

FORM FOR EMPLOYERS

**INSTITUTION AGH University of Science and Technology, Faculty of Materials
Science and Ceramics, Department of Physical Chemistry and Modelling**

CITY Kraków

POSITION Associate professor

DISCIPLINE Technical sciences

POSTED

EXPIRES

WEBSITE www.uci.agh.edu.pl/konkursy

KEY WORDS modeling, materials science and engineering, numerical methods,
interdiffusion, electrodiffusion, diffusion soldering, heat transport, inverse problems

DESCRIPTION (field, expectations, comments): Candidate should have scientific title of doctor of science in the field of chemistry or technical sciences and scientific achievements documented by publications in scientific journal as well as presentations at conferences in the field of materials science and engineering, in particular:

- a) Processes of mass, charge and heat transport in multicomponent materials.
- b) Electrodiffusion in multicomponent materials.
- c) Heat transfer in multiphase materials.
- d) Joining of multicomponent materials.
- e) Diagnostics of corrosion and transport processes in reinforced concrete materials.
- f) Inverse problems, determination of transport properties and geometry of the domain.
- g) Modeling and numerical methods of conjugated mass and charge transport in multicomponent systems and heat transfer in multiphase systems.

Candidate should have experience and practical skills in C++ and Fortran programming as well as specialized programs: CES Edu Pack and Comsol Multiphysics.

Candidate should have documented cooperation with industry partners: common research grants, research agreements with industry, common master and PhD thesis.

Candidate should have experience to independently conduct teaching and give lectures in the field of modelling of materials and processes and numerical methods. His knowledge of English should be fluent in speaking and writing. It should have a reputation for high personal culture.