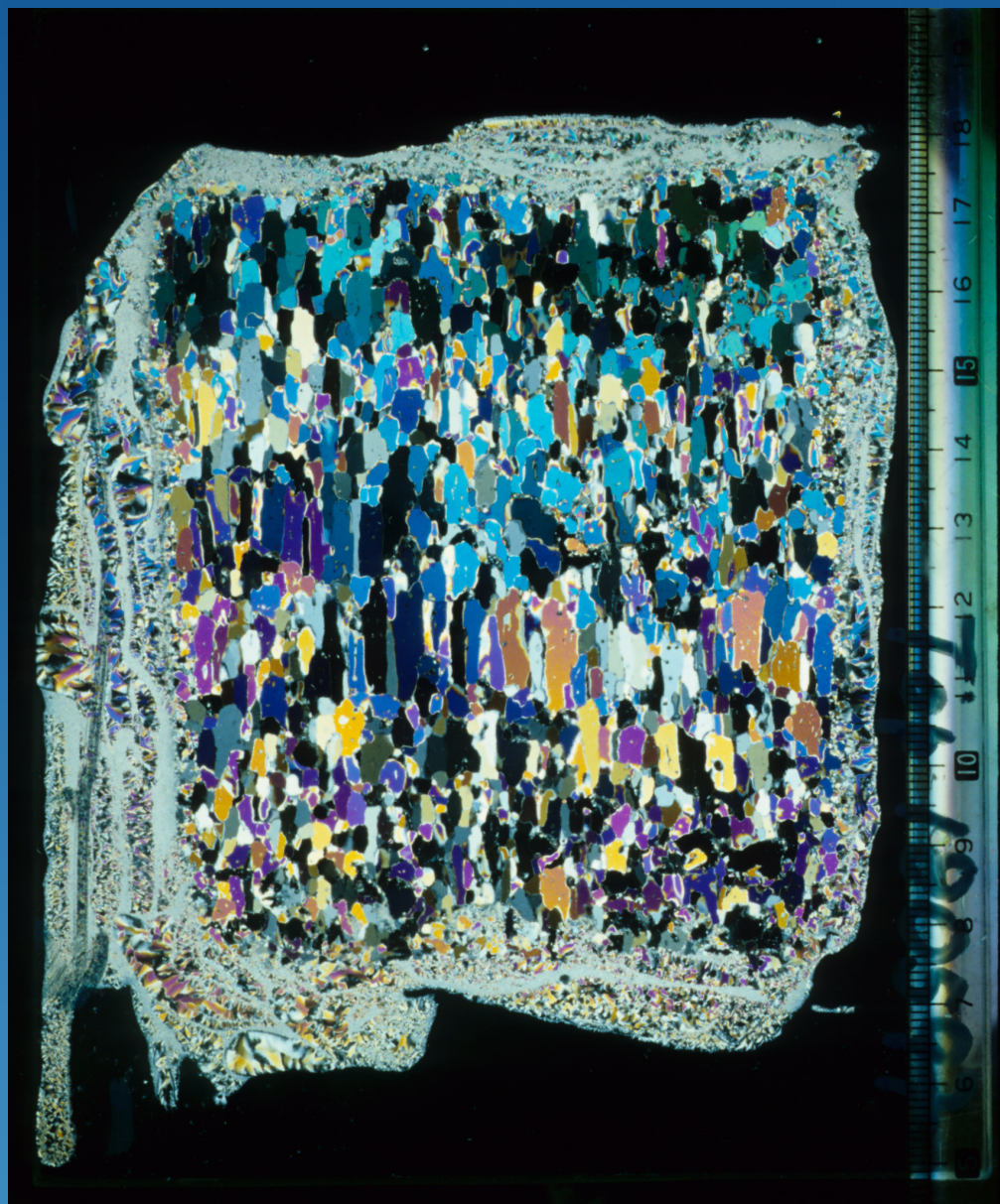


NORWEGIAN POLAR INSTITUTE



Vertical thin section of the upper section of sea ice (fast ice) from Kongsfjorden, Svalbard, photographed between crossed polaroids. The colors indicate different crystals in the ice. Photo: Sebastian Gerland

MANDATE

A directorate under the auspices of Norway's Ministry of Environment, the Norwegian Polar Institute is headquartered in Tromsø, above the Arctic Circle. The NPI is Norway's principal organization for research, environmental monitoring and mapping in the polar regions of both hemispheres. The Institute's director is Jan-Gunnar Winther.



