

Peter Zahuczki

Phone:

E-mail: PZahuczki@mol.hu

Peter@zahuczki.hu

Mailing Address

Personal

Nationality:	Hungarian	Languages:	Hungarian	Native language
Date of Birth:			English	fluent
Marital Status:	Married			
No. of children:	2			

Education

M.Sc. in geophysical engineering at University of Miskolc in 1999

Thesis: The effect of the surrounding environment of an electromagnetic sounding point in the case of planar EM wave propagation

Career History

October 2014 - present	MOL Group E&P	Leading Expert of Exploration Geophysics at Asset Evaluation
January 2013 - September 2014	MOL Group E&P	Leading Expert of Exploration Geophysics at Exploration Portfolio Management
May 2006 – January 2013	MOL Plc.	Senior Geophysicist Expert at Geomodel Development
Sept 1999 – May 2006	MOL Plc.	Geophysicist

Major Areas of Expertise

- ▶ Seismic Interpretation
- ▶ Exploration prospect generation
- ▶ Probabilistic and deterministic reserve estimation
- ▶ Seismic reservoir characterisation
- ▶ Quantitative seismic interpretation
- ▶ Complex velocity modelling
- ▶ 3D reservoir modelling
- ▶ Geostatistics
- ▶ Surface electromagnetic data interpretation

Professional Experience

- ▶ Participating in data room evaluation teams analysing exploration and development opportunities in Africa (Morocco, Mauritania, Cameroon, Equatorial Guinea, Gabon, Congo, Angola, Namibia, South Africa, Somalia, Tanzania)
- ▶ Participating in data room evaluation teams analysing exploration and development opportunities in rest of the World (UK, Denmark, Norway, Germany, Hungary, Israel, Spain, Malaysia, Kurdistan, Turkey)
- ▶ Seismic fracture characterisation of Bijell field (Kurdistan)
- ▶ Complex velocity modelling of Bijell field (Kurdistan)
- ▶ Complex velocity modelling of Matjusinsky block (Russia)
- ▶ Interpretation of 3D magnetotelluric data in Block 43b (Oman)
- ▶ AVO modelling and interpretation of pre-stack seismic data of Nanaar 3D survey on Ngosso permit (Cameroon)
- ▶ Seismic Reservoir Characterisation of Beru-M-I unconventional reservoir (Hungary)
- ▶ Probabilistic reserve estimation in Beru-M-I unconventional tight sand reservoir
- ▶ Complex velocity modelling of Khor-Mor field (Kurdistan)
- ▶ Seismic Reservoir Characterisation of Foldes-M2 gas field (Hungary)
- ▶ Seismic to well calibration and seismic resolution enhancement study in Mathusinskaya Block (Russia)
- ▶ 3D reservoir model of Flodes-M2 gas field (Hungary)
- ▶ 3D reservoir model of Dorozsma oil field (Hungary)

- ▶ Seismic Reservoir Characterisation of Hosszupalyi-D gas field (Hungary)
- ▶ Prospect generation of Mpi-D-1 well
- ▶ 3D reservoir model Hosszupalyi-D gas field (Hungary)
- ▶ Seismic Reservoir Characterisation of Zsana gas field (Hungary)
- ▶ Seismic Reservoir Characterisation of Sas-Ny oil & gas field (Hungary)
- ▶ 3D reservoir model of Sas-Ny oil & gas field (Hungary)
- ▶ Seismic Interpretation of Ásotthalom-North Field (Hungary)
- ▶ Seismic Reservoir Characterisation of Maros-1 gas field (Hungary)
- ▶ Seismic Reservoir Characterisation of AP-13 oil field (Hungary)
- ▶ Seismic Reservoir Characterisation of Deszk gas field (Hungary)
- ▶ Map based reservoir model of Deszk gas field (Hungary)
- ▶ Seismic Reservoir Characterisation of Bajansenye & Oriszentpeter gas field (Hungary)
- ▶ Seismic Reservoir Characterisation of Pusztafoldvar gas field (Hungary)
- ▶ Seismic Reservoir Characterisation of Szeged-Moraváros oil field (Hungary)
- ▶ Basin modelling and analysis of Derecske basin (Hungary)
- ▶ Seismic evaluation of Mako Trough and Bekes basin to predict unconventional HC accumulations (Hungary)
- ▶ Mapping of AVO class II sandstones in Derecske basin (Hungary)
- ▶ AVO processing and interpretation of Nagykörös-South and Sio seismic 2D lines for prospect generation and risk reduction
- ▶ Joint interpretation of magnetotelluric and seismic data in Nyírség area (Hungary)
- ▶ Joint interpretation of seismic and magnetotelluric data in Fábiansébestyén, Nagyszénás area in geothermal aspects (Hungary)
- ▶ Interpretation of electromagnetic frequency soundings in Komlós area (Hungary)
- ▶ Magnetotelluric data interpretation in Paleogene basin (Hungary)

