

### In Memory of Prof. Tadahiko KAWAI

Professor emeritus Tadahiko Kawai passed away at the age of 88 on October 31, 2014. Before retiring from the University of Tokyo in 1986, he had been an active member of ERS for many years. He contributed remarkably to the progress of earthquake engineering through his major, applied and computational mechanics. According to the paper [T. Kawai, “The way I have passed in the field of solid mechanics”, *Computers & Structures*, Vol.30, No.4, (1988), pp.777~781], his 34 years of research after graduating from the University of Tokyo may be classified into the following three periods: (1) The first period (1952-1965) of applied mechanics oriented research, (2) The second period (1965-1975), devoted to research and development of the finite element method, (3) The third period (1975~1986), involved in research and development of the discrete method of limit analysis (or rigid bodies-spring models). His contributions to earthquake engineering can be partly seen in the paper [T. Kawai, “New discrete models and their application to seismic response analysis of structures, *Nuclear Engineering and Design*, Vol.48, (1978), pp.207~229]. We thank his effort and pray that his soul may rest in peace.

Yutaka TOI



## Obituaries

### In Memory of Professor Choshiro TAMURA



We are sorry to be the bearers of sad news that Dr. Choshiro TAMURA, Emeritus Professor at the University of Tokyo, passed away on 18th January 2015 at the age of 84. He had been on his carrier path at the Institute of Industrial Science, University of Tokyo since 1965 until 1991. Needless to say, Professor Tamura had been a great figure, and made many substantial contributions to the field of earthquake engineering.

Professor Tamura was widely renowned for his pioneering work to advance understanding of the fundamentals that control earthquake performance of soil-structure systems such as tunnels, earthfill and rockfill dams. The evaluating approach developed by him was truly a great breakthrough in simplifying the analysis of soil-structure interaction, and was put to practical use in a variety of seismic designs. In addition, he made frequent reconnaissance trips to earthquake-hit areas, sometimes as leaders of official teams dispatched by the Japan Society of Civil Engineers (JSCE). We were heavily influenced by his motto "Learning by hand and heart in nature".

Professor Tamura has a brilliant record of service in various organizations in Japan, including the JSCE committee of Earthquake Engineering. After the 1995 Kobe Earthquake, JSCE organized a special assembly for reviewing problems for seismic designs, and he, as the chairman of this review assembly, devoted much of his energy to make official JSCE recommendations for the seismic designs of civil-infrastructures. Important design regulations for railways, tunnels etc. have been revised along with these recommendations. Also, he was the President of the Japan Society of Dam Engineering in 1996.

Professor Tamura was highly esteemed by his peers in the field of earthquake engineering, as evidenced by the many honors he received for his achievements and contributions. He was the recipient of the Prize for the JSCE best journal paper of the year in 1993 and the JSCE Lifetime Achievement Award, 2003.

Professor Tamura will be much missed by not only his dearest family but also many students who are now leaders in the field of earthquake engineering. His educational and engineering visions continue to shape the lives of earthquake engineers worldwide.

Kazuo KONAGAI and Takashi KIYOTA

### Eulogy for late Prof. Hisashi Tanaka



Prof. Hisashi Tanaka, Professor Emeritus of University of Tokyo, passed on September 10 last year. He was a member of ERS. It is a 91 year old life. Prof. Tanaka graduated from Department of Architecture, the Second School of Engineering, University of Tokyo, in 1946. He entered the graduate school and there he received the guidance of Prof. Kaoru Ono. Soon after, Professors Ono and Tanaka published a book entitled “Limit Design of Building Structures”. The drafts of all chapters of this book were prepared by Prof. Tanaka, a research associate at that time, because Prof. Ono was in the hospital due to serious disease during those days. Prof. Tanaka conveyed the drafts chapter by chapter for review of Prof. Ono. Prof. Tanaka was proud of this book through his life. Structural engineers and young engineers, in particular, were surprised at the contents of this book. Every chapter discusses unexpected themes and more over is described in witty manners. All engineers read this book were apt to change their own principles from the bottom.

Prof. Tanaka studied in Brown University for two years as a visiting scholar. Those days Professor W. Prager activated research of plasticity there. He collected young and ingenious researchers from all over the world. They produced a lot of achievements in the field of plastic design and plastic analysis of structures. Prof. Tanaka flew into the hot spot of research in this area. Naturally, his motivation toward research was so much stimulated. After returning home he enthusiastically wrote many books expressing his research achievements. While, he had a strong motivation to

construct the plastic design practice in the building structures, though this design method was prohibited under the Building Standard Law in the beginning. He earnestly supervised and inspired the committee members in Japan Welding Society and also in Architectural Institute of Japan. The accomplishments of the committees are utilized in the seismic design since the revision of the regulation of the Law.

Prof. Tanaka once dedicated to role of Director of Institute of Industrial Science he belonged to for many years as a professor. He sincerely managed the society in the Institute during the difficult term of research circumstance. In Architectural Institute of Japan, he contributed as the vice-president and chairs of many committees. He was awarded the Grand Prize for his contribution in the society of building engineering. He felt a great honor and willingly received this prize.

As many colleagues agree with me, Prof. Tanaka enjoyed drinking so much among his students and young researchers who feel familiar with him. In such occasions he cheerfully told his ideas, his perspectives and his way of life. Surely, persons beside him were well educated and cultivate as well. They could find the goal they are aiming at. Prof. Tanaka left a strong memory of his character in our minds. I sincerely pray his repose.

March 20, 2015

Koichi Takanashi

Professor Emeritus, University of Tokyo.