

FREE UNIVERSITY OF BOZEN-BOLZANO

SELECTION PROCEDURES

for

**six posts of
JUNIOR UNIVERSITY RESEARCHER
with fixed-term CONTRACT**

Rector's decree
of 16.06.2016,
no. 139/2016

FREE UNIVERSITY OF BOZEN-BOLZANO
RECTOR'S DECREE
no. 139/2016

Selection procedures for six posts of *junior* university researcher with fixed-term contract

THE RECTOR

In view of

- the Statute of the Free University of Bozen-Bolzano;
- Art. 24 of the law 30th December 2010, no. 240;
- the regulation for the recruitment of researchers with fixed-term contract in force;
- the applicable regulation regarding the contractual and economic conditions of the professors and researchers;
- the resolution of the Faculty Council of the Faculty of Science and Technology of 14.04.2016, no. 114/2016, concerning the propose of the recruitment of one junior university researcher with fixed-term contract at the Faculty of Science and Technology in the competitive sector 07/C1 (Agricultural, forest and biosystems engineering) and in the disciplinary-scientific sector AGR/09 (Agricultural machinery and mechanization)
- the resolution of the Faculty Council of the Faculty of Science and Technology of 14.04.2016, no. 111/2016, concerning the propose of the recruitment of one junior university researcher with fixed-term contract at the Faculty of Science and Technology in the competitive sector 09/C1 (Fluid machinery, energy systems and power generation) and in the disciplinary-scientific sector ING-IND/08 (Fluid Machinery)
- the resolution of the Faculty Council of the Faculty of Science and Technology of 14.04.2016, no. 112/2016, concerning the propose of the recruitment of one junior university researcher with fixed-term contract at the Faculty of Science and Technology in the competitive sector 09/A3 (Industrial Design, Construction of Machines, Metallurgy) and in the disciplinary-scientific sector ING-IND/14 (Mechanical Design and Machine Construction)
- the resolution of the Faculty Council of the Faculty of Science and Technology of 14.04.2016, no. 113/2016, concerning the propose of the recruitment of one junior university researcher with fixed-term contract at the Faculty of Science and Technology in the competitive sector 09/B1 (Manufacturing technology and systems) and in the disciplinary-scientific sector ING-IND/16 (Manufacturing technology and systems)
- the resolution of the Faculty Council of the Faculty of Science and Technology of 14.04.2016, no. 116/2016, concerning the propose of the recruitment of one junior university researcher with fixed-term contract at the Faculty of Science and Technology in the competitive sector 09/E2 (Electrical Engineering) and in the disciplinary-scientific sector ING-IND/32 (Power electronic converters, electrical machines and drives)
- the resolution of the Faculty Council of the Faculty of Science and Technology of 14.04.2016, no. 116/2016, concerning the propose of the recruitment of one junior university researcher with fixed-term contract at the Faculty of Science and Technology in the competitive sector 01/A6 (Operations Research) and in the disciplinary-scientific sector MAT/09 (Operations research)
- considered that the posts of university researcher with fixed-term contract requested by the Faculty of Science and Technology enjoy the necessary financial backing.

DECREES

Art. 1

Object of the selection procedure

- 1) The Free University of Bolzano, hereinafter referred to as University, announces six selection procedures for six posts of *junior* university researcher for the Faculty and the disciplinary-scientific sector hereafter indicated.

1. Faculty of Science and Technology

Competition Sector: 07/C1 (Agricultural, forest and biosystems engineering)

Disciplinary-scientific sector: AGR/09 (Agricultural machinery and mechanization)

Area of research or title of the research project: Applications of Farm Machinery (designing and machine properties) and Farm Mechanization (use of machines) in agro-forestry enterprises to be used in productive processes or services at stationary or mobile user-point), with related management analysis (both ex-ante and ex-post) of their impacts on profitability, quality of primary products and environmental sustainability.

Research activity: The candidate will carry out teaching and research on topics of the sector AGR/09. All this, focusing on problems of mountain environments in relation to aspects concerning: i) the development of technology solutions that are appropriate to ensure adequate standards of safety and comfort to the operators of the sector, including a strong specialization towards the production contexts in sloping areas, offering unprecedented standard test conditions for agricultural vehicles to be primarily used in such environments, ii) the creation of new prototypes, designed to implement product- or process- innovations (either radical, or incremental) within the sector, iii) the promotion of technology transfer activities across multiple sectors, including application areas normally independent of each other: from winter industry to agri-forestry solutions, or vice versa.

Number of positions: 1

Duration of the contract: 3 years

The regime of commitment: full-time

Number of teacher-centered didactic hours assigned per academic year: Minimum 60 hours and maximum 120 hours for academic year

Type of selection: qualifications and discussion of the qualifications, the projects, the scientific production and oral exam.

Language of the interview with the commission: Italian

Language of the oral exam: English

Criteria for the attribution of a score to the candidates during the interview with the commission for the scientific qualifications, projects, every single publication and oral exam (max. 100 points)

Discussion of titles:

- Possession of a doctoral degree or equivalent in the field of research is congruent with the position of RTD subject to this call, obtained in Italy or abroad (**max. 15 points**)
- Master's degree: up to a **maximum of 5 points**
- further academic degrees: (master, specializations schools) up to a **maximum of 5 points**;
- experience in the field of agricultural engineering, with a focus on farm machinery and mechanization: up to a **maximum of 5 points**
- Teaching at the university level preferably within topics on farm machinery and mechanization: **max. 10 points**
- Research activities (max. 10 points)

- Participation as a speaker at conferences and national and international conferences, with contributions inherent issues of farm machinery and agricultural mechanization (**max. 10 points**)

Discussion of publications: It will be taken account of originality, scientific relevance of the editorial collocation, the spread within the scientific community, the number of authors, the consistency of the methods used in publications on topics of farm machinery and agricultural mechanization (**max. 20 points**).

Oral exam (verification of language knowledge): Knowledge of English language will be evaluated based on reading and oral translation of a text chosen by the commission and a short conversation (**max. 20 points**).

Criteria for determining the part of the candidate in publications with more than one author: For publications with multiple authors, the individual contribution of the candidate, if not obvious from the text, is determined based on a duly signed statement of the authors of the work on the contribution of the individual. In the absence of such a declaration, the contribution among the various authors is considered equally weighted

Threshold for the assessment of candidates' suitability with regard to the publications, the scientific curriculum and the discussion with the Commission: 50/80 points.

