

Dr Rohit Pillai

Senior Lecturer in Mechanical Engineering
School of Engineering, University of Edinburgh

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EMPLOYMENT

Senior Lecturer (Associate Professor) in Mechanical Engineering University of Edinburgh	2023–present
Lecturer (Assistant Professor) in Mechanical Engineering University of Edinburgh	2018–2023
Postdoctoral Research Associate University of Edinburgh	2017–2018

EDUCATION

PhD, Chemical and Biomolecular Engineering , University of Melbourne	2017
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RESEARCH FUNDING

[ERC Starting Grant](#), NANO-COOL, 2024–2029, £1,270,000.

Additional funding from [EPSRC](#) and UK national HPC services, totalling £355,600.

PUBLICATIONS

1 invited book chapter, 20 journal articles, 31 conference abstracts.

Selected journal articles:

1. A El-Rifai, S Perumanath, MK Borg, [R Pillai](#) (2024) Unravelling the regimes of interfacial thermal conductance at a solid/liquid interface. *J. Phys. Chem. C*, **128**(20), 8408–8417.
2. S Perumanath, [R Pillai](#), MK Borg (2023) Contaminant Removal from Nature’s Self-Cleaning Surfaces. *Nano Letters*, **23**(10), 4234–4241.
Press: [The Conversation](#), [Phys.org](#), [TechXplore](#)
3. P Sullivan, D Dockar, MK Borg, R Enright, [R Pillai](#) (2022) Inertio-Thermal Vapour Bubble Growth. *J. Fluid Mech.*, **948**, A55.
4. S Datta, [R Pillai](#), MK Borg, K Sefiane (2021) Acoustothermal Nucleation of Surface Nanobubbles. *Nano Letters*, **21**, 1267–1273.
Press: [EurekAlert](#), [ScienceDaily](#), [Phys.org](#)
5. [R Pillai](#), MK Borg, JM Reese (2018) Acoustothermal Atomization of Water Nanofilms. *Phys. Rev. Lett.*, **121**:104502.
Press: [BBC Scotland](#), [Phys.org](#), [The Times](#), [Daily Express](#), [Metro](#), [The Sun](#)

RESEARCH SUPERVISION

Postdocs: 2 completed, 1 ongoing. Both obtained [Leverhulme Trust Early Career Fellowships](#); [S Datta](#) appointed Senior Lecturer (Swansea), [S Perumanath](#) appointed Assistant Professor (IIT Madras).

PhD students: 6 completed, 2 ongoing.

TEACHING

Thermofluids 3 (Course Organiser, 2020–2024, 160+ students; [EUSA](#) Teacher of the Year nominations 2021, 2022; Outstanding Course nominations 2021, 2023), Engineering Mathematics 2A (2018–2023), Engineering 1 (2018–2019), MEng Honours Projects (2018–present).

SERVICE AND ESTEEM

- Invited keynotes incl. [Gordon Research Conference](#) (2027) and [NEMD Conference, Osaka](#) (2025)
- Conference Chair, [5th NEMD Conference](#), Edinburgh, UK, 2026
- Expert Evaluator, European Research Council (2024–present)
- College Member, [EPSRC](#) Peer Review College (2024–present)
- External PhD Examiner: Imperial College London, UK (2024); Brunel University, UK (2026)
- Internal PhD Examiner: 7 students (2022–2024)
- Member: [SIAM](#) (2014–), [UK Fluids Network NEMD SIG](#) (2019–), [Scotland Beyond Net Zero](#) (2025–)