

## Curriculum Vitae

**Name:** Katalin Gribovszki  
**Complete name:** Dr. Katalin Eszter Gribovszki  
**Date and place of birth:** 21 February 1974., Sajószentpéter, Hungary  
**Nationality:** Hungarian  
**Marital Status:** Single  
**Religion:** Calvinist  
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 Sopron, H – 9400  
 Hungary  
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**Present Employment:** **Postdoc** at Department of Meteorology and Geophysics, Faculty of Earth Sciences,  
 Geography and Astronomy, University of Vienna  
 Temporary position (between 01/05/2013 and 30/04/2014)

**Senior research fellow** at Geodetic and Geophysical Institute, Research Centre for  
 Astronomy and Earth Science, Hungarian Academy of Sciences  
 Permanent position  
 H-9400, Sopron, Csatkai E. utca. 6-8., Hungary  
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### EDUCATION:

**Bachelor of Science, Mathematics; 2010** (2007-2010)  
 Savaria University Centre, University of West Hungary;

**PhD., Seismology; 2006**  
 Geo-environmental Sciences Program, Kitaibel Pál Environmental Doctoral School,  
 University of West Hungary,  
*Dissertation:* Studying the Geophysical and Geological Environment of Earthquakes and  
 Deterministic Seismic Hazard of Debrecen city (Hungary) Using Geographic Information  
 System Tools;

**Master of Science, Geoinformatics; 2002** (2000-2002)  
 Applied Geoinformatics postgraduate course, Faculty of Civil Engineering, Budapest  
 University of Technology and Economics;

**Master of Science, Environmental Engineering; 1998** (1993-1998)  
 Environmental engineering course, Faculty of Forestry, University of West Hungary;

### OTHER QUALIFICATIONS:

- ArcObjects programming, one-week course, ESRI Hungary, 2008
- ArcGIS II., one-week course, ESRI Hungary, 2007
- ArcGIS I., one-week course, ESRI Hungary, 2006
- International Training Course on Seismology, Seismic Data Analysis, Hazard  
 Assessment and Risk Mitigation, five-week course  
 GeoForschungsZentrum, Potsdam, Germany, 2004
- 6th Workshop on Three-Dimensional Modelling of Seismic Waves Generation,  
 Propagation and Their Inversion, two-week course  
 Abdus Salaim International Centre for Theoretical Physics, Trieste, Italy, 2002

### LANGUAGES:

Hungarian (mother tongue), English (intermediate), Russian (intermediate)

### SCIENTIFIC CARRIER:

2012 – present senior research fellow, Geodetic and Geophysical Institute,  
 Research Centre for Astronomy and Earth Science, HAS (Previous

	name before 01/01/2012 is Geodetic and Geophysical Research Institute, Hungarian Academy of Sciences)
2006 – 2012	<u>research fellow</u> , Geodetic and Geophysical Research Institute, Hungarian Academy of Sciences (HAS)
1999 – 2006	<u>junior research fellow</u> , Geodetic and Geophysical Research Institute, Hungarian Academy of Sciences

*Main research interests:*

- Creating special seismotectonical GIS including earthquake epicentres and detailed data of them, and 22 other different digital maps (ArcView 3.2);
- **Detailed analyses of the geo-environmental parameters at the surroundings of earthquake epicentres at territory of Hungary by applying geoinformation systems (ArcView Spatial and 3D Analyst);**
- **Deterministic seismic hazard estimation by hybrid method** (method developed at Dipartimento di Scienze della Terra, Trieste, Italy);
- **Creating seismic risk map of Debrecen and Budapest by applying GIS tools;**
- Detailed investigations of the earthquakes occurred in the eastern part of Nyírség (Érmellék region, Hungary-Romania);
- Hypocenter-relocation by HYPOINVERSE-2000 taking into account the special 3D velocity model of deep sediments situated in the Pannonian basin;
- Focal depths analysis of earthquakes in the Carpathian Basin;
- **Estimation of the upper limit of prehistoric earthquakes using the parameters of intact speleothems in Hungary, in Bulgaria and in Slovakia (in-situ measurements in karstic caves).**

Visiting scientist

2008 (for 2 months)

Seismological Group, Department of Earth Sciences, University of Trieste, Italy

Financed by ourselves

*Description of activity:*

Modelling seismic wave propagation by hybrid method and producing seismic hazard and risk maps for the territory of the capital of Hungary (Budapest);  
Seismic microzonation of Budapest.

