

## PERSONAL INFORMATION

## Ferenc Fedor

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## WORK EXPERIENCE

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- 2018–Present **Lecturer, petrophysical expert**  
University of Pécs, Pécs (Hungary)  
- lecturer in petroleum geology  
- petrophysical expert - GINOP-2.2.1-15-2017-00102
- 2011–Present **CAPES president**  
Sycamore Engineering Ltd. (Platán Mérnöki Kft.), Kozármisleny (Hungary)  
- president of the Cluster of Applied Earth Sciences in the field of geosciences, project organization, contact building
- 2010–Present **Lecturer**  
University of Szeged, Szeged (Hungary)  
- "Technical-economical Conditions of Constructing Radioactive Waste Repositories" course
- 2010–2015 **Managing director**  
ALA-PETRO Ltd., Kozármisleny (Hungary)  
- marketing, investment
- 2007–Present **Managing director**  
Sycamore Engineering Ltd. (Platán Mérnöki Kft.), Kozármisleny (Hungary)  
- project organisation, engineering consultancy (R&D)
- 2006–Present **Managing director, Project director**  
GEOCHEM Ltd., Kozármisleny, Kővágószőlős (Hungary)  
- project organisation  
- managing SMLAB investment  
- engineering consultancy (R&D)
- 2004–2008 **Chief engineer of R&D**  
MECSEKÉRC Ltd., Pécs (Hungary)  
- engineering planning  
- IT project leader of Bábaapáti Project
- 1999–2003 **Associate Researcher**  
University of Miskolc, Research Institute of Applied Chemistry, Department of Reservoir Engineering, Miskolc (Hungary)  
- engineering R&D

- petrophysical measurements
- data evaluation, instrument and method development

1988–1991 **Geological technician**

Geological Institute of Hungary, Department of the South-Transdanubian Region, Budapest (Hungary)

- technical administration

EDUCATION AND TRAINING

01/09/2011–18/06/2013 **Master of Business Administration, MBA**

University of Pécs, Pécs (Hungary)

Title of thesis: Valuation Problems of Knowledge-intensive SMEs, an Hungarian example - Valuation of GEOCHEM Ltd.

01/09/1996–30/06/1999 **Earth Sciences, Ph.D**

University of Miskolc, Miskolc (Hungary)

Title of dissertation: The Origin of Gases Explored Within the Inert Gas Zone, Hungarian Great Plain, Hungary

01/09/1991–30/06/1996 **Geologist engineer, M.Sc.**

University of Miskolc, Miskolc (Hungary)

Title of thesis: Genetical Aspects and Reservation of Hydrocarbons in the Area of Karcag-Bucsa

PERSONAL SKILLS

Foreign language(s)

|   | UNDERSTANDING |         | SPEAKING           |                   | WRITING |
|---|---------------|---------|--------------------|-------------------|---------|
|   | Listening     | Reading | Spoken interaction | Spoken production |         |
| English                                 | B2            | C1      | B2                 | B2                | B2      |
| State language exam, intermediate level |               |         |                    |                   |         |
| French                                  | A1            | A1      | A1                 | A1                | A1      |
| Russian                                 | A1            | A1      | A1                 | A1                | A1      |

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
Common European Framework of Reference for Languages

ADDITIONAL INFORMATION

**Membership in professional bodies**

- Member of the Hungarian Geological Association (HGA) (since 1996); of the North Hungarian Regional Organization of HGA, member of executive committee (2003 – 2004);
- Member of the Geomathematical Section, member of the board (2006-2010), President (2016-);
- Member of the South Transdanubian Regional Organization of HGA, of the executive committee (2007-2018);
- Member of the Hungarian Academy of Sciences, Territorial Committee of Pécs, X. Section - Committee of Geology and Mining (since 2014);
- Member of the Subcommittee of Geomathematics (since 2010) and Organic Geochemical Subcommittee (since 2001) of the Committee of Mineralogy, Petrology and Geochemistry, Section of Earth Sciences, Hungarian Academy of Sciences;
- Member of the American Association of Petroleum Geologists (AAPG), student member: 1998-2000, associate member (2000-2005), active member (since 2005);
- Member of the Engineering Chamber of Borsod-Abaúj-Zemplén county (register number: 05-1241:

till 2006). Member of the Engineering Chamber of Baranya county (register number: 02-0986, since 2006);

- Member of the International Committee of Coal and Organic Petrology (ICCP) (since 2005);
- Member of Hungarian Mining and Metallurgical Society (since 2013);
- President of the Cluster of Applied Earth Sciences (since 2014).

#### Expert authorities

Expert Authorities:

EurGeol title, Number: 1327 (since 19.10.2015.)  
Hungarian Geological Service (FSZ-2/2014):

- General Geology (till 19.08.2020);
- Geology of Mineral Resources (till 19.08.2020);
- Petroleum Geology (till 19.08.2020);
- Geology of geothermal energy (till 19.08.2020)

Engineering Chamber Of Hungary:

- B-Sz/02-0986 (Drilling and Shaft, till 01.07. 2020);
- GO-Sz/02-0986 (Hydrocarbon exploration and research, till 01.07. 2020)

#### Publications

In national conference publication: 10  
In national professional journals: 3  
In international conference publication: 11  
In international professional journals: 7  
Notes, manuscripts, etc.: 4

**FEDOR, F.:** Computer evaluation of geochemical and hydrochemical data of some boreholes in the Mid-Great-Plain, microCAD'97 International Computer Science Conference, Section A: Geoinformatics, environment protection, February 26-27, 1997, Miskolc, pp. 117-123 (article in conference proceedings in Hungarian)

**FEDOR, F.:** Analysis of Vitrinite Reflectance Data – Uncertainties that Arise in the Course of Sampling, Measuring and Interpreting (Hungarian article with English abstract in conference proceedings) Forum of PhDs, section edition of the Faculty of Mining Engineers, 6. November, 1998, Miskolc, pp. 22-35.

