

Curriculum vitae with track record (for researchers)

* **ROLE IN THE PROJECT** Project manager ☐ Work package leader ☒ Project partner ☐

* PERSONAL INFORMATION

*Family name, First name:	Wang, Widar Weizhi		
*Date of birth:	26.01.1993	*Sex:	male
*Nationality:	Norwegian		
Researcher unique identifier(s):	https://scholar.google.com/citations?hl=no&user=XqKA-8sAAAAJ https://orcid.org/my-orcid?orcid=0000-0003-3844-3109		
URL for personal website:	www.reef3d.com		

* EDUCATION

	Name of faculty/department, name of university/institution, country
2020	PhD , Faculty of Engineering Science and Technology/Department of Civil and Environmental Engineering, NTNU Trondheim, Norway
2016	Master of Science , Department of Shipping and Marine Technology, Chalmers University of Technology, Gothenburg, Sweden

* POSITIONS - current and previous

	Job title/name of employer/country
2023-	Senior researcher , Faculty of Engineering/Department of Civil and Environmental Engineering, NTNU Trondheim, Norway
2023-2023	Researcher , SINTEF Ocean, Trondheim, Norway
2021-2022	Researcher , Faculty of Engineering/Department of Civil and Environmental Engineering, NTNU Trondheim, Norway
2019-2021	Pos-doc , Faculty of Engineering/Department of Civil and Environmental Engineering, NTNU Trondheim, Norway
2016-2019	PhD student (defence in 2020), Faculty of Engineering Science and Technology/Department of Civil and Transport Engineering, NTNU Trondheim, Norway

PROJECT MANAGEMENT EXPERIENCE

	Project and role, funding from
2022-	PARTRES: Particle resolving fluid-sediment interaction; Role: assisting proposal writing, PhD co-supervision, researcher, Funding: European Research Council (ERC).
2022-	MAPLE: Marine Plastic Pollution: Environmental impact and life cycle scenarios, (2022-2026), Role: PhD co-supervisor; Funding: NTNU Sustainability
2021-	<i>DIGICOAST: Next-Generation Coastal Modeling for Wave, Current and Sediment Transport Impact on Coastal Infrastructure</i> , Role: PhD co-supervisor; Funding: Center for Green Shift in the Built Environment, Dept. of Civil and Envr. Eng., NTNU

SUPERVISION OF GRADUATE STUDENTS AND RESEARCH FELLOWS

	No. of	Master's students/ Ph.D./Postdocs	Name of faculty/department/centre, name of university/institution/country
2011-	28	MSc students	Supervision and co-supervision, Dept. of Civil and Envr. Eng. NTNU Trondheim, Norway
2011-	7	PhD students	Co-supervision, Dept. of Civil and Envr. Eng. NTNU Trondheim, Norway

TEACHING ACTIVITIES (selection)

	Teaching position – topic, name of university/institution/country
2021	Guest Lecturer - <i>Hydromechanics</i> , BSc-course, NTNU Trondheim, Norway
2019-	Lecturer – Coastal Engineering, MSc-course, NTNU Trondheim, Norway
2017	Trainee – Pedagogy - NTNU Teacher Training Seminar, NTNU Trondheim, Norway
2016-2019	Teaching assistant - Coastal Engineering, MSc-course, NTNU Trondheim, Norway

INSTITUTIONAL RESPONSIBILITIES

	Name of university/institution/country
2020-2022	Extended management committee , Department of Civil and Environmental Engineering. NTNU Trondheim, Norway

2018-2022	Social committee , Department of Civil and Environmental Engineering, NTNU, Trondheim, Norway
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COMMISSIONS OF TRUST IN ACADEMIC, PUBLIC OR PRIVATE ORGANISATIONS (selection)

	Name of university/institution/country – and role
2020-	Reviewer board member , open-access journal - Energies, MDPI
2019	Session co-chair , Free Surface Modelling, International Conference on Ocean, Offshore & Arctic Engineering

Track record

Total number of publications:

- **25** articles in peer-reviewed international journals
- **29** articles in peer-reviewed conference proceedings

Citations:

- Google Scholar: citations: **435**, h-index: 11, i10-index: 14.

Selection of ten publications in major international peer-reviewed scientific journals:

1. Bihs H., Wang W. (2025) REEF3D::NHFLOW – A High-Performance Non-Hydrostatic Solver for Coastal Wave Propagation, Coastal Engineering, Vol. 202, pp. 104819, doi: 10.1016/j.coastaleng.2025.104819

2. Wang W., Pákozdi C., Kamath A., Bihs H. (2023) Phase-resolved wave modelling in Norwegian fjords for the ferry-free E39 project, Journal of Ocean Engineering and Marine Energy, Vol. 9, DOI: 10.1007/s40722-023-00284-z

3. Wang, W., Pákozdi, C., Kamath, A., Fouques, S. and Bihs, H. (2022). A Flexible Fully Nonlinear Potential Flow Model for Wave Propagation over the Complex Topography of the Norwegian Coast. *Applied Ocean Research*, 122, 103103. doi: 10.1016/j.apor.2022.103103.

4. Pákozdi, C., Kamath, A., Wang, W. and Bihs, H. (2022). Application of Arbitrary Lagrangian-Eulerian Strips with Fully Nonlinear Wave Kinematics for Force Estimation. *Marine Structures*, 83, 103190. doi: 10.1016/j.marstruc.2022. 103190.

5. Wang W., Pákozdi C., Kamath A., Martin T. and Bihs H., (2022) Hydrodynamic coupling of viscous and non-viscous numerical wave solutions within the open-source hydrodynamics framework REEF3D, *J. Offshore Mech. Arct. Eng.*, 144(4). doi:10.1115/1.4053848. 041903.

6. Wang, W., Pákozdi, C., Kamath, A. and Bihs, H. (2021). A fully nonlinear potential flow wave modelling procedure for simulations of offshore sea states with various wave breaking scenarios. *Applied Ocean Research*, 117, 102898. ISSN 0141-1187. doi:https://doi.org/10. 1016/j.apor.2021.102898.

7. Wang W., Kamath A., Martin T., Pákozdi C. and Bihs H., (2020) A comparison of different wave modelling techniques in an open-source hydrodynamic framework, *Journal of Marine Science and Engineering*, 8(7), 526; doi: https://doi.org/10.3390/jmse8070526

8. Wang, W., Martin, T., Kamath, A. and Bihs, H. (2020) An Improved Depth-Averaged Non-Hydrostatic Shallow Water Model with Quadratic Pressure Approximation. *International Journal for Numerical Methods in Fluids*. 92, 803–824. doi: <https://doi.org/10.1002/fld.4807>
9. Wang W., Kamath A., Pákozdi C. and Bihs H. (2019) Investigation of Focusing Wave Properties in a Numerical Wave Tank with a Fully Nonlinear Potential Flow Model. *Journal of Marine Science and Engineering*, 2019, 7, 375, ISSN 2077-1312, doi: <https://doi.org/10.3390/jmse7100375>.
10. Wang W., Wu M., Palm J., & Eskilsson, C. (2018) Estimation of numerical uncertainty in computational fluid dynamics simulations of a passively controlled wave energy converter. *Proceedings of the Institution of Mechanical Engineers, Part M: Journal of Engineering for the Maritime Environment*, 232(1), 71–84. doi: <https://doi.org/10.1177/1475090217726884>