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University of Miskolc  
Faculty of Earth Science and Engineering

CVs

of instructors of courses offered by the faculty in English at  
master programs:

Petroleum Engineering,  
Earth Sciences Engineering,  
Hydrogeology Engineering.

<b>Name: István Bérczi Dr.</b>		
<b>Qualification(s)</b>		
Geologists, Eötvös Loránd University of Science, 1967		
<i>Current employment, position(s)</i>		
Contracted senior expert, MOL Group		
<b>Scientific degree (field, year)</b>		
PhD (1990), Petroleum Geology		
<i>Scholarships (date)</i>		
<b>Teaching activities (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)</b>		
<b>Period</b>	<b>Position</b>	<b>Employer</b>
1978-1982	Geology, invited lecturer	University of Miskolc
1988-1990	Reservoir Geology, visiting professor	Montanuniversität Leoben, Austria (English)
1998 -	Petroleum Geology, Applied Sedimentology, part time professor	University of Miskolc
1995- 2005	Reservoir Geology, invited lecturer	Eötvös Loránd University of Science
1985 – 2010	Petroleum Geology, Reservoir Geology, instructor	Open International Courses, organizer: HOT Engineering, Austria
1985 - 2010	Petroleum Geology, Reservoir Geology, instructor	In-house on-the-job courses for National Oil Corporations in Libya, Iran
<ul style="list-style-type: none"> <li>• <i>Years spent in academia:</i> 20 years</li> <li>• <i>Classes taught in Hungarian:</i> 3</li> <li>• <i>Classes taught in a foreign language:</i> Hydrocarbon geology, Sedimentology</li> </ul>		
<b>Professional experience so far and main achievements</b>		
Number of scientific papers: 92 Cumulative impact factor: 45.84 Independent citations in journals: 50 Number of confidential industry reports: 50		
<b>Relationship of classes taught and scientific/research activities</b>		
a) <i>The most important five publications of the last five years: no open-file publications, reports Confidential material.</i> b) <i>The most important five publications of the entire career: numbers in brackets indicate the number of independent references</i> <ul style="list-style-type: none"> <li>• Bérczi, I., Philips, R. L.: Processes and depositional environments within Neogene deltaic-lacustrine sediments, Pannonian Basin, South-East Hungary. – Geophysical Transactions 1985, 31, 1-3, 55-74.</li> <li>• Bérczi, I.: Pore-space sedimentology: a combined sedimentological reservoir-geological approach to the exploration of the matured petroleum provinces (a case history from the Pannonian Basin) – Acta Geologica Hungarica, 1988, 31, 3-4, 227-263.</li> </ul>		

- Bérczi, I., Hámor, G., Jámor, Á., Szentgyörgyi, K.: Neogene Sedimentation in Hungary. – In: Leigh H. Royden and Ferenc Horváth (eds.) 1988. The Pannonian Basin: A study in Basin Evolution. AAPG Memoir 45., 57-68.
- Bérczi I.: Preliminary sedimentological investigations of a characteristic Neogene depression in the Great Hungarian plain (SE-Hungary). – In: Leigh H. Royden and Ferenc Horváth (eds.) 1988. The Pannonian Basin: A study in Basin Evolution. AAPG Memoir 45., 107-116.
- Phillips, R. L., Révész, I., Bérczi, I.: Lower Pannonian Deltaic – Lacustrine Processes and Sedimentation, Békés Basin. – In: Teleki, P.G., Mattick, R.E., Kókai, J. (eds.) 1994. Basin Analysis in Petroleum Exploration. Kluwer Academic Publishers, 67 - 82.

*Knowledge of English, presentation/teaching experience*

*Language Certificate: superlative degree, 1972*

- *Teaching experience in English abroad:*  
Since 1985 (visiting professorship, ~20 international industry courses)
- *Courses previously taught in English: 3*
- *Number of publications in English: 35*
- *Conference presentations in English: 30*

**Name: Dr. László Berényi**

**Qualification(s), degrees granted by, year**

MSC in Business Economics, University of Miskolc, 2003  
 Environmental Engineer (BSc), University of Miskolc, 2010  
 QMS Lead Auditor, SGS-Hungary, 2004  
 Accountant (OKJ), Perfekt Rt., 2002

*Current employment, position(s)*

University of Miskolc, Faculty of Economics, Institute of Management Science – associate professor

**Scientific degree (field, year)**

PhD (Business Economics, 2007)

*Scholarships (date)*

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**Teaching activities (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)**

Period	Position	Employer
2003-2006	PhD student	University of Miskolc
2007-2009	assistant lecturer	University of Miskolc
2009-2012	assistant professor	University of Miskolc
2013-	associate professor	University of Miskolc

- *Years spent in academia: 11 years*
- *Classes taught in Hungarian: Quality Management, Quality Management Tools, Environmental Management, Innovation Management, Operation Management, Team Management, Project Management, Ergonomics*
- *Classes taught in English: Quality management*

**Professional experience so far and main achievements**

Author of 3 books (1 in English), editor of 1 book (in English). Experiences in project planning and

project management.

- Number of scientific papers: 75
- Cumulative impact factor: 0
- Independent citations in journals: 45
- Number of scientific reports: 0

*Relationship of **classes taught and scientific/research activities***

a) *The most important five publications of the last five years:*

- Fundamentals of Quality Management, LAP LAMBERT Academic Publishing, ISBN 978-3659490590, 2013, 184.p.
- A minőségmenedzsment módszerei és eszközei, Publio Kiadó, ISBN 978-963-381-602-8; 978-963-381-601-1, 2014, 260.p.
- Környezetmenedzsment (Environmental Management), University of Miskolc, Faculty of Economics, ISBN 9789636618964, 2009, 300.p.
- Számítógép-használat otthon és munkahelyen – digitális kompetencia és a számítógépes munkakörnyezet ergonómiájának empirikus vizsgálata, Vezetéstudomány, XLIV:(4), 2013, pp. 51-62.
- Berényi, L.: Kompetenciamenedzsment és irányítási rendszer-szabványok, Competitio, 2012, pp. 93-108.

b) *The most important five publications of the entire career:*

- Berényi, L.: Fundamentals of Quality Management, LAP LAMBERT Academic Publishing, ISBN 978-3659490590, 2013, 184.p.
- A minőségmenedzsment módszerei és eszközei, Publio Kiadó, ISBN 978-963-381-602-8; 978-963-381-601-1, 2014, 260.p.
- Berényi, L.: Környezetmenedzsment, University of Miskolc, Faculty of Economics, ISBN 9789636618964, 2009, 300.p.
- A környezettudatosság fejlesztésének alapjai, VEZETÉSTUDOMÁNY, 2009, XL:(10) pp. 44-54.
- Zöld stratégia - barna kultúra?: Koordinációs eszköztár és szervezeti kultúra a környezettudatosság szolgálatában, 2006, VEZETÉSTUDOMÁNY XLVII:(special issue) pp. 98-106. (co-author: Balázs Heidrich)

*Knowledge of English, presentation/teaching experience*

*Language Certificate:* Type-B2 English

- *Number of publications in English:* 21
- *Conference presentations in English:* 14

<b>Name: Mihály Dobróka Dr.</b>	
<b>Qualification(s)</b> , degrees granted by, year	
MSc in Physics, Kossuth Lajos University of Science, Debrecen, 1972	
<i>Current employment, position(s)</i>	
University of Miskolc, professor in Geophysics	
<b>Scientific degree</b> (field, year)	
Candidate of Technical Sciences, 1986 Doctor of Technical Sciences, 1996 dr. habil. University of Miskolc, 1996	
<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution,	

etc.)

Dates	Position	Employer/Institution
1997-	Professor in Geophysics	Department of Geophysics, University of Miskolc (UM)
1988-1997	Associate Professor	Department of Geophysics (UM)
1983-1988	Principal University Lecturer	Department of Geophysics (UM)
1977-1983	Principal University Lecturer	Department of Physics (UM)
1972-1977	Assistant Professor	Department of Physics (UM)

- *Years spent in academia:* 42 years
- *Classes taught in Hungarian:*  
Geophysics, Geophysical Inversion, Geophysical interpretation
- *Classes taught in English:*  
Engineering physics, Data and information processing, Geophysical inversion, Engineering and mining geophysics

*Professional experience so far and main achievements*

**Educational activity:** his main subjects in education is Theoretical Physics and Geophysical Inverse Problem Theory for geophysicist studentst. He has lectures also in Geophysical Interpretation, Seismic- and Geoelectric Tomography. Prof. Dobroka is active in leading students in scientific work, his students won 17 awards (among the the Pro Scientia Award) in University level as well as State level scientific competitions. He is active also in the PhD Education since its begining in Hungary. He is the scientific leader of the „Applied Geophysical Research” Research Program running int he framework of the Mikoviny Sámuel Doctoral School of the Faculty of Earth Sciences and Engineering. Under the leadership of Prof. Dobroka 14 PhD students has been finished the PhD studies and received Absolutorium. As Pro-rector he was responsible (2004-2013) for the University level organization of the PhD education at the University of Miskolc. Presently he is the leader of the Mikoviny Sámuel Doctorial School in Earth Science (Faculty of Earth Science and engineering).

**Research Activity:** Prof. Dobróka started his research work int he field of Plasma Physics. He defended his university level Doctoral Thesis also in this field at the Roland Eötvös University of Sciences (Budapest) in 1976. He applied his physical knowledge successfully in solving geophysical problems and gave a complete desription of “Guided channel waves propagating in an inhomogeneous coal seam structure” in his Candidate of Science Thesis. Continuing his scientific and educational activity at the Department of Geophysics he developed new methods (with co-authors) in the Joint Inversion of Geophysical Data and published the results in various international Journals. He defended his Doctor of Sciences Thesis (DSc) at the Hungarian Academy of Sciences in 1996.

**International Relations:**

Prof. Dobróka together work group has been continued successfull research project with the Geophysics Institute of the Ruhr University, Bochum in the framework of the cooperation agreement between the Hungarian Academy of Sciences and the Deutsche Forschungsgemeinschaft. This research work was continued without break in more then 20 years. He leads also cooperation in research with the State Universit of Mining, Moscow, the Geophysics Department of Universita degli studi "La Sapienza", Rome and Technical University of Helsinki. He is a member of the European Association of Geoscientists & Engineers (EAGE), the Society of Exploration Geophysicists (SEG), the Environmental and Engineering Geophysical Society (EEGS). As a member of the European Section of the EEGS he was also member of the group "Ethical standards and quality of work".

- Number of scientific publications: 226
- Cumulative impact factor: 24.981
- Independent citations in journals: 336

*Relationship of classes taught and scientific/research activities*

a) *The most important five publications of the last five years:*

Szabó N P, Dobróka M: **Extending the Application of a Shale Volume Estimation Formula Derived from Factor Analysis of Wireline Logging Data.,**

MATHEMATICAL GEOSCIENCES 45: (7) pp. 837-850. Paper 10.1007/s11004-013-9449-2. *impakt faktor*: 1.440

Szabó N P, Dobróka M, Drahos D: **Factor analysis of engineering geophysical sounding data for water saturation estimation in shallow formations**, GEOPHYSICS 77: (3) pp. WA35-WA44. *impakt faktor*: 1.723

Dobróka Mihály, Szabó Norbert Péter: **Interval inversion of well-logging data for automatic determination of formation boundaries by using a float-encoded genetic algorithm**, JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING 86-87: pp. 144-152.  
Paper 10.1016/j.petrol.2012.03.028. *impakt faktor*: 0.997

M. Dobróka, J. Somogyi Molnár: **New Petrophysical Model Describing the Pressure Dependence of Seismic Velocity**, ACTA GEOPHYSICA 60: (2) pp. 371-383. *impakt faktor*: 0.910

Dobroka M, Szabo N: **Interval inversion of well-logging data for objective determination of textural parameters**, ACTA GEOPHYSICA 59: (5) pp. 907-934.  
Paper 10.2478/s11600-011-0027-z. *impakt faktor*: 0.617

a) *The most important five publications of the entire career:*

R Misiek, A Liebig, A Gyulai, T Ormos, M Dobróka, L Dresen: **A joint inversion algorithm to process geoelectric and surface wave data**, GEOPHYSICAL PROSPECTING 45: (1) pp. 65-86. *impakt faktor*: 0.477, *független idéző közlemények száma*: 36

A Hering, R Misiek, A Gyulai, T Ormos, M Dobróka, L Dresen: **A joint inversion algorithm to process geoelectric and surface wave seismic data**, GEOPHYSICAL PROSPECTING 43: (2) pp. 135-156. *impakt faktor*: 0.359, *független idéző közlemények száma*: 92

M Dobróka, L Dresen, C Gelbke, H Rüter: **Tomographic inversion of normalized data: double-trace tomography algorithms.**, GEOPHYSICAL PROSPECTING 40: (1) pp. 1-14.  
*impakt faktor*: 0.364, *független idéző közlemények száma*: 9

M Dobróka, Á Gyulai, T Ormos, J Csókás, L Dresen: **Joint inversion of seismic and geoelectric data recorded in an under-ground coal mine.**, GEOPHYSICAL PROSPECTING 39: (5) pp. 643-665. *impakt faktor*: 0.833, *független idéző közlemények száma*: 81

J Csókás, M Dobróka, Á Gyulai: **Geoelectric determination of quality changes and tectonic disturbances in coal deposits.**, GEOPHYSICAL PROSPECTING 34: (7) pp. 1067-1081. *impakt faktor*: 0.741, *független idéző közlemények száma*: 21

*Knowledge of English, presentation/teaching experience*

*Language Certificate*: Type B2

- *Teaching experience in English abroad*:  
Ruhr University, Bochum, University of Rome, 'La Sapienza' (researcher and visiting professor)
- *Courses previously taught in English*:  
Engineering and mining geophysics (EGEC, University of Miskolc)
- *Number of publications in English*: 47
- *Conference presentations in English*: 52

<b>Name: János Földessy CsC., Dr. habil</b>								
<b>Qualification(s)</b> , degrees granted by, year								
MS in geology, Eötvös Loránd University, 1970								
<b>Current employment, position(s)</b>								
University of Miskolc, full professor								
<b>Scientific degree</b> (field, year)								
Dr. habil, earth science, University of Miskolc								
<b>Scholarships</b> (date)								
-								
<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)								
<table border="1"> <thead> <tr> <th>Period</th> <th>Position</th> <th>Employer</th> </tr> </thead> <tbody> <tr> <td>1999-</td> <td>associate professor, professor</td> <td>University of Miskolc</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>Years spent in academia: 15 years</li> <li><i>Classes taught in Hungarian:</i> Nyersanyag kutatás, Szerkezet földtan, Ásványvagyon becslés, Teleptan.</li> <li><i>Classes taught in English:</i> Mineral Exploration, Mineral deposits, Geological interpretation and prospecting, Non-metallic industrial minerals.</li> </ul>			Period	Position	Employer	1999-	associate professor, professor	University of Miskolc
Period	Position	Employer						
1999-	associate professor, professor	University of Miskolc						
<b>Professional experience so far and main achievements</b>								
<ul style="list-style-type: none"> <li>Number of scientific papers: 86</li> <li>Cumulative impact factor: 3.1</li> <li>Independent citations in journals: 145</li> <li>Number of scientific reports: 60</li> </ul>								
<b>Relationship of classes taught and scientific/research activities</b>								
<p>a) <i>The most important five publications of the last five years:</i></p> <ul style="list-style-type: none"> <li>Németh Norbert, Földessy János, Kupi László, Iglesia, Jesus Garcia: Zn-Pb mineralization types in the Rudabánya ore bearing complex. <i>Carpathian Journal of Earth and Environmental Sciences</i> (8), (2013) 47-58.</li> <li>Földessy János, Németh Norbert, Gerges Anita: A rudabányai színesfém-ércesedés újrakutatásának előzetes földtani eredményei. <i>FÖLDTANI KÖZLÖNY</i>, 140 (3), pp. 281-292(2010).</li> <li>Zelenka Tibor, Földessy János, Komlóssy György: Modern mineral explorations in Telkibánya. <i>PUBL UNIV MISKOLC, SER A MIN</i>, 78, pp. 159-170 (2009).</li> <li>Hartai Éva, Zelenka Tibor, Földessy János: Environmental assessment of the Telkibánya area. <i>PUBL UNIV MISKOLC, SER A MIN</i>, 78, pp. 141-159 (2009).</li> <li>Földessy János, Böhm József: Arany és cianid - Lehetőségek és Kockázatok, <i>Magyar Tudomány</i>, 2012/5. szám, 2012, pp. 532-540.</li> </ul> <p>b) <i>The most important five publications of the entire career:</i></p> <ul style="list-style-type: none"> <li>Földessy János: A recski felső-eocén rétegvulkáni andezit összlet. <i>FÖLDTANI KÖZLÖNY</i> 105: 625-645 (1975).</li> <li>Baksa Cs, Balla Z, Földessy J, Havas L, Szabó I: The tectonic setting of the ophiolites in the Bükk Mts, North Hungary, <i>GEOL CARPATH</i>. 1, pp. 465-493 (1980).</li> </ul>								



- Földessy János: A recski Lahóca aranyérc előfordulás. FÖLDTANI KUTATÁS, 34 (2), 12-15 (1997).
- Gatter István, Molnár F, Földessy J, Zelenka T, Kiss J, Szebényi G: High- and Low Sulfidation Epithermal Mineralization of the Mátra Mountains, Northeast Hungary. In: Molnár F, Lexa J, Hedenquist J W (ed.), Epithermal mineralization of the Western Carpathians. Littleton: Society of Economic Geologists, 1999, pp. 155-181 (Society of Economic Geologists Guidebook Series; 31).
- Stohl J, Lexa J, Földessy J, Konecny P, Koneč V, Kollárova V, Onacila D, Rojkovicova L, Zakova E: High sulphidation of epithermal gold mineralization at Podpolom, Javorie Mts, Slovakia, MINER SLOVACA, 32, pp. 257-262 (2000).

