EVOLUTION OF COMPOSITES IN THE AERONAUTIC INDUSTRY

Keynote lecture given on Day 3 of FPCM-9, Thursday July 10th 2008, 8 h 30 – 9 h 15

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Pôle de Plasturgie de l’Est (PPE) is a success story in the field of Liquid Composite Molding (LCM). Well known in Europe as a pioneer in the industrial implementation of Resin Transfer Molding (RTM) and related processes, Jean-Pierre Cauchois presents in this lecture the methodology followed by PPE from material selection and characterisation to part fabrication, including permeability measurement and flow simulation. He describes also the key features of the various LCM process variants now in use and discusses about their advantages and limitations. Finally, the development of an aerospace composite part is exposed as case study.