RULE BOOK ON ADDITIONAL REQUIREMENTS FOR APPOINTMENT INTO SCIENTIFIC WORK POSTS

Pursuant to Article 41, paragraph 8 of the Act on Scientific Activity and Higher Education (Official Gazette Nos. 123/03, 105/04, 174/04, 02/07, Decision of the Constitutional Court of the Republic of Croatia, 46/07, 45/09, 63/11, 94/13, 139/13, 101/14, Decision about the Decree of the Constitutional Court, 60/15, Decision of the Constitutional Court of the Republic of Croatia and 131/17) and Article 48 of the Statute of Croatian Geological Survey (Hrvatski geološki institut), the Scientific Council of the Institute enacted at its 15th session of 7 May, 2018 the following

RULE BOOK ON ADDITIONAL REQUIREMENTS FOR APPOINTMENT INTO SCIENTIFIC WORK POSTS

I. GENERAL PROVISIONS

Article 1

By virtue of this Rule Book, additional criteria and minimal additional requirements for appointment into scientific work posts are established, in the area of natural and technical sciences at the Croatian Geology Survey (Hrvatski geološki institut, hereinafter: the Institute).

Additional criteria and minimal requirements are established separately according to scientific areas, namely the following:

- natural sciences, scientific field of geology
- technical sciences, scientific field of mining, petroleum and geological engineering.

Scientific work posts include: research associate, senior research associate, scientific advisor and tenured scientific advisor.

Article 2

The procedure of appointment into work posts is regulated by the Act on Scientific Activity and Higher Education (Official Gazette Nos. 123/03, 105/04, 174/04, 02/07, Decision of the Constitutional Court of the Republic of Croatia, 46/07, 45/09, 63/11, 94/13, 139/13, 101/14, Decision about the Decree of the Constitutional Court, 60/15, Decision of the Constitutional Court of the Republic of Croatia and 131/17) and the Statute of the Institute.

Article 3

A general requirement for appointment into a scientific work post is being entered into the Register of Scientists in the same or higher scientific research grade, i.e. appointment into a scientific research grade conducted within the procedure of appointment into a scientific work post.

In addition to general requirements for appointment into scientific work post, the candidate must also fulfil minimal additional requirements prescribed by this Rule Book.

In the recruitment notice text, it shall be written that it is mandatory to provide evidence for additional criteria pursuant to the Rule Book published on the web site of the Institute: http://www.hgi-cgs.hr.

This Rule Book shall be applied in compliance with the currently valid Rule Book for the Appointment into Scientific Research Grades (Official Gazette 28/2017).

Article 4

This Rule Book defines also the status of an active scientist at the Institute, which proves contribution in achieving the Institute's mission. An active scientist is considered to be a scientist who published in the last five years at least three scientific papers in journals listed in the journal databases Web of Science Core Collection (WoSCC) or Current Contents (CC). The active scientist status is a precondition for being appointed to a scientific work post.

Article 5

Additional criteria are based on:

- 1) basic parameters (CRITERION A)
- 2) specific parameters (CRITERION B).

The criteria A + B include the following quantification:

- of scientific productivity and excellence of the candidate
- of scientific competitiveness of the candidate
- of scientific visibility of the candidate
- educational activity of the candidate
- specific activities and abilities of the candidate related to scientific / professional work at the Institute.

The Rule Book prescribes the grading model for additional criteria, as well as the minimal number of points for additional requirements needed to be appointed to one of the scientific work posts.

The analysis of the criteria A + B provides an overall evaluation of the overall scientific and professional contribution of the candidate.

Share of points from Criterion B may amount to maximum 20 % of the total sum of points (criteria A + B).

The candidate must submit evidence for all activities cited in the application for appointment to a scientific work post in electronic format, thus making them a constituent part of the application. In case the candidate fails to submit evidence for an individual activity cited in the application, this particular activity shall not be considered.

