

Taimoor Sohail

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Education

The Australian National University **Canberra, Australia**
PhD Candidate in Earth Sciences *2016–2020*
Working Thesis Title: *Can convection drive Southern Ocean circulation?*
Supervisors: Dr. Bishakhdat Gayen and Dr. Andrew McC. Hogg
Funded by: Endeavour Scholarship and ARC Centre of Excellence in Climate Extremes

Lafayette College **Easton, PA, USA**
Bachelor of Science in Mechanical Engineering *2010–2014*
GPA: 3.84/4.00, magna cum laude

Experience

Young Professional Officer – Climate Change **November 2015 – January 2016**
LEAD Pakistan *Islamabad, Pakistan*
○ Head of Operations for the Climate & Development Knowledge Network (CDKN) funded by Department for International Development;

Research Associate **November 2014 – November 2015**
Centre for Climate Research & Development (CCRD) *Islamabad, Pakistan*
Project Title: *Low-carbon Scenario Analysis Greenhouse Gas Inventory project*
○ Implemented for the Government of Pakistan, in collaboration with the International Institute for Sustainable Development (IISD);

Research Assistant (Part-time) **May 2013 – May 2014**
Department of Engineering Studies, Lafayette College *Easton, PA, USA*
Project Title: *Liquid Desiccant Solar Thermal Energy Systems*
○ Constructed laboratory apparatus including a data acquisition interface for controlling and recording experimental parameters.

Research Assistant (Part-time) **December 2011 – January 2012**
Department of Mechanical Engineering, Lafayette College *Easton, PA, USA*
Project Title: *Arterial Blood Flow Modeling*
○ Created a 2D model of the blood flow in the Abdominal Aortic, and Right and Left Renal Arteries with COMSOL Multiphysics.

Teaching

Lab Demonstrator, Climate System Science **July 2017 – December 2017**
Research School of Earth Sciences, ANU *Canberra, Australia*

Lab Demonstrator, Physics of Fluid Flows **February 2017 – May 2017**
Research School of Earth Sciences, ANU *Canberra, Australia*

Teaching Assistant, Climate Change **August 2013 – December 2013**
Department of Geology, Lafayette College *Easton, PA, USA*

Meetings & Conferences

Oral Presentations.....
○ **Sohail, T.**, Gayen, B. and Hogg, A. McC. The role of convection and eddies in driving mixing in the Southern Ocean. *American Geophysical Union - Ocean Sciences Meeting*, 2018.

- **Sohail, T.**, Gayen, B. and Hogg, A. McC. The role of convection in driving mixing in the Southern Ocean. *AMOS-ICSHMO Conference*, 2018.
- **Sohail, T.**, Gayen, B. and Hogg, A. McC. Impact of convection on heat uptake and mixing in the Southern Ocean. *10th Australasian Natural Convection Workshop (ANCW)*, 2017. **Awarded Best Speaker.**
- **Sohail, T.**, Gayen, B. and Hogg, A. McC. Turbulent convection in geostrophic circulation with wind and buoyancy forcing. *American Physical Society - Division of Fluid Dynamics (APS-DFD) Meeting*, 2017.
- **Sohail, T.**, Gayen, B. and Hogg, A. McC. Can convection drive Southern Ocean circulation? *RSES Student Conference*, 2017. **Awarded Best Speaker.**
- **Sohail, T.**, Vreugdenhil, C. A., Gayen, B. and Hogg, A. McC. A turbulence-resolving model of Southern Ocean circulation. *20th Australasian Fluid Mechanics Conference (AFMC)*, 2016.

Posters.....

- **Sohail, T.**, Gayen, B. and Hogg, A. McC. Convection drives mixing in the Southern Ocean. *Center of Excellence in Climate System Science Workshop*, 2017. **Awarded Best Poster.**
- **Sohail, T.**, Gayen, B. and Hogg, A. McC. A turbulence-resolving model of Southern Ocean circulation. *AMOS/MSNZ Conference & ANZ Climate Forum*, 2017.
- **Sohail, T.**, Gayen, B. and Hogg, A. McC. A turbulence-resolving model of Southern Ocean circulation. *Center of Excellence in Climate System Science Workshop*, 2016.

Summer/Winter Schools.....

6th ARC Centre of Excellence for Climate System Science Winter School <i>hosted by the ARC Centre of Excellence on Climate System Science</i>	June 2017 <i>Sydney, Australia</i>
14th Coupled Data Assimilation Summer School <i>hosted by the Chinese Academy of Sciences (CAS)</i>	June 2015 – July 2015 <i>Beijing, China</i>

Skills

Computer.....

Programming Languages: Python, Fortran, Matlab

Software Packages: Paraview, Numeca FINE/Open, COMSOL Multiphysics, Engineering Equation Solver (EES), Autodesk Inventor, ANSYS, NI LabVIEW, DirectSoft PLC, Adobe Photoshop, InkScape

Language.....

English: Fluent

Urdu: Fluent

French: Intermediate

Awards & Honours

- *Best Speaker:* RSES Student Conference 2017 & 10th ANCW 2017
- *Best Poster:* Center of Excellence in Climate System Science Workshop 2017
- 2017 Australian Society of Exploration Geophysics (ASEG) ACT Scholarship Recipient
- 2016 Endeavour Scholarship Recipient

Outreach & Volunteering

STEM Professional: Scientists and Mathematicians in Schools <i>Commonwealth Scientific and Industrial Research Organisation (CSIRO)</i>	July 2017 – Present <i>Canberra, Australia</i>
Student Representative: Equity and Diversity Committee <i>Research School of Earth Sciences, ANU</i>	May 2017 – Present <i>Canberra, Australia</i>
CFP Seminar Convenor <i>Research School of Earth Sciences, ANU</i>	April 2017 – Present <i>Canberra, Australia</i>