*Knowledge of English, presentation/ teaching experience*

Language Certificate: MSc degree, University of Sydney

- Courses previously taught in English: Mineral exploration, Environmental Geology.
- Number of publications in English: 24
- Conference presentations in English: 23

**Name: Tamás Hámor**

**Qualification(s), degrees granted by, year**

University of Miskolc: 1979-1984 mining engineer  
 Budapest University of Economics: 1992-1994 postgraduate economist engineer  
 ELTE University: 1994-1997 postgraduate jurist engineer

*Current employment, position(s)*

Hungarian Office for Mining and Geology, head of legal division  
 University of Miskolc, Institute of Mineralogy and Geology, honorary associate professor

**Scientific degree (field, year)**

PhD in earth sciences, „Stable isotopic patterns of anoxic sedimentation and early diagenesis” (1998)

*Scholarships (date)*

Soros (1989), DAAD (1997), Fulbright (2002), CEA (1997), Eötvös (1996)

**Teaching activities (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)**

Period	Position	Employer
2010 -	invited lecturer, honorary associate professor	Miskolc University
2008	invited lecturer,	Szeged University

- Years spent in academia: 6
- Classes taught in Hungarian:  
**Legal and economic studies with regard to mining and geology**

**Professional experience so far and main achievements**

- registered and active expert of the European Commission



*Relationship of **classes taught and scientific/research activities***

a) *The most important five publications of the last five years:*

b) *The most important five publications of the entire career:*

Hámor-Vidó M. – **Hámor T.** 2006: Sulphur and carbon isotopic composition of power supply coals in the Pannonian Basin – International Journal of Coal Geology, Vol. 73, No. 3-4, pp. 425-447

**Hámor T.** 2002: Legislation on mining waste management in Central and Eastern European Countries - Joint Research Centre, Ispra, EUR 20545 EN, 188 p.

**Hámor T.** - Lantos M. 1994: An evaluation of slump fold formation using paleomagnetic techniques - Sedimentary Geology, Vol. 90., pp. 233-240.

**Hámor T.** 1994: The occurrences and morphology of sedimentary pyrite - Acta Geol. Hung., Vol. 37., No. 1-2., pp. 39-67.

Elston, D. P. - Lantos M. - **Hámor T.** 1994: High resolution polarity records and the stratigraphic and magnetostratigraphic correlation of Late Miocene and Pliocene deposits of Hungary - Basin analysis in petroleum exploration (eds. Teleki et al.), Kluwer Acad. Pub., Dordrecht, pp. 111-142.

*Knowledge of English, presentation/teaching experience*

*Language Certificate:* high level English (1998), advanced level Russian (1978)

- *Number of publications in English:* ca. 50
- *Conference presentations in English:* ca. 60

**Name: Éva Hartai Dr.**

**Qualification(s), degrees granted by, year**

geologist (ELTTE) 1976

*Current employment, position(s)*

associate professor , University of Miskolc

**Scientific degree (field, year)**

Scientific degree: Ph.D. in Earth Sciences (2001)

*Scholarships (date)*

Széchenyi István Scholarship 2002-2005

**Teaching activities (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)**

Period	Position	Employer
1976-1977	Department engineer	Technical University of Heavy Industry
1977-1984	Assistant lecturer	Technical University of Heavy Industry
1984-2000	Assistant professor	Technical University of Heavy Industry
2000-	Associate professor	University of Miskolc

Subject	R/C/PhD	Contact hours	Note
Introduction to Geology	R	3l+1p	Faculty of Mechanical Eng. Geoinformatics spec.
Reservoir Geology (in English)	R	2l	For foreign students in oil engineering
Basic Concepts of Geology (in English)	R	2l	Optional, in English
Selected Topics of	R	2l	Optional, in English

Environmental Geology (in English)			
Basic Geology	R	3l+1p	Faculty of Earth Science & Engineering
Basic Knowledge in Geology	R /C	2l+2p	Branch of Mining, high-school level
Applied Geology	R	2l+2p	Faculty of Earth Science & Engineering
Environmental Geology	R	2l+2p	Branch of Env.eng., Branch of Geography
Introduction to the Geology of Mineral Deposits	R	2l+1p	Hydrogeology, Geophysics spec.
Geology of Hungary	R	2l	Fac. of Earth Sc. & Eng., Geoinform. spec.
Geology	R /C	3l+1p	Fac. of Earth Sc. & Eng., BSc
Geology of Hungary	C	2l	Fac. of Earth Sc. & Eng., BSc
Historical Geology	R	2l	Babes-Bolyai University, Cluj, Geology Branch

*Classes taught in English:* Physical geology, Applied geology, Basic concepts of geology

**Professional *experience* so far and main *achievements***

Publications in Hungarian	10
Publications in foreign language	25
Presentations at Hungarian and foreign conferences	17
Lecture notes in Hungarian and in English	6
Electronic teaching materials	3
Research report, study	6
Hungarian and international projects	2

**Relationship of *classes taught* and *scientific/research activities***

*a) The most important five publications of the last five years:*

- Németh Norbert, Hajdu István, Hartai Éva, Molnár József, Tompa Richárd: Gallium, In: Földessy J, Fekete Sz, Hartai É, Horváth A, Horváth R, Mádai F, Németh N, Szakáll S, Zajzon N, Molnár J, Tompa R, Dobos T, Hajdú I Less Gy (szerk.) 2013: Stratégiai fontosságú ásványi nyersanyagok I. Miskolc: Miskolci Egyetem, 2013. pp. 59-77. (CriticEl Monográfia sorozat; 1.)
- Kiss Gabriella, Mozgai Viktória, Hartai Éva: Platinacsoport, In: Less György (szerk.) 2013: Stratégiai fontosságú ásványi nyersanyagok II: CriticEl Monográfia sorozat 2.. Miskolc-Egyetemváros: Miskolci Egyetem, 2013. pp. 117-145.
- Hartai Éva: Nemesfémérccek, In: Pál-Molnár E, Biró L (szerk.) Szilárd ásványi nyersanyagok Magyarországon. Szeged: SZTE TTK Földrajzi és Földtani Tanszékcsoport, 2013. pp. 9-26. (GeoLitera)
- Hartai Éva: Potential of CO2 geological storage in porous sedimentary formations in North Hungary, PUBLICATIONS OF THE UNIVERSITY OF MISKOLC SERIES A-MINING 2012/1: (1) pp. 129-139.
- Hartai Éva, Zelenka Tibor, Földessy János 2009: Environmental assessment of the Telkibánya area, PUBLICATIONS OF THE UNIVERSITY OF MISKOLC SERIES A-MINING 78: pp. 141-159.

*b) The most important five publications of the entire career:*

- Földessy János, Hartai Éva, Kupi László (2008): New data about the Lahoca high sulfidation

mineralization, PUBLICATIONS OF THE UNIVERSITY OF MISKOLC SERIES A-MINING 73: pp. 129-145.

- Seres-Hartai É, Szakáll S (2005): Geological and mineralogical background of the Paleolithic chert mining on the Avas Hill, Miskolc, Hungary, PRAEHISTORIA 6: pp. 15-21.
- Hartai Éva, Földessy János (2003): Mineralógia zlata a charakteristiky vychodnich hornín vo vysoko-sulfidickom type epitermálneho loziska Podpolom (Klokoc), ACTA MONTANISTICA SLOVACA 8: (1) pp. 22-30.
- Földessy János, Szabéni Géza, Hartai Éva (2002): The distribution of gold in the Reesk ore complex, Hungary, GEOLOGICA CARPATHICA 53: p. online. impakt faktor: 0.147
- Földessy János, Hartai Éva (2001): Mineralogy and genetic aspects of gold in the Lahóca (Reesk, Hungary) high sulfidation epithermal deposit, ACTA MONTANISTICA SLOVACA vol. 6.: (1.) pp. 19-27.

*Knowledge of English, presentation/ teaching experience*

*Language Certificate:* Type B2 English

Courses previously taught in English:

Basic concepts of geology; Selected topics of Environmental geology, Petroleum Geology

- *Number of publications in English:* 28
- *Conference presentations in English:* 18

<b>Name: Balázs Kovács Dr.</b>																							
<b>Qualification(s)</b> , degrees granted by, year																							
mining engineer, Technical University for Heavy Industry, 1989 agricultural environmental engineer, Gödöllő Agricultural University, 1995																							
<b>Current employment, position(s)</b>																							
University of Miskolc, associate professor University of Szeged, scientific research fellow																							
<b>Scientific degree</b> (field, year)																							
PhD (1999), Earth sciences																							
<b>Scholarships</b> (date)																							
<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)																							
<table border="1"> <thead> <tr> <th>Period</th> <th>Position</th> <th>Employer</th> </tr> </thead> <tbody> <tr> <td>1989-1992</td> <td>scientific scholar</td> <td>Technical University for Heavy Industry</td> </tr> <tr> <td>1992-1999</td> <td>assistant</td> <td>University of Miskolc</td> </tr> <tr> <td>1999-2000</td> <td>lecturer</td> <td>University of Miskolc</td> </tr> <tr> <td>2000-</td> <td>associate professor</td> <td>University of Miskolc</td> </tr> <tr> <td>2004-2007</td> <td>postdoc scholar</td> <td>University of Szeged</td> </tr> <tr> <td>2007-</td> <td>scientific research fellow</td> <td>University of Szeged</td> </tr> </tbody> </table>			Period	Position	Employer	1989-1992	scientific scholar	Technical University for Heavy Industry	1992-1999	assistant	University of Miskolc	1999-2000	lecturer	University of Miskolc	2000-	associate professor	University of Miskolc	2004-2007	postdoc scholar	University of Szeged	2007-	scientific research fellow	University of Szeged
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2004-2007	postdoc scholar	University of Szeged																					
2007-	scientific research fellow	University of Szeged																					
<ul style="list-style-type: none"> <li>• <i>Years spent in academia:</i> 25 years</li> <li>• <i>Classes taught in Hungarian: UoM:</i> Groundwater Management, Practical GW Flow Modeling, Groundwater Prospecting, GW Flow and Contaminant Transport Modeling, Groundwater Resources Management, Hydrogeology, Applied Hydrogeology, Modeling Hydrodynamics</li> </ul>																							

<ul style="list-style-type: none"> <li>• <i>Classes taught in English:</i> Groundwater flow and contaminant transport modeling; Groundwater prospecting, water resource management</li> </ul>
<p><i>Professional <b>experience</b> so far and main <b>achievements</b></i></p>
<p>Research topics: Awards: MHT Lászlóffy Woldemár Diplomatervezési Pályázat I. díj, MTA Szádeczky-Kardoss Elemér ösztöndíj (I. fokozat) 1999, MTA Bolyai János kutatási ösztöndíj 2000-2003, MTA MAB Tudományos díja 2002, MTA Bolyai János Emlékplakett 2004, Magyar Mérnöki Kamara - Környezetvédelmi Műszaki Felsőoktatásért 2010, Kiváló Konzulensi díj 2012, XIX. Széchy Károly Emlékülés felkért előadó 2013.</p> <p>Number of scientific papers: 107 Cumulative impact factor: 0,9 Independent citations in journals: 17 Number of scientific reports: 193</p>
<p><i>Relationship of <b>classes taught</b> and <b>scientific/research activities</b></i></p>
<p>a) <i>The most important five publications of the last five years:</i></p> <ul style="list-style-type: none"> <li>• Szanyi J, Kovács B, Scharek P: Geothermal Energy in Hungary: potentials and barriers. EUROPEAN GEOLOGIST 27: pp. 15-19. (2009).</li> <li>• Mikita Viktória, Kovács Balázs, Földes Tamás: The use of computer tomography for evaluation of the compaction of loose agricultural soils, CEREAL RESEARCH COMMUNICATIONS 37:(1) pp. 543-546. (2010).</li> <li>• Németh Ágnes, Kovács Balázs, Lénárt László: Examination of the water resources in the Bükk Mountains with the use of fuzzy logic, KARST DEVELOPMENT / KARSZTFEJLŐDÉS 1:(2) pp. 6-11. (2010).</li> <li>• Szanyi János, Kovács Balázs: Utilization of geothermal systems in South-East Hungary. GEOTHERMICS 39: pp. 357-364. (2010).</li> <li>• Kántor Tamás, Tóth Márton, Kovács Balázs: Investigation of transport modelling and soil structure influencing effect of biodiesel by-product in agricultural soils, GEORGIKON FOR AGRICULTURE 18:(3) pp. 57-70. (2013).</li> </ul> <p>b) <i>The most important five publications of the entire career:</i></p> <ul style="list-style-type: none"> <li>• Kovács Balázs, Szanyi János: Hidrodinamikai és transzportmodellezés 2: Processing Modflow és Surfer for Windows környezetben, Miskolc: ME, 2005. 213 p.</li> <li>• Kovács Balázs: Hidrodinamikai és transzportmodellezés 1: Processing MODFLOW környezetben, Miskolc: ME, 2004. 159 p.</li> <li>• Szanyi J, Kovács B: A geotermikus energia hasznosítása Magyarországon. TERMÉSZET VILÁGA II. Különszám: pp. 25-27. (2009).</li> <li>• Mikita Viktória, Kriston Sándor, Kántor Tamás, Kovács Balázs, Dobos Endre: Modelling of soil compaction and saturation distribution of loose agricultural soils by penetrometer, NÖVÉNYTERMELÉS 60:(1) pp. 203-206. (2011).</li> <li>• Viktória Mikita, Balázs Kovács, Tamás Kántor, Sándor Kriston: Numerical simulation of the artificial recharges of groundwater NÖVÉNYTERMELÉS 61:(1) pp. 365-369. (2012).</li> </ul>
<p><i>Knowledge of English, presentation/ teaching experience</i></p>
<p><i>Language Certificate:</i> State Certificate</p> <ul style="list-style-type: none"> <li>• <i>Teaching experience in English abroad:</i></li> <li>• <i>Courses previously taught in English:</i> Groundwater flow and contaminant transport modeling; Groundwater prospecting, water resource management</li> <li>• <i>Number of publications in English:</i> 57</li> <li>• <i>Conference presentations in English:</i> 39</li> </ul>

<b>Name: Dr. János Lakatos</b>	
<b>Qualification(s)</b> , degrees granted by, year	
Dipl. Chemist, 1980 (Kossuth L. University, Debrecen)	
<b>Current employment</b> , position(s)	
University of Miskolc, Faculty of Material Sci. and Eng., Institute of Chemistry.	
<b>Scientific degree</b> (field, year)	
PhD/ CSc Chemical Sciences, 1995. (Univ. of Debrecen)/ (Sci. Qual. Board of HAS)	
<b>Scholarships</b> (date)	
Postdoktoral Fellowship (Royal Society) Glasgow, Strathclyde University, 12 months (1996). Fellowship of Hungarian Scholarship Board, Cracow, Univ. of Mining and Metallurgy, 3 months (1997).	
<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)	
<ul style="list-style-type: none"> <li>• Years spent in academia: 19</li> <li>• Classes taught in Hungarian: <ul style="list-style-type: none"> <li>General Chemistry (1995-</li> <li>Inorganic Chemistry (2009-</li> <li>Analytical Chemistry (2000-</li> <li>Nuclear Chemistry (2002-</li> <li>Instrumental Analytical Chemistry (2003-</li> <li>Colloid Chemistry (2012-</li> <li>Hydrochemistry (2009-2011)</li> <li>Soil Chemistry (1995-</li> <li>Carbon structures (2000-,)</li> <li>Carbon nanostructures (2005-2014)</li> </ul> </li> <li>Classes taught in English: Water chemistry</li> </ul>	
<b>Professional experience</b> so far and main <b>achievements</b>	
<p>1980-2000 researcher (last position at 2000: senior res. associate) Research Institute of Applied Chemistry, Miskolc University (The former Institute of Petroleum Recovery of HAS). The research works have done on the field of Physical Chemistry connected to the oil recovery, gas sorption on coals, and atomic spectroscopy.</p> <p>2000- associate prof. University of Miskolc, Institute of Chemistry, teaching of different chemical subjects, research works on sorption science.</p> <ul style="list-style-type: none"> <li>• Number of scientific papers: 57</li> <li>• Cumulative impact factor: 19,024</li> <li>• Independent citations in journals: 86</li> <li>• Number of scientific reports: 7</li> </ul>	
<b>Relationship of classes taught and scientific/research activities</b>	
<p>a) The most important five publications of the last five years:</p> <p>I. ROBLES, J. LAKATOS, P. SCHAREK, Z. PLANK, G. HERNANDEZ, S. SOLIS, E BUSTOS: Characterisation and remediation of soils and sediments polluted with mercury: Occurrence, transformations, environmental considerations and San Joaquin's Sierra Gorda case. Chapter 29 in the Environmental Risk assessment in Soil Contamination. INTECH Open Sci. Publication, p.827-850. (2014).</p>	

