

SELECTED PROJECT PORTFOLIO

**Vessel:** *R/V OCEAN RESEARCHER V*  
**Operator:** National Applied Research Laboratories (Taiwan)  
**Client:** Jong Shyn Shipbuilding Company

**Services Provided:**

- Provided complete acoustic design services; noise control plan, airborne noise predictions and underwater noise predictions. Reviewed all pertinent shipyard construction drawings.
- Recommended all noise control treatments; acoustic insulation, damping tiles, vibration isolation, and insulation.
- Conducted training of shipyard personnel on quiet ship design and construction.
- Witnessed “Factory Acceptance Tests” of multiple shipboard machinery items for airborne noise and vibration.
- Conducted shipyard inspections during construction.
- Planned and performed dockside and underway noise testing which included airborne noise, ship-wide vibration, and underwater noise.
- Used BAMS™, NCE’s proprietary underwater noise measurement system to quantify and demonstrate compliance with ship underwater noise requirements.

**Results:**

- The *Ocean Researcher V* achieved all of the acoustic requirements including airborne noise, vibration, and importantly underwater radiated noise.