**ANNAMACHARYA UNIVERSITY FACULTY DETAILS FOR WEBSITE**

**About Profile**



NAME: I. Pugazhenthi

DATE OF BIRTH: 07-07-1984

DESIGNATION: Assistant professor

DEPARTMENT: Humanities and Sciences (Chemistry)

EMAIL ID: pugalchemist@gmail.com

DATE OF JOINING: 10.06.2019

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## Academic Profile

| **Qualification** | **Name of the Board/University** | **YEAR** |
| --- | --- | --- |
| **Ph.D** | **Thiruvalluvar University, Vellore, TN** | **2019** |
| **M.Sc** | **University of Madras** | **2010** |
| **B.Sc** | **University of Madras** | **2008** |

## Research Details

1. Areas of Specialization: Material Science, Polymer Nanocomposite, Corrosion
2. List of Publications:
3. Ilangovan Pugazhenthi, Carbon Sequestration and Wastewater Treatment, Ahmad, I. (Ed.). (2025). Green Technologies for Wastewater Treatment and Bioenergy Production (1st ed.). CRC Press. <https://doi.org/10.1201/9781003459286>
4. Pugazhenthi, I., Safiullah, S.M., Basha, K.A. (2025). Synergistic Effects of Nanofillers in the Thermal and Optical Properties of Functional Polymers. In: Mallakpour, S., Hussain, C.M. (eds) Handbook of Nanofillers. Springer, Singapore. <https://doi.org/10.1007/978-981-99-3516-1_28-1>
5. S. Mohammed Ghouse, I. Pugazhenthi,Chapter 13 - Development of titanium dioxides for anticorrosive coatings for corrosion protection,Editor(s): Chandrabhan Verma, Vandana Srivastava, Taiwo W. Quadri, Chaudhery Mustansar Hussain, Eno E. Ebenso,Smart Anticorrosive Materials,Elsevier,2023,Pages 251-257, ISBN 9780323951586,https://doi.org/10.1016/B978-0-323-95158-6.00028-X.
6. Pugazhenthi I, Safiullah SM, Basha KA. Photostable electroactive polymer based nanocomposite films for the protection of mild steel from corrosion. Polymers and Polymer Composites. 2021;29(9\_suppl):S130-S142. doi:10.1177/0967391120986506
7. Ghouse, S.M., Pugazhenthi, I. (2021). Nanomedicine: General Introduction from A to Z. In: Arivarasan, V.K., Loganathan, K., Janarthanan, P. (eds) Nanotechnology in Medicine. Nanotechnology in the Life Sciences. Springer, Cham. <https://doi.org/10.1007/978-3-030-61021-0_1>
8. Pugazhenthi I, Ghouse SM. Corrosion protection performance of titania nanoparticles filled poly(4-methyl-5-vinylthiazole) applied on mild steel in 3.5% sodium chloride solution. Journal of Plastic Film & Sheeting. 2020;37(1):17-32. doi:10.1177/8756087920939301
9. I. Pugazhenthi, Design, Fabrication, and Characterization of Electrically Active Methacrylate-Based Polymer–ZnO Nanocomposites for Dielectrics, Edited by Haghi, R.K., Besalu, E., Jaroszewski, M., Thomas, S., & K.M., P. (Eds.). (2018). Modern Physical Chemistry: Engineering Models, Materials, and Methods with Applications (1st ed.). Apple Academic Press. <https://doi.org/10.1201/9781315143118>
10. I. Pugazhenthi, S. Mohammed Safiullah, K. Anver Basha , UV and corrosion protective behavior of polymer hybrid coating on mild steel, 2017 Wiley Periodicals, Inc. J. Appl. Polym. Sci. 2018, 135, 46175.
11. Pugazhenthi Ilangovan, Mohammed Safiullah Sakvai, Anver Basha Kottur, Synergistic effect of functionally active methacrylate polymer and ZnO nanoparticles on optical and dielectric properties, Materials Chemistry and Physics, Volume 193, 2017, Pages 203-211.https://doi.org/10.1016/j.matchemphys.2017.02.027.
12. Pugazhenthi Ilangovan, Mohammed Safiullah Sakvai, Anver Basha Kottur, An electrically active methacrylate based polymer reinforced with ZnO – Synthesis, characterization and dielectric properties, Materials Letters, Volume 183, 2016, Pages 240-243, <https://doi.org/10.1016/j.matlet.2016.07.120>.
13. Manivel, P., Prabakaran, K., Suneel, Y. et al. Synthesis, structure determination, and antioxidant activity of novel 1-pyrazolyl-3-substituted isoquinolines, 1-pyrrolyl 3-substituted isoquinolin-1-amine, and 1-pyrazolonyl-substituted isoquinolines. Res Chem Intermed 41, 2081–2094 (2015). <https://doi.org/10.1007/s11164-013-1333-7>
14. Ilangovan Pugazhenthia, Shaik Mohammed Ghousea, Fazlur-Rahman Nawaz Khan et al. Water mediated reactions: TiO2 and ZnO nanoparticle catalyzed multi component domino reaction in the synthesis of tetrahydroacridinediones, acridindiones, xanthenones and xanthenes, RSC Adv., 2015, 5, 17257-17268, DOI: 10.1039/C4RA13045F
15. Awards Received : NIL
16. Research Guidance:
17. No. of PhD Guided:NIL
18. No. of M.Tech Guided:NIL
19. No. of B.Tech Guided:NIL
20. Details of Professional Membership:NIL
21. Subjects Taught: Engineering chemistry, Chemistry, Environmental Sciences

## Publication Details

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| **Title** | **Publisher** | **Published Year** |
| Green Technologies for Wastewater Treatment and Bioenergy Production  Synergistic Effects of Nanofillers in the Thermal and Optical Properties of Functional Polymers  Development of titanium dioxides for anticorrosive coatings for corrosion protection  Photostable electroactive polymer based nanocomposite films for the protection of mild steel from corrosion  Nanomedicine: General Introduction from A to Z  Corrosion protection performance of titania nanoparticles filled poly (4-methyl-5-vinylthiazole) applied on mild steel in 3.5% sodium chloride solution  Design, Fabrication, and Characterization of Electrically Active Methacrylate-Based Polymer–ZnO Nanocomposites for Dielectrics  UV and corrosion protective behavior of polymer hybrid coating on mild steel  Synergistic effect of functionally active methacrylate polymer and ZnO nanoparticles on optical and dielectric properties  An electrically active methacrylate based polymer reinforced with ZnO–Synthesis, characterization and dielectric properties  Water mediated reactions: TiO2 and ZnO nanoparticle catalyzed multi component domino reaction in the synthesis of tetrahydroacridinediones, acridindiones, xanthenones and xanthenes†  Synthesis, structure determination, and antioxidant activity of novel 1-pyrazolyl-3-substituted isoquinolines, 1-pyrrolyl 3-substituted isoquinolin-1-amine, and 1-pyrazolonyl-substituted isoquinoline | Taylor and Francis  Springer  Elsevier  Sage Publisher  Springer  Sage Publisher  Taylor and Francis  Wiley Publications  Elsevier  Elsevier  Royal Society of Chemistry  Springer | 2025  2025  2023  2021  2021  2021  2018  2017  2017  2016  2014  2013 |

## Patent Details NIL

| **Sno.** | **Title of Patent** | **Submitted/Published/Awarded** |
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