

Publication and language requirements for the PhD degree **Habilitation Committee and Doctoral Council of Physics**

Excerpt from the BME Doctoral and Habilitation Regulations

BME DHR § 17 (5)

(amended on June 28, 2021)

In the case of scientific and technical works, the minimum condition is at least 3 published (or accepted for publication) peer-reviewed publications. Of these, at least 2 must be foreign language publications, at least 2 must be journal publications, at least 2 must be a quality publication of the candidate's own work with his / her dominant contribution, and at least 2 publications must be published in journals indexed in the Web of Science or Scopus database.

In the case of a doctorate of art, the minimum condition is at least one realized, qualified work of art. The precise definition of the dominant contribution and quality requirements, as well as of the qualified work of art, shall be determined and specified in its regulations by the responsible Habilitation Committee and Doctoral Council (HBDT), with the approval of the University Habilitation Committee and Doctoral Council (EHBDT), taking into account the specifics of the field, including additional minimum conditions. Compliance with the publication requirements is a necessary condition for initiating the graduation procedure.

Bylaws of the Doctoral School of Physical Sciences Annex 2

Minimum publication requirements

Formal compliance with the requirements does not guarantee in itself either the initiation of the procedure or its successful completion. Upon making their decision, both the Physical Sciences HBDT and the official opponents substantially examine the publication level of the new scientific results, and also the candidate's contribution to the published results.

The PhD dissertation shall fulfil conditions A or B to be forwarded to the opponents as follows.

A.

Among the scientific publications related to the thesis points (published or accepted for publication) at least 3 shall be WS articles, and the candidate shall be first author in minimum 2 of the latter ones. A filed international patent can substitute 1 WS publication (maximum 1 WS publication).

Of the 3 WS articles 2 shall be category K1 "featured publication", and the candidate shall be first author in minimum one of the latter ones.

B.

Completion of 3 "equivalent publications" through category K1, K2, and K3 featured publications, where the above featured publications shall count with 1, 2, and 3 weights, respectively in the calculation of equivalent publications. The candidate shall be the first author in at least one featured category publication.

Definitions:

A **category K1** featured publication is a journal article published (or accepted for publication) in a journal with an impact factor of at least 1,000 in any of the 5 years prior to the submission, or belongs to the following journals of recognized forum of the narrow field:

Applied Radiation & Isotopes
Fractals
Granular Matter
Int. J. Bifurcation & Chaos
Int. J. Refractory Metals & Hard Materials
J. Radioanalytical and Nuclear Chemistry
J. Computational and Theoretical Transport
Kerntechnik

Modern Physics Letters B.
Optical Engineering
Nuclear Science & Engineering
Nuclear Technology
Progress in Nuclear Energy
Radiation Protection Dosimetry
Reports of Practical Oncology and
Radiotherapy
Quantitative Finance

A **category K2** featured publication is a journal article published (or accepted for publication) in a journal with an impact factor of at least **3,000** in any of the 5 years prior to the submission, or belongs to the below journals of recognized forum of the narrow field: APS Physical Review journals, Europhysics Letters, Journal of Applied Physics, Annals of Nuclear Energy, Nuclear Instruments and Methods, Nuclear Engineering and Design, Fusion Engineering and Design, Radiology and Oncology, Medical Dosimetry

A **category K3** featured publication is a journal article published (accepted for publication) in a journal with an impact factor of at least **6,000** in any of the 5 years prior to the submission.

Exemption from the first authorship requirement for multi-author publications

If the work submitted towards doctoral degree is based exclusively on articles in large collaborations (at least 20 authors) for which the usual first authorship designation is excluded by the rules of operation of the collaboration, HBDT can grant an exemption from this requirement simultaneously with sending out the dissertation to referees.

The request for exemption must be made in writing when the graduation procedure is initiated. The justification should include a description of the candidate's exact individual contribution, documented by the means available for the specific collaboration concerned.

Language requirements

Section 17(3) of the BME DSZ establishes an intermediate level English language examination in the first place. To certify language competence, a complex (oral and written) state accredited language examination at level B2 or a certificate equivalent thereto shall be required.

The second foreign language shall be any language in which the branch of science is practiced. To certify language competence, a complex (oral and written) state accredited language examination at level B1 (elementary), or a certificate equivalent thereto shall be required. With an HBDT decision, the authenticated proof – provided by a higher education institute or a research institute – as proof of second language competence (e.g. taking examinations or giving lectures in the given language) shall also be accepted.

The requirements for degree obtainment shall be reviewed annually by the Habilitation Committee and Doctoral Council of Physics (HBDT), and shall be amended as needed. The above requirement were adopted by the HBDT on November 20, 2020, and took effect with the approval by the Habilitation Committee and Doctoral Council of the University on November 27, 2020.