



Post Title: Associate Research Scientist
Domain: Earth System Physics (Research and Partnership)
Post Number: 1ITSC 0894TP
Grade: P-2
Organizational Unit: ICTP
Primary Location: Trieste, Italy
Recruitment open to: Internal and external candidates
Type of contract: Fixed Term
Deadline (midnight Trieste time): **07-MAR-2024**

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.

Under direct supervision of the Earth System Section Head the incumbent is expected to develop, maintain, disseminate, and use advanced computer software for scientific applications, with particular emphasis on the development and continuous upgrade of numerical models applied to climate research, along with related pre/post-processing and analysis tools. Furthermore he/she is expected to actively take part in all activities of the ESP section and also to contribute to all ICTP activities in the field of scientific computing, in particular schools, workshops and conferences organized both at ICTP and abroad, as well as to the ICTP postgraduate programs.

Essential responsibilities include:

- Developing advanced computing softwares for application to climate modelling and continuously upgrade and optimize the ESP model codes and pre and post processors. Carrying out numerical simulations with the ESP models and analyse the output produced by the ESP research work using advanced analysis tools.
- Managing large datasets, both from observations and model simulations, produced by the ESP scientific activities
- Porting and Optimizing the ESP model codes, when required, to different computing architectures, including computing frameworks in developing countries, and to provide consulting support to the users of the ESP models and datasets.
- Contributing to the ICTP training activities, including schools, workshops and conferences at ICTP and abroad, in particular when these involve hands-on sessions on the use of the ESP models and datasets
- Supervising students, post-docs and visitors in the field of scientific computing and to lecture in the Masters Programme in High-Performance Computing (MHPC)

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_framework_e.pdf)
https://en.unesco.org/sites/default/files/competency_framework_e.pdf

REQUIRED QUALIFICATIONS

EDUCATION

- Advanced University degree (Master's Degree or equivalent) in Physics, Earth System Sciences or other relevant fields

WORK EXPERIENCE

- A minimum of 2 years of professional research experience in the field of advanced software development for scientific application, with focus on climate modeling.

SKILLS/COMPETENCIES

- Ability to collaborate effectively within a multicultural environment with sensitivity and respect for diversity
- Good analytical skills, ability to collect, synthesize and analyse information from various sources
- Ability to communicate effectively on complex technical and scientific issues in English Demonstrated ability to develop and apply advanced scientific softwares, with emphasis on climate modeling applications
- Experience in teaching and/or mentoring undergraduate or postgraduate students.

LANGUAGES

- Excellent knowledge of written and oral English.

DESIRABLE QUALIFICATIONS

WORK EXPERIENCE

- Experience in providing consulting support for users of advanced scientific softwares. Experience in providing software development support for scientific projects

LANGUAGES

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

BENEFITS AND ENTITLEMENTS

UNESCO's salaries consist of a basic salary and other benefits which may include if applicable: 30 days annual leave, family allowance, medical insurance, pension plan etc.

For more information in benefits and entitlements, please consult [ICSC website](#) and [UNESCO's career website](#).

MORE INFORMATION

Please note that all candidates must complete an on-line application and provide complete and accurate information. No modifications can be made to the application submitted.

The evaluation of candidates is based on the criteria in the vacancy notice, and may include tests and/or assessments, as well as a competency-based interview.

Candidates must use the UNESCO's online application system which is accessible through the following links:

For current UNESCO fixed-term staff members: UNESCO Intranet > Tools > HR Apps > [Careers](#). If you are working remotely, you should connect to Careers portal through connect.unesco.org

For all other candidates: <https://careers.unesco.org>

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