



Europass Curriculum Vitae

Personal data

Dr. László Lénárt



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Citizenship: Hungarian

Date of birth: 23 February 1951, Place of birth: Budapest

Gender: Male

Professional experience

Position

self-employed

Lénárt László e.v. Karsztvízgazda, 06 January 2023 –

retired and honorary university professor, lecturer:

Miskolc, University of Miskolc, Institute of Water and Environmental Management, Institute Department of Hydrogeology and Engineering Geology, 01 July 2018 –

retired and honorary associate professor:

Miskolc, University of Miskolc, Institute of Environmental Management, Institute Department of Hydrogeology and Engineering Geology, 25 February 2016 – 30 June 2018

associate professor:

Miskolc, University of Miskolc, Institute of Environmental Management, Institute Department of Hydrogeology and Engineering Geology, 01 September 2009 – 25 February 2016

assistant professor

Miskolc, University of Miskolc, Hydrogeology and Engineering Geology Department 1999 – 31 Aug.2009;

manager:

Karsztvízgazda Bt., 01 July 1996 – 31 August 2023

technical assistant

Miskolc, University of Miskolc, Hydrogeology and Engineering Geology Department 1995 – 1999;

assistant professor

Miskolc, University of Miskolc, Hydrogeology and Engineering Geology Department 01 July 1990 – 1995;

assistant professor

Miskolc, Technical University of Heavy Industry, Hydrogeology and Engineering Geology Department, 1984 – 30 June 1990;

assistant lecturer

Miskolc, Technical University of Heavy Industry, Hydrogeology and Engineering Geology Department 29 August 1977 – 1984;

part-time assistant lecturer:

Miskolc, Technical University of Heavy Industry, Geology Department 01 February 1976 – 30 June 1976;

soil mechanist:

AGROBER Miskolc Site, 02 May 1975 – 28 August 1977

field geologist

National Geological Research and Drilling Company, Northeast Hungary Plant, Miskolc, Tower-south lignite research 15 August 1974 – 30 April 1975

Studies

PhD student at the Technical University of Kosice, 2006

Environmental Engineer postgraduate degree, Technical University of Heavy Industry, Miskolc, 1990

“dr. techn.”, Technical University of Heavy Industry, Miskolc, 1984

M.Sc. geologist engineer degree, Technical University of Heavy Industry, Miskolc, 1974

First language(s)

Hungarian

Other language(s)

English, Russian

Self-evaluation

European level (*)

