

Preface

Ming-Yueh Tsay

Received: 16 March 2012 / Published online: 13 April 2012
© Akadémiai Kiadó, Budapest, Hungary 2012

Growth and characteristics of scientometric study in Taiwan

Scientometric research in Taiwan had begun since 1989, when M.-Y. Tsay published her paper entitled “Bibliometric study of the application of computers in synthetic organic, physical inorganic and analytical chemistry literature abstracted by Chemical Abstracts in 1986” in *Journal of Chemical Information and Computer Sciences* in 1989 and then two papers in 1995 and 2000, respectively. Since then, the number of journal papers on scientometric research in Taiwan has grown exponentially, as shown in Fig. 1. Tsay also published a textbook on informetrics in Chinese in 2003, which may also be a significant driving force for the scientometric study in Taiwan. Therefore, Professor Tibor Braun, editor-in-chief of *Scientometrics* thought that it is the time to publish a special issue on “Scientometric Research in Taiwan” in the summer of 2011.

From 1989 to 2011, the total number of paper, authored by 241 Taiwan researchers from 104 institutes is 156. Figure 1 demonstrates that the number of scientometric paper produced in Taiwan has really grown exponentially in the last two decades. The average annual growth rate is 35.9 %.

Scientometric researches in Taiwan accumulated have covered a broad range of subject areas, as listed in Table 1. Among them, the information science and library science is the major subject category followed by computer science, business economics, engineering, operations research management science, environmental sciences ecology, chemistry, public administration, respectively.

The author keywords of these papers, as shown in Table 2, also reflect the broad scope of scientometric study in Taiwan until now. In total, there are 334 keywords. Table 2 indicates that scientometrics, bibliometric analysis, bibliometrics, citation analysis, research trend and patent citation are among the top of the list. This may suggest that the scientometric research in Taiwan focus on scientometric or bibliometric study, and is consistent with the distribution of subject areas, as discussed previously.

M.-Y. Tsay (✉)
Graduate Institute of Library, Information and Archival Studies, National Chengchi University,
64, Section 2, Chinan Road, Wenshan Section, Taipei, Taiwan 116, Republic of China
e-mail: mytsay@nccu.edu.tw

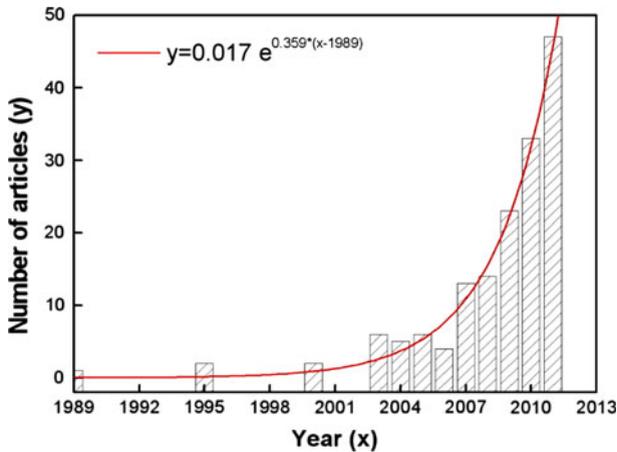


Fig. 1 The growth of journal papers on scientometric research in Taiwan. The data was collected based on the keyword, i.e., “bibliometric*” or “citation analysis” or “informetric*” or “scientometric*” with truncation search on the topic from WOS, plus papers published in the *Scientometrics* by the Taiwan researchers

Table 1 Subject area of scientometric research in Taiwan, 1988–2011

Subject area	No. of papers ^a
Information science library science	99
Computer science	96
Business economics	17
Engineering	12
Operations research management science	9
Environmental sciences ecology	4
Chemistry	4
Public administration	4
Others (in total)	39

^a A paper may be categorized in multiple subject areas

Summary of the studies in the special issue

The response to the call-for-papers on the special issue was very positive and enthusiastic, though the time frame was really very short. After peer review, 13 full-length papers were accepted for publication in the special issue on “Scientometric Research in Taiwan”. These papers may be divided into four major categories: general bibliometric study, patent analysis, research assessment and the use of bibliographic tool. The content for each paper is summarized as follows:

General bibliometric study in Taiwan

1. Title: Bibliometric characteristics of highly cited papers in Taiwan from 2000 to 2009. The study, based on the Thomson Reuters’ essential science indicatorsSM (ESI), explores the top 1 % of the most highly cited papers in Taiwan based on the citation thresholds for each subject category and publication year. The authors analyze