

CURRICULUM VITAE

Arnold Zdenek, RNDr., CSc. (born 10.12.1949) - Czech nationality

Principal researcher at the Institute of Physics of the Academy of Sciences of the Czech Republic

Professional career:

- 1973 graduated at Faculty of Mathematics and Physics, Charles University, Prague
- 1974 RNDr. in Physics, Charles University, Prague
- 1979 Ph.D. (CSc.) in Solid State Physics, Institute of Physics, Prague
- 1979-1985 Junior Scientist
- 1985-1996 Senior Scientist
- 1996-2004 Principal Researcher
- 2005–2013 Head of the Department of Magnetism and Superconductors
- 2014 - present - Principal Researcher

Professional interests - expertise:

- experimental studies of pressure effects on temperatures of magnetic-phase transitions of intermetallic compounds with a special emphasis on magnetism of Fe-based compounds
- experimental studies of the pressure effects on magnetic moment and magnetocrystalline anisotropy of solids
- studies of volume anomalies connected with magnetic phase transitions, thermal expansion under pressure
- high pressure studies of thermal expansion, transport and magnetic properties of perovskites that exhibit colossal magnetoresistance

Research grants:

- Grant Agency of CR - "Environment induced electron structure changes leading to novel magnetic phases" 1.1.2015 - 31.12.2017
- Grant Agency of CR „Magnetic poly-functional materials – new access of theory and experiment“ 1.1.2012 - 31.12.2014
- Grant Agency of CR - „Anisotropic magnetocaloric effect - enhancement of application potential of magnetic refrigerants“ 1.1.2009 - 31.12.2011
- Grant Agency of CR- "New generation of functional intermetallics (Materials with application potential based on coupled magnetic, structural and transport anomalies)" – 1.1.2006 - 31.12.2008
- Grant Agency of the Academy of Sciences of Czech Republic - " Interface in nanogranular systems – the effect of external high pressures on the magnetic and magnetotransport properties" – 1.1.2006 - 31.12.2008
- EU Specific Targeted Research Project N°: 027827, "Competitive Contact-Less Position Sensor Based on Magnetoresistive Nano-Contacts" (2005 – 2008)
- Main investigator of several joint projects AS CR and CNR Italy (2007-2009, 2010-2012, 2013-2015) AS CR and CNRS France (2007-2008, 2009-2010, 2011-2012), AS CR and CSIC Spain (2007-2008), AS CR and SAS Slovakia (2006-2007)

Scientific output:

- 10 invited talks at international conferences
- more than 190 (37 in the last five years) papers in international journals
- Number of citations without auto-citations: 2428
- Hirsch index: 21
- Referee of international journals (e.g. Phys.Rev.Lett., Phys.Rev.B, JMMM, Japcom) and Grant agencies (e.g. ESF (USA), GA ČR, GA UK)