PhD and MSc Positions Available

Biome Renewables, Defense Research and Development Canada (Atlantic Research Centre) and the University of New Brunswick (UNB) have initiated a multiyear research project investigating new designs to improve the propulsion efficiency of ocean-going vehicles. Using design innovations from Biome, extensive operational experience of DRDC personnel, and the research supervision and training experience offered by UNB, the goal is to gain insight into new designs supported by optimization workflows using new and existing tools. Improving propulsion efficiency will directly contribute to making the shipping industry more competitive and environmentally less intrusive since ocean shipping accounts for 80-90% of global trade and 2-3% of global greenhouse gas emissions.

The research, sponsored through NSERC's Alliance program, requires PhD and MSc students with a strong interest in fluid mechanics, simulation, and turbomachinery design. More specifically, students will be using and contributing to the development of tools covering Computational Fluid Dynamics (CFD), multi-objective optimization, software engineering of design workflows, and CAD geometry creation and surface/volume meshing.

Interested individuals can send an email to agerber@unb.ca along with relevant background information.