XXIV Congresso AIMETA2019 – Associazione Italiana di Meccanica Teorica e Applicata

Roma, 15-19 Settembre 2019

Mini Symposium Proposal

Hydrothermal Ageing of Natural Fibre Polymer Composites

Nowadays, environmental issues drive ever more the interest of the research toward the development of new materials which enhance optimal utilization of natural resources, and in particular, of renewable ones. In this frame, a rapid and wide diffusion of new eco-friendly composites is reported in many fields from automotive to civil engineering, from packaging to sports.

However, the major vulnerability of these sustainable materials to environmental factors as humidity, temperature and ultraviolet radiations, compared to traditional ones, limits their use mainly to the fabrication of non-load bearing indoor components. To overcome this drawback, many efforts have been made to gain more insights about degradation phenomena usually triggered by exposing the eco-friendly composites to accelerated protocols of ageing.

The proposed mini-symposium aims to track the state of the art of the knowledge about the influence of water and/or temperature on the performances of composite systems with intrinsic low environmental impact over all their life cycle.

Chairmen

Pietro Russo – Institute for Polymers, Composites and Biomaterials (IPCB) – CNR.

Francesca Nanni – Department of Enterprise Engineering, University of Rome “Tor Vergata”

Francesco Fabbrocino – Pegaso Telematic University, Italy