Preface

The 18\textsuperscript{th} International Conference on Conceptual Structures (ICCS 2010) was the latest in a series of annual conferences that have been held in Europe, Australia, and North America since 1993. The focus of the conference has been the representation and analysis of conceptual knowledge for research and practical application. ICCS brings together researchers and practitioners in information and computer sciences as well as social science to explore novel ways that conceptual structures can be deployed.

Arising from the research on knowledge representation and reasoning with conceptual graphs, over the years ICCS has broadened its scope to include innovations from a wider range of theories and related practices, among them other forms of graph-based reasoning systems like RDF or existential graphs, formal concept analysis, Semantic Web technologies, ontologies, concept mapping and more. Accordingly, ICCS represents a family of approaches related to conceptual structures that build on the successes with techniques derived from artificial intelligence, knowledge representation and reasoning, applied mathematics and lattice theory, computational linguistics, conceptual modeling and design, diagrammatic reasoning and logic, intelligent systems and knowledge management.

The ICCS 2010 theme “From Information to Intelligence” hints at unveiling the reasoning capabilities of conceptual structures. Indeed, improvements in storage capacity and performance of computing infrastructure have also affected the nature of knowledge representation and reasoning (KRR) systems, shifting their focus toward representational power and execution performance. Therefore, KRR research is now faced with a challenge of developing knowledge representation and reasoning structures optimized for such reasonings.

There were 36 papers submitted to ICCS 2010 for peer review. All submissions were assessed by at least three referees, and most of them, by four referees. The top-ranked 12 submissions were accepted as full papers, amounting to an acceptance rate of 33\%, and 6 other submissions were accepted as posters, amounting to a total acceptance rate of 50\%. The programme also included five invited talks by leading researchers, two from the ICCS community itself and three from related communities. The thorough selection process would not have been possible without the help of the numerous reviewers to whom we express our acknowledgement.

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Computer Science and Information Technology of University Malaysia Sarawak, for providing support in funding, promotion and local arrangements, making this event a success.

July 2010

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