Science Societies

In memoriam: Michael H. B. Hayes

June 18, 2026



On June 21, 2024, soil science and the global scientific community lost a colossal figure, Professor Michael H. B. Hayes, of the University of Limerick, Ireland. Mike was 96

years old and still professionally active at the time of his death. His life was unique in that it spanned two professional lifetimes, first at the University of Birmingham in the UK and subsequently at the University of Limerick.

Mike Hayes was a globally recognized soil scientist, a mentor to aspiring scientists and colleagues alike, a gentleman, and a man of unwavering personal and professional integrity. He was a regular participant in the SSSA and ASA International Annual Meetings (now called CANVAS), as well as the International Humic Substances Society and the World Soil Congresses of the International Union of Soil Sciences, most recently in Scotland in 2022 and Italy in 2024. Mike always had a commanding scientific and personal presence at those meetings.

Like many agricultural scientists of the 20th century, Mike was born and raised on a farm; in his case, in County Clare in Ireland. His background in Clare, where peatlands abound, had a significant influence on his subsequent research interest in organic matter components, their isolation and identification—topics of particular importance today given the role of peatlands in greenhouse gas mitigation and the broad issue of climate change. He studied agricultural science at University College Dublin, graduating in 1952 at a time of economic and agricultural stagnation in Ireland. While in Dublin, Mike displayed an interest in athletics, particularly track and field, something that remained with him all his life. Attending a meeting of the International Peat Society was the catalyst for Mike that set his professional sights beyond sports.

At Cornell University in the U.S., he earned an M.S degree before moving to Ohio State University, where he majored in organic chemistry and biochemistry. There, his interest in humic acid, lignin, and carbohydrates deepened. Upon graduation with a Ph.D., Mike moved to the University of Birmingham in the UK, his professional home until retirement in 1998.

While in Birmingham, Mike mentored many students, some of whom went on to play leading roles in soil organic matter research themselves, including Roger Swift and Ed Clapp. Mike was a prolific and widely cited author, with more than 200 publications in refereed journals, books, edited proceedings, and book chapters. His publications cover the chemistry of soil processes, humic substances, soil colloids, peats and sludges, and biochar. Mike collaborated with scientists from many institutions around the world and was a founding member of the International Humic Substances Society.

Mike received global accolades in recognition of his achievements, including Honorary Membership in SSSA, ASA, and the International Humic Substances Society. He was a Member of the Royal Irish Academy and received the Gold Medal from the Polish Soil Science Society.

After mandatory retirement at Birmingham, he returned to his native Ireland to assume a position of Research Professor in the Department of Chemical and Environmental Sciences at the University of Limerick, continuing his work on humic substances and polysaccharides. His related interests extended to carbon dioxide emissions from soils, organic wastes as soil amendments, biomass and organic residues as chemical feedstocks to produce ethanol and other chemicals. During his second career in Limerick, Mike was as energetic as ever on the international scene.

Mike never forgot his Irish roots. He was a man of the land, true and true. While in Limerick he achieved a long-held dream to own land and purchased a small farm near the Shannon estuary. His love of sports never left him, either, particularly hurling.

His funeral in the church in the village of Kilmihil in County Clare included a moving eulogy given by his son Dan, a soil scientist and mentee of his famous father. Mike Hayes was quintessentially Irish as well as being a scientific colossus globally. He was

one of a kind. His achievements were great, and his legacy to soil science will live on.

—Written by John Ryan, Soil Scientist, Carrigataha, Cahir, County Tipperary, Ireland

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