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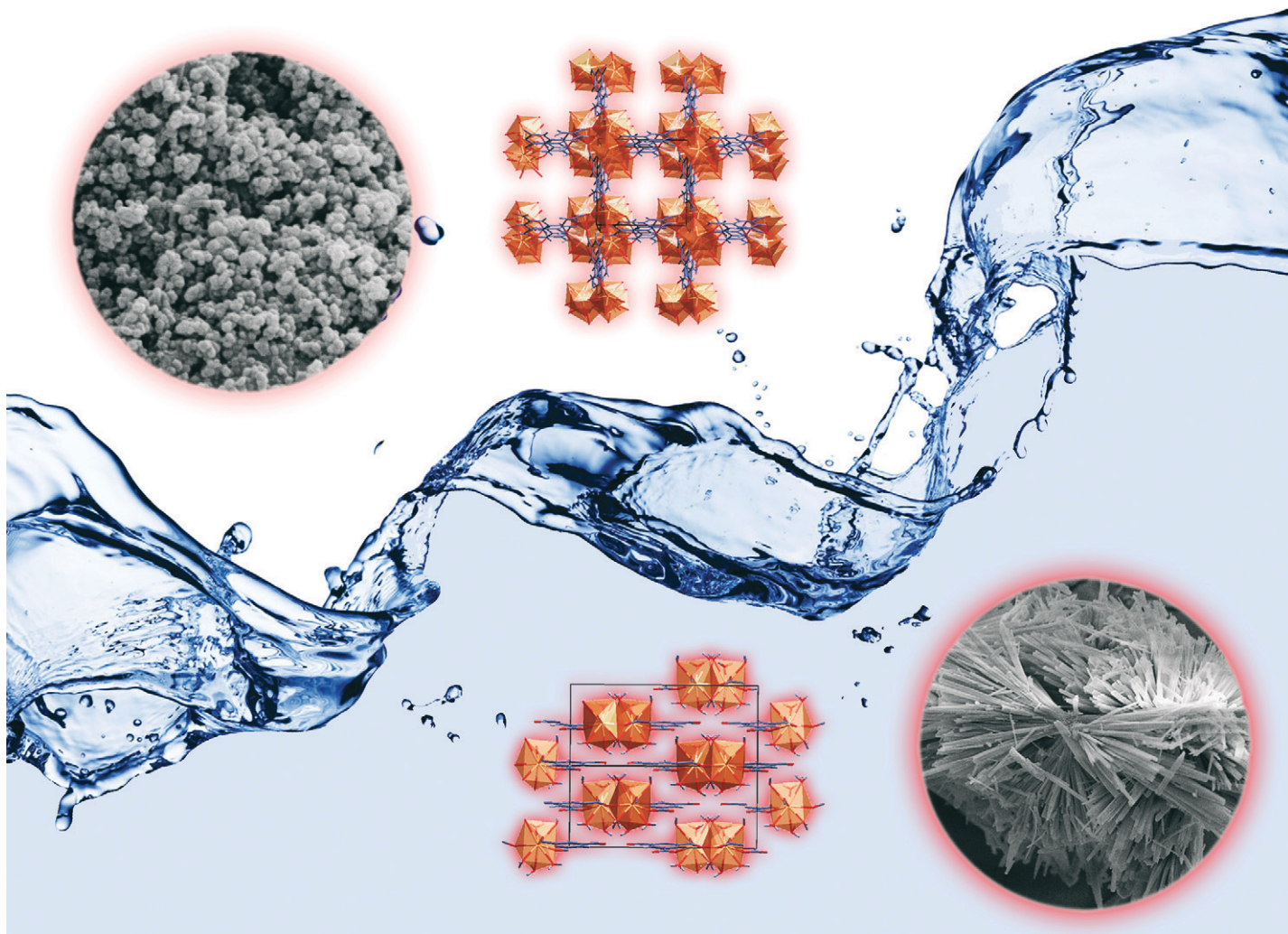
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Showcasing research from Professor M. C. Bernini's laboratory,  
Department of Chemistry, University of San Luis,  
San Luis, Argentina.

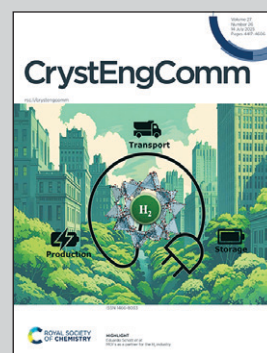
Time dependence of water-induced phase transition in nano- and microcrystalline  $\text{Eu}^{3+}$ -doped MOF-76(Y): different luminescence responses with memory effect

This striking cover visualizes the water-induced phase transition from the 3D  $\text{Eu}$ -doped MOF-76(Y) to the 1D Y:Eu-BTC structure. Two morphologies, "bean-shaped" nanocrystals and "needle-like" nanocrystals along with two structures involved in the phase transition are included at two sides of a water fluid limit.

Furthermore, it emphasizes the distinct luminescence responses represented by different reddish tonalities emerging from the particles and structures, being underlying the memory effect crucial for sensing and technological applications, as detailed in the manuscript "Time Dependence of Water-Induced Phase Transition in Nano- and Microcrystalline  $\text{Eu}^{3+}$ -Doped MOF-76(Y): Different Luminescence Response with Memory Effect".

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As featured in:



See Maria C. Bernini *et al.*,  
*CrystEngComm*, 2025, **27**, 4470.