Comprehension

Listening comprehension

Reading

Speaking

Conversation

Fluency

Writing

English

basic

basic

basic

basic

basic

Russian

basic

basic

basic

basic

basic

(*) Common European Reference values

<p>International study trips</p>	<p>One week in Kosice, 3 weeks in Moscow and the Caucasus Mountains as student, 1973 Leading student study trips to the Soviet Union (Moscow, Caucasus Mountains, 1981 and 1983) 3 weeks field hydrological research, NATO Science for Peace (SfP 973684-SQUASH) Project, Szatmárnémeti, Romania, 2002. Leading student study trip to Romania within the framework of NATO Science for Peace (SfP 973684-SQUASH) Project (2002, 2004) International conferences (International Scientific Conference on the Mineral Waters of the Carpathian Basin; Carpathian Basin Environmental Science Conference; Mining, Metallurgy and Geology Conference, CERECO, SQUASH, Karst Development, etc.) Participation in short professional study trips in Austria, Slovakia, Poland, Ukraine, Romania, Croatia; altogether approximately 25 times. Participation in university lecturer study trips abroad, one to three weeks long each, in Czechoslovakia (Kosice), Poland (Krakow), Czechoslovakia (Ostrava), Bulgaria (Sofia), Soviet Union (Simferopol - Odessa) Participation in study trips abroad in connection with international speleology conferences, one to three weeks long each, in Austria, Belgium (Helecine), Switzerland (La Chaux-de Fonds, 1997, Muotathal, 2012), France (Vercors, 2008), Slovenia.</p>
<p>Professional membership</p>	<p>Marcel Loubens Speleology Association member 1969 – (President 1983 – 1990) Hungarian Karst and Speleology Society member 1973 (Head of Training Committee 1984 – 2004; Member of Advisory Board 1991 – 1995; Co-president 2007 – 2010 President of Supervisory Board 2011 – 2016 Member of Medal Committee 2016 –) Hungarian Geology Society member 1974 – 1987; 2012 – Hungarian Hydrology Association, member 1975 – (Member of Committee/Advisory Board of the Borsod Area 1996 –; Hydrogeology Section president 2011 –) National Speleological Society (USA) member 1976 – 1978 MTESZ County Fellowship Committee of B.A.Z. County member 1991 – 2003 (Secretary 1998 – 2003) PHARE COST 620 Hungarian National Committee member 1991 – 1999 International Mine Water Association (IMWA) member 1992 – 1994 University of Miskolc, Mining Faculty Committee, member 1995 – 1999 “Our Geological Heritage” Environmental Protection Association, member 1997 – 1999 Engineering Chamber member 1998 – (BOMEK Technical Geological Body president 2014 – Subsurface Waters Foundation Advisory Board Board member 2013 – 2014 (Advisory Board President 2014 –)</p>
<p>Scientific and public committees</p>	<p>Technical University of Heavy Industry / University of Miskolc, TDK KHSzCs University Speleological Group, lecturer head 1977 – 2003 Technical University of Heavy Industry / University of Miskolc, Faculty of Earth Sciences and Engineering, Scientific Student Committee, member 1981 – 2015 OTDT Physics, Maths, Earth Sciences Committee university representative 1981 – 2015 Miskolc MJV Municipality, Environmental Protection Committee member 1990 – 1994 PHARE COST 620 Hungarian National Committee member 1991 – 1999 Miskolc Scientific Academy, Mining and Environmental Faculty Secretary 1991 – 2003 University of Miskolc, Philately Circle member, later secretary 1995 – 2005 University of Miskolc, Mining Faculty Committee member 1995 – 1999 Sustainable Water Management in the Bükk Region Public Foundation Advisory Board President 1998 – 2014 BM National Disaster Recovery Directorate Industr. Consultant Board member 2015 – 2020</p>
<p>Most important project leading and project participant tasks</p>	<p>OTKA 3005 (1991 – 1994): Environmental research for geological, hydrogeological, karst genetics and environmental protection purposes, based on radon tracing detector measurements; including the study of natural radon’s aspects in balneo and speleotherapy (part theme leader). BKWM (1992 – ongoing): <u>Establishing and continuously operating</u> the Bükk Karst Water Monitoring System (Bükki Karsztvízszint Észlelő Rendszer - BKÉR) at the University of Miskolc, based on the requests of ÉRV Zrt, HVMZrt, Zsóry-fürdő (spa), MIVIZ water directorate (until 2011), and Smaragd-GSH Kft. in 2004 and 2005.</p>

