

## The most important concepts and definitions

**AFFILIATION** - it should be understood as the place where research or development activities are carried out, the results of which form the basis for the preparation of a scientific publication or a scientific monograph.

If the author indicates many affiliations in one scientific publication or scientific monograph, only one unit chosen by the author may receive credits. If no individual has been chosen by the author [...], they are included in the achievements of this individual, in which the author is included in the N number (Journal of Law of 2016 item 2154, § 2 point 13, § 14 point 3).

**SPREAD SHEET** - a unit of measurement used in publishing houses in order to determine the content size (text and graphic) of the publication. The one spreadsheet contains: - 40,000 typographic characters (with spaces) of prose, or - 700 lines of poetry, or - 800 lines of text (50 characters), or - 3000 cm<sup>2</sup> of illustration (also music notation, mathematical, chemical ... , diagrams). When computing the spreadsheet, we take into account all the elements within the published version of the text: headings, footers, page numbers, page headers, abstracts, bibliography, etc.

**SCIENTIFIC ARTICLE** - an article of scientific character should be understood as an article presenting the results of original research of empirical, theoretical, technical or analytical character containing the title of publications, names of authors and presenting the current state of knowledge, research methodology, the course of the research process, its results and conclusions, with reference to the quoted literature (bibliography) of a size of 0.5 spreadsheet. Scientific articles also include monographic, polemical or review papers published in scientific journals, as well as legal statements or comments (The Ministry of Science and Higher Education).

Types of articles (according to the Pol-Index system)

**ORIGINAL SCIENTIFIC ARTICLE** - a scientific article presenting the results of original research of empirical, theoretical, technical or analytical character. These includes also monographic articles, conference articles and scientific essays.

**REVIEW ARTICLE** - a scientific article summarizing the current state of knowledge in a given research area. The review article integrates and interprets the foregoing

results of original scientific research, but does not have to include original research results.

STATEMENT PRESENTING RESEARCH RESULTS - short (usually 1 to 3 pages) scientific article describing the preliminary results of empirical research of special significance, course and preliminary results of original experimental research or original technical solutions.

LEGAL STATEMENT OR COMMENTARY - legal article containing original results of analytical character.

REVIEW ARTICLE (SCIENTIFIC REVIEW) - a scientific article containing a critical analysis and evaluation of a scientific publication, a literary work or a work of art, can be published as part of a polemic discussion.

CASE STUDY - a publication which serves as an analysis of a given case (usually actual) giving the opportunity to draw conclusions about the causes and results of the case or the event described in it. It is a typical publication of magazines in the field of medical and social sciences.

GUIDELINES / RECOMMENDATIONS - a review publication which is a description of guidelines and recommendations for dealing with specific cases. This publication is characteristic for magazines of medical sciences.

POPULAR SCIENCE ARTICLE - a publication popularizing scientific issues among readers who are not specialists in a given field.

OTHERS PUBLICATIONS OF A CITING CHARACTER - publications included in the scientific journal not listed above, which have the potential to be a cited publication, what means that they are generally cited in scientific journals, have bibliographical references and are subject to a review process.

OTHER PUBLICATIONS NOT TO BE QUOTED - publications in the scientific journal not mentioned above, e.g. erratum, biographical notes, reports, prefaces, afterwords, editorials, obituaries, announcements, letters to the editor, reviews (non-scientific) and other articles that are not generally quoted by the authors of other publications, they also do not have bibliographical references and are not usually subject to review.

BASIC RESEARCH - original research of experimental or theoretical character primarily undertaken to acquire new knowledge about the basics of phenomena

and noticeable facts, without any direct commercial use (Journal of Laws of 2016 item. 2045, art. 2 point 3a )

CEJSH Database (The Central European Journal of Social Sciences and Humanities) - an electronic, open-access database publishing English abstracts of articles and reviews that appear mostly in national languages in scientific journals devoted to social sciences and humanities

QUOTING - if a given publication contain something important to contribute to science, it is often cited by the authors of other publications - the number of quotations of a given publication is therefore a good measure of its value. Therefore, this is the basis for the citation rate (Impact Factor, Copernicus index, Hirsch index). It is created based on a database of citations of scientific publications. To determine the number of citations the following citation indexing services can be used: Web of Science, Scopus, Publish or Perish, Google Scholar.

DOI - (digital object identifier) digital document identifier given by the Crossref database. These numbers are permanently assigned to it, so as a result finding an electronic document using special databases is not a problem.

