



ELSEVIER
PERGAMON

Comprehensive Structural Integrity

Fracture of Materials
from Nano to Macro

◆ **VOLUME 6:**

Environmentally-Assisted Fracture

Volume Editors

◆ J. Petit

◆ P. Scott

Editors-in-Chief ◆ I. Milne ◆ R. O. Ritchie ◆ B. Karihaloo

Contents

Preface	vii
Contributors to Volume 6	xi
6.01 Stress Corrosion Cracking	1
H. E. HÄNNINEN, <i>Helsinki University of Technology, Finland</i>	
6.02 Hydrogen-assisted Cracking	31
R. P. GANGLOFF, <i>University of Virginia, Charlottesville, USA</i>	
6.03 Cracking of Hydride-forming Metals and Alloys	103
C. E. COLEMAN, <i>AECL, Chalk River Laboratories, ON, Canada</i>	
6.04 Environment-assisted Fatigue in Liquid Environments	163
A. TURNBULL, <i>National Physical Laboratory, Teddington, UK</i>	
6.05 Environmentally Assisted Fatigue in the Gaseous Atmosphere	211
J. PETIT, G. HÉNAFF, and C. SARRAZIN-BAUDOUX, <i>Ecole Nationale de Mécanique et d'Aérotechnique, Chasseneuil-du-Poitou, France</i>	
6.06 Environmental Effects on Crack Growth in Polymers	281
J. C. ARNOLD, <i>University of Wales, Swansea, UK</i>	
6.07 Deterioration of Steel Reinforced Concrete	321
G. K. GLASS, <i>Fosroc International, Staffordshire, UK</i>	
6.08 Radiation Embrittlement of Reactor Pressure Vessel Steels	351
C. A. ENGLISH and J. M. HYDE, <i>AEA Technology, Oxon, UK</i>	
Subject Index	399