



This fall **Drs. Jerzy and Barbara Szpunar** joined respectively the Mechanical Engineering and Physics and Engineering Physics Departments in the College of Engineering.

A professor of Materials Science from McGill University, Jerzy was educated in Poland and received his PhD and DSci degrees from the Academy of Mining and Metallurgy in Cracow. He has held various visiting positions at Sussex and Durham Universities in England, worked in laboratories of the Finish Academy of Science, Riso National Laboratories and held visiting professor positions in Seoul National University, Queens University and Tohoku University. He has also served as an adviser to the National Atomic Agency Research Centre in Bandung, Indonesia and International Atomic Energy Agency in Vienna.

Barbara obtained her BS in Physics, at Jagiellonian University, Cracow where she also completed a Master thesis in the field of theoretical high energy physics. Barbara received a PhD in Physics at the Silesian University,

Katowice. Her experience includes visiting many international laboratories (RISØ, Max Planck) and working at a number of Universities (Technical University in Krakow, Durham University in UK, University of Pittsburgh in USA and Queen's University in Canada) and the Royal Military College of Canada. After working for over six years at Atomic Energy Canada Limited (AECL) where she pursued her interest in the simulations of accidents in CANDU and Advanced CANDU reactors (ACR), Barbara moved to the University of Saskatchewan with her husband.

Jerzy's research interests span the areas of materials-related investigations. Most recently his research is focused on various types of coatings for the aerospace industry, biomedical materials, nuclear materials and hydrogen extraction and purifications. He is the incoming Tier I Canada Research Chair in Advanced Materials for Clean Energy.

Barbara's research interests include Computer Simulations of CANDU and

Contact Information

Professor Jerzy Szpunar
Ph: 966-5374
Email: jerzy.szpunar@usask.ca

Dr. Barbara Szpunar
Ph: 966-6462
Email: b.szpunar@usask.ca

next generation reactors (physical & chemical properties of nuclear materials, accidents, first principles, predictive simulations of properties of new fuels, computer simulations of properties and processing of complex, high tech materials). Barbara is currently involved in modeling the effect of radiation damage on the properties and performance of nuclear materials. These studies are very important for the development of new generation reactors, which work under extreme conditions and old reactors that have operational times extended.

Says Dean Janusz Kozinski "If you like, you could say they are the nuclear power couple. We are very excited to have the Szpunars working at the College."

They have already established an impressive list of new research projects involving industry partners such as Cameco and Evraz, and will utilize the resources of the Canadian Light Source synchrotron.