**FEDOR, F.:** Optical Methods for Measuring the Thermal Maturity of Organic Matter – a Review, 2nd International Conference of Ph.D. Students, Section Engineering Sciences, University of Miskolc, 8-14. August, 1999, pp. 41-53 (article in conference proceedings in English)

**FEDOR, F.:** Carbon Cycle in Hydrosphere – Biosphere – Atmosphere –Litosphere System – a New Model, Conference of Ph.D. Students, 5. November, 1999, Miskolc (article in conference proceedings in Hungarian with English abstract)

**FEDOR, F., KONCZ, I.:** New Possibilities for Measuring the Maturity of Organic Matter, MOL Conference, 10-12. November, 1999, Siófok (manuscript – Hungarian)

**FEDOR, F., HÁMOR-VIDÓ, M.:** Reflectance of Collotelinite Used as a Geothermometer, In: I. Lakatos (ed): Progress in Mining and Oilfield Chemistry, Vol. 2., Novelties in Enhanced Oil and Gas Recovery, Akadémia, Budapest, 2000, pp. 303-314 (English article)

**FEDOR, F., FEGYVERNEKI, S., HÁMOR-VIDÓ, M., LÖVEI, J.:** A Possible Way of Statistical Analysis in Case of Small Sample Size, In: I. Lakatos (ed): Progress in Mining and Oilfield Chemistry, Vol. 3., Recent Advances in Enhanced Oil and Gas Recovery, Akadémia, Budapest, 2001, pp. 279-290 (English article)

**FEDOR, F., HÁMOR-VIDÓ, M.:** Statistical Analysis of Vitrinite Reflectance Data – a New Approach, Int. J. of Coal Geology, Vol. 55-56. Issues 3-4, 2003, pp. 277-294. (English article)

**FEDOR, F.:** The Origin of Gases Explored Within the Inert Gas Zone, Hungarian Great Plain, Hungary, Ph.D. Thesis, 2004

**SZÚCS, I., FEDOR, F.:** Spatial Extension and Parameter Integration into the Safety Case –Examples from the Hungarian LLW/ILW and HLW Disposal Project, in Linkage of Geoscientific Arguments and Evidence in Supporting Safety Case (workshop proceedings in English), OECD NEA No. 6119, 2007, pp. 163-165.

**FEDOR, F., MÁTHÉ, Z., HÁMOS, G., SOMODI, G., JOBBIK, A., SZÚCS, I.:** Laboratory Pressure Pulse Decay permeability measurement of Boda Claystone, Mecsek Mts., SW Hungary Physics and Chemistry of the Earth (2008), pp. S45-S53

**FEDOR, F., MOLNOS, I., SZIKSZAI ZS., MENYHEI, L.:** Task-oriented Innovative Developments in Informatics at MECSEKÉRC Ltd, in the Hungarian Journal of Mining and Metallurgy, 2008 (3), Vol. 141. pp. 35-39. (Hungarian article)

**KOVÁCS, L., BAKSAI, A., BENKOVICS, I., BERTA, ZS., CSICSÁK, J., DANKÓ, GY., DEMÉNY, A., DÖVÉNYI, P., FANCSIK, T., FEDOR, F., FEURERER, V., FÖLDING, G., GEIGER, J., GEOSITS, L., HÁMOS, G., HORVÁTH, F., KONRÁD, GY., LÁZÁR, K., NAGY, Z., MAJOROS, GY., MÁTHÉ, Z., MOLNÁR, P., ÖTVÖS, K., SZABÓ, GY., SZÚCS, I., SZÚCS, P., TAKÁTS, F., VÁRHEGYI, A., KOVÁCS, L. (EDIT.):**

Update of the content related, financial and scheduling concept of the Boda Claystone Formation long-term research project, Research report (published), 2008. pp.1-368.

**FEDOR, F., KOVÁCS, L., BENKOVICS, I., SZÚCS, I.:** The New Conceptual Model in Boda HLW/SF Project, S-Hungary, in Approaches and Challenges for the Use of Geological Information in the Safety Case for Deep Disposal of Radioactive Waste, 3rd AMIGO

Workshop Proceedings, OECD NEA No. 6417, 2009, pp. 177-184 (workshop proceedings in English)

**FEDOR, F., FEURER, V., GEIGER, J. MENYHEI, L., SZIKSZAI, ZS.:** Management of Mission-Critical Information in Bataapáti LLW/ILW Project, S-Hungary in Approaches and Challenges for the Use of Geological Information in the Safety Case for Deep Disposal of Radioactive Waste, 3rd AMIGO Workshop Proceedings, OECD NEA No. 6417, 2009, pp. 198-204 (workshop proceedings in English)

**GEIGER, J., FEDOR, F., FEUER, V.:** Establishment and documentation of the Integrated Report System and database connections in the Bataapáti LLW/ILW Project, Research report (published), 2009. pp.110.

