

THIS ISSUE HONORS THE DISTINGUISHED SCIENTIST ALFRED KRÖNER, ON THE OCCASION OF HIS 60TH BIRTHDAY (1999) WITH CONTRIBUTIONS TO ASPECTS OF CONTEMPORARY EARTH SCIENCE.

Alfred Kröner's 60th birthday was celebrated by friends, colleagues, and collaborators with a symposium in Mainz. It was here at the Johannes Gutenberg-University that Alfred was appointed full Professor of Geology in 1977. Since then, Mainz has been his base, from which he continues to conduct his activities over several continents as a truly cosmopolitan geoscientist of overwhelming efficiency, recognized and appreciated worldwide in the Geoscience community.

Alfred Kröner was born in 1939, the son of a master-builder family in Kassel, mid-western Germany. After his military service, multi-talented and with broad interests, he opted to study Geology and Mineralogy at the Technical University of Clausthal-Zellerfeld where he received his "Vordiplom" in 1962. He then went to Vienna for a year, where he attended geology courses at the University and studied violoncello in a master class at the Vienna Conservatoire. Subsequently he received his "Diplom" in Munich in 1965, with a petrographic and structural study of the Ötztal basement gneisses in the Eastern Alps, resulting in his first (co-authored) paper in the "Jahrbuch der Geologische Bundesanstalt Wien" (v. 120, 1969). Structural geology, together with geochronology, hard-rock geochemistry, and petrology as clues for understanding geodynamics have remained in the center of his scientific interests ever since.

Curiosity and "go-getter" spirit then led Alfred and his wife Marion abroad—ask her about the many wilderness adventures into which he has led her! Tossing a coin, (legend has it) decided in favor of South Africa rather than India and thus he began the regional focus of much of his later geological work. He worked at the Precambrian Research Unit at the University of Cape Town and finished his Ph.D. there in 1968 with his thesis "The gneiss-sediment relationships north-west of Vanrhynsdorp, Cape Province." The publication resulting from this thesis was judged to be the best of the year

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and earned him a medal from the Geological Society of South Africa. After a year as a base-metal-exploration geologist in Namibia, Alfred returned to Cape Town as a Senior Research Fellow of the Precambrian Research Unit, involved in research projects in the Damara and Gariep Belts and in the Namaqualand Metamorphic Complex. Since then, Alfred has produced a continuously increasing flow of publications ranging from 2 to 7 per year at the beginning and rising to sometimes more than 10 annually. Most of his early papers dealt with the Precambrian of Southern Africa and consequences for general problems of the Earth's early evolution. Thus Alfred rapidly gained a reputation as an expert on the Precambrian in general.

In 1977 he moved back to Germany and accepted the Chair of Geology position at the University of Mainz. Alfred rapidly won collaborators in his institute, re-established a professorship in Geophysics and created, with a grant from the Volkswagen Foundation, a new professorship in Tectonophysics. He established close cooperation with Albrecht W. Hofmann's Department of Geochemistry of the Max Planck-Institute for Chemistry at Mainz. All the while Alfred advanced his own research, mainly funded by the Deutsche Forschungsgemeinschaft (DFG), participating in the multi-institute research projects "Geodynamics", "Continental Lower Crust", "Orogenic Processes: The Variscan Belt", and the east-European transect "Europrobe". He initiated or joined other projects using German funding given for cooperation with foreign countries such as China, the former CSSR, Egypt, Mongolia, Sri Lanka, the former USSR, and Zimbabwe. Scientifically, these ever-widening activities also meant continuously enlarging his fields of interest. As a visiting professor at Stanford University, Alfred started projects in paleomagnetism. Later, he was among the first to use the analytical possibilities of the SHRIMP ion microprobe, developed in Australia, spending several of his sabbatical leaves in Canberra and Perth. Back in Mainz he made maximum use of the mass-spectrometry facilities at the Max Planck-Institute for single zircon analysis by the evaporation technique. In addition his work on Precambrian to Phanerozoic orogens in Europe, Asia, and Africa, Alfred's special focus during the last few years has been on basement rocks from east-central Europe. Most of his research is related to a better understanding of the evolution of continental crust by the complex interplay of various plate tectonic processes.

