

Curriculum Vitae

Alexandra Marsenić

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Date of birth: November 5th, 1978

Place of birth: Martin, Slovak Republic

Nationality: Slovak

Employment

October 2006 – present: Researcher at the Geophysical Department of the Institute of Earth Sciences of the Slovak Academy of Sciences (formerly the Geophysical Institute of the Slovak Academy of Sciences), Dúbravská cesta 9, 840 05 Bratislava.

My scientific work originally focused on the magnetohydrodynamics of the Earth's core and the generation of cosmic magnetic fields. I am currently trying to contribute to the theory of magnetotellurics.

October 2011 – December 2013: Researcher at the Institute of Geophysics of the Czech Academy of Sciences, Boční II 1401, 141 31 Prague 4, Czech Republic. Post-doctoral stay.

Education

November 2010: Awarded PhD degree in Geophysics.

Department of Astronomy, Physics of the Earth and Meteorology, Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava.

Dissertation thesis: Stability of sheared magnetic fields.

Advisor: Doc. RNDr. Sebastián Ševčík, CSc.

November 2006: Awarded RNDr. (Rerum Naturalium Doctor) in Physics.

Department of Astronomy, Physics of the Earth and Meteorology, Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava.

Rigorous thesis: Influence of a position of a critical level on the rise of magnetic and thermally driven instabilities.

October 2003 – September 2006: Doctoral studies at the Faculty of Mathematics, Physics and Informatics, Comenius University Bratislava, Department of Earth and Planetary Physics in the field of Physics, specialization Geophysics.

June 2003: Awarded Mgr. degree in Physics.

Diploma thesis: Calculation of seismic hazard of the Mochovce Nuclear Power Plant site for a hybrid earthquake occurrence model.

Advisor: RNDr. Peter Labák, PhD.

September 1998 – June 2003: Master's degree in Physics at the Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava, Department of Earth and Planetary Physics.

Projects (as principal investigator)

Currently: VEGA project n. 2/0100/24: Analysis of special magnetotelluric situations and their manifestations in electromagnetic response.

2015-2017: VEGA project n. 2/0067/15: Numerical solution of the kinematic problem for geomagnetic secular variations.

2012-2014: VEGA project n. 2/0137/12: Resistive processes as a source of hydromagnetic motions in the Earth's core.

2006: Comenius University grant for young scientists UK/354/2006: Stability analysis of non-homogeneous magnetic fields in rotating densely stratified horizontal layer.

2004: Comenius University grant for young scientists UK/88/2004: Stability analysis of non-homogeneous magnetic fields in rotating systems with density stratification.

Invited lectures

November 2013: A kinematic model of vertical geomagnetic field variation resulting from a steady convective flow. Geophysical Institute of the Slovak Academy of Sciences, Prague, Czech Republic.

September 2011: Stability of sheared magnetic fields. 7th Conference of Slovak and Czech Physicists, Faculty of Electrical Engineering, University of Žilina, Žilina, Slovak Republic.

December 2005: Steady states of two-dimensional radial flow in the corner. Departamento de Matemática Aplicada, Universidad Complutense de Madrid, Madrid, Spain.

Awards

August 2011: Second prize in Competition for the best scientific work of young physicists. Awarded by Slovak Physical Society.

July 2010: Award of the President of Slovak Republic Ivan Gašparovič for young scientists of SAS.

April 2010: Second prize in Competition for the best publication of young scientists of Slovak Academy of Sciences up to 35 years. Awarded monothematic scientific work: Stability of sheared magnetic fields.