

# CURRICULUM VITAE

## André PINEAU

Emeritus Professor of Materials Science & Engineering  
Ecole des Mines de Paris – ParisTech (France)

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## EDUCATION

1. Engineering Degree. Ingénieur Civil des Mines, 1965.
2. Ph.D (Materials Science). Ecole des Mines de Nancy, 1969.

## BACKGROUND and PROFESSIONAL APPOINTMENTS

- Joined the Materials Research Center of Ecole des Mines in 1965. Prepared a PhD on "Thermomechanical Heat Treatments applied to steels (Ausforming) and a Theory of Precipitation Hardening in Ni base Superalloys".
- Promoted Research Group Leader for High Strength Steels in 1969.
- Appointed "Maître de Recherches" in 1971.
- Visiting scientist for 12 months at MIT in the Materials Science and Engineering Department in 1972/1973 with Pr. R. Pelloux.
- One month stay at Kyoto University with Professor I. Tamura, February 1977.
- Appointed Professor in Materials Science in 1979. Head of the Materials Science and Engineering Undergraduate Department since 1979.
- Visiting Professor at M.I.T., Feb.-May 1983.
- Head of the Research laboratory associated with the CNRS (URA 866) from 1978 to 1994.
- Scientific advisor at the French Atomic Energy Authority (CEA) since 1980 and at Electricité de France (EDF) since 1994, ARCELOR since 1998, SPMR since 1997.
- Member of CADAS (Comité des Applications - French Academy of Sciences – 1994-2000).
- Member of the French Academy of Engineering, since 2000.
- Editor of Nuclear Engineering and Design Journal (2000-2007).
- Member of Advisory Board of Editors of Fatigue and Fracture of Engineering Materials and Structures Journal.
- Expert in many Failure Analysis in nuclear, transportation, pipeline, aeronautical and aerospace industries.

## PROFESSIONAL and HONORARY SOCIETY MEMBERSHIPS

- SF2M, DVM, ASTM, FEMS, ESIS, MECAMAT member
- Member of several French Research Laboratories Committees
- Scientific advisor at CEA, EDF, ARCELOR, RENAULT, SPMR
- Vice President of the European Structural Integrity Society (ESIS) 2002-2006.

## **DISTINCTIVE PROFESSIONAL AWARDS and HONORS**

1974: Rist Price (SF2M)  
1983: Osmond Price (SEIN)  
1987: H. Becquerel Price (French Academy of Sciences)  
1989: Silver Medal (CNRS)  
1991: Portevin Medal (SF2M)  
1992: GDF Price (French Academy of Sciences)  
1992: Honoray Member of the DVM (Germany)  
1994: Great Medal (SEIN)  
1996: Griffith Medal (ESIS)  
1997: Gold Medal (FEMS)  
1999: Honorary Medal (SF2M)  
2011: Irwin Medal (ASTM)  
2013: Acta Materialia Gold Medal

## **OTHERS**

1989 : Ordre des Palmes Académiques  
1991 : Ordre National du Mérite

## **MAIN RESEARCH ACTIVITIES**

- Supervisor of 86 PhD students.
- About 300 research papers in refereed international journals dealing with :
  - Physical metallurgy of phase transformation in metallic alloys.
  - Precipitation hardening in metals and alloys.
  - Fatigue crack growth rate behaviour in Al, Ti and Ni based alloys.
  - High temperature fatigue in austenitic stainless steels and Ni based superalloys.
  - Creep crack growth behaviour.
  - Local approach to ductile and brittle fracture of steels.
  - Dynamic crack propagation and crack arrest in steels.
  - Ductile to Brittle Transition in steels.
  - Phase transformation in steels, Ni-based superalloys, Zr based alloys, and Al alloys.
- Author of 6 books
- Co-author of about 20 books
- Editor of 10 books
- 2 patents

## **MAIN TEACHING ACTIVITIES**

- Head of the Undergraduate Department of Materials Science and Engineering at Ecole des Mines.
- Courses
  - Continuum Solid Mechanics, Phase Transformations.
  - Physical and Mechanical Metallurgy (Deformation behavior, Creep, Fatigue, Fracture Mechanics, etc...).
  - Organization of the Internships for the students.
- Graduate courses.
  - Plasticity
  - Damage and Fracture
  - Fracture Mechanics