

ALISTAIR EVERETT

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POSTGRADUATE RESEARCH

JAN 2013–
PRESENT | **PhD - SWANSEA UNIVERSITY GLACIOLOGY GROUP, UK**
TITLE: Modelling circulation within glacial fjords in south-east Greenland: Implications for sea-level rise predictions from the Greenland Ice Sheet.
SUPERVISORS: Prof. Tavi Murray & Dr. Ian Rutt
AIMS: I use numerical and experimental methods to investigate fluid dynamics processes occurring at the ice-front of tidewater glaciers in south east Greenland. Numerical experiments are carried out using Fluidity, an open-source fluid dynamics code, and validated using available remote sensing and field data.

POSTGRADUATE EMPLOYMENT

OCT 2011–
DEC 2012 | **Graduate Bridges and Design Engineer - NORTH YORKSHIRE COUNTY COUNCIL: HIGHWAYS AND TRANSPORT DEPARTMENT, UK**
4 months working in an Area Office in Highway Operations completing a drainage project and assisting with road surfacing schemes. 11 months working in the Bridges and Design Services team with responsibility for 4 projects worth up to £160,000 each.

JULY 2011–
SEPT 2011 | **Research Assistant - UNIVERSITY OF BATH, UK**
A 3 month research project developing a novel tidal power device. I developed a rotating 3 dimensional Computational Fluid Dynamics simulation of a turbine using an open source CFD software package, as well as using C++ and Matlab to create a process which allowed parametric designs to be generated, fed into the model and power outputs to be calculated.

EDUCATION

SEPT 2007–
JULY 2011 | **MEng (Hons) Civil Engineering - UNIVERSITY OF BATH, UK**
Upper Second Class Honours
DISSERTATION: Experimental Investigations on Thermohaline Circulation
SUPERVISOR: Dr. Michael Patterson
RELEVANT MODULES: Fluid Mechanics, Coastal and Offshore Engineering, Civil Engineering Hydraulics, Mathematics, Continuum Mechanics, Materials Science.

GRANTS AND AWARDS

DEC 2015	Swansea University Team Maker Competition 2015 (First Prize £450)
DEC 2015	British Society for Geomorphology Travel Grant (£1000)
OCT 2015	NERC High Performance Computing Grant (£5600)
MAR 2015	Swansea University Academic Development Bursary (£500)
AUG 2014	University of Alaska, Fairbanks Travel Grant (£200)
AUG 2014	IACS Travel Grant (£250)
JAN 2014	Climate Change Consortium of Wales Travel Bursary (£750)
JUNE 2013	Andrew Croft Memorial Fund (£300)
MAR 2013	Gino Watkins Memorial Fund (£500)

COURSES AND EXPERIENCE

SEPT 2014	Fluid Dynamics Summer School (FDSE) - UNIVERSITY OF CAMBRIDGE, UK
AUG 2014	International Summer School in Glaciology - MCCARTHY, ALASKA, USA
FEB 2014	AG-825 Glaciology Course - UNIVERSITY CENTRE IN SVALBARD, NORWAY
JAN 2014	Public Presentation Training - SCIENCE MUSEUM LONDON, UK
JUN 2013– SEPT 2013	Field Assistant - SERMILIK FJORD, SOUTH EAST GREENLAND
2009–2011	Club President - BATH UNIVERSITY MOUNTAINEERING CLUB

TEACHING

Student Demonstrator - SWANSEA UNIVERSITY, UK

MODULES: Geographical Methods 1
Geographical Methods: Field Project
Environmental Research Methods
Geographic Information Systems

OUTREACH

DEC 2014	Careers in Glaciology and Science - ERMYSTED'S GRAMMAR SCHOOL, SKIPTON, UK
JUNE 2014	Science on a Sphere Public Lectures - SCIENCE MUSEUM LONDON, UK

COMPUTER SKILLS

Familiar: C++, Fortran, HTML, Visual Basic, High Performance Computing, Quantum GIS, ArcMap

Proficient: Microsoft Office, Python, Linux, MATLAB, L^AT_EX

PUBLICATIONS

Papers:

Everett, A., Murray, T., Selmes, N., Rutt, I. C., Luckman, A., James, T. D., Clason, C., O'Leary, M., Karunarathna, H., Moloney, V., Reeve, D. E. (2016) Water Levels in Crevasses Controlled by Basal Water Pressures at Helheim Glacier, South East Greenland, *Journal of Geophysical Research: Earth Surface*, (In Review)

Everett, A., Murray, T., Rutt, I. C., O'Leary, M., Karunarathna, H., Moloney, V., Reeve, D. E. (2016) Quantifying the Discharge and Behaviour of Subglacial Discharge Plumes at Helheim Glacier, South East Greenland, (In Prep)

Data Sets:

Murray, T., Edwards, S., O'Farrell, T., Selmes, N., Martin, I., **Everett, A.**, Aspey, R. and James, T. D., (2015), Helheim Glacier, SE Greenland: Networks of Sensors, *UNAVCO*, GPS Data Set, DOI: 10.7283/T55X278X

SELECTED ORAL PRESENTATIONS

Conference:

Water Levels in Crevasses Reveal Subglacial Water Pressure Variations at Helheim Glacier, South East Greenland (Dec, 2015) AGU 2015 Fall Meeting, SAN FRANCISCO, USA, Abstract ID: C43E-04

Water Levels in Crevasses Reveal Subglacial Water Pressure Variations at Helheim Glacier, South East Greenland (Sept, 2015) IGS British Branch Meeting, DURHAM, UK

Annual Supraglacial Lake Drainage Linked to Plume Formation at Helheim Glacier, South East Greenland (Aug, 2015) IGS International Symposium on Contemporary Ice Sheet Dynamics, CAMBRIDGE, UK, Abstract ID: 73A1901

Do Plumes of Subglacial Discharge Impact Calving Rates? (Oct, 2014) Calving and Surging Glaciers in Svalbard Workshop, UTRECHT, NETHERLANDS

Invited:

A High-Resolution, 3-Dimensional LES Plume Model and Experiments with Mesh Movement on a Melting Ice Face (Nov, 2015) Applied Modelling & Computation Group, Imperial College, LONDON, UK

Constraining Plume Discharge from Surface Observations (Dec, 2015) Greenland Ice Sheet Ocean Observing System (GrIOOS) Workshop, SAN FRANCISCO, USA

Internal:

Oceanic Influences on the Melt Rates of Marine-Terminating Glaciers in SE Greenland (June, 2014) Biosciences Seminar Series, SWANSEA UNIVERSITY, UK

ADDITIONAL QUALIFICATIONS

Mountain First Aid (3 Years), Crevasse Rescue, PADI Open Water Diver Certification, Full Clean UK Driving License, Basic German, French and Norwegian.