	<p>PHARE COST Action 65 (1992 – 94): Hydrogeological aspect of groundwater protection in karstic areas (Expert)</p> <p>COST-620: Vulnerability and risk mapping for the protection of carbonate karstic aquifers (Participant)</p> <p>OTKA T 016558 (1995-98): Environmental research based on measurements of natural radon. (University supervisor)</p> <p>NATO SfP-973684 (2001-04): NATO Science for Peace, Quantitative and qualitative hydrogeological study of the alluvial aquifer of Somes-Szamos (Romania-Hungary), SQUASH project. (Hungarian program leader)</p> <p>OMFB (2001-04): Supporting the Hungarian participant of the NSfP submitting study in the topic of the complex hydrogeological study of the alluvial aquifer of transboundary river Somes-Szamos (University supervisor)</p> <p>EC/FP5 (2001-04): Quality of Life Project Iron Curtain (Participant)</p> <p>GVOP-3.1.1 - 2004 - 05 - 0530 /3.0 (2005-08): Implementing a water monitoring system in the Bükk region for sustainability and for supporting water management decisions (consortium partner supervisor)</p> <p>HUSKUA/05/02/404 InterregIIIA (2006-2008): Research on which later environmental protection and natural area management is based in the historical Bodroghöz (hydrogeological supervisor)</p> <p>BAROSS_EM07-EM_ITN3_07-2008-0037 OMFB-00681/2009 (2009-20010) Health Tourism Research Center founding, developing innovative health tourism related products (departmental supervisor)</p> <p>TÁMOP 4.2.1.B-10/2/KONV-2010-0001 projekt (2011-2013): Excellence Centers for improving the quality of higher education in the strategic research areas of the University of Miskolc (Sustainable Natural Resource Management Excellence Center; Environmental and Sustainable natural Resources Management Scientific Workshop; Water Management Main Group; Innovative Water Management research group leader)</p> <p>MKGR-HM (2012 – ongoing) Establishing and operating the Mályi-Kistokaj Geothermic System Hydrogeological Monitoring (supervisor until 2016, later responsible of field data collecting)</p> <p>HUSK/1001/2.1.2./0058 (2011 – 2013): Methodological study to help local municipalities to prepare for preventing floods, and to enhance their knowledge on hydrological and hydrogeological regimen, in accordance with European and national regulations in effect (Hungarian supervisor)</p> <p>TÁMOP-4.2.2.A-11/1/KONV-2012-0049: KÚTFŐ (2012 – 2014): Developing the international research potential regarding subsurface water at the Faculty of Earth Sciences and Engineering of the University of Miskolc, by supporting basic tasks (leader of 2nd module)</p> <p>Analysis of the BKWM (Bükk Karst Water Monitoring System) data in the 1st module of the GINOP-2.3.2-15-2016-00031 project of INNOVÍZ (“innovative solutions for the sustainable utilization of subsurface water resources”).</p> <p>Providing expert activities in the subject of “The complex survey of the Solotvino salt mine in Ukraine” within the framework of the REVITAL I. HUSKROUA/1702/6.1/0072 cross-border project (2021 – 2023).</p> <p>Active participant in the 3A module of project “Water Science and Water Security National Laboratory” RRF-2.3.1-21-2022-00008 (Innovative handling of water management challenges in the field of karst water resources)</p> <p>Within the framework of project Sustainable Development and Technologies MTA NP2022-II-4/2022, the management of the database of Bükk Karst Water Monitoring System (BKWM), data processing and preparation for hydrogeology analysis, publishing of the data , supporting student projects (TDK, thesis work, PhD) with the data.</p>
<p>Awards</p>	<p>1974 Academic Medallion, Bronze</p> <p>1975 XII. OTDK Grand award</p> <p>1975 Hungarian Geology Society Junior Award</p> <p>1986 Cabinet Council's Award for Excellent Work</p> <p>1987 10 year work jubilee (Technical University of Heavy Industry)</p> <p>1990 Miner Service Medallion, Bronze</p> <p>1991 Hungarian Karst and Speleology Society, Kadić Ottokár Medallion</p> <p>1999 Miner Service Certificate, 25 years</p> <p>2002 National Scientific Student Committee “For Hungary with knowledge” Plaquette</p> <p>2002 Miner Service Certificate, 30 years</p> <p>2005 Subsurface Waters Foundation, Silver Goblet</p> <p>2007 Miner Service Certificate, 35 years</p> <p>2008 For the Environmental Protection Higher Education Hungarian Engineering Chamber award</p> <p>2010 Hungarian Hydrology Association Pro Aqua Medallion</p> <p>2012 University of Miskolc Excellent Consultant Certificate</p> <p>2012 Miner Service Certificate, 40 years</p> <p>2015 Rector Acknowledgement Letter for 40 years of service</p> <p>2016 Signum Aureum Universitatis (University of Miskolc)</p> <p>2017 Hungarian Hydrology Association Dr. Schafarzik Ferenc Medallion</p>

