

CURRICULUM VITAE



Name : Dr. Mónika Kéri
E-mail: keri.monika@science.unideb.hu

Degrees:

2008-2015 **University of Debrecen, Chemistry PhD School**
Ph.D. in Chemistry (pre-degree certificate:2012, defense: 2015, summa cum l.)

2007 **TÜV Academy QMF Quality Assurance training**

2005-2007 **University of Debrecen, Center of Foreign Languages**
English-Hungarian Special Translator

2002-2008 **University of Debrecen, Faculty of Science and Technology**
Environmental scientist, chemist specialization

1996-2002 **Lajos Kossuth Secondary School of the University of Debrecen**

Experience:

2008- **University of Debrecen, Department of Physical Chemistry (previously Dep. of Colloid and Environmental Chemistry)**
PhD and Doctorand Scholarship, lecturer

2008-2009 **DTMP Debreceni Tudományos Műszaki Park Kht., Aquaprofit Zrt.**
Environmental scientist, chemist

Research & development experience:

- "In situ" structural characterization of environmental adsorbents by nonconventional NMR methods (2020-2023, PD OTKA 135169)
- Metal complexes of nano-sized ligands: synthesis, physical-chemical properties, applications (2019-2023, K OTKA 131989)
- Structure and applications of micro- and mesoporous solid materials (structure determination of silica-based aerogel drug delivery systems by NMR) (2017-2021, FK OTKA 124571)
- Study of porous adsorbents by NMR cryoporometry, relaxometry and diffusometry, determination of the pore size distribution (2013-2014, Jedlik Ányos Scholarship, 2013 ENVIKUT project TÁMOP-4.2.2.A-11/1/KONV-2012-0043, 2015-2018 OTKA 109558, 2016-2020 GINOP 2.3.2-2016-00008)
- Interaction of functionalized dendrimers with metal ions and small molecules (2011-2013, Chinese-Hungarian TÉT Collaboration TÉT_10-1-2011-0145) Study journey: Shanghai, Donghua University 2012 June.
- Study of the effect of vanadium-dendrimer catalysts on trichloroethylene (TCE) oxidation. (2010-2011, CHEMIKUT project TÁMOP-4.2.2.-08/1-2008-0012)
- Characterization of the behavior of generation 5 PAMAM dendrimers in aqueous solution and their interaction with phosphate ions, gold nanoparticles and drug molecules by 1D and 2D NMR and pH-potentiometry (2008-2015, PhD)
- Treatment of iron sludge containing arsenic, formed in the arsenic removal process from drinking water. Development of arsenic removal technology, and the study of the deposition possibilities of the harmless sludge (2007-2017; patent 2017).

- Adsorption of ammonium ions on clay mineral (2004-2008, TDK, thesis, Department of Colloid and Environmental Chemistry, Isotope Laboratory).

Educational activity, Courses:

- Colloid chemistry laboratory practice (MSc chemist, BSc chemistry, pharmacist students) in Hungarian and English
- Environmental chemistry lecture and seminar (environmentalist, chemistry teacher and chemistry BSc)
- Environmental chemistry II. lecture, seminar and lab practice (MSc chemist and chemical engineering)
- Educational coordinator of the Department of Physical Chemistry: 2010– 2011., from 2020.

Languages:

- German: intermediate level (type C) language exam (2000, Reg. Number: 013703)
- English: high level (type C) language exam (2007, Reg. Number: 903196), special translator

Scholarships and honors:

2018	Distinguished Young Professor of the Faculty of Science
2017	Magnetic Moments in Central Europe 2017 Conference Poster award
2015. Oct.	MTA ATOMKI scientific paper of the month (Kéri et.al. Cellulose 22:(4) pp. 2211-2220.)
2013-2014	Jedlik Ányos Scholarship of the National Excellence Program
2012-2013	Doctorand Scholarship of the Chemistry PhD School
2007	XXVII. OTDK
1998, 1999	Natural sciences student competition of Természet Világa: special and 3. award
1998	Student competition of the Hungarian Chemical Society: 1. award

Memberships:

2014 -	Colloid Chemistry Workgroup of the Hungarian Academy of Sciences Environmental Chemistry Workgroup of the Hungarian Academy of Sciences
2004-2009	Talent Management Program (DETEP)

Other professional activities:

- Arsenic removal from iron sludges of drinking water treatment (2007-2018. cooperation with Aquaprofit Zrt.).
- Characterization of nanoformulated drug ingredients by NMR spectroscopy (2010-2017. cooperation with Nangenex Zrt.).
- Scientific blog on the homepage of the Environmental Colloids Research Group <http://kolloid.unideb.hu/blog/>. (2013-15)

Scientific educational activity:

- TTK Summer Camp 2015-2017. instructor
- DExpo: spectacular experiments in colloid chemistry (2016)
- Spectacular experiments for students (2010, Lajos Kossuth Secondary School of the UD)