

PhD Projects in Microfluidics

University of Sydney Chemistry

[Prof Chiara Neto](#) Deadline: April 7th, 2024 for the forms below

About the Project

Two PhD projects in Microfluidics are on offer to students in physics, physical chemistry, or mechanical engineering in the group of Prof Chiara Neto in the School of Chemistry at the University of Sydney to study flow at liquid/liquid interfaces. Students will need to apply for Australian Government Research Training Program scholarships or similar schemes (AUD \$35,950 per annum), awarded on a competitive basis.

<https://bit.ly/3OMyWDx>

This project will take place within the [Nano-Interfaces Group](#) with a strong collaborative atmosphere between students and postdoctoral fellows. The successful candidates will investigate flow at interfaces, either in microfluidic experiments or computational fluid dynamics (CFD) simulations. Through high-quality microscale experiments –both physical and in silico– we will establish the occurrence of previously unknown interfacial phenomena, connected with gas accumulation. The experimental project involves flow experiments on special wettability nano- and micro-structured surfaces in microfluidic devices; the computational project involves CFD simulations of multiscale multiphase flows. Please see our website, <https://neto.sydney.edu.au/>, or contact Prof. Neto for further information.

You will be part of a scientifically rich and culturally diverse environment at the University of Sydney. The University hosts the Key Centre for Polymer and Colloids and the University of Sydney Nano Institute. Our staff and students are active members of the Australasian Colloids and Interface Society. You will have opportunities to collaborate with theorists and experimentalists across these networks and with our industry collaborators.

Information and Application

To be considered for these projects, fill in the following forms by 7th April, 2024:

For the numerical simulations project: <https://bit.ly/4chMeCa>

For the experimental project: <https://bit.ly/3vkKK9C>