

# **10th International Conference on Science and Technology Indicators**

**Excellence and Emergence – A new Challenge for  
the Combination of Quantitative and Qualitative  
Approaches**

**Vienna, 17th–20th Sept. 2008**

**<http://sti2008.at/>**

**ESF Member Forum on Evaluation of Funding Schemes and  
Research Programmes  
October 6th -7th 2008**

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- **Theme 1**  
**Quantitative and qualitative approaches: a special focus in evaluation of the academic performance;**
- **Theme 2**  
**S&T indicators for the identification of emerging fields;**
- **Theme 3**  
**Disciplinary relevance of bibliometric indicators: Science and Technology, Social Sciences and Humanities;**
- **Theme 4**  
**Interactions between Open Access initiatives and scientometrics;**
- **Theme 5**  
**Visualisation and Science Mapping: tools, methods and applications;**
- **Theme 6**  
**Accuracy and reliability of data sources for scientometric studies;**
- **Theme 7**  
**Management and measurement of bibliometric data within scientific organisations.**

**Pre-Conference Workshops**

- **QUALITY AND IMPACT OF THE SOCIAL SCIENCES**

*Chaired by Dorothea Sturn*

- **INTRODUCTION TO SCIENCE MAPPING WITH BibTechMon**

*Chaired by Edgar Schiebel*

## Keynotes:

- **Mesasuring quality and impact of the Social Sciences – concepts, opportunities and drawbacks**  
*A.F.J. van Raan (CWTS, Univ.Leiden)*
- **Social Science and Society: Looking for rules of engagement**  
*R.Zintl (Univ.Bamberg)*

## Panel discussion

- **Perspectives of different Stakeholders**  
*H.D.Daniel (ETH Zürich, Chair), L.Butler (Australian National Univ.) G.Falkner (Univ.Vienna), U.Felt (Univ.Vienna), C.Kratky (FWF, President)*

**some important points:**

- great differences between disciplines in Social Sciences regarding approaches to international visibility, scientometrics, etc.;
- different „markets“ for social sciences: the „science market“ and the „society market“ – to be taken into account when impact of social sciences is discussed;
- great differences in publications practices and citation periods between and even within different disciplines;
- some disciplines well covered by the WoS (psychology, economy, ...), others not (law, political sciences ...);
- non-WoS publications receive increasing attention and gain importance;
- language: non-english publications face great problems with citation rates (even in WoS-covered journals);
- orientation towards quality and transparency (peer review) still needs improvement in the social sciences (especially in Continental Europe).

## **Opening**

- **MEASURING SCIENCE**

*Keynote: Anthony van Raan*

- **MEASURING TECHNOLOGY AND INNOVATION**

*Keynote: Hariolf Grupp*

## SELECTED TOPICS

*Chaired by Henk Moed*

- **COMPARING WEB OF SCIENCE AND SCOPUS ON A PAPER-BY-PAPER BASIS**  
*Visser, Martijn; Moed, Henk F*
- **ANIMATIONS OF JOURNAL MAPS: VISUALIZATIONS OF INTERDISCIPLINARY DEVELOPMENTS AND STRUCTURAL CHANGE**  
*Leydesdorff, Loet*

## COMPARING WEB OF SCIENCE AND SCOPUS ON A PAPER-BY-PAPER BASIS

*Visser, Martijn; Moed, Henk F*

- **Research question:** degree of overlap between WoS and Scopus in various domains of science and scholarship examined in two datasets:
  - 1) papers submitted in the 2001 RAE in UK
  - 2) ACM and IEEE computer science conference papers
- **Results:**

increase of coverage of WoS papers by Scopus from 1996 to 2005:

in science related fields	from 93% to 97%
in Soc.Sci and Hum.	from 57% to 72%
- **Conclusion:** Scopus is a genuine alternative to WoS, however, the effects of the differences between both have to be analyzed carefully, before existing bibliometric indicators are applied.



