

# Preface

Metadata and semantics are integral to any information system and significant to the sphere of Web data. Research and development focusing on metadata and semantics are crucial to advancing our understanding and knowledge of metadata; and, more profoundly, for being able to effectively discover, use, archive, and repurpose information. In response to this need, researchers are actively examining methods for generating, reusing, and interchanging metadata. Integrated with these developments is research on the application of computational methods, linked data, and data analytics. A growing body of work also targets conceptual and theoretical designs providing foundational frameworks for metadata and semantic applications. There is no doubt that metadata weaves its way through nearly every aspect of our information ecosystem, and there is great motivation for advancing the current state of understanding in the fields of metadata and semantics. To this end, it is vital that scholars and practitioners convene and share their work.

Since 2005, the Metadata and Semantics Research Conference (MTSR) has served as a significant venue for dissemination and sharing of metadata and semantic-driven research and practices. This year, 2015, marked the ninth MTSR—Metadata and Semantics Research Conference, drawing scholars, researchers and practitioners investigating and advancing our knowledge on a wide range of metadata and semantic-driven topics. MTSR has grown in numbers and submission rates over the last decade, marking it as a leading, international research conference. Continuing the successful mission of previous MTSR conferences (MTSR 2005, MTSR 2007, MTSR 2009, MTSR 2010, MTSR 2011, MTSR 2012, MTSR 2013, and MTSR 2014), MTSR 2015 sought to bring together scholars and practitioners that share a common interest in the interdisciplinary field of metadata, linked data, and ontologies.

The MTSR 2015 program and the contents of these proceedings show a rich diversity of research and practices from metadata and semantically focused tools and technologies, linked data, cross language semantics, ontologies, metadata models, semantic systems, and metadata standards. The general session of the conference included 12 papers covering a broad spectrum of topics, proving the interdisciplinary field of metadata, and was divided into three main themes: Ontology Evolution, Engineering, and Frameworks; Semantic Web and Metadata Extraction, Modeling, Interoperability and Exploratory Search; and Data Analysis, Reuse and Visualization. Metadata as a research topic is maturing, and the conference also supported the following five tracks: Digital Libraries, Information Retrieval, Linked and Social Data; Metadata and Semantics for Open Repositories, Research Information Systems and Data Infrastructures; Metadata and Semantics for Agriculture, Food, and Environment; Metadata and Semantics for Cultural Collections and Applications; and European and National Projects. Each of these tracks had a rich selection of papers, in total 26, giving broader diversity to MTSR, and enabling deeper exploration of significant topics.

All the papers underwent a thorough and rigorous peer-review process. The review and selection this year were highly competitive and only papers containing significant research results, innovative methods, or novel and best practices were accepted for publication. From the general session, only 11 submissions were accepted as full research papers, representing 36.6 % of the total number of submissions. Additional contributions from tracks covering noteworthy and important results were accepted, totaling 38 accepted contributions for MTSR 2015.

Manchester has been the scene of many significant contributions to the development of computers. The School of Computer Science at the University of Manchester is one of the oldest in the UK. The University of Manchester has made a considerable contribution to the development of computing. This includes many firsts including the first stored program computer, the first floating point machine, the first transistor computer, and the first computer to use virtual memory. Thus we were delighted to secure as this year's keynote speaker Professor Carole Goble. Professor Goble leads a large team of researchers and developers working in e-Science, building e-infrastructure for researchers working at the lab, national, and pan-national level. She is heavily involved in European cyber infrastructures for the Life Sciences and is currently active in linking these with the NIH BD2K Commons initiative. She applies technical advances in knowledge technologies, distributed computing, workflows and social computing to solve information management problems for life scientists, especially systems biology, and other scientific disciplines, including biodiversity, chemistry, health informatics and astronomy. Her current research interests are in reproducible research, asset curation and preservation, semantic interoperability, knowledge exchange between scientists and new models of scholarly communication. She has recently been advocating the releasing of research as Research Objects ([www.researchobject.org](http://www.researchobject.org)) and is a long-established leading figure in the Semantic Web and Linked Data, chairing the International Semantic Web Conference in 2014 and co-founding the leading journal in the field. The title of her outstanding keynote presentation was "Research Objects: the why, what, and how".

We conclude this preface by thanking the many people who contributed their time and energy to MTSR 2015, and made possible this year's conference. We thank, also, all the organizations that supported the conference.

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Emmanouel Garoufallou  
R.J. Hartley  
Panorea Gaitanou

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Garoufallou, E.; Hartley, R.J.; Gaitanou, P. (Eds.)

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