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# INCITES CUSTOM COMPARISONS REPORT

PREPARED EXCLUSIVELY FOR:

## Slovak Academy of Sciences

This regional research report presents how you can use InCites advanced normalized bibliometric methodologies and reporting capabilities for the academic research performance evaluation of your scientific output.

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## CITATION ANALYSIS AND BIBLIOMETRIC METHODOLOGIES IN RESEARCH ASSESSMENT

Every research paper can be considered a countable end product of research in its final and public form containing the citations to the work of other researchers as an indicator of scientific impact. The term citation analysis refers to the analysis of data derived from several references cited in various bibliographies and/or footnotes of academic publications. Citation analysis has proved to be a powerful and popular method of examining and mapping intellectual impact at various levels, including that of a paper, individual researcher, faculty/department, institutional and at the national/international level. Citation analysis and bibliometrics methodologies have been efficiently used by several academic and research institutions mainly for research policy making and decision making, visualization of scholarly networks, monitoring scientific developments, promotions, tenure and allocation of research funds in higher education.

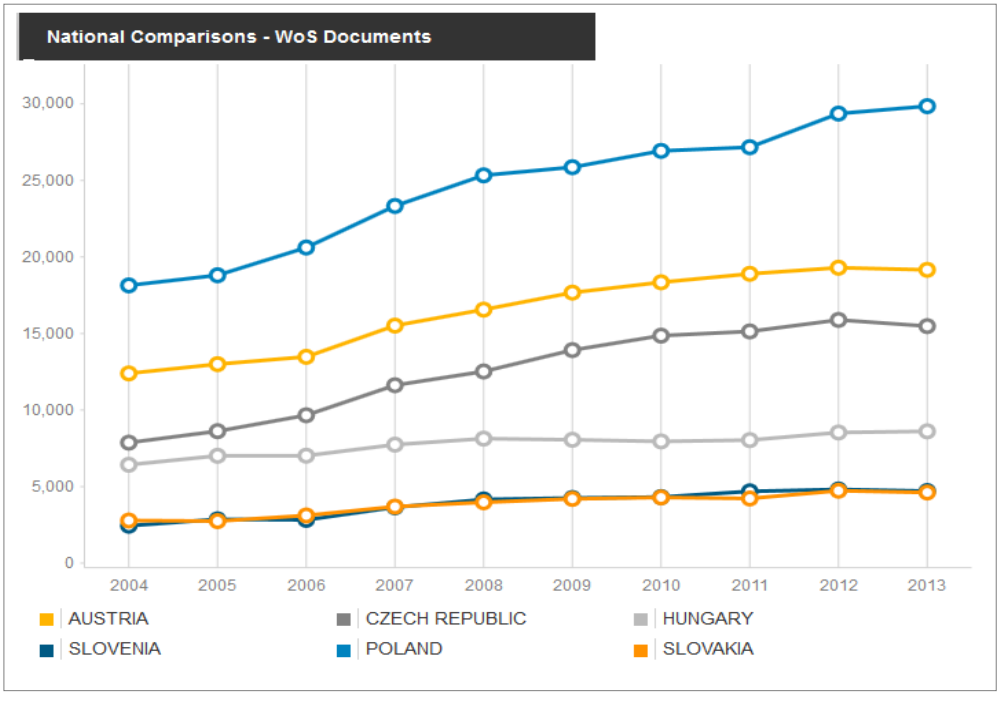
## THE USE OF INCITES IN RESEARCH PERFORMANCE EVALUATION

InCites is a customized online citation based research evaluation tool that allows academic and government administrators to analyse their productivity and benchmark their output against peers worldwide using advanced normalised bibliometrics methodologies. InCites uses citation analysis and allows you to produce various key quantitative based performance indicators in order to monitor the productivity and scientific impact of your research output at various organisational levels, e.g. a single publication, an individual researcher, a faculty/department, an institution, a journal, a research field and at the national/international level.

