

EVALUATION SHEET FOR UNIVERSITY PROFESSOR APPL	ICATIO	NS		
Discipline: Natural Sciences				
MAB code: E Name and institution of Applicant				
Assessment criteria				
I. Higher education activities (maximum score)	100			
1a.1. <u>Teaching experience</u>	Maximum score	Score obtai ned		
Minimum requirement* (10 points): The Applicant is required to have taught at least 200 contact hours of lectures in subjects related to the disciplines indicated in the application at any higher education institution during the ten active years preceding the submission of the application. The teaching activity must be certified by the Applicant's direct superior. The relevant student feedback results for at least the last five active years must be provided. In the absence of student feedback, the assessment of the Applicant's direct supervisor is also acceptable. IForeign Applicants: proof of contact hours does not need to come from the Applicant's direct superior. Instead, other acceptable forms of verification from their country can be used. For example, this might include a certificate from the dean's office or a detailed list of courses making up the contact hours, which must include the course titles, the institution/faculty/subject names, the level of education (bachelor, master, doctoral), and the dates. With respect to student feedback on teaching activity, the information resulting from the processes of the given country must be taken into account.	10			
Points for teaching activities: 10 points are given for 250 contact hours, 20 points for 300 contact hours, 30 points for 350 contact hours, and 40 points for 400 contact hours. For higher education teaching performance, the minimum requirement of at least 200 contact hours of lectures is worth 10 points, and a maximum of 50 points can be given for 400 contact hours of lectures. Between the maximum and the minimum, the score is determined proportionally and must be rounded to the nearest whole number. A maximum of 10 additional points may be awarded for lectures of high importance (compulsory core subjects of BSc and MSc courses), for major lectures given at renowned universities abroad, and on the basis of student evaluations. A maximum of 25 (10+15) points may be given for contact hours where the	40			

¹Foreign Applicants are: a) Applicants who are not Hungarian citizens, and b) Applicants who are Hungarian citizens working abroad on a long-term basis (more than five years).



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Maximu m score	Score obtai ned
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1b. Activities and achievements in education development	Maximum score	Score obtai ned
1b.1. Minimum requirement* (5 points): The Applicant is course director of at least one compulsory (type "A") course or at least two optional (type "B" or "C") courses in the ten active years preceding the application, verified by the direct superior. Certification by the direct superior is not taken into account in the evaluation process for applications during the application period starting on May 13, 2025. Foreign Applicants: overall responsibility for courses may be substituted for activities leading and/or managing programmes, courses or projects. (However, participation in research/development/innovation projects should be accounted for and evaluated under item 2b.1.)	5	
Additional points can be given: another 5 points for acting as course director for one subject, and 5 points for meaningful participation in the development of two more subjects (2 points per subject).	10	
1b.2. <i>Minimum requirement*</i> (5 points): The Applicant must be the editor, first author, sole author or co-author of at least one coursebook or textbook, teaching aid or digital teaching material of 100 or more pages. If co-author, the Applicant must have contributed at least 50% of the entire work. The requirement is also considered met if the Applicant is the sole author of a chapter of appropriate length in any of the publications mentioned above.		
Special criteria for additional points that may be given: Introduction of innovative contents/new methods, development of new training programmes in Hungary and/or abroad (5 points). Overall responsibility for a programme or specialisation (5 points); management experience (head of department, institute, senior position at a faculty or university) (5 points).	10	
Total (1b.1+1b.2.)	30	
Written evaluation of performance, supported by specifics:		
I. Total higher education activities:	100	



