Dr. Ricardo Antonio Olea has been selected by the IAMG Awards Committee (Chair, Heinz Burger) as the twenty-fifth winner of the William Christian Krumbein Medal of the International Association for Mathematical Geology. Out of four nominees, he was judged the clear winner for 2004 based on aggregate point scores for the three main selection criteria: distinguished research, service to IAMG, and service to the profession.The Krumbein medal is the highest honor bestowed by the IAMG. It has been awarded every year from 1976 to 1996, and every second year thereafter. Ricardo received his medal at the IAMG Awards Ceremony during the 32nd International Geological Congress in Florence, August 2004, before delivering a lecture on "Successful mathematical correlation of colluvial sediments at two sites in Thailand where neither seismic nor visual correlation produced results".

Born and educated in Chile, Ricardo originally obtained the Mining Engineering degree from the Universidad de Chile, Santiago, in 1966. The Instituto de Ingenieros de Minas de Chile awarded him the Juan Brüggen Prize for being best graduating mining engineer in the country for 1966. After teaching in the School of Petrochemistry, Technical University of Estado, Punta Arenas, Chile, he came to the Kansas Geological Survey in Lawrence in 1970, initially as a Visiting Industrial Research Scientist.

In 1982 Ricardo became Doctor of Chemical and Petroleum Engineering at the University of Kansas after successfully defending his dissertation on "Systematic approach to sampling of spatial functions". Among his degrees there is an MSc in Computer Science awarded by the same university in 1972 for a thesis entitled "Application of regionalized variable theory to automatic contouring".

After occupying various positions at KGS in Lawrence, and also at the Empresa National del Petróleo, Santiago, Chile, Ricardo became Senior Scientist in the Mathematical Geology Section, KGS, in 1995. He retired from this position in 2003 but retains KGS Emeritus Scientist status. Other honors received include the 1993 Best Paper Award, Mathematical Geology.

During his career, Ricardo worked outside KGS on several occasions. This included two stays as Visiting Research Scientist, Institute für Ostseeforschung Warnemünde, Germany; consulting for Earth Resources Exploration (EREX), Egypt; and research at the Federal Institute for Geosciences and Natural Resources (BGR), Germany, from August to November 2003. Currently he is Visiting Research Scholar in the Department of Environmental Sciences and Engineering, University of North Carolina, Chapell Hill, N.C., USA.

Ricardo has distinguished himself in application of mathematics in the earth sciences. He has authored or co-authored more than 200 publications including three books. He edited

the geostatistical glossary and multilingual dictionary in 1991. His important single-author textbook "Geostatistics for Engineers and Earth Scientists" published in 1999 is already making an impact. The latest IAMG monograph "Geostatistical Analysis of Compositional Data" (Pawlowsky-Glahn and Olea, 2004) also will be very helpful to many.

CORRELATOR, the interactive computer program for high-resolution lithostratigraphic well-log correlation, was one of many projects on which Ricardo worked while at the Kansas Geological Survey. This highly original and influential software package is widely known. Since 1985, it went through many updates with improvements. Its final state-of-the-art version was completed only recently (in 2003). The Correlator code and associated manual will shortly be available on the Computers & Geosciences server, in association with a C&G paper by Ricardo.

Ricardo's service to the IAMG has been second to none. Initially it included chairing the IAMG Geostatistics Committee (1985-1989), and chairing the IAMG Membership Committee while being a Council Member (1989-1992). Later he was IAMG Secretary-General (1992-1996), IAMG President (1996-2000), and IAMG Past-President (2000-2004). The legacy left from when Ricardo was President is note-worthy in that it includes many new features, e.g. IAMG scholarships for graduate students. Ricardo personally drafted many of the guidelines now on the IAMG web site.

The organizational changes wrought by Ricardo were based on extensive consultations. He always insisted on being democratic gradually working his way toward broadly-based consensus. His influence persists. In 2003, Ricardo chaired the IAMG Membership Commission that resulted in significant re-structuring. Several improvements resulted from responses to an elaborate questionnaire distributed to the IAMG Membership near the end of Ricardo's term as President.

As mathematical geologist, Ricardo always maintained professional affiliations with engineering associations, e.g. by serving on the American Society of Civil Engineers Task Force on Geostatistical Techniques in Geohydrology (1987-1989) for which he received an Excellence Award together with the other committee members. His engineering background helped him to formulate precise definitions and rules from which we as mathematical geologists continue to benefit, e.g. by consulting the geostatistical glossary or the IAMG guidelines.

As a person, Ricardo is modest. He is always keen to highlight excellence in others. During his career he has proposed many colleagues in the field of mathematical geology for the Krumbein medal or other honors. He felt that others should be honored before him. In recent years, Ricardo has added significantly to his many earlier achievements, both by producing major new publications and by his services to IAMG and the profession. It is fitting that the IAMG has awarded him its highest honor, the Krumbein Medal, in recognition of his invaluable contributions.

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