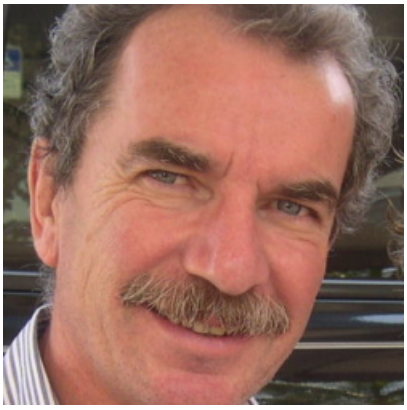

Jacques LAMON

ENS Paris-Saclay - Bâtiment Nord - MV62

EQUIPE MILA

Jacques LAMON

DIRECTEUR DE RECHERCHE ÉMÉRITE

Statut : Chercheur·se

01 81 87 51 75

Courriel

Research activities

- Thermomechanical behavior of composite materials
- Modelling of damage, fracture and durability
- Effects of environment
- Multiscale approaches to behavior, fracture and durability
- Probabilistic approaches to fracture and damage

Jacques Lamon received an award from the Seymour Cray company in 1990 for his work on failure statistics based predictions of brittle failure. In 2006, he was elected Fellow of the American Ceramic Society. In 2007 he received the First Prize of Best Paper Awards from the American Ceramic Society. He has authored a book on Mechanics of brittle fracture and damage: probabilistic approaches (in French), more than 300 technical articles (including 200 refereed journal and conference proceedings articles) on ceramics reliability, and the thermomechanical behaviour of fibre-reinforced ceramic matrix composites. He has edited a book on Ceramic Matrix Composites, he has contributed to 13 books; he was the editor of 14 conference proceedings, and 3 journal special issues (Composite Science & Technology and Annales de Chimie journals). He is also the author/co-author of more than 15 testing method standards (CEN). He presented more than 70 invited letures.

Teaching activities

- Thermomechanical behavior of ceramics, composites and materials
- Microstructure-properties relationships
- Probabilistic approaches to fracture and damage

Responsabilities

- Founder Member of the French Society of Ceramics 1982
- President of the French Society of Composites Materials 1999-2009; 2013-
- President of the European Society of Composite Materials 2006-2008
- Member of ESCM Council since 1999
- Member of Board of the French Federation of Materials since 2003
- Member of the Scientific Committee of the French Association for Mechanics since 2005
- Member of Commission ASTM C28 on Advanced Ceramics 1993 - 1999
- Member of the European Commission of Normalization (CEN/TC 184)"Advanced Technical Ceramics - Ceramic Composites" since 1995
- Member of ISO (International Organization for Standardization (ISO/TC 206 : expert on composites, Project Leader WG44) since 2007
- Member of Lecture Panel of Editions Herms/Lavoisier, since 1994: Collection "Etudes en mcanique des matriaux et des structures".
- Scientific Editor ISTE-WILEY, Material Science Series.
- Membre of American Ceramic Society-Wiley book committee
- Member of Scientific Committee of : Annales de Chimie - Science des
- Matriaux, Mcanique et Industries, Revue des Composites et des
- Matriaux Avancs.
- President of Scientific Council of Program COMPTINN 2010-2013
- Member of board of Program MAIA (Advanced Methods in Mechanics) [FRANCE] : Composites
- Organization of Conferences and Symposia

Publications

2024

Journal articles

The influence of grinding process on the mechanical behavior of SiC/SiC composite tubes under uniaxial tension
C. Morel, E. Baranger, J. Lamon, C. Marques, S. Le Bras, J. Braun, C. Lorrette
Journal of the European Ceramic Society, 2024, 44 (1), pp.91-106. ⟨10.1016/j.jeurceramsoc.2023.07.067⟩

2023

Journal articles

The influence of internal defects on the mechanical behavior of filament wound SiC/SiC composite tubes under uniaxial tension
C. Morel, E. Baranger, J. Lamon, J. Braun, C. Lorrette
Journal of the European Ceramic Society, 2023, 43 (5), pp.1797-1807. ⟨10.1016/j.jeurceramsoc.2022.12.040⟩

Tensile strength analysis and fractography on single nuclear grade SiC fibers at room temperature
L.C.M. Barbosa, C. Lorrette, S. Le Bras, E. Baranger, J. Lamon
Journal of Nuclear Materials, 2023, 576, pp.154256. ⟨10.1016/j.jnucmat.2023.154256⟩

Statistical Analysis of the Ultimate Strength of Filaments, Tows and Minicomposites
Jacques Lamon, Mohamed R'Mili