**FEDOR, F., SOMODI, G.:** Interdisciplinary investigation of the Boda Claystone Formation – Geological scale and petrophysical properties, in Pál-Molnár, E. (ed): Basin development and geological resources, Geolitera, Szeged, 2010, pp. 49-51. (Hungarian abstract)

**FEDOR, F.:** The Importance of Laboratorial Petrophysical Characterization: Possibilities and Limitations, In Hungarian Mining and Metallurgical Association: The First Central and Eastern European International Oil and Gas Conference and Exhibition, Siófok, 2011, pp.110

**FEDOR, F., ÁCS, P.:** Pore characterization and permeability analysis of shotcrete in NRWR, Bataapáti, in: Hámos, G., Sámson, M. (eds): Geological, mining and technological results of first two chamber tunnelling of Hungarian LLW, Bataapáti, workshop proceedings of Pécs Board of HAS, Molnár, 2012, pp. 96-102 (Hungarian with English abstract)

**GILI, L., FEDOR, F., MÁTHÉ, K., TÖRÖK, I., CZIMMERMANN, L.:** Development of autonomous data collector for wireless seismic measurements, In: Kovács Attila Csaba, Turai Endre (edit.): Earth Sciences and Environmental Protection Annual Meeting and Exhibition, Miskolc, 2012, pp. 40-41.

**HORVÁTH, J., KORONCZ, P., FEDOR, F., HLATKI, M.:** Petrophysical and geomechanical analysis of Upper Pannonian unconsolidated sandstones, in Török, Á., Görög, P., Vásárhelyi, B. (eds) Civil Engineering and Rock Mechanics 2013, Hantken, Budapest, pp. 229-240 (Hungarian) (ISBN 978-615-5086-06-09)

**UDVARDI, B., KOVÁCS, I., FÜRI, J., KÓNYA, P., HORVÁTH, ZS., BESNYI, A., FÖLDEVÁRI, M., KOLOSZÁR, L., FEDOR, F., HORVÁTH, J., ÁCS, P., FANCSIK, T., SZABÓ, CS.:** Characterization of slipped sediments from a loess landslide, Kulcs, Central-Hungary In: Geophysical Research Abstracts 16, European Geosciences Union General Assembly, Vienna, 2014, pp. 7367. (EGU2014-7367)

**UDVARDI, B., KOVÁCS, I., KÓNYA, P., VATAI, J., KOLOSZÁR, L., FEDOR, F., ÁCS, P., MIHÁLYI, J., NÉMETH, CS., DEÁK, ZS., V., FÜSI, B., SZALAI, Z., SZABÓ, CS., FALUS, GY., FANCSIK, T.:** Characterization of slipped sediments from a loess landslide, Kulcs, Central-Hungary In: Hungarian Geophysics 55(3), 2014, pp. 121-133. (ISSN 0025-0120)

**HORVÁTH, J., KORONCZ, P., FEDOR, F.:** Petrophysical and hydrodynamical investigation of unconsolidated rocks – measurement vs. empirical estimation, in: Cvetkovic, M., Novak-Zelenika, K., Geiger, J. (eds) Geomathematics – from theory to practice, Croatian Geological Society, 2014, pp. 167-174 (ISBN 978-953-95130-8-3)

**HORVÁTH, J., FEDOR, F., GEIGER, J.:** Grain size analysis and examination of the potential for estimating the hydraulic conductivity of Bánk-2 core samples, in Cserny, T. Kovács-Pálffy, P., Kriván-Horváth, Á. (eds): 12th Meeting of the Hungarian-born professionals of Earth-related sciences (article collection), Budapest, 2014., pp. 267-270 (Hungarian) (ISBN 978-963-8221-54-4)

**FÜVESI, V., VÖRÖS, CS., BÖLKÉNYI, I., JOBBIK, A., FEDOR, F., HLATKI, M.:** Laboratory instrument and measurement method development for the investigation of geothermal well completion In:

Bulletin of Engineering Geology 85(1), 2015, pp. 48-54. (ISSN 2063-5508)

**KORONCZ, P., FEDOR, F.:** Experimental investigation of stress-dependent petrophysical behaviour of reservoir rocks., in Cvetkovic, M., Novak-Zelenika, K., Horváth, J., Hatvani I.G. (eds) Geomathematics – present and future of geological modelling, Croatian Geological Society, 2016, pp. 83-87 (ISBN 978-953-59036-1-1)

**FEDOR, F., MÁTHÉ, Z., KORONCZ, P., ÁCS, P.:** Results of mineralogical, petrological, geochemical and petrophysical laboratory measurements carried out on samples of BAF-2 and BAF-1,-1A drillholes, in Dályay, V., Hámos, G. (eds): BCF Research - workshop, Molnár Nyomda és Kiadó,Pécs, 2016, pp. 52-62., ISBN 978-963-8221-60-5 (Hungarian)

**KORONCZ, P., FEDOR, F.:** Complex petrophysical investigation of pannonian-miocene shales – preliminary results of acoustic anisotropy measurements, 35th International Geological Congress, 27.08-02.09.2016, Cape Town, Paper Number: 4827, <http://www.americangeosciences.org/igc/16349>

**FEDOR, F.:** SmartLab – a new concept of global geological laboratory service, 35th International Geological Congress, 27.08-02.09.2016, Cape Town, Paper Number: 5239, <http://www.americangeosciences.org/igc/16621>

**NAGY, GY., FEDORNÉ, SZ. A., ÁCS, P., FEDOR, F.:** Felejtse el a fáradságos szitaanalízist! - Occhio Zephyr ESR szemcseméret-eloszlás és alakparaméter vizsgáló berendezés 30 µm-30 mm mérettartományban, X. Kő- és Kavicsbányász Napok konferenciakiadványa, 02-03.03.2017, Velence, HU (ISBN 978-615-80006-9-7)

