



Linking Minds Across Cultures

Fulbright Program to Italy for US Scholars
a.y. 2020-21

*Junior Research Lectureship in Industrial Engineering
at the University of Trento*

Award # 10533

Grant Category: Teaching or Teaching/Research

▶ **Number of Awards:**

One grant

▶ **Discipline and specialization:**

Applications are sought in **Engineering**

Materials Science and Engineering, Bioengineering, Mechanics, Mechatronics, Electronic Engineering.

The Department main focus is the development of materials, structures, processes and integrated intelligent mechanical and electronic systems promoting and supporting technological innovation. The multidisciplinary approach ranges from traditional materials to nano structured materials and biomaterials, including chemistry and fibre and polymer technology, biotechnology, material physics, materials for electronics, and process technology, along with design and product development and the related environmental impact.

The Department of Industrial Engineering gathers together researchers of a broad range of areas ranging between:

- **Materials Engineering:** Materials production and optimization, Structural and functional materials applications; Nanomaterials and nanotechnologies; Biomedical technologies and applications; Materials for energy and environment; Materials and technologies for cultural heritage; Mechanical and Processing Industry
- **Mechatronics:** Manufacturing Systems and Industrial Automation; Mechanical Measurements and Sensor Data Fusion; Intelligent Systems (Vehicles and Robotics), Space Technologies, Accessibility and Assistance Living
- **Embedded Electronics and Computing Systems:** Nano & Microsystems, including design, numerical simulation and modeling, electrical and functional characterization, design of custom analog read-out and signal processing circuits; Sensors & Networks, including designing and implementing modern distributed systems and networks, increasingly characterized by stringent requirements in terms of high performance, Quality of Service, large scale, dynamicity, and security.
- **Operations Research:** Managing, optimizing and supporting research and industrial production planning, cost analysis, quality and reliability of the industrial processes, simulation and optimization. Development and application of information technology tools.

The Department is made up of 45 professors and research fellows, most of whom have research experience at major universities and research centers worldwide. DII has also an international doctorate school with around 60 students, mainly coming from Italy, Western/Eastern Europe and Asia. The Department is organized in research labs (Glass and Ceramics, Materials Chemistry, Mechanical Design and Metallurgy, Coatings and Industrial Corrosion Control, Polymers and Composites, Biomedical Technologies Laboratory, Mechatronics, Electronics and Systems Engineering) and includes a Research Center in Biotechnology (Biotech); these labs and centers cover

the most significant research topics in the broad field of Industrial Engineering.

The visiting scholar will have the opportunity to collaborate on research projects in one of the above areas.

▶ **Grant period and activity:** Three months. Grants must begin in Spring 2021.

The visiting scholar is expected to carry out research within the Department of Industrial Engineering (DII) of the University of Trento and to give lectures at advanced level (master's and doctoral students) within the master's degree courses in Materials and Production Engineering & Engineering and Mechatronics Engineering and the courses offered by the International Doctoral School in Materials, Mechatronics and Systems Engineering. Teaching load is up to four hours a week. The average size of classes is between 10 and 20 students.

Willingness to perform other duties such as thesis advising is preferred and support to international students is desirable.

In addition to being a prestigious academic exchange program, the Fulbright Program is designed to expand and strengthen relationships between the people of the United States and citizens of other nations and to promote international understanding and cooperation. To support this mission, Fulbright Scholars will be asked to give public talks, mentor students, and otherwise engage with the host community, in addition to their primary activities..

During the Fulbright grant, the scholar may be also invited to take part in academic meetings, conferences, seminars and other program-related activities organized by Italian or European universities, under the Fulbright Inter-Country Program <http://www.fulbright.it/fulbright-intercountry/>

▶ **Qualifications:** Ph.D. degree and experience of post doc of at least two years or more. Some years of teaching experience desirable.

▶ **Language:** Lectures can be given in English and no interpreters are provided. Italian language proficiency sufficient to complete the research project is required.

▶ **Letter of Invitation and project proposal:** Letter of invitation should not be requested. Applicants should submit a detailed project proposal in the Fulbright US Scholar application.

► **Award benefits:** € 5.100 for 3 months. This sum includes a maintenance allowance of € 4,000 and a travel allowance of € 1.100. The grantee will be covered by a limited health and accident coverage for the whole grant period, provided to participants in the Fulbright cultural exchange Program by the *United States Department of State*.

A guest flat is available for hosting the visiting professor. The apartments are all furnished and located in the city center or close to the Faculty, with parking space and bike rental facilities. Utilities such as electricity and gas are included; weekly change of linen is provided; telephone is not available in all apartments and is at extra charge. Internet connection available in most apartments.

Office space will be provided; the visiting scholar will have access to the university canteen and facilitated access to the university network of sport services and sports facilities (Uni.Sport).

More information about the university and the city of Trento is provided on our international website:

<http://international.unitn.it/>

► **How to apply:** Fulbright Scholar Awards to Italy are assigned through an annual competition administered at the national level in the US by the Council for International Exchange of Scholars - CIES in Washington DC, in collaboration with the Fulbright Commission in Italy. Potential candidates can apply online through CIES (<https://apply.iie.org/apply/>).

