Name of organization Laboratório de Ondas e Correntes - Federal University of Rio de Janeiro (LOC/COPPE – UFRJ)	**Year of information updating** 2020
Year established 1999	**Year of joining the ITTC** 2021
Address Av. Athos da Silveira Ramos, Block I, Room 104, University City, RJ - Brazil.	**Status in the ITTC** Member
Contact details Laboratory Coordinator: Antonio Carlos Fernandes acfernandes@oceanica.ufrj.br +55 21 3938 - 8736 Laboratory Manager: Joel Sena Sales Junior joel@oceanica.ufrj.br +55 21 3938 - 7750	**Website** www.loc.ufrj.br

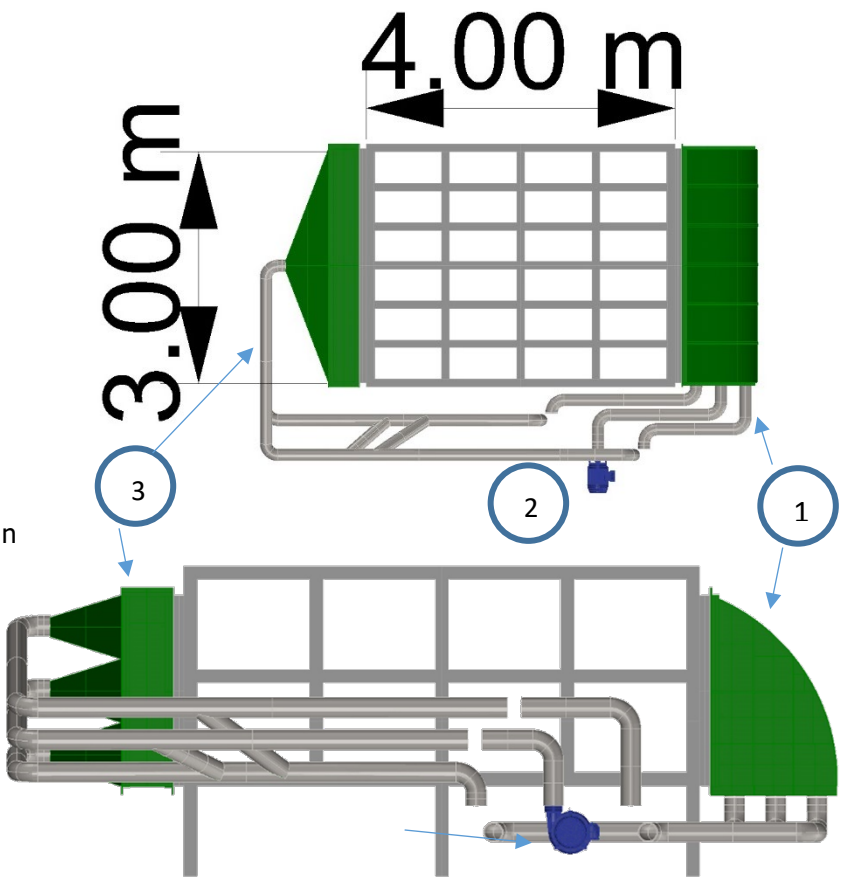
Type of facility Visualization tank	**Year constructed/upgraded** Construction: 2006 / Upgrade: 2019
Name of facility Laboratório de Ondas e Correntes (LOC/COPPE – UFRJ)	**Location** (if different from the above address)

Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)
L x B x D = 3 x 4 x 1.5 m (internal dimensions)

Drawings of facility

Top-view plan

Corss-section-view plan



1	Water inlet
2	Pumping system
3	Water outlet

Detailed characteristics (carriages, wave/current/wind generators, instrumentations, etc.)

Features installed at circulating current channel:

- Current velocity between 0.05 – 0.1 m/s (at 1.50 m of water depth)
- Vertical oscillator
- PMM installation
- Bottom and sidewalls made of glass
    - Full visualization

Instrumentation:

- Load cells
    - In-house built ring-type (for measuring tension in mooring lines)
    - Commercial 1D compression loadcells
    - In-house built 3D loadcell (drag, lift, moment measurements)
- Optical tracking systems
    - Commercial: Qualysis®
    - In-house device
- Particle Image Velocimeter (PIV)
- Capacitive wave gauges
- Pressure sensors

Applications (Tests performed)

- Drop-tests
- Evaluation of hydrodynamic coefficients (added mass and potential damping)
- Mooring lines behavior

Published description (Publications on this facility)