*Mathematical Geology, Vol. 31, No. 2, 1999*

# Association Announcement

## JAN EDUARD HARFF: 1996 KRUMBEIN MEDALIST

Jan Eduard Harff, the 21st Krumbein Medalist of the International Association for Mathematical Geology, has essentially had two lives and two careers, each alone sufficiently eventful enough to qualify him for the Association's highest award.

Jan was born on March 14, 1943, into the chaos of the final years of the Third Reich and the Soviet conquest of his north German homeland. Although Jan's family has a long tradition as medical doctors (a tradition continued by Jan's only child, Anne Harff) and Jan himself was raised by his uncle Eduard who was the town physician of Güstrow, Jan felt the call of the sea and longed to

**Professor Jan Harff** of the Institut für Ostseeforschung Warnemünde (IOW), shown in front of John Brinckman School in his hometown Güstrow, Mecklenburg (Germany), where he completed his secondary education (photo taken on June 27, 1998 by Dietmar Schallwich).



0882-8121/99/0200-0245$16.00/1 

become a marine scientist. Fortunately for the field of mathematical geology and the IAMG, Jan's childhood ambitions were thwarted until later in his life, and he turned instead to the challenges of applied geology and the use of computers in the earth sciences.

Jan graduated in 1961 from the John-Brinckman-Oberschule in Güstrow, where his walk from school to his modest apartment within the old family holdings just outside the medieval town wall of Güstrow took him daily past the Soviet Army Hospital in a commandeered block of homes also along the old city wall. (Exactly 35 years later, the homes were being restored to their former function, and Jan was the host of an IAMG international symposium on computerized modeling of sedimentary systems in his old school building.)

Jan was not accepted as a university student directly after graduation, but spent the next 3 years as a concrete construction worker and geological sampler before he was finally permitted to enroll as a student of geology in the famous von Humboldt University of Berlin from 1964 to 1967. He completed his undergraduate studies back in north Germany in 1969, at the Ernst Moritz Arndt University of Greifswald. After graduation, Jan was denied permission to work as a marine geologist because intemperate remarks he had made as a student on the morality of the Berlin Wall had brought him unwanted attention from the Stasi. Instead, he spent a year as a government geologist in Rostock, working on problems of Quaternary geology. He then returned to Greifswald and pursued his doctorate (Dr. rer. nat.), which was granted in 1973. At this time he began his work in mathematical geology, applying multivariate statistical methods to the interpretation of wireline logs for oil and gas exploration under the supervision of Prof. G. Peschel. Then, back to Rostock for more work on Quaternary geology, and most significantly, on "Geoinformatik" and the use of computers.

In 1977, Jan was appointed to the staff of the Zentralinstitut für Physik der Erde of the Academy of Sciences of the DDR. The ZIPE was headquartered on the old grounds of the venerable Prussian Royal Academy of Science on the Telegrafenberg above Potsdam, the former place of employment of Albert Einstein, and which remained a prestigious (although threadbare) institution in spite of the distortions of the communist era. Jan worked on geoinformatics and mathematical geology, an interest that benefited greatly from stints as a visiting scientist in Prof. A. B. Vistelius' Laboratory for Mathematical Geology in Leningrad and in the Laboratory of Mathematical Geology (IGEM-Academy of Science) in Moscow where he studied under Dr. D. A. Rodionov. Jan's association with Dimitri Rodionov was especially significant because it inspired work by Jan's own research group at ZIPE on the technique of "regionalized classification." (In 1986, Jan had become a Section Leader and had earned his D.Sc., and by 1989 also had been awarded the Association of Geological Sciences' A. G. Werner Medal and F. Stammberger Prize.) In the DDR, it was essential that research have a practical objective, and regionalized classification was developed

for the purpose of defining areas in the North German Basin that were especially prospective for gas, but Jan's group did not neglect development of a theoretical underpinning that combined elements of Rodionov and Voronin's "theory of uniform geological objects" with Matheron's concept of "regionalized variables."