	<p>2018 Plaquette – ME Google Scholar H=67 member by end of 2017 2019 Plaquette – ME Web of Science H=41 member by end of 2018 2023 Hungarian Hydrology Association, Kvassay Jenő Award</p>
<p>University level programme (training, research) activity</p>	<p>Subjects taught by me at the University of Miskolc: Hydrogeology, Hydrology-hydrography, Hydrology practicum, Environmental protection, Ecology, Nature protection, Water mining, Water research, Water protection, Hydrogeology of Hungary, Nature and water conversion, Karsthydrogeology, Ecology environmental protection, General and technical hydrology, Water supply, Water supply basics, Expert opinion preparation basics, Literature research and documentation</p> <p>Thesis consultation: I provided consultation for 104 thesis works at the University of Miskolc between 1978 and 2023. I was supervisor for 7 external thesis (currently also 1 in Baja), and I provided expert opinion as external reviewer in 11 cases.</p> <p>Leading and reviewing TDK works: Since 1975, I led 90 Scientific Student competition works, of which about 18 were presented in the National Scientific Student competition. The number of works I reviewed locally of for national scientific student competition as approximately the same. (I was President of the panel of judges in the national scientific student competition.) I was reviewer and president of the panel of judges twice at the National High School Geology Student Conference (the “entrance hall” to the OTDK, the National Scientific Student Committee competition).</p> <p>Research activities: The number of assigned research work projects completed with manuscripts is 318 until the beginning of 2023. I have been participating in 210 industrial work projects based on assignment at the university, of which I was the supervisor or partial supervisor in 197 cases.</p> <p>About 85 % of all my work is centered on the Bükk or around the Bükk region. Most of my work at the university were related to water protection and aquifer protection, mainly within the frame of the Bükk Karst Water Monitoring System (BKWM), and the Mályi-Kistokaji Geothermic System monitoring. Based on the BKWM data, approx. 110 manuscripts (+ approx. 265 monthly reports), 25 competition work, degree thesis, 3 PhD, approx. 245 Hungarian and international presentation were created; in case of more than half of the cases in the latter group, publications were also prepared. Outside the university, I was the supervisor of 150 cases.</p> <p>Research areas: karst-hydrology, karst hydrogeology, cave-climatology, speleoradiology, water-protection, aquifer protection, water supply, environmental protection, nature conservation, water management, protection of cave dwelling bat species.</p> <p>Scientific publications: Number of publications of which I am author or co-author based on the items listed in MTMT is 362, of which 71 was also translated and published in other languages until the beginning of 2023. 135 independent quotation were conducted on my publications, but not by complete processing. The impact factor value of 4 articles is 2.359. According to Google Scholar, until the end of 2017 there were 71 references to 1 article. (<i>The article is marked.</i>)</p> <p>Sport: Member of the basketball team of the Athletics and Soccer Club of the University of Miskolc in 1969-1970. Participation in international inter-university basketball competitions in the Soviet Union (Harkov, 1970).</p>
<p>Professional and professional-public activities outside of the university</p>	<p>Membership in the Chamber of Engineers since 1998 (membership no.: 05-0651; Expert: KV-Sz; “A” category engineer: VZ-TEL; VZ-TER; VZ-VKG) I have more than enough engineering chamber points to allow me to do design engineering work (its value between 2007 and 2012 is 79)</p> <p>Well design – designer supervision: I was the designing engineer and/or the designer supervisor of 4 monitoring wells, 3 production wells drilled in porous aquifer, and 1 exploratory drilling in thermal karst between 2007 and 2023. The wells all fulfilled their designed purpose. Their total depth is 11097 m; the deepest thermal karst well is 2421 m, making it</p>