<p><u>LAKATOS J.: A geotermia vízkémiája, Geothermic Hydrochemistry E- learning materials:Műszaki Földtudományi Kar, Geotermikus Szakmérnöki Szak, (2014)</u></p> <p><u>LAKATOS, J., BÁNHIDI, O., LENGYEL, A., LOVRITY, Z., MURÁNSZKY, G., Analitika Anyagmérnököknek Nemzeti Tankönyvkiadó, Budapest, Elektronikus tankönyv, (2011).</u>  <a href="http://www.tankonyvtar.hu/hu/tartalom/tamop425/0001_1A_A3_01_ebook_analitikai_kemia_anyagmer_nokoknek/adatok.html">http://www.tankonyvtar.hu/hu/tartalom/tamop425/0001_1A_A3_01_ebook_analitikai_kemia_anyagmer_nokoknek/adatok.html</a>  <a href="http://www.tankonyvtar.hu/hu/tartalom/tamop425/0001_1A_A3_01_ebook_analitikai_kemia_anyagmer_nokoknek_video/adatok.html">http://www.tankonyvtar.hu/hu/tartalom/tamop425/0001_1A_A3_01_ebook_analitikai_kemia_anyagmer_nokoknek_video/adatok.html</a></p> <p>SPITZMÜLLER I., FARKAS L. KOZÁR Z., LAKATOS J.: Ipari sós szennyvizek tisztítására használt aktív szén regenerálási lehetőségeinek vizsgálta: <i>Anyagtud. Közl.</i> 38 kötet 1 füzet 277-287 (2013)</p> <p>LAKATOS J. MADARÁSZ T. :Ásványi szén alkalmazhatósága a szennyezések tovaterjedését megakadályozó gát-technológiákban. <i>Multidiszciplináris Tudományok, Miskolci Egyetemi Kiadó, 1., 329-332, (2011).</i></p> <p><i>b)The most important five publications of the entire career:</i></p> <p>POSTA J , <u>LAKATOS J.:</u> A simple continuous titration method for the investigation of flame atomisation process. <i>Spectrochim. Acta Part B Atomic Spectroscopy</i> <b>35</b>:(10) pp. 601-606. (1980)</p> <p><u>LAKATOS J., LAKATOS I</u> :The effect of flow and gas-expansion on atom distribution. <i>Microchemical jurnal</i> 46: pp. 280-290. (1992).</p> <p><u>LAKATOS J., BROWN SD , SNAPE CE</u> : Influence of coal properties on mercury uptake from aqueous solution <i>Energy &amp; Fuels</i> <b>13</b>:(5) pp. 1046-1050. (1999)</p> <p>FILEP GY., KOVÁCS B., <u>LAKATOS J., MADARÁSZ T., SZABÓ I.</u>: Szennyezett területek kármentesítése, 4. fejezet: A szennyezett területek kutatásának analitikai kémiai alapjai. (107-156) Miskolci Egyetemi Kiadó, (2002).</p> <p><u>LAKATOS J.</u> Atomabszorpciós Spektrometria.: 4. fejezet. 137-187 old. Záray Gy.(szerk) Az elemanalitika korszerű módszerei. Akadémiai Kiadó, (2006).</p>
<i>Knowledge of English, presentation/ teaching experience</i>
<p><i>Language Certificate:</i> Type B2 English</p> <ul style="list-style-type: none"> <li>• <i>Number of publications in English:</i> 26</li> <li>• <i>Conference presentations in English:</i> 42</li> </ul>

<b>Name: László LÉNÁRT, Ph.D.</b>	
<b>Qualification(s), degrees granted by, year</b>	
M.Sc. geologist engineer Technical University Miskolc, 1974 Environmental Engineer postgraduate diploma Technical University of Miskolc, 1990	
<b>Current employment, position(s)</b>	
<b>assistant professor</b> Faculty of Earth Sciences and Engineering, Department of Hydrogeology and Engineering Geology University of Miskolc	
<b>Scientific degree (field, year)</b>	
“Mining geology and research of geology”, Ph.D, 2006	
<b>Scholarships (date)</b>	
Ph.D student at the Technical University of Kosice, 2006 Environmental Engineer postgraduate diploma, Technical University of Miskolc, 1988-1990 “dr. techn.” Technical University Miskolc, 1984. M.Sc. geologist engineer, Technical University Miskolc, 1969-1974	
<b>Teaching activities (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)</b>	



Period	Position	Employer
1974-1975	field geologist	OFKfV
1975-1977	soil mechanist	AGROBER
1975-1977	part time employed	Technical University of Miskolc
1977-1994	full time employed	Technical University of Miskolc Department of Geology
1994-	full time employed	Department of Hydrogeology and Engineering Geology

#### Fields of Educational experiences:

Hydrogeology, Hydrology, Environmental earth science, Ecology, Nature conservation, Water supply, Water resources, Water protection, Hydrogeology of Hungary, Karst-hydrogeology

#### Professional *experience so far and main achievements*

- Number of scientific papers: 277
- Cumulative impact factor: 4 articles is 2.359
- Independent citations in journals: 101
- Number of scientific reports: 313

#### Relationship of *classes taught and scientific/research activities*

##### a) The most important five publications of the last five years:

**Mádai, F. – Németh, N. – Szendi, A. – Lénárt, L. – Hevesi, A. (2010):** Minerals, history and vines – trip to Miskolc, Miskolctapolca and the Bükkalja region = Acta Mineralogica-Petrographica, Field Guide Series, Vol. 12, pp. 1-12.

**Ganoulis, Jacques – Aureli, Alice – Fried, Jean (2011):** Transboundry Water Resources Management. (In: Drobot, Radu – Szucs, Peter – Brouyere, Serge – Minciuna, Maria-Nelu – Lenart, Laszlo – Dassargues, Alain: Hydrogeological Study of Somes-Szamos Transboundary Alluvial Aquifer.), Wiley-VCH, Weinheim, Németország.

**Lénárt, L. (2012):** Hydrogeological field trip on the open karst of Bükk mountains and on the thermalkarst of Bükk region (North Hungary). GEOTOUR' 12 & IRSE' 12 International Twin Conference, 04-06. October, 2012, pp. 73-79, Salgótarján, Hungary.

**Lénárt, L. – Szegeginé Darabos, E. (2013):** Hydrodynamics of cold and warm karst systems in the Bükk region. Proceedings of the IAH Central European Groundwater Conference 2013. Geothermal Applications and Specialities in Groundwater Flow and Resources May 8-10, 2013 Mórahalom, Hungary. pp. 156-159. ISBN 978-963-306-217-3.

**Lénárt, L. – Szegeginé Darabos, E. (2013):** The Hydrogeological Relations of the Thermal Karst of the Bükk Mountains Based on Monitoring Data – Geosciences and Engineering, Vol. 2. No. 3. pp. 91-99.

##### b) The most important five publications of the entire career:

**Hakl, J. – Lénárt, L. – Somogyi, Gy. (1989b):** Time integrated radon measurements performed in karstic well water. Proceedings of International Congress of Speleology, Budapest, 13-20. August 1989. II, pp. 618-619. Budapest.

**Hertlendi, E. – Lénárt, L. – Svingor, É. (1994):** Participation in CEC program: COST-65. Hydrogeological Aspects of Groundwater Protection in Karstic Areas. ISOKARST '94 International Workshop on Environmental Isotope Study of Karst Systems 3-4 October 1994, Miskolc. ATOMKI-MÁFI-ME kiadvány, pp. 1-210, Miskolc.

**Lénárt, L. (1997b):** Karst water level measurement of Bükk mountains and its application in nature conservation. Symposium of Research, Conservation, Management. Aggtelek-Jósvafő, May 1-5, 1996. Volume I. pp. 75-82, Sopron.

**Lénárt, L. – Bretotean, M. (2004):** General characteristics of the studied area = Hidrotechnica Journal, Special issue dedicated to NATO SfP Project No. 973684; Vol. 49. Nr. 9-10. pp. 8-17, Bucharest.

**Lénárt, L. (2010):** The Interaction of Cold and Warm Karst Systems in the Bükk Region. Proceedings of the 1th Knowbridge Conference on Renewables, pp. 111-118, Miskolc.



<i>Knowledge of English, presentation/ teaching experience</i>
<i>Language Certificate:</i> <ul style="list-style-type: none"> <li>• <i>Number of publications in English:</i> 62</li> <li>• <i>Conference presentations in English:</i> 6</li> </ul>

<b>Name: György Less Dr.</b>		
<b>Qualification(s)</b> , degrees granted by, year		
mining engineer and geologist, Moscow University of Geology (1977)		
<i>Current employment, position(s)</i>		
University of Miskolc, professor		
<b>Scientific degree</b> (field, year)		
CSc (1993), earth sciences, Hungarian Committee for Scientific Qualification PhD (1995), earth sciences, Roland Eötvös University Dr. habil. (2008), earth sciences, University of Miskolc DSc (2008), earth sciences, Hungarian Academy of Sciences		
<i>Scholarships (date)</i>		
<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)		
<b>Period</b>	<b>Position</b>	<b>Employer</b>
1999 - 2005	associate professor	University of Miskolc
2005 -	professor	University of Miskolc
<ul style="list-style-type: none"> <li>• <i>Years spent in academia:</i> 15 years</li> <li>• <i>Classes taught in Hungarian:</i> Historical geology (BSc, MSc), Geology of Hungary (BSc), Geological mapping (MSc), Practice in Paleontology (BSc), Biostratigraphy (BSc)</li> <li>• <i>Classes taught in English:</i> Historical geology. Geological mapping</li> </ul>		
<b>Professional experience so far and main achievements</b>		
<p>Main research topics: Geological mapping in NE Hungary (stratigraphy, tectonics, geological evolution). Geological mapping in Libya (stratigraphy, tectonics, geological evolution). Paleogene larger foraminifera (paleontology, evolution and stratigraphy). Geomathematics (quantitative stratigraphy, numerical evolutionary correlation). Main projects led and co-ordinated: National Scientific Research Fund of Hungary (OTKA), Grant n° T 16863, leader of the project "Numerical evolutionary correlation" (1995-1998). National Scientific Research Fund of Hungary (OTKA), Grant n° T 23880, leader of the project "The geological map and the Meso-Cenozoic structural evolution of the innermost zones of the Northwestern Carpathians" (1997-2001). National Scientific Research Fund of Hungary (OTKA), Grant n° T 32370, leader of the project "Shallow benthic zonation of the Hungarian Tertiary based on larger foraminifera" (2000-2004). National Scientific Research Fund of Hungary (OTKA), Grant n° K 60645, leader of the project "Refinement and correlation of the Paleogene shallow benthic zonation of the Western Tethys based on larger Foraminifera" (2006-2010). National Research and Technological Bureau of Hungary, Bilateral Scientific and Technological Co-operation with Turkey, Grant n° NKTH 01222 (TÉT TR-06/2006), Hungarian co-ordinator of project "Comparative stratigraphical, sedimentological</p>		

and tectonic analysis of the Thrace (NW Turkey) and Hungarian Paleogene Basins with special emphasis on the parallel evolution of Paleogene larger foraminifera” (2007-2009). National Scientific Research Fund of Hungary (OTKA), Grant n° K 100538, leader of the project "Case-studies for Sr-isotope-ratio-based numerical dating of Senonian and Oligocene- Miocene geological events in the Western Tethys and adjacent seas" (2012-). International co-operation – 1990-1994: IGCP (International Geological Correlation Program) project № 286 ("Early Paleogene Benthos"), leader of the working group on orbitoidal Foraminifera. 1996-2000: IGCP project № 393. ("Neritic events at the Middle-Upper Eocene Boundary"), leader of working group on orbitoidal Foraminifera. 2002–2003: Participation in the geological mapping of sheet NG-33-8 (Al Haruj Al Abyad) in scale 1:250 000. 2002-2005: Chief editor of the “Geological map of the Gemer-Bükk area 1:100 000” published in co-operation of the Geological Institute of Hungary and of the Geologický Ústav Dionýza Štúra (Bratislava). 2003-2006: Leader of the geological mapping of sheet NG-33-12 (Waw al Kabir) in scale 1:250000. 2005-2008: TÜBITAK project № YDABAG–101Y06 (Turkey): participant. 2007-2009: Hungarian-Turkish Bilateral Project TÉT-TR-06/2006: “Comparative stratigraphical, sedimentological and tectonic analysis of the Thrace (NW Turkey) and Hungarian Paleogene Basins with special emphasis on the parallel evolution of Paleogene larger foraminifera”, Hungarian co-ordinator. Awards: Szádeczky-Kardoss Elemér Award, Ist prize, Hungarian Academy of Sciences (1990). Antal Koch Memorial Medal, Hungarian Geological Society (2009).

Books, book chapters: 23  
 Maps: 8  
 Full papers: 46  
 among them in SCI-covered journals: 18  
 Conference lectures: 37  
 Independent citations: 1070  
 among them in SCI-covered journals: 470  
 Cummulative impact factor: 18.96  
 Hirsch-index: 17

#### *Relationship of **classes taught and scientific/research activities***

##### *a) The most important five publications of the last five years:*

- Özcan E.; Less Gy.; Báldi-Beke M.; Kollányi K. and Acar F. (2009): Oligo-Miocene Foraminiferal Record (Miogypsinidae; Lepidocyclinidae and Nummulitidae) from the Western Taurides (SW Turkey): Biometry and Implications for the Regional Geology. *Journal of Asian Earth Sciences*; 34; 6; 740–760.
- Özcan E.; Less Gy.; Okay A.I.; Báldi-Beke M.; Kollányi K. and Yilmaz I.Ö. (2010): Stratigraphy and Larger Foraminifera of the Eocene Shallow-marine and Olistostromal Units of the Southern Part of the Thrace Basin, NW Turkey. *Turkish Journal of Earth Sciences*; 19; 1; 27–77.
- Özcan E.; Less Gy.; Báldi-Beke M. and Kollányi K. (2010): Oligocene hyaline larger foraminifera from Kelereşdere Section (Muş, Eastern Turkey). *Micropaleontology*, 56, 5, 465-493.
- Less Gy.; Özcan E. and Okay A. I. (2011): Stratigraphy and Larger Foraminifera of the Middle Eocene to Lower Oligocene Shallow-Marine Units in the northern and eastern parts of the Thrace Basin, NW Turkey. *Turkish Journal of Earth Sciences*, 20, 6, 793–845.
- Less Gy. and Özcan E. (2012): Bartonian-Priabonian larger benthic foraminiferal events in the Western Tethys. *Austrian Journal of Earth Sciences*, 105, 1, 129-140.

##### *b) The most important five publications of the entire career:*

- Less Gy. (1987): Paleontology and Stratigraphy of the European Orthopragminae. *Geologica Hungarica series Paleontologica*, 51, 373 p.
- Less Gy. (1991): Upper Oligocene larger Foraminifera of the Bükk Mountains (NE Hungary). *Magyar Állami földtani Intézet Évi Jelentése*; 1989; 411-465.
- Less Gy. (1998): The zonation of the Mediterranean Upper Paleocene and Eocene by Orthopragminae. *Opera Dela Slovenska Akademija Znanosti in Umetnosti*, IV, 34, 2, 21-43.
- Less Gy. (2000): Polyphase evolution of the structure of the Aggtelek-Rudabánya Mountains (NE Hungary), the southernmost element of the Inner Western Carpathians - a review. *Slovak*

Geological Magazine, 6, 2-3, 260-268.

- Less Gy.; Kovács S.; Pelikán P. (ed.); Pentelényi L. and Sásdi L. (2005): Geology of the Bükk Mountains. Magyar Állami Földtani Intézet, 284 p.

*Knowledge of English, presentation/teaching experience*

*Language Certificate:* Type B2 English, C1 Russian

- *Teaching experience in English abroad:*  
1990: University of Barcelona: visiting professor with invited lecture (Paleontology and stratigraphy of Paleogene larger benthic foraminifera), 1993: University of Utrecht: visiting professor with invited lecture (as above), 2002: University of Antalya: visiting professor with invited lecture (as above), 2009: University of Vienna: invited lecture (as above)
- *Number of publications in English:* 55
- *Conference presentations in English:* 37

**Name: Ferenc Má dai Dr.**

***Qualification(s), degrees granted by, year***

MS in Geological Engineering, Moscow Geological University, 1989  
LL.M. in Mineral law and policy, University of Dundee, 1999

*Current employment, position(s)*

ME, MFK, Institute of Mineralogy and Geology - associate professor

***Scientific degree (field, year)***

PhD (2004), earth sciences

*Scholarships (date)*

***Teaching activities (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)***

Period	Position	Employer
1989-1997	assistant professor	University of Miskolc
1997-2004	senior lecturer	University of Miskolc
2004-	associate professor	University of Miskolc

■ Classes taught in Hungarian: Fundamentals of Mineralogy and Petrology, Applied petrography, Mineral Resource Management, Minerals Policy, Optical Methods in Materials Sciences, Applied geology and petrography, Rock physics, Graduate research seminar,

Classes taught in English: Mine waste geochemistry, Geochemical prospecting methods, Graduate research seminar, Legal and economic studies for mining and geology

■ Years spent in Academia: 25 years.

