Research Associate in Theoretical Condensed Matter Physics

The position is occupied from 01.12.2013

Dr. Yevgen Melikhov

Presented here information is actual on the 30.10.2013:

THE HIRSCH INDEX
The ***h*-index** is **11**
Authorship of more than 50 articles in peer-reviewed science and engineering journals, one book chapter and one patent, as well as more than 100 conference presentations

EDUCATION

- MSc. Engineering Physics with specialization Theoretical Physics (honors diploma), Donetsk State University, Donetsk, Ukraine, 1996
- PhD Physics of Condensed Matter and Material Research, Charles University, Prague, Czech Republic, 2001

ACADEMIC EXPERIENCE

- 2006-present Lecturer, Cardiff University, Cardiff, U.K.
- 2002-2005 Post-Doctoral Research Associate, Iowa State University, Ames, Iowa, U.S.A.
- 1997-2002 Researcher, Institute of Physics ASCR, Prague, Czech Republic
- 1999 (August – October) Visiting Scholar, Iowa State University, Ames, Iowa, U.S.A.
- 1996-2001 Post-graduate student, Charles University, Prague, Czech Republic
- 1994-1996 Engineer, Donetsk Physical & Technical Institute, Donetsk, Ukraine

HONOURS AND AWARDS
1995 "Soros student", International Soros Science Education Program (ISSEP)
2001-2002 "NSF-NATO Postdoctoral Fellowship in Science and Engineering"

Dr. Y. Melikhov currently is a lecturer at the School of Engineering of Cardiff University, Cardiff, U.K., with the responsibilities in Research, Teaching and with Administrative duties. Considering criteria for the EAgLE project where all three aspects of research (fundamental knowledge, experiments and modelling) have to be utilized to understand complete physical properties of nanosystems and maybe even to engineer materials from the first principles, opportunity to work under this project was found by Dr. Y. Melikhov as an extremely exciting opportunity and challenging from the scientific point of view. Having an MSc in Engineering Physics with Theoretical Physics specialization and a PhD in Physics of Condensed Matter and Material Research he believes that his own skills and knowledge will allow him to contribute highly to EAgLE project and to the overall research conducted in the X-ray Spectroscopy and Microanalysis Group.
Actual research interests of Dr. Melikhov are within the field of Magnetism, more specifically the production, characterization and modelling of magnetic materials and also the modelling of multiphysics coupling of magnetics with other phenomena, magnetic materials investigations, including extensive work on magnetostrictive, magnetoresistive and magneto-caloric materials. Also, his research interests lie within practical application of magnetics to industrial related problems, e.g., nondestructive evaluation using magnetic methods. Recently, research interests of Dr. Y. Melikhov have also included the research of the multidisciplinary field of Complex Systems, more specifically modelling in Economics and modelling of Brain dynamics. Having done quantitative investigation and interpretation of electronic structure on Quantum Espresso code for Density Functional Theory, he has quite an extensive knowledge of computational tools in Physics and Engineering including, e.g., writing Finite Element Modelling code.