

## **Citation for Clifford Voss GBM Award 2023**

It is a pleasure to recognize Dr. Clifford Voss as the 2023 recipient of the George Burke Maxey Distinguished Service Award. Cliff has had a distinguished career in hydrogeology. He received a Ph.D. in Water Resources and Civil Engineering from Princeton University in 1978. He joined the U.S. Geological Survey in 1981 as a Research Scientist, retiring in 2019, and continues there as an Emeritus Scientist.

Cliff has had numerous notable research accomplishments through which he has also contributed valuable service to the profession. For example, Cliff has authored and co-authored several numerical flow and transport simulators that have facilitated the work of many hydrogeologists. Most prominent among these is the SUTRA simulator, which has been cited in nearly 1800 publications and has also been widely used in unpublished work in industry. Cliff's research has contributed to the betterment of human society and wellbeing through his studies of critical groundwater resources, such as arsenic contamination in the Bengal Basin, seawater intrusion in freshwater aquifers along the east coast of the U.S., California, and Hawaii, and the sustainability of groundwater use from transboundary aquifers in the eastern Sahara Desert. His research has also contributed to the betterment of human society by addressing energy needs. Cliff's early work was on geothermal systems with implications for energy production. He has contributed to the field of nuclear energy through studies of waste disposal sites in Sweden.

Cliff is an international ambassador for the field of hydrogeology. He is a frequent lecturer and in 2015 he was the Birdsall-Dreiss Distinguished Lecturer. Cliff is an internationally recognized expert in groundwater modeling and is in ongoing demand as a consultant, including service on graduate student committees at universities throughout the world.

Perhaps Cliff's most distinguished service to the profession has been as Executive Editor of Hydrogeology Journal, a role he has held since 1994. Hydrogeology Journal is the flagship publication of the International Association of Hydrogeologists (IAH) and is published in partnership with Springer Nature. Hydrogeology Journal publishes about 200 papers per year. Papers from the journal were downloaded over 365,000 times in the past year, and the journal has an impact factor of 3.2. One of the main aims of the journal and of IAH is to improve the human situation on Earth through studies of groundwater and by promoting the wise use and protection of groundwater resources throughout the world. A further mission of IAH is to promote the growth of hydrogeologic expertise in developing countries, to which Hydrogeology Journal historically has contributed through its encouragement of and assistance to authors from developing countries.

Cliff deserves much credit for Hydrogeology Journal's growing international impact over the past 28 years. Through his vision, direction, and energy, Hydrogeology Journal has become one of the leading journals in the field of hydrogeology. Cliff oversees all aspects of the journal's operation, including definition of its aims, scope, and policies, selection of its editorial board and staff, coordination with Springer Nature and IAH, and organization of special issues and topical collections. Cliff provides technical input for the review of manuscripts, ensures correct execution of journal policies, promotes the journal within the hydrogeology community, provides accountability for the journal's quality and impact, serves as the final arbiter for any author complaints, cares for the journal's health, and protects and advances the journal's reputation. Cliff's wise and steady leadership at Hydrogeology Journal has served the hydrogeological community by providing a valuable forum for the exchange of knowledge and professional growth.

In summary, Cliff has had an impactful career whose research has provided direct and diverse practical societal benefits. His unpaid service to Hydrogeology Journal has been a major, long-term commitment

that is difficult to overstate. His quiet faithfulness as Executive Editor for so many years would be appropriately recognized by his receipt of the George Burke Maxey Distinguished Service Award.