

Ten Tenure-Track Positions in Nanotechnology, Materials Science, Energy, Robotics, Artificial Intelligence, Molecular Biology and Bioinformatics

The **Istituto Italiano di Tecnologia / Italian Institute of Technology (IIT)** is pleased to announce TEN new tenure-track openings (open rank) in broad areas, as part of an ambitious plan to expand our tenure-track system by more than **100 scientists over the next decade**.

IIT seeks *dynamic, highly motivated, independent and innovative* researchers to join our community of scientists and technologists engaged in cutting-edge research and development. Candidates must be creative thinkers who span traditional scientific boundaries, with the overarching goal of melding science and technology to improve human health, welfare and sustainability.

IIT has state-of-the-art facilities and has rapidly established itself among top research institutes worldwide. IIT has a strongly international character, with more than 40% foreign scientific staff drawn from over 50 countries worldwide.

The new tenure-track scientists will be intellectually and financially independent (i.e., principal investigators) and will enjoy world-class start-up and operational funding, as well as internationally competitive salaries and benefits. IIT also strongly encourages and assists its scientists in expanding their research scope by obtaining independent external support from national, European and international funding agencies.

Hiring procedures of IIT are based **solely** on scientific credentials, and our search committees include external members from foreign institutions to provide diverse, independent perspectives. We encourage non-Italians and Italians, both abroad and in Italy, to apply.

IIT is looking for candidates with outstanding track records in the following broad areas:

Nanotechnology/materials science

Primary interests include graphene and other innovative 2D materials, nanotechnology applications to health and diagnostics, green materials, nanoscale characterization, colloidal chemistry and nanocomposite materials. The candidate(s) will interact with IIT's strong group of nanotechnologists,

nanochemists, materials scientists and applied physicists. Candidates will be drawn from fields including physics, materials science and chemistry.

Computational multi-scale modeling of materials

We target multi-scale computational modeling, especially pertaining to material science and nanotechnology. The candidate(s) will interact extensively with world-class IIT groups involved in nanofabrication and nanochemistry of novel materials, as well as IIT groups involved in computational modeling of bioactive molecules. Candidates will be drawn from fields including physics, chemistry, engineering, mathematics and computer science.

Bioinformatics

Primary focus is on the analysis of molecular biological data to address fundamental questions on the organization of genomes and transcriptomes, with special interest on long noncoding RNAs and repetitive elements. Expertise in big-data management and development of analysis pipelines is essential. Space and resources for wet-lab experiments may be considered. Candidates will be drawn from fields including molecular biology, computer science, computational biology, statistics and mathematics, and will interact extensively with experimental life scientists at IIT.

Robotics and artificial intelligence

Relevant sub-areas include humanoid robotics, bio-inspired robotics, robotic-assisted rehabilitation, advanced control systems for robotics, human-machine interaction, and artificial intelligence, including distributed intelligence applications. The candidate(s) will interact with world-class roboticists and computer scientists at IIT, as well as experts in materials science. Candidates will be drawn from engineering and computer science.

Energy

Preferential research lines are sub-kilowatt power applications, including wearable, portable methods for mechanical and/or thermal energy harvesting. The candidates will interact extensively with IIT experts in materials science, applied physics and nanofabrication. Candidates will be drawn from fields including applied physics, engineering, material science and nanotechnology.

Molecular biology

Candidates should have a world-class record in innovative areas, such as epigenetics, noncoding RNAs, and innovative gene transfer and manipulation. We are interested in both normal and pathological biological contexts. The candidate(s) will interact extensively with life scientists, especially neuroscientists and bioinformaticians at IIT, and will exploit interdisciplinary expertise at IIT to

develop innovative tools for research and therapeutics. Candidates will be drawn from broad areas of molecular biology, biochemistry and genetics.

A Ph.D. or equivalent graduate degree, as well as relevant postdoctoral experience are required at the time of application.

Candidates should submit a single PDF file containing:

1. **C.V.**, including list of published papers, patents, and research grants directly **3-page research statement** containing a 1-page summary of previous research contributions and a 2-page description of plans for future work.

Candidates should upload applications at <http://tenure.iit.it>

Applicants should also arrange for **three referees** familiar with the applicant's research accomplishments to prepare **letters of recommendation**.

IIT will contact the three referees directly for the letters, but candidates must first register at <http://tenure.iit.it> to provide contact information for the referees. After registering, candidates can submit their applications at a later date. Candidates are strongly encouraged to ensure that the three recommendation letters are submitted before the application deadline, because review of applications will begin immediately after the application deadline.

For junior faculty applicants, referees will usually include the applicant's PhD and postdoctoral advisor(s). In exceptional cases, IIT may consider outstanding senior candidates for direct tenure. Senior candidates should submit applications as described above.

Deadline for submission of applications is March 31st 2015 .

Shortlisted candidates will be invited to visit IIT for an interview, tentatively during the first two weeks of May 2015.

For further information about the IIT Tenure Track searches, please send an email to tenuretrack@iit.it

For general information about Fondazione IIT please visit <http://www.iit.it/>

In order to comply with the Italian law (art. 23 of Privacy Law of the Italian Legislative Decree n. 196/03), we have to kindly ask the candidate to give his/her consent to allow IIT to process his/her personal data. We inform you that the information you provided will be used solely for the purpose of assessing your professional profile to meet the requirements of IIT. Your data will be processed by IIT, with headquarters in Genoa, Via Morego, 30, acting as the Data Holder, using computer and paper based means, observing the rules on protection of personal data, including those relating to the security of data. Please also note that, pursuant to art. 7 of Legislative Decree 196/2003, you may exercise your rights at any time as a party concerned by contacting the Data Manager.

The IIT is an Equal Opportunity Employer that actively seeks diversity in the workforce.