

## J. P. Giroud — Biographical Note

Dr. Giroud, a pioneer in the field of geosynthetics since 1970, is recognized throughout the world as a geosynthetics leading expert. In 1977, he coined the words “geotextile” and “geomembrane”, thus starting the geoterminology used in geosynthetics engineering. He was instrumental in the formation of the International Geosynthetics Society (IGS), of which he was President until 1990. A former professor of geotechnical engineering, Dr. Giroud has been Director of the Geotextiles and Geomembranes Group of Woodward-Clyde Consultants (1978-1983). In 1983, he founded GeoSyntec Consultants, of which he was Chairman of the Board. In 2001, he retired from GeoSyntec Consultants, with the title of Chairman Emeritus, to work as an independent consultant (JP GIROUD, INC.). He is Chairman of the Editorial Board of *Geosynthetics International*, and was Chairman of the Editorial Board of *Geotextiles and Geomembranes* (1984-1994).

Dr. Giroud has developed many of the design methods used in geosynthetics engineering for filters, drainage systems, unpaved roads, liner leakage evaluation, leachate collection and leakage detection layers, liner system stability, reinforcement of liners and soil layers overlying voids, geomembrane stress and strain analysis, evaluation of the effects of temperature on geomembranes, connections between geomembranes and concrete structures, etc. Dr. Giroud has published noted state-of-the-art reviews on granular and geotextile filters, the use of geosynthetics in environmental applications, the use of geosynthetics in dams, and the behavior of geomembranes, and he has published studies on geosynthetic testing and specifications.

Dr. Giroud, considered the “father of geosynthetic liner systems”, has developed many methods for the design of geosynthetic liner systems and drainage systems used for landfills, liquid impoundments, and low-level radioactive waste disposal facilities. He wrote three books published as special issues of *Geosynthetics International*: “Design of Geomembrane Applications”, “Control of Liquid Migration Using Geosynthetics Liner Systems”, and “Liquid Collection Systems”. Dr. Giroud has originated a number of geosynthetics applications such as: first nonwoven geotextile filter (1970), first geotextile in a dam (1970), first geotextile cushion for geomembrane (1971), first double liner with geomembranes (1974), first entirely geosynthetic double liner system with two geomembranes and a geonet leakage detection system (1981). He played a key role in the development of liner construction quality assurance (1983-1984) and the development of the technique of exposed geomembrane landfill covers (1995-1998).

Dr. Giroud has been involved in the design or performance analysis of hundreds of structures incorporating geosynthetics, and has provided expert testimony for landfills, low-level radioactive waste disposal facilities, drainage systems, etc. Dr. Giroud is recognized as a leading expert in the analysis and remediation of failures of geotechnical structures incorporating geosynthetics. He is currently completing the preparation of a 1000-page book “Lessons Learned from Failures Associated with Geosynthetics”.

Dr. Giroud was chairman of the 2nd International Conference on Geotextiles (1982) and the International Conference on Geomembranes (1984). He served two terms as chairman of the Technical Committee on Geosynthetics of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE). He is the author of 250 publications on geosynthetics, and the editor of a book of geosynthetics case histories. Dr. Giroud is the author of a monumental Geosynthetics Bibliography (1721 pages, more than 10,000 references). In addition, he wrote four books and a hundred papers on other geotechnical engineering subjects.

Dr. Giroud has taught training courses on geosynthetics for organizations such as the U.S. Environmental Protection Agency (which he advised for the development of landfill regulations), the Federal Highway Administration, the U.S. Bureau of Reclamation, and the Association of State Dam Safety Officials. He has lectured worldwide and has been keynote lecturer at numerous conferences. In 2005, he delivered the prestigious “Vienna Terzaghi Lecture”, and he recently wrote the chapter on filter criteria in the book commemorating the 75th anniversary of Terzaghi’s book “*Erdbaumechanik*”. Dr. Giroud has been invited to deliver the 2005-2006 Mercer Lectures, a lecture series sponsored by Tensar International and endorsed jointly by the IGS and the ISSMGE.

Dr. Giroud has received awards from the French Society of Engineers and Scientists, the Industrial Fabrics Association International, and the IGS (1994 for liner leakage prediction and 2004 for filter design). In 1994, the IGS named its highest award “The Giroud Lecture”, “in recognition of the invaluable contributions of Dr. J.P. Giroud to the technical advancement of the geosynthetics discipline”. In 2002, he became Honorary Member of the IGS with the citation “Dr. Giroud is truly the father of the IGS and the geosynthetics industry”. In 2005, Dr. Giroud has been awarded to status of “hero” of the Geo-Institute of the American Society of Civil Engineers (ASCE).