N. (2015). RSM and ANN modeling for electro-oxidation of simulated wastewater using CSTER. *Desalination and Water Treatment*, *55*(6), 1445-1452.

20. Priyadarshini, R., Vaishnavi, L., Murugan, D., Sivarajan, M., Sivasamy, A., Saravanan, P., Rai, C. L. (2015). Kinetic studies on anaerobic co-digestion of ultrasonic disintegrated feed and biomass and its effect substantiated by microcalorimetry. *International journal of environmental science and technology*, *12*(9), 3029-3038.

21. Muthukrishnaraj, A., Vadivel, S., Joni, I. M., & Balasubramanian, N. (2015). Development of reduced graphene oxide/CuBi2O4 hybrid for enhanced photocatalytic behavior under visible light irradiation. *Ceramics International*, *41*(5), 6164-6168.

22. Vijayakumar, V., & Balasubramanian, N. (2015). Heavy metal removal by electrocoagulation integrated membrane bioreactor. *CLEAN–Soil, Air, Water*, *43*(4), 532-537.

23. Muthukannan, V., Praveen, K., & Natesan, B. (2015). Fabrication and characterization of magnetite/reduced graphene oxide composite incurred from iron ore tailings for high performance application. *Materials Chemistry and Physics*, *162*, 400-407.

24. Vanitha, M., Keerthi, Vadivel, S., & Balasubramanian, N. (2015). Visible light photocatalysis of methylene blue by graphene-based ZnO and Ag/AgCl nanocomposites. *Desalination and Water Treatment*, *54*(10), 2748-2756.