**FEURER, V., FEDOR, F.:** The 3rd/4th industrial revolution - Challenges for researchers, in Hatvani I.G., Tanos, P., Cvetkovic, M., Fedor, F. (eds) Geomathematics in multidisciplinary science - The new frontier?, Pécs Regional Committee of the Hungarian Academy of Sciences, 2017, pp. 160-166 (ISBN 978-963-8221-65-0)

**FEDOR, F., FEURER, V., SCHÖN, R.:** How to automate a petrophysical laboratory? - challenges and solutions, in Hatvani I.G., Tanos, P., Cvetkovic, M., Fedor, F. (eds) Geomathematics in multidisciplinary science - The new frontier?, Pécs Regional Committee of the Hungarian Academy of Sciences, 2017, pp. 167-174 (ISBN 978-963-8221-65-0)

**KORONCZ, P., LEMBERKOVICS, V., ÁCS, P., FEDOR, F.:** Pore characterization, acoustic and permeability measurements on core plug triplets, from the Miocene Tótkomlós (Calcareous Marl) Formation of the Pannonian-basin, Hungary, *Geologica Croatica*, vol.70/2., 2017, pp. 87-92 (ISSN1330030X)

**FEDOR, F., MÁTHÉ, Z., ÁCS, P., KORONCZ, P.:** New results of Boda Claystone research - genesis, mineralogy, geochemistry, petrophysics (in progress), chapter in a Geological Society of London Special Publications (Multiple Roles of Clays in Radioactive Waste Confinement)

Presentations, poster sessions

|   |                |
|---|----------------|
| <b>Hungarian presentations (as co-author):</b>          | <b>30 (10)</b> |
| <b>Hungarian poster sessions:</b>                       | <b>1</b>       |
| <b>Presentation in English (Russian by co-author) :</b> | <b>14 (1)</b>  |
| <b>Poster sessions in English:</b>                      | <b>6</b>       |

Fedor, F.: **Computer Evaluation of Geochemical and Hydrochemical Data of Some Boreholes in the Mid-Great-Plain**, (oral presentation) microCAD'97 International Computer Science Conference, Section A: Geoinformatics, environment protection, February 26-27, 1997, Miskolc.

Fedor, F.: **Interactive Approach of a Geochemical Problem with the Help of a Computer Graphic Program** (poster presentation), Conference of Young Professionals, Tata, 17-18. April, 1997.

Fedor, F.: **Geochemical Methods in Hydrocarbon Research**, (oral presentation) North Hungarian Regional Organization of the Hungarian Geological Association, Miskolc, 24. September, 1998.

Fedor, F.: **Analysis of Vitrinite Reflectance Data – Uncertainties that Arise in the Course of Sampling, Measuring and Interpreting**, (oral presentation), Forum of PhDs, section edition of the Faculty of Mining Engineers, Miskolc, 6. November, 1998.

Fedor, F.: **Optical Methods for Measuring the Thermal Maturity of Organic Matter – a Review**, (oral presentation in English) 2<sup>nd</sup> International Conference of Ph.D. students, Section Engineering Sciences, University of Miskolc, 8-14. August, 1999.

Fedor, F., Koncz, I.: **Estimating the Maturity of Organic Matter, Applications and their Limits – a Critical Review**, (oral presentation) 19-20. October 1999, Veszprém

Fedor, F., **Carbon Cycle in Hydrosphere – Biosphere – Atmosphere – Lithosphere System – a New Model**, (oral presentation) Conference of PhD Students, 5. November 1999, pp. 29-34.

Fedor, F., Koncz, I.: **New Possibilities for Measuring the Maturity of Organic Matter**, (oral presentation) MOL Professional and Scientific Conference, 10-12. November 1999, Siófok.

Fedor, F., Hámorné Vidó M.: **Statistical Analysis of Collotelinite Reflectance Data – a New Approach**, (oral presentation) VII. Geomathematical Conference, 8. September 2000, Szeged.

Fedor, F., Hámorné Vidó M.: **Statistical Analysis of Collotelinite Reflectance Data – a New Approach**, (oral presentation in English) 53<sup>rd</sup> Annual Meeting of the International Committee for Coal and Organic Petrology (ICCP) and the Society for Organic Petrology (TSOP), 12-19 August 2001, Copenhagen.

Fedor, F.: **A Possible Way of Statistical Analysis in Case of Small Sample Size**, (oral presentation) Seat of North Hungarian Regional Organization of the Hungarian Geological Association, 27.09. 2001, Miskolc.



