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Laurent David

Professor Laurent David is the Group Leader of “Polymer Materials at the Interface with Life Sciences” at the Ingénierie des Matériaux Polymères (Polymer Engineering Laboratory), *Université Claude Bernard Lyon 1, France*. His research group explores the complex relationships between polymer structure, dynamics, and biological function, with a particular emphasis on natural polysaccharides, such as chitin and chitosans.

Professor David earned his Ph.D. in Materials Science in 1993 at INSA Lyon, MATEIS, under the supervision of Professor Serge Etienne, with a thesis focused on molecular mobility in parastituted polyaryls. In 2001, he obtained his Habilitation to Supervise Research at INSA Lyon, with a thesis on structure and dynamics in selected non-crystalline systems. His earlier training includes a Master of Science in Mechanics and Materials from École Centrale de Lyon (1990), where he investigated hydrogels for orthopedic applications.

Since 2002, Professor David has been Full Professor at Université Claude Bernard Lyon 1, following his tenure as Associate Professor at MATEIS (1994–2001). Over the past decades, he has built an internationally recognized research program with scientific contributions in major domains: Nanostructure analysis of polymer systems, using SALS, synchrotron SAXS, and neutron scattering (SANS); Glass transition and relaxation phenomena in glass forming systems; Natural polymers, especially chitin and chitosan, processing, structural characterization, and evaluation of dielectric, mechanical, and biological properties; Hydrogels for tissue engineering and wound healing, with a focus on structure-function relationships; Natural fiber spinning.

Professor David has supervised 35 doctoral theses and his publication record includes approximately 250 peer reviewed articles, 3 books, and 35 patents, reflecting both his academic depth and his commitment to innovation and technology transfer. His scientific impact is widely recognized, with an H index of 53 (Web of Science) and 61 (Google Scholar).

Beyond his research achievements, Professor David plays a central role in the European scientific community as President of the European Chitin Society (EUCHIS), where he fosters collaboration, knowledge exchange, and the advancement of chitin and chitosan science across Europe and beyond.

Professor Laurent David’s career exemplifies interdisciplinary vision, and sustained leadership in polymer materials and biopolymer research. His contributions continue to shape the field, bridging fundamental understanding with applications that impact biotechnology, medicine, and sustainable materials.

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EUCHIS International School on Chitosan • Iași, Romania • 26th October - 1st November 2026



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Talk: Generalities about chitin and chitosans

This introductory lecture will present the fundamentals of chitin and chitosans. The talk will cover their definitions, chemical structures, occurrence in nature, and isolation from biomass. The principal methods used for their characterization will be briefly introduced, followed by an overview of their key physicochemical and biological properties. Finally, selected applications of chitosan-based materials in biomedicine and environmental protection will be presented.

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