



Showcasing research from Professor Himansu Biswal's laboratory, School of Chemical Sciences, NISER, Bhubaneswar and HBNI, Mumbai, India, and Dr. Malay Rana's laboratory, Department of Chemical Sciences, IISER, Berhampur, India.

Critical assessment of interactions between ct-DNA and choline-based magnetic ionic liquids: evidences of compaction

DNA compaction is a critical aspect of gene regulation and has significant implications in the field of medicine. Over the years, various approaches have been explored to achieve DNA compaction. Our research focuses on the compaction of DNA using magnetic ionic liquids since ionic liquids have gained prominence as tailored solvents for the storage and stabilization of biomolecules. To gain a deeper understanding of the interactions that drive this compaction, we have employed several spectroscopic studies and molecular dynamic simulations, providing an atomistic perspective on the underlying mechanisms.

As featured in:



See Malay Kumar Rana, Himansu S. Biswal *et al.*, *Chem. Sci.*, 2024, 15, 5507.