Evidence of scientific paper/publication is an electronic version of the scientific paper/publication on a CD, whereas for other activities the relevant evidence implies various certificates and other evidence containing all required information also in an electronic form on a CD.

Article 6

II. ADDITIONAL CRITERIA FOR APPOINTMENT INTO SCIENTIFIC WORK POSTS IN THE AREA OF NATURAL SCIENCES (SCIENTIFIC FIELD OF GEOLOGY) AND AREA OF TECHNICAL SCIENCES (SCIENTIFIC FIELD OF MINING, PETROLEUM AND GEOLOGICAL ENGINEERING)

CRITERION A

1. NUMBER AND EXCELLENCE OF SCIENTIFIC PUBLICATIONS

ORDINAL NO.	CRITERION NAME	POINTS1		
A1.1.	Original scientific paper/scientific review published in the scientific journal represented in the databases WoSCC and CC	10		
A1.2.	Original scientific paper / scientific review published in the scientific journal represented in the databases Scopus and other databases	5		
A1.3.	Other scientific papers in journals in WoSCC and CC databases	1		
A2.	Basic geological maps with the associated explanatory notes ²	10		
A3.1.1.	Scientific book/monograph/university textbook represented in the WoSCC, Scopus and CC databases	10		
A3.1.2.	Chapter in the scientific book/monograph/university textbook represented in the WoSCC, Scopus and CC databases	6		
A3.2.1.	Scientific book/monograph/university textbook (the publisher is the scientific institution)	5		
A3.2.2.	Chapter in the scientific book/ monograph/university textbook (the publisher is a scientific institution)	3		
A4.1.1.	Original scientific paper or scientific review/congress abstract (summary) published in the conference proceedings, abstracts book or journal from an international scientific congress presented in a lecture	4 / 2		
A4.1.2.	Original scientific paper or scientific review/congress abstract (summary) published in the conference proceedings, abstracts book or journal from an international scientific congress presented in a poster			
A4.2.1.	Original scientific paper or scientific review/congress abstract (summary) published in the conference proceedings, abstracts book or journal from an international scientific congress presented in a lecture			
A4.2.2.				

¹The points refer to one publication. ²Relates to the Programme of making basic geological maps of the Institute, consisting of the following units:

- 1) Basic geological map at a scale of 1:50.000
- 2) Basic hydrogeological map
- 3) Basic engineering geological map
- 4) Basic geochemical map
- 5) Mineral and energy resources map
- 6) Submarine geological map

Number of publications is based on the attached copies in electronic format.

2.1. THE SCIENTIFIC PAPER RANKING AND CITATION

ORDINAL NO.	CRITERION	POINTS1
A5.1.	Scientific paper ranking (RZR) referred to in points A1.1. to A1.3. (Q1 / Q2/Q3 / Q4 category according to JCR or SJR)*	8/6/4/2
A5.2.	Citation of an individual scientific paper referred to in points A1. to A4.2.2.	C**
A5.3.	Paper published in the journal Geologia Croatica	5

¹The points refer to one publication.

In case that JCR or SRJ are not available for the year when the paper was published in a journal, the values of quartile are taken into account from the year closest to the year of paper publication.

The papers published in the journals falling outside of the subject category field in which the candidate selected are valued according to the quartiles which the journal features in its respective category.

If a journal, where the candidate's paper was published, which journal is not included in the database WoSCC or Scopus, does not have a defined impact factor and it is not classified in any quartile, it shall be deemed classified in the fourth quartile (Q4).

The points refer to one publication. The maximum number of points per scientific publication is 30.

The ranking of each scientific paper (RZR) is based on the attached evidence of the candidate, downloaded from the web site JCR (Journal Citation Report) or SJR (SCImago Journal Rank).

Number of citations is based on the candidate's attached certified report of the National and University Library or the excerpt from the database WoSCC or Scopus for each scientific paper/publication. It is attached in electronic format.

