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# SAI RAM INSTITUTE OF TECHNOLOGY

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## DEPARTMENT OF CHEMISTRY

Name : Dr.M. KUMAR  
Designation : Assistant Professor  
Email : kumar.chem@sairamit.edu.in  
Qualification : M.Sc.,M.Phil.,Ph.D.  
Specialization : CHEMISTRY  
Research Interest : Polymer Composites



Experience in years : **Teaching** UG  PG  **Industry**

No. of Workshop/Conferences/  
FDP attended : Workshop  Conferences  FDP

No. of Workshop/Conferences/  
FDP Organized : Workshop  Conferences  FDP

Professional Membership	
Publications	International Journal : 18
	National Journal : 03
Research Funded Projects	<b>AERB (CSRP/PROJ.No.65/06/2017) as Co-Investigator in 37.93 Lacks</b>
Patents	-
Achievements	-
Any Other Information	Anna University recognized supervisor to guide Ph.D. scholars Guideship Number: 2770032

## List of Publications:-

21. R. Manimegalaia, S. Sendhilnathan, V. Chithambaram, **M. Kumar** (2023) Experimental investigation on ferrofluid properties of Cd doped Co-Zn ferrites. Digest Journal of Nanomaterials and Biostructures, 18, 547-555. **Impact Factor: 0.899.**
20. Nimel Sworna Ross, Ganesh M., M.Belsam Jeba Ananth, **M. Kumar**, 2023 Ritu Rai, Munish Kumar Gupta, Mehmet Erdi Korkmaz, Development and potential use of MWCNT suspended in vegetable oil as a cutting fluid in machining of Monel 400, *Journal of molecular liquids*, 382, 121853. **Impact Factor: 6.633.**
19. R. Tamilarasan, R. Tamilarasan, **M. Kumar**, V.Chithambaram (2022) Senegalia Catechu activated carbon incorporated Ba-alginate composite beads for the removal of Safranin B: modeling studies, Digest Journal of Nanomaterials and Biostructures, 17, 2022, p. 1369-1384. **Impact Factor: 0.899.**
18. Padmanaban. R, **Kumar. M**, and Dharmendirakumar. M (2021) Adsorption modeling studies for the removal of rose bengal dye from aqueous solutions using a natural adsorbent perlite, Indian Journal of Chemical Technology. 28, 604- 611. **Impact Factor: 0.57.**
17. **M. Kumar**, R. Tamilarasan and G. Vijayakumar, 2019. Synthesis, characterization and experimental studies of nano Zn-Al-Fe<sub>3</sub>O<sub>4</sub> blended alginate/Ca beads for the adsorption of Rhodamin B. Journal of Polymers and the Environment. 27 (1), 106-117. **Impact Factor: 3.667.**
16. D. Jayganesh, R. Tamilarasan and **M. Kumar**, 2018. Marine Seaweed Gracilaria Corticata Activated Carbon used for the Removal of Safranin Dye : Adsorption Modelling Studies. Journal of Marine Science and Technology. (**Accepted Manuscript**). **Impact Factor: 1.802.**
15. D. Jayaganes, **M. Kumar**, R. Tamilarasan. 2017. Equilibrium and Modelling Studies for the Removal of Crystal Violet Dye from aqueous solution using eco-friendly activated carbon prepared from Sargassm wightii seaweeds. Journal of Materials and Environmental Science. 8(4), 1508-1517. **Impact Factor: 0.23.**
14. D. Jayaganes, **M. Kumar**, R. Tamilarasan. 2017. Preparation of eco-friendly and low-cost activated carbon from Gracilaria corticata seaweeds for the Removal of Crystal Violet Dye from aqueous solution: Equilibrium and Modelling Studies. Chiang Mai Journal of Science. 45(2) : 1039-1051. **Impact Factor: 0.523.**
13. **M. Kumar**, V. Sureshkumar, R. Tamilarasan. 2016. Biosorption of Victoria blue using *Zizyphus oenoplia* seed: Evaluation of modeling, experimental, FTIR and SEM studies. IEEE Proceedings of ICETETS, Kings College of Engineering, Thanjavur, India. 24-26. 10.1109/ICETETS.2016.7603126
12. M. Bhuvanawari, S. Sendhilnathan, **M. Kumar**, R. Tamilarasan, N.V., Giridharan. 2015. Synthesis, investigation of structural and electrical properties of cobalt doped mn-zn ferrite nanocrystalline powders. Material Letters Poland. 34 (2), 344–353. **Impact Factor: 1.022.** DOI: 10.1515/msp-2016-0046.
11. **M. Kumar**, R. Tamilarasan, G. Arthanareeswaran, & F. Ismail, 2015. „Optimization of methylene blue using Ca<sup>2+</sup> and Zn<sup>2+</sup> bio-polymer hydrogel beads: A comparative study”, Ecotoxicology and

