

**Senior Research Assistant - School of Mechanical
Engineering (Fixed term contract for 12 months)
Reference: 469/2024**

**School of Mechanical Engineering,
Technological University Dublin**

The School of Mechanical Engineering, TU Dublin currently has a position available for a Senior Research Assistant in Engineering.

Job Description

We are seeking a highly skilled Research Assistant to join a cutting-edge project focused on optimizing energy usage in cyber-physical systems. The successful candidate will work with advanced electronic cooling technologies and wind tunnel systems to support critical milestones, including the development of an autonomous control loop and data centre server cooling techniques.

Principal Accountabilities

- Develop, maintain, and operate experimental setups, including wind tunnel systems.
- Perform data acquisition and analysis using thermofluid sensors and LabVIEW tools.
- Collaborate on testing and validating advanced server cooling technologies.
- Assist with the scientific publication process, ensuring research dissemination.
- Report to the Principal Investigator, PhD researcher and research team supervisors.
- Contribute to the research design and laboratory studies in relation to the project.
- Contribute to the overall activities of the research team and department as required.
- Work under supervision on an assigned research task.
- Be responsible for ensuring that equipment is safe and maintained in working order.
- Manage time effectively to meet the deliverables of the project.
- Actively comply with all TU Dublin policies and regulations, including those about Research Ethics and Health and Safety.

Person Specification

The ideal candidate will demonstrate the appropriate mix of knowledge, experience, skills, talent and abilities as outlined below:

Knowledge

- An **Master's degree (NFQ Level 9)** in Engineering, Physics or an equivalent qualification. **(essential)**
- A **PhD (NFQ Level 10)** in a related field **(desirable)**
- Familiarity with the project subject matter and ability to stay updated. **(essential)**
- Proficiency in research techniques, report writing, and communication skills. **(essential)**
- Working knowledge of instrumental techniques used for characterisation and a willingness to learn. **(essential)**

Experience

- Hands-on experience with experimental and mechanical tools in a laboratory setting.
- Understanding of data acquisition systems and thermofluid sensor technologies.
- Familiarity with GLP conditions and laboratory safety protocols.

Skills, talents & abilities

- The successful candidate will be highly skilled and motivated with the ability to work independently and as part of a team.
- IT skills to include chemical drawing and other related software and preparation of web-based material.
- Excellent interpersonal skills.
- Excellent communication skills.
- Excellent organisational skills, time management and ability to undertake duties assigned and meet deadlines required.

Salary

- The successful candidate will be appointed at the appropriate Senior Research Assistant B salary scale (<https://www.tudublin.ie/media/intranet/hr/salary-scales/salary-scales-adobe/Research-salary-scales-wef-01.10.2024.pdf>).

Interested parties should send a current CV to sajad.alimohammadi@tudublin.ie by 5 pm, 12 December 2024.