

J. P. Giroud — Biographical Note

Civil engineer from Ecole Centrale de Paris, PhD in geotechnical engineering
Doctor Honoris Causa of the Technical University of Bucharest (Romania)
Member of the US National Academy of Engineering
Vienna (Austria) and US Terzaghi Lecturer
Past President of the International Geosynthetics Society
Chairman of the Editorial Board of *Geosynthetics International*
Chairman Emeritus of Geosyntec Consultants

Dr. Giroud, a pioneer in the field of geosynthetics since 1970, is recognized worldwide as a geosynthetics leading expert. In 1977, he coined the words “geotextile” and “geomembrane”, thus starting the “geo-terminology”. 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 rigid structures, etc.

Dr. Giroud, considered the “father of geosynthetic liner systems”, has developed many methods for the design of landfills and liquid impoundments. He wrote three books published as special issues of *Geosynthetics International*: “Design of Geomembrane Applications”, “Liquid Migration Control Using Geosynthetic Liner Systems”, and “Liquid Collection Systems”. Dr. Giroud has originated geosynthetics applications: 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, performance analysis or expert testimony for hundreds of structures with geosynthetics. Dr. Giroud is recognized as a leading expert in the analysis and remediation of failures of structures with geosynthetics. His work on testing is used in standard test methods (ASTM, GRI). He wrote in 1991 the U.S. Bureau of Reclamation Design Standards on Embankment Dams with Geomembranes (302 pages).

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 wrote the chapter on filter criteria in the book commemorating the 75th anniversary of Terzaghi’s book “*Erdbaumechanik*”. Dr. Giroud has delivered the 2005-2006 Mercer Lectures, a lecture series endorsed jointly by the IGS and the ISSMGE in Europe, Asia, Africa and North America.

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 discipline”. In 2005, Dr. Giroud has been awarded the status of “hero” of the Geo-Institute of the American Society of Civil Engineers (ASCE). In 2007, Dr. Giroud has been appointed Doctor Honoris Causa of the Technical University of Bucharest, Romania. In 2008, Dr. Giroud presented the Terzaghi Lecture, the highest award bestowed on a geotechnical engineer by the ASCE. In 2009, Dr. Giroud has been elected to the US National Academy of Engineering.