



## **XVII Malente Symposium**

More than Water – Oceans and Global Responsibility  
Mehr als Wasser – Ozeane und globale Verantwortung

**Lübeck, October 12 - 14, 2008**

under the auspices of

**Sigmar Gabriel**

Federal Minister for the Environment,  
Nature Conservation and Nuclear Safety

**CONFERENCE VENUE:**

Lübeck Music and Congress Center  
Willy-Brandt-Allee 10  
23554 Lübeck  
Germany

**CONFERENCE BUREAU:**

Responsible:  
Christin Grope  
Christina Peter  
Phone: +49 451 79 04-250  
Fax: +49 451 79 04-251

The Malente Symposia, organized by the Dräger Foundation at two-year intervals since 1981, are the Foundation's most comprehensive and internationally recognized events. They are named after a small town in Germany where the first conference was held in 1981, and provide a forum for innovative debates at the interface between economic and sociopolitical issues.

The XVII Malente Symposium, entitled 'More than Water – Oceans and Global Responsibility', will take place in Lübeck from October 12 – 14, 2008, and is being organized in cooperation with the ZEIT-Stiftung Ebelin und Gerd Bucerius in Hamburg, and the Cluster of Excellence 'The Future Ocean' in Kiel. The conference aims to examine in depth the 21st century challenges the world's oceans are facing through global warming and rising sea levels, overfishing, pollution, invasive species, and the exploitation of resources, and will seek to identify solutions to best manage these challenges. It aims to increase awareness and facilitate a dialog with the global business community, with politicians worldwide, and with society as a whole.

Since the publication by the Intergovernmental Panel on Climate Change (IPCC) of its most recent report in Paris at the beginning of 2007 and the results of the Stern Report toward the end of 2006, it has become obvious that the human-induced climate change that our planet is experiencing could soon have drastic consequences for our quality of life, and especially for the earth's water balance. Thermal expansion of the oceans may bring about a rise in sea level of no less than 20 to 30 cm by the end of the century. Added to this would be a more uncertain increase of approximately 15 cm caused by the melting of the Greenland icesheet; on the other hand, increased snow-

fall in the Antarctic could cause global sea levels to drop by some 5 cm. Higher temperatures and precipitation would decrease the density of surface water in the North Atlantic, thereby potentially reducing ocean circulation and the transport of heat, and the ocean's uptake of CO<sub>2</sub>.

Whereas attention hitherto has been primarily focused on the consequences of greenhouse gas emissions and the accompanying warming of the earth's atmosphere, public debate – and, by extension, political interest – will now revolve to a greater extent around the consequences of climate change for our oceans. After all, the oceans are at least as important as the earth's atmosphere when it comes to maintaining a balanced global climate. To date, however, this fact has only penetrated the public consciousness to a rudimentary degree.

At the same time, the world's oceans are increasingly becoming the scene of inter-governmental conflicts. The lines of conflict extend from fishing rights to the securing of fossil fuels. Yet the oceans present not only a danger and source of potential conflict, but are also a vital resource: the oceans are the biggest long-term sink of human-made CO<sub>2</sub>, they store and generate energy, and they provide a habitat for fauna and flora. The oceans boast more than half the earth's biodiversity, with 1,600 new species being discovered every year. This gene pool of earthly life, which is largely still unknown, is essential for humankind – countless medical drugs, for example, are based on natural extracts from the marine fauna and flora. The biodiversity of the oceans, however, is increasingly at risk as a result of industrial waste dumping and overfishing. A lack of internationally valid legal codices means that it is virtually impossible to prevent this, or to pursue offenders. Expanding international law to take effective account of this area –

i.e. in many cases drawing up such laws in the first place, incorporating them into national legal systems and implementing international mechanisms to enforce them – is a major undertaking which has yet to be attempted.

The XVII Malente Symposium brings together experts and stakeholders from around the world and from all fields of society to discuss these challenges in a comprehensive way and to identify practical solutions to facilitate future sustainable development.

