

D.D.G. 1968 05/10/2018

Notice of public selection process, by titles and examination, to fill 1 Technologist post, pursuant to art. 24 bis of Law 240/2010, with full time fixed-term contract for 3 years, at the Service Centre of Department of Mathematical Sciences of this Polytechnic.

#### code 17/18/TD

### **The General Manager**

IN VIEW of	law 241 dated 7/08/1990 as amended;
IN VIEW of	the National Collective Labor Agreements for staff of the University sector signed on 16/10/2008 and 12/03/2009;
IN VIEW of	the Consolidating Act of the legislative and regulatory provisions on administrative documentation issued with Presidential Decree 445 dated 28/12/2000;
IN VIEW of	Leg. Dec. 165 dated 30/03/2001 as amended;
IN VIEW of	law 240 dated 30/12/2010 concerning rules in the field of the reorganization of Universities and improvement in the quality and efficiency of the university system and, in particular, art. 24 bis, which introduces the figure of the technologist on a fixed-term basis;
IN VIEW of	Legislative Decree 49 dated 29/03/2012, concerning rules on the matter of programming, monitoring and assessing budgetary and recruitment policies of Universities;
IN VIEW of	Law 190 dated 6/11/2012, on the matter of "Regulations for the prevention and suppression of corruption and crime in the Public Administration";
IN VIEW of	Leg. Dec. 81 dated 15/06/2015 on the matter of "Rules for employment contracts and revision of the regulations in terms of duties, according to article 1, paragraph 7, of law 183 dated 10 December 2014;
IN VIEW of	the "Regulation relating to the procedures for selection, recruitment and management of the employment relationship of technologists on fixed-term contracts at the Turin Polytechnic", issued with Regional Decree dated 1/3/2017;
IN VIEW of	the note dated 27/09/2018 from the Head of Department of Mathematical Sciences concerning the request to activate a public selection process to fill 1 full time fixed term contract Technologist post, to realize the project "Modeling, simulation, prediction and control" in the context of the Excellence Project of the Department of Mathematical Sciences "G.L. Lagrange" of the Polytechnic of Turin;
CONSIDERED	the professionalism required to realize the project above in terms of the

competencies connected with the specific profile;

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HAVING CERTIFIED

HAVING VERIFIED

that the financial coverage of the relevant expense is guaranteed by the

fund Progetto di Eccellenza - codice UGOV- 53\_RID18DIPECC;

the absence of rankings in force at this University to recruit Technologists required for this process;

#### **ORDERS**

### Art. 1 Number of posts – Professional profile

A public selection process, by titles and examination, has been announced by the Polytechnic of Turin to fill a Technologist post according to art. 24 bis of law 240/2010 with a full time fixed term contract, for a duration of three years, at the Service Centre of Department of Mathematical Sciences of this Polytechnic, to realize the project "Modeling, simulation, prediction and control" in the context of the Excellence Project of the Department of Mathematical Sciences "G.L. Lagrange" of the Polytechnic of Turin.

The profile sought identifies a figure with considerable technical knowledge in the field of computational mathematic s and high-performance scientific computing, capable of administering the simulation instruments and providing support to researchers using these instruments. The selected candidate will be responsible for supporting the activities related to the Project "Modeling, simulation, prediction and control" in the context of the Project of Excellence, serving as a technical reference for the simulation and software development aspects.

#### Activities and responsibilities

The selected person will deal with all aspects of implementation, management and maintenance of computational clusters and Unix-like departmental workstations.

The candidate will have to provide support to the departmental groups during the optimization and profiling (inter and intra compute nodes) phases of the developed simulation codes.

In particular, the activities include the following:

- installation, administration, maintenance and updating of Unix-like operating systems an clusters and workstations;
- installation and configuration of libraries far scientific computing, with particular attention to the hardware characteristics of the host machine;
- support far profiling, tracing and optimization of codes developed in-house with public and commerciai tools (Vtune, Scalasca, Gdb, Valgrind, Tau,...);
- support far the parallelization of scientific codes developed in-house, and far the visualization of the obtained results, both in-situ and post-processing;
- training an the use of the Department's HPC hardware and software simulation tools, through the organization of courses/seminars aimed at undergraduates and PhD students;
- installation, configuration and management of distributed and/or parallel file systems on different nodes;
- installation, configuration and management of Resource and Job managers;
- keep departmental resources up-to-date with developments in IT/HPC;
- keep in touch with the other computing centers, internal or external (national and international) to the university;
- attend training courses, workshops and seminars, organized in HPC computing centers.