InCites advanced bibliometrics methodologies could be used to:

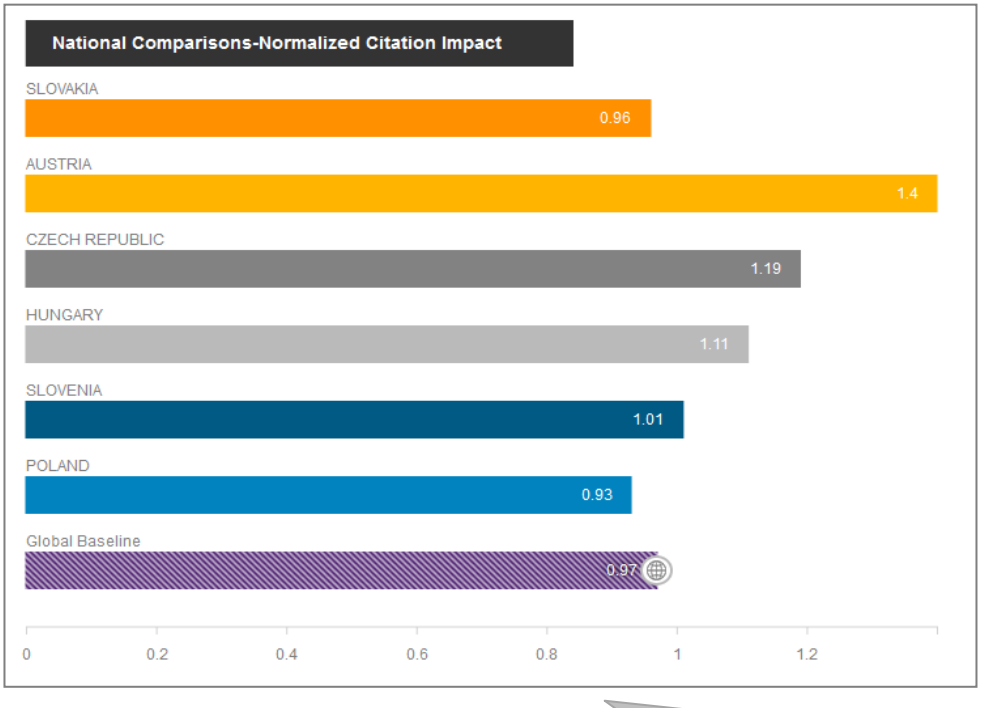
- Monitor the scientific developments of your institution and benchmark your research performance with the international standards
- Identify the most impactful domestic/international collaborations with meaningful visualizations, track new potential collaboration opportunities and develop strategic partnerships
- Provide key quantitative based performance indicators as accountability measures to support new funding proposals or to monitor the performance of the projects already funded
- Improving decision making procedures and research policy making.