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For their active and valuable support in the preparation of this conference, the Dräger Foundation and the ZEIT-Stiftung wish to thank their co-operation partner, the Kiel Cluster of Excellence 'The Future Ocean', and the members of the steering committee for the preparation of the XVII Malente Symposium:

**Professor Martin Visbeck**, Deputy Director, IFM-GEOMAR, Leibniz Institute of Marine Sciences, and Member of the Cluster of Excellence 'The Future Ocean', Kiel, Germany

**Professor Gernot Klepper**, The Kiel Institute for the World Economy, and Member of the Cluster of Excellence 'The Future Ocean', Kiel, Germany

**Frank Schweikert**, Marine Biologist and Journalist, ALDEBARAN Marine Research & Broadcast, Hamburg, Germany

**Antje Uhlig**, Project Director 'Governance', ZEIT-Stiftung Ebelin und Gerd Bucerius, Hamburg, Germany

**Dr. Markus Baumanns**, Executive Vice President, ZEIT-Stiftung Ebelin und Gerd Bucerius, Hamburg, Germany

The Foundation wishes to thank the artists

**Beatrice Dettmann**, Hamburg, Germany, and

**Detlef Moraht**, Schaddingsdorf, Germany for exhibiting their paintings;

**Flo Peters Gallery**, Hamburg, Germany for making available photography by **Sebastian Copeland**, Los Angeles, CA, USA, and

**Frank Schweikert**, ALDEBARAN, Hamburg, Germany for exhibiting photography, video panoramas and full-dome underwater impressions from his excursions.

The Foundation also wishes to express its gratitude to

**Volkswagen AG**, Wolfsburg, and

**OCÉ-Deutschland Business Services GmbH**, Lübeck, for their generous support of the conference.

Responsible for the preparation and organization of the Symposium:

**Petra Pissulla**  
Director, Dräger Foundation, Lübeck



MORE THAN WATER – OCEANS AND GLOBAL RESPONSIBILITY

MEHR ALS WASSER – OZEANE UND GLOBALE VERANTWORTUNG

## Sunday, October 12, 2008

St. Petri Church, Lübeck

**6:40 pm** Meet in the lobby of either the Mövenpick Hotel or the Radisson SAS Senator Hotel (tours will leave from both hotels) to walk to St. Petri Church

**7:00 pm** **Opening Reception and Dinner**  
St. Petri Church  
Am Petrikirchhof 1, 23552 Lübeck

### Welcome

**Dr. Bernd Schwarze**  
Pastor, St. Petri Church, Lübeck, Germany

**Speaker:** **Professor Peter M. Herzig**  
Director, Leibniz Institute of Marine Sciences, IFM-GEOMAR, Kiel, Germany

### OCEAN RESOURCES AND MARINE CONSERVATION

**After Dinner** **Participants Play Jazz!**

**Professor Peter Eigen**, tenor sax  
**Kurt-Jürgen "Curtis" Lange**, drums  
**Professor Eckhard Maronn**, bass  
**Gebhard Ohnesorge**, clarinet and baritone sax  
**Professor Dieter H. Feddersen**, piano

## Monday, October 13, 2008

Music and Congress Center, Willy-Brandt-Allee 10, 23554 Lübeck

**9:00 am - 1:00 pm** **Plenary Session**

**Moderator:** **Professor Gernot Klepper**  
Director, The Kiel Institute for the World Economy;  
Cluster of Excellence 'The Future Ocean', Kiel, Germany

**9:00 am** **Welcome by the Organizers**

**Professor Dieter H. Feddersen**  
Member of the Board, Dräger Foundation, Lübeck, Germany

**Dr. Markus Baumanns**  
Executive Vice President, ZEIT-Stiftung Ebelin und Gerd Bucerius,  
Hamburg, Germany

**Word of Greeting on behalf of the State Government  
of Schleswig-Holstein**

**Dr. Werner Marnette**  
Minister for Science, Economy and Transport of the State of Schleswig-Holstein,  
Kiel, Germany

**Word of Greeting on behalf of the Federal Ministry for  
the Environment, Nature Conservation and Nuclear Safety**

**Dagmara Berbalk**  
Head of Division, Protection of the Marine Environment, Federal Ministry  
for the Environment, Nature Conservation and Nuclear Safety, Bonn, Germany

