

## CURRICULUM VITAE

PERSONAL INFORMATION Ing. Jakub Houška, Ph.D., D.E.S.S.



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Sex Male | Date of birth 14/11/1976 | Nationality Czech

## WORK EXPERIENCE

1.4.2012 – till now Researcher

Department of Soil Science and Soil Protection, Faculty of Agrobiology, Food and Natural Resources, Czech University of Life Sciences

- Research and education in the field of soil science

[Research&education](#)

1.7.2009 – 30.9.2011 Asset Manager, Quality Analyst, Project Manager

IBM IDC Brno

- Asset Management, Quality Analyst, Project Manager

[Management/Quality Analyses](#)

1.7.2009 – 30.9.2012 Lecturer

Department of Forest Botany, Dendrology and Geobiology, Department of Landscape Management, Faculty of Forestry and Wood Technology, Mendel University Brno

- Courses and field trips in the frame of the projects "*Management of natural resources in tropics and subtropics - study programs innovation at FFWT MUAF in Brno*" (No. CZ.1.07/2.2.00/07.0156) and "*Support of practical competencies in regional development engineering*" (No. CZ.1.07/2.2.00/28.0303).

[Research&education](#)

2003 – 30.6.2009 Research assistant

Department of Pedology and Geology, Faculty of Forestry and Wood Technology, Mendel University Brno

- Courses of Forest Geology and Forest Pedology, Regional Geology.
- Research focused on forest soil chemistry, comparison of virgin and human-affected forests, etc.

[Research&education](#)

## EDUCATION AND TRAINING

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2000 - 2008 Ph.D.

Mendel University of Agriculture and Forestry, Faculty of Forestry and Wood Technology

Program: Landscape Ecology, Field: Forest Ecology

Dissertation Thesis: *Dynamics of soil properties in natural and semi-natural forest ecosystems: comparative analyses of selected forest soils' properties.*

2001 - 2002 D.E.S.S. (Diplôme d'études supérieures spécialisées) - Master's degree (Remote Sensing and GIS).

Université Pierre et Marie Curie (Paris VI)

▪ Remote Sensing and GIS

1995 - 2000 Ing. - Master's degree

Faculty of Forestry and Wood Technology (FFWT), Mendel University of Agriculture and Forestry (MUAF)

▪ Forest Engineering

## SPECIAL PERSONAL SKILLS

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Mother tongue(s) Czech

Other languages English (state examination), French (DELF2) – active

Spanish, German, Russian – inactive

Other skills Statistical programs: R freeware for statistical computing, EstimateS, Canoco.

## ADDITIONAL INFORMATION

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### Publications

#### Scientific papers:

##### Submitted:

Navrátil T., Rohovec J., Dobešová I., Matoušková Š., Oulehle F., Houška J., Cudlín P. Legacy mercury and stoichiometry with C, N and S in soil, litter and soil solution of adjacent coniferous and deciduous stands at extremely acidified Ore Mountains, Czech Republic. *Environmental Monitoring and Assessment.*

##### Published:

Ash Ch., Tejnecký V., Šebek O., Houška J., Chalac A.T., Drahotad P., Drábek O. Redistribution of cadmium and lead fractions in contaminated soil samples due to experimental leaching. *Geoderma.* 2015, vol. 241-242, p. 126-135.

Kučera A., Šíkl J., Oulehle F., Šamonil P., Marosz K., Hleb R., Houška J., Hruška J. Comparison of modern and traditional methods of soil sorption complex measurement: The basis of long-term studies and modelling. *Ekológia (Bratislava)*. 2014, vol. 33, no. 1, p. 48–59.

Houšková, K., Martiník, A., Palátová, E., Cafourek, J., Houška, J.: Lze zlepšit vzcházivost osiva douglasky tisolisté? *Zprávy lesnického výzkumu*. 2014, vol. 59, no 4, p. 256-263. ISSN 0322-9688.

Janků J., Kučerová D., Houška J., Kozák J., Rubešová A. The evaluation of degraded land by application of the contingent method. *Soil & Water Research*. 2014, no. 9, p. 214–223.

Hruška J., Oulehle F., Šamonil P. et al. Long-term forest soil acidification, nutrient leaching and vegetation development: Linking modelling and surveys of a primeval spruce forest in the Ukrainian Transcarpathian Mts. *Ecological Modelling*. 2012, vol. 244, p. 28-37. DOI: 10.1016/j.ecolmodel.2012.06.025.

Hédl R., Houška J., Banas M, et al. Effects of skiing and slope gradient on topsoil properties in an alpine environment. *Polish Journal of Ecology*. 2012, vol. 60, no. 3, p. 491-501.

Šamonil P., Valtera M., Bek S. et al. Soil variability through spatial scales in a permanently disturbed natural spruce-fir-beech forest. *European Journal of Forest Research*. 2011, vol. 130, no. 6, p. 1075-1091. DOI: 10.1007/s10342-011-0496-2.

Šebesta J., Šamonil P., Lacina, J. et al. Acidification of primeval forests in the Ukraine Carpathians: Vegetation and soil changes over six decades. *Forest Ecology and Management*. 2011, vol. 262, no. 7, p. 1265-1279. DOI: 10.1016/j.foreco.2011.06.024.