Visiting PhD. Student

2001, 2002 (for 4 months) and 2003 (for 4 months),

Seismological Group, Department of Earth Sciences, University of Trieste, Italy

Fellow financed by European Union Marie Curie Fellowship,

Research Programme: ESD

Contract Number: EVK2-CT-2000-57002

*Description of activity:*

Modelling seismic wave propagation by hybrid method and producing seismic hazard and risk maps for the territory of Debrecen city Hungary;  
Seismic microzonation of Debrecen.

**COMPUTER SKILLS:**

Softwares: MS Office, Adobe Acrobat Writer, Adobe Photoshop, GIMP, Corel Draw, Maple13; MATLAB (basic knowledge);  
Operating systems: MS Windows XP, LINUX (user level);  
Softwares in seismology: Seismic Handler, Hypoinverse-2000, DST softwares for hybrid method, SeisGram 2K, Scenario Shake Map;  
GIS Softwares: ArcView 3.2 (Spatial Analyst, 3D Analyst), ArcGIS 9.1, Surfer 8.0, Autodesk Land Dev., Raster Design.

**AWARDS:**

- Meskó Attila award (previously: “Paper of the year”, Award of the Association of Hungarian Geophysicists), 2011;
- Szádeczky-Kardos Elemér Award of the GeoSciences (X.) Department of Hungarian Academy of Sciences — II. prize, 2006;

- 4<sup>th</sup> National University Environmental Student Conference — special prize, 1998;
- Diploma Work Award of HUNGIS (Hungarian Geoinformatics) Foundation — III. prize, 1998.

**TEACHING AT UNIVERSITY LEVEL:**

Geoinformation System;	practice, University of West Hungary;
Monitoring and modelling;	practice, University of West Hungary;
Environmental Informatics;	theory, University of West Hungary;
Descriptive geometry;	practice, University of West Hungary;

**MEMBERSHIPS:**

Association of Hungarian Geophysicists  
 Hungarian Geodetic and Cartographic Society  
 European Geosciences Union

**PARTICIPATIONS IN PROJECTS:**

*Projects led as principal investigator (PI) in Geodetic and Geophysical Research Institute, Hungarian Academy of Sciences*

Hungarian-Slovak bilateral project between Academy of Sciences

Project name: „*Assesment of the peak ground horizontal acceleration generated by paleo-earthquakes from failure tensile stress of speleothems. Study of seismicity of the remote past with the use of engineering seismology.*”

2011-2012

Host Institute: Slovak Geophysical Institute, Slovak Academy of Sciences;

Host colleague: Dr. Ladislav Brimic;

Project name: „*Seismic risk of the inner town of Budapest*” (deterministic method);

Employer: Generali-Providencia Insurance Company

2008

Hungarian-Bulgarian bilateral project between Academy of Sciences (No. 42)

Project name: „*Assesment of the peak ground horizontal acceleration generated by paleo-earthquakes from failure tensile stress of speleothems. Study of seismicity of the remote past with the use of engineering seismology.*”

2006-2007

Host institute: Seismic Mechanics and Earthquake Engineering, National Institute for Geophysics, Geodesy and Geography, Bolgár Tudományos Akadémia;

Host colleague: Prof. Ivanka Paskaleva;

Project number: *IKTA5-142/2002*;

Project name: *Intelligent miner data analysis centre* (analysing earthquake epicenters data as well);

2003-2005

Leader Institute: University of Veszprém, Technical Informatics, Research and Technological Centre

*Project participation*

Project number: *OTKA K105399*;

Project name: „*Seismic hazard and microzonation of Budapest*”

2013-2016

PI: Dr. Erzsébet Györi, Geodetic and Geophysical Institute, Research Centre for Astronomy and Earth Science, HAS