## GRAPH 1. NATIONAL RESEARCH OUTPUT



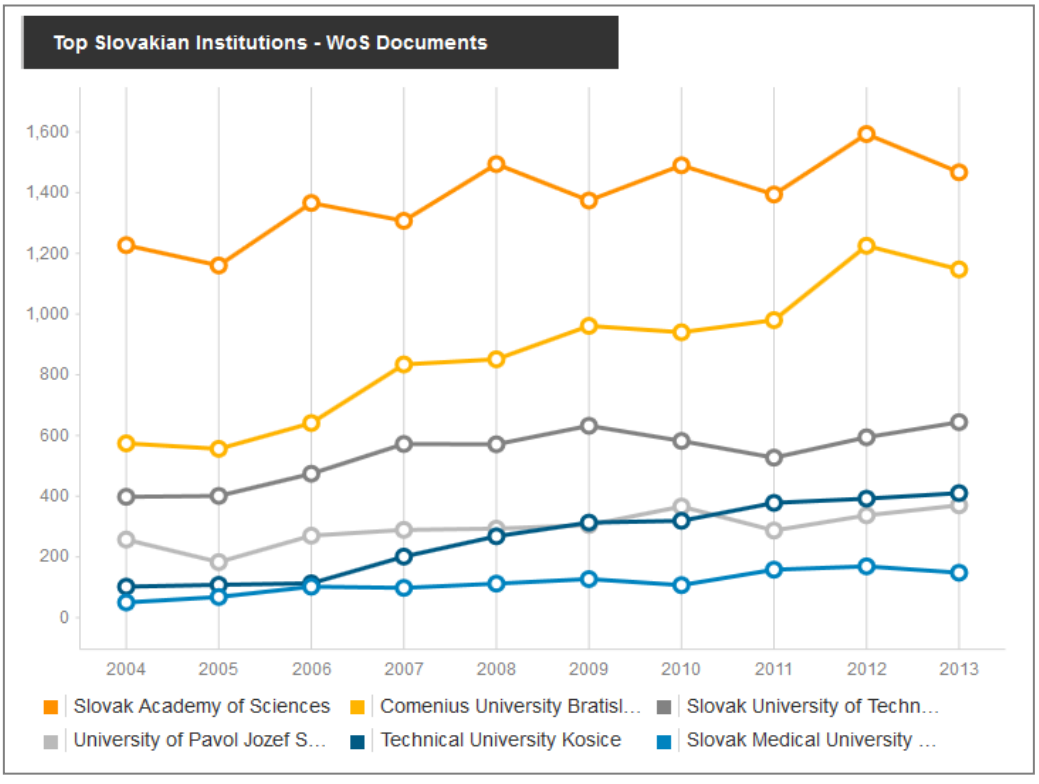

Graph 1 shows research output as measured by the number of publications produced by Slovakia and other neighbor countries for the time period 2004-2013. When assessing the volumes of research output at the institutional and/or national level, certain factors need to be considered, such as the publication practices and the fields of research that an institution/country is active in.

## GRAPH 2. NATIONAL NORMALIZED CITATION IMPACT



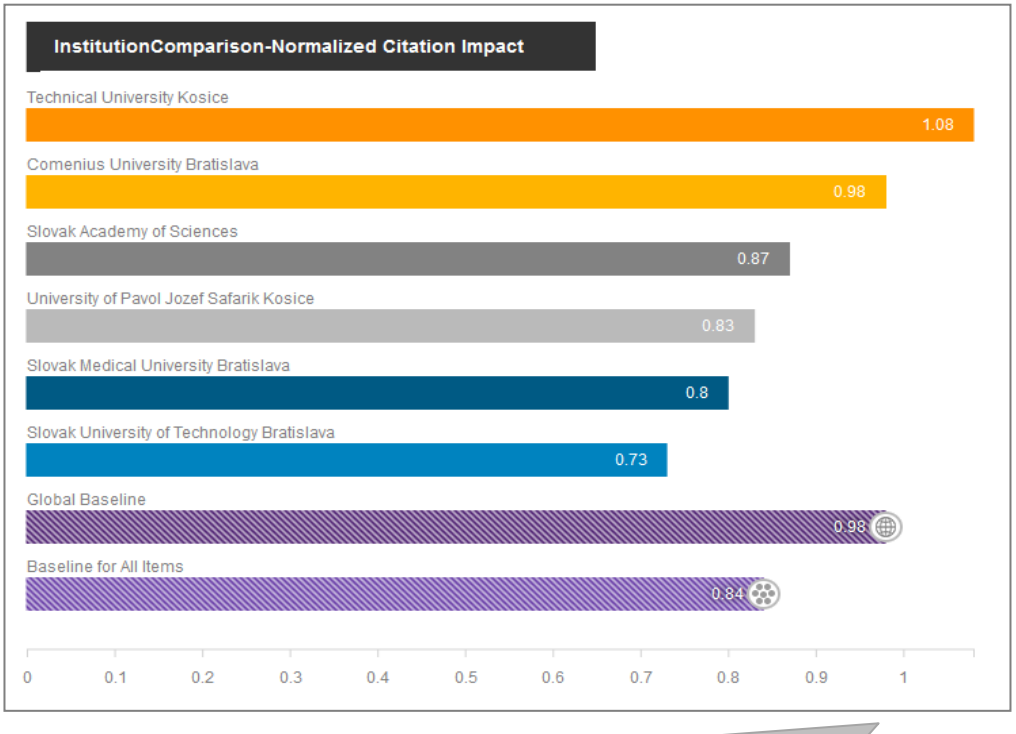

Graph 2 shows the normalized citation impact (NCI) as compared to the world average for Slovakia and other neighbor countries, as found in InCites for the time period 2009-2013. The world average is always 1. If the NCI exceeds the value of 1, it means that the country is performing better than the world average. If it is below 1, it means that it is performing lower than the world average.

