



SELECTION ANNOUNCEMENT No. 2018S8

BY QUALIFICATIONS AND EXAMINATIONS TO RECRUIT NO. 1 LEVEL II RESEARCH TECHNOLOGIST ON A FULL-TIME FIXED-TERM CONTRACT FOR 24 MONTHS, PURSUANT TO ART. 24BIS OF LAW NO. 240 OF 30.12.2010, AND TO THE NATIONAL COLLECTIVE BARGAINING AGREEMENT OF 19.04.2018 AT THE DEPARTMENT OF INFORMATION ENGINEERING - DEI.

By implementing Art. 24bis of Law no. 240 of 30.12.2010 and the National Collective Bargaining Agreement of 19.04.2018, the University of Padova plans to recruit Level II research technologist by qualifications and examinations on a full-time fixed-term contract, for 24 months at the Department of Information Engineering - DEI, to carry out the following research activities on the "Paccagnella Contr. MICRON 2017" project, financed by Micron Semiconductor Italia S.r.l., the "Contratto UE ENSPACE" project, financed by QASCOM S.r.l. as part of the "Horizon 2020" Program and the "Contratto ESA – 4000119384/17/NL/CRS" project, financed by ESA – European Space Agency:

- development of hardware and software for carrying out electric and reliability tests, in particular printed circuit boards and control programs, to be performed both on elemental devices (MOSFETs, HEMTs, memory cells), and on complex digital chips (Flash memories, Systems on Chip);
- development of measurement setups to characterize electronic devices, using laboratory instruments (power supplies, oscilloscopes, etc.) with focus on the tests to be carried out for the electronics meant for extreme environments, such as space or high-energy physics experiments, and in general with respects to ionizing radiation sensitivity;
- execution of experimental measurements through accelerated life tests at high voltage and temperature, and ionizing radiation sources, such as gamma rays, X rays, and proton and heavy-ion beams;
- processing of data collected during the accelerated tests and simulations, using data analysis software (e.g. MATLAB, Origin, etc.).

The aforementioned activities require the following **professional skills, knowledge and competences**:

- knowledge of the most important microelectronic devices, in particular MOSFETs and volatile and non-volatile memory cells;
- knowledge of the main electronic measurement techniques;
- knowledge of laboratory instruments for the characterization of solid-state electronic devices;
- knowledge of digital circuits operation and design;

- very good knowledge of English.

Admission requirements

Candidates must have the following requirements by the selection announcement deadline:

- academic qualifications:
 - **a first-cycle degree (*Laurea Triennale*)** (ex Ministerial Decree DM 270/04): class L-8 Information technology engineering, class L-31 Computer Science;
or a first-cycle degree (*Laurea Triennale*) (ex Ministerial Decree 509/99) recognised as the equivalent by Interministerial Decree 9.7.2009: class 09 Information technology engineering, class 26 Computer Science;
or an Italian University Diploma from a special-purpose school (ex Presidential Decree DPR no. 162/1982) recognised as the equivalent by Interministerial Decree DI 11.11.2011 in: Informatica (didattica a distanza);
or an Italian University Diploma (ex Law 341/1990) recognised as the equivalent by Interministerial Decree DI 11.11.2011 in: Ingegneria biomedica, o Ingegneria delle telecomunicazioni, o Ingegneria elettronica, o Ingegneria informatica, o Ingegneria informatica e automatica, o Informatica;
 - a second-cycle degree (*Laurea Magistrale*)** (ex DM 270/04) in class LM-18 Computer science, or class LM-21 Biomedical engineering, or class LM-22 Chemical engineering, or class LM-23 Civil engineering, or class LM-24 Construction engineering, or class LM-25 Automation engineering, or class LM-26 Safety engineering, or class LM-27 Telecommunications engineering, or class LM-28 Electrical engineering, or class LM-29 Electronic engineering, or class LM-30 Energy and nuclear engineering, or class LM-31 Management engineering, or class LM-32 Computer systems engineering, or class LM-33 Mechanical engineering, or class LM-35 Environmental engineering, or class LM-66 Computer systems safety;
or a second-cycle degree (*Laurea Specialistica*) (ex DM 509/99) recognised as the equivalent by Interministerial Decree DI 9.7.2009 in class 23/S Computer Science, or class 26/S Biomedical engineering, or class 27/S Chemical engineering, or class 28/S Civil engineering, or class 29/S Automation engineering, or class 30/S Telecommunications engineering, or class 31/S Electrical engineering, or class 32/S Electronic engineering, or class 33/S Energy and nuclear engineering, or class 34/S Engineering and industrial management, or class 35/S Computer engineering, or class 36/S Mechanical engineering, or class 38/S Environmental engineering;
 - or a degree (*Diploma di Laurea*) (prior to DM 509/99) recognised as the equivalent by Interministerial Decree DI 9.7.2009, in: Informatica, o Ingegneria biomedica, o Ingegneria medica, o Ingegneria chimica, o Ingegneria civile, o Ingegneria delle telecomunicazioni, o Ingegneria edile, o Ingegneria elettrica, o Ingegneria elettronica, o Ingegneria nucleare, o

Ingegneria gestionale, o Ingegneria industriale, o Ingegneria meccanica, o Ingegneria per l'ambiente e il territorio, o Ingegneria informatica, o Scienze dell'informazione.

