Editorial

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The UK Association of Computational Mechanics (UK-ACM, 2016) was founded in March 1992 with the purpose of promoting research in computational mechanics in the UK and establishing formal links with similar organisations across Europe and worldwide. The Association is affiliated with the European Community of Computational Methods in Applied Sciences (ECCOMAS) and the International Association for Computational Mechanics (IACM). The principal activity of UK-ACM involves the organisation of an annual two-day conference that is focused on the latest developments and research trends in the field of computational mechanics. The

conference is particularly orientated towards encouraging young scientists in the field to present their current research at both doctoral and post-doctoral levels. The conference is therefore a unique forum to foster ideas, enable new multi-disciplinary research approaches and establish collaborative research links, helping to build strong research networks within the UK and at an international level.

The 23rd UK-ACM conference was held at Swansea University, UK, where it was inaugurated in 1993 (Figure 1). The conference was held in the Zienkiewicz Centre for

Figure 1. The 23rd UK-ACM conference

Computational Engineering, College of Engineering, Swansea University, from the 8th to 10th April 2015. It is well known that since the pioneering work of Prof. O Zienkiewicz in the 1960s, this research centre has accumulated a long-standing prestige in this field of science, which has helped the city of Swansea to be recognised as the host for a world-leading centre of research. The conference was sponsored by the College of Engineering at Swansea University, the Institute of Mathematics and Its Applications (IMA), the Zienkiewicz Centre for Computational Engineering (ZCCE) at Swansea University, the Wales National Research Network in Advanced Engineering and Materials (NRN), and the Society for Industrial and Applied Mathematics (SIAM).

The conference was preceded by the 4th ACME school on the 8th of April, which focused on the theme of 'Low or high order: this is the questions! (To p or not to p)'. With more than 100 attendees, four presentations were delivered by Prof. K. Morgan, Dr. A. J. Gil, Dr. R. Sevilla and Dr. P. D. Ledger as part of the school, taking advantage of the local expertise. The conference was extremely successful and was attended by 142 delegates, from 12 different countries and 32 different institutions. 99 four-page papers were presented within the conference, resulting in a book of proceedings of outstanding quality. Presentations were distributed among four

parallel sessions, including a wide spectrum of research topics, namely, solids mechanics, fluids dynamics, mesh generation, stochastics, composites, optimisations, advanced applications, coupled problems and fracture, to name but a few. All the presentations were of great quality, very well attended and chaired by experts in the field as part of the local scientific committee. In addition, the conference counted as invited keynote speakers with four of the greatest scientists in the field, namely Prof. J. Peraire (Massachusetts Institute of Technology, Cambridge, MA, USA), Prof. R. Löhner (George Mason University, Fairfax, VA, USA), Prof. L. Formaggia (Politecnico di Milano, Milan, Italy) and Prof. J. Schröder (Universität Duisburg-Essen, Essen, Germany).

This themed issue is comprised by some of the many high-quality contributions presented at the conference, especially chosen with the aim to address the wide audience and provide an insight into the variety of topic addressed during the two-day conference.

REFERENCE

UK Association of Computational Mechanics (UK-ACM) (2016)
<http://ukacm.org/> (accessed 19/07/2016).