***Professional experience so far and main achievements***

- Dr. Ferenc Madai has worked for Department of Mineralogy and Petrology since 1989. He has more than 20 years of teaching and research experience in fields of mineralogy and petrography, more than a decade experience in fields of mineral resource management and environmental mineralogy. His main research areas are the metamorphic carbonate petrography and mineralogical-geochemical characterization of mine wastes. Since 2005 he is the Hungarian representative in the CEN TC292 WG8 workgroup, working on characterization of waste from the extractive industry in the European Union. participated in two EU consortia in completion of guidelines for mine waste characterization and inspection. Participates in several TÁMOP projects (Criticel, Kút f ő, UniDuó...)

- Publications: 56
- Cumulative impact factor: 7.1
- independent citations: 52
- Coinference presentations: 55

*Relationship of **classes taught** and **scientific/research activities***

*a) The most important five publications of the last five years:*

- Mádai F., Móricz F., Walder I.F., Embile R.Jr, Praviczki T.(2013): Ércbányászati meddőhányók vizsgálata: szulfid oxidáció neutrális körülmények között. MŰSZAKI FÖLDTUDOMÁNYI KÖZLEMÉNYEK 84:(2) pp. 53-72. (2013)
- Móricz F, Mádai F, Walder I F (2012): Pyrite oxidation under circumneutral pH conditions GEOSCIENCES AND ENGINEERING: A PUBLICATION OF THE UNIVERSITY OF MISKOLC 1:(2) pp. 111-116.
- Szakáll S, Fehér B, Bigi S, Mádai F (2011): Klajite from Recsk (Hungary) the first Mn-Cu arsenate mineral EUROPEAN JOURNAL OF MINERALOGY 23:(5) pp. 829-835. (2011)
- Móricz F, Mádai F, Walder I F (2011): Pyrite oxidation changes in Sulphidic mine Wastes from the Itos Sn-Ag Deposit, Bolivia. In: Rüde R T, Freund A, Wolkersdorfer Ch (szerk.) 11th International Mine Water Association Congress – Mine Water – Managing the Challenges
- Móricz F, Walder I.F, Mádai F. (2009): Geochemical and Mineralogical Characterization of Waste Material from the Itos Sn-Ag Deposit, Bolivia. In: Securing the future : Mining, metals and the environment in a sustainable society and 8th ICARD : International Conference on Acid Rock Drainage. Konferencia helye, ideje: Skeleftea, Svédország, 2009.06.22-2009.06.26. pp. 1-10.

*b) The most important five publications of the entire career:*

- Szakáll S, Fehér B, Bigi S, Mádai F (2011): Klajite from Recsk (Hungary) the first Mn-Cu arsenate mineral EUROPEAN JOURNAL OF MINERALOGY 23:(5) pp. 829-835. (2011)
- Barany S, Shilov V, Madai F (2007): Effect of adsorbed polymers on electrophoresis of dispersed particles in strong electric fields COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS 300:(3) pp. 353-358. (2007)
- Németh Norbert, Mádai Ferenc (2005): Early phase ductile deformation elements in the limestones of the eastern part of the Bükk Mts, Hungary ACTA GEOLOGICA HUNGARICA 48:(3) pp. 283-297.
- Németh Norbert, Mádai Ferenc (2003): Korai fázisú képlékeny deformációs elemek a Bükk hegység keleti részének mészköveiben I. FÖLDTANI KÖZLÖNY 133:(4) pp. 563-583. (2003)
- Mishchuk NA, Barany S, Tarovsky AA, Madai F (1998): Superfast electrophoresis of electron-type conducting particles. COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS 140:(1-3) pp. 43-51.

*Knowledge of English, presentation/teaching experience*

*Language Certificate:* English level C1 based on LL.M. diploma obtained in Great-Britain, Russian C1

*Teaching experience in English in a foreign country:*

- European Geotechnical and Environmental Course (EGEC) since 2010, Short course on mining waste characterization (2010 November, 2012 May, Kjeoy Research and Education Centre, Norway); Advanceg2 Erasmus IP course (2013 July, Spisska Nova Ves, Slovakia)
- *Courses thought in English:* Environmental geology, Mine waste geochemistry, Graduate research seminar

*Number of publications in English:* 26

*Conference presentations in English:* 16

<b>Name: Viktor Má dai Dr.</b>											
<b>Qualification(s)</b> , degrees granted by, year											
MSc in earth science engineering, University of Miskolc, 1996 MSc in computer science engineering, University of Miskolc, 2003											
<b>Current employment, position(s)</b>											
University of Miskolc, assistant professor											
<b>Scientific degree</b> (field, year)											
PhD (2007), earth sciences Title of Thesis: „Environmental Mineralogical Investigation of Gyöngyösoroszi Flotation Tailing Impoundment”											
<b>Scholarships</b> (date)											
<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)											
<table border="1"> <thead> <tr> <th>Period</th> <th>Position</th> <th>Employer</th> </tr> </thead> <tbody> <tr> <td>1998-2006</td> <td>assistant lecturer</td> <td>University of Miskolc</td> </tr> <tr> <td>2006-</td> <td>assistant professor</td> <td>University of Miskolc</td> </tr> </tbody> </table>			Period	Position	Employer	1998-2006	assistant lecturer	University of Miskolc	2006-	assistant professor	University of Miskolc
Period	Position	Employer									
1998-2006	assistant lecturer	University of Miskolc									
2006-	assistant professor	University of Miskolc									
<ul style="list-style-type: none"> <li>• <i>Years spent in academia:</i> 17 years</li> <li>• <i>Classes taught in Hungarian:</i> Hardware knowledge (MSc), Windows System Administrator (MSc), Environmental Mineralogy (BSc), Environmental Geology (MSc), Applied Environmental Geology / Environmental Status Assessment and Remediation (MSc), Basics of Mineralogy and Petrology (BSc), Geology (BSc), Environmental Geology-Geochemistry (BSc), Exploration Geochemical Methods (MSc).</li> <li>• <i>Classes taught in English:</i> Applied environmental geology, Environmental geology</li> </ul>											
<b>Professional experience so far and main achievements</b>											
<p>He graduated at the University of Miskolc with excellent qualification as an Earth Science Engineer specialized for Geological Engineering in 1996, then gained PhD from the Sámuel Mikoviny Doctoral School of the same university with summa cum laude level in 2007. He has been working at the University of Miskolc since 1998. He supervised scientific student theses. His research activity covers mainly environmental mineralogy and geochemistry of sulphide containing mine wastes, investigation of composite metallic and nonmetallic alloys, and mechanochemical study of cement grinding.</p> <p>Number of scientific papers: 23 Cumulative impact factor: 2.5 Independent citations in journals: 7</p>											
<b>Relationship of classes taught and scientific/research activities</b>											
<p>a) <i>The most important five publications of the last five years:</i></p> <ul style="list-style-type: none"> <li>• G. Mucsi, Á. Rácz, V. Má dai, 2013: Mechanical activation of cement in stirred media mill. POWDER TECHNOL 235: 163-172.</li> <li>• V. Má dai, 2012: Utilisation of Gyöngyösoroszi Flotation Tailing Material in Cement Industry. University of Miskolc, Paper 13.</li> <li>• V. Má dai, 2012: A gyöngyösoroszi flotációs meddőanyag, mint klinkeradalékanyag cement-víz keverékre gyakorolt hatásának vizsgálata, BKL BÁNYÁSZAT 145:(5), 21-24.</li> <li>• Z. Gácsi, J. Pázmán, V. Má dai, Á. Kovács, 2012: Arrangement of the Al-Ni phases in Al/SiC(Ni)<sub>p</sub> composites. INTERNATIONAL JOURNAL of MICROSTRUCTURE MAT.</li> </ul>											

<p>PROP 7:(1), 49-63.</p> <ul style="list-style-type: none"> <li>J. Pázmán, V. Mádai, J. Tóth, Z. Gácsi, 2011: Production and Investigation of Al/SiC(Ni)p Composites. 15th International Metallurgy &amp; Materials Congress, pp. 1752-1761.</li> </ul> <p>b) <i>The most important five publications of the entire career:</i></p>
<i>Knowledge of English, presentation/ teaching experience</i>
<p><i>Language Certificate:</i> Type B2 English</p> <ul style="list-style-type: none"> <li>Number of publications in English: 27</li> <li>Conference presentations in English: 10</li> </ul>

<b>Name: Dr. Tamás Madarász</b>		
<b>Qualification(s)</b> , degrees granted by, year		
MSc program Geologist engineer University of Miskolc, Hungary, Faculty of Earth Science and Engineering	1990-1995	
<i>Current employment, position(s)</i>		
associate professor – Department Head at Department of Environmental Engineering director – Centre for Technology and Knowledge Transfer		
<b>Scientific degree</b> (field, year)		
<i>Ph.D. in Earth Sciences</i> Title of thesis: Criterion and application of health risk assessment in contaminated site remediation 2005		
<i>Scholarships (date)</i>		
Postdoctoral research grant of the Hungarian Ministry of Education 2006-2007 Öveges József Research Program 2006-2007		
<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)		
<b>Period</b>	<b>Position</b>	<b>Employer</b>
1998	visiting scholar	Rochester Institute of Technology
1995	various positions	University of Miskolc
<ul style="list-style-type: none"> <li>Years spent in academia: 19 years</li> </ul> <p><i>Classes taught in Hungarian:</i> Human-health and Environmental Risk Assessment, Geotechnics of Waste Disposal, Applied Hydrogeology, Environmental Geology, Contaminated Site Remediation, well drilling and completion, water network design Classes taught in English: Environmental risk assessment and remediation; Contaminated site remediation</p>		
<i>Professional experience so far and main achievements</i>		
<ul style="list-style-type: none"> <li>Number of scientific papers: 15</li> <li>Cumulative impact factor: 2,5</li> <li>Independent citations in journals: 21</li> <li>Number of scientific reports: 34</li> </ul>		
<i>Relationship of classes taught and scientific/research activities</i>		



*a) The most important five publications of the last five years:*

- Szucs P, **Madarász T**: Hydrogeology in the Carpathian basin – how to proceed? EUROPEAN GEOLOGIST 35: pp. 17-20. (2013)
- Madarász T**, Szűcs P, Gombkötő I: Protocol and Lab Measurements Supporting the Design of a New PRB Approach. In: Karl E Lorber (szerk.) DepoTech 2012 International Conference, Montanuniversität Leoben Konferencia helye, ideje: , Ausztria, 2012.11.06-2012.11.09. Leoben: Eigenverlag, 2012. pp. 453-456.; (ISBN:978-3-200-02821-0)
- Plank Zs, Szűcs P, **Madarász T**, Neduczka B: Interdisciplinary Characterization of Subsurface Hydrocarbon Contamination on a Test Site in Hungary. ACTA GEODAEITICA ET GEOPHYSICA HUNGARICA 46:(4) pp. 457-470. (2011) IF: 0.346
- Gombkötő Imre, Lakatos János, **Madarász T**: New approach of permeable reactive barriers; ECOTERRA: JOURNAL OF ENVIRONMENTAL RESEARCH AND PROTECTION 28:(28) pp. 67-70. (2011)
- Szűcs P, Sallai F, Zákányi B, **Madarász T**: Vízkészletvédelem: A vízminőség-védelem aktuális kérdései; Miskolc: Bíbor Kiadó, 2009. (ISBN:978-963-9988-00-2)

*b) The most important five publications of the entire career:*

- Plank Zs, Szűcs P, **Madarász T**, Neduczka B: Interdisciplinary Characterization of Subsurface Hydrocarbon Contamination on a Test Site in Hungary. ACTA GEODAEITICA ET GEOPHYSICA HUNGARICA 46:(4) pp. 457-470. (2011) IF: 0.346
- Gombkötő Imre, Lakatos János, **Madarász T**: New approach of permeable reactive barriers; ECOTERRA: JOURNAL OF ENVIRONMENTAL RESEARCH AND PROTECTION 28:(28) pp. 67-70. (2011)
- Szűcs P, Sallai F, Zákányi B, **Madarász T**: Vízkészletvédelem: A vízminőség-védelem aktuális kérdései; Miskolc: Bíbor Kiadó, 2009. (ISBN:978-963-9988-00-2)
- P. Szucs, **T. Madarász**, F. Civan: Remediating over-produced and contaminated aquifers by artificial recharge from surface waters, Hungary; in Environmental Modelling and Assessment, Springer; DOI 10.1007/s10666-008-9156-4, 2008 IF: 1,056
- M. Huysmans, **T. Madarász**, A. Dassargues: Risk Assessment of groundwater pollution using sensitivity analysis and worst case scenario analysis, Environmental Geology Publisher: Springer-Verlag GmbH, ISSN: 0943-0105 (Paper) 1432-0495 (Online), Online published Febr. 22, 2006; pp.180-193 IF: 0,61;

*Knowledge of English, presentation/teaching experience*

*Language Certificate: Type C1 English*

- *Number of publications in English: 8*
- *Conference presentations in English: 25*



<b>Name: Dr. Mészáros Józsefné dr.</b>		
<b>Qualification(s)</b> , degrees granted by, year		
Technical University with a degree in Mechanical Engineering, University of Miskolc, 1973		
<b>Current employment, position(s)</b>		
University of Miskolc, Department of Applied Mathematics, Associate Professor		
<b>Scientific degree</b> (field, year)		
PhD, Discipline of Mechanical Engineering Science, 1997		
<b>Scholarships</b> (date)		
<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)		
<b>Period</b>	<b>Position</b>	<b>Employer</b>
1973-1980	department engineer	NME
1980-1989	assistant professor	University of Miskolc
1989-2000	lecturer	University of Miskolc
2000-	associate professor	University of Miskolc
<ul style="list-style-type: none"> <li>• <i>Years spent in academia:</i> 41</li> <li>• <i>Classes taught in Hungarian:</i> : Analysis, Probability, Statistics, Optimization methods, Numerical methods, Programming languages, Linear algebra, Computer Sciences</li> <li>• <i>Classes taught in English:</i> Numerical methods and optimization, Computer science for engineers</li> </ul>		
<b>Professional experience so far and main achievements</b>		
<b>Relationship of classes taught and scientific/research activities</b>		
<p>a) <i>The most important five publications of the last five years:</i></p> <ol style="list-style-type: none"> <li>1. Mészáros, G.: Solvig Nonlinear Constrained Minimization Problems with Zone Funcions, <i>The Publication of the XXVI. microCAD International Scientific Conference</i>, ISBN: 978-963-661-773-8, University of Miskolc, Hungary, 29-30 March 2012.</li> <li>2. Mészáros Gabriella: Numerikus Módszerek, <i>E-learning tananyag az ME Műszaki Földtudományi Kar Műszaki Földtudományi alapszakának Numerikus Módszerek tantárgyához</i>, Miskolci Egyetem, 2011, 1-180. (TÁMOP 4.2.5.)</li> <li>3. Mészáros G.: Numerical Methods, <i>E-learning lecture notes</i>, University of Miskolc, 2011, 1-80. (TÁMOP 4.2.5)</li> </ol> <p>b) <i>The most important five publications of the entire career:</i></p> <ol style="list-style-type: none"> <li>1. Kálovics, F., Mészáros, G.: Box Valued Functions in Solving Systems of Equations and Inequalities, <i>Numerical Algorithms (Kluwer Academic Publishers)</i>, Vol. 36. (2004), 1-12.</li> <li>2. Kálovics, F., Mészáros, G.: Two applications of exclusion functions without derivatives, <i>Conference on Numerical Methods and Computational Mechanics in Science and Engineering</i>, Miskolc, July 15-19, 1996. (abstract)</li> <li>3. Kálovics, F., Mészáros, G.: Finding global minima of maximum functions by using exclusion</li> </ol>		

functions without derivatives, *INTERVAL 96*, Wuerzburg, Sep. 30-Okt. 2, 1996. (extended abstract)

4. Égertné, M. É., Kálovics, F., Mészáros, G.: Numerical analysis I.-II. (*Egyetemi jegyzet*), Miskolci Egyetemi Kiadó (1992), 1-175.
5. Kálovics, F., Mészáros, G.: Finding global minima of maximum functions by using exclusion function without derivatives, *Reliable Computing* (Kluwer Academic Publishers), Vol. 3. No. 4. (1997), 381-399

*Knowledge of English, presentation/teaching experience*

*Language Certificate: Type-B2 English*

*Number of publications in English: 12*

- *Conference presentations in English: 7*

<b>Name: Dr. Németh Norbert</b>		
<b><i>Degrees</i></b>		
Economist, M.Sc. in BE. Diploma (Specialization in Business Economics, majored in Organization and Management), University of Miskolc, 1998 Certificated engineer of Earth Sciences, M.Sc. (Specialization in Applied Earth Sciences, majored in Geology), University of Miskolc, 2000		
<b><i>Present occupation</i></b>		
University of Miskolc, senior lecturer		
<b><i>Scientific degree</i></b>		
PhD (2006), geosciences, University of Miskolc		
<i>Széchenyi professzori ösztöndíj, Széchenyi István ösztöndíj, vagy Békésy György posztdoktori ösztöndíj stb. és juttatásának időpontja</i>		
<b><i>Educational activity</i></b>		
<b>Idő</b>	<b>Beosztás</b>	<b>Munkaadó</b>
1998 - 2000	research fellow	Bay Zoltán Foundation for Applied Research Institute for Logistics and Production Systems
2003 - 2004	junior research fellow	University of Miskolc
2004 - 2009	junior lecturer	University of Miskolc
2009 - 2014	lecturer	University of Miskolc
2014 -	senior lecturer	University of Miskolc
<ul style="list-style-type: none"> <li>• <i>Time in education: 10 years</i></li> <li>• <i>Subjects taught in Hungarian:</i> Structural geology, Geological practice 1-2, Geological documentation, Remote sensing, Environmental geology (exercises) <i>Subjects taught in English:</i> Structural geology, PEGEC</li> </ul>		
<b><i>Professional career</i></b>		

Speciality: structural geology, mineral exploration

Number of scientific publications: 80

Cumulated impact faktor: 0.727

Independent references: 40

Exploration reports:

***Links of subjects taught and scientific activity:***

*a) most relevant publications of the last 5 years:*

- Németh N. – Földessy J. – Kupi L. – Iglesias, J. G. 2013: Zn-Pb mineralization types in the Rudabánya Ore Bearing Complex. *Carpathian Journal of Earth and Environmental Sciences***8/1**, pp. 47-58.
- Németh N. – Kasó A. – Földessy J. 2012: Sphalerite indications in the Aggtelek Mts. *Geosciences and Engineering, A Publication of the University of Miskolc***1/1**, pp. 255-260.
- Németh N. 2012: Geological observations in the Cserehát, between Irota and Gadna. *Geosciences and Engineering, A Publication of the University of Miskolc***1/1**, pp. 261-269.
- Földessy J. – Németh N. – Gerges A. 2010: A rudabányai színesfém-ércesedés újrakutatásának előzetes földtani eredményei. *Földtani Közlemény***140/3**, pp. 281-292.
- Németh N. – Pethő G. 2009: Geological mapping by geobotanical and geophysical means: a case study from the BükkMountains (NE Hungary). *Central European Journal of Geosciences***1/1**, pp. 84-94.

