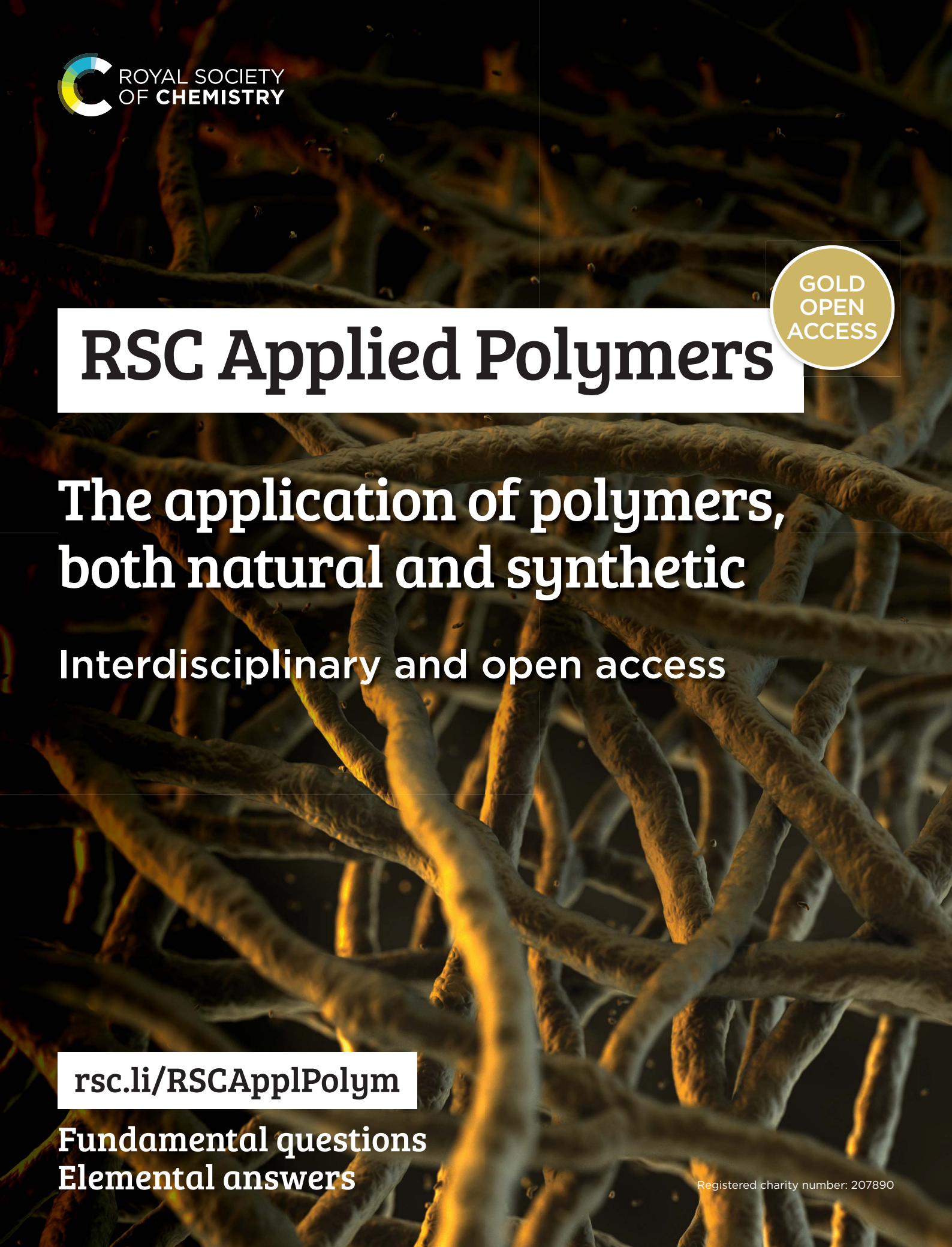
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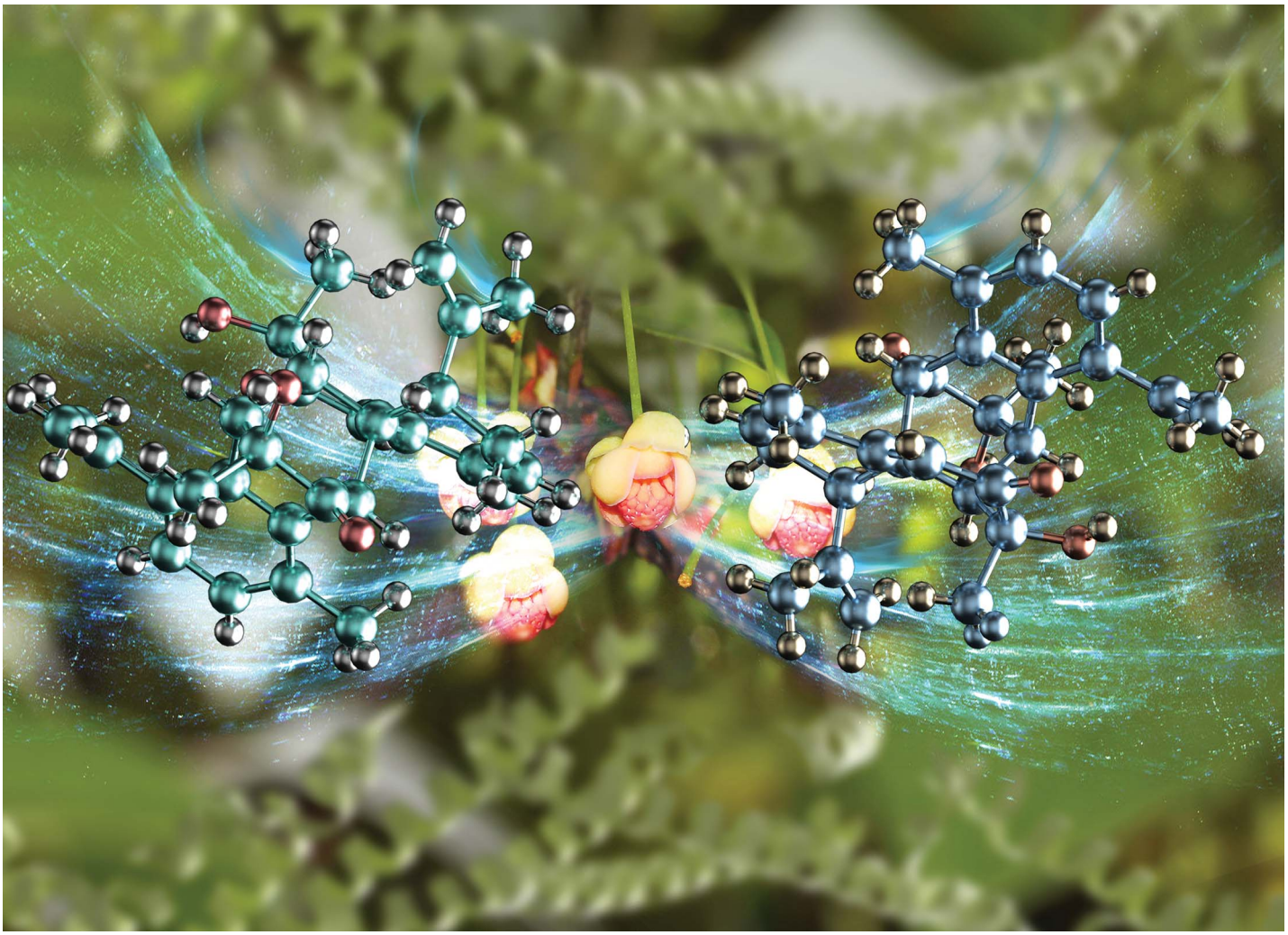
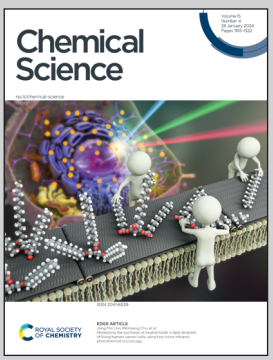


Showcasing research from Professor Pema-Tenzin Puno *et al.*, State Key Laboratory of Phytochemistry and Plant Resources in West China, Kunming Institute of Botany, Chinese Academy of Sciences, Yunnan, China.

Discovery and bioinspired total syntheses of unprecedented sesquiterpenoid dimers unveiled bifurcating [4 + 2] cycloaddition and target differentiation of enantiomers

An unprecedented class of cadinane sesquiterpene [4 + 2] dimers were isolated from *Schisandra henryi*. The divergent total syntheses of these natural dimers and their enantiomers were concisely accomplished in eight linear steps using a protection-free approach. Mechanistic studies illustrated the origin of selectivity in the key [4 + 2] cycloaddition as well as the inhibition of reaction pathway bifurcation *via* desymmetrization. The chemical proteomics results showed that a pair of enantiomers shared common targets and had unique targets.

As featured in:



See Xiao-Song Xue, Pema-Tenzin Puno *et al.*, *Chem. Sci.*, 2024, **15**, 1260.

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