<p><b>A1 INSTITUTIONAL PERFORMANCE</b></p> <p><i>Chaired by Linda Butler</i></p>	<p><b>B1 MAPPING SCIENCE</b></p> <p><i>Chaired by Edgar Schiebel</i></p>	<p><b>C1 FACTORS INFLUENCING EXCELLENCE</b></p> <p><i>Chaired by Aparna Basu</i></p>
<p><b>A2 (SUPRA) NATIONAL PERFORMANCE</b></p> <p><i>Chaired by Thed Van Leeuwen</i></p>	<p><b>B2 NEW DATABASES AND THEIR INDICATORS</b></p> <p><i>Chaired by Wolfgang Mayer</i></p>	<p><b>C2 METHODOLOGICAL ASPECTS OF FIELD STUDIES</b></p> <p><i>Chaired by Martin Fieder</i></p>

## SCIENCE POLICY

*Chaired by Grant Lewison*

- **EVIDENCE-BASED BIBLIOMETRICS: A DECADE OF BIBLIOMETRICS-BASED SCIENCE POLICY IN FLANDERS**  
*Debackere, Koenraad; Glänzel, Wolfgang*
- **EXPERIENCES WITH A BIBLIOMETRIC MODEL FOR PERFORMANCE BASED FUNDING OF RESEARCH INSTITUTIONS**  
*Sivertsen, Gunnar*
- **MODELLING THE OUTCOMES OF THE 2001 UK RESEARCH ASSESSMENT EXERCISE WITH METRICS: DIVERSE RESULTS FOR CHEMISTRY AND POLITICAL SCIENCE**  
*Butler, Linda; McAllister, Ian*

## EVIDENCE-BASED BIBLIOMETRICS: A DECADE OF BIBLIOMETRICS-BASED SCIENCE POLICY IN FLANDERS

*Debackere, Koenraad; Glänzel, Wolfgang*

- *Problem: science policy relies heavily on bibliometric based evaluation and allocation rules, both for funding curiosity driven as well as industry relevant research on universities.*
- *Methods: The construction and evolution of the respective toolbox is described -> including now multiple data sources (SCIE, SSCI, A&HCI, ISI Proc.), weighting schemes, impact factors.*
- *Results/ Effects:*
  - > *increase of intra-university awareness;*
  - > *tensions, but focus on res.output & visibility;*
  - > *critical review of internal funding instruments and assessment procedures*
- *Conclusion: Bibliometric-based science policy is prone to many pitfalls, but: informed use of bibliometrics and indicators increases science policy process as such.*

<p><b>A3 INTERDISCIPLINARY &amp; TRANSLATIONAL RESEARCH</b> <i>Chaired by <b>Éric Archambault</b></i></p>	<p><b>B3 SCIENCE POLICY AND FUNDING</b> <i>Chaired by <b>Kevin Boyack</b></i></p>	<p><b>C3 UNIVERSITY- INDUSTRY COOPERATION</b> <i>Chaired by <b>Ulrich Schmoch</b></i></p>
<p><b>A4 OPEN ACCESS &amp; BIBLIOMETRICS</b> <i>Chaired by <b>Leo Egghe</b></i></p>	<p><b>B4 THEORETICAL REFLECTIONS ON BIBLIOMETRIC METHODOLOGIES</b> <i>Chaired by <b>Stefan Hornbostel</b></i></p>	<p><b>C4 NEW S&amp;T INDICATORS</b> <i>Chaired by <b>Peter Vinkler</b></i></p>
<p><b>A5 NEW DATA SOURCES</b> <i>Chaired by <b>Ronald Rousseau</b></i></p>	<p><b>B5 SOCIAL SCIENCES AND HUMANITIES</b> <i>Chaired by <b>Isabel Gómez</b></i></p>	<p><b>C5 H-INDEX AND RELATED INDICES</b> <i>Chaired by <b>Michel Zitt</b></i></p>

## NEW SCIENCE INDICATORS

*Chaired by Liwen Vaughan*

- **FIELD NORMALIZATION OF IMPACT FACTORS: A CITING SIDE APPROACH**  
*Zitt, Michel; Small, Henry*
- **METHODOLOGICAL FOUNDATIONS OF SUBFIELD-SPECIFIC NORMALISED RELATIVE INDICATORS AND A NEW GENERATION OF RELATIONAL CHARTS**  
*Glänzel, Wolfgang; Thijs, Bart; Schubert, András; Debackere, Koenraad*
- **THE Pi-INDEX. A NEW INDICATOR CHARACTERIZING THE IMPACT OF JOURNALS**  
*Vinkler, Peter*

## **SOME GENERAL „CONCLUSIONS“**

- „discipline-specific“ approaches and methods (indicators) are considered of central importance;
- recent developments of databases (WoS – SCOPUS – Google Scholar) and their use open up new opportunities;
- „mapping of science“ a growing field;
- „open access publishing“ and its implications are gaining importance;
- combination of quantitative (indicators) and qualitative (peer review) methods should be mandatory;
- development of appropriate indicators and scientometrics in the social sciences and humanities is a still pending problem.

Think well, act carefully (selection of indicators!), consider different views, etc., etc.

papers will be published in

- Research Evaluation
- Research Policy
- Scientometrics