2.2. AUTHOR'S CONTRIBUTION IN THE PUBLISHED SCIENTIFIC PUBLICATIONS REFERRED TO IN POINTS A1.1., A1.2., A3.1.1. AND A3.1.2.

ORDINAL NO.	PRDINAL NO. CRITERION	
A6.1.1.	The candidate is the only author	7
A6.1.2.	The candidate is the first author	6
A6.1.3.	The candidate is the second or third author	3
A6.1.4.	The candidate is the fourth or further author	1
A6.1.5.	The candidate is the first author from the Institute*	3
A6.1.6.	The candidate is the editor / co-editor**	2/1

¹The points refer to one publication. The candidate may get points only per one criterion, namely the one that is the most favourable for the candidate.

Author's contribution of the candidate is based on the attached copies of scientific publications in electronic format.

^{*}The criterion for valuing the scientific paper ranking (RZR): Q1, Q2, Q3 or Q4 category – according to JCR (Journal Citation Report) or SJR (SCImago Journal Rank) in the year of publication or according to the newest report published from the day of filing request for appointment into scientific work post, depending on what is more favourable for the candidate, and for the "Subject Category" which is the most favourable for the candidate.

^{**}Citation is calculated by a formula: $C = number \ of \ citations/(number \ of \ authors \ x \ 2)$.

^{*}Taken into account only if the author from the Institute is among the first five authors.

^{**}Relates to criteria referred to in point A3.

2.3. AUTHOR'S CONTRIBUTION IN THE PUBLISHED SCIENTIFIC PUBLICATIONS REFERRED TO IN POINTS A1.3., A3.2.1. AND A3.2.2., A4.1.1. TO A4.2.2.

ORDINAL NO.	CRITERION	POINTS1
A6.2.1.	The candidate is the only author	2
A6.2.2.	The candidate is the first author	1.5
A6.2.3.	The candidate is the second or third author	1
A6.2.4.	The candidate is the fourth or further author	0.5
A6.2.5.	The candidate is the first author from the Institute*	1

¹The points refer to one publication. The candidate may get points only per one criterion, namely the one that is the most favourable for the candidate.

 $Author's\ contribution\ of\ the\ candidate\ is\ based\ on\ the\ attached\ copies\ of\ scientific\ publications\ in\ electronic\ format.$

3. SCIENTIFIC COMPETITIVENESS

ORDINAL NO.	CRITERION NAME	POINTS1		
A7.1.	Conducting a scientific-research international project (e.g. Obzor 2020, UNESCO/IGCP, ESF) financed to the institution in the amount of ≥ 50.000 Euro / < 50.000 Euro			
A7.2.	Conducting a scientific-research national project (e.g. MZOS, HRZZ, HAZU) financed to the institution in the amount of > 200.000 kuna / 200.000 – 50.000 kuna / < 50.000 kuna	20 / 12 / 6		
A7.3.	Coordination for the Institute or conducting one or more units (work package leader) of science-research international project (e.g. Obzor 2020, UNESCO/IGCP, ESF) financed to the institution in the amount of ≥ 50.000 Euro / < 50.000 Euro	10 / 6		
A7.4.	Participating in the science-research international project (e.g. Obzor 2020, UNESCO/IGCP, ESF) financed to the institution in the amount of ≥ 50.000 Euro $/ < 50.000$ Euro	5 / 3		
A7.5.	Participating in the science-research national project (e.g. MZOS, HRZZ, HAZU) financed to the institution in the amount of > 200.000 kuna / <50.000 kuna	4/2/1		
A7.6.	Registered patent	10		

¹The points refer to one science-research project. The candidate may get points only per one criterion, namely the one that is the most favourable for the candidate.

Scientific competitiveness of the candidate is based on the attached evidence for each individual activity in the form of a certificate issued by a parent institution of the candidate. It is attached in electronic format.