II. Scientific activities (maximum score)	10	00
2a.1. Outstanding scientific or research work (up to the submission of the application)	Maximu m score	Score obtai ned
Internationally recognised, outstanding scientific achievements. Minimum requirement* (10 points): The Applicant must be the author (sole, first, last or corresponding) of at least five foreign language articles published in Q1 journals, or be the sole, first or lead (corresponding or final) author of an article published in an international journal ranked category A or B by the Hungarian Academy of Sciences in a relevant field. These parameters shall be fulfilled and evaluated taking into account the MTMT database. When assessing the impact of the publication activity, the criteria are considered to be met only if all numerical indicators specified for each discipline in the Appendix are met. Special requirement: In Mathematics, publication and independent citation performance should be considered according to the specific field of research in question. Foreign Applicants: Publication in another language is not a requirement for native English speakers. For non-native English speaking Applicants, publication in a (foreign) language relevant to international scientific communication is required.	10	
Additional points may be awarded: 115% 20 points; 130% 30 points; 145% 40 points; 160% 50 points. The scientific performance (2a.1.) shall be evaluated on the basis of the discipline-specific requirements detailed in the Appendix. In the specialty category, the Applicant receives 10 points for the minimum requirement (rounded 25% of the available score), and the maximum value is 50 points for 160%. Between the maximum and the minimum, the score is determined proportionally and must be rounded to the nearest whole number. If the Applicant is the head of a Lendület team of the Hungarian Academy of Sciences or has won an ERC or ERC Starting Grant, he/she is given at least 30 points in the field of scientific achievements (2a.1.). Applicants who obtained the title Doctor of the Hungarian Academy of Sciences no more than 10 years before submission of the application, and those who have been awarded the ERC Consolidator/Advanced/Synergy Grant, are considered to have met the criteria for outstanding scientific or research performance (point 2a.1), and are to be evaluated with the maximum score of (10+40).	40	
Total (2a.1.)	50	



Only the maximum or zero points may be awarded for the minimum condition to be fulfilled. If the minimum requirement is not met (it is worth zero points), then for the particular section (e.g. 1a.2.) no additional points can be awarded, the entire section (eg. 1a.2.) is to be evaluated at zero points.

Written evaluation of performance, supported by scientometric data or specific references to recognition, awards or other data:

2a.2. <u>Supervising the scientific work of young academics, participation in doctoral training as thesis supervisor</u>	Maximu m score	Score obtai ned
Minimum requirement* (5 points): The Applicant has been a thesis supervisor to at least one doctoral student who has obtained his/her doctoral degree (as confirmed by the doktori.hu website). The supervision of at least one doctoral student who has obtained his/her doctoral degree might have taken place at a foreign institution. Where there is no PhD training, the assessment must take into account the Applicant's achievements in the education of the next generation of scholars, but the requirement regarding the number of PhD students who obtained a doctoral degree under the supervision of the Applicant is not applicable.	5	
Additional points may be given for: Additional PhD students obtained his/her doctoral degree and/or postdoctoral fellows supervised by the Applicant (5 points each). In addition to the points given for a student who has obtained his/her doctoral degree, 3 additional points may be given for each currently supervised doctoral student and doctoral candidate, registered by the doctoral school, who are recorded by name in the database of the National Doctoral Council (or on the certificate from the foreign university for students who have studied abroad), including the expected year of obtaining their pre-degree certificate and degree.		
2a.3. <u>Minimum requirement*</u> (5 points): establishing of a recognized intellectual hub: lead role in one research team, substantial participation in three research teams, or at least three individual research grants. Participation in research will not be taken into account if it is directly linked to the Applicant's job (e.g. as part of the duties to be performed). Foreign Applicants: The creation of an intellectual hub can be substituted by other student talent development activities, as well as prizes and awards (which, however, cannot be the same as those related to teaching activities, e.g. activities substituted for TDK thesis supervision).	5	
2a.4. <u>Minimum requirement*(5 points):</u> Activity in the professional public sphere (e.g. as head or member of a professional committee at a university, as member of a non-university professional body, member of a university senate, faculty council, chair or member of a university professional committee, external member of a committee of another university).	5	
Total (2a.2+2a.3+2a.4.)	30	



