

Dr. Tananji S. Patil

Research Publications –

1. “A Study of Synthetic Methods and applications of polyaniline Nanofibers”, R. S. Kamble, **T. S. Patil**, N. M. Patil. Proceedings on National Conference on Frontiers of Research in Chemistry (FRC-2013) at Sadguru Gadge Maharaj College, Karad (ISBN 978-935137-576-0).
2. “Study of Activity of H-ZSM-5 catalysts on Light Alkane Aromatization” Raviraj Kamble, **Tananji Patil**, Rajan Kamble, Vijay Kothavale, N. Vishwanadham, Proceedings on International Conference on Advances in Materials Science (ICAMS-2016) (ISBN 978-93-5254-490-5) at Raje Ramrao Mahavidyalaya, Jath
3. “Structural and Optical Study of Titanium Dioxide Thin Films by Chemical Spray Pyrolysis” V. P. Kothavale, **T. S. Patil**, R. S. Kamble, C. M. Kannamadi, C. H. Bhosale, Proceedings on International Conference on Advances Materials Science (ICAMS-2016) (ISBN 978-93-5254-490-5) at Raje Ramrao Mahavidyalaya, Jath on 7th and 8th December 2016.
4. “Effect of Some Inorganic Acid Dopants on Electrical Conductivity of Polyaniline” Raviraj S. Kamble, **Tananji S. Patil**, Proceedings on Second International Conference on Advances in Materials Science (ICAMS-2017) (ISBN 978-84-931247-6-5), p. 157-162 at Raje Ramrao Mahavidyalaya, Jath on 22nd and 23rd December 2017.
5. “Preparation, Characterization and Electrical Conductance Properties of HCl and H₂SO₄ Acid Doped Polyaniline” Raviraj S. Kamble, **Tananji S. Patil** Proceedings on International Conference on Materials and Environmental Science (ICMES-2018) ISBN:978-93-5346-224-6 at S. Y. P. Science College Solankur and New College, Kolhapur on 7th and 8th December.
6. “Photoelectrocatalytic degradation of Rhodamine B using N doped TiO₂ thin Films”, Kothavale, V. P., Patil, **T. S.**, **Patil**, P. B., & Bhosale, C. H. (2020). *Materials Today: Proceedings*, 23, 382-388.
7. “Structural, optical, morphological, and supercapacitive studies of electrophoretically deposited nanostructured Mn₃O₄ thin films”, (2024), **Tananji S. Patil**, S.M. Nikam, V.P. Kothavale, R.S. Kamble, R.B. Patil, M.V. Takale, S.A. Gangawane, Thin Solid Films, Volume 792, 140252, ISSN 0040-6090, <https://doi.org/10.1016/j.tsf.2024.140252>.
8. Effect of Nickel (Ni) Ion Doping on the Morphology and Supercapacitive Performance of Mn₃O₄ Thin Films, (2024), **Patil, T.S.**, Kothavale, V.P., Malekar,

- V.P., Kamble, R. S., Patil, R. B., Gurav, K. V., Takale, M. A., Gangawane, S. A, J. Electron. Mater. **53**, 394–407. <https://doi.org/10.1007/s11664-023-10765-4>
9. "Enhanced supercapacitive performance of electrophoretically deposited nanostructured molybdenum-doped Mn₃O₄ thin films", (2024), **Patil, Tanaji S.**, Kamble, Raviraj S., Patil, Rahul B., Takale, Mansing V. and Gangawane, Satish A., International Journal of Materials Research, vol. 115, no. 1, pp. 47-58. <https://doi.org/10.1515/ijmr-2022-0414>
 10. "A Review on Mn₃O₄ and Its Composite Nanomaterials of Diverse Morphologies as an Electrode Material in Supercapacitors", (2021), **Tanaji S. Patil**, Satish A. Gangawane, Mansing V. Takale, International Journal of Scientific Research in Science and Technology (www.ijrst.com), Vol. 8, Issue 2, Print ISSN: 2395-6011, Online ISSN: 2395-602X, doi : <https://doi.org/10.32628/IJSRST>
 11. Study of different acid doped polyaniline nanostructures and their electrical conductance properties, (2022), R. S. Kamble, **T. S. Patil**, R. P. Patil, Journal of Scientific Research, Vol. 14, Issue 2, Pages 659-669.
 12. Annealing-Driven Modifications in ZnO Nanorod Thin Films and Their Impact on NO₂ Sensing Performance, (2025), Nikam, S.M.; **Patil, T.S.**; Nimbalkar, N.A.; Kamble, R.S.; Patil, V.R.; Mote, U.E.; Gilani, S.J.; Mane, S.M.; Lee, J.; Mane, R.D., Micromachines, *16*, 778. <https://doi.org/10.3390/mi16070778>
 13. Nickel ion-doped vertical nanorod array network of ZnO engineered by chemical bath deposition for versatile NO₂ gas sensor, Nikam, S.M., **Patil, T.S.**, Nimbalkar, N.A., Vijay P. Kothavale, Raviraj S. Kamble, Gautam A. Gaikwad, Sagar M. Mane, Jaewoong Lee & Ravindra D. Mane, (2025), *J. Korean Ceram. Soc.* **62**, 330–349. <https://doi.org/10.1007/s43207-024-00469-8>

Book Publication: -

Text book of B.Sc. Part-I, Semester I, Physics – **Mechanics**, Shivaji University, Kolhapur, As Per National Education Policy (NEP-2020) Syllabus from Academic Year 2024-25