The objectives of the ship handling and marine traffic system laboratory in KUMM are to develop techniques for integrating risk assessment and risk management in the field of maritime safety, and to enhance the safety of ship operation and vessel traffic system. In our laboratory, quantitative risk evaluating techniques which cover every phase of ship operation, from the mooring of a ship to the maneuvering in an ocean, including the collision avoidance maneuvering in restricted and congested waterways, have been applied to the design of desirable waterways, the design of functional VTS, the safety improvement planning of ports and harbors and the investigation of the countermeasures to assure the navigation safety.

Main Research Themes

- Development of Evaluation Indices of Safe Ship Handling
- Quantitative Analysis of Mariners' Perceptions of Safety
- Assessment of Ship Handling Difficulty in Restricted and Congested Waterways

- Marine Traffic Safety Assessment
- Development of Safety Support Information Technology
- Design of Waterways, Ports and Harbors
- Design of Next Generation Type VTS
- Anchor Performance Test
- System Design of Maritime Education and Training

Main Research and Education Facilities

- Ship-Handling Simulator
- Wind-Wave Water Tank
- Anchor Performance Test Tank

Consultation Fields

- Practical Use of Ship Handling Simulator and Application Research of Virtual-Reality Technology
- Software Technology on Safety Assessment
- Policy Making on Maritime Safety Management
- Risk Assessment and Risk Management of Every Phase of Ship Operation

{gallery}sousenob/lab/e{/gallery}

Professor Dr. Kinzo Inoue Tel & Fax： 0798-42-7150 inoue_maritime-lab@sousenob.com