Slippery surface coatings for drag and fouling reduction

Postdoctoral Position
(Full- or part-time, fixed term for 2.5 years)

Description: Available immediately to join the Nano Interfaces Group in the School of Chemistry at the University of Sydney. The post is funded by the Australian Research Council to explore experimentally and computationally the properties of lubricant-infused surfaces.

You will work under the supervision of A/Prof Chiara Neto and be part of an effort to increase our understanding of flow and wetting at surfaces, involving PhD students and researchers in the School of Chemistry at the University of Sydney. Our research is primarily experimental and relies on state-of-the-art surface modification and characterisation. Theoretical tools and computer simulations are also used in quantitative data analysis and mathematical modeling of the underlying processes.
Job responsibilities include:

- Design, test and improve lubricant-infused surfaces
- Perform characterisation of marine fouling experiments in static conditions and under flow
- Test and improve anti-bacterial properties
- Test and improve coatings for lubricant retention
- Conduct literature reviews and write scientific manuscripts
- Co-supervise research students in the group and assist in lab management

For more details on the Neto group visit: https://sydney.edu.au/science/chemistry/neto/.

Eligibility: Candidates should have an experimental PhD degree (or equivalent) in Physical Chemistry, Interface Physics, Materials Science, Chemical Engineering, or Biology with emphasis on bacterial studies. **Essential qualifications and skills are:** in depth experience in working with microfluidic devices **or** in bacterial studies; experience in surface fabrication and up-scaling methods; a demonstrated ability to independently plan and conduct high quality research; a high degree of independence and motivation; a strong track record in research publication; excellent written and verbal communication skills; good teamwork. **Desirable qualifications include**: experience in working with drag-reducing or fouling-reducing coatings; skills in computational studies of flow and wetting.

Salary: The salary is AUD $94,628 per annum and may be renewed for up to 30 months, subject to satisfactory progress. Review of applications starts May 30th, 2019, and continues until the position is filled.

Application guide: To apply please send a brief cover letter and a CV containing full contact details of two-three academic referees. For information concerning the research project and the fellowship please contact:

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