Information on the Fulbright US Scholar Program, catalogue of awards, eligibility requirements, tips, guidelines and resources for applying, review criteria, selection and competition timeline is available on CIES website at <https://www.cies.org/program/fulbright-us-scholar-program>

► **Application Deadline:** Monday, September 16, 2019

For information about the grant, please contact Fulbright Commission staff:

Commissione per gli Scambi Culturali fra l'Italia e gli Stati Uniti
The US - Italy Fulbright Commission
Via Castelfidardo 8 - 00185 Rome Italy
www.fulbright.it

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Resources on the Italian university system and research:

❖ MIUR - Ministry of Education, Universities and Research - www.istruzione.it
Italian Government - Ministry of Education, Universities and Research

❖ CRUI - Conference of Italian University Rectors - www.cruir.it
National Conference of Italian state and private universities

❖ ENIC-NARIC network - www.enic-naric.net/index.aspx?c=Italy
Italy Country page on the ENIC-NARIC network of European Information Centers on academic recognition and mobility

- ❖ Ricerca Italiana - www.ricercaitaliana.it
National portal on the world of Italian Research
- ❖ ICCU - www.iccu.sbn.it
National Institute for the Italian Library Catalogue

Travelling to Italy

- ❖ ITALIA - www.italia.it
Discover Italy - info, ideas and resources for the travel to Italy
- ❖ CULTURA ITALIA, Un patrimonio da esplorare - www.culturaitalia.it
Italian Ministry of Cultural Heritage and Activities - Cultural paths and resources from the world of Italian culture



UNIVERSITY OF TRENTO - Italy

The **University of Trento** is a young and dynamic university with 15,000 students and about 1,200 people working as faculty and administrative and technical staff. Quality of research and teaching, internationalization and strong, positive relations with the community are the main priorities of the University of Trento.

The university is organised into three distinct sites. The Faculties of Economics, Law, Sociology, Humanities and Philosophy and the School of International Studies are all situated close together in the heart of the historic centre of Trento, just a short walk from the Cathedral and from the town's most frequented venues. Only five minutes by bus from Trento's rail station and with excellent links to the city by public transport are the Faculties of Engineering and of Science. Surrounded by nature they comprise the university's campus in the hills. 25 km from Trento, in the town of Rovereto, famous as the home of the Museum of modern and contemporary art (Mart), is the Faculty of Cognitive Sciences. With the inauguration of this faculty in 2004, the university broadened its scope to include neurosciences, a particularly innovative area of study and research of great interest for the future developments it promises. Here research is conducted within the departments and at numerous research and study centres. Besides the most important fields handled such as ICT, environmental engineering, materials engineering, physics, international studies, transnational law, experimental economics and social studies, prestigious research centres have recently been founded including the Centre for Mind/Brain Sciences (CIMeC) and the Centre for Integrative Biology (CIBio). The area also hosts several prestigious research centres such as the Bruno Kessler Foundation and the Edmund Mach Foundation.

Everything is within reach and easily accessible in Trento. Libraries, university canteens, laboratories, cultural activities and special services. The University of Trento offers 5 libraries, open even during the evening, with IT rooms equipped with fixed PCs and a laptop PC service. There are 5 university canteens: 3 in the city and 2 up the hill at the Faculties of Engineering and

Science. The university also operates its own Language Learning Centre with extensive and intensive courses in 7 foreign languages, as well as courses in Italian for foreigners.

It is very important, especially for a small to medium-sized university like Trento, to create partnerships with distinguished universities and research centres all around the world in order to better face the challenges of global competition. This is why over the years the University of Trento has created a rich cooperation network which allows itself to integrate its educational opportunities and to promote fruitful relationships in teaching and research.

The relationship between the University and the territory has strengthened over the years and today the University represents for the community both a precious cultural resource and an important factor of social, cultural and economic development.

In recent years the University of Trento has been evaluated as one of the best universities in Italy, in some cases even the best one among small to medium-sized universities. In 2008 all faculties were rated the 1st or 2nd in Italy, except for the Faculty of Cognitive Sciences, which could not be evaluated since it is the only one in Italy. Good results were also achieved at an international level. This success is due, among other factors, to the high quality of teaching, research and services, the strong collaboration with foreign universities and the great number of study grants and student accommodations offered by the Opera Universitaria.

The University of Trento strongly believes in sport not only as a relaxation and leisure activity but also as a personal growth and socialization tool. The University and the University Guild have recently started up the Trentino university sport system, an integrated programme of sport and recreational activities which makes optimum use of the available resources and of the opportunities offered by the beautiful natural setting of the university. Thanks to the collaboration with the University Sports Centre, students and professors can attend courses in a variety of disciplines, from the more traditional, such as skiing or sailing on the lakes of the Trentino region, to the more unusual, such as gliding.

Living in Trento means enjoying the advantages of a region that is renowned for its superior quality of life, general well-being and natural environment of extraordinary beauty, where the sun paints the panorama in different hues, creating new sensations for every season.