Threshold for the assessment of candidates' suitability with regard to the oral exam: 10/20 points

Maximum number of publications: 12

Supervisor: Prof. Fabrizio Mazzetto

Working place: Bozen-Bolzano

Session: III Session 2016

2. Faculty of Science and Technology

Competition Sector: 09/C1 (Fluid machinery, energy systems and power generation)

Disciplinary-scientific sector: ING-IND/08 (Fluid Machinery)

Area of research or title of the research project: Thermo-fluid-dynamic, energy and environmental analysis of fluid machines for small scale distributed generation systems.

Research activity: The research focuses on the main thermodynamic, fluid-dynamic, energy and environmental issues of the fluid machines. In particular, it deals with the design, the management, the diagnosis and the environmental impact of the single components of fluid machines as well as the study of the industrial plants in which fluid machines are installed. Research includes the test on both motor machines (gas and water turbines, expanders and internal combustion engines) and operating machines (pumps, compressors). The activity will be focused on small-scale distributed energy generation devices (micro-gas turbines, internal combustion engines, micro-hydro turbines) fed with renewable sources, traditional or alternative fuels; the operation of such fluid machines, their fluid-dynamics and the combustion process will be investigated using experimental and numerical tools. Moreover, the insertion of those machines within power generation systems and industrial and civil applications will be studied.

Number of positions: 1

Duration of the contract: 3 years

The regime of commitment: full-time

Number of teacher-centered didactic hours assigned per academic year: min. 60 hours and maximum 120 hours for academic year to be taught partially or entirely in German

Type of selection: qualifications and discussion of the qualifications, the projects, the scientific production and oral exam.

Language of the interview with the commission: English

Language of the oral exam: German

Criteria for the attribution of a score to the candidates during the interview with the commission for the scientific qualifications, projects, every single publication and oral exam (max. 100 points)

Discussion of titles:

- Master's degree in Mechanical Engineering or equivalent (**max. 5 points**)
- Possession of a doctoral degree or equivalent in the field of research is congruent with the position of RTD subject to this call, obtained in Italy or abroad (**max. 10 points**)
- Further post-doc positions: research fellows and RTD contracts (**max. 10 points**)
- Teaching at the university level preferably within: Fluid Machine Design, Energy systems design (**max. 10 points**)
- Research activities (**max. 10 points**)
- Participation as a speaker at conferences and national and international conferences (**max. 5 points**)
- Professional experience in CHP systems and/or renewable energy systems (**max. 10 points**)

Discussion of publications: It will be taken account of originality, scientific relevance of the editorial collocation, the spread within the scientific community, the number of authors, the consistency with the scientific sector (**max. 20 points**).

Oral examination (verification of language knowledge): Knowledge of German language will be evaluated based on reading and oral translation of a German text chosen by the commission and a short conversation (**max. 20 points**).

Criteria for determining the part of the candidate in publications with more than one author: For publications with multiple authors, the individual contribution of the candidate, if not obvious from the text, is determined based on a duly signed statement of the authors of the work on the contribution of the individual. In the absence of such a declaration, the contribution among the various authors is considered equally weighted.

Threshold for the assessment of candidate's suitability with regard to the publications, the scientific curriculum and the discussion with the Commission: 60/80 points.

Threshold for the assessment of candidate's suitability with regard to the oral exam: 12/20 points

Maximum number of publications: 12

Supervisor: Prof. Andrea Gasparella

Working place: Bozen-Bolzano

Session: III Session 2016

3. Faculty of Science and Technology

Competition Sector: 09/A3 – Industrial Design, Construction of Machines, Metallurgy

Disciplinary-scientific sector: ING-IND/14 – Mechanical Design and Machine Construction

Area of research: The research field is focused on the mechanical characterization of advanced engineering materials, aimed at assessing their structural performance, and on the design of innovative components and solutions. This is to be achieved by simulations, experimental analysis and testing.

Research activity: The research is aimed at the study of the structural strength of advanced materials currently employed in actual industrial engineering applications. More specifically, the research focus is on the identification of models applied to describe the mechanical behavior and final failure of several not yet completely tested alloys, both isotropic and anisotropic, under complex loading conditions. Loads might be static, and possibly dynamic. The more promising models will be selected, subsequently implemented into computational codes, and finally tuned and validated based on sound experimental data. To this purpose, the planning and execution of proper experimental campaigns will be mandatory, using dedicated experimental equipment and sample geometries. Collected data will be used for the calibration of the abovementioned models. The results will be exploited for the design/validation of innovative mechanical components. These components will be eventually tested at a laboratory level to assess the effectiveness of the adopted models. The research activities require an advanced use of finite element numerical analysis and the knowledge of techniques and methodologies of experimental mechanics and machine design.

Number of positions: 1

Duration of the contract: 3 years

The regime of commitment: full-time

Number of teacher-centered didactic hours assigned per academic year: Minimum 60 hours and maximum 120 hours for academic year to be taught partially or entirely in German

Type of selection: qualifications and discussion of the qualifications, the projects, the scientific production and oral exam

Language of the interview with the commission: English

Language of the oral exam: German

Criteria for the attribution of a score to the candidates during the interview with the commission for the scientific qualifications, projects, every single publication and oral exam (max. 100 points)

Discussion of titles:

- Master's degree in Mechanical Engineering or equivalent (**max. 5 points**)
- Possession of a doctoral degree or equivalent in the field of research is congruent with the position of RTD subject to this call, obtained in Italy or abroad (**max. 10 points**)
- Further post-doc positions: research fellows and RTD contracts (**max. 10 points**)
- Teaching at the university level preferably within: Machine Design, Design using Finite Elements, - Mechanical Design (**max. 10 points**)
- Research activities (**max. 10 points**)
- Participation as a speaker at conferences and national and international conferences (**max. 5 points**)
- Professional experience in Mechanical Design (**max. 10 points**)

Discussion of publications: It will be taken account of originality, scientific relevance of the editorial collocation, the spread within the scientific community, the number of authors, the consistency with the scientific sector (**max. 20 points**).

Oral examination (verification of language knowledge): Knowledge of German language will be evaluated based on reading and oral translation of a text chosen by the commission and a short conversation (**max. 20 points**).

Criteria for determining the part of the candidate in publications with more than one author: For publications with multiple authors, the individual contribution of the candidate, if not obvious from the text, is determined based on a duly signed statement of the authors of the work on the contribution of the individual. In the absence of such a declaration, the contribution among the various authors is considered equally weighted.

