

Report

(1) **Name of Lecturer:** Volker BERTRAM

(2) **Position:** Professor

(3) **Affiliation:** DNV GL, Hamburg

(4) **Short Biography:**

Volker Bertram is senior project manager in the technology, knowledge and governance unit at DNV GL, the world's second largest classification society. He is extraordinary professor at the University of Stellenbosch, visiting professor at the World Maritime University and Pisa University. He has authored more than 400 papers and 2 books, and organizes 3 international conferences per year. He is renowned for his expertise in ship hydrodynamics, energy efficiency, environmental aspects of ships and autonomous ship technology. He is on the editorial board of three scientific journals.

(5) **Subject and Schedule of the Lectures:**

November 4: 10:30-12:00, 12:50-14:20, 14:35-16:05

Emissions to air (NO_x, SO_x, CO₂, Particulate matter), future fuels and energy converters for ships, hull and propeller roughness

November 5: 12:50-14:20, 14:35-16:05

Antifouling, hydrodynamic options for energy saving

(6) **Comments:**

Some 30-40 students attended the courses. They were exposed to important new developments that should motivate them to use their engineering skills to make shipping more environmentally friendly.