Skills

The candidate must demonstrate excellent technical knowledge of Unix- like operating systems, problems and methods of high performance parallel computing in the contexts of applied mathematics and scientific computing. The candidate must also be able to handle either the aspects related to the performances of parallel I/O, and the issues relating to the usage of different APis and libraries, to better exploit the different hardware and software layers connecting the nodes between them. The candidate will also have to demonstrate a good ability to salve problems independently and to be able to administer clusters of parallel computers and related storage systems.

This notice will be published on the Official Gazette of the Politecnico di Torino, on the website of the Polytechnic of Turin at www.swas.polito.it/services/concorsi/persta.asp, as well as on the site of the Ministry of Education, 'University and Research (MIUR), at http://bandi.miur.it and on the website of the European Union, at http://ec.europa.eu/euraxess.

#### Art. 2

#### Admission requirements

To be admitted to the selection process the following is required:

#### a) academic title:

Second-cycle degree of the educational system in conformity with Min. Dec. 270/2004 in the following classes: LM-32 (Computer Engineering) or LM-44 (Mathematical-Physical Modelling for Engineering) or in academic titles equivalent, by law, to the degrees of the old educational system.

The Interministerial Regulation 9/7/2009 related to the equivalence between degrees of the previous academic system, specialist degrees and second-cycle degrees is available on the link below: http://attiministeriali.miur.it/UserFiles/3160.pdf

Applicants who have attained their academic title outside Italy must attach the degree translated and authenticated by the competent diplomatic or Italian consular representative, indicating that the equivalence with one of those indicated above has occurred. The equivalence, solely for admission to the selection process, between the degree attained outside Italy and the professionalism connected with the selection itself is certified, on request of the applicant, by a dedicated commission of experts appointed by the General Manager.

- b) capacity to exercise civil and political rights;
- c) absence of criminal convictions which may impede the entering of an employment contract because of the regulations in force;
- d) they must not have been excluded from active political electorate, or made redundant on disciplinary grounds or deprived of or dismissed from employment at a public administration for ongoing underperformance or have attained the employment through false declarations or production of false documents or flawed by invalidity which is not remediable;
- e) they must not have been declared disqualified from state employment, according to art. 127 paragraph one, lett. d) of the consolidating act of the provisions concerning the statute of civil servants, approved by Presidential Decree no. 3 dated 10.1.1957;
- f) they must not be related up to the fourth degree of consanguinity or affinity, or have a relationship of marriage or registered partnership between people of the same sex or living together as if married, with a professor belonging to the Department who has proposed the



activation of the contract, or the Rector, the General Manager, a component of the Board of Administration according to art. 18 paragraph 1 letter c) of Law 240/2010.

Foreign citizens, for the purposes of accessing public administration posts, must be capable of exercising their civil and political rights in the country of nationality or origin, be in possession, with the exception of the ownership of Italian citizenship, of all the other requirements for the citizens of the Republic, have suitable knowledge of the Italian language.

Applicants must be in possession of the above-mentioned requirements at the date of expiry of the deadline for presentation of the application for admission to the selection process. Those who have attained their academic title outside Italy and requested but have not yet obtained the recognition of equivalence within the expiry term set out above, will be admitted to the selection process under reserve.

For needs connected with the organization of the work and in compliance with principles of timeliness, effectiveness, efficiency and cost-effectiveness of the administrative action, all applicants will be admitted to the selection process under reserve; hence, this Administration reserves the right to control only the applications of those who will have sat the written exam; therefore, exclusion from the competition, due to lack of the admission requirements set out above, may be ordered at any time, for any justified reason.

This Administration guarantees fairness and equal opportunities for men and women to access the job and treatment at work, according to art. 7 of Leg. Dec. 165/2001.

## Art. 3 Applications and deadline to submit applications

The application for admission to the selection process should be presented on paper not subject to stamp duty to Area Risorse Umane e Organizzazione – Ufficio Personale Tecnico-Amministrativo (Human Resources and Organization Area – Technical-Administrative Personnel Office), using the form set out in annex "A", of this notice, by the date **18/10/2018**. Applications arrived after the abovementioned deadline shall not be considered valid.