A degree (*Diploma di Laurea*) (prior to DM 509/99) in Informatica and in Scienze dell'informazione must be recognised as the equivalent of an LM-18 or an LM-66 second-cycle degree (*Laurea Magistrale*) by the awarding university.

Candidates holding a foreign degree may take part in the selection only after completing a degree-equivalency process pursuant to Art. 38, paragraph 3 of Legislative Decree DL 165/2001. Candidates are conditionally admitted to the selection procedure if the equivalency process is underway, but no final decision has been reached. They must have had their degree recognised as the equivalent of an Italian degree by the time they are recruited.

The degree-equivalency process must be started before the selection-announcement deadline, otherwise the candidate will be excluded from the selection procedure. Candidates must inform the procedure manager that they have applied for degree equivalency.

The degree-equivalency application form is available at:

<http://www.funzionepubblica.gov.it/strumenti-e-controlli/modulistica>

- specific professional qualification pertinent to the research:
at least two years of professional experience relevant to the activities to be carried out;
- Italian citizenship (Italians who are not citizens of the Republic of Italy have the same rights as Italian nationals), or citizenship of an EU Member State. Following implementation of Art. 7 of Law 97/2013, the following may also apply for the selection procedure: family of citizens from an EU Member State who do not have citizenship of an EU Member State, but do have the right of residence, or the permanent right of residence; and third-country nationals with a long-term EU permit of stay, with refugee status, or with subsidiary protection status;
- candidates with full political rights;
- candidates who are physically suitable for the position;
- candidates who have completed their military service.

Non-Italian nationals are required to:

- have full civil and political rights in their country of origin;
- fulfil the same requirements as Italian nationals, but do not need Italian citizenship;
- have a good knowledge of Italian.

Application form

The application form and appendices for this selection announcement **must be submitted online** with the Pica platform at: <https://pica.cineca.it/unipd/tipologia/pta>.

To apply online, candidates must have a valid email address so that they can register with the system. They must also provide all of the information needed to complete the application and attach the required documents in electronic form.

The system allows the application to be saved in draft form until the submission deadline. The online application procedure and submission must be completed by **5 pm on June the 1st 2018, when the selection announcement closes.**

The system will certify the date that the online application form is submitted by emailing candidates an automatic receipt. Once the submission deadline has expired, the system will shut down access and applications can no longer be sent.

If necessary, a submitted application form can be withdrawn and another one submitted **before the application deadline (June the 1st 2018).**

Each application will be given an identification number which must be included in any correspondence, along with the selection announcement code stated in the online procedure. Candidates must complete each and every part of the application form in accordance with the online instructions. The application is to be completed as follows:

- with a digital signature using a smart card, USB token or remote signature that enables the user to sign documents with signature software. Alternatively, a web portal may be used to provide a certified remote signature. Candidates with a smart card or USB token for digital signing can check for compatibility with the server's digital-signing system. If compatible, the user may sign the application on the server;
- candidates who do not have compatible digital-signing devices and users of remote digital signatures without web portal access for signing documents will have to save a system-generated pdf file on their computer. After which, they must not edit the file and e-sign it in CAdES format. A file with a p7m extension will be generated and uploaded into the system. If the file is edited before the e-signature is applied, the system will be unable to verify whether the content of this document matches the original. If this occurs, the application will be rejected.
- If none of the aforementioned options are available:
print and hand-sign the application form, then upload **a scanned copy along with a scanned form of identification. Candidates not providing identification may be excluded from the selection procedure.**

The system may be momentarily offline for technical reasons.

Non-Italian candidates are to submit their application form as per the methods and deadlines stated in this application procedure.

Documents must be in a static, non-editable format and must not contain executable codes or macro-instructions. PDF is the preferred format. Documents must not exceed 30 MB.

The University of Padova is not liable for undelivered correspondence should candidates not provide a complete address, or when late or no notification is provided should the address on the application form change. Nor is it liable for problems caused by third parties, misfortune or force majeure.

For additional information or queries about the application procedure, please contact the Technical and Administrative Personnel office on +39 049 827 3159 - 3494 between 9 am and 1 pm.

Contact the following email address for technical problems only: unipadova@ Cineca.it.

Candidates must state under their own responsibility their surname and first name, their date and place of birth, their permanent address, any telephone number, any criminal convictions and pending criminal procedures, that they enjoy full political rights, their military-service status, a detailed statement they meet the aforementioned requirements, and the exact contact address for any correspondence.

