

ENVER MURAD



On 9 June 2006 Dr Enver Murad celebrated his 65th birthday. Enver's name is inextricably linked with Mössbauer spectroscopy of Fe oxides and Fe-containing clay minerals, a research focus that commenced in 1975 when he joined Professor Udo Schwertmann's group at the Technical University of Munich. Mössbauer spectroscopy of soil minerals was a real speciality in those days and little was known about soil Fe oxides/hydroxides, their properties or their genesis. Enver Murad filled this niche and transformed Mössbauer spectroscopy into a major tool for characterizing iron minerals. Presently, 112 articles in scientific journals, professional volumes and refereed conference proceedings and a comprehensive book, witness a fruitful and prolific scientific career. For those of us who like to measure scientific success through numbers: Enver Murad's h-index is 23, the number of citations per year never falls below 40 and has 'topped out' at 180.

Enver was born in Berlin, then attended British schools in a several major cities surrounding the

Mediterranean Sea. He completed a Master's Diploma in Mineralogy at the Technical College in Darmstadt, followed by a doctorate at the University of Frankfurt and a Habilitation at the Technical University of Munich. He was employed as a Research Fellow at the Mineralogical Institute at the University of Tübingen and at the Soil Science Department at the Technical University of Munich. He also served as a visiting Assistant Professor in 1983 at North Carolina State University where he became proficient in Mössbauer spectroscopy working with Professor Lawrence Bowen. Enver also took advantage of opportunities as a Visiting Research Scientist with John Cashion at the Department of Physics at Monash University in Melbourne, Australia, in 1989, 1994, 1998 and 2004 and with Jose Fabris at the Departamento de Química, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, in 2000, 2004 and 2006/2007.

From 1999–2006, Enver served as Director for the Department of Geological Services, Economic Geology and Soil Protection at the Bayerisches Landesamt für Umwelt (Bavarian Environmental Agency, previously named Bavarian State Geological Survey). In addition to managing this

program, he expanded his research into multiple areas of spectroscopy including infrared transmission and Raman spectroscopies. These techniques have served him well in continued studies of phyllosilicates and Fe oxide-bearing minerals. He is presently an Emeritus scientist at the Bavarian Environmental Agency.

Enver is particularly recognized for his pioneering work studying the properties of finely particulate Fe oxide phases associated with the new fields of acid mine drainage and biogeochemistry. He has contributed to numerous studies of the minerals ferrihydrite and schwertmannite that continue to challenge and interest scientists in terms of their formation conditions, structure and stability. Enver participated in many of the early studies of the effects of grain size, crystallinity and the presence of Al in Fe oxides/oxyhydroxides and their influences on the properties of Fe minerals. He has also led studies on samples from some remote regions, such as soils in Santorini, Greece, and hot-spring precipitates in Soos in the Czech Republic.

Many colleagues know Enver best as an Associate Editor of *Clay Minerals*, where he served from 1988 to 1997 on the Editorial Board and since 1997 as Associate Editor. He is rated as an efficient and thoughtful participant in the

publication process. This special issue of *Clay Minerals* is dedicated to Enver Murad for his long-standing career of critical thinking, dedication to the scientific method and service to the scientific community.

Although Enver retired in 2006 from his official position at the Bavarian Environmental Agency, he remains active in research and publications in his role as Emeritus scientist there. He is also continuing his editorial duties at *Clay Minerals*. 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, 18–22 September, 2006. This resort town on the Adriatic coast and former vacation destination of European royalty was a fitting location to commemorate Enver's scientific achievements with his numerous colleagues.

While Enver is best known by colleagues as an insightful and dedicated scientist, his friends know him as a fun-loving culinary and travel connoisseur. His practice of completing manuscripts in exotic, sunny locations will undoubtedly continue to an even greater extent in retirement.

May he continue to serve as an active researcher and insightful scientist for many decades!

JANICE L. BISHOP and HELGE STANJEK