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[150] Characterization of Tannin-Furanic Foams by UV Raman and Infrared Spectroscopy and by X-ray Computed Microtomography

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Samples of totally natural rigid foams, derived from byproducts of wood industries, have been characterized through the exploitation of state-of-the-art spectroscopic techniques combined with imaging and mapping options employing a wide range of electromagnetic radiation from far infrared to X-rays. The synergistic complementation of several analytic techniques available through the beamlines IUVS (UV-Raman), SISSI (Infrared), and SYRMEP (microtomography) at the Elettra Sincrotrone Trieste, triggered with the help of the CERIC proposal 20167027, will enable to optimize, in future subsequent steps, these materials with potential applications as new materials for green-building technology, as well as possibly for water purification from contaminants of emerging concern.

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