

## Mgr. Renata Lukešová, Ph.D. (maiden name: Gaždová)

<b>Date and birthplace</b>	16.016.1981, Kolín, Czech Republic
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### EDUCATION

- 2004 - 2012 Ph.D. in “*Applied Geology*”: **Faculty of Science, Charles University in Prague**  
Institute of Hydrogeology, Engineering Geology and Applied Geophysics  
Ph.D. Thesis: “*Application and interpretation of seismic surface waves in a broad frequency range*”, Advisor: doc. RNDr. Jan Vilhelm, CSc.
- 1999 - 2004 Master in “*Applied Geophysics*”: **Faculty of Science, Charles University in Prague**  
Institute of Hydrogeology, Engineering Geology and Applied Geophysics  
Master Thesis: “*Gravity and magnetic survey of mafic intrusions in the Western pluton of the Krušné hory batholith (Saxothuringian zone, Bohemian massif)*”, Advisor: RNDr. Vratislav Blecha, CSc.

### EMPLOYMENT

- Since 2007 Department of Seismotectonics, **Institute of Rock Structure and Mechanics of the ASCR, v.v.i.**; V Holešovičkách 94/41, 182 09, Prague 8, Czech Republic, [www.irsm.cas.cz](http://www.irsm.cas.cz)
- measurement and interpretation of geophysical data and groundwater level variations, participation on a research projects
- 10/2012 – 12/2017: maternity leave**
- followed 2 years of part-time work at IRSM AS CR v.v.i.
  - organization of four-member family improve her diplomacy, management, communication and multitasking skills
- 2002 - 2006 **G IMPULS Praha, spol. s r.o.**, Přístavní 24, 170 00, Prague 7, Czech Republic, <http://www.gimpuls.cz/>
- measurement and interpretation of near-surface geophysical data

### AWARD

- EGU 2011: Union Outstanding Student Poster (OSP) Awards 2011
- for poster presentation: **R. Gaždová**, O. Novotný, J. Málek, J. Valenta, M. Brož, P. Kolínský: Groundwater level variations in the seismically active region of Western Bohemia in the years 2005-2010

### AREAS OF RESEARCH INTEREST

Seismic surface waves, Methods of frequency-time analysis, Dispersion curve inversion, Seismoactive regions, Applied geophysics, Gravimetry, Ground water level variations

### MISCELLANEA

**Computer literacy:** Matlab (advance), Python (basic), graphical software, seismic data processing  
**Languages:** English (quite good), German (basic)

**SOLVED GRANTS AND RESEARCH PROJECTS (in the field that is the subject of the current grant project):**

- 2010 - 2018 CzechGeo / EPOS - the system of geophysical observations performed by geoscience institutions of the Czech Republic
- 2009 - 2013 GAČR 205/09/1244 : Nature of seismicity in the Hronov-Poříčí fault area
- 2009 - 2012 GAAV IAA300120905: Dynamic of crustal fluids in the western part of the Bohemian Massif and its relation to stress changes
- 2009 - 2010 VaV project No. 1/2009 “Paleoseismology of the fault structures near NPP Temelín”, funded by the State Office for Nuclear Safety, Czech Republic
- 2009 - 2010 A/CZ0046/2/0015 „A comparison of seismic swarms in West Bohemia and South Iceland“ - EEA/Norway Grants and the Czech Republic state budget by means of the Research Support Fund
- 2006 - 2010 GAAV IAA300460705: Propagation of seismic surface waves in the Trans-European Suture Zone
- 2006 - 2008 GAUK 236/2006/B-GEO/PrF: Significance of scale factor for determination of seismic shear modulus in subsoil environment. *Leading researcher: Mgr. Renata Gaždová*

**LIST OF PEER-REVIEWED PUBLICATIONS (over the last ten years – period is prolonged due to career interruption due to maternity and parental leave):**

- Lukešová, R.**, Fojtíková, L., Málek, J. and Kolínský, P., 2019: Seismic waves velocities inferred from the surface waves dispersion in the Male Karpaty Mountains, Slovakia. *Acta Geodynamica et Geomaterialia*, 16 (4), 51–464, doi: 10.13168/AGG.2019.0038. IF: 1.062
- Weinlich, F. H., **Gaždová, R.**, Teschner, M., Poggenburg, J., 2016: The October 2008 Novy Kostel earthquake swarm and its gas geochemical precursor. *Geofluids* 16 (5), 826-840. doi: 10.1111/gfl.12187. IF: 2.687
- Gaždová, R.**, Kolínský P., Vilhelm, J., Valenta J., 2015: Combining surface waves and common methods for shallow geophysical survey. *Near Surface Geophysics* 13, 19-32, doi: 10.3997/1873-0604.2014039. IF: 1.232.
- Valenta, J., Rappich, V., Skácelová, Z., **Gaždová, R.**, Fojtíková, L., 2014: The newly discovered neogene maar volcano near the Mariánské Lázně, Western Bohemia. *Acta geodynamica et geomaterialia*, 11 (2), 107-116. doi: 10.13168/AGG.2013.0061. IF: 0.389.
- Kolínský, P., Valenta, J., **Gaždová, R.**, 2012: Seismicity, groundwater level variations and Earth tides in the Hronov-Poříčí Fault Zone, Czech Republic. *Acta Geodynamica et Geomaterialia*, 9 (2), 191-209. IF: 0.530.
- Gaždová, R.**, Vilhelm, J., 2011: DISECA – A Matlab code for dispersive waveform calculations. *Computers and Geotechnics*, 38 (4), 526–531, doi: 10.1016/j.compgeo.2011.03.001. IF: 0.987.
- Gaždová, R.**, Novotný, O., Málek, J., Valenta, J., Brož, M., Kolínský, P., 2011: Groundwater level variations in the seismically active region of Western Bohemia in the years 2005-2010, *Acta Geodynamica et Geomaterialia*, 8 (1), 17–27. IF: 0.530.
- Gaždová, R.**, Kolínský, P., Popova, I., Dimitrova, L., 2011: Surface wave phase velocities between Bulgaria and the Czech Republic. *EGRSE. Exploration Geophysics, Remote Sensing and Environment*, 18 (2), 16-23.
- Málek, J., Novotný, O., **Gaždová, R.**, Žanda, L., 2010: Anomalous propagation of refracted waves beneath the Orlik water reservoir, Czech Republic. *Studia Geophysica et Geodaetica*, 54, 389-401. IF: 1.123.
- Skácelová, Z., Rappich, V., Valenta, J., Hartvich, F., Šrámek, J., Radoň, M., **Gaždová, R.**, Nováková, L., Kolínský, P., Pécskay, Z., 2010: Geophysical research on structure of partly eroded maar volcanoes: Miocene Hnojnice and Oligocene Rychnov volcanoes (northern Czech Republic). *Journal of Geosciences*, 55, 299–311. IF: 1.026.