Threshold for the assessment of candidates suitability with regard to the publications, the scientific curriculum and the discussion with the Commission: 60/80 points.

Threshold for the assessment of candidates suitability with regard to the oral exam: 15/20 points.

Maximum number of publications: 12

Supervisor: Prof. Dominik Matt

Working place: Bozen-Bolzano

Session: III Session 2016

4. Faculty of Science and Technology

Competition Sector: 09/B1 (Manufacturing technology and systems)

Disciplinary-scientific sector: ING-IND/16 (Manufacturing technology and systems)

Area of research: Technical and organizational optimization and design of production systems / processes in small and medium enterprises with the use of intelligent Industry-4.0 technologies

Research activity: The research activity is focused on the design and use of various planning and management techniques, particularly in relation to small and medium-sized companies, aiming to examine the economic effects of innovation, change and improvement projects at various levels of detail of a production and business system, amongst other things the relationships between design decisions taken and the resulting business performance achieved, between the design and implementation of innovations, the type of financing of projects, in conjunction with the context in which the company operates. In this context, the interplay of man, machine and organization in terms of an interlocking system of production with manufacturing processes for the conversion of materials and information processes for information handling is in the foreground. For the purpose of increasing demands in terms of competitiveness and sustainability at the global level particularly small and medium-sized enterprises are affected, for which it is necessary to develop innovative methods and systems for manufacturing, assembly, for management and for planning of appropriate systems. Today, many small and medium enterprises also lack of access to automated systems, leading to a competitive disadvantage. In this sense, the research activities are aimed specifically at the development of leaner, more flexible and changeable production and assembly systems for small and medium businesses, by combining their flexibility with the efficiency of manual processes with automated or semi-automated systems and with the new technologies of the Internet of things in the context of the concepts related to Industry 4.0 and the Smart Factory. This requires the exploration of the state of the art, the determination of the requirements for such systems and methods and the design and practical implementation (e.g. in the designated FUB "Mini-Factory" lab). Practical results of the research are new approaches for small and medium-sized companies with the objective to increase the level of innovation, the effective use of automation in production and assembly, the streamlining of production and organization, to increase efficiency in the sense of Lean and Agile thought, to shorten throughput - delivery times and to increase the adaptability and flexibility of production processes and systems.

Number of positions: 1

Duration of the contract: 3 years

The regime of commitment: part-time

Number of teacher-centered didactic hours assigned per academic year: 45 hours to be taught partially or entirely in German

Type of selection: qualifications and discussion of the qualifications, the projects, the scientific production and oral exam

Language of the interview with the commission: English

Language of the oral exam: German

Criteria for the attribution of a score to the candidates during the interview with the commission for the scientific qualifications, projects, every single publication and oral exam (max. 100 points)

Discussion of titles:

- Possession of a doctoral degree or equivalent in the field of research is congruent with the position of RTD subject to this call, obtained in Italy or abroad (**max. 15 points**)
- Master's degree: up to a **maximum of 5 points**
- Further master degrees: up to a **maximum of 5 points**
- Experience in the design, implementation and optimization of industrial production systems in small and medium-sized enterprises: up to a **maximum of 5 points**
- Teaching at the university level preferably within: design of production systems, production planning and control (**max. 10 points**)
- Research activities in the research field (**max. 10 points**)
- Participation as a speaker at conferences and national and international conferences (**max. 10 points**)

Discussion of publications: It will be taken account of originality, scientific relevance of the editorial collocation, the spread within the scientific community, the number of authors, the consistency of the methods used in publications with the sector (**max. 20 points**)

Oral examination: (verification of language knowledge): Knowledge of German language will be evaluated based on reading and oral translation of a text chosen by the commission and a short conversation (**max. 20 points**).

Criteria for determining the part of the candidate in publications with more than one author: For publications with multiple authors, the individual contribution of the candidate, if not obvious from the text, is determined based on a duly signed statement of the authors of the work on the contribution of the individual. In the absence of such a declaration, the contribution among the various authors is considered equally weighted.

Threshold for the assessment of candidates suitability with regard to the publications, the scientific curriculum and the discussion with the Commission: 75/80 points.

Threshold for the assessment of candidates suitability with regard to the oral exam: 15/20 points.

Maximum number of publications: 12

Supervisor: Prof. Dominik Matt

Working place: Bozen-Bolzano

Session: III Session 2016

5. Faculty of Science and Technology

Competition Sector: 09/E2 (Electrical Engineering)

Disciplinary-scientific sector: ING-IND/32 (Power electronic converters, electrical machines and drives)

Area of research: The research will be carried out in the frame of the design of high performance electromechanical conversion systems, considering both the design and analysis of electrical machines, the related drives and the control strategies. The research will be conducted in collaboration with research groups of the Faculty of Science and Technology and foreign universities, as well as in collaboration with local partners.

Research activity: Analysis, modeling and design of electrical drives with high-efficiency and high torque density induction motors and synchronous motors for high performance electromechanical energy conversion. Experimental validation of the developed models by means of experimental test on specific prototypes. Collection and processing of experimental data and results. Presentation and promotion in conference and journals.

Number of positions: 1

Duration of the contract: 3 years

The regime of commitment: full-time

Number of teacher-centered didactic hours assigned per academic year: min. 60 hours and maximum 120 hours for academic year

Type of selection: qualifications and discussion of the qualifications, the projects, the scientific production and oral exam

Language of the interview with the commission: English

Language of the oral exam: German

Criteria for the attribution of a score to the candidates during the interview with the commission for the scientific qualifications, projects, every single publication and oral exam (max. 100 points)

- Master's degree: up to a **maximum of 7 points**
- Possession of a doctoral degree or equivalent in the field of research is congruent with the position of RTD subject to this call, obtained in Italy or abroad (**max. 13 points**)
- Teaching experience and experience as teaching assistant at university level preferably within the topics of the scientific sector related to this call (**max. 5 points**)
- Research and professional activities (e.g., research contract at university level or at a another renowned research institution) in the fields of research set out in the above mentioned research activity, participation as a speaker at national and international conferences in the field of research subject to this call (**max. 35 points**)
- Discussion of publications: It will be taken account of originality, scientific relevance of the editorial collocation, the spread within the scientific community, the number of authors, the consistency of the methods used in publications with the research project and the sector (**max. 30 points**).
- The knowledge of the German language will be evaluated based on reading and oral translation of a text chosen by the commission and a short conversation (**max. 10 points**).