## GRAPH 3. INSTITUTIONAL RESEARCH OUTPUT



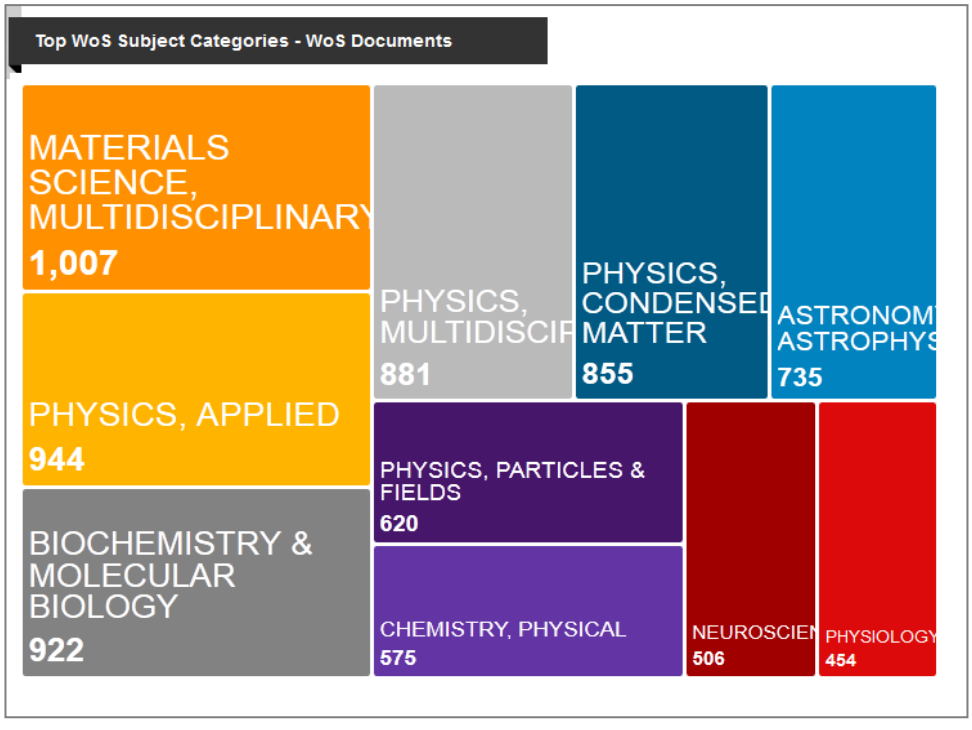

Graph 3 shows the change in research output over time as measured by the number of publications produced by the Slovak Academy of Sciences and other Slovak institutions, as found in InCites for the time period 2004-2013.

