THE RESEARCH PUBLISHED IN OIL SHALE: HOW IT LOOKS IN BIBLIOMETRIC INDICATORS

The bibliometric analysis has become a widely used tool for evaluation of the scientific quality of published research papers. Many funding agencies continue to explore the potential of bibliometric indicators to have a greater role in research quality assessment. Various aspects of bibliometric indicators have been intensely discussed and the overall understanding is that bibliometrics should only be used alongside other esteem measures and peer review, if it comes to rating researchers, teams or institutions. A popular way of estimating the impact of a publication or a research journal is to count the number of times they have been cited. Often the number of citations is taken as a measure of the attention the journal or a publication has received and of its importance within the research community. The following is a short review of the journal Oil Shale in terms of quantity and quality of the scientific publications and impact based on the Web of Science (WoS) and the Essential Science Indicators (ESI) of Thomson Reuters, and Elsevier (Scopus). These are continuously developed databases and analytical tools that allow to follow bibliometric indicators through time to be useful for the authors and editors of the journal. Journal Oil Shale positions into the subject category of Energy and Fuels of WoS that covers altogether 79 scholarly periodicals. At the date of a search (23.10.2011) the citation indexes in the WoS revealed 762 publications (801 in Scopus) that were published in Oil Shale and cited a total of 1623 times (1315 in Scopus). Contributing authors of Oil Shale originate most frequently from Estonia (451 articles have at least one author from Estonia), People's Republic of China (P.R.C.) (60), Turkey (38), Russia (30) and Jordan (14), all together from 27 countries. The authors ranking list in terms of number of publications is led by E. Reinsalu (21 articles in Oil Shale according to the WoS), L. Tiikma (21), I. Johannes (20), V. Yefimov (20) and H. Arro (19) – all from Tallinn University of Technology, Estonia.

The highest impact factor (IF – the average number of times the published articles in a particular journal have been cited in the previous two years) Oil Shale has reached, was 0.815 in 2009. First citations to articles published in Oil Shale appeared in WoS in 1996 (19 citations). Since then citation has grown more than tenfold (219 citations in 2010) being 101 as an
average per year. Overall average number of citations per published item in *Oil Shale* is 2.13, but it varies considerably between different types of articles. Papers in conference proceedings (34 articles) have gained the highest attention of scientific community (4.82 citations per article), which is considerably higher than that of review papers (2.95) and original research articles (2.47), not to speak of editorials (0.91). This is an argument for supporting the publication of more special volumes of *Oil Shale* with fair but rigorous selection of manuscripts.

Without self-citations, *Oil Shale* articles have been cited 816 times in 785 publications, most frequently by authors from Estonia (388 times), P.R.C. (91), Turkey (69), USA (53) and Jordan (37). Other research journals in the *Energy and Fuels* subject area of WoS where the publications of *Oil Shale* have been most often cited are *Journal of Thermal Analysis and Calorimetry* (IF = 1.752), *Fuel* (IF = 3.604) and *Energy & Fuels* (IF = 2.444). These are high impact journals and should also be considered as potential places of publication of relevant works. The most frequently cited authors of *Oil Shale* are R. Kuusik (143 citations), H. Arro (108) and A. Prikk (102) – again from Tallinn University of Technology, Estonia.

Finally, the most frequently cited papers published in *Oil Shale* are:


**Volli KALM**
Professor of Geology
University of Tartu
Estonia