

Association Announcement

1999 Andrei Borisovich Vistelius Research Award



Pierre Goovaerts

California, the Silicon Valley, and Stanford are powerful magnets for many young scientists fresh out of their doctoral degrees. I receive each year many requests from Ivy League graduates from all over the world seeking a Stanford conclusion to their brilliant courses of studies. I do believe, however, in the worth of a nonacademic experience in industry or a research lab, prior to reentering the academic rat race. Therefore I try to dissuade the best candidates by asking them to fund a large part of the costs of their would-be postdoctoral position at Stanford. Nevertheless, I had spotted Pierre Goovaerts as an exceptionally versatile young scientist and

was prepared to fund him fully. Pierre took the challenge very personally and came up within 6 months of his initial request with not one but two fellowships to support his stay at Stanford, one from his home country and the second from the prestigious Fulbright Foundation. I knew I had a winner coming in.

Pierre came to geostatistics almost accidentally to answer a nagging question about how many samples were needed to characterize the soil properties of agricultural lands in Chimay, a place best known for its abbey and superb beer. As an engineer agronomist he had a problem to solve, he found the limitations of traditional sampling designs, dug out by himself a paper on geostatistics, and ran his first variogram. . . resulting in pure noise! Many would have left there, but this is not the style of Pierre: he called upon his entire family, father, mother, sister, brother, and his future bride to collect better data under the sooty drizzle of the Belgian winter, then followed many months of sample processing in the lab. The reward was a superb variogram displaying a series of nested structures clearly interpretable. The geostatistical community had gained a new recruit.

He read more about geostatistics and proposed to his advisors a doctorate on Multivariate Geostatistics as applied to soil characterization and remediation. The University of Louvain did not offer any class in geostatistics—not a problem: he would commute across the border to France to get the best training possible in the Centre de Geostatistique of Fontainebleau with Matheron and Wackernagel for mentors. As to seek help go for the best!

As he was developing his doctoral thesis, Pierre submitted no less than 6 papers in English in 6 different major journals, all were accepted, an unprecedented feat. The geostatistical community had gained a writer.

After his Ph.D. defense, he looked beyond Europe and aimed at Stanford. He did not take the lukewarm answer of Andre Journel for a NO and went about finding funds for his postdoctoral stay at Stanford. The U.S. had gained its next leading geostatistician.

Too many people carry with them their old clothes when traveling, trying to protect their culture rather than learning new ones. This is not Pierre Goovaerts' style. The man is hungry, he learns and assimilate, then the knowledge is his, uniquely. Within 6 months at the Stanford Center for Reservoir Forecasting he read all the Center annual reports, some 600 pages each, became an expert in GSLIB, and tested on his own data set all algorithms that were new to him, preparing each time a new paper. During his stay at Stanford he would submit 8 more papers on widely different subjects, all accepted for publication. I knew I had found an encyclopedist.

In 1993 in the plane back from the Montreal Congress "Geostatistics for the next Century," I casually suggested that he endeavors writing a book summarizing his experience at Stanford and providing a theoretical backup to the highly successful GSLIB software. I warned him about the extreme qualifications of a good book, a book that will hit the charts, and remain there for years as the ultimate reference.

He initially thought that 6 months would do, I told him that one full year was more likely, and it took him 2 years to complete *Geostatistics for Natural Resources Evaluation*. A quick glance at reference lists of geostatistics papers published in *Math Geology* indicate that Pierre has once again met his target; his book is now the leading reference book in the field ahead of Gslib and the aging *Mining Geostatistics*. I told a search committee at University of Michigan, Ann Arbor, about this nascent superstar and his forthcoming book, they invited him for a talk, he made the short list, and was selected for the tenure-track position. We had gained our next great teacher.

The Vistelius award is aimed at “a young scientist for promising contributions in research in the application of mathematics or informatics in the earth sciences.” The 1998 award is going to a young scientist with established contributions and the promise for much more. The future of mathematical geology is in good hands.

Andre G. Journel, NAE
Donald and Donald M. Steel Professor of Earth Sciences
Department of Petroleum Engineering
Stanford University
Stanford, California 94305-2220