	valuation of performance, supported by specifics:			
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2b.1. Exp	perience and achievements in research management	Maximu m	Score obtai	
2011 <u>249</u>				
must have research/o	<i>n requirement*</i> (5 points): By the submission deadline, the Applicant we won and carried out at least one national or international scientific development/innovation project in a competitive procedure, and must naged the operation of the research team implementing the winning on.	5		
internatio	<u>al points can be given:</u> thesis supervision at further national or onal competitions for 5 points, thesis topic supervision of institutional ons for 2 points.	5		
	Total (2b.1.)	10		
2b.2. <u>Rec</u>	cognition in Hungary and abroad	Maximu m score	Score obtai ned	
Minimum	cognition in Hungary and abroad n completion * (5 points): plenary speaker at international conferences invited speaker 2 points, speaker 1 point	m	obtai	
Minimum 3 points, i Special re points), m points), c conferenc Prestigiou	n completion * (5 points): plenary speaker at international conferences	m score	obtai	
Minimum 3 points, i Special re points), m points), c conferenc Prestigiou	n completion * (5 points): plenary speaker at international conferences invited speaker 2 points, speaker 1 point equirement: Head of domestic or international scientific organisation (5 number of board (3 points), conference chair or conference organiser (3 co-chair, section organiser, section chair, invited plenary speaker at ces (1 point each). us international conferences, seminars and professional workshops	m score	obtai	
Minimum 3 points, i Special re points), m points), c conferenc Prestigiou organised	n completion * (5 points): plenary speaker at international conferences invited speaker 2 points, speaker 1 point equirement: Head of domestic or international scientific organisation (5 member of board (3 points), conference chair or conference organiser (3 co-chair, section organiser, section chair, invited plenary speaker at tes (1 point each). us international conferences, seminars and professional workshops by the Applicant in Hungary or abroad.	m score 5	obtai	



Only the maximum or zero points may be awarded for the minimum condition to be fulfilled. If the minimum requirement is not met (it is worth zero points), then for the particular section (e.g. 1a.2.) no additional points can be awarded, the entire section (eg. 1a.2.) is to be evaluated at zero points.

Maximum score:	Points awarded in total:	I. Higher education activities	II. Scientific activity	I. + II. Total
200				

The minimum score necessary for supporting the Applicant's appointment: 160

* If the Applicant did not meet the minimum requirement for an item (any requirement, if there are more than one), then a score of 0 must be given for that item (e.g. 1b.1.) 0 points must be awarded (i.e. no additional points may be awarded in this case).

(underline as applicable:)

The Applicant achieved the minimum score	The application merits endorsement
The Applicant did not achieve the minimum score	Not supported



Appendix

Representative values for the discipline-specific publication indicators

2a.1. The criteria for evaluating "Outstanding scientific and research (achievements up to the date of submission of the application)", used in the assessment of applications for the title of Doctor of the Hungarian Academy of Sciences, are **considered to be met** only if all numerical discipline-specific indicators are met. Additional scores can be given for scientific metrics that exceed the indicators recorded here. The rate at which the minimum requirements are exceeded is calculated as the average of the surplus per indicator (e.g. if the number of publications is 125% and the number of citations 175%, the average surplus performance is 150%). The source of the list below is the Minimum Requirements for Doctor of the Hungarian Academy of Sciences. Last updated: September 1, 2022

Biological Sciences

The minimum level of requirements in the field of **infra-individual biological research**:

Number of publications: 10

Amount of IF where the Applicant is the first or the last one to be signed: 40

The number of independent citations received for all publications of the Applicant, taken into account

according to the MTMT: 300

Minimum requirements in the field of **supraindividual biological** research:

Number of publications: 10

IF amount where the Applicant is first or last author: 10

The number of independent citations received for all publications of the Applicant, taken into account

according to the MTMT: 250

Physical Sciences

Applicants conducting basic research, whatever their field of expertise, must have 200 effective independent citations. When calculating the effective citation, all independent citations of articles with a maximum of five authors are counted with full value. All independent citations of articles with more than five authors and up to ten authors should be counted with a multiplier of 3/4. Each independent citation of articles with more than 10 and up to 20 authors is considered with a multiplier of 1/2, and each independent citation of articles with more than 20 and up to 100 authors is considered with a multiplier of 1/4. With respect to citations of articles with more than 100 authors resulting from a large collaboration, only citations to articles in which the Applicant's leading role can be clearly demonstrated (with a weight factor of one), such as an analysis note, technical report, delegated or invited conference presentation on the subject of the article, should be included in the calculation of effective citations.

For Applicants with a strong focus on applied research, the minimum effective citation is 100. In addition, there should be publicly verifiable documentation of works published in non-scientific journals, as well as patents that have been granted and possibly implemented, or research reports and their application.