- Fedor, F.: ***Analysis of the Origin of Fluids explored within the Inert Gas Zone of the Hungarian Great Plain***, (oral presentation) 24-25.10.2001, Veszprém.
- Fedor, F.: ***A Possible Way of Statistical Analysis in Case of Small Sample Size***, (oral presentation) Proceedings of the Geomathematical Section of the Hungarian Geological Association, 05.02.2002, Budapest.
- Fedor, F.: ***A New Possibility for TTI Calculation for the Sediments in the Neogene Deep Basins***, 28-29.05.2003, Veszprém (oral presentation).
- Fedor, F.: ***The Origin of Gases Explored Within the Inert Gas Zone, Hungarian Great Plain***, (Ph.D defense), 03.06. 2003, Miskolc (oral presentation).
- Fedor, F.: ***The origin of gases explored within the Inert Gas Zone, Hungarian Great Plain, Hungary***, (poster presentation), 56<sup>th</sup> Annual Meeting of the International Committee for Coal and Organic Petrology- ICCP 12-18<sup>th</sup> September 2004, Budapest
- Fedor, F.: ***Comparison of the Results of Revised and Traditional TTI Calculation in a Neogene Sedimentary Example***, (oral presentation), IX. Geomathematical Congress, 20-21.05.2005, Mórahalom.
- Szűcs, I., Fedor, F.,: ***Spatial Extension and Parameter Integration into the Safety Case – (Examples from the Hungarian LLW/ILW and HLW Disposal Projects)***, (oral presentation in English), 2<sup>nd</sup> AMIGO Workshop, Toronto, 17-24.09.2005.
- Fedor, F.: ***A Possibility for Modeling the Periodical Sedimentation*** (oral presentation), X. Geomathematical Congress, 18-20.05.2006, Mórahalom.
- Vér, Cs., Szűcs, I., Fedor, F. Jenei, A.: ***South Transdanubian Eco-industrial Park and Research Centre***, „Our Environment 2007” I. Regional Communal and Environmental Protection Exhibition and Conference, 4. section 1. presentation, Pécs, Expo Center, 26.04.2007
- Fedor, F.: ***3D Estimation of the Vitrinite Reflectance Values of Pannonian Sediments in the Jászság Basin and Environments – a New Approach*** (oral presentation), XI. Geomathematical Congress, 10-12.05.2007, Mórahalom.
- Fedor, F., Máthé, Z., Hámos, G., Somodi, G, Jobbik, A., Szűcs, I.: ***A New Approach of Laboratory Permeability Measurement of Very Tight Rocks: Experimental Data of BCF, Mecsek Mts, SW Hungary*** (poster presentation), 3<sup>rd</sup> International Meeting on Clays in Natural and Engineered Barriers for Radioactive Waste Confinement, Lille, 17-20.09.2007.
- Szűcs, I., Menyhei, L., Fedor, F., Berta, Zs., Benkovics, I.: ***Роль расширения пространственной геотформации в сфере контроля за низко- и среднерадиоактивными отходами в Венгрии***, Geoinform, Kiev, 26.03.2008 (co-author).
- Fedor, F., Kovács, L., Benkovics, I., Szűcs, I.: ***The New Conceptual Model in Boda HLW/SF Project, S-Hungary*** (oral and poster presentation), 3<sup>rd</sup> AMIGO Workshop on “Approaches and Challenges for the use of geological information in the safety case”, Nancy, 15-18.04.2008.
- Fedor, F., Feurer, V., Geiger, J. Menyhei, L., Szikszai, Zs.: ***Management of Mission-Critical Information in Bataapáti LLW/ILW Project, S-Hungary*** (poster presentation), 3<sup>rd</sup> AMIGO Workshop on “Approaches and Challenges for the use of geological information in the safety case”, Nancy, 15-18.04.2008.
- Menyhei, L., Somodi, G., Fedor, F.: ***Spatial Heterogeneity and Modeling of Geotechnical Data in the Environment of the Inclined Tunnels in Bataapáti***, XII. Geomathematical Congress, 28-30.05.2008, Mórahalom
- Fedor, F., Feurer, v., Geiger J.: ***Theoretical Sketch of a Data Base Management System in Case of Radioactive Waste Disposal to Geological Environment*** (oral presentation), XIII. Geomathematical Congress, 21-23.05.2009, Mórahalom
- Fedor, F., Somodi, G.: ***Interdisciplinary investigation of the Boda Claystone Formation – Geological scale and petrophysical properties***, Annual Meeting of Hungarian Geological Society, Szeged, 20-22.05.2010
- Fedor, F.: ***The Importance of Laboratory Petrophysical Measurements – possibilities and limitations***, (presentation), The First Central and Eastern European International Oil and Gas Conference and Exhibition, Siófok, 14-16.09.2011
- Fedor, F.: ***Uncertainty of porosity values calculated on the basis of He-pycnometry***, 4<sup>th</sup> HR-HU and 15<sup>th</sup> HU geomathematical congress “Geomathematics as Geoscience”, 23-25, May, 2012, Opatija
- Fedor, F., Ács, P.: ***Pore characterization and permeability analysis of shotcrete in NRWR, Bataapáti***, workshop of Pécs Board of HAS, Pécs, 13.06.2012

Fedor, F., Fancsik, T., Zilahy-Sebess, L., Maros, Gy., Kovács, A.Cs., Földes, T., Máthé, Z., Hámos, G., Ács, P., Somodi, G.: **Interdisciplinary investigation of Boda Claystone Formation – preliminary results**, 5<sup>th</sup> International Meeting on Clays in Natural and Engineered Barriers for Radioactive Waste Confinement, Montpellier, 22-25.10.2012.

Nagy, A., Fedor, F., Feurer, V.: **Purpose and limits of automation in laboratory practice**, 5<sup>th</sup> HR-HU and 16<sup>th</sup> HU geomathematical congress “Geomathematics as Geoscience”, 30 May-01 June, 2013, Mórahalom

Hlatki, M., Fedor, F., Csicsák, J., Szulimán, Sz.: **Connection between injection well completion technology development, petrophysics and rock mechanics**, (előadás) 5<sup>th</sup> HR-HU and 16<sup>th</sup> HU geomathematical congress “Geomathematics as Geoscience”, 30 May-01 June, 2013, Mórahalom

Hlatki, M., Fedor, F., Csicsák, J., Szulimán, Sz.: **Mechanism of reinjection to sandstones – a literary review**, 10<sup>th</sup> workshop of Hungarian Geothermal Section of HEC, Budapest, 20.06.2013.

Hlatki, M., Fedor, F., Csicsák, J., Szulimán, Sz.: **Experiences of visits in Landau and Insheim Geothermal Power Plants**, 10<sup>th</sup> workshop of Hungarian Geothermal Section of HEC, Budapest, 20.06.2013.

