

**European Concerted Action on  
Advanced Solder Materials for High-Temperature Applications;  
their nature, design, process and control in a multiscale domain**

**COST ACTION MP0602**

**Expression of Interest**

***Submitted by:***

**Dr.S.A.Mucklejohn**  
Ceravision Limited  
The Mansion, Bletchley Park  
Milton Keynes, MK3 6EB, UK

E-mail: [stuart.mucklejohn@btinternet.com](mailto:stuart.mucklejohn@btinternet.com)

***Company background***

Ceravision Limited (See [www.ceravision.com](http://www.ceravision.com)) is a SME based in the UK specialising in the design and development of electrodeless microwave powered light sources for the visible and UV ranges.

***Fields of study:***

Development of electrodeless microwave powered light sources including the discharge tube and the microwave power source.

***Expertise of proposer:***

Design of low cost microwave power sources. Design of high intensity discharge lamps. Derivation, determination, assessment and calculation of thermochemical parameters for metal halide systems, metals and alloys. Life cycle assessments.

***Techniques:***

Assessment of thermochemical parameters by MTDATA  
Calculation of phase diagrams using MTDATA  
Light source measurements and diagnostics

***Collaborators***

**Dr.A.T.Dinsdale**  
National Physical Laboratory  
Hampton Road,  
Teddington, Middlesex TW11 0LW, UK

E-mail: [alan.dinsdale@npl.co.uk](mailto:alan.dinsdale@npl.co.uk)

**Dr. R.Devonshire**  
High Temperature Science Laboratories  
Department of Chemistry, University of Sheffield  
Brook Hill, Sheffield S3 7HF, UK

E-mail: [r.devonshire@sheffield.ac.uk](mailto:r.devonshire@sheffield.ac.uk)