EXPERIENCED SCIENTIST – a person who has a doctoral degree, who during 10 years before making request for granting funds for research or development work:

- a) published at least five publications in prestigious Polish or foreign scientific journals,
- b) was responsible for implementation of research projects
- c) meets at least three of the following criteria:
  - was a member of scientific committee of at least one prestigious international conference
  - has published at least one monograph
  - gave an oral presentations during prestigious international conferences
  - won an international prize or award
  - is or was a member of the recognized associations, international scientific organizations or academies

- has other significant academic achievements and, in the case of a scientific activity in the field of creativity and art – a person who is the author of the artistic works of international importance or significance for Polish culture and took part in international exhibitions, festivals or art, music, theatre and film events (Journal of Laws of 2016 item 1071, art. 2 point 4)

DSM (GRANT FOR YOUNG RESEARCHERS) - is a subsidy granted for a specific activity that includes conducting scientific research or development works, but also tasks related to these works, serving the development of young scientists and doctoral students (Journal of Laws of 2015 item 1443 § 2 point 2)

RESEARCH AND DEVELOPMENT ACTIVITIES - creative activity involving scientific research or development work, regularly undertaken to increase knowledge and use of knowledge resources to create new applications (Journal of Laws of 2016 item 2045, art. 2 point 6).

STATUTORY ACTIVITY - execution of tasks specified in the statute of the scientific unit, regularly conducted by this unit, related to the research or development activities (Journal of Laws of 2016 item 2045, art. 2 point 7).

DUN DZIAŁALNOŚĆ UPOWSZECHNIAJĄCA NAUKĘ (Activity popularizing science) - execution of tasks supporting the development of Polish science through popularization and promotion of innovative research and development activity (also of international character), as well as execution of tasks related to the maintenance of resources of great importance for science and its heritage, where conducting scientific research or development works is not included (Journal of Laws of 2016 item 2045, art. 2 point 8).

IMPACT FACTOR (IF) - measure of the frequency with which the average article in a journal has been cited - is a measure reflecting the yearly average number of citations to recent articles published in a journal within previous 2 years to the total number of articles posted in it in the same period. Impact Factors are stored the Journal Citation Reports (JCR).

INDEX COPERNICUS - (IC) is an online database of user-contributed information that evaluate the quality of journals based on the validation of approximately 30 parameters grouped in five categories: scientific value, editorial diligence, technical diligence and reach, frequency, regularity and stability of the market. This index is often used, especially when concerning magazines that are not on the Master Journal List, but they matter on the medical publishing market  
[<https://indexcopernicus.com/index.php/pl/>]

HIRSCH INDEX (h-index) - is an author-level metric that not only show how many times a particular publication has been cited but also attempts to measure both the productivity and citation impact of the publications of a scientist or scholar. H-index means the number of papers that scholar with an index of  $h$  has published, each of which has been cited in other papers at least  $n$  times. If the scholar has an index  $h$  equal to 4, it means that he/she has published at least 4 works and each of them has been quoted at least 4 times.

SCIENTIFIC UNITS - within the meaning of the statutes of the university scientific units are basic organizational units of the university [see: Faculty of Journalism, Information and Book Studies], continuously conducting research or development (Journal of Laws of 2016 item 2045, art. 2 point 9a).

CONFERENCES COVERED BY WEB OF SCIENCE - in accordance with the Regulation of the Ministry of Science and Higher Education, these are scientific publications in peer-reviewed journals from international scientific conferences, included in the database of magazines and abstracts of Web of Science Core Collection, having the value of 15 points 9 (Journal of Laws of 2016 item 2154, § 33).

SCIENTIFIC CONSORTIUM - group of organizational units, composed of at least one educational entity and at least one entrepreneur, or at least two research entities, that undertakes, on the basis of the contract, a joint venture involving scientific research, development works or investments serving scientific or labor-related needs (Journal of Laws of 2016 item 2045, art. 2 point 12).

N NUMBER - indicates the number of employees in the unit, employed on the basis of employment relationship in order to conduct research or development work. These are academics and scientific employees as well as scientific and technical staff but also engineering and technical staff hired to realize ancillary activities within scientific research (Journal of Laws of 2016 item 2154, § 13 paragraph 1).

NO NUMBER - indicates the number of employees in full time equivalent, taken into account when determining the N number, who were employed in the unit at least 3 years in the period covered by the survey and were not authors or coauthors of scientific and creative achievements, [...] excluding: engineering and technical employees (Journal of Laws of . 2016 item 2154, § 13 paragraph 1).