Threshold for the assessment of candidates suitability with regard to the publications, the scientific curriculum and the discussion with the Commission: 60/90 points.

Maximum number of publications: 12

Supervisor: Prof. Luigi Alberti

Working place: Bozen-Bolzano

Session: III Session 2016

6. Faculty of Science and Technology

Competition Sector: 01/A6 (Operations Research)

Disciplinary-scientific sector: MAT/09 (Operations Research)

Area of research: Study of decision-making processes and development of mathematical models and quantitative methods for the optimization, for example, of production, distribution, support for goods and services, planning and management of activities. Theoretical formulation and development of solution algorithms

Research activity: The candidate will carry out teaching and research in the specified scientific sector (MAT/09) consistently with the research macro-area "Fundamental sciences for innovative applications".

Number of positions: 1

Duration of the contract: 3 years

The regime of commitment: full-time

Number of teacher-centered didactic hours assigned per academic year: min. 60 hours and maximum 120 hours for academic year

Type of selection: qualifications and discussion of the qualifications, the projects, the scientific production and oral exam

Language of the interview with the commission: English

Language of the oral exam: Italian

Criteria for the attribution of a score to the candidates during the interview with the commission for the scientific qualifications, projects, every single publication and oral exam (max. 100 points)

Discussion of titles:

- Possession of the PhD title or equivalent in a field related to the RTD announced position (see the following art. 2 "Requirements for admission"), obtained in Italy or abroad **(15 points max)**
- Research activity at qualified Italian and foreign institutes **(10 points max)**
- Seminars at Italian and foreign Universities and at national and international workshops **(15 points max)**
- Didactic experience at a university level **(20 points max)**.

Discussion of publications: The following aspects will be taken into account for the evaluation: originality, scientific relevance of the editorial collocation, diffusion within the scientific community, number of authors, congruency of the methods employed in the publications with the research field and the sector **(40 points max)**.

Oral examination: (verification of language knowledge): Italian language proficiency will be evaluated based on the reading and oral translation of a text chosen by the commission and on a short

conversation (10 points max).

Criteria for determining the part of the candidate in publications with more than one author: For publications with multiple authors, the individual contribution of the candidate, if not obvious from the text, is determined based on a duly signed statement of the authors of the work on the contribution of the individual. In the absence of such a declaration, the contribution among the various authors is considered equally weighted.

Threshold for the assessment of candidates suitability with regard to the publications, the scientific curriculum and the discussion with the Commission: 54/90 points.

Threshold for the assessment of candidates suitability with regard to the oral exam: 7/10

Maximum number of publications: 12

Supervisor: Prof. Letizia Bertotti

Working place: Bozen-Bolzano

Session: III Session 2016

Art. 2

Requirements for admission

- 1) For participating in the selection procedure candidates must possess the following qualification:
 - a) research doctorate or equivalent, obtained in Italy or abroad.

Position 1: PhD or equivalent foreign titles in the field of the agro-forestry or environmental sciences, engineering or physical sciences, or information technologies.

Position 2: PhD or equivalent foreign titles in the field related to the scientific sector of the procedure

Position 3: PhD or equivalent foreign titles in the field related to the scientific sector of the procedure

Position 4: PhD or equivalent foreign titles in the field of the design of changeable, agile, reconfigurable and intelligent production systems.

Position 5: PhD or equivalent foreign titles in Mathematics, oriented to Operations research or anyway in the field of Operations research.
- 2) The following persons cannot participate in the selection procedure:
 - a) university professors of the first and second rank and researchers employed with open-ended contract, even if ceased from service;
 - b) those having had contracts in quality of holder of research grants and of fixed-term researcher according to Art. 22 and 24 of the law no. 240/2010 by the University or other public, not public or telematic Italian Universities, and bodies provided by paragraph 1 of Art. 22 of the law no. 240/2010 for a period that, added to the duration provided by the contract of the call, exceeds altogether 12 years, also not consecutive. For the duration of the mentioned relationships the periods of absence for maternity or for health reasons as provided by law in force are not taken into consideration;
 - c) those having family or kinship relation, up to the fourth degree, with a professor of the Department making the proposal of the activation of the contract, with the Rector, the Director or with a member of the University Council

- 3) All above mentioned requirements must be held on the date of expiry of the term set for the presentation of the application for participation in the selection procedure.

Art. 3

Conditions for presenting the application for participation

- 1) To participate in the present selection procedure candidates must fill in an application form in unstamped paper, according to the model of attachment 'A' and available on the web page of the University <http://www.unibz.it/en/organisation/vacancies/research/default.html> within 30 days from the day following the publication of this public announcement in "*Gazzetta Ufficiale della Repubblica*".

- 2) The application, duly signed and dated at the last page, must be addressed to:

Free University of Bozen – Bolzano
Personnel Office Academic Staff (call)
Piazza Università, 1- P.O.B. 276
39100 Bozen-Bolzano

The application for participation in the selection procedures may also be directly handed in (opening hours: from Monday to Friday from 10 a.m. to 12 a.m. and from 2 p.m. to 4 p.m.) or sent by post with registered letter with notification of reception or any other form appropriate to certify the reception within the above mentioned final date. Therefore shall be considered proof the date stamp of the accepting post office according to the D.P.R. 28th December 1970, no. 1077.

The candidate is obligated to add to the application in paper form, a data carrier which contains a digital copy of all documents (if possible PDF version) produced (the same holds true for the publications).

The University disclaims liability for possible postal mis-deliveries.

