Post Title: Research Scientist
Domain: Applied Physics
Post Number: 1ITSC 1048TP
Grade: P-3
Organizational Unit: International Centre for Theoretical Physics (ICTP)
Primary Location: Trieste, Italy
Recruitment open to: Internal and external candidates
Type of contract: Fixed-Term
Deadline (midnight, Paris time): 4 June 2020

UNESCO Core Values: Commitment to the Organization, Integrity, Respect for Diversity, Professionalism

OVERVIEW OF THE FUNCTIONS OF THE POST

Founded in 1964 by the late Nobel Laureate Abdus Salam and located in Trieste (Italy), the Abdus Salam International Centre for Theoretical Physics (ICTP) seeks to accomplish its mandate by providing scientists from developing countries with the continuing education and skills that they need to enjoy long and productive careers.

The Applied Physics Unit encompasses areas of research that are at the boundary between the core research fields of the ICTP and more applied fields of research of particular impact for sustainable development. The Unit runs research, training, and outreach activities in the areas of ICT, radio propagation, wireless networks, advanced instrumentation, fast data acquisition, cultural heritage, optics, 3D printing, low-cost instrumentation, and includes a fabrication laboratory.

Under the direct supervision of the Director, Research Division, the incumbent assists in the coordination of the training and research activities of the Applied Physics Unit. He/she implements the recommendations of external experts and coordinates the cooperation on approved common projects that take advantage of the relevant, diverse expertise represented within the Unit. The incumbent is expected to undertake basic and applied research studies and coordinate a team in the field of wireless communication, sensor networks, and Internet of Things. The incumbent will also collaborate on research, training, and outreach projects carried out by other teams within the Unit. In particular, s/he will perform the following duties:

- **Program coordination**: Assist the Director, Research Division, in the coordination of the research and outreach activities of the Unit, in consultation, when appropriate, with external experts. Suggest, propose, and organize schools, workshops, conferences, topical meetings and seminars in the incumbent’s field of research, in the framework of the scientific calendar of activities of the Centre.

- **Administrative responsibilities**: Oversee the administrative aspects of the Unit, ensuring the availability of laboratory spaces and of technical/administrative support for its teams. Review applications for visiting scientists, Associates, and students, and recommend candidates to the Director, Research Division, for selection by the appropriate programmes. Act as local organizer for scientific activities in areas of interest to the group.

- **Research**: Initiate and undertake front-line research in the field of wireless sensors networks with particular emphasis on environmental monitoring applications and collaborative research within the Applied Physics Unit. Suggest, develop and realize scientific projects and publish their results in peer-reviewed journals. Maintain scientific contacts with institutions and scientists in the developing world, as well as with the world’s best research centers in the corresponding fields. Supervise and coordinate the research work of students and junior collaborators.

- **Training**: Lecture in joint postgraduate programs and supervise the students. Supervise Sandwich Programme (STEP) students and PhD students in joint PhD Programmes. Train visiting scientists, including TRIL (Training and Research in Italian Laboratories) fellows and supervise their scientific work.
COMPETENCIES

A successful candidate will be required to demonstrate the following competencies:

- Accountability
- Communication
- Teamwork
- Innovation
- Results focus
- Planning and organizing
- Knowledge sharing and continuous improvement

For detailed information please consult the UNESCO Competency Framework (https://en.unesco.org/sites/default/files/Competency%20Framework_E.pdf)

REQUIRED QUALIFICATIONS

EDUCATION
- Advanced University degree (Ph.D. or equivalent) in Physics, Electrical Engineering, Telecommunications or related disciplines.

WORK EXPERIENCE
- Minimum of 4 years of relevant post-doctoral research experience in Physics, Electrical Engineering, Telecommunications or a related field.
- Experience with wireless communication and low-cost instrumentation.
- Experience in the design, implementation and management of scientific projects.

SKILLS/COMPETENCIES
- Ability to collaborate effectively within a multicultural environment.
- Excellent analytical skills. Ability to collect, synthesize and analyze information from various sources.
- Ability to communicate effectively on complex technical and scientific issues in English, including excellent drafting skills.

LANGUAGES
- Excellent knowledge (spoken and written) of English.

DESERABLE QUALIFICATIONS

WORK EXPERIENCE
- Relevant post-doctoral research experience acquired at international level.
- Experience in the teaching and/or mentoring of undergraduate or postgraduate students.
- Experience in the development and coordination of scientific training programmes.

LANGUAGES
- Knowledge of another official UNESCO language (Arabic, Chinese, French, Russian, Spanish) or Italian.

BENEFITS AND ENTITLEMENTS

UNESCO’s salaries are calculated in US dollars. They consist of a basic salary and a post adjustment which reflects the cost of living in a particular duty station and exchange rates.

Other benefits include: 30 days annual leave, family allowance, home travel, education grant for dependent children, pension plan and medical insurance.

Please note that UNESCO is a non-smoking Organization.

MORE INFORMATION

Candidates must use the UNESCO’s online application system which is accessible via the UNESCO Intranet web page dedicated to Job Opportunities at:

https://unesco.taleo.net/careersection/2/joblist.ftl

Candidates may submit any additional documentation (CV, list of publications, research statement, etc.) to the ICTP Personnel Office at personnel_office@ictp.it.

For information: Personnel Office, Abdus Salam International Centre for Theoretical Physics, Strada Costiera, 11, 34151 Trieste, Italy.
E-mail: personnel_office@ictp.it, phone: +39-040-2240-595/596/695

A WRITTEN EXAMINATION MAY BE USED IN THE EVALUATION OF CANDIDATES.