



Editorial

Dear Readers,

Every contribution to science adds a “**new perspective to our understanding of the world**”. Providing a platform for these meaningful contributions is the cornerstone of the Mapana Journal of Sciences. On behalf of our editorial team, I am pleased to present the second issue of 2026. This issue brings together high-quality research and review articles from diverse scientific disciplines that demonstrate innovative methodologies and practical insights.

The issue opens with an article by Siddanna et al., which explores the effect of film thickness on the electrical resistance and structural properties of silver oxide thin films prepared using RF magnetron sputtering. The study shows that optimizing film thickness can significantly enhance the electrical and microstructural characteristics. Lalasangi et al., investigated the optical and spectroscopic properties of the dye 4-[(5-amino-1-phenylindolizin-3-yl) carbonyl] benzonitrile (4-5APCB) by examining its behaviour in solvents of varying polarity. Its conjugation with green-synthesised silver particles was also examined. Lingappa et al., studied the photophysical properties of the coumarin derivative 13IBC3 using experimental and computational methods in solvents of different polarities. This study showed that solvent polarity influences its optical behaviour, with the molecule exhibiting strong fluorescence. Katageri et al. investigated the dipole moments and the photophysical properties of two iodinated coumarin derivatives. The study demonstrated that the chlorine substitution enhanced the optical and nonlinear optical properties of the compounds.

The growing demand for advanced optical and energy-storage devices has accelerated research into multifunctional thin-film materials. Ganapathi et al., investigated the structural, nonlinear optical, and electrochemical properties of (Mg+Ag) and (Mg+Li) codoped CdO thin films. Sustainable energy management is becoming increasingly important for meeting growing electricity demand. Rajarajeswari et al., developed an inventory model for the electrical energy supply chain. This would optimise the setup costs, reduce carbon emissions, and promote investment in green technologies.

Maheswari et al., introduced a new class of generalised closed sets in nano topological spaces. The proposed framework is further applied to attribute reduction in student dropout risk analysis, a useful approach for

decision-making problems. Maintaining good musculoskeletal health is essential for improving the well-being and productivity of working professionals. Rajamohan et al., investigated the lower-limb health and gait patterns of female teaching professionals through a data-driven survey. This identified prolonged standing, footwear, movement intensity, and work experience as key factors associated with lower-limb discomfort. Bhavya et al., identified and characterized the haemocytes of the beetles *Pheropsophus sibiricus* and *Oryctes rhinoceros* using Leishman staining. Their findings improve our understanding of insect immune cells and may aid future research on insect conservation and control strategies. Rajakumari et al., introduced and studied the new forms of compactness in Grill topological spaces. Their work established important relationships that contribute to the research in generalised topology.

The editorial team expresses its sincere gratitude to all the authors for their valuable contribution. We hope that the articles presented in this issue will inspire further scientific enquiry and contribute meaningfully, adding a “**new perspective to our understanding of the world**”.

Dr Manoj Balachandran

Editor