- 3) On the package the candidate, in addition to the requirements mentioned in paragraph 2, must affix the inscription "Application: selection procedure for one post of university researcher with fixed-term contract" and accurately indicate the faculty, the competitive sector, the initials and the denomination of the disciplinary-scientific sector, the title of the research project and the candidate's name, surname and address for the present selection procedure (the address for the present selection procedure is the candidate's elected domicile for the receipt of the communications relating to this procedure).
- 4) On the application (see attachment 'A') the candidate must clearly indicate her/his name and surname and must declare, under his/her own responsibility:
- a) the date and place of birth;
 - b) the code of personal identification (tax number);
 - c) the residence, with the indication of the street, the street number, the town, the province, the postcode;
 - d) the possessed citizenship;
 - e) the municipality on whose electoral lists she/he is registered or the reasons for the non-registration or cancellation from such lists.
- Foreign nationals must declare to enjoy civil and political rights in the country on which they belong;
- f) not having been convicted of the criminal offences and not having pending criminal suits (otherwise to indicate);
 - g) not to exceed the superior limit of twelve years, also non continuous periods, therefore considering the total duration of the contracts under Art. 22 (Research grants) and Art. 24 (fixed-term researchers) of the law 30th December 2010, no. 240, also between different universities, public, non-public or telematic ones, and with bodies as provided in Art. 22, paragraph 1 of the law no. 240/2010, as well as the duration of the contract according to the present call;
 - h) having viewed the advertisement to which this selection procedure refers and accepts all its provisions;
 - i) the content of the digital copies of all documents produced correspond to the content of the copies produced on paper;
 - j) not to be a university professor of the first and second rank or a researcher employed with open-ended contract, even if ceased from service;

k) not to have family or kinship relation, up to the fourth degree, with a professor of the Department making the proposal of the activation of the contract, with the Rector, the Director or with a member of the University Council;

l) not to have been dispensed or dismissed from the employment by a Public Administration for persistent insufficient performance, not having been declared lost from other public employment according to art. 127, paragraph 1, letter d) of the T.U. regarding provisions concerning the charter of civil servants, approved with D.P.R. 10th January 1957, no. 3, not having gained the employment through production of faked documents or vitiated by not amendable invalidity, and not having had an employment relationship by a Public Administration which has been terminated for disciplinary reasons, included those provided in art. 21 of the legislative decree 29/1993;

m) he/she gives the Personnel Office Academic staff the permission to send the scientific curriculum vitae to the mentoring group of the Faculty in order to define the optionally payment of the scientific salary increase in case of employment;

n) the different activities, than those listed in Art. 12 of the present call, he/she perform;

o) that everything in the curriculum vitae (CV) that has been attached to this application is true and s/he gives the person in charge of the selection procedure the permission to undertake any checks on any substitute declarations that have been presented by the undersigned for the purposes of this selection procedure;

p) to give the permission for the use of personal details that s/he has supplied to be processed as per Italian legislative decree 196/2003 for any procedures that are connected to this selection procedure and any contracts that may be drawn up as a consequence;

q) the address chosen for the receipt of communications relating to the selection procedure she/he has applied for (address with postcode, telephone number, possible e-mail-address or fax number) and the commitment to inform the University in case of possible subsequent variations of those data.

- 5) Candidates with recognized disabilities must expressly specify in their application any aid needed in relation to their handicap and the possible necessity of further time for the performance of the exams, according to art. 20 of the law 5th February 1992, no. 104.
- 6) Any variation of the candidate's data according to paragraph 4 of the present article must be communicated in written form immediately to this Administration.
- 7) The University accepts no responsibility for cases in which candidates are untraceable or the communications are undeliverable due to imprecise indication of the address, or belated or lack of notification on the part of the candidate regarding a change of the address declared in the application. The University also disclaims liability for mail going astray, whether third parties are to blame, or whether it is attributable to mishaps, or to *force majeure* and which, in any case, is in no wise ascribable to the University. It accepts no blame when the return delivery slip indicating receipt of the application, of documents or of communications relating to the selection procedures fails to arrive. If the candidate's address differs from that of her/his place of residence, again the University is exempt from responsibility should a registered letter with notification of receipt arriving at the place which the candidate had specified as his address during the period of selection, fail to reach her/him.

Art. 4

Presentation of qualifications

- 1) Considered that, in accordance to the present call, by 'qualifications' are intended the scientific, didactic and artistic ones and the publications, and for 'certificates' any document proving the possession of a certain qualification, the candidate must enclose at the application for participation in the selection procedure in unstamped paper:
 - a) 1 photocopy of a valid identity document and the tax number;
 - b) 1 photocopy of the curriculum vitae regarding the didactic and scientific activity and drawn up according to the model of attachment 'C';
 - c) qualifications believed useful for the comparative assessment;
 - d) 1 photocopy of the list of the publications believed useful for the comparative assessment and drawn up in accordance with article 5 paragraph 3 of this call;
 - e) 1 photocopy of the list of all documents enclosed at the application [generic list of those materially inserted in the envelope, or the documents required by letters a), b), c) and d) of the present paragraph].

2) The qualifications indicated in paragraph 1, letter c), of the present article, if issued by Italian Public Administration, must be produced in one of the following forms:

- a) in copy corresponding to the original as certified by substitutive declaration of the deed of notoriety according to art. 47 of the D.P.R. 28th December 2000, no. 445. In that case the candidate must produce:
 - 1 copy of each qualification;
 - 1 declaration drawn up according to the model of attachment 'B', signed and dated at the last page, where the candidate, under own responsibility, declares that the copies of the enclosed qualifications, exactly described, and in particular with regard to the date of attainment, place and Administration issuing the qualification, correspond to the original. That declaration at the same time serves as list of the qualifications, in which case the latter ones do not have to be produced;
 - 1 copy of an identity document;
- b) in form of a self-declaration according to the model of attachment 'B' (substitutive declaration of certification according to art. 46 of the D.P.R. 28th December 2000, no. 445), where the candidate, under own responsibility, declares to possess the qualifications, exactly described, in particular with regard to the date of issue, place and Administration issuing the qualification. In that case the candidate must produce:
 - 1 copy of the attachment 'B', signed and dated at the last page, which at the same time serves as list of the qualifications, in which case the latter ones must not be produced;
 - 1 copy of an identity document.

The University cannot request nor accept certificates issued by other Italian public offices.

If the above-mentioned certificates should be enclosed at the application for participation in the selection procedure, they will not be considered by the Commission of selection.

The certificates issued by private corporation or abroad can be produced in one of the following forms:

- a) in original;
- b) in certified copy;
- c) in copy corresponding to the original as certified by substitutive declaration of the deed of notoriety or in form of a self-declaration according to the above-mentioned model of attachment 'B'.

The above mentioned declarations drawn up according to the model of attachment 'B' may be used by Italian citizens and also by citizens of the EU.

The declarations according to the above-mentioned articles of the D.P.R. 28th December 2000, no. 445, may be used by non-EU citizens, if it is necessary to proof conditions, facts and personal qualities certifiable or attestable by public or private Italian bodies, without prejudice of special provisions in laws and regulations concerning immigration matters and the condition of foreigners.

