

Contents of Volume 3

INVITED PAPERS

On the critical problems in physico-mechano-structural foundations of fracture T. Yokobori	1145
A J based engineering usage of fracture mechanics C. E. Turner	1167
<i>Theme 1</i>	
PRACTICAL APPLICATIONS OF FRACTURE MECHANICS	
<i>E. Fracture Resistance of Welds</i>	
Microstructural analysis of the cold working effect on the fracture toughness of weld metal in HSLA steel welds L. Nedeljković, A. Radović and S. Sedmak	1193
The influence of microstructure and biaxial stress on crack propagation in steels as studied in SEM G. Venkataraman, V. Thyagarajan and A. Srinivasulu	1201
Influence of microstructure on weldmetal toughness property of line pipe steel S. K. Chaudhuri and V. Ramaswamy	1209
Significance of pop-in fracture in high nickel cryogenic steel weldments K. Tanaka, H. Takashima and H. Mimura	1219
Fracture toughness of simulated H.A.Z. G. Bernard, L. Devillers, F. Faure and B. Marandet	1227
Creep crack growth in a CrMoV throttle valve pressure vessel M. C. Coleman	1235

Theme 2

CRACK TIP SINGULARITY ANALYSIS AND COMPUTATION

F. Cracks in Composites

Fracture analyses of angle - PLY laminates T. Nishioka and S. N. Atluri	1245
A theory for laminated plates with a through-the-thickness crack E. P. Chen	1253
Fracture mechanisms in the peeling failure of adhesive joints A. Crocombe and R. Adams	1265

Theme 3

PHYSICAL FRACTURE PROCESSES - STRUCTURAL ASPECTS

I. Creep Fracture and Related Phenomena: Cracks and Notches

Notch weakening and strengthening in creep of $\frac{1}{2}$ Cr $\frac{1}{2}$ Mo $\frac{1}{4}$ V steel S. E. Ng, G. A. Webster and B. F. Dyson	1275
Creep damage accumulation and fracture under multiaxial stresses B. J. Cane	1285
Critical examination of parameters for predicting creep crack growth E. M. Christian, D. J. Smith, G. A. Webster and E. G. Ellison	1295
The interrelation between prior creep damage and creep crack propagation in steels D. Worswick and R. Pilkington	1303
Crack growth mechanisms maps R. J. Fields and E. R. Fuller	1313
Creep crack growth characterization of austenitic stainless steel G. G. Musicco, D. J. Boerman and G. Piatti	1323

Theme 5

FATIGUE

E. Low Crack Growth Rate and Threshold

Threshold ΔK values and non-closure of fatigue cracks C. J. Beevers	1335
Experimental procedure for fast measurement of threshold in fatigue crack propagation P. Chappuis, J. Masounave and J. P. Bailon	1343
High cycle fatigue and threshold behaviour of polycrystalline copper W. Hessler, H. Mullner and B. Weiss	1349

On the mechanisms of threshold behaviour J. N. Vincent and L. Rémy	1357
Threshold of fatigue crack growth in a low alloy steel J. K. Musuva and J. C. Radon	1365
A criterion for threshold stress intensity in fatigue crack growth A. T. Yokobori and T. Yokobori	1373
<i>H. Damage and Low Cycle Fatigue</i>	
On the interaction of hardening and fatigue damage in the 316 stainless steel J. L. Chaboche and H. Kaczmarek	1381
An interaction effect consideration in cumulative damage on a mild steel under torsion loading*	
T. Bui-Quoc	
Regularities of similarity and fatigue damage accumulation under irregular loading V. P. Kogaev and A. P. Gusenkov	1395
Understanding fatigue-creep interactions D. A. Miller and W. J. Plumbridge	1403
The low-cycle fatigue and cyclic behaviour of zirconium L. Handfield and J. I. Dickson	1411

*Articles marked with an asterisk can be found at the end of Volume 5.