	<p>the deepest thermal karst well of the Bükk region. I have also completed the designs for 6 other thermal wells to be drilled in porous, fractured and karstic rock, in the framework of tenders, but their actual drilling have not been started yet.</p> <p>Scientific consultation: 2016 – Szeleta Park Visitor Center – Bükk National Park. Supporting scientific experts and exhibition subject design experts in two subjects (“The caves of Bükk” and “Karstwater system”). 2021 – Miskolc, Tündérvilla park, expert of Miskolc MJV Mayor Office for the review of protective area.</p> <p>Organizing the “About water” photo poster competition for World Water Day (MHT BTSz – ME MFK) It took place 17 times between 2006 and 2023, with altogether 1505 works submitted. In 2016, MHT have published the best works of the first 10 years on a DVD, containing 718 photo posters.</p>
<p>My most important publications:</p>	<p>Lénárt, L. (1977a): Hydrogeological excursions in the Bükk. University Text, Tankönyvkiadó, Budapest.</p> <p>Lénárt, L. – Somogyi, Gy. – Hakl, J. – Hunyadi, I. (1989b): Radon Mapping in Caves of Eastern Bükk Region. Proceedings of International Congress of Speleology, Budapest, 13-20. August 1989. II. 620-622. Budapest.</p> <p>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 publication, Miskolc.</p> <p>Hertlendi, E. – Veres, M. – Futó, I. – Svingor, É. – Mikó, L. – Lénárt, L. (1995): Environmental isotope study of karst systems national report of Hungary. COST action 65. Hydrogeological aspects of groundwater protection in karstic areas. Final report. EUR 16547 EN pp.133-148.</p> <p>Hakl, J. – Hunyadi, I. – Csige, I. – Géczy, G. – Lénárt, L. – Várhegyi, A. (1997): <i>Radon transport phenomena studied in Karst caves – international experiences on radon levels and exposures. Radiation Measurements 28. (1-6) pp. 675-684. Elsevier.</i></p> <p>Kun-Szabó T. [editor] (1999): Quality management of environmental protection. General environmental protection. Műszaki Könyvkiadó, Budapest. (Lénárt L.: Chapters Nature and landscape protection, and biomonitoring)</p> <p>Lénárt, L. – Takácsné, Bolner K. (2002): Categorizing of the caves of the Bükk Mountains based on their endangerment of water quality. The newest results of the karst water research in the Bükk, conference. Miskolc, 24-26 Jan. 2002. Karst water research in Hungary II. 87-101. Miskolc.</p> <p>Lénárt, L. (2004): The Bükk karst water monitoring system and its results between 1992 and 2004 = Körkép, XVI. ann. 1. ed. I-II. Quarters, pp. 5-9.</p> <p>Lénárt, L. (2006): The characteristics of the karst water level increase based on the data collected in the Bükk karst water monitoring system between 1992 and 2005 = Publication of the University of Miskolc, “A” series, Mining, volume 69. Volume published for the 70th birthday of György Hahn 307-318.</p> <p>Lénárt, L. (2006): The characteristics of the karst water level decrease based on the data collected in the Bükk karst water monitoring system between 1992 and 2005 Landscape, environment and society. Festive studies for the respect of Keveiné Bárány Ilona professor. pp 425-434. Szeged.</p> <p>Lénárt, L. (2006): The karst water potential of the Bükk region; environmental protection tasks for its long term utilization. North-Hungary Strategy Booklets. III. ann. 2. ed. pp. 17-28. Miskolc.</p> <p>Lénárt, L. (2010): The Interaction of Cold and Warm Karst Systems in the Bükk Region. Proceedings of the 11th Knowbridge Conference on Renewables, pp. 111-118, Miskolc.</p> <p>Lénárt, L. (2011): The assessment level of the Egerszalók-Demjén section of the Bükk thermal karst = Publication of the University of Miskolc, “A” series, Mining, volume 81., pp. 17-25, Miskolc.</p> <p>Lénárt, L. – Hernádi, B. (2012): The morphological, geological and hydrological reasons behind the temperature of the thermal karst waters of the Bükk. The mineral waters of the Carpathian Basin, IX. international scientific conference, 30 August - 01 September 2012, (ISBN 978-973-7625-37-3) pp. 25-36, Herkulesfürdő, Romania.</p> <p>Lénárt, L. – Szegediné Darabos, E. (2012): The hydrogeological relations of the thermal karst of Bükk mountains (Northern Hungary). Proceedings of the 13th National Congress of Speleology, 29. Sept.-1. Okt. 2012, Speleodiversity, (ISBN 978-2-88374-021-1; ISSN 0069-8911; EAN 9782883740198) pp. 209-214, Muotathal, Schweiz.</p> <p>Lénárt, L. – Szegediné 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.</p> <p>Zeľňaková, M. – Lénárt, L. – Gaňová, L. – Mikita, V. [Editors] (2013): Hydrologic risks – floods and droughts. pp. 1-152. Technická univerzita v Košiciach. Košice.</p> <p>Lénárt, L. – Szegediné 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.</p>

