

## Underwater Towed Vehicles

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### ABSTRACT

*Controllable towed underwater vehicles are used as carrier system in a wide range of maritime applications. The quality and accuracy of the registered multimedia seabed and subsoil data depends on the dynamic behaviour and stability of the towed sensor carrier as well as on the transmission of wave induced motion along the submarine umbilical.*

**Keywords:** *underwater vehicle, cable ,Towed Vehicle, dynamic modeling*

### References

- 1. Jordan Matulea ,Georgica Slămnoiu, Victor Popa, Liliana Rusu, Iosif Năstase and Gabriel Oancea .** Modele Spectrale si Probabilistice in Tehnologia Marina
- 2. Michael S. Triantafyllou , Franz S. Hover** Maneuvring and control of marine vehicles.
- 3. Amy Linklater .** Design and Simulation of a Towed Underwater Vehicle .
- 4. J.W. Crane and D.E. Humphreys.** Modeling and Simulation of Underwater Vehicles. SCS Summer Simulation Conference, July 1991.
- 5. Thor I. Fossen.** Guidance and Control of Ocean Vehicles. John Wiley and Sons, 1994.
- 6. Naomi E Leonard.** Stability of a Bottom-Heavy Underwater Vehicle. Automatica, March 1997.
- 7. J.N. Newman.** Marine Hydrodynamics. The MIT Press, 1977.
- 8. R.R. Rodriguez.** Performance Evaluation of the Control Surface Actuators for the Towed Body for Mine Countermeasures Sensor Testing. Technical Report CSS/TR-97/20, Dahlgreen Naval Surface Warfare Center, Panama City, FL, September 1997.
- 9. Eric M. Schuch.** Towfish Design, Simulation and Control. MS Thesis, Virginia Polytechnic Institute and State University, June 2004.
- 10. Steven Vogel.** Life in Moving Fluids, The Physical Biology of Flow. Princeton University Press, 1994.