Oulehle F., Hleb R., Houška J.,et al. Anthropogenic acidification effects in primeval forests in the Transcarpathian Mts., western Ukraine. *Science of the Total Environment*. 2010, vol. 408, No. 4, p. 856-864. DOI: 10.1016/j.scitotenv.2009.10.059.

Houška J., Schejbalová H. The dynamics of selected soil properties over 60 years in natural forest ecosystems: General tendencies and internal dynamics. *Ekológia-Bratislava*. 2004, vol. 23, p. 66-79.

### Certified methodologies

Borůvka, L. et al. Evaluation methodology of forest soil contamination, Methods for the Forest Soils Pollution Assessment , Forest Soils; Pollution; Potentially Toxic Elements; Persistent Organic Pollutants; Toxicity; Analytical Methods, 2013.

### Conferences

Houška J., Kratina J., Cafourek J., Vašát R., Němeček K., Borůvka L. Stanovení půdních vlastností pomocí difúzní spektroskopie ve viditelném a a infračerveném spektru: vliv metody selekce vzorků a memory-based learning algoritmus v porovnání s PLSR – nová perspektiva pro zemědělce? In: Čapkovičová D. et al. *Pedologické dny: Ekosystémové zložky pôd v poľnohospodárskej a lesnej*

*krajine (sborník abstraktů)*. Bratislava: Výskumný ústav pôdoznalectva a ochrany pôdy, 2014, p. 35.

Tejnecký V., Šlechtová M., Tomková A., Říhová D., Šebek O., Houška J., Drábek O. Vliv vegetačního porostu na zastoupení nízkomolekulárních organických kyselin v lesních půdách. 2014, In: Čapkovičová D. et al. *Pedologické dny: Ekosystémové zložky pôd v poľnohospodárskej a lesnej krajine (sborník abstraktů)*. Bratislava: Výskumný ústav pôdoznalectva a ochrany pôdy, 2014, p. 33.

Houška J., Veska J., Šebesta J. Acidification dynamics of forest soils in Ukraine Carpathians after 60 years and reaction of plant communities. In: HŮNOVÁ, I. *Acid Rain 2005*. Prague: Czech Hydrometeorological Institute, 2005, p. 538. ISBN 80-86690-25-3.

Hruška J., Houška J. Application of soil analyses, repeated after 60 years, for acidification modeling using MAGIC model. In: HŮNOVÁ, I. *Acid Rain 2005*. Prague: Czech Hydrometeorological Institute, 2005, p. 462. ISBN 80-86690-25-3.

#### Projects/stays abroad

- 2000 (IX–XII) Aristotle University, Thessalonica (Faculty of Geotechnical Sciences, Department of Forestry and Natural Environment – 3 months), Greece.
- 2001 (IX) - 2002 (VI) GDTA Toulouse, CIRAD Montpellier, Université Pierre et Marie Curie (Paris VI) diploma D.E.S.S. (Diplôme d'études supérieures spécialisées)
- 2002 (IV) Field survey in the Concouati-Douli National Park, Republic of the Congo
- 2005 (V) University Metz, France
- 2006 (V) E.T.S.I. de Montes, Madrid, Spain
- 2006 Degradation rate of natural forest soils during last 70 years, out of the influence of local pollution resources. Internal Grant Agency, MUAF Brno.
- 2007 - 30.6.2009 the main investigator on behalf of MUAF of the project Grant Agency of the Czech Republic No. 526/07/1187 „Soil acidification in natural forest ecosystems out of local pollution resources. Current state and prediction“
- 2007 (IV) -Swedish University of Agricultural Sciences, Uppsala, Sweden  
-North Karelia University of Applied Sciences Forest and Wood Technology Joensuu, Finland
- 2008 (XII) Département de géographie, Université de Montréal; Ministère des Ressources naturelles et de la Faune, Québec, Canada
- 2009 (VI) Socotra (Republic of Yemen) : field survey in the frame of the project : “Management of natural resources in tropics and subtropics - study programs innovation at FFWT MUAF in Brno” (č. CZ.1.07/2.2.00/07.0156)
- 2011 (I) Socotra (Republic of Yemen) : field survey in the frame of the project : “Management of natural resources in tropics and subtropics - study programs innovation at FFWT MUAF in Brno” (č. CZ.1.07/2.2.00/07.0156)
- 2012 (I-II) Socialist Republic of Vietnam : field survey in the frame of the project : “Management of natural resources in tropics and subtropics - study programs innovation at FFWT MUAF in Brno” (č. CZ.1.07/2.2.00/07.0156)

2013 (II)	Peru: Universidad National Agraria de la Selva Tingo María, field survey in the frame of the project “Support of practical competencies in regional development engineering” (No. CZ.1.07/2.2.00/28.0303)
2013 (XII)	Peru: Universidad National de Ucayali, Universidad National Agraria la Molina, field survey
Memberships	Czech Society of Soil Science, ProSilva Bohemica, Czech Association for Agroforestry