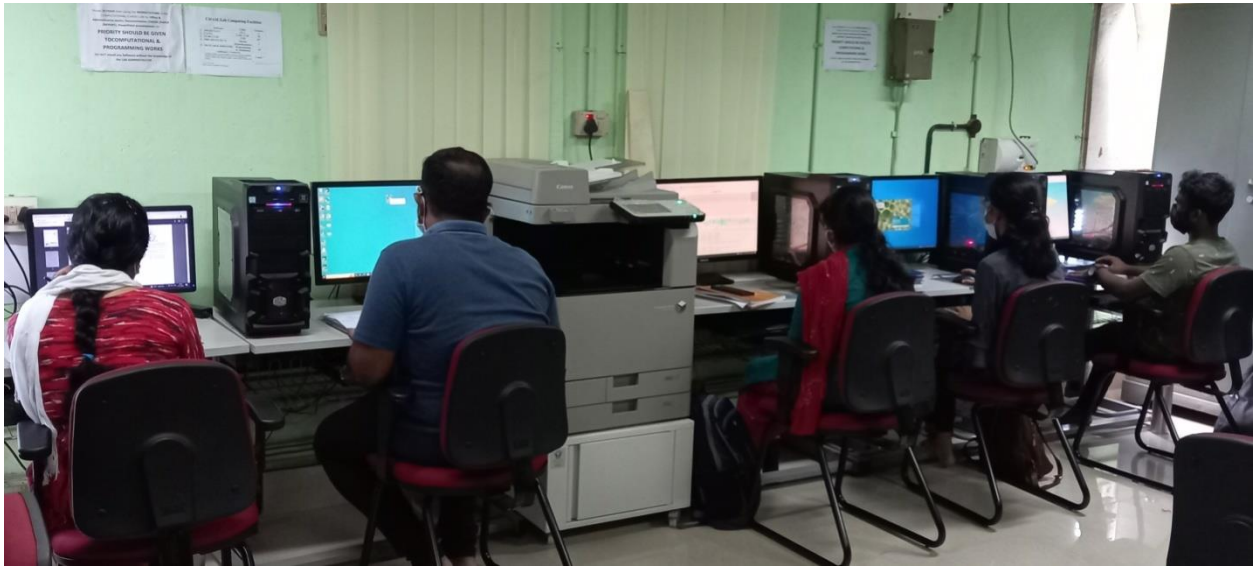


## RESEARCH FACILITIES

### 1. Computational Lab (CHASE)

The **Computational Hydrodynamics and Structural Engineering (CHASE)** Lab was setup in the academic year 2016 –17 as part of the CUSAT 2020 scheme for *Improving infrastructural facilities for research-intensive departments* under the State Plan Grant.

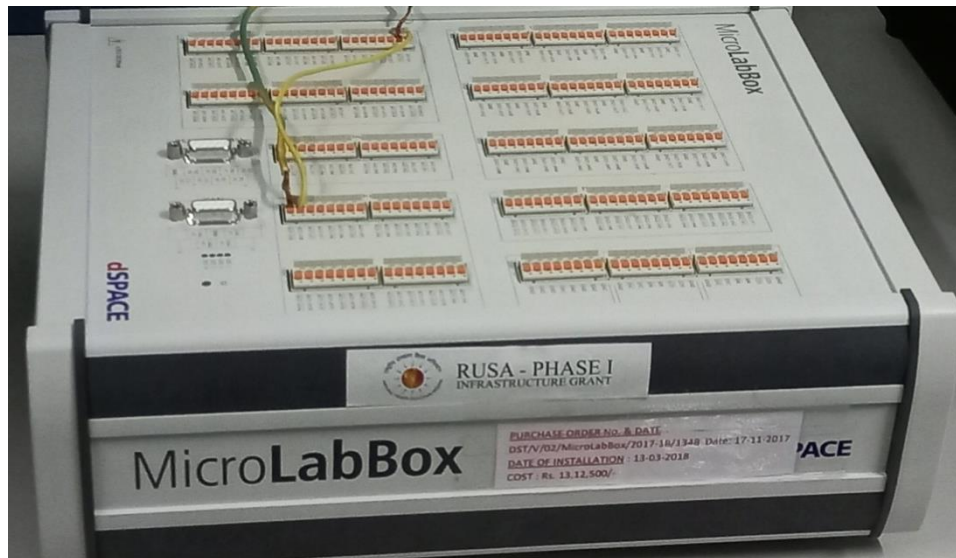


The lab is equipped with 10 Workstations and the following Software suite:

Software Packages	Utility	Licenses
ABAQUS	Finite Element Analysis	4
CATIA	CAD / CAM / CAE	30
STAR-CCM+	Computational Fluid Dynamics	10
OrcaFlex	Dynamics analysis of offshore marine systems	1
MATLAB & SIMULINK*	General purpose programming with 10 additional Toolboxes	10

## 2. Instrumentation Lab

**dSPACE MicroLabBox** - Compact prototyping unit for the laboratory. The system can be used mechatronic research and development areas such as robotics, electric drives controls, renewable energy, vehicle engineering and aerospace.

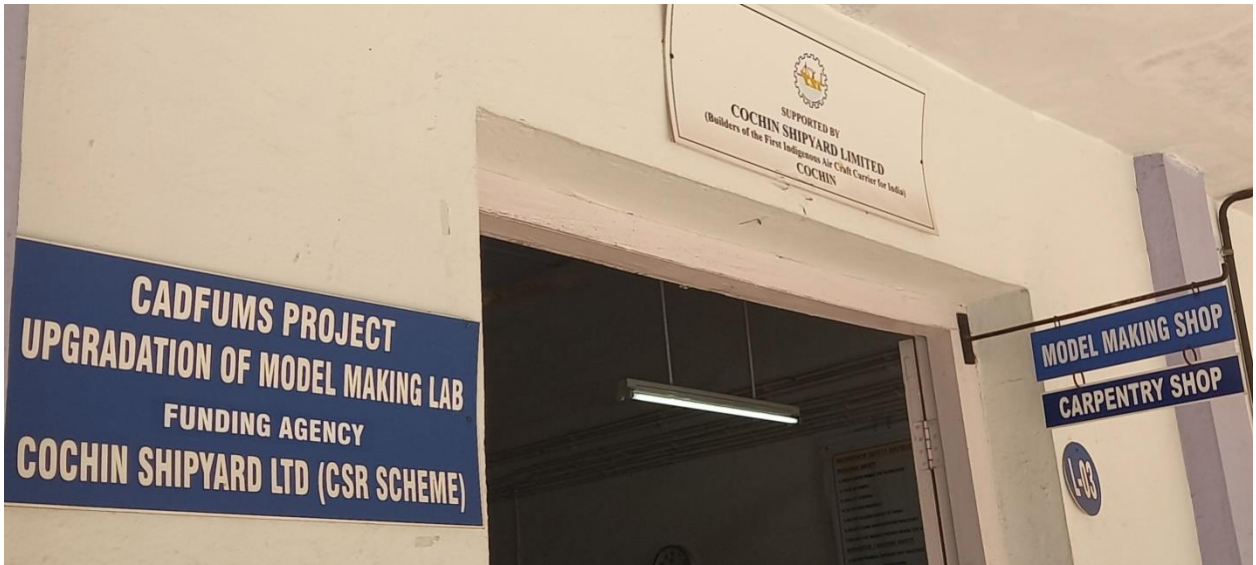


### 3. ElectroChemical Testing Lab

The lab is equipped with CH Instruments Electro-chemical analyzer and CH Software.



## 4. Model Making Lab



## 5. Strength of Materials Lab

The material testing lab is equipped with the following  
Universal Testing Machine



## 6. Fluid Mechanics Lab



PUMP MODELS



ORIFICE APPARATUS



VENTURIMETER/ORIFICEMETER  
APPARATUS



NOTCH APPARATUS

## **7. Welding Lab**

- a) TIG Welding
- b) Spot Welding
- c) MIC Welding