**9:15 am - 11:15 am Opening Speeches****Professor Karin Lochte, [Speech \(PDF\)](#)**

Director, Alfred Wegener Institute for Polar and Marine Research in the Helmholtz Association, Bremerhaven, Germany

**RESEARCHING THE OCEANS: EXPLORING THE UNKNOWN****Professor Jacqueline McGlade, [Presentation \(PDF\)](#)**

Executive Director, European Environment Agency, Copenhagen, Denmark

**MANAGING THE OCEANS: ECONOMIC USE AND CONSERVATION****The Honorable Professor Tullio Treves, [Speech \(PDF\)](#)**

Judge, International Tribunal for the Law of the Sea, Hamburg, Germany; University of Milan, Milan, Italy

**GOVERNING THE OCEANS: RISKS AND POTENTIAL CONFLICTS****11:15 am - 11:45 am Coffee Break****11:45 am - 1:00 pm Panel Discussion****SAVING THE OCEANS: WHAT NEEDS TO BE DONE?**

**Moderator:** Caspar Henderson  
Journalist, Oxford, UK

**Panelists:** Paul F. Nemitz, Kick-off  
Head of Maritime Policy Development and Coordination,  
European Commission, Brussels, Belgium

**Professor Colin Devey**

Deputy Director, Leibniz Institute of Marine Sciences, IFM-GEOMAR, Kiel, Germany

**Professor Martin Visbeck**

Deputy Director, Leibniz Institute of Marine Sciences, IFM-GEOMAR, Kiel, Germany

**Professor Daniel Pauly**

Director, Fisheries Centre, Aquatic Ecosystems Research Laboratory (AERL), The University of British Columbia, Vancouver, Canada

**Dr. Agustín Blanco-Bazán**

Senior Deputy Director, UN International Maritime Organization (IMO), London, UK

**1:00 pm - 2:00 pm Lunch****2:00 pm - 5:00 pm Parallel Working Groups 1-4**  
(including a coffee break from 3:30 to 4:00 pm)**[Working Group 1 \(Orchestra Hall\), Summary \(PDF\)](#)**

Oceans as a global source of resources?

**[Working Group 2 \(Foyer\), Summary \(PDF\)](#)**

Oceans and climate change: Consequences and actions

**[Working Group 3 \(Seminar Rooms 3-6\), Summary \(PDF\)](#)**

Habitat ocean: How to save the ocean's biodiversity

**[Working Group 4 \(Conference Room 2\), Summary \(PDF\)](#)**

Navigating the oceans: Transport security, transport technology, and maritime infrastructures

**Working Group 1 OCEANS AS A GLOBAL SOURCE OF RESOURCES?**

(Orchestra Hall)

**Chair:** **Professor Colin Devey**, [Summary \(PDF\)](#)  
Deputy Director, Leibniz Institute of Marine Sciences, IFM-GEOMAR, Kiel, Germany

**Rapporteur:** **Dr. Kirsten Schäfer**  
Scientific Coordinator, Cluster of Excellence 'The Future Ocean',  
IFM-GEOMAR, Kiel, Germany

**Possible Topics & Questions:**

- Exploitation, environment and sustainability
- Oceans as energy provider - costs & benefits
- Maritime mining
- Marine gene pool
- How should valid international regulations and codices be implemented for the benefit of the oceans?

**Speakers:** **Dr. Mary H. Feeley**  
Chief Geoscientist, ExxonMobil Exploration Company, Houston, TX, USA  
**Paul Holthus**, [Presentation \(PDF\)](#)  
Executive Director, World Ocean Council, Honolulu, HI, USA  
**Professor Alexander Proelß**, [Presentation \(PDF\)](#)  
Director, Walther-Schücking-Institute for International Law,  
Christian-Albrechts-University, Kiel, Germany  
**Dr. Christian Reichert**  
Director and Professor, Division Geophysics, Marine and Polar Research, Federal  
Institute for Geosciences and Natural Resources (BGR), Hanover, Germany

**Working Group 2 OCEANS AND CLIMATE CHANGE: CONSEQUENCES AND NEED FOR ACTION**

(Foyer)