The applications must be submitted in one of the following ways:

- by registered letter with return receipt to the following address: Politecnico di Torino Area Risorse Umane e Organizzazione – Ufficio Personale Tecnico Amministrativo –C.so Duca degli Abruzzi, 24 – 10129 Turin. For this purpose the stamp and date of the accepting post office shall be proof of dispatch;
- direct delivery to the Ufficio Personale Tecnico Amministrativo (Technical Administrative Personnel Office), C.so Duca degli Abruzzi, 24 – Torino – I floor (tel. 011.0907955) at the following times: from Monday to Friday from 9am to 12pm and from 2pm to 4pm;
- by PEC (certified email address), sending an email from one's own personal PEC address to politecnicoditorino@pec.polito.it containing the application of participation duly compiled and signed and any other document required, in PDF format, together with the scan of a valid identity document. The subject of the email must show the following wording "PEC DOMANDA DI CONCORSO TD. COD. 17/18/TD" ["PEC APPLICATION FOR SELECTION PROCESS TD. COD. 17/18/TD"];
- by fax, to no.0110906043, attaching copy of a valid identity document.

All applicants must state, under their own responsibility:

1. their surname, name, date and place of birth;



- 2. their citizenship;
- 3. the municipality in whose electoral rolls they are registered, or the reasons for non-registration or cancellation from the same rolls;
- 4. to have no previous or current criminal record (even if amnesty, remission, pardon or judicial pardon has been granted) and pending proceedings against him;
- 5. to be in possession of the required academic title;
- 6. their position held as regards military obligations;
- 7. any services provided at Public Administrations and causes of termination of preceding relationships;
- 8. that they have not been deprived of or dismissed from employment according to art. 127 d) of the Consolidating act approved by Presidential Decree no. 3 dated 10/1/1957, or made redundant from employment at a Public Administration;
- 9. that they are not related up to the fourth degree of consanguinity or affinity, or have a relationship of marriage or registered partnership between people of the same sex or living together as if married, with a professor belonging to the Department who has proposed the activation of the contract, or the Rector, the General Manager, a component of the Board of Administration according to art. 18 paragraph 1 letter c) of Law 240/2010.
- 10. whether they are in possession of any preferential rights, as set out in annex B.

The application must be accompanied by the European style curriculum vitae (annex C) containing a detailed description regarding the studies and professional experience gained, as well as any other information which the applicant considers useful for assessment purposes, in relation to the professional profile required; the Curriculum vitae must be produced by personal sworn declaration pursuant to art. 47 of Pres. Dec. 445 dated 28.12.2000. The curriculum will be completed by the 10 most relevant products (also in .pdf format) the candidate will decide to submit to evaluation.

The applicants, recognized as disabled according to law 104/1992, must make explicit request for the necessary aid, as well as any need for additional time to carry out the tests, depending on their handicap.

According to art.13 of the "Code regarding the protection of personal data" issued with Leg. Dec. 196 dated 30/6/2003, all data provided by the applicants by application shall be processed respecting the aforementioned regulations and the obligations of confidentiality, to fulfill the obligations connected with the selection procedure.

The application form to participate in the selection process and the curriculum vitae format are distributed in the Office mentioned above and available on the website of the University at the following address: <a href="https://www.swas.polito.it/services/concorsi/">https://www.swas.polito.it/services/concorsi/</a>

The bottom of the application must be signed; the signature requires no authentication pursuant to art. 39 of Pres. Dec. 445 dated 28/12/2000, under penalty of exclusion from the selection process.

## Art. 4 Selection committee

The Selection Committee, appointed with a subsequent order of the General Manager, will be composed by experts on the subjects regarding the professionalism required, the type and scientific-disciplinary area of the research project, as well as the organization and/or selection of staff.



### Art. 5 Evaluation of titles

The Selection Committee first defines the evaluation criteria, then evaluates the titles of candidates. The title's assessment is pointed out for a maximum of 50 points. Title categories and related maximum points are:

- 1. Ph.D. in applied mathematics, scientific computing, mathematics or computational physics or similar computational subjects. Other Ph.D. will not be considered. To the Ph.D 25 points are given; if the candidate has not discussed the thesis 5 points for each year of attendance, up to a maximum of 15 points are given;
- 2. Professional and research experiences professional experiences and assignments, academic and non-academic teaching on the topics of the announcement, research grants (not concurrent with the duration of doctoral scholarships) on topics related to the topics of the announcement: up to a maximum of 20 points;
- 3. Other titles and products such as publications, articles, multimedia products, patents, prizes, competitive funding and other awards: up to a maximum of 5 points.