## GRAPH 4. INSTITUTIONAL NORMALIZED CITATION IMPACT



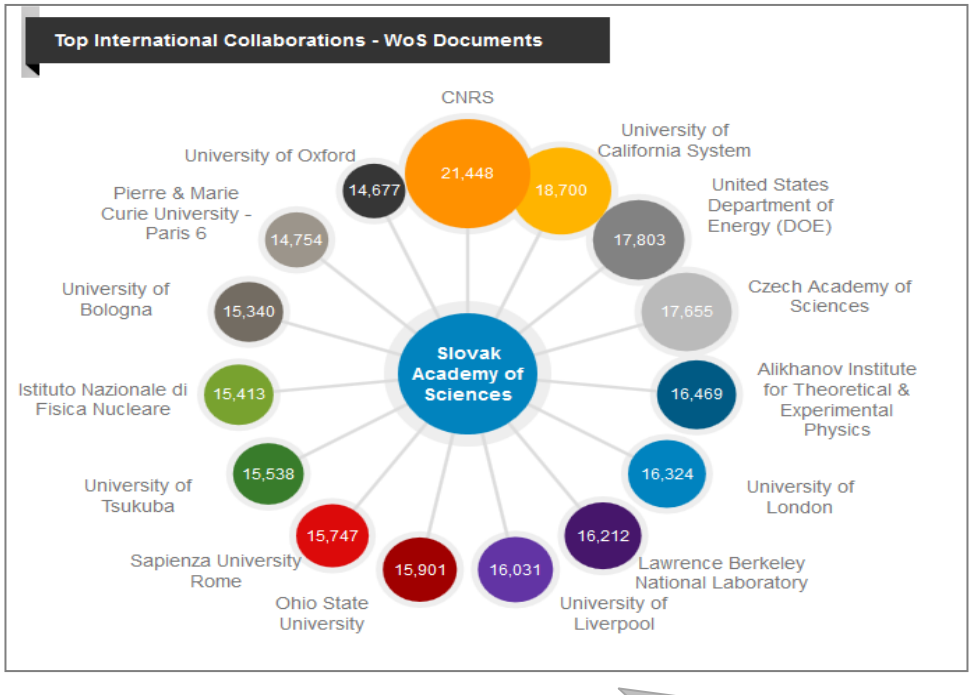

Graph 4 shows the normalized citation impact (NCI) as compared to the world average for the Slovak Academy of Sciences and other Slovak institutions, as found in InCites for the time period 2004-2013. The world average is always 1. If the NCI exceeds the value of 1, it means that the country is performing better than the world average. If it is below the value of 1, it means that it is performing lower than the world average.

## GRAPH 5. RESEARCH OUTPUT BY SUBJECT AREAS




Graph 5 shows the top 10 Web of Science subject categories in which researchers of the Slovak Academy of Sciences have mostly published between 2004 and 2013. The most productive subject categories are Materials Science, Applied Physics, and Biochemistry & Molecular Biology.