**Chair:** **Professor Martin Visbeck**, [Presentation \(PDF\)](#), [Summary \(PDF\)](#)  
Deputy Director, Leibniz Institute of Marine Sciences, IFM-GEOMAR, Kiel, Germany

**Rapporteur:** **Dr. Emanuel Söding**  
Project Manager, Cluster of Excellence 'The Future Ocean', IFM-GEOMAR,  
Kiel, Germany

**Possible Topics & Questions:**

- Rising sea levels: risks for coastal regions; climate change vulnerability
- Coastal management and urbanization concepts
- Ocean currents and CO<sub>2</sub> absorption
- Ocean acidification and carbon-climate connections
- Oceans as dumping ground for carbon sequestration
- Ocean-determined climate change and climate interactions between oceans and land
- Costs and financing instruments; legal regulations
- Protecting the ocean and the climate: Conflicting goals?

**Speakers:** **Professor Ralph F. Keeling**, [Presentation \(PDF\)](#)  
Professor of Climate Science, Scripps Institution of Oceanography,  
San Diego, CA, USA  
**Dr. Hartwig H. Kremer**, [Presentation \(PDF\)](#)  
CEO, Land-Ocean Interactions in the Coastal Zone (LOICZ), Institute for Coastal  
Research, GKSS Research Centre GmbH, Geesthacht, Germany  
**Professor Till Requate**, [Presentation \(PDF\)](#)  
Professor for "Innovation, Competition Policy and New Institutional Economics",  
Department of Economics, Christian-Albrechts-University, Kiel, Germany  
**Professor Markku Wilenius**  
Member of the Club of Rome; Senior Vice President Group Development,  
Allianz SE, Munich, Germany

**Working Group 3** HABITAT OCEAN: HOW TO SAVE THE OCEAN'S BIODIVERSITY

(Seminar Rooms 3-6)

**Chair:** **Professor Daniel Pauly**, [Presentation \(PDF\)](#), [Summary \(PDF\)](#)  
Director, Fisheries Centre, Aquatic Ecosystems Research Laboratory (AERL),  
The University of British Columbia, Vancouver, Canada

**Rapporteur:** **Dr. Martina Zeller**  
Coordinator, Kiel Earth Institute, IFM-GEOMAR, Kiel, Germany

**Possible Topics & Questions:**

- Ecosystem of the oceans; ecosystem functions
- The effects of human activities on marine resources and collateral damage
- Marine environment management & protection (garbage & noise from vessels, sewage & other discharge, seagrass)
- Invasive species
- Overfishing
- Conservation beyond the limits of national jurisdiction
- International scientific and technical cooperation

**Speakers:** **Professor Antje Boetius**, [Presentation \(PDF\)](#)  
Group Leader, 'Microbial Habitat' Group, Biogeochemistry Department,  
Max Planck Institute for Marine Microbiology, Bremen, Germany

**Jochen Deerberg**  
Owner & CEO, Deerberg-Systems GmbH, Oldenburg, Germany

**Dr. John M. Fentis**  
President, Algalita Marine Research Foundation, Long Beach, CA, USA

**Professor Reinhold Leinfelder**, [Presentation \(PDF\)](#)  
General Director, Natural History Museum, Humboldt University, Berlin, Germany

**Dr. Richard C. Murphy**, [Presentation \(PDF\)](#)  
Director of Science & Education, Jean-Michel Cousteau's Ocean Futures Society,  
Santa Barbara, CA, USA

**Alfred Schumm**, [Presentation \(PDF\)](#)  
Director, Marine Programme, World Wide Fund For Nature (WWF),  
Hamburg, Germany

**Working Group 4** NAVIGATING THE OCEANS: TRANSPORT SECURITY, TRANSPORT TECHNOLOGY,

(Conference Room 2)

AND MARITIME INFRASTRUCTURES

**Chair:** **Dr. Agustín Blanco-Bazán**, [Summary \(PDF\)](#)  
Senior Deputy Director, UN International Maritime Organization (IMO), London, UK