- 3) The curricula and the lists mentioned in letters d) and e) of paragraph 1 of the present article must be signed and dated in the last page.
- 4) No qualification sent to this Administration will be returned.
- 5) The sending of the publications does not enable to correct the missed or late submission or mailing of the application for participation in the selection.
- 6) Without prejudice to the exceptions expressly provided by law, the above-mentioned attachment 'B' may further be used by the candidate to declare standings, facts and personal qualities of her/his direct knowledge, not expressly indicated in art. 46 of the D.P.R. 28th December 2000, no. 445.
- 7) With regard to non-EU citizens, the certificates issued by the competent Authorities of the country the person belongs to, must be in accordance with the provisions in force in those countries and must also be legalized by the competent Italian consular authorities.
- 8) With regard to conditions, facts and personal qualities self-certificated by the candidates for the present selection procedures the University has the possibility to exercise appropriate checks, also random ones, regarding their truthfulness.

In case of mendacious declaration the candidate, further than being excluded from the selection procedure, will be denounced according to the Criminal Code and the special laws regarding the matter, according to the provisions cited in art. 76 of the D.P.R. 28th December 2000, no. 445.

- 9) The qualifications may be produced in their original language if it is one of the following: Italian, French, English, German and Spanish.

It is in the authority of the Commission of selection to request the candidates integrations of the qualifications submitted in French, English, German or Spanish language, by forwarding the correspondent translation in Italian.

The translation in Italian language must be accompanied by a substitutive declaration of the deed of notoriety where the candidate, according to art. 47 of the D.P.R. 28th December 2000, no. 445, certifies the conformity of the translated text with the original (see attachment 'B').

- 10) Any qualifications drawn up in a language different than Italian, French, English, German and Spanish, submitted by Italian, EU or non-EU citizens, must be enclosed, according to paragraph 3 of Art. 33 of the D.P.R. 28th December 2000, no. 445, the correspondent Italian translation, which is certified conform to the original text by the competent diplomatic or consular representation or by a official translator.

The qualifications drawn up in a different language than those above mentioned, in case of lacking translation, will not be assessed by the Commission of selection.

Art. 5

Sending of the publications

- 1) The sending of the application for participation may be enclosed by the forwarding of the publications. The publications that the candidate believes useful for presentation at the comparative assessment and which have been indicated in the application for participation according to art. 4, paragraph 1, letter d), must be sent within 30 days from the day following the publication of this public announcement in "Gazzetta Ufficiale della Repubblica" by post with registered letter with notification of reception or any other form appropriate to certify the reception or handed in by hand (opening hours: from Monday to Friday from 8.30 a.m. to 12.30 a.m. and from 2 p.m. to 5 p.m.) to the

Free University of Bozen-Bolzano
Personnel Office Academic Staff (call)
Piazza Università, 1- P.O.B. 276
39100 Bozen-Bolzano

In relation to publications sent by registered letter with notification of reception proof shall be considered the date stamp of the accepting post office according to the D.P.R. 28th December 1970, no. 1077.

The University disclaims liability for possible postal mis-deliveries.

- 2) If the applicant forward more publications as foreseen in the art. 1, the Commission of selection assess only the maximum number in the order indicated by the applicant.
- 3) Publications will only be evaluated when they can be traced in public catalogues as publications.
- 4) Together with the publications, there must be enclosed a correspondent list, signed and dated at the last page. The Publications must be mentioned in chronological order within each category following the International Standard for bibliographic references with DOI whenever possible. With multiple authorship, if one is the main author, that author's name appears in *Italics*. In addition, in the left-hand margin please star (*) what you consider were especially significant publications. Where relevant, citation index and impact of journal.
- 5) On the package containing the publications there must be affixed the inscription "Publications: selection procedure for one post of university researcher with fixed-term contract" and also accurately indicated the faculty, the competitive sector, the initials and the denomination of the disciplinary-scientific sector, the title of the research project and the candidate's name, surname and address for the present selection procedure (the address of the present selection procedure is the candidate's elected domicile for the receipt of the communications relating to this procedure).

- 6) Publications handed in or sent after the final term as indicated in paragraph 1 of the present article cannot be considered by the Commission of selection.
- 7) For the present selection procedure as provided in art. 1 of the present call the print extracts and the works which, at the moment of the deadline of the call, have been subject to legal deposit according to the provisions of the law 15th April 2004, no. 106, put into effect with D.P.R. 3rd May 2006, no. 252 are considered assessable.
- 8) The publications, with no. 1 copy of the correspondent list attached, may be sent:
 - a) in original;
 - b) in certificated copy;
 - c) in photocopy. In that case a substitutive declaration of the deed of notoriety (to be drawn up according to the model of attachment 'B' and signed at the last page, with the production of a photocopy of an ID) must be attached, where the candidate, according to art. 47 of the D.P.R. 28th December 2000, no. 445, certifies the conformity of those produced with the original and indicates the author, the title of the work, the place and date of publication and the number of the work.
- 9) In case the candidate produces copies declared conform to the originals according to paragraph 7, letter c), of the present article:
 - a) for works printed in Italy it is also necessary to attest the date of deposit of the printing according to the law 15th April 2004, no. 106, put into effect with D.P.R. 3rd May 2006, no. 252;
 - b) for works printed abroad the date and place of publication must be indicated.
- 10) The publications may be produced in their original language if it is one of the following: Italian, French, English, German and Spanish.

It is in the authority of the Commission of selection to request the candidates integrations of the publications submitted in French, English, German or Spanish language, by forwarding the correspondent translation in Italian.

The translated texts must be produced in typewritten copies with the text printed in the original language and must be accompanied by a substitutive declaration of the deed of notoriety where the candidate, according to art. 47 of the D.P.R. 28th December 2000, no. 445, certifies the conformity of the translated text with the original (see attachment 'B').
- 11) The publications whose original language is different than Italian, French, English, German and Spanish must be translated in one of the above-mentioned languages.

It is in the authority of the Commission of selection to request the candidates integrations of the translations submitted in another language than Italian, by forwarding of a translation in Italian of the already translated text.