Candidates are admitted to the selection procedure conditionally. Should any of the requirements not be met, candidates may be excluded from the selection procedure at any moment, even after they have taken the tests.

Selection

Candidates are selected by qualifications and an oral examination.

A total of 90 points are awarded for qualifications and tests. They are divided as follows:

- 30 points for qualifications;
- 60 points for oral examination.

Qualifications

Candidates will be assessed on the following qualifications:

1) Additional qualifications: a second-cycle degree (<i>Laurea Magistrale</i>) ex DM no. 270/2004, or a second-cycle degree (<i>Laurea Specialistica</i>) ex DM no. 509/1999, or a degree (<i>Diploma di Laurea</i>) prior to DM no. 509/1999	4 points max
2) PhD	4 points max
3) research grants	8 points max
4) articles in scientific journals with peer review	8 points max
5) conference proceedings	2 points max
6) awards at international conferences	2 points max
7) scientific qualification	2 points max

The score awarded for qualifications will be out of 30.

EU candidates must provide all of the statuses, information and qualities that they deem useful for the assessment of their qualifications in a statutory declaration, as per Art. 46 and 47 of Presidential Decree DPR no. 445/2000. Non-EU candidates are not allowed to use a statutory declaration, as per Art. 3 of Presidential Decree DPR no. 445/2000.

Certificates issued by the European Union or Italy's Public Administration must not be submitted.

Publications must be attached to the application form and be true copies of the original.

Abstracts and academic work published before the selection-announcement deadline will be accepted for assessment. Non-printed publications (electronic works only) will be assessed, but do not need to comply with the formalities envisaged for printed works (see Legislative Decree of the King's Lieutenant no. 660 of 31.8.1945).

Candidates will be notified of their qualification-assessment result before they take the oral examination.

Examinations

The examination will comprise an oral examination on:

- physics and technology of microelectronic devices;
- electronic measurements;
- operation and design of digital circuits;
- check on good knowledge of English.

The examination will take place at the following times and venues. No further notice will be given: on **June the 19th 2018**, at 10.00 p.m., at the "Saletta Videoconferenza" (1st floor) of the Department of Information Engineering - DEI, Via Gradenigo, 6/B – PADOVA.

Publication of this calendar is considered to be notification.

Approved candidates must come on the date and at the time specified above. No further notice will be given.

Candidates must show a valid ID document before being admitted to the oral examination.

Any candidates not coming to the examination will be deemed to have waived their place, regardless of the reason.

The examination pass mark is 21/30 (7/10).

All Commission sessions during the oral examination are public. At the end of each oral examination, the Commission will draw up a list of the candidates assessed with a score for those who have passed the examination.

This list, which is signed by the Commission Chair and the Secretary, will be posted on the Department of Information Engineering (DEI), Via Gradenigo, 6/B – Padova noticeboard and on the University of Padova website at <http://www.unipd.it/tecnologi-ricerca>. Candidates can access the list with a personal password provided to all selection participants.

Overall ranking

The final score is calculated by adding up the score for the oral examination, and the score for qualification assessment.

The overall ranking will be published in the University of Padova's Official Register. Any appeals may be filed the day after the ranking is published.

The overall ranking is effective immediately.

The winner is entitled to the gross annual salary for the D category, financial position D3, as per the University section of the current National Collective Bargaining Agreement (CCNL), as well as to an additional quota as specified in the "University Regulations for Recruiting and Regulating 'Fixed-term Research Technologists', in accordance with Art. 24 bis of Law no. 240 of 30 December 2010." The salary will be paid into a bank or post-office account only.

The administration may decide not to draw up the agreement should there cease to be the need, opportunity or resources to proceed.

The ranking is valid for three years from its publication date and may be used to recruit additional fixed-term technologists with the same profile and level. All other aspects of employment will depend on the University's specific needs.

Anything not stated above is covered by the "University Regulations for Recruiting and Regulating 'Fixed-term Research Technologists', in accordance with Art. 24bis of Law no. 240 of 30 December 2010", available at: <http://www.unipd.it> (see "Statuto e Regolamenti").

Pursuant to Law no. 241 of 7.8.1990, the selection-procedure manager is Maria Zanato – *Ufficio personale tecnico amministrativo*, Riviera Tito Livio, 6, Padova, Italy.

The Technical-Administrative Staff office (*Ufficio personale tecnico amministrativo*) is open to the public at the following times:

From Monday to Friday from 10 am to 1 pm and on Tuesday and Thursday from 3 pm to 4.30 pm.

NB: This selection announcement has been translated into English for publication purposes only.
The Italian version is valid for all legal purposes and for the resolution of any disputes.

Padua, May the 14th 2018

Signed The Director-General
Alberto Scuttari

Office Manager Maria Zanato	Department Manager Anna Maria Cremonese
Date	Date