Horváth, J., Koroncz, P., Fedor, F., Hlatki, M.: **Petrophysical and geomechanical analysis of Upper Pannonian unconsolidated sandstones**, Conference of Civil Engineering and Rock Mechanics, Budapest, 06.11.2013

Horváth, J., Koroncz, P., Fedor, F.: **Petrophysical and hydrodynamical investigation of unconsolidated rocks – measurement vs. empirical estimation**, 6<sup>th</sup> HR-HU and 17<sup>th</sup> HU geomathematical congress “Geomathematics - from theory to practice”, Opatija, 21-23.05.2014.

Fedor, F., Ács, P., Horváth, J., Koroncz, P., Török, E.: **Petrophysical examinations and results of Upper Pannonian sandstones**, Sustainable geothermal energy utilization: Developments and results of MECSEKÉRC Plc. GOP-1.1.1-2012-0033 project – workshop, Pécs, 19.06.2014.

Vörös, Cs., Fedor, F., Hlatki, M., Mecsekérc Zrt.: **Introduction of the laboratory instruments measuring fracture damage and fracture conductivity, developed in framework of the project Sustainable geothermal energy utilization**, Developments and results of MECSEKÉRC Plc. GOP-1.1.1-2012-0033 project – workshop, Pécs, 19.06.2014.

Fedor, F., Ács, P., Koroncz, P.: **Upscaling of petrophysical parameters – possibilities and limits in case of Boda Claystone (BCF)**, GEODISPOSAL 2014, Manchester, 24-26.06.2014.

Horváth, J., Fedor, F., Geiger, J.: **Grain size analysis and examination of the potential for estimating the hydraulic conductivity of Bánk-2 core samples**, HUNGEO, Debrecen, 19-22.08.2014.

Fedor, F., Hlatki, M., Vörös, Cs., Csicsák, J.: **Laboratory investigation of well completion technologies of water injection into unconsolidated sandstone formation**, XXX. Nemzetközi Olaj- és Gázipari Konferencia, Kiállítás, 2014.09.16-18., Siófok

Fedor, F., Ács, P.: **Pore structure of Boda Claystone Formation, W-Mecsek, Hungary**, 6<sup>th</sup> International Conference on “Clays in Natural and Engineered Barriers for Radioactive Waste Confinement, March 23-26, 2015, Brussels

Koroncz, P., Fedor, F.: **Experimental investigation of stress-dependent petrophysical behaviour of reservoir rocks**, 8<sup>th</sup> HR-HU and 19<sup>th</sup> HU geomathematical congress “Geomathematics – present and future of geological modelling” Trakosčan, 26-28.05.2016

Fedor, F., Máthé, Z., Koroncz, P., Ács, P.: **Results of mineralogical, petrological, geochemical and petrophysical laboratory measurements carried out on samples of BAF-2 and BAF-1,-1A drillholes**, BCF Research - workshop, Pécs, 13.06.2016

Fedor, F.: **SmartLab – a new concept of global geological laboratory service**, 35<sup>th</sup> IGC, Instrumental, experimental and laboratory-based developments in the Geosciences, 31.08.2016., Cape Town, SA

Koroncz, P., Fedor, F.: **Complex petrophysical investigation of pannonian-miocene shales – preliminary results of acoustic anisotropy measurements**, 35<sup>th</sup> IGC, Instrumental, experimental and laboratory-based developments in the Geosciences, 31.08.2016, Cape Town, SA

Nagy, Gy., Fedorné, Sz. A., Ács, P., Fedor, F.: **Felejtse el a fáradtság szitaanalízist! - Occhio Zephyr ESR szemcseméret-eloszlás és alakparaméter vizsgáló berendezés 30 µm-30 mm mérettartományban**, X. Kő- és Kavicsbányász Napok, 02-03.03.2017, Velence, HU

Feurer, V., Fedor, F.: **The 3rd/4th industrial revolution - Challenges for researchers**, 20<sup>th</sup> Hungarian and 9<sup>th</sup> Croatian-Hungarian Geomathematical Congress: Geomathematics in

multidisciplinary science - The new frontier?, 05.11-13.2017, Pécs

Fedor, F., Feurer, V., Schön, R.: **How to automate a petrophysical laboratory? - challenges and solutions**, 20<sup>th</sup> Hungarian and 9<sup>th</sup> Croatian-Hungarian Geomathematical Congress: Geomathematics in multidisciplinary science - The new frontier?, 05.11-13.2017, Pécs

#### Citations

Hámor-Vidó, M.: **The first hundred years of organic petrology in Hungary**, Földtani Közlöny, Vol.132. No.2, 2002, pp. 265-289, (Fedor, 1998, 1999, Fedor & Koncz, 1999, Fedor & Hámor-Vidó, 2000)

Pironon, J.: **Fluid inclusions in petroleum environments: analytical procedure for PTX reconstruction**, ACTA PETROLOGICA SINICA, 2004 Vol.20 No.6 P.1333-1342

赵俊峰, 刘池洋, 王晓梅: **The factors influencing the measurement results of vitrinite reflectance**, COAL GEOLOGY & EXPLORATION, 2004 Vol.32 No.6 P.15-18

Mon-Yen Lin: **Compositional studies of organic material with various maturity**, [www.geo.ncu.edu.tw/seminar/20071101A-rep.pdf](http://www.geo.ncu.edu.tw/seminar/20071101A-rep.pdf), 11/1, 2007 (presentation)

Sihra, K.K.: **Integrating vitrinite reflectance, Rock-Eval pyrolysis, fluorescence microscopy, and palynology of the Athabasca oil sands**, Kears Lake area, northeastern Alberta, M.Sc Thesis, Faculty of Mathematics and Science, Brock University St. Catharines, Ontario, 2010

SCHMITT, Mayka, et al. Caracterização do sistema poroso de rochas selantes combinando-se adsorção de nitrogênio e intrusão de mercúrio. 2013.

