

Meet a researcher: Dr Arash Zamyadi, Senior Research Associate

How long have you been at UNSW? 9 months

Where did you work before UNSW? Immediately after completing my Ph.D. studies, in June 2011 (Montreal, Canada), I continued my research career at Civil Engineering Department, École Polytechnique de Montreal (Canada), by accepting a “Research Associate” position. I collaborated with Yellow Springs Instrument (YSI) Inc. (Yellow Springs, Ohio, USA) as a part time Environmental Monitoring Research and Development Consultant in 2011 and 2012. I was awarded both the Natural Sciences and Engineering Research Council of Canada (NSERC) Postdoctoral Fellowship (Canadian version of DECRA) and the “Fonds de recherche du Québec – Nature et technologies” Post-doctoral Scholarship. In August 2012, I accepted the NSERC Fellowship and started my postdoctoral research project at Drinking Water Research Group, Civil Engineering Department, University of Toronto (Canada), where I worked till June 2014.

Describe your role/project? Here at UNSW, I am working on an ARC Linkage project titled “Online monitoring of cyanobacteria to predict coagulant doses and powdered activated carbon application in water treatment”. The project lead investigator is Dr Rita Henderson in collaboration with Professor Richard Stuetz and Dr Gaye Newcombe (SA Water). My role includes:

- designing and conducting laboratory, pilot and field experimental plans,
- supervising the work of students involved with the project and the advance of the project respecting the schedule,
- analysing and reporting the scientific and technical outcome of the project.

I am also actively involved with International Water Association Australia (IWAA) and Australian Water Association (AWA) young water professional committees, and American Water Works Association (AWWA) taste and odour committee.

Countries where you have lived? Australia, Canada, Iran

Next holiday destination? Singapore & Malaysia

What's excited you about your research this week? We have installed an online multi-system monitoring probe in Wingecarribee reservoir in collaboration with Water NSW, Xylem, and YSI Inc. Validating the probe's performance for cyanobacterial monitoring is one of the main goals of the first stage of the ARC Linkage project. This week's installation of the probe at Wingecarribee reservoir is an exciting event in the project calendar marking major progress in collaboration between the project research team from UNSW and the project partners from state government and industry sectors using the newest version of this monitoring technology.

It's also exciting to shift the project focus from laboratory experiments towards field research in real environmental conditions with future plans for expansion of the monitoring program into the nearby water treatment plant.

The probe system will be at this monitoring location for the next 12 months, providing a unique opportunity to study the performance of the probe including the seasonal variations in water conditions and to monitor the dynamics of cyanobacterial and algal community at this water intake.

For more information on Arash's work check out www.arashzamyadi.com