MASTER JOURNAL LIST - list of journals and scientific series prepared and updated by Thomson Reuters. The list contains titles that have passed the evaluation process and are included in the ISI Web of Knowledge database. The bibliographic data of the journals included in the list contain only the title of the journal, frequency of its publishing, ISSN, address of the publisher and the database in which it is indexed. Master Journal List does not include the Impact Factor.

YOUNG SCIENTIST [MŁODY NAUKOWIEC] – a person who conducts research and development activities, who in the year of applying for funding ends no more than 35 years. If the person was on maternity leave, leave on the conditions of maternity leave, paternity leave, parental leave or parental leave under laws and regulations of the Labor Code or received sickness benefit or rehabilitation benefits as being not able to work including sickness requiring medical rehabilitation may apply for funding after the age of 35 for the period corresponding to the time spent on these leaves or the period of receiving this allowance or benefit, however, the total length of this leave periods may not exceed two years (Journal of Laws of 2016 item 2045, art. 2 point 19).

THE SCIENTIFIC MONOGRAPH, including scientific editions of source and artistic texts, atlases and maps, thematic encyclopedias and lexicons, scripts and academic textbooks, biographical and bibliographic dictionaries,

bibliographies and catalogs of monuments, including scientific and creative achievements of the individual, if they meet all of the following conditions:

- 1) is a study that form a thematic integrity ;
- 2) present specific issue in the original and creative way;
- 3) has undergone the process of peer review
- 4) contains appropriate notes like bibliography or footnotes (with the exception of maps);
- 5) have a capacity of at least 6 spreadsheets or are maps corresponding to the capacity of the text;
- 6) are published as books or separate volumes (excluding maps), that legal deposits have been given over to authorized libraries [...];
- 7) are available in university libraries in Poland and abroad, or other scientific organizations, or are published in electronic form in the Internet;
- 8) have ISBN, ISMN, ISSN or DOI (Digital Object Identifier – digital document identifier).

Scientific monographs do not include: scientific articles published in scientific journals; novels; collections of poetry; collections of stories and reportages; diaries and journals; reissue of scientific monographs (Journal of Laws of 2016 item 2154, § 11 paragraph 1, 3).

THE SCIENTIFIC MONOGRAPH ACKNOWLEDGED AS REMARKABLE WORK - the basis for the recognition of a scientific monograph as an remarkable work is: the Prime Minister's award; the award given by the minister managing the government administration department; the award of the Polish Academy of Sciences; the award of the scientific committee the award of The Foundation For Polish Science; prestigious award of a foreign scientific society; prestigious award of an international organization or nationwide scientific society (Journal of Laws of 2016 item 2154, § 11 paragraph 2).

SCIENTIFIC AND CREATIVE ACHIEVEMENTS - scientific and creative achievements of an individual include, among others: 1) scientific publications in scientific journals published in parts A, B, C of the list of

scientific journals; 2) peer-reviewed scientific publications in a language other than Polish with a capacity of at least 0.5 of the spreadsheet, published in a foreign scientific journal not included on the list of scientific journals; 3) scientific publications in peer-reviewed papers from international conferences, that are included in recognized database of international scientific publications; 4) scientific monographs, editing of scientific monographs and chapters in scientific monographs; 5) a chapter in a scientific monograph being a scientific study with a capacity of at least 0.5 spreadsheet, 6) entries in encyclopedias and dictionaries with a capacity of at least 0.25 of the spreadsheet - if they meet the requirements specified in paragraph (Journal of Laws of 2016 item 2154, § 10 paragraph 1, § 11 point 4).

PERSON STARTING A SCIENTIFIC CAREER - should be understood as a person without a doctoral degree or a person who, no earlier than 7 years before the application for funding for research or development, received a PhD; this period does not include time away from work related to maternity leave (Journal of Laws of 2016 item 1071, art. 2 point 3).

POL-index - the citation database created as part of the POL-on system, responsible for collecting information about citation in order to determine the Polish Impact Factor [<https://pbn.nauka.gov.pl/polindex-webapp/>]

PBN POLSKA BIBLIOGRAFIA NAUKOWA [POLISH SCIENTIFIC BIBLIOGRAPHY] - the Ministry of Science and Higher Education' website gathering information about publications of Polish scientists, publishing achievements of scientific units and about Polish and foreign magazines. It is part of the Integrated Information System for Science and Higher Education POL-on [<https://pbn.nauka.gov.pl/>]

POL-on - it is an integrated information system about science and higher education, which supports the work of the Ministry of Science and Higher Education, as well as the Central Statistical Office and the Central Commission for Academic Degrees and Titles. POL-on task is



to create a global database about scientific units, universities and Polish science. The information gathered thanks to it supports the decision-making processes of the Ministry of Science and Higher Education regarding Polish universities and scientific units. POL-on facilitates making decisions on expenditure on education and financial assistance for universities. A certain scope of information collected in the system is publicly accessible.

