

## High Temperature Oxidation Group Publications

### Selected published research papers written by group members

- W.M.Pragnell and H.E.Evans, "Chromium Depletion at 2-Dimensional Features During the Selective Oxidation of a 20Cr-25Ni Austenitic Steel", Oxidation of Metals, in press.
- W.M.Pragnell and H.E.Evans, "A Finite-Difference Model to Predict 2D Depletion Profiles Arising from High Temperature Oxidation of Alloys", Modelling and Simulation in Materials Science and Engineering 14 p733-740 (2006)
- W.M.Pragnell, H.E.Evans, D.Naumenko and W.J.Quadackers, "Aluminium Depletion in FeCrAlY Steel During Transitional Alumina Formation", Materials at High Temperatures 22 (3/4) (2005)
- M.P.Taylor, W.M.Pragnell and H.E.Evans, "Evidence for the Formation of Al-Rich Reservoir Phases Resulting from Interdiffusion Between an MCrAlY Coating and Ni-based Substrate", Materials Science Forum 461-464 p239-246 (2004)
- S.Gray, M.H.Jacobs, C.B.Ponton, W.E.Voice and H.E.Evans, "A Method of Heat Treatment of Near gamma-TiAl to Enhance Oxidation Resistance by the Formation of a Ti5Si3 Layer", Materials Science Engineering A 384 (1-2) p77-82 (2004)
- S.Gray, K.Berriche-Bouhanek and H.E.Evans, "Oxide Growth Stresses in an Austenitic Stainless Steel Determined by Creep Extension", Materials Science Forum 461-464 p755-762 (2004)
- Y.Li, H.E.Evans, I.R.Harris and I.P.Jones, "The Oxidation of NdFeB Magnets", Oxidation of Metals 59 p169-182 (2003)
- G.R.Millward, H.E.Evans, I.P.Jones, C.D.Eley and C.W.Mowforth, "The Influence of Carbonyl Sulphide on the Initiation of Filamentary Carbon Deposition on Stainless Steel", Materials and Corrosion 54 p864-869 (2003)
- H.E.Evans and M.P.Taylor, "Diffusion Cells and Chemical Failure of MCrAlY Bond Coats in Thermal Barrier Coating Systems", Oxidation of Metals 55 (1/2) p17-34 (2001)
- M.P.Taylor and H.E.Evans, "The Influence of Bond Coat Surface Roughness and Structure on the Oxidation of a Thermal Barrier Coating System", Materials Science Forum 369-372 p711-718 (2001)
- H.E.Evans, G.R.Millward, M.Aindow and C.W.Mowforth, "The Influence of Oxide Layers on the Initiation of Carbon Deposition on Stainless Steels", Oxidation of Metals 56 p231-250 (2001)
- H.E.Evans, S.Osgerby and S.R.J.Saunders, "Cracking and Spallation of Chromia and Alumina Scales During Thermal Cycling", Materials Science Forum 369-372 p491-498 (2001)
- H.E.Evans and J.R.Nicholls, "Prediction of Oxide Spallation from an Alumina-Forming Ferritic Steel", Proceedings of 'Lifetime Modelling of High Temperature Corrosion Processes: an EFC Workshop' p37-49 (2000)
- M.P.Taylor, H.E.Evans, C.B.Ponton and J.R.Nicholls, "A Method for Evaluating the Creep Properties of Overlay Coatings", Surface and Coatings Technology 124 p13-18 (2000)