S. Bagavathy

Research guide: Dr. D. Thangaraju

Date of joining: July 2021

Department: Physics

Education Details (UG & PG)

- M.Sc. Physics - PSG College of Arts and Science – CGPA 9.2
- B.Sc. Physics - Holy Cross College – CGPA 9.4

Tentative title of the research work

Performance and Fabrication of single-phase metal molybdates and rare earth gallium garnet/non-garnet nanostructures towards supercapacitor device application.

Brief abstract

The modern energy crisis has recently prompted the development of new-generation energy storage device called supercapacitors. The low-temperature cost-effective methods are utilized in the synthesis of metal molybdates and rare earth gallium garnet/non-garnet nanostructures. The synthesized materials are employed as the effective electrode materials for supercapacitor applications.

Publications

- Enhanced asymmetric supercapacitor device performance of graphene templated β-Bi2-xEuxMo2O9 nano self-assembly – Journal of Electroanalytical Chemistry
- Rare-earth gallium garnet ($RE_3Ga_5O_{12}$, RE = Eu, Gd, Dy, Er, and Yb) self-assembled nanostructure based battery type electrodes for efficient asymmetric supercapacitor applications – Journal of Energy Storage