



Future by Innovation



TechnologieTransfer

International Cutting-Edge Research

WE ARE INVOLVED IN FUNDAMENTAL RESEARCH RELEVANT TO SOCIETY. BESIDES CLIMATE RESEARCH, WE CONTRIBUTE TO THE UNDERSTANDING OF BOTH MARINE AND POLAR GEO AND ECOSYSTEMS.

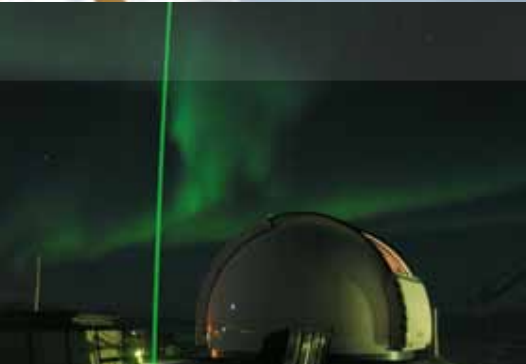
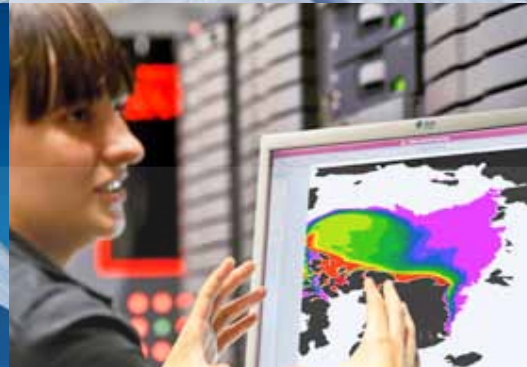
Fundamental for the program-oriented research at the Alfred Wegner Institute are the skilled scientists, research platforms designed for extreme conditions in combination with efficient logistics and modern management.

The AWI is an internationally highly recognised Institution due to its scientific excellence, its close links with institutions world wide and the operation of research platforms such as the Research Icebreaker *Polarstern* and the Antarctic Station *Neumayer III*.

The Alfred Wegner Institute is active in the fields of:

- Research on the Earth's climate and geosystem
- Ecosystem research in polar regions and the North Sea
- Global changes in the environment incl. anthropogenic impacts
- Biological monitoring, ecosystem health studies
- R&D of polar and marine technology
- Coordination, advice and logistical support for foreign investigators with own ships, aircraft and field stations.
- Consultation for decision makers through the „German Advisory Council on Global Change“

Research platforms of the Alfred Wegener Institute: Antarctic Station „Neumayer III“, Lander deployment in the Southern Ocean, Research aircraft „Polar 5“, Autonomous Underwater Vehicle AUV, Research Icebreaker Polarstern, Climate modelling, Laser spectrometry at the Arctic research base AWIPEV, Deployment of an ozone probe, Frame of an ice drill tent.



Future by Innovation

BASIC RESEARCH AND APPLICATION ARE NO ANTAGONISM BUT COMPLEMENT EACH OTHER

Both society and industry benefit from knowledge and innovations generated at the Alfred Wegener Institute. Aiming at securing the basis for human life includes the transfer of innovations from research into competitive commercial application.

There is manifold motivation for such technology transfer:

SOCIETY

The transfer of innovative technologies into an economic utilization helps to establish the sustainable, environment-friendly use of marine resources. With its specific know-how the Alfred Wegener Institute wants to meet the challenges of ecological and climate changes not only within the scientific community but also in other societal sectors.

RESEARCH

The research infrastructures and platforms needed to perform field research can only be designed, built and operated in close cooperation with specialized companies. In this context the Alfred Wegener Institute maintains national and international business cooperations.



AWI

Encountering limited public basic funding as well as an increased competition in soft money acquisition, there is a growing relevance to generate a monetary return from licenses and industry cooperations for research.

ECONOMY

Besides the large industry, small and medium-sized businesses contribute also to generate new jobs by the flexible realization of innovations. Pioneering inventions often come from basic research. Via licensing and R&D cooperations with private companies, the Alfred Wegener Institute contributes to strengthen regional business locations and the maritime industry.

Technology Transfer - Active Partnership

WE SUPPORT AND ACCOMPANY TECHNOLOGY TRANSFER PROJECTS AT THE INTERFACE BETWEEN SCIENCE AND ECONOMY.

Technology transfer has an overarching function at the Alfred Wegener Institute, since innovative research is carried out by all disciplines of the institute. The Technology Transfer Office advises inventors on how to protect their intellectual property and also manages the licensing of commercial applications, industrial cooperation and the founding of new enterprises.

Innovation transfer - a three-way catalyst:

Licensing

Industry cooperation

Spin-offs

According to its scientific domains, the Alfred Wegener Institute conducts R&D in the fields of:

Marine and polar technology

Scientific instrumentation

Marine light-weight construction

Offshore aquaculture and closed circulation systems for sustainable cultivation of algae, mussels and fish.

Accompanying ecological research

IT-based management systems for expedition planning, handling of dangerous goods in combination with laboratory safety administration

Bottom water sampler; microbial oil remediation in ice-covered seas; oceanographic sensors and sensor calibration; glacier and avalanche sensors; sustainable caviar production; example of bionic light weight car wheel; outdoor thermometer for strong winds; coccolithophoride lamp; diatoms under microscope



Unravelling Complex Systems

WITH OUR KNOWLEDGE WE CONTRIBUTE TO SOLVING MAJOR CHALLENGES AND HELP TO SECURE THE FUTURE LIFE OF OUR SOCIETY.

There are great challenges: The research of the Alfred Wegener Institute for Polar and Marine Research addresses questions of high societal relevance.

Our multi disciplinary basic research aims at the comprehension of complex systems which determine life on our *Blue Planet* and being affected by human actions, respectively.



Alfred Wegener Institute
for Polar and Marine Research
Am Handelshafen 12
27570 Bremerhaven

Technology Transfer Office
Dr. Eberhard Sauter

Phone +49 (0)471-4831-1517
Fax +49 (0)471-4831-1425
Email: eberhard.sauter@awi.de
www.awi.de

