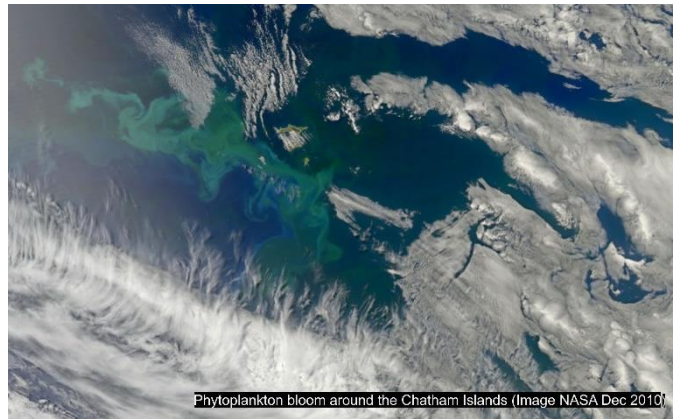


Ph.D. in Earth Science at Asian School of Environment

Phytoplankton is a functional group of single cell organisms including cyanobacteria and eukaryotes that can perform oxygenic photosynthesis. The eukaryotic compartment of phytoplankton harbors a wide diversity of organisms that are distributed widely across several branches of eukaryotic tree of life. These organisms are at the core of global biogeochemical cycles (pathway by which a chemical substance moves through biotic and abiotic compartments of Earth, for example carbon and oxygen).



We are looking for a curious and motivated Ph.D. student to join our team at NTU. The student will be at the forefront of a research project that aims at unveiling the dynamics and contribution of small (pico) oceanic eukaryotic phytoplankton to the carbon cycle. We will combine classical primary productivity experiments with phytoplankton population sorting by flow cytometry and metabarcoding (metaB) of marker genes to access group specific contribution to carbon fixation. To track the variation of phytoplankton communities abundances and their metabolism *in situ*, we will perform high-resolution sampling through the natural diel-cycle in different water masses and apply meta transcriptomic (metaT) data analysis to examine the pathways that lead to nutrient acquisition and growth of key picoplanktonic species.

The project will involve field and laboratory studies and will be developed in collaboration with National Institute of Water and Atmospheric Research - New Zealand and the Station Biologique de Roscoff – France. Lab experience and/or computing skills will be considered favorably: geeks with love for microbes are welcome!

The Ph.D is to be completed with 4 years of study.

Criteria for admission in the PhD program

The minimum requirement for admission is a Bachelor's degree with 2nd Class Honors Upper.

All applicants are required to submit their GRE or GATE test scores which must be within 5 years or less from the date of application. Special arrangements can be made for selected applicants to sit for Technical Proficiency Test (TPT) in place of GRE.

International applicants for whom English is not their first language are required to submit their TOEFL/IELTS test scores as well. Test dates must be within 2 years or less from the date of your application. Special arrangements can be made for selected applicants to sit for NTU's English Proficiency Test (EPT) in place of TOEFL/IELTS.

Benefits

The student will be provided with a graduate research assistantship that includes a stipend for living expenses, academic fees, tuition and health insurance.

Deadline for application

31st January 2019 to start in August 2019 intake.

You will have to build an application which will take quite a bit of time, including performing the GRE and TOEFL (if is applicable) tests in case you don't have yet. So please contact me as soon as possible if you are interested.

Contact

If you are interested, inquiries can be send to adriana.lopes@ntu.edu.sg (<https://adriana.netlify.com/>). Please, include your CV and a statement of research experience and interests.