DEVELOPMENT WORKS- acquiring, combining, shaping and using the currently available knowledge and skills in the field of science, technology and business, as well as other knowledge and skills for production planning, creating and designing new, changed or improved products, processes and services, excluding works involving routine and periodic changes introduced to the products, production lines, manufacturing processes, already existing services and other operations in progress, even if such changes are of an improvement nature (Journal of Laws of 2016, item 2045, point 4).

RESEARCH PROJECT - this should be understood as a project aimed at carrying out basic research on a subject determined by the applicant, within a specified time, implemented on the basis of a contract for project realization and its financing (Journal of Laws of 2016, item 1071, art. 2, point 2).

SCIENTIFIC PUBLICATION - should be understood as a reviewed scientific article, including a reviewed monographic, polemical or review study, gloss or legal commentary:

- a) published in a scientific journal or a supplement, or a special journal notebook, provided that the supplement or the notebook are consecutive issues of the journal included in the list of scientific journals [...],
- b) presenting the results of the scientific research or development works of an empirical, theoretical, technical or analytical nature,
- c) presenting the methodology of the scientific research or development works, the course of the research process, as well as its results and conclusions - providing the cited literature (bibliography) (Journal of Laws of 2016, item 2154, art. 2, point 10).

JOURNAL POINTS - in the case of a comprehensive assessment of the unit, a list of scientific journals is used, together with the number of points awarded for scientific

publications in these journals, determined on the basis of lists published in these years by the minister. For the scientific publications in each of these journals, the highest number of points from those specified in the individual lists from this period is granted. The list of scientific journals consists of three parts:

- a) part A - contains the number of points for publications in scientific journals with Impact Factor (IF), included in the Journal Citation Reports (JCR),
- b) part B - contains the number of points for publications in scientific journals without Impact Factor (IF)
- c) part C - contains the number of points for publications in scientific journals included in the European Reference Index for the Humanities (ERIH).

SCOPUS - produced by Elsevier is an interdisciplinary database of abstracts and citations in the field of mathematical and natural sciences, as well as technical, medical and humanities. The Scopus database also provides the Hirsch index, which is calculated on the basis of publications from the 1970s.

SPECIAL RESEARCH DEVICE (PL Specjalne Urządzenie Badawcze - SPUB) - scientific-research apparatus or research stand, of at least regional significance, which maintenance costs constitute a significant part of the costs of maintaining the scientific unit's research potential, used to conduct scientific research or development works [...], with the use of which are provided (also against payment) services in the field of research and development for other scientific units (Journal of Laws of 2016, item 2045, art. 2, point 18).

WEB OF SCIENCE - a collection of databases produced by Clarivate Analytics (formerly Thomson Reuters). Lists of journals indexed in the Web of Science bases are available on the Master Journal List page (on the Philadelphia list).

Based on:

Journal of Laws of 2016, item 2045 with later changes – THE NOTICE OF MARSHAL OF THE SEJM OF THE REPUBLIC OF POLAND from November 17, 2016, on the publication of a uniform text of the Act on the principles of financing science.

Journal of Laws of 2016, item 1071 with later changes – THE NOTICE OF MARSHAL OF THE SEJM OF THE REPUBLIC OF POLAND from July 5, 2016, regarding the publication of a uniform text of the Act on the National Science Center.

Journal of Laws of 2016, item 2154 - REGULATION OF THE MINISTER OF SCIENCE AND HIGHER EDUCATION from December 12, 2016, on the awarding of a scientific category to the research units and universities in which, according to their statutes, no basic organizational units have been distinguished.

Journal of Laws of 2015, item 1443 - REGULATION OF THE MINISTER OF SCIENCE AND HIGHER EDUCATION from September 11, 2015, on the method of determining the amount of subsidies and accounting for funds for maintaining the research potential, as well as for research or development works and related tasks for the progress of the young scientists and participants of doctoral studies

Message from the Minister of Science and Higher Education from June 2, 2015, on the criteria and procedure for the evaluation of scientific journals

<https://polon.nauka.gov.pl/polon/system>

<https://pbn.nauka.gov.pl/>

<http://ieei.eu/independent-economic-experts-journal/typy-artykulow/>

<https://punktacjaczasopism.pl/>

<http://ekulczycki.pl/>

<https://wbn.icm.edu.pl/o-wbn/>

and others.

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