*b) most important 5 publications*

- Németh N. 2007: A bükkzsérci Patkó-sziklák kőfejtőjének és környékének szerkezetföldtani jelenségei. *Földtani Közlemény***137/4**, pp. 473-486.
- Németh N. – Má dai F. 2005: Early phase ductile deformation elements in the limestone of the eastern part of the Bükk Mts, Hungary. *Acta Geologica Hungarica***48/3**, pp. 283-297.
- Zelenka T. – Kaló J. – Németh N. 2005: Az alsótelekesi gipsz-anhidrit dóm szerkezete. *Földtani Közlemény***135/4**, pp. 493-511.
- Németh N. – Má dai F. 2004: Korai fázisú képlékeny deformációs elemek a Bükk hegység keleti részének mészköveiben II. – mikroszerkezeti jellemzők. *Földtani Közlemény***134/1**, pp. 1-28.
- Németh N. – Má dai F. 2003: Korai fázisú képlékeny deformációs elemek a Bükk hegység keleti részének mészköveiben I. *Földtani Közlemény***133/4**, pp. 563-583.

Languages, educational practice in English

Exams: intermediate level B2 English

- *Foreign educational practice in English:*  
-
- *Subjects taught in English*  
Participation in EGEC courses from 2004: lectures in German and in English, field trainings
- *Publications in English: 18 papers*
- *Conference presentations in English: 16*

<b>Name: JUDIT NÉMETHNÉ SÓVÁGÓ, Ph.D.</b>	
<b><i>Degree and qualification, institution issuing the degree, year:</i></b>	
Chemical Engineer, University of Veszprém, 1992.	
<b><i>Current workplace, the job of the appointment:</i></b>	
University of Miskolc, Faculty of Materials Science and Engineering, Institute of Chemistry, Associate Professor	
<b><i>Academic degree:</i></b>	
Ph.D., Chemistry Science 1997.	
<b><i>Scholarships (date):</i></b>	
<ul style="list-style-type: none"> <li>- Academical scholarship from 1992 to 1995 (Hungarian Academy of Sciences; Petrochemical Research Group; Veszprém)</li> <li>- DAAD Scholarship from 1 Nov 1994 to 31 Jan 1995</li> </ul>	
<b><i>Teaching activities:</i></b>	
<ul style="list-style-type: none"> <li>- From 1993 to 1995: managing of laboratory practices in organic chemistry (University of Veszprém)</li> <li>- From 2008 until now: chemistry (MSc), organic chemistry (BSc), physical chemistry (BSc), applied physical chemistry (MSc), transport phenomena and its simulations (MSc), inorganic chemical technology (BSc), chemical technology (MSc), air pollution testing of industrial technologies (MSc), optimization of chemical technology (MSc), equilibrium thermodynamics (Bsc and Msc), chemical engineering calculations (PhD) (University of Miskolc).</li> </ul> <p><i>Classes taught in English:</i> Physical chemistry</p>	
<b><i>Professional (scientific, research and development) practices and results:</i></b>	
<p><b>Scientific activities:</b></p> <ul style="list-style-type: none"> <li>• 1992-1995: University of Veszprém, Petrochemical Research Group: Research Assistant: my research field was the homogeneous catalytic reactions. Specific research activity was the analysis of living polymerization reaction of allenes.</li> </ul> <p><b>Other professional activities:</b></p> <ul style="list-style-type: none"> <li>• 1995-1996: Plant Health and Soil Conservation Station, Debrecen: expert of instrumental analysis.</li> <li>• 1996-2008: TVK Plc. various engineering positions.</li> </ul> <p>From 2008: Educational and researching activities at the University of Miskolc, Faculty of Materials Science and Engineering</p> <ul style="list-style-type: none"> <li>• Research in micro-reactor regarding to organic chemical processes.</li> <li>• R &amp; D activity of TVK Plc joint research and development themes: eg. exploring the acidification problems of the steam system in the Olefin Plants, examination the content of volatile substances in the HDPE polymer powder.</li> <li>• Leading the Thesis and Dissertation of the Chemical Technology students, which are more focused on the plants and technologies of TVK Plc and Borsod Chem Ltd., as Ph.D. co-supervisor testing the gas separation system of olefin technology.</li> </ul> <p>From 2008 until now: 12 student made Tesis and Dissertation and 6 student took part in Scientific Student Conference under my supervising.</p> <ul style="list-style-type: none"> <li>➤ Keeping connection with Chemical and Petrochemical Companies located in Borsod region, coordinating summer practice work of the chemical technology students. Since 2008, as the leader of Chemical Technology Specialty I organized the summer practice work for more</li> </ul>	

than 100 students.

***Presentation the relationship between the Subjects and the educational qualification / research activity:***

**The more important publications over the past five years:**

- Varga Tünde, Kerecsi János, Némethné Sóvágó Judit, Vigh Ervin; Vegyipari benzin sűrűségének hőmérséklet-függése a komponens-összetétel figyelembe vételével Anyagmérnöki Tudományok, Miskolc, 38. kötet.1. füzet pp. 337-348. (2013)
- Némethné Sóvágó Judit; A vegyipari szimulációs programok működéséhez alkalmazható termodinamikai modellek, Anyagmérnöki Tudományok, Miskolc, 38. kötet.1. füzet pp. 231-243. (2013)
- Kerecsi János, Némethné Sóvágó Judit; az olaj- és petrokkémiai iparban jelentkező mikrobiológiai korróziós folyamatok; Anyagmérnöki Tudományok, Miskolc, 37. kötet. pp. 175-186. (2012)
- Prof. Bárány Sándor, Baumli Péter, Emmer János, Hutkainé Göndör Zsuzsanna, Némethné Sóvágó Judit, Báder Attila; Fizikai kémia műszakiaknak elektronikus tankönyv+video, Nemzeti Tankönyvkiadó, (2011.)
- [http://www.tankonyvtar.hu/en/tartalom/tamop425/0001\\_1A\\_A3\\_02\\_ebook\\_fizikai\\_kemia\\_muszakiaknak/adatok.html](http://www.tankonyvtar.hu/en/tartalom/tamop425/0001_1A_A3_02_ebook_fizikai_kemia_muszakiaknak/adatok.html)
- Némethné Sóvágó Judit, Ábrahám József, Gál Tivadar, Vegyipari és Petrokkémiai Technológiák; Általános és szerves kémiai technológia elektronikus tankönyv (I. fejezet); Nemzeti Tankönyvkiadó, (2011.)
- [http://www.tankonyvtar.hu/hu/tartalom/tamop425/0001\\_1A\\_A3\\_03\\_ebook\\_vegyipari\\_es\\_petrokkemiai\\_technologiak/adatok.html](http://www.tankonyvtar.hu/hu/tartalom/tamop425/0001_1A_A3_03_ebook_vegyipari_es_petrokkemiai_technologiak/adatok.html)

**More five important publications:**

- Varga Tünde, Kerecsi János, Némethné Sóvágó Judit; Az olefingyártáshoz szükséges alapanyagok összetételének hatása a monomer kihozatalra; Anyagmérnöki Tudományok, Miskolc, 37. kötet. pp. 423-433. (2012)
- Judit Némethné Sóvágó, Olivér Bánhidi, Tivadar Gál; Gábor Barancsy; Investigation of acidification phenomena in process water- and steam; MOL Group Scientific Magazine (ISSN 2060-338X); 2012/1; p. 80-87.
- Némethné Sóvágó Judit, Bernáth Tibor, Gál Tivadar: Szimulációs és tervezési modellek használatának gyakorlata és a kialakított modell-rendszerek harmónizációja a MOL Csoport Petrokkémiai Divíziójában MOL Szakmai Tudományos Közlemények, 188-207 (2007/1).
- G. Szalontai, J. Sóvágó and F. Ungváry: Solution- and solid-state NMR study of intermediate  $\eta^3$ -allyl-cobalt-tricarbonyl type complexes in 3-methyl-1,2-butadiene polymerization. Journal of Organometallic Chemistry, 586, 54-60, (1999).
- J. Sóvágó, G. M. Newton, E. A. Mushina and F. Ungváry: Intermediate Complexes in the Octacarbonyl Dicobalt Initiated Living Polymerization of 3-Methyl-1,2-butadiene. Journal of the American Chemical Society, 118, 9589-9596 (1996). Hivatkozások száma: 17
- G. M. Newton, J. Sóvágó and F. Ungváry: Identification of the Initial Adducts in the Polymerization of 3,3-dimethylallene with dicobalt-octacarbonyl; Crystallographic Association Annual Meeting; Atlanta, GA, (1994)

<b>Name: Dr. Ormos Tamás</b>		
<b>Qualification(s)</b> , degrees granted by, year		
degree in Mining Engineering ( <i>Mining geology-geophysics</i> ), Technical University of Heavy Industry (University of Miskolc) 1972		
<b>Current employment, position(s)</b>		
University of Miskolc, private professor		
<b>Scientific degree</b> (field, year)		
<b>CSc (1996)</b> , Engineering sciences (MTA) Title of CSc thesis: „ <i>Investigations on the seismic channel model based on the in-mine measured data of Rayleigh- and Love seam waves and underground VSP</i> ”		
<b>PhD (1996)</b> , Engineering (issued on the basis of CSc, University of Miskolc) <b>„dr. habil” title (2006)</b> University of Miskolc Scientific lecture: „ <i>The role of the seismic-geolectric joint inversion in the engineering geophysics</i> ”		
<b>Scholarships</b> (date)		
István Széchenyi Professorial Scholarship (2000-2003)		
<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)		
<b>Period</b>	<b>Status</b>	<b>Employer</b>
1972-1974	scientific fellow /scholar trainee	University of Miskolc
1974-1985	assistant lecturer	University of Miskolc
1985-1996	senior lecturer	University of Miskolc
1996-2013	associate professor	University of Miskolc
2013-	private professor	University of Miskolc
<ul style="list-style-type: none"> <li>• <i>Years spent in academia: 41 years</i></li> <li>• <i>Classes taught in Hungarian:</i> Geofizika II. (<i>Szeizmika</i>) (BSc), Szeizmikus kollégium (MSc), Mérnök- és Környezetgeofizika (MSc), Geofizikai kutatómódszerek I. (<i>Szeizmika</i>) (MSc), Vízkutatás geofizikája (<i>Szeizmika</i>) (MSc), Mérnöki geofizika (MSc), Geofizikai mérések (MSc), Geofizikai értelmezés és tervezés I. (MSc), Speciális módszerek a szeizmikában II. (PhD).</li> <li>• <i>Classes taught in a foreign language:</i> Geophysical measurements, Engineering and environmental geophysics</li> </ul>		
<b>Professional experience so far and main achievements</b>		
<ul style="list-style-type: none"> <li>• Method- and instrument development in connection with seismic methods applied in mines. Active participation in the application of mining seismic methods: planning, data acquisition, controlling of measurements as well as data processing and interpretation of the results. In 1984 a <b>univ. Dr thesis</b> was made under this topic with the title „<i>Love seam waves in the Borsod coal area</i>”.</li> <li>• Intensive participation in the efficient MTA-DFG scientific cooperation between the Department of Geophysics at the Ruhr-Universität Bochum and the Department of Geophysics at the University of Miskolc during the period 1981-2000.</li> <li>• The research results in evaluation of seismic measurements made in mines are summarized in the <b>CSc dissertation</b> with the title „<i>Investigations on the seismic channel model based on the in-mine measured data of Rayleigh- and Love seam waves and underground VSP</i>”. Its defence was in December 1995.</li> <li>• Present researches, method developments (partially in international cooperation): <b>2D series expansion inversion of refracted time data, qualified joint inversion of seismic and</b></li> </ul>		



**geolectric measurement data, near surface hole exploration with surface waves.** He **habilitated** with the scientific colloquium theme „*role of the seismic-geolectric joint inversion in the engineering geophysics*” based on these results at the University of Miskolc in 2006.

- Scientific projects: (*participation and leadership*)  
Hungarian Scientific Research Fund (OTKA): 5 project  
MTA-DFG (Hungarian-German): 5 project  
Exploration reports: more than 20
- Sciencemetry: (*MTMT data*)  
Number of scientific works: 106  
Cumulative impact factor: 5.2  
Number of independent references: 258  
Hirsch index: 9

#### *Relationship of **classes taught** and **scientific/research activities***

##### *a) The most important five publications of the last five years:*

- Paripás A N, Ormos T: New Inversion Techniques for the Elimination of Trigger Errors in Seismic Refraction Data. GEOSCIENCES AND ENGINEERING: A PUBLICATION OF THE UNIVERSITY OF MISKOLC 2:(3) pp. 73-82. (2013)
- Gyulai A, Ormos T, Dobroka M, Turai E, Sasvari T: In-mine geolectric investigations for detecting tectonic disturbances in coal seam structures. ACTA GEOPHYSICA 61:(5) pp. 1184-1195. (2013)
- Paripás A N, Ormos T: Resolution and ambiguity studies for a series expansion based multilayer refraction inversion method. ACTA GEODAETICA ET GEOPHYSICA HUNGARICA 47:(2) pp. 28-41. (2012)
- Ormos T, Paripás A N: Traveltime Differences in Seismic Refraction Inversion. GEOSCIENCES AND ENGINEERING: A PUBLICATION OF THE UNIVERSITY OF MISKOLC 1:(2) pp. 123-128. (2012)
- Gyulai A, Ormos T, Dobroka M: A quick 2-D geolectric inversion method using series expansion. JOURNAL OF APPLIED GEOPHYSICS 72:(4) pp. 232-241. (2010)

##### *b) The most important five publications of the entire career:*

- Ormos T, Daragó A: Parallel inversion of refracted travel times of P and SH waves using a function approximation. ACTA GEODAETICA ET GEOPHYSICA HUNGARICA 40:(2) pp. 215-228. (2005)
- Gyulai A, Ormos T: A new procedure for the interpretation of VES data: 1.5-D simultaneous inversion method. JOURNAL OF APPLIED GEOPHYSICS 41:(1) pp. 1-17. (1999)
- R Misiak, A Liebig, A Gyulai, T Ormos, M Dobróka, L Dresen: A joint inversion algorithm to process geolectric and surface wave data: Part II. : Applications. GEOPHYSICAL PROSPECTING 45:(1) pp. 65-86. (1997)
- M Dobróka, Á Gyulai, T Ormos, J Csókás, L Dresen: Joint inversion of seismic and geolectric data recorded in an under-ground coal mine. GEOPHYSICAL PROSPECTING 39:(5) pp. 643-665. (1991)
- Breitzke M, Csókás J, Dresen L, Gyulai Á, Ormos T: Parameter estimation and fault detection by three-component seismic and geolectric surveys in a coal mine. GEOPHYSICAL PROSPECTING 35: pp. 835-863. (1987)