4. SCIENTIFIC VISIBILITY

ORDINAL NO. CRITERION NAME				
A8.1.	Invited and plenary lecture at an international scientific conference			
A8.2.	Invited and plenary lecture at a national scientific conference	3		
A9.1.	Editorial activity (chief editor / member of editorial team) in a scientific journal represented in the databases WoSCC and CC			
A10.1.	Review of the paper in a scientific journal or book represented in the databases WoSCC and CC or Basic geological map or Explanatory notes ²²	2		
A11.1.	Presiding over a scientific or organisational board of an international			

^{*}Taken into account only if the author from the Institute is among the first five authors.

	scientific conference / membership in the scientific or organisational board of an international scientific conference	
A11.2.	Presiding over a scientific or organisational board of a national scientific conference / membership in a scientific or organisational board of a national scientific conference	1 / 0.5
A12.1.	Organisation of a scientific workshop or a course in duration of at least 40 working hours / participation at a scientific workshop or a course	3 / 1
A12.2.	Fellowship or study exchange (guest scientist) at a foreign scientific institution for the purpose of scientific or professional training or science-research work in duration of up to: one month / three months / one year and longer	3 / 5 / 10

¹The points refer to one lecture//editing/membership in the board of a journal//review of one scientific paper/one map, sheet, area and explanatory notes from the Programme of basic geological maps of the Institute//presiding over a board of one scientific conference //organisation/participation at a workshop or course//one fellowship or one study exchange.

²Refers to the Program of making basic geological maps of HGI (Institute) consisting of the following units:

1) Basic geological map at a scale of 1:50.000

2) Basic hydrogeological map

3) Basic engineering geological map

4) Basic geochemical map

5) Mineral and energy resources map

6) Submarine geological map

Scientific visibility of the candidate is based on the attached evidence of each individual activity in the form of a copy in electronic format, proving such visibility.

5. EDUCATIONAL ACTIVITY

ORDINAL NO.	CRITERION	POINTS1
A16.1.	*Leadership / participation in teaching (with the decision or appointment by the University's Senate)	2 / 1
A16.2.	**Mentorship or co-mentorship of a graduation/master/doctoral thesis	1 / 3/ 10
A16.3.	**Membership in the commission for evaluation or defending of graduation/master/doctoral thesis	1/2/3
A16.4.	Guiding the guest researcher/student and/or scientist at the Institute for a period of at least one month	5
A16.5.	Participation in popularisation of science through lectures, presentations and/or workshops	0,2

¹The points refer to leadership or participation in teaching on one course in one semester of one academic year//mentorship or comentorship//membership in the commission for one candidate//guiding one guest researcher/student/scientist//participation in popularisation of science at one lecture and/or workshop.

The educational activity of the candidate is based on the attached evidence for each individual activity in a form of a certificate issued by a relevant institution. Attached in electronic format.

CRITERION B

1. SPECIFIC ACTIVITIES

ORDINAL NO.	CRITERION	POINTS1
B1.1.	² The first author of a published sheet or unit from the Programme of	7 / 7

^{*}Maximum number of points is 20.

^{**} Bachelor of Science (BSc), Master of Science (MSc) and Dissertation (PhD).

	Basic Geological Maps / Explanatory notes				
B1.2.	² Co-author of a published sheet or unit from the Programme of Basic	4 / 4			
	Geological Maps / Explanatory notes				
B1.3.	² Associate for a published sheet or unit from the Programme of Basic	2 / 2			
	Geological Maps / Explanatory notes				
B1.4.	Leading a professional international project, i.e. applied research in	5/3			
	the amount of ≥ 50.000 Euro / < 50.000 Euro				
B1.5.	Leading a professional national project, i.e. applied research in the				
	amount of ≥ 100.000 kuna / < 100.000 kuna				
B1.6.	First author / other authors of Survey's report of larger proportions *	2 / 1			
B1.7.	First author / other authors of Survey's report of smaller proportions *	0.2 / 0.1			

¹Points refer to one sheet or area/explanatory notes//one project, i.e. applied research//authorship/co-authorship of one Survey's report. ²Refers to the Program of making basic geological maps of HGI (Institute) consisting of the following units:

1) Basic geological map at a scale of 1:50.000

2) Basic hydrogeological map

3) Basic engineering geological map

4) Basic geochemical map

5) Mineral and energy resources map

6) Submarine geological map

Specific abilities and activities of the candidate are based on the attached evidence for each individual activity in a form of a certificate issued by a relevant institution. Attached in electronic format.

