

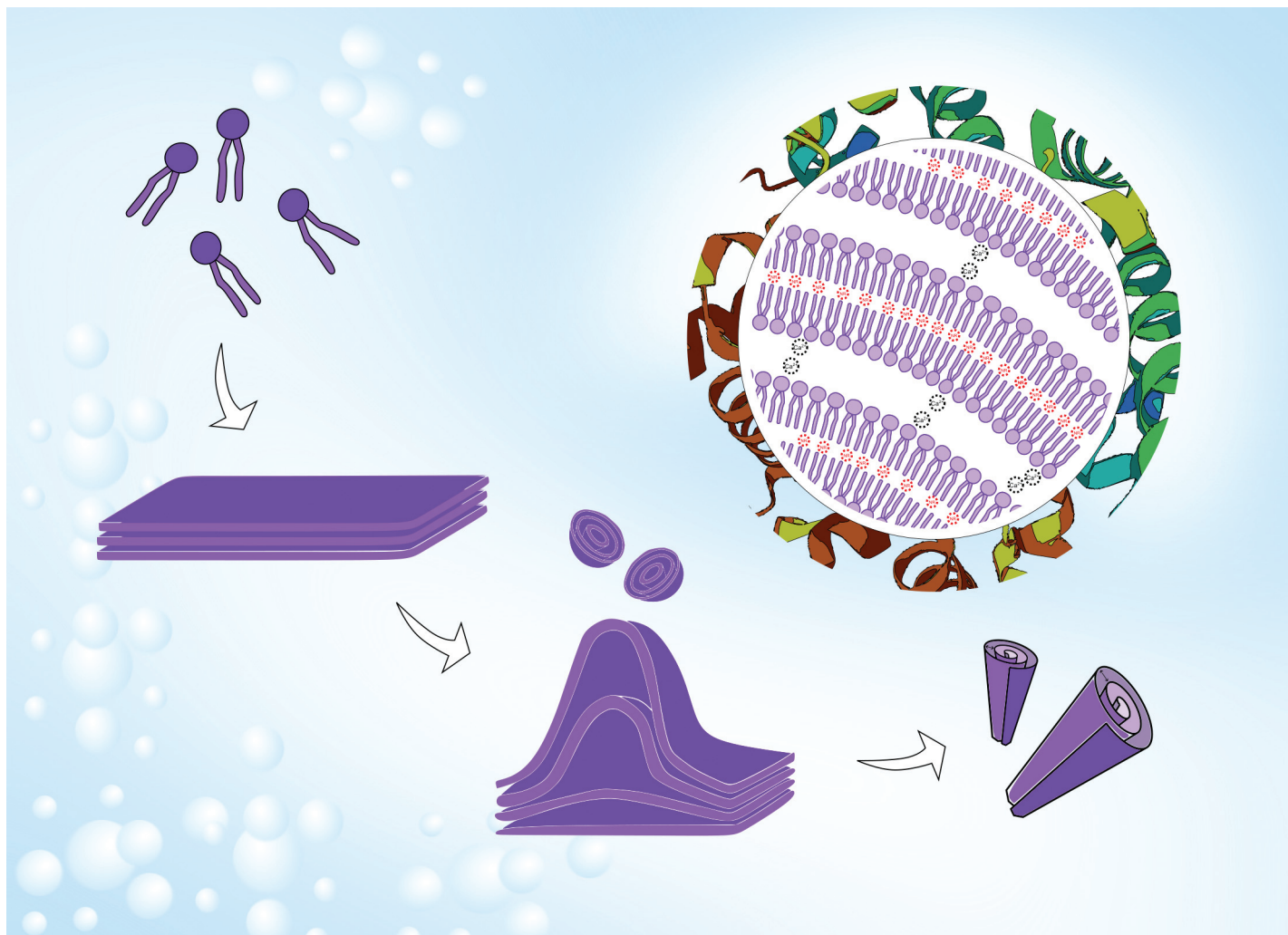
RSC Applied Polymers

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Fundamental questions
Elemental answers



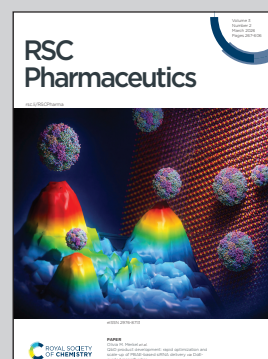
Showcasing collaborative research from Dr Rahul Shukla Department of Pharmaceutics, National Institute of Pharmaceutical Education and Research (NIPER- R), Raebareli, India and Professor Kamalinder K Singh, School of Pharmacy and Biomedical Sciences, University of Lancashire, Preston, United Kingdom.

Naringenin-encapsulated nano-cochleate hydrogel for topical delivery: cellular anti-inflammatory activity and dermatokinetic profiling

Encapsulating naringenin — a poorly water soluble, plant derived flavonoid — into nano cochleates embedded within a hydrogel matrix significantly enhances its physicochemical and biological performance. This delivery system improves naringenin's aqueous dispersibility, cellular uptake, and anti-inflammatory activity, while demonstrating strong ROS scavenging capacity. In addition, the hydrogel based nano cochleates promote superior skin permeation and retention, indicating strong potential for the topical management of psoriasis.

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As featured in:



See Kamalinder K. Singh, Rahul Shukla *et al.*, *RSC Pharm.*, 2026, **3**, 401.