

Faculty Profile



Name: Dr. GOURISANKHAR BRAHMA

Designation: Professor

Teaching areas: Engineering Thermodynamics, Chemistry, Material Science, Environmental Science

Research interests: Study of kinetics and mechanism of reactions involving transition metal complexes with bio molecules and study of their antioxidant, anti-inflammatory, anti-tumour, and anti-carcinogenic activities, Study of thermal properties of nano-scale compounds, composites and complexes of transition metals like Nickel (Ni), Cobalt (Co) and Iron (Fe)

Education :

- Ph.D., Utkal University, Bhubaneswar, Odisha, 2002
- M.Phil. Utkal University, Bhubaneswar, Odisha, 1995
- M. Sc., Utkal University, Bhubaneswar, Odisha, 1993

Selective latest research publications:

No. of publications: 42 (39 SCIE & 3 Scopus) No. of conferences attended: 07 No. of Ph.D. produced: - 03; No. of Ph.D. scholars currently guiding: - 02

1. Synthesis and thermal analysis of nano-crystallite copper phosphate mixture and its composites as thermal energy conservation material in building coating, Sisir Kumar Sethy, Arakshita Majhi, **Gouri Sankhar Brahma**, and Trilochan Swain., *Bull. Mater. Sci. (Springer)* 46:161 (2023). (SCIE, IF = 1.8)
2. Cobalt phosphate-based composite with wall care putty as building envelope material for thermal energy storage, Sisir Kumar Sethy, Arakshita Majhi, **Gouri Sankhar Brahma**, and Trilochan Swain., *Materials Science and Engineering B, (Elsevier)* 290, 116300 (2023). (SCIE, IF = 3.407)
3. Synthesis, Characterization of phosphate-based nano-compounds of Fe and Ca and their thermal analysis, Akash Kumar Sahu, Rudrarapu Aravind, **Gouri Sankhar Brahma**, Trilochan Swain, *Journal of Energy Storage, (Elsevier)* Volume 47, 2021, 103598. (2022). (SCIE, IF = 8.907)
4. Thermal and Optical Behavior of Novel Phosphate-Based Inorganic Mixtures Containing Fe and Na and Their Application as Solar Reflective Coating, Akash Kumar Sahu, Rudrarapu Aravind, **Gouri Sankhar Brahma**, Trilochan Swain, *J. Sol. Energy Eng., (ASME Transactions)* 144(4): 041002 (2022). (SCIE, IF = 2.376).
5. Investigation on the Thermo-Oxidative Degradation of Polyethylene, Poly(vinyl chloride), and Polystyrene using NiPI_{m1.5} and NiPI_{m2} Nanocomposites., Rudrarapu Aravind, Akash Kumar Sahu, **Gouri Sankhar Brahma**, *ACS Omega, (American Chemical Society)* 44(6):29869–29881 (2021). (SCIE, IF = 4.132).
6. Heat repellent behaviour of cobalt based imidazole containing phosphate and meta-phosphate complex mixtures., Rudrarapu Aravind, **Gouri Sankhar Brahma**, Trilochan Swain., *International Journal of Energy Research (Wiley)*, Vol- 45(9): pp- 13911-13924 (2021). (SCIE, IF = 5.164).
7. Synthesis and thermal characterization of sensible thermal heat storage phosphate mixtures as well as neutral composite material, Swapna Samala, **Gouri Sankhar Brahma**, Trilochan Swain, *Journal of Thermal Analysis and Calorimetry (Springer)* Vol-143, pp: 3623–3632 (2021). (SCIE, IF = 4.755)