

Short Curriculum Vitae

Alexander Ilyushechkin

Qualifications

Almost 30 year's extensive experience in the field of material science:

- Mineral matters behavior at gasification and combustion conditions;
- Syngas processing and syngas cleaning technology development;
- High temperature processing of materials with particular application to the pyrometallurgical production;
- Experimental studies of slags properties, phase equilibria and process control;
- Metal membrane technology and alloy development for hydrogen separation;
- Material forming and shaping for various applications;
- Powders, ceramics and alloys sintering; material shaping: extrusion, pelletising;
- Thick films technology: high temperature superconductors (HTS), composite oxides, resistive films;
- Thin films technology: HTS, AlN and other multi component ceramic films;
- High temperature processing of materials with particular application to the coal gasification;
- Carbon membranes and nano-materials;
- Plasma gasification;
- Metal corrosion

Education

1998, Doctor of Philosophy,

- Joint study in Solid State Microelectronics between The University of Queensland (Australia), Moscow Institute of Electronic Technique (Russia) and Central Research Technological Institute (Russia)
- Thesis title: "HTSC films: processing methods, structure, transport properties and microwave applications"

1987, Master of Science,

- Department of Solid State Physics, Moscow University of Engineering Physics

1986, Bachelor of Science,

- Department of Solid State Physics, Moscow University of Engineering Physics

Employment history (last 20 years)

- 2004–present, Senior Research Scientist Energy Flagship, Research Scientist Energy Technology CSIRO, Pullenvale, Australia
- 2001–2004, Post-Doctoral Fellow, Research Fellow Pyrometallurgy Research Centre, The University of Queensland, Brisbane, Australia
- 1999–2001, Research Engineer, Nanochem Research Pty Ltd
- 1995–1999, Research Scientist, Advanced Ceramic Development, Uniquet Ltd, The University of Queensland, Brisbane, Australia

Professional activities

Reviewer for Fuel, Fuel Processing technology, Energy & Fuels, Corrosion science, Materials Science and Engineering, B, Superconducting Science and Technology, and Corrosion Science.

Publications

More than 60 journals and over 40 conference papers related to Energy technology, Material science and High temperature processing.

Awards

International Pittsburgh Coal Conference-2010: winner in category "Outstanding technical paper" (2010)