**Rapporteur:** **Ulrike Bernitt**, Coordinator, Kiel Earth Institute, IFM-GEOMAR, Kiel, Germany

**Possible Topics & Questions:**

- Shipping, security & environment
- Transport system development
- The opening of the North-West Passage
- Technical, political, social, and legal issues related to the use of coastal resources & environments
- Implementing an integrated system of marine and coastal area management

**Speakers:** **Professor James J. Corbett**, [Presentation \(PDF\)](#)  
Marine Policy Program, College of Marine and Earth Studies, University of Delaware,  
Newark, DE, USA

**Sverre Alvik**, [Presentation \(PDF\)](#)  
Personal Assistant to the CEO, Det Norske Veritas, Høvik, Oslo

**Dr. Hermann J. Klein**  
Member of the Executive Board, Germanischer Lloyd AG, Hamburg, Germany

**Dr. Ralph Rayner**, [Presentation \(PDF\)](#)  
Deputy Director, Ocean.US, U.S. National Office for Integrated and Sustained Ocean  
Observation, Silver Spring, MD, USA

**Harald Kuznik**, [Speech \(PDF\)](#)  
Executive Vice President, Global Head of Shipping, HSH Nordbank AG,  
Hamburg, Germany

**Stephan Wrage**, [Presentation \(PDF\)](#)  
Chairman of the Executive Board, SkySails GmbH & Co. KG, Hamburg, Germany

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**6:40 pm** **Bus transfer from the Radisson SAS Senator Hotel to the Schiffergesellschaft Restaurant**

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**7:00 pm** **Reception and Dinner at the Schiffergesellschaft Restaurant**

**Dinner Speaker:** **Frank Schweikert**  
Biologist and Journalist; ALDEBARAN Marine Research & Broadcast, Hamburg, Germany

**OCEANS: A THREATENED BIOSPHERE**


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**10:30 pm** **Bus transfer back to the Radisson SAS Senator Hotel**

## Tuesday, October 14, 2008

Music and Congress Center, Willy-Brandt-Allee 10, 23554 Lübeck

### 9:30 am - 1:15 pm Plenary Session

**Chair:** **Professor Dieter H. Feddersen**  
Member of the Board, Dräger Foundation, Lübeck, Germany

### 9:30 am - 10:15 am Reports from the Working Groups

### 10:15 am - 11:15 am Closing Speeches

**Dr. Kenrick R. Leslie, [Speech \(PDF\)](#)**  
Executive Director, Caribbean Community Climate Change Center (CCCCC),  
Belmopan, Belize

**GLOBAL CLIMATE CHANGE AND THE CARIBBEAN – SEEKING SOLUTIONS FOR AN  
ENDANGERED REGION**

**Dr. Sylvia A. Earle**  
President, Deep Search International; Member of the Board, Marine Conservation  
Biology Institute, Bellevue, WA, USA

**SUSTAINABLE SEAS – THE VISION, THE REALITY**

### 11:15 am - 11:45 am Coffee Break

### 11:45 am - 1:15 pm Plenary Discussion

**HOW TO REACH A GLOBAL COMPACT ON OCEAN SUSTAINABILITY –  
FURTHER STEPS**

**Moderator:** **Andreas Ernst**  
Host and Anchor, PHOENIX, Bonn, Germany

**Panelists:** **Professor Colin Devey**  
**Dr. Sylvia A. Earle**  
**Dr. Kenrick R. Leslie**  
**Professor Daniel Pauly**  
**Dr. Reinhard Priebe**  
Director MAREIC, DG for Fisheries and Maritime Affairs,  
European Commission, Brussels, Belgium  
**Professor Martin Visbeck**

### 1:15 pm Farewell

**Professor Dieter H. Feddersen**  
Member of the Board, Dräger Foundation, Lübeck, Germany

**Dr. Markus Baumanns**  
Executive Vice President, ZEIT-Stiftung Ebelin und Gerd Bucerius,  
Hamburg, Germany

### 1:30 pm Lunch Buffet and End of Conference

**Dräger-Stiftung**

Moislinger Allee 53-55  
23558 Lübeck, Germany  
Tel +49 451 882-2151  
Fax +49 451 882-3050  
E-Mail: draeger-stiftung@draeger.com

[www.draeger-stiftung.de](http://www.draeger-stiftung.de)