



DEPARTMENT OF CHEMISTRY
Ph.D. in Chemical and Molecular Sciences

Scientific Seminar

Bio-based Super-Absorbent Materials: development and characterization

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**ROOM 2 - GROUND FLOOR - Department of Chemistry
23 APRIL 2026 h. 16:00**

Bio-based super-absorbent materials are emerging as sustainable alternatives for a wide range of applications, including hygienic-sanitary, agricultural, pharmaceutical, and biomedical fields. This work presents our research group and current research lines, focusing on biobased polymer matrices and superabsorbent systems. General aspects of formulation, processing, properties, and applications are discussed. Selected case studies highlight strategies to enhance water absorption, including structural modification and functionalization, demonstrating improved performance and potential.

All faculty members, PhD candidates, fellows, and students are invited to participate.
Chairperson: **Prof. Elvira De Giglio**, Department of Chemistry, University of Bari