## GRAPH 6. TOP INTERNATIONAL COLLABORATIONS



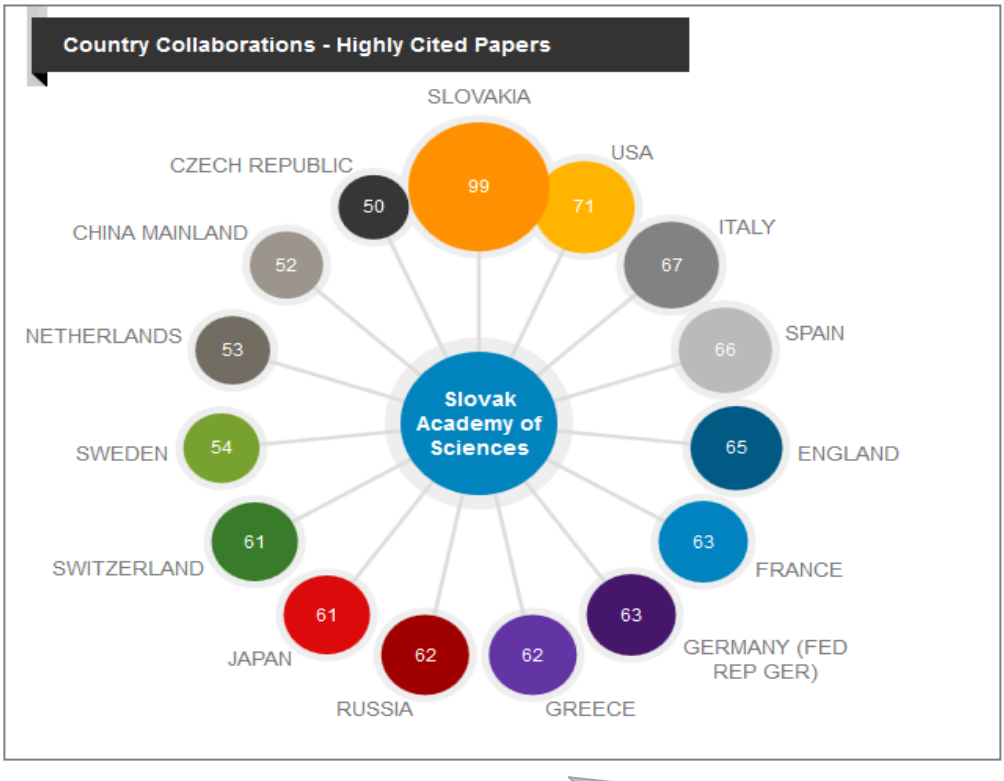

Graph 6 shows the top international collaborations of the Slovak Academy of Sciences between 2004 and 2013, in terms of number of documents. International collaborations are regarded as indicators of quality, a way to develop and disseminate scientific knowledge and are considered to be a driver of scientific impact (number of citations).

## TABLE 1. JOURNAL ANALYSIS

| The 5 journals where Slovak Academy of Sciences researchers have mostly published in the last 10 years | Publications | Citations | Impact Factor Quartiles | ESI Ranked |
|---|---|---|---|---|
| BIOLOGIA | 283 | 888 | Q4 | NO |
| PHYSICAL REVIEW LETTERS | 235 | 6375 | Q1 | YES |
| PHYSICAL REVIEW D | 232 | 3113 | Q1 | YES |
| PHYSICS LETTERS B | 162 | 5332 | Q1 | YES |
| SUPERCONDUCT SCIENCE & TECHNOLOGY | 142 | 1,365 | Q1 | YES |

Table 1 shows the top 5 journals in which Slovak Academy of Sciences researchers have mostly published between 2004 and 2014. The quartiles are based on the 2013 Journal Impact factors. If the journal is ESI ranked, it means that it is ranked within 50% of the most cited journals of its categories in the past 10 years.

## GRAPH 7. COLLABORATIONS BY MOST HIGHLY CITED PAPERS




Graph 6 shows the top 15 collaborating countries with which the Slovak Academy of Sciences produces the largest number of highly cited papers between 2004 and 2014. Highly cited papers are considered to be indicators of scientific excellence and top research performance.

# ESSENTIAL SCIENCE INDICATORS GLOBAL INSTITUTIONAL RANKINGS: SLOVAK ACADEMY OF SCIENCES

**518**

**Global Ranking for the Total Number of Publications**

*InCites™ Essential Science Indicators*

**649**

**Global Ranking for the Total Number of Citations**

*InCites™ Essential Science Indicators*

**1,012**

**Global Ranking for Citations Per Paper**

*InCites™ Essential Science Indicators*

**99**

**Number of Highly Cited Papers (Top 1%)**

*InCites™ Essential Science Indicators*

The InCites™ Essential Science Indicators are based on 10 years of publications indexed in the Web of Science Core Collection.

When we rank institutions by number of publications (articles, reviews and proceedings papers), the Slovak Academy of Sciences ranks 518th.

When we study the total number of citations received by these papers (absolute impact), the Slovak Academy of Sciences ranks 649th.

When ranked by average impact per publication, the Slovak Academy of Sciences is 1,012th.

The Slovak Academy of Sciences has published 99 Highly Cited papers in the last 10 years. These papers are within the 1% of the most cited papers in their categories.

InCites™ Essential Science Indicators can be used to benchmark the research performance of authors, institutions, countries, journals, and papers against field baselines and keep up on global research trends by monitoring the highly cited and hot papers, and research fronts, in a range of disciplines.

# SUMMARY

We hope you have found the information delivered in your report to be unique, insightful, and of practical use. By delivering reliable data on research performance and complementing it with baseline statistics for benchmarking against peers and aspirational peers, Thomson Reuters enables research leaders like you to make confident, informed decisions.

Whatever your institution's particular requirements are - whether it's a one-off performance report, a fully-integrated platform for ongoing evaluation, or a more in-depth personalized consultation and analysis — Thomson Reuters has a solution to fit.

For more information about our solutions for evaluating and managing research at your institution, please contact David Horky using the information provided below.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