

Editorial

This is a special issue to honour the outstanding contributions of professor Ton Vrouwenvelder to the risk and reliability discipline. Ton Vrouwenvelder is a former editorial board member and editor-in-chief of the journal *Heron*. In an earlier special issue in 2004 (volume 49/2) we acknowledged his enormous valuable contributions to the journal. This new issue has been written by some of his former PhD and MSc students who were all very happy to contribute and learn the principles and crucial details of this very important field of expertise for the civil engineering domain.

Ton Vrouwenvelder has the reputation of a leading scientist in the field of reliability analysis and probabilistic design of civil engineering structures. Ton is a frequent and well-respected member of national and international committees in the field. In 2011 at the ICASP11 conference in Zürich Ton received the *C. Allin Cornell Award* for his outstanding achievements in, amongst others, the fields structural reliability, flood risk analysis and management as well as his contributions to design codes such as the Eurocode. The *C. Allin Cornell Award*, previously CERRA Award and recently renamed after the first recipient and pioneer in the field Professor C. Allin Cornell, is one of the most prestigious distinctions in the field of structural reliability and risk with famous previous award winners such as Cornell, Rackwitz, Ditlevsen, Der Kiureghian or Hasofer & Lind.

Ton Vrouwenvelder is also the former president of the Joint Committee on Structural Safety (JCSS). In this committee he worked to improve the general knowledge and understanding within the fields of safety, risk, reliability and quality assurance, for all types of civil engineering and building structures, on the basis of sound scientific principles and with an open eye to applications in practice. He stimulated that inter-associational pre-normative research in the field of risk and reliability is performed in an effective and adequate way. The development of the worldwide used Probabilistic Model Code is a beautiful example of this work.

All papers in this special issue reflect the fields where Ton was and still is active: Bayesian decision making, reliability analysis of new and existing structures, probabilistic traffic load models, probabilistic methods for water safety and over the last years the development of probabilistic models of the assessment of induced earthquakes.

We would like to thank Ton Vrouwenvelder for being an excellent colleague and his teaching, supervision and inspiring collaboration!

Raphaël Steenbergen, Bert Sluys