Alfred has a stunning capacity for work, work, and more work with tireless and sometimes alarming enthusiasm, but without ever losing his relaxed ways and sense of humor. To give an idea of his involvement, he is author and co-author of more than 230 research papers as well as a textbook on high-grade gneiss terrains. He is editor of *Precambrian Plate Tectonics, Precambrian Tectonics Illustrated*, and *Archaean Geochemistry*, editor of ten special journal volumes, co-editor of *Precambrian Research* and *Terra Nova*, associate editor of *Tectonics*, member of the editorial boards of *Geology, Geologische Rundschau*, and *Journal of Geodynamics*, Secretary of the IUGS Commission on Tectonics (1978-1989), Chairman of Working Group 3 of the International Lithosphere Program (1983-86), Leader of IGCP Projekt 280 "The oldest rocks on Earth" (1988-1993), President of the Geologische Vereinigung (1986-91), Vice-President of the European Union of Geosciences (1996-1999), and Program Director of EUG 9.

Alfred's scientific achievements won him the Jubilee Medal of the Geological Society of South Africa in 1969. The Geological Society of America elected him a Fellow in 1981. In 1982 he was invited by the French Academy of Sciences to give a "Distinguished Lecture". In 1986, the Northwest University, Xian, China, awarded him the title "Honorary Professor", and in 1999, the Geological Society of South Africa invited him to deliver the renowned Du Toit Memorial Lecture. The Geological Society of Sri Lanka presented him with the Ananda-Coomaraswamy-Medal in January 2000. In the same year, he received the Emanuel-Boricky-Medal from one of the oldest universities, the Charles-University in Prague.

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Mainz has one significant advantage over other German universities, which must have been important for Alfred: from here it takes only half an hour to reach Frankfurt airport, Alfred's gateway to the world! He has worked on all continents except Antarctica, visiting most of them on a regular basis. Field work for Alfred often has an "Indiana Jones" component. Once in the field, Alfred is not concerned with trivial matters such as lack of drink or food, malaria, civil war, or other mundane matters that might worry lesser geologists. Once he wants a sample, he gets it. Even though we have shared only a small part of his field experiences, every trip has been memorable in some way. We have been shot at by an absent-minded policeman in a deserted refugee camp in Zimbabwe, walked through possible and probable minefields, had lions roaring next to the tent, haggled with nervous taxi drivers about running army roadblocks to the next outcrop, and discussed the likely size and nature of the crocodile population in the Komati River where a granite outcrop was waiting on the opposite bank to be sampled. All these field trips had a serious undertone: to understand rocks, and for Alfred the best way to do this is to see and sample as many of them as possible in their natural environment.

Last but not least: Alfred is an excellent teacher. His wide-ranging experience and insights into so many regions of the globe, his enthusiasm in sharing these with students and his ability to explain clearly and concisely even highly intricate data and problems - all these qualities make him a popular professor. Leading his institute and looking for collaborators has always meant to him to search for the best, without fear of competition or envy for others' successes. In addition, Alfred has never lost the ability to critically evaluate his own work in the light of newer results.

Alfred Kröner was not born to be "easy and comfortable." He demands as much of others as of himself. But despite the occasional rough edge, through being at heart also a musician, hence social and peaceable, he does not let professional quarrels become personal conflicts. His exemplary qualities as an organizer, manager, and promoter have never prevented him from voraciously pursuing scientific goals. Quick wits, flair for crucial questions, and hard work combined with generosity are the hallmark of his personality. Alfred's unflagging devotion to scientific endeavor and excellence has advanced Earth Science not only in Mainz but worldwide.

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