Management Experience

- ▶ **G&G team leader** in assessment and 3D basin modelling and resource calculation in Derecske basin unconventional exploration
 - Responsibilities: Manage, coordinate and supervise multidisciplinary G&G team
 - Results: Documented full assessment of the basin, new well locations: Beru-4, Beru-6, Beru-3
 - Project time frame: 2 years
- ▶ Temporary substitution of the Geomodel Development Leader absent at work (holidays, business trips) in the last 5 years

G&G Software Experience

- ▶ **IHS Kingdom**
- ▶ **Landmark:** Openworks, Stratworks, Seisworks, Z-Map Plus, Geoprobe, Depth Team Express, Depth Team Interpreter
- ▶ **Hampson – Russell:** AVO, AFI, STRATA, EMERGE, ISMAP
- ▶ **dGB:** OpendTect, OD plugins: Steering, NN, MPSI, SCB, SSIS, HorizonCube
- ▶ **ESRI:** Arcview 3.3, ArcGIS 9
- ▶ **IRAP RMS:** Structural modelling, stochastic modelling of reservoir properties and volumetric calculations
- ▶ **Schlumberger Petrel:** Seismic Interpretation, Structural modelling, stochastic modelling of reservoirs and volumetric calculations
- ▶ **Geosystem WinGLink:** Magnetotelluric interpretation, Gravity and magnetic modelling

Other Software Experience

- ▶ **MS Office**
- ▶ **Adobe Illustrator, Adobe Photoshop, CorelDraw, Golden Software Surfer, Grapher**
- ▶ Scientific software development in **Lazarus (FPC)**

Professional Courses

- ▶ Compressional and transpressional structural styles (Budapest, 2011)
- ▶ Quantification of Geologic Risk in the Conventional and Unconventional Realm (Houston, 2010)
- ▶ Seismic Stratigraphy and Seismic Geomorphology (Houston, 2010)
- ▶ Understanding Heterogeneity in U.S. Shale Plays (Houston, 2010)
- ▶ Reservoir Geophysical Applications (Las Vegas, 2008)
- ▶ Geoprobe advanced level training (Milan, 2007)
- ▶ Naturally Fractured Reservoir: Geologic and Engineering Analysis (Houston, 2006)
- ▶ Fractured Reservoir Characterisation (Seattle, 2004)

- ▶ Basic Reservoir Engineering (Zagreb, 2004)
- ▶ Multi-component Seismic Reservoir Characterisation (Budapest, 2003)
- ▶ Seismic Data Integration in the Earth Modeling Workflows (Stavanger, 2003)
- ▶ Hampson - Russell Software Training, AVO, STRATA (Budapest, 2002)
- ▶ Roxar IRAP-RMS Software Training (Budapest, 2002)
- ▶ Structural Styles in Petroleum Exploration (Budapest, 2001)

