

Vatsal Sanjay — Ph.D.

Physics of Fluids Dept., Univ. Twente – Postdoc (2022–2025)

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Date of birth: Feb. 5, 1996 Updated: May 29, 2025

Education

Physics of Fluids Dept.

Ph.D. (Appl. Phys.), Graduated cum laude (with distinction)

Supervisor: Prof. Detlef Lohse.

Thesis: *Viscous free-surface flows* (OA) [10.3990/1.9789036554077](https://doi.org/10.3990/1.9789036554077).

Univ. Twente

2018–2022

Two-Phase Flow & Instability Lab

B.Tech (Mech.) & M.Tech (Thermal Eng.), Graduated with distinction (CGPA: 9.1/10)

Supervisor: Prof. Arup Kumar Das,

Thesis: *Understanding of mutual interactions between liquid jets* (OA) [10.13140/RG.2.2.22294.04166](https://doi.org/10.13140/RG.2.2.22294.04166).

IIT Roorkee

2013–2018

Professional Experience

Physics of Fluids Dept.

Postdoctoral Researcher, Leading Computational Multiphase Physics (CoMPhy) Lab

Working on non-Newtonian free-surface flows and soft matter singularities.

Univ. Twente

2022–2025

Fluid Mechanics & Acoustics Lab (UMR 5509)

Research Intern

Worked on Landau–Levich dip coating.

Univ. Claude Bernard Lyon 1, France

May–July, 2016

Major Awards & Achievements

2025: Ammodo Science Fellowship for mycofluidic transport.

2024: J. Fluid Mech. Outstanding Reviewer (top 1%), **KIVI Hoogendoorn Award** (best PhD thesis in NL), **Young Scientist** (73rd Lindau Nobel Laureate Meeting).

2022: Doctor cum laude (with distinction), top 5% of PhD graduates.

2018: Department Gold Medal, IIT Roorkee.

Service to the Community

Organized: Physics of Fluids weekly seminar (2022–2025), 2 workshops/symposia.

Referee: J. Fluid Mech. (75), Phys. Rev. (18), PNAS (2), among others.

Funding & Outreach

Funding: Ammodo Fellowship (€170000), 10M CPU hours on Snellius HPC.

Outreach: Social media (@pofwtwente), APS-DFD mentor, Skype a Scientist.

Supervision & Teaching

PhD: 4 students: A. Bhargava, A. Dixit, J. Talukdar, S. Jana (2023–2025).

Master/BSc: 15 theses supervised (2019–2025).

Teaching: For teaching activities, see comphy-lab.org/teaching.

Peer-Reviewed Publications

Selected publications (15 total, 600+ citations):

- V. Sanjay & D. Lohse, Unifying theory of scaling in drop impact, *Phys. Rev. Lett.*, in press (2025).
- B. Zhang, V. Sanjay, et al., Impact forces of water drops, *Phys. Rev. Lett.* 129, 104501 (2022); **Editor's Suggestion, Highly Cited.**
- V. Sanjay, S. Lakshman, et al., Drop impact on viscous liquid films, *J. Fluid Mech.* 958, A25 (2023).
- V. Sanjay, D. Lohse, & M. Jalaal, Bursting bubble in a viscoplastic medium, *J. Fluid Mech.* 922, A22 (2021).

Full list: [Google Scholar](#).

Selected Talks

Invited: 16 talks: DAMTP Cambridge, Univ. Warwick, IIT Bombay, others.

Contributed: 32 talks: APS-DFD (5x), EFMC, EFDC, Liquid Matter Conf.

Metrics: h-index: 9 ([Google Scholar](#)), 7 ([Web of Science](#)) — i10-index: 9 — Citations: 400+ — ORCID: [0000-0002-4293-6099](#)