OBITUARY

The Late Prof. Masami Fukuoka

By Fumio Tatsuoka
IGS Past President

The Late Prof Professor Fukuoka, Masami, IGS Past President passed away on 27 January 2016 in Tokyo at the age of 98. This is a great sadness for all of us who were instructed by him and worked with him. Prof. Fukuoka was born on 12 March 1917 in Okayama Prefecture, Japan. He studied Civil Engineering at the University of Tokyo, and in 1940 he entered the profession fully, taking up a post as a civil engineer for Japan's Public Works Research Institute (PWRI) of the Ministry of Internal Affair.

During the Second World War, he served in the Japanese military, an experience which included being near enough to the atomic bombing of Hiroshima on the morning of 6 August 1945 to be affected.

He returned to PWRI after the war ended, and his engineering acumen was immediately needed. Japan experienced a series of severe earthquakes and floods, which further complicated the damage the country had suffered to its infrastructure during the war. It was one of the most difficult times in the history of Japan, he said to me when I was young. As a civil engineer, in particularly, as a geotechnical engineer, he worked to restore Japan's infrastructures from the effects of war and natural disasters.

His strength of leadership was an especially important contribution to the design and construction of a great number of important infrastructures; and his work improved projects across a broad range of sectors, including those dealing with landslides, road building and pavements, slope stability, flood control, river and coastal dyke engineering, ground investigation and soil test, earth pressure and retaining walls, rock-fill and earth-fill dams, ground subsidence, foundations of long-span bridges, earthquake geotechnical engineering and, eventually, geosynthetic engineering. The breadth of his work was extraordinary, considering how difficult it is to become a specialist in even one of these areas today. After rising to serve as PWRI's director, he retired in 1970 and entered academia and became a full professor of Civil Engineering of the University of Tokyo, where I was studying as doctoral candidate. In 1977, Prof. Fukuoka transitioned to a professorship at Tokyo University of Science where he remained until his retirement in 1986. As his career progressed; he contributed greatly to multiple professional organizations. He helped establish the Japanese Geotechnical Society (JGS) in 1949 and served as its President from 1976 – 1997. He was integral to Tokyo playing host to the 9thInternational Conference on Soil Mechanics and Foundation Engineering, then served as President of the International Society for Soil Mechanics and Foundation Engineering (now ISSMGE) from 1977-1981. During this period, while at Tokyo University of Science, he started the research on geosynthetic-reinforced soil retaining walls and geomembrane lining at the bottom of reservoirs. The work led him to participate in the 2nd International Conference on Geosynthetics (2ICG) in Las Vegas in 1982.

This visit, in turn, led him to contribute to the establishment of the International Geosynthetics Society (IGS) in 1983, working with J. P. Giroud, and other geosthynsetics field colleagues.

Prof. Fukuoka's work with the IGS founding cannot be overlooked. At that time, most of the geotechnical engineers in Japan did not recognize the importance of Geosynthetic Engineering. He established a technical committee on geosynthetics within the JGS in 1983, an act which led to an IGS chapter in Japan in 1985: the first IGS Chapter. It put the society on a path to grow healthily through establishing domestic and regional organizations (IGS Chapters) around the world. Today, there are 43 IGS Chapters.

It is important to emphasize the framework Prof. Fukuoka set up for the IGS Japanese Chapter. His vision has influenced the strong growth of the IGS overall.

Foremost, he did not establish an independent Japanese Geosynthetics Society; later, he made the group a chapter of Island, thus, all individual and corporate members of the chapter were also IGS members.

Secondly, he recognized the need to allow Japanese to be the primary language of the chapter members' activities within the chapter itself, even if English was the common language for larger, international engineering gatherings.

To this domestic-industry -growing end, Prof. Fukuoka:

-Published the membership list in Japanese.

-Founded the Japanese -language publication

-"Geotechnical Technical Information", published three times per year, for sharing geosynthetic case histories, the latest technical information of geosynthetic engineering practice, research updates, and translated information from the IGS News.

He established an annual two- day symposium on geosynthetic engineering, conducted in Japanese and with proceedings. These proceedings were eventually graded up to the annual Geosynthetics Engineering Journal, which contains peer-reviewed technical papers in Japanese or English.

The importance of these decisions has been validated by the healthy and strong activities of IGS Japan over the past 30 years; and Prof. Fukuoka's influence through that first IGS Chapter can be felt in the formation and activities of the next 42 national and regional chapters that have been added to the IGS ever since.