- environmental safety". Vol. 121, 2015, Pages 164-173. **Impact Factor: 6.291.**  
doi:10.1016/j.ecoenv.2015.04.007.
- 10 **Kumar M**, Tamilarasan R, Vijayakumar G, Mukeshkumar, P.C & Sendhilnathan, S, 2015. Biosorption of aniline blue from aqueous solution using a novel biosorbent *Zizyphus oenoplia* seeds: Modeling studies, Polish Journal of Chemical Technology. 17, 3, 70 - 77. **Impact Factor: 1.125.** DOI: 10.1515/pjct-2015-0052
  9. Saranya, R, **Kumar, M**, Tamilarasan, R, Ismail A. F. & Arthanareeswaran, G. 2015, Functionalised activated carbon modified polyphenylsulfone composite membranes for adsorption enhanced phenol filtration, Journal of Chemical Technology and Biotechnology, Vol. 91, Issue 3, 2016, Pages 748-761, **Impact Factor: 3.174.** DOI: 10.1002/jctb.4641
  8. **Kumar, M** & Tamilarasan, R. 2014, Removal of Victoria Blue using Prosopis juliflora bark carbon: Kinetics and Thermodynamic modeling Studies, Journal of Material and Environmental Science, vol. 5, no. 2, pp. 510-519. **Impact Factor: 0.23.**
  7. **Kumar, M** & Tamilarasan, R.. 2013, „Modeling studies for the removal of methylene blue from aqueous solution using Acacia Fumosa seed shell activated carbon“, Journal of Environmental Chemical Engineering, vol. 1, pp. 1108-1116. **Impact Factor: 5.909.** doi:10.1016/j.jece.2013.08.027
  6. **Kumar, M** & Tamilarasan, R. 2013, „Kinetics and equilibrium data modeling studies for the sorption of chromium by Prosopis Juliflora bark carbon“, Arabian Journal of Chemistry, Vol. 10, 2017, Pages S1567-S1577. **Impact Factor: 5.165.** doi:10.1016/j.arabjc.2013.05.025
  5. **Kumar, M**, Tamilarasan, R & Sivakumar, V. 2013, „Adsorption of Victoria blue by carbon/Ba/Alginate beads: Kinetics, thermodynamics and Isotherm studies“, Carbohydrate Polymers, vol. 98, no. 1, pp. 505-513. **Impact Factor: 9.314.** doi:10.1016/j.carbpol.2012.11.076
  4. **Kumar, M** & Tamilarasan, R. 2013, „Modeling of experimental data for the adsorption of methyl orange from aqueous solution using a low cost activated carbon prepared from Prosopis juliflora“, Polish Journal of Chemical Technology, vol. 15, no. 2, pp. 29-39.  
**Impact Factor: 1.125.** DOI: 10.2478/pjct-2013-0021
  3. **Kumar, M** & Tamilarasan, R. 2013, „Kinetics and Equilibrium Studies on the Removal of Victoria Blue Using Prosopis juliflora Modified Carbon/Zn/Alginate Polymer Composite Beads“, Journal of Chemical Engineering Data, vol. 58, no. 3, pp. 517-527. **Impact Factor: 2.694.** DOI: 10.1021/je3012309
  2. **Kumar, M** & Tamilarasan, R. 2013, „Modeling studies: Adsorption of aniline blue by using Prosopis Juliflora carbon/Ca/alginate polymer composite beads“, Carbohydrate Polymers, vol.92, no. 2, pp. 2171-2180. **Impact Factor: 9.314.** doi:10.1016/j.carbpol.2012.11.076
  1. **Kumar, M.** Sridevi K. & Tamilarasan, R. 2012, „Assessment of cadmium and its impact on the uptake efficiency of Phosphate fertilizers by *Amaranthus tricolor*“, Journal of Material and Environmental Science, 3(5), 947-954. **Impact Factor: 0.23.**

**List of Patent : NIL**

### **Workshop / Conferences / FDP Attended:-**

1. **Kumar, M** & Tamilarasan, R 2014, 'Adsorption studies on the removal of methylene blue using  $\text{Ca}^{2+}$  and  $\text{Zn}^{2+}$  alginate hydrogel beads: A comparative study', ICGTEPC- 2014, International Conference, NIT-Tiruchirapalli, Tiruchirapalli-15.
2. **M. Kumar**, V. Sureshkumar, R. Tamilarasan. 2016. Biosorption of Victoria blue using *Zizyphus oenoplia* seed: Evaluation of modeling, experimental, FTIR and SEM studies. IEEE Proceedings of ICETETS, Kings College of Engineering, Thanjavur, India. 24-26.
3. **Muthaiyan Kumar**, Rengasamy Tamilarasan and Vadivelu Sivakumar, Aniline blue optimization using Zn-Biopolymeric beads encapsulated with Prosopis Juliflora activated carbon, International Conference on Advanced Polymers for Science and Technology (APST-2016), VIT- Vellore.

### **National Conference**

1. **Kumar, M** and Tamilarasan, R, "Kinetics and Equilibrium Studies on Adsorption of dye by Prosopis juliflora bark carbon" UGC- sponsored National Conference, Oral session, December-2012, organized by Presidency College, Chennai.
2. **Kumar, M**, TNSCHE-Sponsored state level Seminar. "Promises and challenges of using nanomaterials in clinical application", Seethalakshmi Ramaswamy College, Tiruchirapalli.
3. **Kumar, M** & Tamilarasan, R 2011, 'Kinetics and equilibrium studies on the adsorption of methylene blue by Prosopis Juliflora bark carbon', NCAC-2011 (AICTE sponsored Conference), Eswari Engineering College, Chennai.

### **Workshop / Conferences / FDP Organized:-**

1. Organized 10<sup>th</sup> National Level National conference NCAC-2019 (AICTE sponsored Conference), Eswari Engineering College, Chennai in 2019.