



Barceló Sants Hotel
Plaça dels Països Catalans, s/n | 08014 Barcelona

ITOC Workshop

‘Enhanced Publications: Approaches to Maximising the Value of Digital Assets to Enhance Scientific Publications’

The Information Trends and Opportunities Committee (ITOC) is the catalyst for strategic thinking of ICSTI. It conducts foresight/horizon scanning to identify trends and opportunities of interest and relevance to ICSTI members. The **Chair of ITOC is Margret Plank**, Head of Competence Center for non-textual Materials at the German National Library of Science and Technology (TIB).

Workshop Description

Current research is presented by a variety of digital assets. Besides text research also includes visualized research data, video, graphics, models and even software code. These digital assets are an important element of contemporary scientific outputs and thus part of our cultural heritage. Unfortunately, no sustainable standard has become established for handling these important assets. Only a negligible proportion of those digital assets are accessible at present, whilst scientific texts are, in principle, sufficiently well-documented and available. This can lead to serious problems when it comes to verify, reproduce and reuse the research results. In this workshop we’d like to focus on approaches and strategies for integration, re-use and re-purposing of data and digital content within scientific publications.

Workshop Program



Maarten Cleeren – Elsevier

Elsevier’s Article of the Future - [PRESENTATION](#)

In 2009 Cell Press and Elsevier embarked on a journey to fulfil the promise of digital publishing for the scientific article – and created the Article of the Future. Over the ensuing years we have been implementing various integrative technologies for authors to enrich and promote their articles and share their rich data output. In this talk

I will discuss in detail a small set of these enrichment capabilities and consider what digital publishing has in store for (digital native) scientists.

Maarten Cleeren is Director of Product Management, Enriched Content within the Research Products group at Elsevier. He moved from academia into publishing 8 years ago. With a background in Philosophy and Natural Language Semantics, he has been driving development and delivery of Smart Content and article enrichments at Elsevier in various roles.



Marco Stella – JoVE

Our Shared Role in Solving Science's Reproducibility Crisis - [PRESENTATION](#)

Studies show that as little as 10% of scientific papers can be reproduced. But why is this happening? And how can we, scientific publishers, Librarians, or a member of the scientific research community, help to bring this reproducibility crisis to an end? We'll be discussing how academic publishers, specifically JoVE, can advance the productivity, efficiency, and reproducibility of scientific research via video-based publications.

Marco Stella graduated from Bologna University in 2005 with a degree in Tourism Economics. He moved first to Florence and then to Barcelona where he lived for 5 years, working for vLex, a legal publisher. He then moved to the UK in 2012 and currently lives in London. He started working for JoVE in 2014 as Account Manager and he is now Associate Director, leading a team that covers Southern Europe, France, Benelux and Scandinavia.



Neil Chue Hong – Software Sustainability Institute

Software - a different type of research object? - [PRESENTATION](#)

Software is critical to all areas of research and science. The move towards Open Science has made it even more important that software is made findable, accessible, and reusable.

This is a path that has been taken before, for research papers and more recently for research data. With software we experience new challenges because of its constant evolution - can we reuse techniques or is software fundamentally different?

This talk will draw on the experiences of the Software Sustainability Institute in understanding the role of scientific software in scholarly communication, from making it findable and accessible, to its linkage with other research objects and the dream of reproducibility.

Neil Chue Hong is the founding Director and PI of the Software Sustainability Institute, a collaboration between the universities of Edinburgh, Manchester, Oxford and Southampton. He enables research software users and developers to drive the continued improvement and impact of research software. He is the Editor-in-Chief of the Journal of Open Research Software, the current Advisory Council chair of the Software Carpentry Foundation, co-

editor of "Software Engineering for Science", co-author of "Best Practices for Scientific Computing" and "An Open Science Peer Review Oath", and incoming chair of the EPSRC Strategic Advisory Team on e-Infrastructure. His current research interests include barriers and incentives in research software ecosystems and the role of software as a research object.



Markus Kaindl – Springer Nature

Springer Nature SciGraph – Building a Linked Data Knowledge Graph for the scholarly publishing domain - PRESENTATION

We are pleased to introduce Springer Nature SciGraph, the new Linked Open Data platform aggregating data sources from Springer Nature and key partners from the scholarly domain. The Linked Open Data platform will initially collate information from across the research landscape, such as funders, research projects, conferences, affiliations and publications. Additional data, for example citations, patents, clinical trials and usage numbers will follow over time. This high quality data from trusted and reliable sources provides a rich semantic description of how information is related, as well as enabling innovative visualizations of the scholarly domain.

Markus Kaindl, today Senior Manager Semantic Data, joined Springer 4 years as Data Manager for the Springer Book Archives project, retro-digitizing 110.000 books from the company's rich history. Gradually moving from big data consolidation to semantic enrichment, he covered Named Entity Recognition (NER), automatic document classification and structuring of unstructured bibliographic references before finally managing the lod.springer.com project, Springer's Linked Open Data (LOD) platform for conference proceedings published in Computer Science. After the merger with Nature and successful metadata migrations for Palgrave Macmillan and Metzler Markus is now product owner of Springer Nature SciGraph – which overcomes former scholarly boundaries by relating comprehensive information of the research landscape.