ÁDÁM TÓTH

Date of birth	21 August 1989
Permanent address	Rába Street 42, 9514 Kenyeri
Temporary address	Dembinszky Street 18, 1071 Budapest
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Nationality	Hungarian

EDUCATION

2016–	Eötvös Loránd University, Budapest, Hungary Doctoral School of Earth Sciences, Geology–Geophysics program PhD candidate in Hydrogeology
2013–2016	Eötvös Loránd University, Budapest, Hungary Doctoral School of Earth Sciences, Geology–Geophysics program Supervisor: Judit Mádl-Szőnyi
2011–2013	Eötvös Loránd University, Budapest, Hungary Geophysicist MSc – Geophysical Exploration specialisation
2008–2011	Eötvös Loránd University, Budapest, Hungary Earth Scientist BSc – Geophysicist specialisation

PROFESSIONAL EXPERIENCE

September 2016 –	Assistant lecturer in hydrogeology Department of Physical and Applied Geology Eötvös Loránd University, Budapest, Hungary
January–June 2016	Part-time assistant lecturer in hydrogeology Department of Physical and Applied Geology Eötvös Loránd University, Budapest, Hungary
June–August 2014	Assistant research fellow Department of Physical and Applied Geology Eötvös Loránd University, Budapest, Hungary
July–August 2013	Intern Geo-Log Geophysical and Environmental Ltd. Budapest, Hungary

SCIENTIFIC HONOURS AND AWARDS

2015	Best Research Paper on Regional Groundwater Flow First Prize 41st IAH Congress, Rome, Italy
2014	Young Karst Researcher Prize Karst without Boundaries, Trebinje, Bosnia and Herzegovina
2014	Best poster prize in Hydrogeology & Engineering Geology session 5th International Students Geological Conference, Budapest, Hungary
2013	William Agocs Geophysical Prize Department of Geophysics and Space Sciences, Eötvös Loránd University, Budapest, Hungary
2013	Excellent Student of the Faculty Faculty of Sciences, Eötvös Loránd University, Budapest, Hungary
2012–13	Fellowship granted by the Republic of Hungary Eötvös Loránd University, Budapest, Hungary
2012	Dr. Imre Pauka Prize Golder Associates (Hungary) Ltd.
2012	Excellent Student of the Faculty Faculty of Sciences, Eötvös Loránd University, Budapest, Hungary

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MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

2015–	Regional Groundwater Flow Commission of International Association of Hydrogeologists (IAH–RGFC) Secretary
2015–	European Association of Geoscientists & Engineers (EAGE)
2013–	Society of Exploration Geophysicists (SEG) 2013–2014 President of the Eötvös Student Chapter, Eötvös Loránd University
2013–	International Association of Hydrogeologists (IAH)
2010–	American Association of Petroleum Geologists (AAPG) 2010– Member of the Eötvös Student Chapter, Eötvös Loránd University

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PUBLICATIONS

Tímea Havril, Ádám Tóth, John W. Molson, Attila Galsa, Judit Mádl-Szőnyi (2017): Impacts of predicted climate change on groundwater flow systems: Can wetlands disappear due to recharge reduction? *Journal of Hydrology*

Judit Mádl-Szőnyi, Anita Erőss, Ádám Tóth (2017): Fluid flow systems and hypogene karst of the Transdanubian Range, Hungary — with special emphasis on Buda Thermal Karst. *Selected Hypogene Karst Regions and Caves of the World, Springer*

Judit Mádl-Szőnyi, Szilvia Simon, Anita Erőss, Ádám Tóth, Brigitta Czauner, László Balázs, Petra Bodor, Tímea Havril, László Boncz, Viktor Sőreg (2017): Confined carbonates — Regional scale hydraulic interaction or isolation? *Marine and Petroleum Geology*

Sándor Szalai, Ernő Prácser, Kitti Szokoli, Ádám Tóth (2017): Prediction of the Process of a Slowly Moving Loess Landslide by Electrical Resistivity Tomography. *Advancing Culture of Living with Landslides: Volume 3 Advances in Landslide Technology*

Judit Mádl-Szőnyi, Ádám Tóth (2017): Topographically driven fluid flow at the boundary of confined and unconfined sub-basins of carbonates: basic pattern and evaluation approach. *Advances in Karst Science, Springer*

Ádám Tóth, Tímea Havril, Szilvia Simon, Attila Galsa, Fernando A. Monteiro dos Santos, Imre Müller, Judit Mádl-Szőnyi (2016): Groundwater flow pattern and related environmental phenomena in complex geologic setting based on integrated model construction. *Journal of Hydrology* 539, pp. 330–344.

Ádám Tóth, Judit Mádl-Szőnyi (2016): Scale–dependent evaluation of an unconfined carbonate system — Practical application, consequences and significance. In: Z. Stevanovic, N. Kresic, N. Kukuric (eds.): *Karst without Boundaries*, IAH – Selected Papers on Hydrogeology; 23. CRC Press – Taylor and Francis Group, pp. 199–214.

Judit Mádl-Szőnyi, Ádám Tóth (2015): Basin–scale conceptual groundwater flow model for an unconfined and confined thick carbonate region. *Hydrogeology Journal* 23/7, pp. 1359–1380.

Judit Mádl-Szőnyi, Eszter Pulay, Ádám Tóth, Petra Bodor (2015): Regional underpressure — a factor of uncertainty in the geothermal utilization of deep carbonates, Gödöllő Region, Hungary. *Environmental Earth Sciences* 74/12, pp. 7523–7538.

CHAIRING SESSIONS

Groundwater management and energy source development in a changing climate

44th Congress of International Association of Hydrogeologists, Dubrovnik, Croatia, 25–29 September 2017

Site Characterization

Characterizing regional groundwater flow systems: Insight from practical applications and theoretical development, Calgary, Canada, 26–28 June 2017

Verification of conceptual patterns and expected natural effects of regional groundwater flow by interpretation of relevant field observations

43rd Congress of International Association of Hydrogeologists, Montpellier, France, 24–29 September 2016

Marine, Hydrogeophysics, Geothermy & Well Logging

8th Congress of the Balkan Geophysical Society, Chania, Greece, 4–8 October 2015

TEACHING

Hydrogeology – Pannon University, Veszprém, Hungary – invited lecturer

Introduction to hydrogeology (in Hungarian)

Hydrogeology (in Hungarian)

Limnology (in Hungarian)

Groundwater flow in drainage basins lecture and practice (in Hungarian and English)

Applied hydrogeology lecture and practice (in Hungarian and English)

Field practice in hydrogeology (in Hungarian and English for Brazilian and Kurd students)

INTEREST

My main field of interest is the application of regional groundwater flow theory in the following subdisciplines:

- hydrogeophysics, using geophysical methods for hydrogeological purposes,
- karst hydrogeology, application of topography-driven regional groundwater flow to carbonate regions and deep, hypogenic, karstification,
- geothermal potential assessment, determining the components (reservoir, fluid and heat) of fluid-based geothermal systems,
- groundwater-dependent ecosystems and their hydraulic position,
- springs as indicators of groundwater flow systems,
- numerical simulation of groundwater flow,
- basin hydrodynamics, application of hydraulic data processing, prospecting basin-scale regional subsurface processes, use of hydrogeological models to reveal the evolution of basins.