Project name: „*Seismic hazard of Budapest and the surroundings in the base of measured subsoil parameters*”

Employer: Allianz Hungária Insurance Company

2010

PI: Dr. László Tóth

Project number: *OTKA K78332*,

Project name: „*Kinematic and dynamic models of landslides by means of geodetic observations along the high bank of the Danube at Dunaszekcső, Hungary*”  
2009-2012

PI: Prof. László Bányai, Geodetic and Geophysical Research Institute, HAS

Project number: *CEI project 1202.038-09*; (CEI=Central European Initiatives)

Project name: “*Unified Seismic Hazard Mapping for the Territory of Romania, Bulgaria, Serbia and Republic of Macedonia*” and represent an example of efficient cross-border cooperation under the coordination of the Department of Geosciences – University of Trieste and of the Abdus Salam International Centre for Theoretical Physics in Trieste.  
2010-2011

PI: Prof. Panza GF, Seismological Group, Department of Earth Sciences, University of Trieste, Italy

Project-number: *OTKA T043413*,

Project-name: „*New forward and inverse methods for the synthetic modelling of the gravity field*” 2003-2006

PI: Dr. Gábor Papp, MTA GGKI

Project-number: *OTKA T038099*;

Project-name: „*Integrated study of recent earthquakes and paleoearthquakes in the Carpathian basin*”  
2002-2005

PI: Dr. Gyöző Szeidovitz, MTA GGKI, Szeizmológiai Főosztály

Project-number: *EVGI-2001-00061 OASYS*

Project-name: „*Integrated Optimization of Landslide Alert Systems*”, *EU5, 109.740*  
2003-2004

PI: Dr. Gyula Mentés, MTA GGKI

Project-name: „*Regular geodynamical study of the Paks Nuclear Power Plant 5km surroundings*”  
every second year

PI: Prof. László Bányai, MTA GGKI

Project-number: European Union, Marie Curie fellowship, *EVK2-CT-2000-57002*

Project-name: „*Deterministic seismic hazard computations for Debrecen, Hungary by applying hybrid method and seismic microzonation of Debrecen*”  
2003.03.15. – 2003.07.15.

PI: Prof Panza GF, Seismological Group, Department of Earth Sciences, University of Trieste, Italy

Project-number: European Union, Marie Curie fellowship, *EVK2-CT-2000-57002*

Project-name: „*Modelling of seismic ground motion and its amplification along some profiles in the city of Debrecen*”  
2001.11.01. – 2002.03.01.

PI: Prof Panza GF, Seismological Group, Department of Earth Sciences, University of Trieste, Italy

Project-name: „*Final dumping of small and middle intensity radioactive waste from power plant; Local geodynamical investigation of Mecsekfalja fault line by geodetic methods surrounding Ófalu.*”  
2001-2004

PI: Dr. Gyula Mentés, MTA GGKI

Employer: Hungarian Geological Institute (MÁFI)

Project-number: *OTKA T025318*;

Project-name: „*Modeling of gravity field of Carpathian Basin*”  
2000-2002

PI: Dr. Gábor Papp, MTA GGKI

Project-number: *AKP 98-68 2,5*

Project-name: „*Integral study of geodetic environmental analysis methods on the Sóskut network*”  
1999-2000

PI: Dr. László Bányai, MTA GGKI

Project-number: INCO-COPERNICUS PROGRAMME - Contract N°ERBIC15- CT96-0203,  
Project-name: „*European Network on Seismic Risk, Vulnerability and Earthquake Scenarios  
(ENSeRVES)*”  
*1997-2000;*

Principal coordinator: Prof. Mauro Dolce (Universita di Basilicata, Potenza, Italy);  
PI in Hungary: Dr. Gyöző Szeidovitz, MTA GGKI Szeizmológiai Főosztály

Project-number: *PHARE project/OSS No. ZZ9524 0106 L001.*

Project-name: „*Development of GIS of Fertő-Hanság National Park and Szigetköz Landscape-protection  
Area*”  
*1998-2000*

PI: Dr. István Márkus, University of West Hungary, Geodetic and Remote Sensing Department