

KOHOUT EARLY CAREER AWARD

Hydrogeology Division
The Geological Society of America

The Kohout Early Career Award is considered annually in accordance with the bylaws of the Division. It is awarded to a distinguished early-career scientist (35 years of age or younger throughout the year in which the award is to be presented or within 5 years of receiving their highest degree or diploma) for outstanding achievement in contributing to the hydrogeologic profession through original research and service, and for the demonstrated potential for continued excellence. The recipient need not be a member of the Hydrogeology Division, or of the Society.

The Kohout Early Career Award is funded by a generous bequest from the estate of Francis A. Kohout, a long-time USGS hydrologist. Francis Kohout was the 1961 recipient of the AGU's Robert E. Horton Award (now Hydrologic Sciences Award). Kohout conducted hydrogeologic and marine geologic research primarily along the continental margin of North America. He is probably best known for the so-called "Kohout convection", the geothermally driven circulation of sea water deep into carbonate platforms (as illustrated in the figure below).

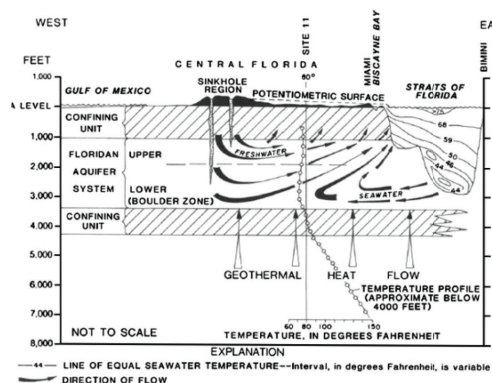


Figure from Kohout, F.A., 1965, A hypothesis concerning cyclic flow of salt water related to geothermal heating in the Floridan aquifer: New York Academy of Sciences Transactions, ser. 2, v. 28, no. 2, p. 249-271.

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Presented to

Dr. Lamine Boumaiza

San Antonio, Texas, USA
October 2025



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Dr. Lamine Boumaiza



Dr. Boumaiza is currently an Assistant Professor at Wayne State University (Michigan) with an appointment at Department of Environmental Science and Geology since August 2025. Dr. Boumaiza grew up in Algeria where he completed an undergraduate bachelor's degree in hydrogeology from the University of Annaba, before moving to Canada where he completed M.Sc.A. as well as Ph.D.

degrees in hydrogeology and geological engineering from the University of Quebec. He followed this up with series of academic research experiences including a hydrogeology research internship completed in 2019 at the BOKU Institute in Austria and three hydrogeology postdoctoral research experiences completed in Canada and USA between 2020 and 2025 at University of Quebec, University of Waterloo, and University of Texas at Austin. In between completing his M.Sc. and Ph.D. programs, Dr Boumaiza worked in geo-environmental consulting in Canada, where he conducted several hydrogeo-environmental technical studies.

It is an honor for us to introduce the recipient of the 2025-Kohout Early Career Award, Dr. Lamine Boumaiza. The Kohout Early Career Award recognizes both outstanding hydrogeological research and service to the hydrogeologic community, traits which Dr. Boumaiza has demonstrated throughout his early career. His approach to hydrogeology combines ingredients like resourcefulness, field observations and an extensive collaborative network to address long-standing water availability issues. This resulted in an impressive number of contributions over the last few years, with high potential for continued excellence.

Dr. Boumaiza's academic research focuses on probing the effect of climate and anthropogenic activities on water resources across a wide variety of physiographical Earth systems experiencing severe environmental and freshwater scarcity conditions. His most significant contributions have increased our knowledge of how recharge is affected by differences in vegetation and climate and understanding aquifer vulnerability in complex systems. Much like Francis Kohout, Dr. Boumaiza has worked to advance our understanding of groundwater quality in coastal aquifer systems, focusing on areas where freshwater resources are exposed to a variety of stressors leading to freshwater quality degradation. This research is providing timely information on the effects of sea level rise, coastal erosion, seawater intrusion, urbanization, sanitation, and agricultural practices to groundwater quality. He uses chemical and environmental tracers to track water flow and groundwater contamination with combination of numerical modeling and innovative statistical approaches to better understand water resource dynamics. Through this approach, Dr. Boumaiza greatly improved our understanding of isotopic methods to quantify groundwater recharge, identify denitrification, and developed multi-isotope tracer approaches to better understand the effects of uncontrolled land-use and active freshwater resources exploitation on complex coastal aquifer systems.

Although still just at the start of his research career, Dr. Boumaiza is an engaged member within the hydrogeologic community. Much of his service has been with the International Association of Hydrogeologists (IAH), for which he served as vice-president of the Canadian Early Career Hydrogeologists' Network (ECHN) (2021-2024), regularly contributes to scientific committees of the IAH Congresses at national/international levels, and is an Associate Editor for Hydrogeology Journal.

Dr. Boumaiza is highly deserving of the Kohout Early Career Award. He is highly motivated, and has a strong international research profile, a record of scholarly achievements, and is actively serving the international hydrogeologic community.

— Prof. Romain Chesnaux (University of Quebec) and
Prof. Randy Stotler (University of Waterloo)