

FACULTY PROFILE

1. Name : Dr. SARANYA PE
2. Designation : Assistant Professor, Department of Physics
3. Qualification : M.Phil, Ph.D
4. Mobile number : 9894079990
5. E-mail id : saranya@auxiliumcollege.edu.in
6. Teaching Experience : 3
7. Area of specialization : Energy storage nanomaterials
8. Positions Held in Auxilium: AQAC member, Quiz club coordinator
9. Research Experience and Guidance : 3
10. No. of Papers Published : 6
11. No. of Papers Presented in the National/ International/ Seminars/ Workshops/ Conferences : 16
12. No. of Books Published/Edited/Co-edited : 1
13. Responsibilities held : Coordinator for quiz club, extension activity and association activity.
14. Current Responsibilities : Coordinator for extension activity
15. Membership in professional bodies (Descriptive) : Natural science foundation

PUBLICATIONS

Publications in Journals

1. Saranya PE, Sellasurai S. 'Mesoporous 3D network Ce-doped NiO nanoflakes as high performance electrodes for supercapacitor applications', RSC New journal of chemistry, ISSN 1144 – 0546, -2019, Vol. 43, Issue 19, pp 7441-7456.

2. Saranya PE, Selladurai S. 'Facile synthesis of NiSnO₃/graphene nanocomposite for high-performance electrode in asymmetric supercapacitor device', *Journal of Materials Science*, ISSN 0022-2461, -2018, Vol. 53, Issue 23, pp. 16022-16046.
3. S.Pavithra, B.Mohana, M.Mani, Saranya PE, R.Jayavel, D.Prabu, S.Kumaresan, 'Bioengineered 2D ultrathin sharp-edged MgO nanosheets using *Achyranthes aspera* leaf extract for antimicrobial applications', *Journal of Inorganic and Organometallic Polymers and Materials*, ISSN: 15741443, 15741451, Oct-2020, Vol. 31, Issue 3, pp. 1120-1133.
4. Saranya PE, S Selladurai, 'Efficient electrochemical performance of ZnMn₂O₄ nanoparticles with rGO nanosheets for electrodes in supercapacitor applications', *Journal of Materials Science: Materials in Electronics*, ISSN: 0957-4522, Feb-2018, Vol.29 , Issue 4, pp. 3326–3339.
5. Saranya PE, S.Selladurai , 'Facile synthesis of self-assembled flower like mesoporous zinc oxide nanoflakes for energy applications', *International Journal of Nanoscience*, ISSN: 0219-581X , April-2018, Vol. 17, Issue 01n02, pp. 1760002.
6. Saranya PE, S.Selladurai, 'Novel synthesis of spinel zinc stannate electrode material for supercapacitor applications', *Journal of chemical and Pharmaceutical sciences*, ISSN: 0974-2115, 2015, Vol. 974, pp.2115.

FDP's/ Seminars/ Workshops/Webinars

- ❖ Participated in the Second International Workshop on “Advanced Functional Nanomaterials (SIWAN 2013)” held at Centre for Nanoscience and Nanotechnology, Anna University, Chennai held during 28th - 30th January, 2013.
- ❖ Participated in the multidisciplinary workshop on “The Role and Importance of Nanomaterials in Energy and Environmental Sectors” held at Department of Physics, Sacred Heart College, Tirupattur held on 28th February, 2013.
- ❖ Participated in the “National Conference on Functional Materials – NCFM’13)” held at Department of Physics, Sacred Heart College, Tirupattur held on 19th September, 2013.
- ❖ Participated in the workshop on “Imaging and Laser Metrology (WILM’14)” held at Department of Physics, Sacred Heart College, Tirupattur held on 27th January, 2014.
- ❖ Participated in the workshop on “Preparation, Characterization of Crystalline materials and their applications (WPCCMMA-2015)” held at Department of Physics, Anna University, Chennai held during 26th - 27th November, 2015.

- ❖ Participated in the “Author Workshop organised by Springer” held at Anna University, Chennai held during 2nd November, 2015.
- ❖ Participated in the workshop on “Advanced Characterisation Techniques of Materials” held at Department of Mechanical Engineering, Anna University, Chennai held during 23rd – 24th February, 2015.
- ❖ Participated and exhibited in the “Exhibition on Education, Science, Technology and Innovation (EESTI-2016)” held at Anna University during 24th - 26th January, 2016.
- ❖ Participated in the workshop on “Research for Resurgence” held at College of Engineering Guindy, Anna University, Chennai held during 13th March, 2018.
- ❖ Participated in the state level workshop on “Tamil Nadu state, Council for Science and Technology Research cell and IPR cell, Chennai”, held at Auxilium college during 2nd – 3rd August, 2019.

Book Chapter

1. Saranya PE, R Pachaiappan, JM Fernandes, R Muniramaiah, DP Joseph, ‘Historical perspective of electrochemical energy storage devices’ Smart Supercapacitors, Elsevier, ISBN: 9780323905633, pp. 17-38