LÁZÁR, Károly; MÁTHÉ, Zoltán. Claystone as a Potential Host Rock for Nuclear Waste Storage. 2012. DOI: 10.5772/48123

KORONCZ, P.J., ÁCS, P., LEMBERKOVICS, V., FEDOR, F., 2017: Pore characterization, acoustic and permeability measurements on core plug triplets, from the Miocene Tótkomlós (Calcareous Marl) Formation of the Pannonian-basin, Hungary; Geologica Croatica

Zehao YANG, Qian SANG, Mingzhe DONG, Shaojie ZHANG, Yajun LI, Houjian GONG, 2015: A modified pressure-pulse decay method for determining permeabilities of tight reservoir cores; Journal of Natural Gas Science and Engineering

Zaobao LIU, Jianfu SHAO, Shouyi XIE, Jean SECQ, 2015: Gas permeability evolution of clayey rocks in process of compressive creep test, Materials Letters

T. CHEN, X. FENG, C. YANG, W. CAO, X. LIU, 2014: Research on confining pressure sensitivity and anisotropy for gas shale permeability; Caikuang yu Anquan Gongcheng Xuebao/Journal of Mining and Safety Engineering

Z. YANG, M. DONG, H. GONG, Y. LI, L. XU, 2015: A new method to measure radial permeability and porosity of shale, Acta Petrolei Sinica, 2015. Vol. 36., No 4.

Regina SANDER, Zhejun PAN, Luke D. CONNELL, 2016: Laboratory measurement of low permeability unconventional gas reservoir rocks: A review of experimental methods; Journal of Natural Gas Science and Engineering

Yanlin ZHAO, Lianyang ZHANG, Weijun WANG, Jingzhou TANG, Hang LIN, Wen WAN, 2017: Transient pulse test and morphological analysis of single rock fractures; International Journal of Rock Mechanics and Mining Sciences, Vol.91, january 2017, pp. 139-154

Madhuri A. PATEL, Aishwarya S. KAR, Dimple GARG, Sumit KUMAR, B. S. TOMAR, R.K. BAJPAL, 2017: Sorption studies of radionuclides on argillaceous clays of Cuddapah System, Journal of Radioanalytical and Nuclear Chemistry, sept. 2017, vol. 313, Iss 3, pp. 555-563

Zehao Yang, Mingzhe Dong, Shaojie Zhang, Houjian Gong, Yajun Li, Feifei Long: A method for determining transverse permeability of tight reservoir cores by radial pressure pulse decay measurement, Journal of Geophysical Research, Solid Earth, 2016.09.14, Volume 121, Iss. 10, pp.7054-7070, <https://doi.org/10.1002/2016JB013173>

Xinmin Ge, Yiren Fan, Jianyu Liu, Li Zhang, Yujiao Han, Donghui Xing: An improved method for permeability estimation of the bioclastic limestone reservoir based on NMR data, J. of Magnetic resonance, Vol. 283., oct. 2017, pp 96-109

Zehao Yang, Mingzhe Dong: A new measurement method for radial permeability and porosity of shale, Petroleum Research, Vol. 2, iss2, june 2017, pp. 178-185

S. S. Surya, D. N.Arnapalli: Effect of Sample Thickness on Laboratory Determination of Gas Permeability of Buffer Material, Indian Geotechnical Conference IGC 2016 15-17 December 2016, IIT Madras, Chennai, India



Qisheng Ma, Yongchun Tang: Petroleum Geochemistry, in Kubicki, J.D. (ed): Molecular Modeling of Geochemical Reactions, Wiley, 2016, ISBN9781118845080

D.A.Kowal: Comparison of thermal maturation indicators within hydrocarbon bearing sedimentary rock, MSc thesis, 2013, Kansas Univ.

Dobson, Patrick, and Houseworth, James. Inventory of Shale Formations in the US, Including Geologic, Hydrological, and Mechanical Characteristics. United States: N. p., 2013. Web. doi:10.2172/1131032.