Lénárt, L. – Hernádi, B. – Szegediné Darabos, E. – Debnár, Zs. – Czesznak, L. – Tóth, M. (2014): The Importance of Bükk Karst Water Monitoring System (BKWMS) in Researching the Relations of Cold and Warm Karst Waters in the Area = Geosciences and Engineering, Vol. 3. No. 3. pp. 107-118.

Szegediné Darabos, E. – Lénárt, L. – Tóth, M. – Czesznak, L. – Hernádi, B. – Balla, B. – Hojdákné Kovács, E. (2014): Methodology Investigation of a Coherent Cold and Thermal Karst Water Regime in Northern Hungary. In: International Association of Hydrogeologists (edit) 41st IAH International Congress "Groundwater: Challenges and Strategies": Abstracts. Place and date of conference: Marrakech, Morocco, 15-19 September 2014

The **Technical Geological Publications** (the publications of the University of Miskolc) volume 86. 3. ed. (2017): Editing the conference volume introducing 25 years activity of the BKWM, including self-written 2 articles

Miklós, R. – Lénárt, L. – Darabos, E. – Kovács, A. – Pelczéder, Á. – Szabó, P. N. – Szűcs, P. (2020): Karst water resources and their complex utilization in the Bükk Mountains, northeast Hungary: an assessment from a regional hydrogeological perspective. Hydrogeology Journal (28), pp. 2159-2172. doi.org/10.1007/s10040-020-02168-0.

Miklós, R. – Lénárt, L. – Darabos, E. – Kovács, A. – Czesznak, L. – Pelczéder, Á. – Szűcs, P. (2021): Exploration and utilization of the karst water resources of the Bükk Mountains. Hydrological Journal 101 (2). pp. 31-43.

Lénárt, L. (2021): Karst, karst water, caves, their value in nature and in society, their utilization and protection. Book excerpt, pp 148-170. In: Kocziszky György [edit.] (2021): The regions of the Carpathian Basin 15. North Hungary. pp 1-830. HVG-ORAC,

Liebe, P. – Kumánovics, Gy. – Rózsa, A. – Szongoth, G. – Tahy, Á. – Szöllősi-Nagy, A. – Csiszár, E. – Pump, J. – Lénárt, L. (2021): Problems of wells in the field of water management of sub-surface water resources and water protection. (Panorama and diagnosis.) Water Journals, CIII. ann. 2. f., pp. 33-68.

Lénárt, L. (2022): The most important well of the 30 years old Bükk Karst Water Monitoring System (BKÉR), the Nv-17 well. Hydrological Journal , 102. ann. 4. ed. pp. 22-30.

Vetési-Foith, Sz. – Lénárt, L. – Leél-Őssy, Sz. – Virág, M. (2022): The Caves of the Bükk Mountains. pp. 323-359. In: Veress, M. – Leél-Őssy, Sz. [Editors] Cave and Karst Systems of Hungary. p. 629. ISBN 978-3-030-92959-6; <https://doi.org/10.1007/978-3-030-92960-2>, Springer