The translated texts must be produced in typewritten copies with the text printed in the original language and must be accompanied by a substitutive declaration of the deed of notoriety where the candidate, according to art. 47 of the D.P.R. 28th December 2000, no. 445, certifies the conformity of the translated text with the original (see attachment 'B').
- 12) For selection procedures concerning linguistic matters publications may be produced in the language or languages the selection procedure relates to, even if different of those indicated in paragraph 9 of the present article.
- 13) The publication must be produced in any case, even in case they have already been submitted by this or other Administrations for participation in other selection procedures.
- 14) The missed sending of the publications within the provided date is not considered as renunciation of participating in the selection procedure. Nevertheless, the Commission of selection assesses the candidate only on the basis of the curricula and can therefore not assess the scientific works even if they are personally known by its members.

The Commission of selection does not take into consideration publications not conforming to the required format or in different edition as those indicated in the application for participation in the selection procedure.
- 15) No scientific work sent to this Administration will be returned. Nevertheless, the candidates may

reacquire its possess, except in case of pending controversy and according to the provision of the subsequent article 15, by going, personally or on behalf of a delegate, to the Personnel Office for the Teaching and Research Staff within the term of six months starting from the date of the Rector's decree of confirmation of the regularity of the records. After this term has passed it is in the power of the University to dispose freely of the material not withdrawn.

Art. 6

Exclusion from participation in the selection procedure

- 1) The candidates are admitted conditionally to the selection procedures. Therefore exclusion through failing to meet the prescribed requirements is provided for with due decree of the Rector of the University at whatever stage of the procedure.
- 2) In particular, are excluded those:
 - a) presenting an application which is not signed;
 - b) presenting applications which, for any reasons, are not sent by post or consigned by the final deadline indicated in art. 5, paragraph 1 of the present call.

Art. 7

Renunciation of participation

- 1) The renunciation of participation in the selection procedure (to be drawn up according to the model of attachment 'D') must be sent by fax to the President of the Commission of selection (fax number +39 0471 017009) and, for information, to the person in charge of the procedure (fax number +39 0471 011309).

Renunciations which precede the formation of the Commission of selection must be sent exclusively to the person in charge of the procedure (fax number: +39 0471 011309).
- 2) Renunciation takes effect from the Commission's first meeting following the date of its receipt.
- 3) The absence of the candidate at the public discussion with the Commission of selection about the qualifications, the projects, the artistic production and the scientific production is considered implied renunciation to the selection procedure.

Art. 8

Commission of selection

- 1) The Commission of selection is to be constituted of three professors of the first rank or of two professors of the first rank and of a professor of the second rank of universities in Italy or abroad.
- 2) The members of the Commissions of selection are appointed by the Department requesting the selection procedure.
- 3) The Commission of selection is appointed by special provision, to be published also on the University's web page.

The Commission of selection remains in charge for six months and may be renewed only once and for not more than four months.

In case the work has not been completed within the extended period, the Rector, with due provision, will start procedure for the replacement of the Commission or the members responsible for the delay, establishing at the same time a new term for the conclusion of the work.
- 4) The Commission of selection, for carrying out its meetings, may make use of telematic tools for collective work.

Art. 9

Selection of the candidates

- 1) The selection is performed by a preliminary assessment of the candidates, with justified analytical judgment of the qualifications, the projects, the artistic production, the curricula and the scientific production, also included the doctorate thesis, in accordance with the criteria set out in M.D. 25th May 2011, no. 243.

- 2) The Commissions of selection perform a motivated assessment, followed up by a comparative assessment, referring to the specific competitive sector and to the profile defined exclusively through the indication of one or more disciplinary-scientific sectors, the curriculum vitae and the following duly documented qualifications of the candidates:
- a) the possess of the qualification of Ph.D. or equivalent, or for interested sectors, a diploma of medical postgraduate specialisation, or equivalent, obtained in Italy or abroad;
 - b) eventual performance of university-level didactic activities in Italy or abroad;
 - c) documented performances of services regarding formation or research, by qualified public or private bodies in Italy or abroad;
 - d) performance of activity in clinical area relating to the disciplinary-scientific sectors requesting those specific competences;
 - e) project-activities regarding the disciplinary-scientific sector the selection procedure relates;
 - f) organisation, direction and coordination of national and international research teams;
 - g) ownership of patents related to those scientific-disciplinary sectors where it is provided;
 - h) participation, in quality of lecturer, at national or international conferences and conventions;
 - i) obtainment of awards and national or international recognitions for research activities;
 - j) diploma of European postgraduate specialisation recognized by international Board's, regarding the competitive sectors which have provided it.

The assessment of each above indicated qualification is made considering the significance it has, in order to the quality and quantity of the research-activity done by each candidate.

- 3) The Commission of selection, in order to perform the comparative assessment of the candidates, shall consider only publications or texts accepted for publication as provided by law in force, as well as essays integrated in collective works and articles published on magazines in paper or digital format with exclusion of internal notes or department relations. The doctorate thesis or equivalent qualifications are considered also in absence of this conditions.

The Commission of selection performs the comparative assessment of the scientific publications on the ground of the following criteria:

- a) originality, innovativeness, methodological accuracy and importance of each scientific publication;
- b) congruence of each publication with the competitive-sector the selection procedure relates to and with the profile defined exclusively through the indications of one or more disciplinary-scientific sectors, or with connected interdisciplinary topics;
- c) scientific relevance of the publication's editorial classification and their diffusion among the scientific community;
- d) analytical definition, also on the ground of the guidelines recognized by the related scientific community, of the candidate's individual contribution in case of participation at works in cooperation.

The Commissions of selection must also assess the total consistency of the scientific production of the candidate and its intensity and continuity, with exception of the periods, properly documented, of not voluntary renouncing of the research activity, particularly in relation to the parents role.

The Commissions of selection, in order to assess the publications, within the competitive sectors on international level where its use is recognized, make also use of the following indexes, referring the final date of presentation of the candidacies:

- a) total number of quotations;
- b) average number of quotations of each publication;
- c) total "impact factor";
- d) average "impact factor" of each publication;
- e) combination of the previous parameters to increase the impact of the scientific production of the candidate (Hirsch index or similar).

- 4) Following the preliminary assessment, the candidates comparatively more meritorious, in an amount included from 10 to 20 per cent of their number and, in any case, not less than six applicants, are admitted to the public discussion with the Commission of selection of the qualifications, the projects,

the artistic production and the scientific production, which may also assume the form of a seminar opened to the public. All candidates are admitted to the discussion if their number is equal or inferior to six.

Following the discussion a score will be attributed to the qualifications, the projects, the artistic production and to each publication submitted by the admitted candidates .