#### Field trips /conferences

10-12.09.2018: project meeting, Celle Drilling 2018 Conference, Celle, Germany;  
03-05.07.2018: project meeting, GeoEnergy Days, Pau, France;  
20-22.02.2018: project meeting, Brussels;  
23-28.09.2017: 7th International Conference on Clays in Natural and Engineered Barriers for Radioactive Waste Confinement, Davos, Switzerland;  
08.09.2016: business meeting, Paris, France;  
24.08-07.09.2016: 35th IGC, Cape Town, South Africa;  
26.05-28.05.2016: 8th HR-HU and 19th HU geomathematical congress, Trakosćan, Croatia;  
11.05-13.05.2016: 7th annual international conference, "UTILIZATION OF MINERAL RESOURCES", Olomouc, Czech Republic;  
23.03-26.03.2015: „Clays in Natural & Engineered Barriers for Radioactive Waste Confinement – 6th International Meeting” Conference, Brussels, Belgium;  
24.06-26.06.2014: Geodisposal Conference, Manchester, England;  
21.05-23.05.2014: Geomathematical Congress, Opatija, Croatia;  
24.03-27.03.2014: Business trip, Vinci Technologies, Nanterre, France;  
27.02-06.03.2014: PDAC, Toronto, Canada;  
01.03-07.03.2013: PDAC, Toronto, Canada;  
13.11-17.11.2012: Der Geothermie Kongress 2012, Karlsruhe, Germany  
22.10-25.10.2012: „Clays in Natural & Engineered Barriers for Radioactive Waste Confinement – 5<sup>th</sup> International Meeting” Conference, Montpellier, France;  
31.07-22.08.2012: Business trip and 34th IGC, Brisbane, Perth, Australia;  
23-25. 05.2012: 4<sup>th</sup> HR-HU and 15th HU Geomathematical Congress “Geomathematics as Geoscience”, Opatija, Croatia;  
18-19.05.2012: Business trip, Warsaw;  
30.08-06.09.2009: Business trip, San Francisco (Core Test Inc.), Houston (Corelab Inc.), Ithaca (PMI Inc.), USA;  
09-12. 07.2009: Business trip, Vinci Technologies, Nanterre, France;  
22-28.06.2009: Business trip and short course, Odelzhausen, Braunschweig, Germany;  
16-22.10.2008: Business trip, Porotec laboratory in Hofheim; Quantachrome laboratory in Odelzhausen; Sy-LAB in Neupurkersdorf;  
16-20.09.2008: „Fault Zones: Structure, Geomechanics, and Fluid Flow” and CLAY CLUB workshop, London, GB;  
06-14.08.2008: International Geological Congress (IGC 33) Oslo, Norway;  
15-18.04.2008: AMIGO 3 Workshop, Nancy, France;  
17-20. 09.2007: „Clays in Natural & Engineered Barriers for Radioactive Waste Confinement – 3<sup>rd</sup> International Meeting” Conference, Lille, France;  
10-14.09.2007: AIG7 Conference, Stellenbosch, South Africa;  
23-25.01.2007: NEA IGSC „Safety Assesment” Conference, Paris, France;  
04-13.09.2006: CLAY CLUB workshop, Horonobe, Japan;  
05-10.11.2005: CLAY CLUB annual meeting, Paris, France;  
26-29.09.2005: „6<sup>th</sup> European Coal Conference”, Beograd, Serbia;  
17-24.09.2005: AMIGO 2<sup>nd</sup> workshop, Toronto, Canada;

11-16.09.2005: „6<sup>th</sup> International Symposium on Applied Isotope Geochemistry (AIG-6)” Conference, Prague, Czech Republic;

05-08.07.2005: CLAYTRAC project meeting and visiting Solexpert Ltd, Basel, Zürich;

06. 2005: Visiting different underground laboratories (Grimsel, Mt. Terri URL, Switzerland; Bure, France) – for radioactive waste disposal;

03. 2005: „Clays in Natural & Engineered Barriers for Radioactive Waste Confinement – 2<sup>nd</sup> International Meeting” – Conference, Tours;

2004: Invited Consultant – Ireland (Aurum Exploration, two weeks);

2001: 53<sup>rd</sup> Annual Meeting of the International Committee for Coal and Organic Petrology (ICCP) and the Society for Organic Petrology (TSOP), Conference. 12-19 August 2001, Copenhagen, Denmark;

1997: University of Leoben, Institute of Geology (two weeks);

1994: Field trip to Scandinavia (Germany - Denmark – Sweden, 1 month);

1993: Field trip to Greece (1 month);

1991: Speleological expedition, France-Spain (1 month);

1988: Field trip to the USSR (Leningrad, two weeks).

#### Selected major project preferences

Mecsekérc Plc.: author or co-author of many different reports connecting to Boda and Bátaapáti projects

RHK Kht. – Paks: Conception Plan for Long Term Information Costudy. High Level Radioactive Waste Disposal Project. Co-author. (MECSEKÉRC Zrt. - 2008)

RHK Kht. – Paks: Bátaapáti Project. Low- and Medium Level Radioactive Waste Disposal Project. Project Leader of Informatics. (MECSEKÉRC – 2006)

GEOPARD Ltd. – Pécs. Special Measurement Laboratory (SMLAB) Project. Completion of the technological plan, the consumer research, the marketing study and the feasibility study. (GEOCHEM)

MECSEKÉRC Co. – Pécs. Hydrodynamic analysis of Boda Claystone Formation's core samples. (University of Miskolc, Research Institute of Applied Chemistry, Department of Reservoir Engineering)

Bátatom Ltd. – Pécs: Consulting Engineering (Sycamore Engineering Ltd.)

Rotaqua Ltd. – Pécs: Consulting Engineering: Coal-bed methane. (GEOCHEM)

EASTMINE Ltd. – Budapest: Consultant services in the area of gold mineral resources. (GEOCHEM)

University of Miskolc, Research Institute of Applied Chemistry - Miskolc (1999-2003):

Design, implementation and interpretation of porosity-, pressure pulse-decay permeability- and formation factor measurements. Completion of reports in reference to remote sensing and to high level radioactive waste disposal.

University of Miskolc, Department of Geology – Miskolc (1996-1999): Participation in the work of the Department: Practical instruction of the „Geology-Environment Geology” the „Geology of Hungary”, the „Petroleum Geology” and the „Structural Geology” subjects.

#### Professional interests

- Hydrocarbon exploration (maturity of organic matter, gas exploration)
- Availability of statistical analysis in case of small sample size
- Measurements and interpretation of the petrophysical parameters (porosity, pore-throat size distribution, permeability), questions of uncertainty
- General model of radioactive waste disposal, its informatical aspects, knowledge management
- SmartLab project