Article 7

The minimal additional requirements for appointment into scientific work posts establish the following:

- minimal number of required points for the appointment into scientific work posts
- minimal number of required scientific papers where the candidate is the first author
- special additional requirements for the appointment into the scientific work post of a scientific advisor and tenured scientific advisor.

III. MINIMAL ADDITIONAL REQUIREMENTS FOR THE APPOINTMENT INTO SCIENTIFIC WORK POSTS IN THE AREA OF NATURAL SCIENCES (FIELD OF GEOLOGY) AND AREA OF TECHNICAL SCIENCES (FIELD OF MINING, PETROLEUM AND **GEOLOGICAL ENGINEERING)**

Until the day when the Rule Book enters into force, the Rule Book on the Requirements for the Appointment into Scientific Research Grades (Official Gazette No. 28/17) is in force, which enables in its transitional provisions the application of the requirements for appointment into individual scientific research grades pursuant to the Rule Book on the Requirements for Appointment into Scientific Research Grades (Official Gazette Nos. 84/05, 100/06, 138/06, 42/07, 120/07, 71/10, 116/10 and 38/11). Considering significant differences in the content and volume of minimal requirements for the appointment into scientific research grades in the above mentioned rule books, this Rule Book defines a different set of minimal requirements for the appointment into scientific work posts in the following way:

^{*}Evaluated by an appointed Commission in the procedure of scientific work post.

> AREA OF NATURAL SCIENCES (FIELD OF GEOLOGY)

• In case that the candidate was appointed into a scientific research grade pursuant to the Rule Book on the Requirements for Appointment into Scientific Research Grades (Official Gazette Nos. 84/05, 100/06, 138/06, 42/07, 120/07, 71/10, 116/10 and 38/11), he/she must fulfil the following minimal requirements:

	RESEARCH ASSOCIATE	SENIOR SCIENTIFIC ASSOCIATE	SCIENTIFIC ADVISOR	TENURED SCIENTIFIC ADVISOR
MINIMAL TOTAL NUMBER OF POINTS	58	178	300	422
**MINIMAL NUMBER OF SCIENTIFIC PAPERS WITH THE CANDIDATE AS THE FIRST AUTHOR	1(0*)	4(1*)	6(2*)	8(3*)

^{*}Number of scientific papers that may replace a part of the overall minimum number of scientific papers where the candidate is the first author, provided that the candidate is the first author from the Institute. It is considered only if the author from the Institute is among the first three authors.

• In case the candidate was appointed to a scientific research grade pursuant to the Rule Book for Appointment into Scientific Research Grades (Official Gazette No. 28/17), he/she must fulfil the following minimal requirements:

	RESEARCH ASSOCIATE	SENIOR SCIENTIFIC ASSOCIATE	SCIENTIFIC ADVISOR	TENURED SCIENTIFIC ADVISOR
MINIMAL TOTAL NUMBER OF POINTS	78	235	418	516
**MINIMAL NUMBER OF SCIENTIFIC PAPERS WITH THE CANDIDATE AS THE FIRST AUTHOR	2(1*)	5(2*)	8(3*)	10(4*)

^{*}Number of scientific papers that may replace a part of the overall minimum number of scientific papers where the candidate is the first author, provided that the candidate is the first author from the Institute. It is considered only if the author from the Institute is among the first three authors.