The result of the evaluation of titles will be published on the 30/10/2018 within hours 16,00, on the Administration web page at the address: www.swas.polito.it/services/concorsi.

#### Art. 6 Examination

The examinations will involve a written test and an interview.

The practical test consists of a written exam with technical and practical queries, and it aims at checking the candidate's knowledge of the topics mentioned at point 1 of the present announcement. The test may require to write a text describing theoretical issues as well as the writing of short portions of code.

The colloquium is both in Italian and English. It aims at deepening the topic questioned in the written test and verifying the spirit of enterprise and the determination of the candidate. In this respect, related working experience resulting from the CV are also possibly discussed.

The sessions of the Committee, during the interviews, are public.

For the evaluation of the written test the commission has 50 points. The written test is considered passed if the candidate obtains a minimum score of 35 points.

For the evaluation of the interview the commission has 50 points. The interview is considered passed if the candidate obtains a minimum score of 35 points.

At the end of each session dedicated to the interview the Committee will draw up a list of the candidates examined with the indication of the vote attained by each and display it at the venue of the examination.

The overall vote is established by the sum of the vote for the title's evaluation, the vote attained in the written test and in the interview.

# Art. 7 Calendar of examinations

The written test will be held on 29/10/2018 at 10,00 at Aula Buzano - Department of Mathematical Sciences of this Polytechnic - C.so Duca degli Abruzzi, 24 - Turin.



The list of those admitted to the interview will be published on 30/10/2018 on the web page of the Polytechnic of Turin at the address <a href="https://www.swas.polito.it/services/concorsi/">https://www.swas.polito.it/services/concorsi/</a>

The interview will be held on 31/10/2018 at 11,30 at Aula Buzano - Department of Mathematical Sciences of this Polytechnic - C.so Duca degli Abruzzi, 24 - Turin.

Applicants are required to be on the premises at the time and on the day mentioned above to sit the examination. They must be in possession of a valid identity document.

## Art. 8 Formulation and approval of ranking

Having performed the test for the selection process, the Committee draws up the merit ranking in descending order of the overall vote based on the results of the title's evaluation and of the interview.

Applicants who have passed the final test and intend to exercise their preferential rights as set out at paragraph 4 of art. 5, Presidential Decree no. 487 dated 9.5.1994 (annex B) are required to show the relevant original documents, or authenticated copy thereof, within the deadline of 15 days. This term starts from the day following that on which individual applicants have passed the final test.

By Decree of the General Manager, the merit ranking will be approved and the successful candidates will be declared, on condition that it is verified that they are in possession of the requirements to be admitted to the job.

The final ranking will be published on the Administration web page at the address: https://www.swas.polito.it/services/concorsi/

### Art. 9 Entering into the contract

A full time fixed-term employment contract for duration of three years will be entered into with the candidate who is declared successful. A probationary period of work as Technologist is envisaged.

The annual overall gross remuneration due to the employee is  $\leq$  29.237,88 which will be paid on a monthly basis.

The employment relationship is governed by the individual contract and by the employment provisions in force, which also include the taxation, welfare and social security, envisaged for employee income. As regards the rights and duties of the employee, reference is made to the principles established by the National Collective Labor Agreement - University Sector and to the regulations in force on public sector employment.

The candidate who has successfully completed the selection process is required to submit all documents, which will be requested from this Polytechnic within thirty days from recruitment, under penalty of dismissal.

The probationary period will last for three months and cannot be renewed or extended. Once this period has been completed without termination of the employment relationship by one of the parties, the employees will be considered as being confirmed in service and their length of service will be calculated in every respect as of the day of recruitment.



# Art. 10 Referral to the performance of the selection process

For all that is not provided for in this selection process notification, reference shall be made to the rules laid down in the Regulation on the selection, recruitment and management process of the fixed-term employment relationship of the Technologists as set out in the introduction, and - as far as compatible - to the Regulation concerning the selection processes for recruiting permanent technical-administrative staff at the Polytechnic of Turin, issued with Regional Decree no. 339 dated 31/05/2002, and to the provisions in force on the procedures for public selection processes.

Turin, 05/10/2018

THE GENERAL MANAGER (Dr. Ilaria ADAMO)