#### *Knowledge of English, presentation/teaching experience*

- *English language educational training abroad:*  
2001: National Central University, National Chung Cheng University, Taiwan: invited lecturer, topics: minegeophysics and inversion  
Umweltgeophysik (European Geotechnical and Environmental Course, University of Miskolc);  
Inversion von Oberflächenwellen und Goelektrischen Daten zur Parameterbestimmung in den oberen Zehnermeter-Bereichen (Mintrop Seminárium, Neheim-Hüsten, Germany); Joint



inversion (National Central University, Chung-Li, Taiwan)

- *Publications in English language: 39*
- *(International) conference presentations in English language: 20*

<b>Name: Gábor Pethő Dr.</b>														
<b>Qualification(s)</b> , degrees granted by, year														
MSc in Mining Engineering, NME, 1975														
<i>Current employment, position(s)</i>														
University of Miskolc, associate research professor														
<b>Scientific degree</b> (field, year)														
PhD (1996), earth sciences														
<i>Scholarships (date)</i>														
Széchenyi Professor Scholarship, 2002-2005														
<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)														
<table border="1"><thead><tr><th>Period</th><th>Position</th><th>Employer</th></tr></thead><tbody><tr><td>1978-1989</td><td>1978-1989 dept. engineer</td><td>University of Miskolc</td></tr><tr><td>1989-1997</td><td>researcher</td><td>University of Miskolc</td></tr><tr><td>1997-</td><td>associate research professor</td><td>University of Miskolc</td></tr></tbody></table>			Period	Position	Employer	1978-1989	1978-1989 dept. engineer	University of Miskolc	1989-1997	researcher	University of Miskolc	1997-	associate research professor	University of Miskolc
Period	Position	Employer												
1978-1989	1978-1989 dept. engineer	University of Miskolc												
1989-1997	researcher	University of Miskolc												
1997-	associate research professor	University of Miskolc												
<ul style="list-style-type: none"><li>• <i>Years spent in academia: 36 years</i></li><li>• <i>Classes taught in Hungarian:</i> Fundamentals of geophysics, Earth science practice I., Radiometry and radiation protection, Applied geophysics, Global environmental geophysics, Special geophysics.</li><li>• <i>Classes taught in a foreign language:</i> Applied geophysics, Geophysical interpretation and prospecting; Environmental Geophysics (European Geotechnical and Environmental Course, University of Miskolc)</li></ul>														
<b>Professional experience so far and main achievements</b>														
<p>Dr. Gábor Pethő has worked for the Department of Geophysics since 1978. He received MSc degree in well log interpretation and after graduation he worked as geophysical engineer of well-logging for Hungarian oil industry between 1975 and 1978. He has more than 30 years teaching and research experience in applied geophysics. His main field of research is electromagnetic methods, and he defended his PhD thesis in this topic. He also did research in different research or academic institutes in the Netherlands, in Germany and in Finland in the 90-ies. He was the leader of two OTKA projects (1999 - 2002, and 2005-2009). Currently underwriter of seven subjects. Lecturer of geophysics and well logging courses in English in the traditional five-year MS training system and he was the lecturer of additional six courses as well.</p> <p>Book portions: 2 Hungarian publications: 28 International publications: 30 Hungarian and international conference presentations: 45 Text books, work-help tutorials: 6 Research reports and studies: 32 Successful national and international application: 3 Publications of reference: 55</p>														

*Relationship of **classes taught** and **scientific/research activities***

*a) The most important five publications of the last five years:*

- Pethő, G. (2012): Differential equations of FEM using electric dipole source for elongated structures with conductivity anisotropy, *Kutatás és Innováció a Magyar Geotermiában*, pp.70-86.
- Pethő, G. (2012): Frequency Domain Electromagnetic Investigation on Elongated Conductivity Structures, *Geosciences and Engineering*, Vol. 1, No. 1, pp.271-282.
- Pethő, G., Vass, P. (2011): *Geofizika alapjai, Elektronikus jegyzet*, pp.1-331.
- Pethő, G., Vass, P. (2011): *Geophysics (Gravity and radiometric methods) electronic textbook*, pp. 1-46.
- Pethő, G. (2009): FEM source effect investigation with 2.5D numerical modelling, 15<sup>th</sup> European Meeting of Environmental and Engineering Geophysics, Dublin, Near Surface 2009 Proceedings, P59.

*b) The most important five publications of the entire career:*

- Pethő, G. (2007): EM parameters of 2.5-D FEM using electric dipole source in the transition zone. Presented in Intellectual service for oil & gas industry, Analysis, solutions, perspectives. Vol. 4. pp. 110-117.
- Pethő, G., Ficsór, L. (2000): Some applications of frequency domain 2.5-D numerical modelling using HED sources. Presented in Intellectual service for oil & gas industry, Analysis, solutions, perspectives. pp. 172-176.
- Pethő, G., Kaikkonen, P., Vanyan, L., L. (1995): Numerical modelling for the effect of a 2-D seafloor trench on sea-bottom EM measurements using horizontal electric dipole sources, *Geophysica*, Vol. 31, pp. 1-21.
- Pethő, G. (1994): CSAMT Numerical Modelling for 2D Thermal EOR Monitoring, EAPG-6<sup>th</sup> Conference and Technical Exhibition, Extended Abstracts of Papers, P547.
- Pethő, G. (1987): Aspects of finite difference modelling of the electromagnetic field of an oscillating electric dipole. *Geophysical Transactions*, Vol. 33/2, pp. 113-122.

*Knowledge of English, presentation/ teaching experience*

*Language Certificate: Type B2 English*

- *Teaching experience in English abroad:*
- *Courses previously taught in English:* Geophysics, Well logging
- *Number of publications in English:* 30
- *Conference presentations in English:* 21

<b>Name: Imre Szabó Dr.</b>	
<b>Qualification(s), degrees granted by, year</b>	
M.Sc. in engineering geology; M.Sc in foundation engineering	
<i>Current employment, position(s)</i>	
University of Miskolc, <i>Department of Hydrogeology and Engineering Geology</i> ; full professor	
<b>Scientific degree (field, year)</b>	
CSc in applied Earth Sciences (1989); Dr habil (2005)	
<i>Scholarships (date)</i>	
▪ Széchenyi István Scholarship 1997-2001 and 2002-2005;	

**Teaching activities** (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)

Time	Position	Employer
1967-1975	Assistant lecturer	Technical University of Miskolc
1975-1990	Assistant professor	Technical University of Miskolc / University of Miskolc
1990-2006	Associate professor	University of Miskolc
2006-	Professor	University of Miskolc
1997-2009	Head of Department	University of Miskolc/ Dept. of Hydrogeology and Engineering Geology

Subject	G/C/PhD	Weekly hours	Remarks
Soil Mechanics, Geotechnics II	G	21+2 p.	
Waste Disposal	G	31	
Waste Management I.	G	21 + 2 p	
Remediation of Contaminated Sites	G	21	
Engineering Geology, Geotechnics III.	G	21	
Engineering Geology	G	21	
Env. Protection, Waste Management	G	31	
Engineering Geology	PhD	11	
Waste Disposal	PhD	11	
Waste Disposal, Landfilling (ELTE, Debreceni Egyetem)	PhD		Invited lecturer at ELTE University, University Debrecen
Environmental Geology, Waste Disposal (ELTE)	G	21	Invited lecturer at ELTE University (1997-2000)
Waste Management, Landfilling	PG	20h/semester	

*Classes taught in English:* Soil mechanics, Geotechnical engineering, Environmental geotechnics

**Professional experience so far and main achievements**

Books, conf. proceedings	10
Hungarian publications	72
Publication in foreign languages	36
Conference lectures in Hungary and abroad	53
University text books, lecture notes	7
Research reports	355
Patents	0
Successful Hungarian and foreign applications	24

▪ Memberships in professional associations:

Period	Board / association	Membership or leadership
1990-2000	Comettee of Hungarian Standartisation	member
1990-.....	Hungarian Chamber of Engineers, Geotechnics	core member
2000-.....	Hungarian Chamber of Engineers, Env. Protection	core member
1993-1998	International Society of Rock Mechanics	member
1993-1998	International Mine Water Association	member
1995-.....	ISSMGE, TC-5 Environmental Geotechnics	national delegate

1995-.....	Hungarian National Committee of the ISSMGE	member
1996-.....	Hungarian Academy of Sciences in Miskolc, Committee of Geotechnics	member
2005-2006	Hungarian Academy of Sciences in Miskolc, Committee of Environmental Geotechnics	leader
1996-.....	Hungarian Academy of Sciences	

*Relationship of classes taught and scientific/research activities*

a) *The most important five publications of the last five years:*

1. Efficiency and equivalency of barrier systems, *Novelties in Enhanced Oil and Gas Recovery*, Progress in Mining and Oilfield Chemistri, Vol.2.(ed. Lakatos I.), Akadémiai Kiadó, Budapest, 2000.pp. 255-272.,ISBN 963 05 7724 0, (társszerzőkkel)
2. Szennyezett területek kármentesítése, Egyetemi tankönyv, Egyetemi Kiadó.Miskolc, 2002., p.480., (társszerzők:Filep Gy. -Kovács B.-Lakatos J.-Madarász T.)
3. Kármentesítési beruházások műszaki ellenőrzése, Kármentesítési Útmutató 5. Környezetvédelmi és Vízügyi Minisztérium, 2003, p.74 ISBN 963 03 4408 4, (társszerzőkkel, főszerk.Németh T.)
4. Hulladékgazdálkodás, alaptankönyv, TERTIA Kiadó Bt., Budapest, 2003 ISBN 963 9387 11 8, (társszerző, szerk.: Zimler T.)
5. The current state and future plans of closure and remediation of old landfills, as well as construction of new landfills, Abschluss und Rekultivierung von Deponien und Altlasten 2004., Abfallwirtschaft in Forschung und Praxis, Band 132, Erich Schmidt Verlag, pp.149-161, ISBN 3 503 08323 5

b) *The most important five publications of the entire career:*

1. Hulladékéltelhelyezés I-IV. kötet I. kötet: A terület kiválasztása, a geotechnikai vizsgálatok, p. 311., II. kötet: Tervezés, méretezés, kialakítás, p. 223, III. kötet: A lerakóban lejátszódó folyamatok. A monitoring rendszer. A kármentesítés, p.231., IV.kötet : A szennyezőanyagok terjedése. A modellezés elmélete és gyakorlata, p. 270 (társsz.: Kovács B.) Ipar a Környezetért Alapítvány,1995
2. Das Multibarrierensystem in der Deponiebautechnik, Schriftenreihe des Lehrstuhles Angewandte Geologie Karlsruhe, 44. 1996., p. 363.,(szerk. K.Czurda-Szabó I.), ISSN 0933-2510
3. Abfallentsorgung und Altlastensanierung, Schriftenreihe des Lehrstuhles Angewandte Geologie, Karlsruhe, 54. 1998. p. 200., (szerk.: K. Czurda-Szabó I.), ISSN 0933-2510
4. Controlled landfill design (Geotechnical aspects), Proc. of the 3rd International Congress on Environmental Geotechnics, Lisboa, Portugal, 7-11. Sept. 1998. Balkema, Rotterdam, pp. 101-1038. (társszerzőkkel)
5. Hulladékéltelhelyezés, egyetemi tankönyv, Miskolci Egyetemi Kiadó, 1999. p. 440 ISBN 963 661 313 3

*Knowledge of English, presentation/ teaching experience*

*Language Certificate:* type B2 Russian, Type B2 German

- *Number of publications in English:* 25
- *Conference presentations in English:* 12

<b>Name: Norbert Péter Szabó Dr.</b>	
<b>Qualification(s), degrees granted by, year</b>	
MSc in earth science engineering, University of Miskolc, 1999	
<b>Current employment, position(s)</b>	
University of Miskolc, associate professor	
<b>Scientific degree (field, year)</b>	
PhD (2005), earth sciences Name of thesis: „Modern inversion methods for the interpretation of well-logging data”	

*Scholarships (date)*

János Bolyai Scholarship from the Hungarian Academy of Sciences (2013-)

**Teaching activities** (*classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.*)

Period	Position	Employer
2003-2010	assistant lecturer	University of Miskolc
2010-2012	assistant professor	University of Miskolc
2012-	associate professor	University of Miskolc

- *Years spent in academia:* 11 years
- *Classes taught in Hungarian:*  
Geophysics I-II. (BSc), Geostatistics I-II. (BSc and MSc), Earth Science Statistics (MSc), Well-logging College (MSc), Software Engineering (BSc), Software Development I. (MSc), Geophysical Surveying Methods I. (MSc), Hydrogeophysics (MSc), Modern statistical methods (PhD), Interpretation of Gravity Data (PhD), New Results of Borehole Geophysics (PhD), MATLAB programming language (PhD)
- *Classes taught in a foreign language:*  
Introduction to Geophysical Literature, Engineering and mining geophysics (European Geotechnical and Environmental Course, University of Miskolc), Geophysical Modeling (Aalto University, Helsinki University of Technology)

*Professional experience so far and main achievements*

He graduated at the University of Miskolc with excellent qualification as an Earth Science Engineer specialized for Geophysical Engineering in 1999, then gained PhD from the Sámuel Mikoviny Doctoral School of the same university with summa cum laude degree in 2005. He has been working at the University of Miskolc since 2003. He has been awarded several times for supervising scientific student theses including both on university and country-wide scales. His research activity covers mainly well-logging inversion and geostatistical data processing method developments. He has gained experience on petrophysical methods from the Hungarian Oil and Gas Company and has been actively involved in common R&D projects of the Geophysical Department and the Hungarian Oil and Gas Company. He participated in EAGE and other scientific conferences regularly (Moneasa - 2002, Stavanger - 2003, Madrid - 2005, Vienna - 2006, London - 2007, Helsinki - 2009, Dublin - 2009, Leicester - 2011, Rome - 2013, London - 2013). He obtained positions as researcher and visiting professor at Helsinki University of Technology between 2008 and 2009. He was awarded with János Csókás Prize from the Hungarian Association of Geophysicists for the most excellent paper of the year in 2010. In 2013 the Rector of the University of Miskolc awarded the prize of the "Excellent Researcher of the University of Miskolc" to him. In the same year he won the János Bolyai (3 years) Scholarship as a support from the Hungarian Academy of Sciences. In 2013 he applied successfully for the leadership of a borehole geophysical project granted by the Hungarian Scientific Research Fund. He frequently reviews scientific papers of domestic and international journals and conferences.

- Number of scientific papers: 52
- Cumulative impact factor: 9.496
- Independent citations in journals: 41
- Number of scientific reports: 12

*Relationship of classes taught and scientific/research activities*

*a) The most important five publications of the last five years:*

- Szabó N. P., Kalmár Cs., 2013: Permeability estimation in primary porosity rocks using Stoneley-wave transit times (in Hungarian). Magyar Geofizika, Vol. 54., No. 3, pp. 141-153.

- Szabó N. P., Dobróka M., 2013: Extending the application of a shale volume estimation formula derived from factor analysis of wireline logging data. *Mathematical Geosciences*, Vol. 45, Issue 7, pp. 837-850.
- Dobróka M., Szabó N. P., 2012: Interval inversion of well-logging data for automatic determination of formation boundaries by using a float-encoded genetic algorithm. *Journal of Petroleum Science and Engineering*, Vol. 86–87, pp. 144-152.
- Dobróka M., Szabó N. P., 2011: Interval inversion of well-logging data for objective determination of textural parameters. *Acta Geophysica*, Volume 59, Number 5, pp. 907-934.
- Dobróka M., Szabó P. N., Cardarelli E., Vass P., 2009: 2D inversion of borehole logging data for simultaneous determination of rock interfaces and petrophysical parameters. *Acta Geodaetica et Geophysica Hungarica*, Vol. 44 No. 4, pp. 459-479.

*b) The most important five publications of the entire career:*

- Szabó N. P., Dobróka M., Drahos D., 2012: Factor analysis of engineering geophysical sounding data for water saturation estimation in shallow formations. *Geophysics*, Vol. 77, No. 3, pp. WA35-WA44.
- Szabó N. P., 2012: Dry density derived by factor analysis of engineering geophysical sounding measurements. *Acta Geodaetica et Geophysica Hungarica*, Vol. 47, No. 2, pp. 161-171.
- Szabó N. P., 2011: Shale volume estimation based on the factor analysis of well-logging data: *Acta Geophysica*, Volume 59, Number 5, pp. 935-953.
- Dobróka M., Szabó P. N., 2005: Combined global/linear inversion of well-logging data in layer-wise homogeneous and inhomogeneous media. *Acta Geodaetica et Geophysica Hungarica*, Vol. 40(2), pp. 203-214.
- Szabó N. P., 2004: Global inversion of well log data. *Geophysical Transactions, Eötvös Loránd Geophysical Institute of Hungary*, Vol. 44. Nos. 3-4., pp. 313-329.

