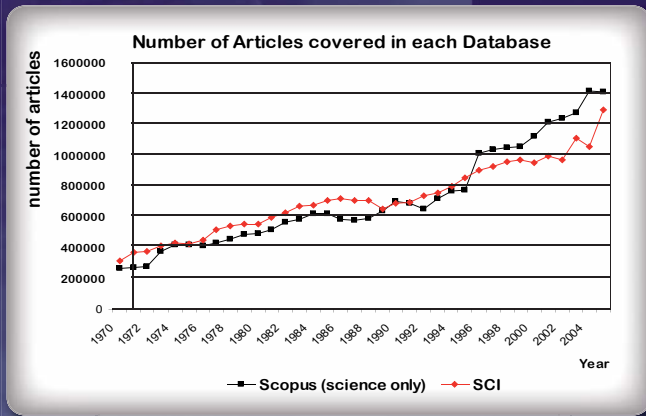




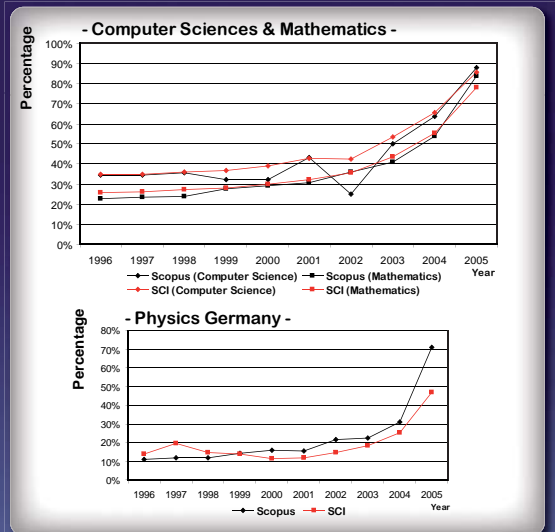
1 Starting Basis for Bibliometric Analyses



Despite an allegedly substantially bigger database, Scopus only shows a larger data pool than ISI's Science Citation Index from 1996 onwards. The number of publicly available journals evaluated in Scopus is misleading in that it should be almost twice as high.

Almost every year before 1996, Scopus failed to equal the number of articles held by SCI. This analysis was based on all of the articles published by institutions in the STM sector.

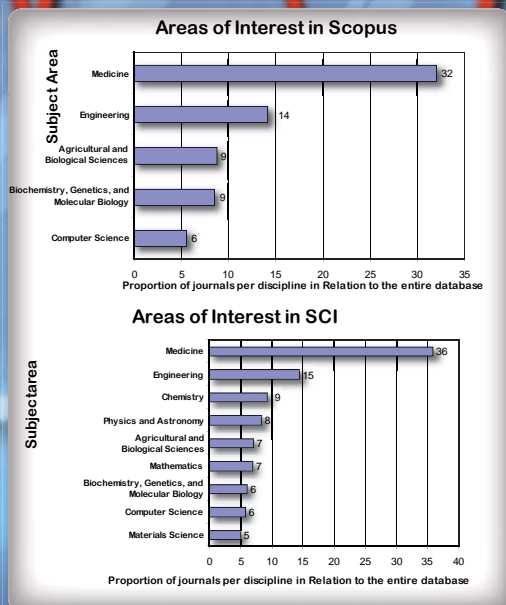
2 Trends and Proportions of Non-Cited Articles



The proportion of non-cited articles in both databases is comparable for the first subject domains analysed, namely computer science and mathematics. It can be said that the differences between the two databases are very small here.

However, if we analyse physics articles with German involvement for example, variations between the two databases are detected for the entire analysis period. For part of this period (1999 – 2005), these variations are to Scopus's disadvantage: the proportion of non-cited articles is significantly higher.

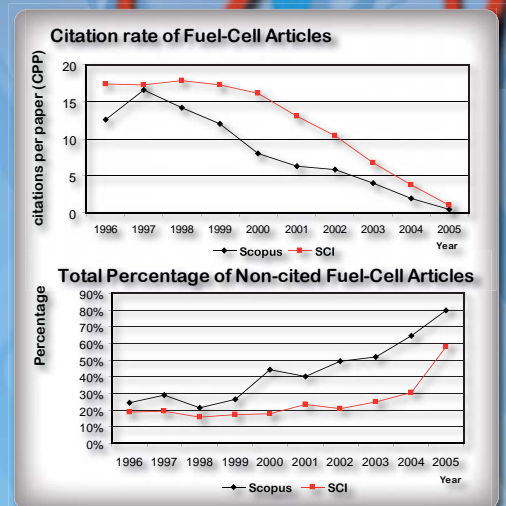
3 Thematic Focus of Both Databases



Both of the databases have developed different areas of interest. Areas of interest are considered to be all subject areas, whose proportion of the journals in relation to the total number of the respective journal is no less than 5%. Multi-classifications are possible here.

In both SCI and Scopus, the primary emphasis is on medicine, which accounts for approximately one third of each of the databases. Other areas of interest follow but these vary considerably between the two databases. Compared to SCI, Scopus has fewer areas of interest. All of the areas of interest in Scopus are also areas of interest in SCI, albeit with different intensities.

4 Bibliometric Analysis of the Topic „Fuel Cells“



Both databases were compared on the basis of a bibliometric analysis on the topic of "fuel cells". The same keywords underlay this analysis. The citation rates (CPP) of each of the articles identified were found to be higher for all years in the SCI database than in Scopus. The articles from the analysis on the same topic had a citation rate of 12 citations per article in SCI, and only 8 citations per article in Scopus.

It becomes clear that the proportion of non-cited publications in Scopus is much higher for all years and lies at 43% on average. SCI achieved an average of 24%. The claim that users can find relevant articles quicker in Scopus has thus been disproved.

Summary and conclusions: depending on what data is used as the basis for bibliometric analyses in the future, different conclusions can be drawn. The reasons why one database and not the other was chosen will have to be justified. What impacts two databases with similar contents have on the process of scientific communication will also have to be investigated. At the moment, it looks as if both databases are trying to develop their periodicals collections parallel to each other – on the one hand in terms of breadth (Scopus) and on the other in terms of depth (SCI).