Earth Sciences

Mineralogy and petrology, geochemistry, geology, geophysics, meteorology,	
paleontology	
Full scientific publication	35
Scientific publication as a lead author	15
Scientific publication in a peer-reviewed journal listed in WoS and/or Scopus	20
Number of independent citations	160
Number of independent citations for peer-reviewed scientific publications in WoS and/or Scopus	100
Hirsch Index (based on independent citations)	8
Mining, geodesy and geoinformatics, natural and social geography	
Full scientific publication	40
Scientific publication as a lead author	20
Scientific publication published in peer-reviewed journals in WoSn and/or Scopus	8.
Number of independent citations	140
Number of independent citations in WoS and/or Scopus for peer-reviewed scientific publications	40
Hirsch Index (based on independent citations)	8.

Definition of terms:

Full scientific publication. MTMT distinguishes between the categories of full scientific publications (book, book chapter, journal article, atlas, map) and other scientific publications, the latter including publications in journals with unknown peer-reviewed status. The Section of Earth Sciences takes the values in the first category as a guide, but may also take into account the number of other scientific publications in the habitat assessment. Abstracts and scientific publications of restricted access (dissertations, theses) are not included in the evaluation.

Scientific publication by a leading author. In addition to the first author, the second, a corresponding or the last author, depending on the traditions of the discipline, may be considered the leading author (the traditions of the discipline may be taken into account in the evaluation).

Scientific book, monograph. A professionally peer reviewed publication of at least 48 pages (3 author's sheets of 16 pages each) (UNESCO) or more than 3 sheets (1 sheet = 40,000 characters) (NAVA), with an ISBN or ISSN number.

Independent citation. A citation in a scientific publication without any identity between the author of the cited work and the author of the citing work. Citations are not included in the doctoral process if their place of publication is:

- not a scientific journal,
- an un-peer-reviewed journal, unless it is included in the Section's list,
- published in a volume of conference proceedings,
- a publication of restricted access (dissertation, thesis).

Minimum requirement. Applicants must meet the minimum requirements set out in the table for their discipline. Otherwise, the application will be rejected, regardless of the outcome of the doctoral evaluation.



Chemical Sciences

<u>Chemical Sciences</u>			
	Overall number of SCI publications and patents	Total impact (cumulative impact factor)	Number of independent SCI CITATION S
Theoretical chemistry			
Computational chemistry			
Molecular structure	35	80	350
Thermodynamics		00	330
Other			
Physical Chemistry			
Catalysis			
Chemical kinetics			
Photochemistry			
Coordination Complex			
Surface Chemistry	35	80	300
Nanostructures		00	300
Chemical Dynamics			
Colloid Chemistry			
Electrochemistry			
Other			
Organic and biomolecular chemistry			
Alkaloid, Flavonoid Chemistry			
Peptide Chemistry			
Carbohydrate Chemistry		80	
Steroid Chemistry	35		200
Pharmaceutical Chemistry			
Biochemistry, Chemistry of Biomolecules			
Other		-	
Inorganic and Nano-Metal Chemistry	35	60	200
Analytical Chemistry and Environmental Chemistry			
Separation Science			
Chemometry			
Chemical sensors and electro-analytics			
NMR, MS, X-ray and other spectroscopies			
Spectrochemical Analysis	35	60	200
Organic and Pharma analytics			
Environmental Chemistry			
Clinical chemistry			
Other			
Materials Science and Chemical Engineering			
Polymer and Plastic Chemistry			
Pharmaceutical Technology			
Materials Technology			
Chemical Technology	30	40	150
Environmental technology			
Nuclear Chemistry			
Other			
Food Chemistry and Biotechnology	30	40	125
Other	30	40	125



Mathematical and Computer Science

In publications already published: at least 80 independent citations (a citing publication is counted as many times as many publications of the Applicant it cites); 30 different citations where the citing work is a monograph, a peer-reviewed international journal article, algorithm, software package, practical application that qualifies as a publication (a citing publication counts as one); 10 "quality" citations, i.e. references that not merely mention the publication but also, e.g. (partially) solves a problem raised by the Applicant, develops (generalises, improves, solving by another method), applies (uses in proof, algorithm, practical application) the result, method or even just discuss it. These 10 qualitative citations represent different monographs, articles in international journals, algorithms that qualify as publications, program packages and practical applications.

Meeting the quantified formal requirements means only that the Scientific Committee has given substantial consideration to the Applicant's research record, comparing it to the academic record of recent professors in the Applicant's field.