Name of Faculty Mr. KOTTALA PANDURANGA Designation **Assistant Professor** Nature of Job/Appointment Contract Date of Joining 03 - 01 - 2022 panduranga_maths@cbit.ac.in E-mail **Education Qualifications** Name of the Degree Class Ph. D Doctor of Philosophy Submitted First Class with PG M.Sc. (Applied Mathematics) Distinction First Class with B. Sc UG Distinction Work Experience Teaching 1Year Research 4 Years Industry Others Coastal Hydrodynamics, Hydroelasticity, Boundary Area of Specialization Element Analysis, Mathematical Modeling **Professional Memberships** International Association of Engineers (272501) Responsibilities held at Institution Level Responsibilities held at Department Level Research Guidance 1. Qualified TS-SET-2018 2. Qualified IIT JAM 2015 Awards Received Courses Handled at Under Calculus, Differential Equations, Numerical Analysis, Graduate / Post Graduate Integral equations, Linear Algebra Level. National Journals – 00 International Journals – 14 No. of Papers Published National Conference –00 International Conference – 06 Projects Carried out Patents Technology Transfer **Invited Speaker** 1. Convergence of Eigenfunction Expansions for Membrane Coupled Gravity Waves. Advances in Fluid Mechanics and Solid Mechanics, Springer, No. of Books / Chapter Singapore, 2020. 101-108. Published with details 2. Water Wave Interaction with Very Large Floating Structures, Advances in Industrial Machines and Mechanisms, 531-540, pp Springer, Singapore, 2021.

Programs/Faculty
Development
Programs/Seminars/Workshops
/Other Trainings (Attended and/or Organized).

Details of Short-Term Training

1. Attended Summer Workshop in Applied Mathematics (SWAM) at TIFR Bangalore, India, on 8th July 2020.

Details of Journal Publications/ Conferences (National and International) International Journals from the year 2017

- 1. S. Koley, and **Panduranga, K.,** A. Nourah, S. Neelamani, and A. Al-Ragum, Numerical and experimental modeling of water wave interaction with rubble mound offshore porous breakwaters, *Ocean Engineering*, vol. 218, pp. 108218 2020. (SCI, IF-3.068), https://doi.org/10.1016/j.oceaneng.2020.10821.
- 2. S. Koley, and **Panduranga, K.,** Energy balance relations for flow through thick-porous structures, *International Journal of Computational Methods and Experimental Measurements*, vol. 9.1, pp. 28-37, 2021. (SCOPUS), DOI:10.2495/CMEM-V9-N1-28-37.
- 3. **Panduranga, K.,** S. Koley, and T.Sahoo, Surface gravity wave scattering by multiple slatted screens placed near a caisson porous breakwater in the presence of seabed undulations, *Applied Ocean Research*, vol. 111, pp. 102675, 2021 (SCI, IF-2.753). https://doi.org/10.1016/j.apor.2021.102675
- 4. **Panduranga, K.,** and S. Koley, Water waves scattering by cylindrical dual porous floating breakwaters connected with a rectangular porous box and floating over an undulated seabed, *Meccanica*, vol. 56, pp. 3001-3024, 2021, (SCI, IF-2.258). https://doi.org/10.1007/s11012-021-01442-z
- 5. **Panduranga, K.,** Koley, S. Hydroelastic analysis of very large rectangular plate floating on shallow water. *Z. Angew. Math. Phys. (ZAMP)* 73, 38 (2022). (SCI, IF-1.934). https://doi.org/10.1007/s00033-021-01673-w
- 6. Kshma Trivedi, Santanu Koley, **Panduranga. K.,** Performance of an U-Shaped Oscillating Water Column Wave Energy Converter Device under Oblique Incident Waves, *Fluids* 6.4 (2021): 137. (ESCI)
- 7. **Panduranga, K.,** and S. Koley, Mitigation of wave loads on the floating porous breakwater by slotted screens, *WIT Transactions on Engineering Sciences*. vol. 131, 2021. (SCOPUS)

International Conferences from the year 2017

- S. Koley and K. Panduranga, Energy balance relations for flow through thick-porous structures, 43rd International Conference on Boundary Elements and other Mesh Reduction Methods, Embry-Riddle Aeronautical University, Daytona, USA, 07-09 December, 2020.
- 2. K. Panduranga, and S. Koley, Wave scattering by a dual cylindrical porous floating breakwater attached with porous box, The 36th International Workshop on Water Waves and Floating Bodies(IWWWFB), South Korea, 25-28 April, 2021.
- 3. K. Panduranga, S. Koley, and T. Sahoo, Water wave scattering by a floating

- viscoelastic plate over an undulated seabed International Workshop on the Mathematics of Sea Ice and Ice Sheets, University of Southern Queensland, Australia, 10-12 November 2021.
- 4. K. Panduranga, and S. Koley, T. Sahoo, "Water Waves Interaction with Slatted Screens Placed Near a Caisson Breakwater," International Conference on Advances in Differential Equations and Numerical Analysis (ADENA2020), Indian Institute of Technology Guwahati, October 12 15, 2020.
- 5. K. Panduranga, and S. Koley, Mitigation of wave loads on the floating porous breakwater by slotted screens, 43rd International Conference on Boundary Elements and other Mesh Reduction Methods, University of Mississippi, USA, 15–17 June 2021.
- K. Panduranga, and S. Koley, Reduction of wave forces on a rigid breakwater by a perforated thin barrier over step bottom. PACE-2021, Turkey, 20-23 June, 2021. ISSN: 2791-6405.