By 1989, both Jan's personal fortunes and those of the Socialist world began to change dramatically. It became obvious to those in power in East Germany that they could no longer maintain their isolation from the West, and the DDR Academy of Sciences made tentative steps to increase scientific contacts. Jan was a beneficiary of this new policy, and in 1989 became the first geoscientist from the DDR to be allowed to visit the U.S. under a private (rather than official government) arrangement. He was permitted to respond to an invitation to serve as Visiting Research Scientist at the Kansas Geological Survey in Lawrence, Kansas. He was granted permission to stay only for a half-year, he could not bring his family, and he was made strongly aware that the fate of any future exchanges depended on his good behavior! (Conditions were imposed by the other side as well, although these were kept from Jan until well after the fact. The U.S. State Department was anxious about a computer-literate scientist from the communist DDR having access to the fledgling Internet, so they decreed that Jan could come to the Kansas Survey only if he were kept off the Survey's Data General computer. Pointing out that the Survey had very few if any secrets worth protecting, and that denying Dr. Harff the tools needed for his research rather obviated the reason for his visit made no impression on the Washington bureaucrats. A last-minute compromise was reached in which the Survey would provide its visitor with a graduate student as a research assistant. The assistant would do the actual hands-on work with the computer, and thus preserve national security. The graduate student's name was Wong, and he was from the People's Republic of China.)

The withdrawal of Soviet support led to rapid changes in the DDR, culminating in the fall of the Berlin wall, German reunification, and the end of the old Academy of Sciences and all its branches in 1991. Just prior to the final days, Jan organized the first (and only) IAMG conference held in the DDR, a symposium on computerized basin analysis that was cosponsored by COGEODATA. The conference was held at the exact time of fiscal unification of the two Germanies, and the financial confusion was horrible! Following the meeting, Jan returned to the Kansas Geological Survey for another stint as Visiting Research Scientist, this time accompanied by his wife Angelika, and freed of any restrictions from the State Department. While at Kansas, the former ZIPE was reorganized into the GeoForschungsZentrum-Potsdam, a new geosciences research institute of the Federal Republic of Germany. Jan, and many members of his old section, were among the scientifically qualified "Ossies" asked to remain in their posts.

During this time, Jan took advantage of the new freedoms to assemble his research papers into a submission for an "habilitation," the highest level of doc-

torate in the German educational system. This was granted by the University of Potsdam in 1992. This achievement not coincidentally qualified Jan for an academic appointment at the highest (C-4) rank, which Jan received when he was offered the dual post of Head of Marine Geology at the Baltic Sea Research Institute at Warnemünde and Professor of Marine Geology at Griefswald.

Jan's boyhood dream of sailing the seas had now come true, but in a more roundabout manner than he could ever have foreseen. Just as his refusal to submit to Socialist politics had later been vindicated by political developments, so had his early interest in mathematical geology paved the way for his appointment as head of marine geology at Warnemünde. Jan has expressed the opinion that it was his vision of mathematically modeling the geologic development of the Baltic, along the lines of his regionalized study of the North German Basin, that convinced the review panel to select him in preference to other candidates. The review panel wanted someone who would break with tradition and introduce new, quantitative methods into Baltic oceanography. If this indeed was the panel's intent, they certainly achieved their goal.

German research institutes are reviewed every 5 years, a process that determines if a particular group will flourish, be reorganized, or even cease to exist. In their first postreunification review, the Institute in Warnemünde and Jan's Marine Geology group at the Baltic Sea Research Institute received highest marks, a testament to the quality of the scientific work and publication record being assembled by his team. In contrast to the Institute's former restricted international role, cooperative work is being done with other research centers around the Baltic and throughout the world, and especially with the Kansas Geological Survey. Jan co-organized a European first, a multinational scientific teleconference held between Warnemünde and Barcelona during IAMG'97. He has been active in the affairs of the IAMG, serving as Membership Chairman and helping organize special sessions and meetings. At the same time, he is responsible for marine geology research done aboard the RV "Alexander von Humboldt" and the RV "Professor Albert Penck," and commands the ships during the scientific phases of their cruises in the Baltic. A new dream, now that his old dreams have been realized, is to combine his two scientific loves and organize a meeting of mathematical geologists at sea on the Baltic. All IAMG members should be hunting out their old swim masks and snorkels!

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