*Knowledge of English, presentation/ teaching experience*

*Language Certificate: Type B2 English*

- *Teaching experience in English abroad:*  
2008-2009: Helsinki University of Technology (researcher and visiting professor)
- *Courses previously taught in English:*  
Introduction to Geophysical Literature (University of Miskolc), Engineering and mining geophysics (University of Miskolc), Geophysical Modeling (Aalto University, Finland)
- *Number of publications in English:* 39
- *Conference presentations in English:* 20

<b>Name: Tibor Szabó Dr.</b>	
<b>Qualification(s), degrees granted by, year</b>	
MSc. in Petroleum Engineering, Tech. Univ. Miskolc, 1989. M.B.A., University of Miskolc, 1996. MSc. in Labour Safety Engineering, Budapest University of Technology and Economics, 2008,	
<b>Current employment, position(s)</b>	
University of Miskolc, associate professor	
<b>Scientific degree (field, year)</b>	
PhD (2006), earth sciences Title of thesis: „ <u>Investigation</u> of the Fluids of Underbalanced Drilling Technology”	
<b>Scholarships (date)</b>	



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<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)		
<b>Period</b>	<b>Position</b>	<b>Employer</b>
1995-2000	assistant lecturer	University of Miskolc
2000-2012	assistant professor	University of Miskolc
2012-	associate professor	University of Miskolc
<ul style="list-style-type: none"> <li>• <i>Years spent in academia:</i> 19 years</li> <li>• <i>Classes taught in Hungarian:</i>            Olajmérnöki ötéves képzésben: Hydraulics, Drilling Technology I., Drilling Technology II., Drilling Technology; Well Control, Drilling Technology; Formations Stimulation            Olajmérnöki ötéves képzés kredit rendszerben: Drilling Design, Drilling hydraulics, Well Control            Műszaki Földtudományi Alapszak: The Basics of Drilling Technology 1., The Basics of Drilling Technology 2., Catastrophes in Petroleum Industry            Olaj- és Gázmérnöki Mesterszak, Olajmérnöki szakirány: Drilling Design, Well Control Simulations, Well Completion, HSE            Olaj- és Gázmérnöki Mesterszak: Drilling and Well Completion, Well Control Simulations, HSE            Olajmérnöki Szakmérnöki Továbbképzési szak: Drilling Design, Drilling hydraulics, Well Control</li> <li>• <i>Classes taught in a foreign language:</i>            MS in Petroleum Engineering upto 2006: Drilling Lab I., Drilling Lab II., Drilling III., Blowout Prevention            MS in Petroleum Engineering from 2012: Drilling Engineering I., Drilling Design I., Drilling Engineering II., Drilling Design II., Well Control Lab, Well Completion Design, HSE in Petroleum Industry</li> </ul>		
<b>Professional experience so far and main achievements</b>		
<p>Dr. Szabó graduated at the Technical University of Heavy Industry in Miskolc as a Petroleum Engineer in 1989. He started his career at the Research Laboratory for Mining Chemistry of the Hungarian Academy of Sciences. He joined the faculty of Petroleum Engineering Department at the beginning of 1995. He gained PhD from the Sámuel Mikoviny Doctoral School of the University of Miskolc in 2006. He currently teaches drilling technology and well control courses. He is a certified Simulator Instructor for the Well Control Training School accredited by IADC WellCap and IWCF. He is a member of SPE.</p> <p style="padding-left: 40px;">Number of scientific papers: 28            Cumulative impact factor: -            Independent citations in journals: -            Number of scientific reports: 8</p>		
<b>Relationship of classes taught and scientific/research activities</b>		
<p>a) <i>The most important five publications of the last five years:</i></p> <ul style="list-style-type: none"> <li>• Szabó T.: Environmental Challenges of Geothermal Drilling, XXVII. microCAD International Scientific Conference, University of Miskolc, 21-22 March, 2013. Miskolc (ISBN: 978-963-358-018-9) pp1-8.</li> <li>• Szabó T.: Filtration Properties of an Microbubble-based Drilling Fluid for Geothermal Drilling, KUTATÁS ÉS INNOVÁCIÓ A MAGYAR GEOTERMIÁBAN konferencia kiadvány, Szerk. Tóth. A, Miskolc, 2012. pp87-99, (ISBN 978-963-358-005-9), 2012.</li> <li>• Szabó T.: Improvement of Filtration Properties of an Aphron-based Drilling Fluid, Bányászati Kohászati Lapok-Kőolaj és Földgáz 145. évf.:(2012/3. sz.) pp. 1-5.(2012)</li> <li>• Szabó T.: Application of an Aphron-based Drilling Fluid for Geothermal Drilling, MISKOLCI EGYETEM KÖZLEMÉNYEI - A. SOROZAT Bányászat 83.: pp. 199-210. (2012)</li> <li>• Szabó T., Szepesi J.: Critical Questions of Killing Operation: Kick Tolerance and MAASP, Első Közép- és Kelet-európai Nemzetközi Olaj- és Gázipari Konferencia és Kiállítás. Siófok, Magyarország, 2011. szeptember 14-16.</li> </ul> <p>b) <i>The most important five publications of the entire career:</i></p>		



- Szabó T.: Environmental Challenges of Geothermal Drilling, XXVII. microCAD International Scientific Conference, University of Miskolc, 21-22 March, 2013. Miskolc (ISBN: 978-963-358-018-9) pp1-8.
- Szabó T.: Improvement of the Filtration Properties of an Aphron-based Drilling Fluid, Bányászati Kohászati Lapok-Kőolaj és Földgáz 145. évf.:(2012/3. sz.) pp. 1-5.(2012)
- Szabó T.: HPHT filtration properties of aphron drilling fluid, In: Patkó Gy, Shammazov A M (szerk.) Intellectual service for oil & gas industry : Analysis, solution, perspectives : Proceedings, Ufa: University of Miskolc - Ufa State Petroleum Technological University, 2007. pp. 130-135. Vol. 4. (ISBN:978-963-661-761-5)
- Szabó T.: Filtration Properties of Aphron Based Drilling Fluid, In: Lehoczky L, Kalmár L (szerk.) microCAD 2007 : International Scientific Conference, 22-23 March 2007. Miskolc : ME pp. 95-102.(ISBN:978-963-661-742-6ö) (2007)
- Szabó T.: Drilling through shallow gas zones in Hungary, In: Besenyei Lajos (edit/editor), Sammazov Airat M (edit/editor) Intellectual service for oil & gas industry: Analysis, solution, perspectives : Proceedings, Miskolc: Miskolci Egyetem, 2000. pp. 41-51. (Vol. 1.)

*Knowledge of English, presentation/teaching experience*

*Language Certificate:* Type B2 English

- *Courses taught in English:*  
Drilling Lab I., Drilling Lab II., Drilling III., Blowout Prevention, Drilling Engineering I., Drilling Design I., Drilling Engineering II., Drilling Design II., Well Control Lab, Well Completion Design, HSE in Petroleum Industry
- *Number of publications in English:* 11
- *Conference presentations in English:* 8

**Name: Dr. Sándor Szakáll**

**Qualification(s), degrees granted by, year**

chemist-physics teacher (1979)

*Current employment, position(s)*

Head of Department of Mineralogy-Petrography, University of Miskolc

**Scientific degree (field, year)**

PhD (2001) mineralogy

*Scholarships (date)*

**Teaching activities (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)**

Period	Position	Employer
1985-2004	head	Herman Ottó Museum, Dept. Mineralogy
2004-	head	Univ. Miskolc, Dept. Mineralogy-Petrography

- *Years spent in academia:* 11
- *Classes taught in Hungarian:* Introduction to mineralogy and petrography, Environmental mineralogy, Systematic mineralogy, Mineralogy and geochemistry
- *Classes taught in English:* Mineralogy and geochemistry

*Professional experience so far and main achievements*

- Number of scientific papers: 89
- Cumulative impact factor: 10.6
- Independent citations in journals: 172
- Number of scientific reports: 16

*Relationship of classes taught and scientific/research activities*

*a) The most important five publications of the last five years:*

Kónya, P., Szakáll, S. (2011): Occurrence, composition and paragenesis of the zeolites and associated minerals in the alkaline basalt of a maar-type volcano at Haláp Hill, Balaton Highland, Hungary. *Mineralogical Magazine*, **75**, 2869-2885.

Montagna, G., Bigi, S., Kónya, P., Szakáll, S., Vezzalini, G. (2010): Chabazite-Mg: a new natural zeolite of the chabazite series. *American Mineralogist*, **95**, 939-945.

Szakáll, S., Fehér, B., Bigi, S., Mádai, F. (2011): Klajite from Recsk (Hungary) the first Mn-Cu arsenate mineral. *European Journal of Mineralogy*, **23**, 829-835.

Szakáll, S., Sajó, I., Fehér, B., Bigi, S. (2012): Ammoniomagnesiovoltaite, a new voltaite-related mineral species from Pécs-Vasas, Hungary. *Canadian Mineralogist*, **50**, 65-72.

Uher, P., Giuliani, G., Szakáll, S., Fallick, A., Strunga, V., Vaculovic, T., Ozdín, D., Gregánová, M. (2012): Sapphires related to alkali basalts from the Cerová Highlands, Western Carpathians (southern Slovakia): Composition and origin. *Geologica Carpathica*, **63**, 71-82.

•

*b) The most important five publications of the entire career:*

Montagna, G., Bigi, S., Kónya, P., Szakáll, S., Vezzalini, G. (2010): Chabazite-Mg: a new natural zeolite of the chabazite series. *American Mineralogist*, **95**, 939-945.

Sajó, I.E., Szakáll, S. (2007): Kochsándorite, a new Ca-Al carbonate mineral species from the Mány coal deposit, Hungary. *Canadian Mineralogist*, **45**, 479-483.

Szakáll, S., Fehér, B., Bigi, S., Mádai, F. (2011): Klajite from Recsk (Hungary) the first Mn-Cu arsenate mineral. *European Journal of Mineralogy*, **23**, 829-835.

Szakáll, S., Sajó, I., Fehér, B., Bigi, S. (2012): Ammoniomagnesiovoltaite, a new voltaite-related mineral species from Pécs-Vasas, Hungary. *Canadian Mineralogist*, **50**, 65-72.

Udubaša, G., Đuđa R., Szakáll, S., Kvasnytsya, V., Koszowska, E., Novák, M. (2002): *Minerals of the Carpathians*. (ed. Szakáll, S.). Granit, Prague, 480p.

*Knowledge of English, presentation/teaching experience*

*Language Certificate:* Type-C1 English based on PhD degree from Kosice

- Number of publications in English: 48
- Conference presentations in English: 34

**Name: Péter Szűcs Dr.**

*Qualification(s), degrees granted by, year*

MSc program Environmental engineer; University of Miskolc, Hungary, Faculty of Earth Science and Engineering [2001-2006]

Ph.D. in Earth Sciences University of Miskolc, Institute of Environmental Management, Department of Hydrogeology and Engineering Geology (2013)

*Current employment, position(s)*

University of Miskolc, *Department of Hydrogeology and Engineering Geology*; full professor

**Scientific degree** (*field, year*)

Ph.D. in applied Earth Sciences (1996), D.Sc. (2009) in hydrogeology, Dr. habil (2009) ;

*Scholarships (date)*

- Széchenyi István Scholarship 2001-2004;
- Bolyai János Research Scholarship 1998-2001, 2004-2007;

**Teaching activities** (*classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.*)

Time	Position	Employer
1988-1995	Assistant lecturer	University of Miskolc
1995	Assistant professor	University of Miskolc
1995-1996	Research fellow	MTA Research Institute of Mining Chemistry
1996-1997	Principle research fellow	MTA Research Institute of Mining Chemistry
1998	Principle research fellow	University of Miskolc
1998-2010	Associate professor	University of Miskolc
2010-	professor	University of Miskolc

Subject	BSc/MSc/PhD	Weekly hours	Remarks
Hydrogeology	BSc	2l+2p	
Applied hydrogeology	BSc	3l+2p	
Data processing	BSc	2l+2p	
Hydrogeology and dewatering	BSc	2l+1p	
Hydrogeology	MSc	2l+2p	
Hydrogeological interpretation	MSc	1l+1p	
Water quality protection	MSc	1l+1p	
Hydrogeology	PhD	2l+2p	
Water quality protection	PhD	1l+1p	

**Professional experience so far and main achievements**

- Publication and experiment records
- |   |     |
|---|-----|
| Books, book chapters                          | 12  |
| Hungarian publications                        | 87  |
| Publication in foreign languages              | 132 |
| Conference lectures in Hungary and abroad     | 85  |
| Lecture notes                                 | 6   |
| Research reports                              | 23  |
| Patents                                       | 0   |
| Successful Hungarian and foreign applications | 15  |

**Relationship of classes taught and scientific/research activities**

a) *The most important five publications of the last five years:*

1. **Szucs P**; Szekely F; Zakanyi B Comparison of analytical and numerical approaches for simulating groundwater flow to multi screen wells. Carpathian Journal of Earth and Environmental Sciences, May 2013, vol. 8., No. 2., pp. 69-76. IF: 1.45
2. **Szucs P**; Virag M; Zakanyi B; Kompar L; Szanto J Investigation and Water Management Aspects of a Hungarian-Ukrainian Transboundary Aquifer. Water Resources, ISSN 0097-8078, 2013, Vol. 40., No. 4., Pleiades Publishing, Ltd., pp. 462-468. IF: 0.293

3. **Szucs P**; Madarasz T: Hydrogeology in the Carpathian basin – how to proceed? European Geologist, No. 35, May 2013, ISSN: 1028-267X, pp. 17-20.
4. Fejes Z; **Szűcs P** Potential Tepid and Hot Water Resources in the Tokaj Mountains Geosciences and Engineering, A Publication of the University of Miskolc, Vol. 2, No. 3 (2013), HU ISSN 2063-6997, Miskolc University Press, 2013, pp. 101-109.
5. Darabos E; **Szűcs P**; Németh Á Application of the ACE Algorithm on Hydrogeological Monitoring Data from the Bükk Mountains. Acta Geod. Geoph. Hung., Vol. 47(2), pp. 256-270 (2012), DOI: 10.1556/AGeod.47.2012.2.13, Akadémiai Kiadó, Budapest.

*b) The most important five publications of the entire career:*

1. Tóth, T. Bódi, **P. Szűcs**, F. Civan: Convenient formulae for determination of relative permeability from unsteady-state fluid displacements in core plugs. Journal of Petroleum Science and Engineering, 36 (2002), pp. 33-44., ELSEVIER, Impact factor: 0.547
2. **P. Szucs**, T. Madarasz: Complex hydrogeological modeling of multifunctional artificial recharge options of the Great-Forest Park in Debrecen, Hungary. Water Pollution VIII, Modelling, Monitoring and Management. Editors: C.A. Brebbia and J.S. Antunes do Carmo, WIT Press, 2006, pp. 177-184., ISBN: 1-84564-042-X.
3. Plank Zs; **Szűcs P**; Madarász T; Neduczka B. Interdisciplinary Characterization of Subsurface Hydrocarbon Contamination on a Test Site in Hungary. Acta Geod. Geoph. Hung., Vol. 46(4), pp. 457-470 (2011), DOI: 10.1556/AGeod.46.2011.4.7
4. **Szucs P**; Madarasz T; Civan F: Remediating over-produced and contaminated aquifers by artificial recharge from surface waters. Environmental Modeling and Assessment, Springer, 2009, DOI: 10.1007/s10666-008-9156-4., (14), pp. 511-520. Impact factor: 0.6
5. **Szucs P**, Horne RN: Applicability of the ACE Algorithm for Multiple Regression in Hydrogeology. DOI: 10.1007/s10596-008-9112-z, COMPUTATIONAL GEOSCIENCES : (13) pp. 123-134 (2009). Springer, Impact Factor: 0.742

*Knowledge of English, presentation/teaching experience*

*Language Certificate:* Type-C1 English

- *Number of publications in English:* 132
- *Conference presentations in English:* 60

<b>Name: Aniko Nóra Tóth Dr.</b>		
<b>Qualification(s)</b> , degrees granted by, year		
MSc in earth science engineering, University of Miskolc, 1978		
<i>Current employment, position(s)</i>		
University of Miskolc, associate professor		
<b>Scientific degree</b> (field, year)		
□ Doctor's degree (1996) University of Miskolc Name of thesis: Hazard and Risk about Petroleum Transmission Pipe-Lines PhD (2004), Geothermal energy, earth sciences Name of thesis: „Relations of the Temperature of Geothermal Energy Production Systems”		
<i>Scholarships (date)</i>		
Fulbright Researcher Scholarship, USA at the Colorado School of Mines (2011-2012-)		
<b>Teaching activities</b> (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)		
<b>Period</b>	<b>Position</b>	<b>Employer</b>

1989-1996	assistant lecturer	University of Miskolc
1996-2011	assistant professor	University of Miskolc
2011-	associate professor	University of Miskolc

- *Years spent in academia:* 25 years
- *Classes taught in Hungarian:*  
Flow Dynamics (BSc), Renewable energies (BSc), Natural gas processing I-II. (BSc-MSc), Geothermal energy (BSc-MSc), Applied computer sciences (MSc), Geothermal energy production (PhD), Geothermal utilization (PhD), Renewable energies (Post. Grad), Heat transfer about geothermal wells (Post. Grad), Direct uses (Post. Grad), Geothermal case studies (Post. Grad)
- *Classes taught in a English:* Geothermal energy, Fluid mechanics

**Professional *experience* so far and main *achievements***

I graduated at the University of Miskolc with excellent qualification as an Earth Science Engineer specialized for Petroleum and Natural Gas Engineering in 1978. In 1996 got my Dr. Univ. degree and in 2004 got my PhD from the Sámuel Mikoviny Doctoral School of the same university with summa cum laude level. I have been working at the University of Miskolc since 1998. The first two years I was working at the Department of Mathematics, the next six year at the Department of Informatics and since 2006 till now at the Petroleum Engineering Department.