Publications and Presentations

- ▶ Csontos L., Kiss K., Németh A., **Zahuczki P.**, Vincze M.: Pannonian Basin Petroleum Exploration and Production: Glorious Past, Enhanced Present, Unconventional Future?; APPEX Regional 2014, Istanbul
- ▶ Göncz G., Sebe I., **Zahuczki P.**, Zsellér P.,: Passive Seismic Exploration during Beru-4 Fracturing Campaign; 2nd Central and Eastern European International Oil and Gas Conference and Exhibition – Sibenik, 2012
- ▶ **Zahuczki P.**: Quantitative Seismic Interpretation in Unconventional Exploration in Pannonian basin; 2nd Central and Eastern European International Oil and Gas Conference and Exhibition – Sibenik, 2012
- ▶ Bernáth Gy., Kiss B., **Zahuczki P.**: Repedezettség azonosítása egy nem hagyományos “tight gas” tárolóban; XXXIII. Földtudományi és Környezetvédelmi Vándorgyűlés és Kiállítás – Miskolc, 2012
- ▶ **Zahuczki P.**: Quantitative Seismic Interpretation in Reservoir Management in Pannonian Basin; Applied Technology and Best Practices in CEE Conference – Budapest, 2011
- ▶ Hatalyák P., **Zahuczki P.**, Wittmann G., Berkes I., Németh Gy.: Discovery of Nagykőrös-South low caloric value gas field and its production possibilities; MOL Scientific Magazine, 2011
- ▶ **Zahuczki P.**: Probabilistic AVO interpretation of seismic data; XIII Geomatematical Symposium - Mórahalom, 2009
- ▶ **Zahuczki P.**: Characterisation of the spatial uncertainty of a 3D seismic velocity model; XII. Geomatematical Symposium - Mórahalom, 2008
- ▶ **Zahuczki P.**: Characterisation of the structural uncertainty in the case of a South-Hungarian HC-reservoir; XI. Geomatematical Symposium - Mórahalom, 2007
- ▶ Zellou A., Royer T., Robinson G. C., **Zahuczki P.**, Király A.: Fractured Reservoir Characterisation Using Post-Stack Seismic Attributes: Application to a Hungarian Reservoir, 68th EAGE Conference & Exhibition - Wien, 2006
- ▶ Vincze T., Komlósi J., **Zahuczki P.**, Moffatt J., Doe T.: Discrete Fracture Network Model - A Case History, Dorozsma Field, SE-Hungary; 18th World Petroleum Congress, Johannesburg, 2005
- ▶ **Zahuczki P.**, Bárány Á.: Porosity Prediction From Seismic Attribute Maps in a Hungarian Limestone Reservoir; Petroleum Summer School, Dubrovnik, 2005
- ▶ **Zahuczki P.**: Egy gáztelep átlagos porozitás eloszlásának becslése térképminti szeizmikus attribútumok alapján, Földtani Kutatás, 2005 I. negyedév, pp. 33-37
- ▶ **Zahuczki P.**: Seismic Data Integration in the geostatistical reservoir modelling; Acta Geologica Hungarica, Vol 47/1, pp. 75-81 (2004)
- ▶ Magyar I, Fogarasi A, Sőreg V, Bukó L, Lemberkovics V, Kiss K, Vakarcs G, Vincze M, **Zahuczki P**: Lacustrine sandstone reservoirs of the Lake Pannon and alluvial sequences, Central Paratethys – Case studies at Algyő and Hosszúpályi South. AAPG/ASPG International Hedberg Research Conference “Sandstone Deposition in Lacustrine Environments: Implications for Exploration and Reservoir Development”, Baku, Azerbaijan, 57-58; 2004
- ▶ **Zahuczki P.**: Szeizmikus attribútumok kvantitatív értelmezése a szénhidrogén kutatásban; Nemzetközi Geofizikai Földtani Fluidumbányászati Környezetvédelmi Vándorgyűlés/Konferencia és Kiállítás, Szolnok, 2003
- ▶ Magyar I, Fogarasi A, Lemberkovics V, **Zahuczki P**, Vincze M, Sőreg V :Revitalization of a mature petroleum province through sequence stratigraphy and seismic attribute analysis: case studies from the Pannonian Basin. Technology of Oil and Gas TOG 2002, Tripoli, Libya, Programme and Abstracts 22-23 , 2002
- ▶ Lemberkovics V., Bárány Á., **Zahuczki P.**: Hatékony 3D szeizmikus eljárások pannon gáztelepek kutatásában, Ifjú Szakemberek Ankétja 2002, Salgótarján

Teaching Experience

- ▶ Guest Lecturer at ELTE Geophysical Department in MSc. I. grade in 2011, 2012,2013,2014 Topic: Practical Quantitative Seismic Interpretation
- ▶ "MOLTanszék" lecturer on University of Miskolc in the following topics:
 - Seismic interpretation
 - Geological mapping
- ▶ Supervising 8 MSc thesis in ELTE and University of Miskolc in the topics of seismic interpretation and electromagnetic data interpretation

Professional Affiliations

- ▶ Member of European Association of Geoscientists and Engineers (EAGE)
- ▶ Member of American Association of Petroleum Geologists (AAPG)
- ▶ Member of Society of Exploration Geophysicists (SEG)
- ▶ Member of Association of Hungarian Geophysicists (MGE)

Awards

- ▶ János Renner Medal, 2011 (This medal recognizes outstanding service within and on behalf of the Association of Hungarian Geophysicists)