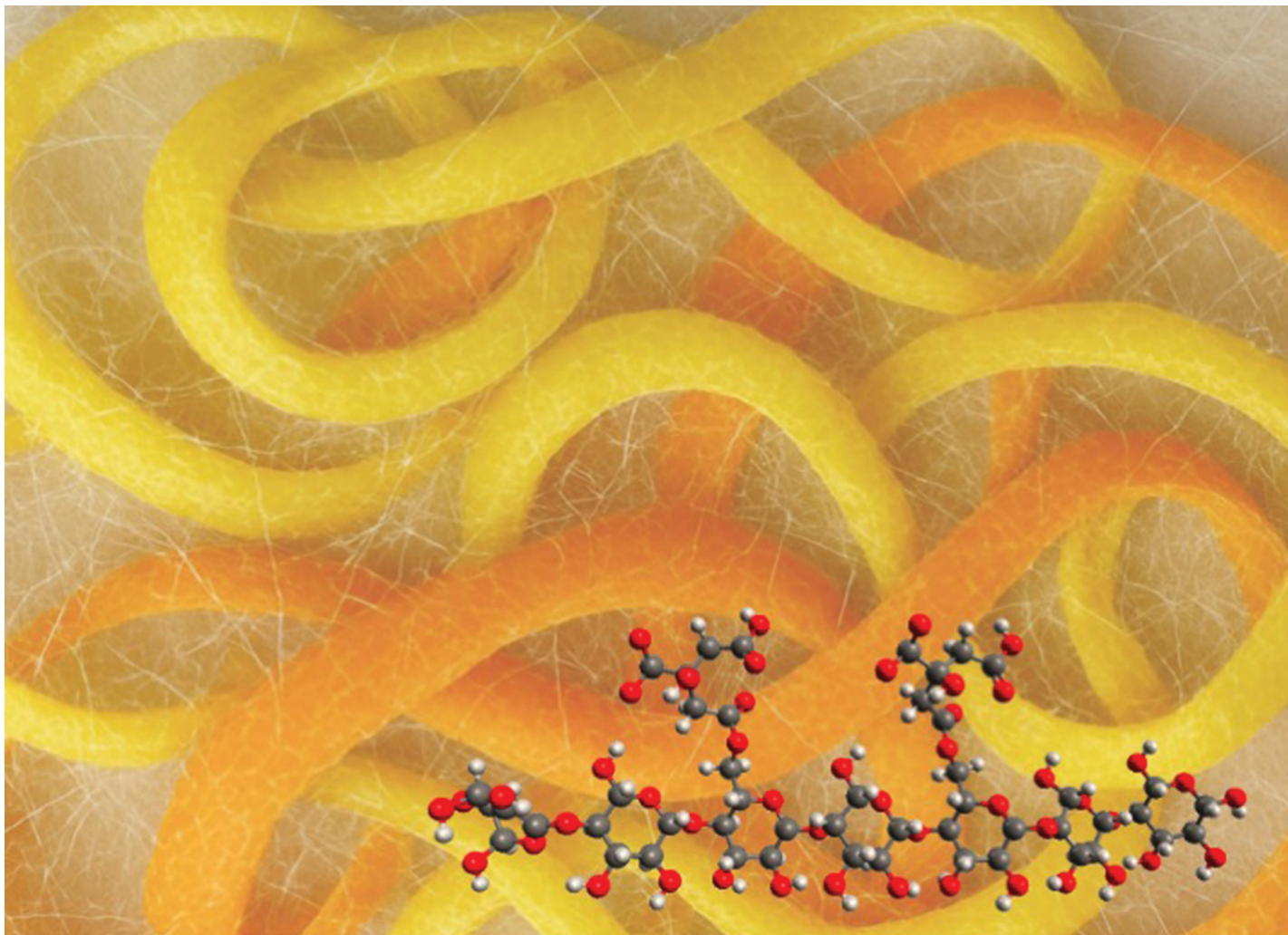




Showcasing joint research from the labs of Professor Anne-Sylvie Tixier, Avignon Université, France, Professor Ana Rosa Garcia, University of Algarve, Portugal, Nicolas Michel, ESAIP Engineering School, France, and Mario Pagliaro, Consiglio Nazionale delle Ricerche, Italy.

CytroCell: a computational study in aqueous solution and infrared spectroscopic structural characterization

Molecular modeling and molecular dynamics simulations reveal the structure and behaviour of CytroCell nanocellulose in aqueous and more complex solutions. Simulations indicate exceptionally strong stabilisation in water promoted by charged citrate groups. DRIFT spectroscopy unveils that CytroCell has a high degree of esterification, corresponding to a lower degree of crystallinity. These results are relevant to applications of this new family of nanocellulose sourced sustainably from citrus industry's main by-product *via* the CytroCav circular economy process.

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### As featured in:



See Anne-Sylvie Fabiano Tixier, Nicolas Michel *et al.*, *Mater. Adv.*, 2026, **7**, 228.