- 5) The discussion may be performed also by videoconference.
- 6) The oral examination, if provided, is aimed to verify the adequate knowledge of the teaching languages of the University and is being held in the language/s indicated in Art. 1 of the present call and will take place contemporaneously with the discussion.
- 7) The date/s of the public discussion with the Commission of selection of the qualifications, the projects, the artistic production and the scientific production will be communicated to the parties concerned in time.
- 8) In order to sustain the discussion, the candidate must be equipped, with the exclusion of others, of one of the following currently valid documents of recognition provided in Art. 35, paragraph 2 of the D.P.R. 28th December 2000, no. 445: identity card, passport, driving license, railway record-book, postal card, firearms license. The mentioned documents must contain a recent photograph of the candidate and her/his signature be authenticated by a mayor or a public notary in order to sustain the discussion.
- 9) At the end of the procedures, the Commission of selection identifies a winner and compiles the merit ranking of the suitable candidates valid for three years.
The Commission of selection gives communication of the record containing the final merit ranking to the person in charge of the procedure for the subsequent measures.
- 10) From the date of the measure of approval of the acts the term for lodging possible petitions is coming into force.
- 11) In case procedural errors are discovered, the records with due provision will be returned to the Commission of selection for regularization within a final term indicated in the measure.
- 12) The results of the selection will be made public also telematically on the web page of the University.
The results of the selection will be communicated by e-mail or by post to the winners by the Personnel Office for the Teaching and Research Staff.
- 13) The Department calling the selection procedure puts forward the proposal of call-up with a vote of the absolute majority of the professors of the first and second rank.
The proposal is approved by decree of the President of the University Council.

Art. 10

General conditions of the contract, duration of the contract, causes of resolution

- 1) The contract with the researcher has to contain a fixed time-limit and a fixed duration also in relation to the fulfillment of the research program.
- 2) The fixed-term contract does not confer rights for access to the University staff.
- 3) The employment relationship may be resolved by voluntary resignation, with previous written communication addressed to the Rector and to be sent to the Personnel Department of teaching staff and researchers of the Faculty the researcher belongs.
In that case the researcher is obliged to observe a 30 calendar day notice, which starts from the receipt of the resignation letter at the Personnel Department of teaching staff and researchers. In case of written consent of the responsible of the research project/of the responsible of the Department concerned, the notice may not be observed.
- 4) The employment relationship may be resolved according to the provisions of the Civil Code.

Art. 11

Rights and duties of the researchers

- 1) For the purpose of financial reporting of the research projects the notional quantification of the annual research activities amounts to 1.500 hours per year for full time researchers and 750 hours for part-time researchers.

The researcher must annotate all hours in a special register.

- 2) The researcher agrees the modalities on how to perform his/her activities with the responsible of the research project or, in case the latter is not provided, the responsible of the Faculty concerned.
- 3) Annually and at the end of the contract the researcher must submit a short paper containing the results of the research activity performed and the results attained at that date by the Faculty he/she belongs to.

The final report at the end of the contract must be analytical and detailed and must be submitted within 45 days preceding the end of the contract. In case there is a responsible of the research project, the report has to be endorsed and commented by the latter.

Art. 12

Incompatibility, compatibility, trial period, permission for external appointments

- 1) The recruitment in quality of researcher is incompatible with:
 - a) other employment relationships;
 - b) the enjoyment of the research grant;
 - c) the research doctorate, if related with the grant of a scholarship;
 - d) post-degree or post-doctorate scholarships or other kind of granted scholarships;
 - e) collaboration contracts for remuneration regarding didactics and research conferred by the University.

In case the candidate covers other offices or jobs, he/she is obliged to attach a declaration specifying the kind of activity he/she is practicing.

- 2) The recruitment in quality of researcher is compatible with
 - a. collaboration contracts for remuneration regarding didactics and/or research conferred by other universities or institutes in Italy or abroad, by approval of the responsible of the project/area of research and of the Rector;
 - b. occasional lectures and seminars that do not require approval in accordance with the Regulation regarding the incompatibilities and authorizations for the teaching and research staff.
- 3) The employees of the Civil Service must be temporarily relieved of their duties, without benefits or social security and welfare contributions, for the whole duration of the contract, or to be put in position of temporary staff, if that position is provided by the rules he/she belongs.
- 4) For employees of public administrations, whether with fixed-term or open-ended contract, if resulting winner in the selection procedure, the incompatibilities provided by existing legal provisions and by the concerned collective agreement remain in force.
- 5) The researcher is subject to a trial period of 3 months of effective service starting from the day of hiring.
- 6) For the authorization system the relevant legal provisions are applied.

Art. 13

Economic treatment and social security

- 1) The researcher with fixed-term contract has the right of an annual gross remuneration as determined by the University Council, which, for the researchers "*tempo definito*" is determined in 75 %.
- 2) It is intended that, for legal effects, the relation has to be qualified as dependent employment relationship, therefore the fiscal, charitable and social security disciplines provided for incomes from employment are applicable.

Art. 14

Return of publications

- 1) Candidates declared not eligible may withdraw, at their own expense, the publications submitted to this University within six months from the date of the Rector's decree of confirmation of the regularity of records. Once the term has passed the University keeps the material for its own necessities, disclaiming liability towards the candidates.

Art. 15

Protection of personal data

- 1) For information about the use of personal data, we refer to the data protection code in compliance with art. 13 of Legislative Decree no. 196/2003, attached to the present call.

Art. 16

Person in charge of the procedure

- 1) In accordance with the law 7th August 1990, no. 241, and with successive modifications and integrations the person in charge of the procedure of the present selection is Dr. Paola Paolini, Head of the Personnel Office Academic Staff, *Franz-Innerhofer-Platz 8 - Piazzetta Franz - P.O.B. 276* - tel. +39 0471 011308, fax +39 0471 011309, e-mail: personnel_academic@unibz.it
- 2) On the web page: <http://www.unibz.it/en/organisation/vacancies/research/default.html> expressly dedicated to the selection procedures, are available all relating information, in particular the progress report of the Commission of selection's works as well as the relating deadlines.


Art. 17

Referring provisions

- 1) For anything that is not expressly considered in the present announcement, reference shall be made, where applicable, to the norms cited in the recitals of the present decree and any related laws in force.

Bozen-Bolzano, 16.06.2016

Decree no. 139/2016


THE RECTOR
Prof. Dr. Walter A. Lorenz

