

2010 MEDALS & AWARDS

INTERNATIONAL SECTION DISTINGUISHED CAREER AWARD

Presented to
W. Gary Ernst



W. Gary Ernst
Stanford University (emeritus)

Citation by Yildirim Dilek

It is my great pleasure to present Professor W. Gary Ernst, the recipient of the 2010 Distinguished Career Award of the GSA International Section. Gary has led and shaped our thinking and ideas about convergent margin tectonics and metamorphism through his multi-faceted international contributions for over 50 years. He is a truly distinguished international geoscientist.

Gary Ernst retired from active teaching at Stanford University in 2004, after 44 years of distinguished academic career and service, but has remained very active publishing more than ever, and promoting earth sciences nationally and internationally through his editorial work. Gary has always been a true pioneer in metamorphic petrology, particularly in documenting the high-pressure conditions of ancient subduction zone systems in the Franciscan Complex in California, the Sanbagawa metamorphic terrane in Japan, and the Alpine orogenic belt in Europe through his original work, as well as in experimental petrology and mineralogy. After his initial work in the California Coast Ranges, he began working with Japanese colleagues in SW Japan, then went to the Alps to study metamorphism, mantle heterogeneity and plate tectonics, to Taiwan, to South Island

in New Zealand, to NE China (to work on Archean tectonics), later to Kazakhstan, Southern Urals (Russia) and East-Central China (to work on HP and UHP terranes). That is a remarkable list of international collaboration. One of Gary's many important contributions to the international earth science community is a rather large cadre of graduate students, whom he trained and worked closely with at UCLA and Stanford, and who are now among the most distinguished and established members of our society.

He has held various Visiting Professor positions in national and international universities. He has touched upon the lives and careers of numerous international researchers and students through his personal interactions with them during these visits, while serving as a great ambassador of the North American geoscience community.

Gary's service to the professional organizations and learned societies in the broad fields of earth sciences surpasses that of many distinguished scientists. He served as the Vice President (1979-80) and President (1980-81) of the Mineralogical Society of America; Chairman (1973-76) of the Volcanology, Geochemistry and Petrology Section of the American Geophysical Union; President of the Geological Society of America (1985-86); and, Chairman of the Board on Earth Sciences in the National Research Council (1984-87). Throughout his long and distinguished service to all these societies and organizations, Gary has been a leader promoting the advancement and implementation of many initiatives, ideas, and projects that shaped the course of our profession.

The significant, high-impact scientific work and contributions of Gary Ernst have been widely recognized by the international scientific community through some of the most prestigious awards he has received during his career. These awards include the Geological Society of Japan Medal (1998), the GSA Penrose Medal (2004), the Mineralogical Society of America Roebling Medal (2008), and the Marcus Milling Legendary Geoscientist Award (2008) of the American Geological Institute. These national and international honours attest to Gary's creative, innovative and frontier work in structural petrology that he always so eloquently documented in the context of regional tectonics and geodynamics of different metamorphic terranes around the world.

Gary Ernst has enriched our science through his own research and leadership, and continues to do so. I do not see any sign of him slowing down in his scientific activities.

I am very pleased that the GSA International Section has recognized his fundamental contributions by awarding him the Distinguished Career Award. Congratulations, Gary!

Response by W. Gary Ernst

Yildirim, John, fellow geologists, I am pleased beyond expression, but equally humbled and embarrassed by this recognition—especially when I consider the large number of Earth scientists conducting international geologic research. The ranks of potential award recipients must be enormous. Nevertheless, many thanks! Professional societies celebrate scientific accomplishments with awards, and far more contribute substantially to advancement of the discipline than can ever be properly recognized. Thus, to receive such an honor, one must be industrious, intelligent, and lucky—I'd choose the latter.

Trained as an experimental mineralogist, field geologist, and sometime-geochemist, I have been fortunate to work in contrasting geologic regions in the central and western United States: the early Precambrian of northern Minnesota; the Cretaceous miogeocline + Tertiary alkaline volcanics of north-central Montana; and the Coast Ranges, Klamath Mountains, and White-Inyo Range of the California Mesozoic convergent margin. Although these areas are exceedingly diverse and their study most edifying, my interest in Alpine-Circumpacific contractional plate margins has allowed me to investigate subduction complexes and to a lesser extent, coeval landward volcanic-plutonic arcs in Chile, Alaska, SW Japan, east-central China, Taiwan, South Island New Zealand, the Western Alps, northern Kazakhstan, and the southern Urals. Entry into some of these areas resulted from doctoral and postdoctoral colleagues I was supposedly supervising, but was learning from while we pursued joint research. I have been favored with a remarkably gifted set of UCLA and Stanford graduate students (14 M. Sc., 33 Ph. D.), post-docs + research associates (>45). Equally important for my geologic development, I have had great friends and scientific colleagues at the USGS as well as academic institutions in Japan, Taiwan, Switzerland, Italy, China, Russia, and New Zealand.

Looking back on these international cooperative studies, three were especially formative for my career: The first involved work on the high-pressure/low-temperature metamorphic belts of SW Japan during

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1963-68, where I benefited immensely from associations with Hisashi Kuno, Akiho Miyashiro, Yotaro Seki, and Shohei Banno. The second occurred during 1970-76 when I studied the petrotectonic evolution of the Western Alps in the company of Peter Bearth, Eduard Wenk, Volkmar Trommsdorff, Giorgio Dal Piaz, and Giovanni Piccardo. The third concerned investigations of ultrahigh-pressure

continental-collision complexes in central and eastern Asia with Louie Liou, Shige Maruyama, Nick Sobolev, Nick Dobretsov, and Ruth Zhang. Most important of all, my wife, Charlotte, has been unwavering in her love, and in providing active support during mineralogic-geologic-tectonic escapades to various far-off places; she has also persistently

tried to educate me regarding the finer things in life.

I heartily thank the GSA International Section for this Distinguished Career Award. I accept it on behalf of the many less-well-recognized Earth scientists far more deserving than I. This sobering knowledge will inspire me to continuing efforts—I'm not done yet!