^{**}The scientific papers from points A1.1. and A1.2 are the only ones considered.

^{**}The scientific papers from points A1.1. and A1.2 are the only ones considered.

> AREA OF TECHNICAL SCIENCES (FIELD OF MINING, PETROLEUM AND GEOLOGICAL ENGINEERING)

	RESEARCH ASSOCIATE	SENIOR SCIENTIFIC ASSOCIATE	SCIENTIFIC ADVISOR	TENURED SCIENTIFIC ADVISOR
MINIMAL TOTAL NUMBER OF POINTS	70(*50)	120(*+50)	190(*+70)	260(*+70)
***MINIMAL NUMBER OF SCIENTIFIC PAPERS WITH THE CANDIDATE AS THE FIRST AUTHOR	1(0**)	2(1**)	3(1**)	4(1**)

^{*}When the candidate has already acquired a scientific research grade according to the Rule Book on the Requirements for Appointment into Scientific Research Grades (Official Gazette Nos. 84/05, 100/06, 138/06, 42/07, 120/07, 71/10, 116/10 and 38/11), he/she may request in writing the application of the extra points principle for being appointed to a senior scientific work post. Extra points of the candidate are established for the period after the appointment into the previous scientific research grade.

> AREA OF NATURAL SCIENCES (SCIETIFIC FIELD OF GEOLOGY) and AREA OF TECHNICAL SCIENCES (SCIENTIFIC FIELD OF MINING, PETROLEUM AND GEOLOGICAL ENGINEERING)

Special additional requirements for appointment into a scientific work post of the scientific advisor and tenured scientific advisor:

- 1. the overall number of scientific papers referred to in points A1.1. and A1.2. exceeds the required minimal number of papers prescribed by the Rule Book on the Requirements for Appointment into Scientific Research Grades (Official Gazette No. 28/17), compliant to Article 43 of that Rule Book
- 2. one scientific paper more than the required minimal number of papers prescribed by the Rule Book on the Requirements for Appointment into Scientific Research Grades (Official Gazette No. 28/17), compliant to Article 43 of that Rule Book. The scientific paper must be published in a journal with impact factor in the first two quartiles (Q1 or Q2)
- 3. H-index according to WoSCC (Web of Science Core Collection) or Scopus database (higher than 8 for natural sciences; higher than 5 for technical sciences)
- 4. conducting scientific-research international/national project or one/more of its units referred to in points A7.1 to A7.3
- 5. dissertation conducting (doctoral thesis defended within a deadline and one scientific paper referred to in point A1.1. published in co-authorship with a doctoral candidate)
- 6. the teaching and research rank grade

^{**}Number of scientific papers that may replace a part of the overall minimum number of scientific papers where the candidate is the first author, provided that the candidate is the first author from the Institute. It is considered only if the author from the Institute is among the first three authors.

^{***}The scientific papers from points A1.1. and A1.2 are the only ones considered.

For the appointment into a scientific work post of scientific advisor, it is required to fulfil the minimum of one of the mentioned requirements, i.e. minimally two requirements for the working post of tenured scientific advisor.

IV. TRANSITIONAL AND FINAL PROVISIONS

Article 8

For the candidate who used the maternity and/or parental leave, unpaid leave or used a sick leave in a period exceeding three months, such periods shall not account within the required five years referred to in Article 4 paragraph 1 of this Rule Book.

Article 9

The Scientific Council of the Institute is in charge of interpreting the Rule Book.

Article 10

This Rule Book shall enter into force on the eighth day from its publication on the Institute's bulletin board.

Article 11

The provisions of this Rule Book shall not apply to all procedures of appointment into scientific work posts which were initiated prior to the entry into force of this Rule Book.

Chairperson of the Scientific Council

Željka Brkić, PhD

It is hereby established that this Rule Book is published on the bulletin board on May 11th, 2018 and it entered into force on May 19th, 2018.

Director

Miko Slobodan, PhD