Research Centre  National Centre for Sensor Research (NCSR)

Post Title  Postdoctoral Researcher (FP7 – Aquawarn Project)

Ref. ASG PD AC Aquawarn

Level on Framework  Level 1

Post Duration  12 Months

Research Career Framework
As part of this role the researcher will be required to participate in the DCU Research Career Framework  [http://www.dcu.ie/hr/ResearchersFramework/index.shtml](http://www.dcu.ie/hr/ResearchersFramework/index.shtml). This framework is designed to provide significant professional development opportunities to Researchers and offer the best opportunities in terms of a wider career path.

Background
The Adaptive Sensors Group ([www.adaptivesensors.com/](http://www.adaptivesensors.com/)) is a large, multidisciplinary research unit hosted by the National Centre for Sensor Research (NCSR), in state-of-the-art facilities situated on the campus of Dublin City University. Core funding for the ASG is provided by Science Foundation Ireland through the INSIGHT Centre initiative ([https://www.insight-centre.org/](https://www.insight-centre.org/)), supplemented by significant project based income provided by Enterprise Ireland, the Marine Institute, EPA and Industry partners. Arising from success in recent FP7 proposals, the following research position is available in the Adaptive Sensors Group at DCU.

Role
Funded through the FP7 project ‘Aquawarn’, this Postdoctoral position is focused on the development of analytical strategies to realise reliable reagent-based colorimetric methods for the sensitive detection of key analysis like pH, sulphate, COD, certain metal ions and TOC based on effective microfluidic manifold design. Analytical strategy including method development and optimisation within a microfluidic environment will also be critical for meeting the project deliverables, as will participation of field deployments and in-situ assessments of the prototype devices. Reporting to Professor Dermot Diamond, the successful candidate will work closely on a day to day basis with other researchers to deliver a truly multidisciplinary group effort.

Duties & Responsibilities:
Reporting to his/her Principal Investigator the Postdoctoral Researcher will:

- Conduct a specified programme of research on the development of analytical strategies to realise reliable reagent-based colorimetric methods for the sensitive detection of key analysis like pH, sulphate, COD, certain metal ions and TOC based on effective microfluidic manifold design.
- Deliver research outputs and provide input into reports as required according to project management schedules.
- Participate in field deployments of prototype devices.
- Attend and present results at project technical progress meetings.
- Liaise with both internal and external stakeholders including industry and academic partners/collaborators.
- Maintain an up-to-date profile on the group website.
• Engage in the dissemination of the results of the research at international conferences and publish research outputs in high impact international journals.
• Assist in identifying and developing future research and funding initiatives.
• Supervise and assist undergraduate students working in this area with their research.
• Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.
• Engage in teaching and teaching support as assigned by and in agreement with the Head of School, under the direction of the Principal Investigator.
• Carry out administrative work associated with the programme of research as & when necessary.

Experience and Qualifications
Candidates must have a primary degree in which chemistry, analytical chemistry or environmental (water) chemistry was a significant component. He/She will also have a PhD in which analytical science, instrumental analysis, and method development were significant components. Experience in microfluidic system design and fabrication would be an advantage, as would experience in environmental analysis, particularly in-situ monitoring.

Candidates will be assessed on the following competencies:

• **Discipline knowledge and Research skills** – Demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline.

• **Understanding the Research Environment** – Demonstrates an awareness of the research environment (for example funding bodies) and the ability to contribute to grant applications.

• **Communicating Research** – Demonstrates the ability to communicate their research with their peers and the wider research community (for example presenting at conferences and publishing research in relevant journals) and the potential to teach and tutor students.

• **Managing & Leadership skills** - Demonstrates the potential to manage a research projects including the supervision of undergraduate students.

Salary: €37,750

Closing Date: 4th September 2014

Application forms are available from:
Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0) 1 7005149
Fax: + 353 1 700 5500 Email: hr.applications@dcu.ie

Quote the position reference code ASG PD AC Aquawarn in your application

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