

ENVER MURAD (9 June 1941 - 12 July 2019)



Dr. Enver Murad was an astute mineralogist, active soil scientist, dedicated editor, successful director, fun-loving colleague, and amiable person who is greatly missed.

Enver's name is inextricably linked with Mössbauer spectroscopy of Fe oxides and clay minerals. Little was known about Mössbauer spectroscopy of these minerals before Enver transformed this technique into a major tool for characterizing Fe-bearing minerals (Murad, 1988; Murad & Cashion, 2004). This is now commonly used for identification of Fe minerals and soil phases in many locations, including the planet Mars!

Enver was born in Berlin, then attended British schools in several major cities around the Mediterranean Sea. This likely fostered his gift for languages. Enver was fluent in German, English, and Greek, and spoke Arabic, French, and Turkish well. In 1967 he completed a Master's Diploma in Mineralogy at the Darmstadt Technical University, followed by a PhD at the University of Frankfurt in 1970. He became a Research Fellow at the Mineralogical Institute, University of Tübingen in 1970, then joined the Soil Science Department at the Technical University of Munich in 1975, where he met Prof. Udo Schwertmann and later completed a Habilitation in 1986.

He enjoyed working with colleagues around the world and frequently arranged overseas appointments (bringing his wife Gerda and daughters Nadja and Nicole with him when possible) to North Carolina State University in 1983 to work with Larry Bowen, then to the Department of Physics at Monash University in Melbourne, Australia for a few visits from 1989-2004 to work with John Cashion, followed by several appointments from 2000-2015 at the Department of Chemistry, University of Minas Gerais at Belo Horizonte, Brazil with José Fabris.

Enver served as Director of the Department of Geological Services, Economic Geology and Soil Protection at the Bavarian Environmental Agency from 1993-2006. His fruitful and prolific scientific career includes 131 peer-reviewed papers and a comprehensive book. Since 1988 Enver served as an Associate Editor of *Clay Minerals*, where he was acclaimed by colleagues as an efficient, thoughtful, and objective reviewer. To celebrate his successful career in clay and soil science, a special session was held in his honour at the Mid-European Clay Conference, in Opatija, Croatia, in 2006, and a special issue of *Clay Minerals* was dedicated to him in 2008. He was also elected Senior Fellow of the Mineralogical Society of America in 2009 and Honorary Fellow of the Mineralogical Society of Great Britain and Ireland in 2013.

While Enver is best known by colleagues as an insightful and dedicated scientist, editor, and institute director, his friends knew him as a jovial traveler and culinary connoisseur. His practice of completing manuscripts in exotic, sunny locations was an inspiration to us all! We all deeply miss our friend and colleague Enver Murad.

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STANJEK, JOHN CASHION,
and JOSÉ DOMINGOS FABRIS

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Murad E. & J. Cashion (2004) *Mössbauer Spectroscopy of Environmental Materials and their Industrial Utilization*. Kluwer, Boston, 418 pp.