I was awarded several times for supervising scientific student theses. My research area is geothermal energy production and utilization. I have gained experience on natural gas transmission and reservoir engineering from the Hungarian Oil and Gas Company and has been actively involved in common R&D projects.

I participated in IGA and other international scientific conferences regularly ((San Francisco – 2000, Reykjavik - 2004, Stanford 2006-2014 minden évben, Antalya – 2005, Reno - 2006, San Diego - 2007, Unterhaching – 2007, Oslo – 2008, Den Pasar - 2010, Paris - 2011, Miláno – 2013, Dublin - 2013, Boulder -2014)

I got a Fulbright researcher scholarship for 5 month and was researcher and visiting professor at the Colorado School of Mines CO, USA in 2011-2012. I frequently review scientific papers of domestic and international journals and conferences.

Number of scientific papers: 67  
Independent citations in journals: 21  
Number of scientific reports: 7

**Relationship of *classes taught* and *scientific/research activities***

a) *The most important five publications of the last five years:*

- Toth A.: Steam Blowout from an Overpressured Geothermal reservoir in Hungary, PROCEEDINGS, Thirty-Five Workshop on Geothermal Reservoir Engineering, SGP-TR-188, Stanford University, USA, 2010
- Toth A.: Hungarian Country Update 2005-2009, World Geothermal Congress, Bali, 2010.
- Toth A.– Bobok E. – Szucs P.– Kujbus A.: Complex Scientific Analysis in Geothermal Exploration in the Pannonian Basin, World Geothermal Congress, Bali, 2010
- Tóth A.: Determining the Amount of Exploitable Thermal Water in Hungary’s Hódmezővásárhely Geothermal Reservoir PROCEEDINGS, Thirty-Seven Workshop on Geothermal Reservoir Engineering, SGP-TR-194, Stanford University, USA, 2012.
- Tóth A. et al: Geothermal Energy Use, Country Update for Hungary, European Geothermal Council, ISBN 978-2-8052-0226-1, Pisa, 2013

b) *The most important five publications of the entire career:*

- Bobok E.. – Toth A.: Megújuló energiák, egyetemi tankönyv, Miskolc, 2005.
- Bobok E.-Tóth A.: A geotermikus energia helyzete és perspektívái, Magyar Tudomány,

<p>2010.</p> <ul style="list-style-type: none"> <li>• Tóth A.: Geothermal Deicing in a Mine Tunnel, PROCEEDINGS, Thirty-Six Workshop on Geothermal Reservoir Engineering, SGP-TR-191, Stanford University, USA, 2011.</li> <li>• Tóth A.: Bevezetés az áramlástanba, egyetemi tankönyv, Miskolci Egyetem, ISBN 978-963-661-997-8, 2012</li> <li>• Tóth A. et al: Geothermal E-learning in Hungarian American Cooperation, European Geothermal Council, ISBN 978-2-8052-0226-1, Pisa, 2013</li> </ul>
<i>Knowledge of English, presentation/teaching experience</i>
<p><i>Language Certificate:</i> Type B2 English</p> <ul style="list-style-type: none"> <li>• <i>Teaching experience in English abroad:</i> ?? Stanford</li> <li>• <i>Courses previously taught in English:</i> ?? Stanford...</li> <li>• <i>Number of publications in English:</i> ??</li> <li>• <i>Conference presentations in English:</i> ??</li> </ul>

<b>Name: Endre Turai PhD, Dr. habil</b>																			
<i>Qualification(s), degrees granted by, year</i>																			
<p>certificated (MS) mining engineer (<i>specialized for geophysical engineering</i>), Technical University for Heavy Industry (University of Miskolc) 1978, (375/1978)  certificated (M.B.A.) economic engineer, University of Miskolc, 1993, (1323/1993)  quality management auditor, TÜV Rheinland InterCert, 2003</p>																			
<i>Current employment, position(s)</i>																			
University of Miskolc, associate professor																			
<i>Scientific degree (field, year)</i>																			
<p>CSc (1994), technical science, Hungarian Academy of Sciences, (15.326)  PhD (1996), earth science, University of Miskolc, (46/1996)  Dr. habil (2012), earth sciences, University of Miskolc, (132/2012)</p>																			
<i>Scholarships (date)</i>																			
István Széchenyi Scholarship (2002-2005)																			
<i>Teaching activities (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)</i>																			
<table border="1"> <thead> <tr> <th>Period</th> <th>Position</th> <th>Employer</th> </tr> </thead> <tbody> <tr> <td>1978-1980</td> <td>scientific assistant</td> <td>Technical University for Heavy Industry (University of Miskolc)</td> </tr> <tr> <td>1980-1982</td> <td>department engineer</td> <td>Technical University for Heavy Industry (University of Miskolc)</td> </tr> <tr> <td>1982-1985</td> <td>assistant lecturer</td> <td>Technical University for Heavy Industry (University of Miskolc)</td> </tr> <tr> <td>1985-1998</td> <td>lecturer</td> <td>Technical University for Heavy Industry, University of Miskolc</td> </tr> <tr> <td>1998-</td> <td>associate professor</td> <td>University of Miskolc</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• <i>Years spent in academia:</i> 36 years</li> <li>• <i>Classes taught in Hungarian:</i></li> </ul>		Period	Position	Employer	1978-1980	scientific assistant	Technical University for Heavy Industry (University of Miskolc)	1980-1982	department engineer	Technical University for Heavy Industry (University of Miskolc)	1982-1985	assistant lecturer	Technical University for Heavy Industry (University of Miskolc)	1985-1998	lecturer	Technical University for Heavy Industry, University of Miskolc	1998-	associate professor	University of Miskolc
Period	Position	Employer																	
1978-1980	scientific assistant	Technical University for Heavy Industry (University of Miskolc)																	
1980-1982	department engineer	Technical University for Heavy Industry (University of Miskolc)																	
1982-1985	assistant lecturer	Technical University for Heavy Industry (University of Miskolc)																	
1985-1998	lecturer	Technical University for Heavy Industry, University of Miskolc																	
1998-	associate professor	University of Miskolc																	



Geophysics I, Geophysical data processing, Geoinformatics, Geoinformatics I, Economics of geophysical explorations, Geophysical research methods I, Data- and information processing, Processing geophysical measurements, Geophysical interpretation, Geophysical practice, Geophysics of water research, Basics of Geoinformatics, College of geoelectric.

• *Classes taught in English:*

Applied geophysics, Geophysical data processing, Geophysics of exploration of water; Introduction to Environmental Geophysics.

*Professional **experience** so far and main **achievements***

He graduated at the Technical University for Heavy Industry Faculty of Mining Engineering qualification as mining engineer (*specialized for geophysical engineering*) in 1978. He has been working at the University of Miskolc Department of Geophysics since 1990's as scientific assistant, assistant lecturer, lecturer and since 1998 as associate professor. He gained dr. univ. title in 2005, candidate in technical science since 1994, in 1996 gained PhD degree of earth sciences. He obtained the engineer-economist diploma in 1993, quality management auditor certification by TÜV Rheinland InterCert in 2003. He habilitated in earth sciences (dr. habil) in 2011. He is a board member of the Mikoviny Sámuel Doctorial School in Earth Science since 2012. He is the director of Institute of Geophysics and Geoinformatics since July 2012, and since July 2013 head of Department of Geophysics. His education and research areas are electrical and electromagnetic methods, geophysical data processing, economics of geophysical explorations and geoinformatics. He is the inventor of international and national patents. Besides hundreds of publications and conference presentation, he was topic, or section supervisor of more than fifty research. He led 2 topics at the Hungarian Scientific Research Found (HSRF) and 1 FKFP subtopics, and participated in 5 HSRF topics as a researcher. He attended and won prizes with his works in numerous national and international exhibitions. In the last years in four Social Renewal Operational Programme project participated and participate he as a researcher or as a module leader. He is an expert of Hungarian Chamber of Engineers. A number of international conferences held lectures and published professional works. Between 2006 and 2013 attended constantly as a lecturer at the EGEC (European Geotechnical and Environmental Course) English language training. Member or head of several national and international professional and scientific organizations. So far received recognition for his professional and social work of the "Honourable Mention of minister" (1985), the "Laszlo Egyed Medal" (2010) and "János Renner Memorial Medal (2013)" can be highlighted.

His science-metry data (*MTMT data*) by (<https://vm.mtmt.hu/www/index.php?AuthorID=10008123#>, downloaded: 29.03.2014.) :

- Number of scientific papers: 380
- Independent citations: 189
- Cumulative citations: 589
- Cumulative impact factor: 5.788
- Hirsch index: 9

*Relationship of **classes taught** and **scientific/research activities***

*a) The most important five publications of the last five years:*

- Gyulai A, Ormos T, Dobroka M, Turai E, Sasvari T, 2013: In-mine geoelectric investigations for detecting tectonic disturbances in coal seam structures, ACTA GEOPHYSICA 61: (5) pp. 1184-1195.
- Turai E, Hursán L, 2012: 2D inversion processing of geoelectric measurements with archaeological aim, ACTA GEODAEITICA ET GEOPHYSICA HUNGARICA 47: (2) pp. 245-255.
- Turai E, 2012: Application possibilities of IP method in the fields of environmental protection, ore- and direct hydrocarbon exploration, GEOSCIENCES AND ENGINEERING: A PUBLICATION OF THE UNIVERSITY OF MISKOLC 1: (2) pp. 161-166.
- Turai E, 2011: Data processing method developments using TAU-transformation of time-domain IP data: II. interpretation results of field measured data, ACTA GEODAEITICA ET GEOPHYSICA HUNGARICA 46: (4) pp. 391-400.

- Turai E, Dobroka M, 2011: Data processing method developments using TAU-transformation of time-domain IP data: I. theoretical basis, ACTA GEODAETICA ET GEOPHYSICA HUNGARICA 46: (3) pp. 283-290.

*b)The most important five publications of the entire career:*

- Turai E, 2004: IP Data processing results from using TAU-transformation to determine time-constant spectra, GEOFIZIKAI KÖZLEMÉNYEK - GEOPHYSICAL TRANSACTIONS Vol. 44.: (No. 3-4.) pp. 301-312.
- Takács E, Turai E, 1986: Approximative solution of the direct problem of magnetotellurics for two-layered, three-dimensional structures, ACTA GEODAETICA GEOPHYSICA ET MONTANISTICA HUNGARICA Vol. 21: pp. 167-176.
- Turai E, 1986: Síkhullámú elektromágneses (EM)-terek matematikai modellezése integrálegenletek útján, MAGYAR GEOFIZIKA 27. évf.: (1. sz.) pp. 1-16.
- Turai E, 1983: A Fourier transzformáció egy numerikus módszerre és alkalmazása a GP-jelenség rendszerjellemző függvénnyel történő leírásánál, MAGYAR GEOFIZIKA 24.: (1. sz.) pp. 11-19.
- Turai E, 1981: GP time-domain görbék TAU-transzformációja, MAGYAR GEOFIZIKA 22. évf.: (1. sz.) pp. 29-36.

*Knowledge of English, presentation/teaching experience*

*Language Certificate:* English: Type B2

- *Courses previously taught in English:* Introduction to Environmental Geophysics, Selected topics from Environmental Geophysics, Environmental Geophysics
- *Number of publications in English:* 48
- *Conference presentations in English:* 37

**Name: Balázs Zákányi Dr.**

**Qualification(s), degrees granted by, year**

MSc program Environmental engineer; University of Miskolc, Hungary, Faculty of Earth Science and Engineering [2001-2006]

Ph.D. in Earth Sciences University of Miskolc, Institute of Environmental Management, Department of Hydrogeology and Engineering Geology (2013)

*Current employment, position(s)*

University of Miskolc, *Department of Hydrogeology and Engineering Geology; assistant professor*

**Scientific degree (field, year)**

Ph.D. in Earth Sciences University of Miskolc, 2013

*Scholarships (date)*

**Teaching activities (classes taught, years spent in Academia, teaching in a foreign language, in a foreign institution, etc.)**

Period	Position	Employer
2006-2009	PhD student	University of Miskolc, Department of Hydrogeology and Engineering Geology

2009-2014	assistant professor	University of Miskolc, Department of Hydrogeology and Engineering Geology
<ul style="list-style-type: none"> <li>• <i>Years spent in academia:</i> 5</li> <li>• <i>Classes taught in Hungarian:</i> Classes taught in Hungarian: Hydrogeology, Applied Hydrogeology, Environmental Protection, Site investigation and monitoring, Data Processing</li> </ul>		
<i>Professional <b>experience</b> so far and main <b>achievements</b></i>		
<p>RESEARCH:</p> <ul style="list-style-type: none"> <li>• Transport simulation of special contaminations (DNAPL, LNAPL)</li> <li>• Hydrogeology</li> <li>• Regional hydrodynamics modelling</li> </ul> <p>INTERNATIONAL EXPERIENCES</p> <ul style="list-style-type: none"> <li>• INNOcekk- Innovative Solutions in Using Permeable Reactive Barriers team member [2009-2011]</li> <li>• TÁMOP 4.2.1.B-10/2/Konv A Felsőoktatás Minőségének Javítása - A Kutatás-Fejlesztés-Innováció-Oktatás Fejlesztésén Keresztül team member [2010-2013]</li> <li>• WELLaHEAD a source of fresh thoughts in groundwater management (TÁMOP-4.2.2.B-11/1/KONV-2011-0049) TEAM MEMBER [2012-2015]</li> </ul>		
<i>Relationship of <b>classes taught</b> and <b>scientific/research activities</b></i>		
<p>a) <i>The most important five publications of the last five years:</i></p> <ul style="list-style-type: none"> <li>• <i>Zákányi Balázs, Szűcs Péter:</i> Víznél sűrűbb, nem vizes fázisú szennyező anyagok transzportfolyamatainak szimulációja felszín alatti közegben. FÖLDTANI KÖZLÖNY 144:(1) pp. 63-70. (2014)</li> <li>• <i>Balázs Zakanyi, Peter Szucs:</i> Hydraulic investigation of flood defences using analytic and numerical methods. ACTA MONTANISTICA SLOVACA 18:(3) pp. 188-197. (2013)</li> <li>• <i>Balázs Zákányi, Péter Szűcs, Márton Tóth:</i> Sensitivity of DNAPL transport simulations concerning the relative permeability data. University of Szeged, 2013. 137-141 p. (LAH Central European Groundwater Conference 2013)</li> <li>• <i>Szucs P, Szekely F, Zakanyi B:</i> Comparison of analytical and numerical approaches for simulating groundwater flow to multi screen wells. CARPATHIAN JOURNAL OF EARTH AND ENVIRONMENTAL SCIENCES 8:(2) pp. 69-76.</li> <li>• <i>Szucs P, Virag M, Zakanyi B, Kompar L, Szanto J:</i> Investigation and Water Management Aspects of a Hungarian-Ukrainian Transboundary Aquifer. WATER RESOURCES 40:(4) pp. 462-468.</li> <li>• <i>Zakanyi B, Szucs P:</i> Opportunities in Increasing Reliability of DNAPL Transport Modeling. Paper 435. In: Annual LAH Conference in 2012 . pp. 100-105.</li> </ul> <p>b) <i>The most important five publications of the entire career:</i></p> <ul style="list-style-type: none"> <li>• <i>Péter Szűcs, Tamás Madarász, Balázs Zákányi:</i> "Start" Modeling of Multifunctional Recharge Options for the Great-Forest Park in Debrecen. In: Lakatos I (szerk.) Progress in Oilfield Chemistry . pp. 245-252.</li> <li>• <i>Horne R N, Szucs, P, Zakanyi B:</i> Inferring Well-to-Well Connectivity Using Nonparametric Regression on Well Histories. In: Lakatos I (szerk.) Progress in Oilfield Chemistry .pp. 247-258.</li> <li>• <i>Zákányi B, Szűcs P:</i> Völgyzáró gát és árvízvédelmi töltések hidraulikai vizsgálata SEEP2D modullal. HIDROLÓGIAI KÖZLÖNY 90:(4) pp. 54-62. (2010)</li> </ul>		

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| <ul style="list-style-type: none"><li>• <i>Szűcs P, Sallai F, Zákányi B, Madarász T: Vízkészletvédelem: A vízminőség-védelem aktuális kérdései. Miskolc: Bíbor Kiadó, 2009. (ISBN:978-963-9988-00-2)</i></li><li>• <i>see above</i></li></ul> |
| <i>Knowledge of English, presentation/ teaching experience</i>  |
| <i>Language Certificate: Germany - type B2</i> <ul style="list-style-type: none"><li>• <i>Number of publications in English: 12</i></li><li>• <i>Conference presentations in English: 6</i></li></ul>   |