

KIOS RESEARCH AND INNOVATION CENTER OF EXCELLENCE

Research Engineer (Smart Water Systems)

Title	: Research Engineer (Special Scientist)
No. of Positions	: Two (2)
Category	: Employment contract
Location	: University of Cyprus, Nicosia, Cyprus

The KIOS Research and Innovation Center of Excellence (www.kios.ucy.ac.cy) at the University of Cyprus announces two (2) **Research Engineer positions, focusing on Smart Water Systems**, for full-time employment. The successful candidates will conduct research, develop software and support on flagship projects related to **real-time monitoring, control, management and cyber-physical security of water systems**.

Who we are:

The **KIOS Research and Innovation Center of Excellence** is the largest research center at the University of Cyprus and in 2017 was upgraded to a European Research Center of Excellence through the KIOS CoE Teaming project. Currently, the Center employs more than 170 people who are supported by externally funded research and innovation projects. The KIOS CoE operates in a diverse environment as an equal opportunity employer.

What we do:

KIOS provides an inspiring environment for carrying out top level research and innovation in the area of Information and Communication Technologies, with emphasis on the Monitoring, Control and Security of Critical Infrastructures. Such infrastructures include power and energy systems, water networks, transportation networks, telecommunication networks and emergency management and response. The Center instigates interdisciplinary interaction and promotes collaboration between industry, academia, and research organizations in high-tech areas of global importance.

Why work at KIOS:

You will have the opportunity to work on various high-profile projects with great impact on the community and the environment, not only in a local but also in a global scale.

The Smart Water Systems group is involved in various of research and innovation projects, including the prestigious ERC Synergy Grant “Water-Futures” and the H2020 PathoCERT, as well as a number of industrial projects with the Water/Wastewater Boards of Cyprus and the Water Development Department. The goal of these projects is to design the next generation of water distribution systems and to promote the adoption of smart water technologies in Cyprus and beyond.

In KIOS we strive to create a multicultural, diverse and inclusive workplace and we strongly support the continuous personnel evolution and development, both personally and professionally, to fulfill your long-term goals. We offer internal and external professional training, covering both technical and soft skills, to suit yours and the Center’s needs.

Job Details

Duties and Responsibilities:

The successful candidate is expected to be trained and work on the following:

- Development of software tools for environmental modelling in MATLAB and/or Python
- Work with hydraulic modelling tools (e.g., EPANET) and learn how to develop research toolkits (in MATLAB or Python) for monitoring, control and cyber-physical security of water distribution systems
- Work with water-quality modelling tools (e.g., EPANET-MSX)
- Work with Geographical Information Systems (e.g., QGIS) and learn how to develop QGIS/Python software tools to contribute to the development of an innovative integrated water management system used by water utilities (OCEANOS).
- Learn how to develop user-friendly interfaces to represent water-related IoT sensor data and alerts
- Work on the development of a the innovative KIOS Virtual City to study the evolution of water distribution systems in the future
- Learn how to perform data analysis using machine learning models for advanced analytics
- Organize and participate industrial trainings on Smart Water Systems
- Participate in industrial projects, attend meetings and collaborate with industrial partners
- Work on the development, operation and maintenance of a physical Water Security Testbed
- Develop mathematical and software models of industrial process systems

Profile of the ideal candidate:

- Attention to detail
- Problem solver
- Team-player
- Be reliable and trustworthy
- Be flexible and eager to learn
- Be able to adapt in a fast-paced dynamic environment
- Have good communication, organizational and self-management skills
- Very good knowledge of the English language

Qualifications and Experience:

- Bachelor's and/or Master's degree in Electrical/Computer/Environmental/Chemical/Mechanical Engineering or Computer Science or other relevant field from an accredited institution.
- Previous experience in the area of ICT and water systems will be considered an advantage.

Employment Terms:

The positions are on a contract basis. Initially, a one-year contract will be offered, which is renewable based on performance. The gross monthly salary depends on the candidate's qualifications and experience and will be between €1500-€2500. From this amount, employee contributions to the Cyprus government funds will be deducted. The 13th salary bonus is incorporated in the monthly salary. Maternity leave will be granted based on Social Insurance Laws from 1980 until 2012.

Application:

Interested candidates should submit the following items online through the link:

<https://applications.ucy.ac.cy/recruitment>

- Cover letter explaining the interest of the applicant in pursuing a career at the KIOS CoE, along with employment availability date.
- Short summary of prior work experiences, activities and accomplishments (can be combined with the cover letter) (2 pages maximum)
- Copies of transcripts of BSc/MSc or other degree(s)
- A detailed curriculum vitae in English or in Greek
- Identify at least two referees that can provide reference letters.

The University of Cyprus shall collect and process your personal data according to the provisions of the General Regulation on Personal Data 2016/679 (EU).

The applications should be submitted as soon as possible, but not later than **Friday, 18th of February 2022, at 5 pm**. The evaluation of the applications will begin immediately. **Candidates will be informed of the result of their application by the KIOS CoE.**

For more information, please contact the KIOS Center of Excellence, by phone at +357 22893451 or via e-mail at kioshiring@ucy.ac.cy .