Equipping live-captured white whales with satellite transmitters to study movements and diving patterns in the Svalbard area. Photo: Hans Wolkers

EARLY DAYS



Adolf Hoel installs stakes to measure the velocity and ablation of the Lillishöök Glacier, Krossfjorden 1907. NPI photo library

Evolving from Norges Svalbard- og Ishavsundersøkelser (Norway's Svalbard and Arctic Ocean Survey), which was established in 1928, the Norwegian Polar Institute received its modern name and mandate in 1948. The esteemed oceanographer Prof. Harald Ulrik Sverdrup, who had been in charge

of the scientific work during Amundsen's North-East Passage expedition, returned to his native land to serve as the new institute's first director.

POLAR ENVIRONMENTAL CENTRE

After having spent its first 70 years in Oslo, the NPI shifted headquarters to Tromsø in 1998. Nicknamed "Gateway to the Arctic", the coastal city has been a traditional starting-point for expeditions to the far north. Members of the city's research community, including those at the world's northernmost university, represent a broad range of disciplines in the natural and social sciences - with a focus on the Arctic.

Anchored by the NPI, the new Polar Environmental Centre - Centre for the Environment and Co-operation in the Polar Areas and the Barents Region - houses several institutions that deal with research and advisory services; several of these institutions co-operate on projects with partner organizations in north-west Russia. The Centre regularly hosts national and international scientific conferences and workshops.

ORGANIZATIONAL STRUCTURE

The NPI is divided into three departments: Research (with a staff of 40), Environmental Management and Administration & Logistics. There are also Library and Information Services and, based in Longyearbyen, a Svalbard branch.

Since the Institute moved to Tromsø, the recruitment of scientists from all over the world has enhanced the NPI's international character. One of the interna-

tional secretariats administered by the NPI is the ACSYS/CLiC Project Office (IACPO) - a result of the Arctic Climate System Study secretariat being extended to comprise cryosphere research beyond the Arctic.

The NPI runs research stations in Ny-Ålesund, Svalbard, and operates expeditions to Dronning Maud Land, Antarctica, where the Institute has two summer stations, Troll and Tor. The NPI's research vessel Lance has been customized for navigation in severe ice conditions. Available for lease parts of the year, Lance can accommodate up to 24 scientists and has laboratories and a helicopter landing platform.

RESEARCH PROGRAMMES



Deployment of current meters below the fast ice at Kongsfjorden, Svalbard. Water current below the sea ice are crucial for energy fluxes at the ice-ocean interface, and within that for freezing and melting processes. Photo: Sebastian Gerland

search for an understanding of climate change by considering climate variability and feedback in the sea ice - land - ocean - atmosphere system in the polar regions, to assess the system's sensitivity to disturbances, and to analyse the consequences of a changing climate. NPI polar climate monitoring programmes collect data in collaboration with national and international institutions under research initiatives. The Marine Ecology Programme, led by K. M. Kovacs, PhD, is designed to provide sound scientific advice to Norwegian and international agencies responsible for resource management and conservation issues in the polar regions. It also strives to maintain a more general scientific expertise about polar marine systems, and contribute high quality scientific knowledge to the global knowledge base regarding Arctic and Antarctic marine fauna.

The Terrestrial Ecology Programme, led by A. De-rocher, PhD, focuses on

such Svalbard mammals as Arctic fox and reindeer as well as studying vegetation and the causes of ecological systems' change.

The Ecotoxicology Programme, led by G. W. Gabrielsen, PhD, gathers knowledge that will improve our understanding of sources and biological effects of contaminants in the European Arctic. The emphasis is on persistent organic pollutants (POPs). A central task is the establishment and development of a POP monitoring programme in the Norwegian Arctic.

The Geological Mapping Programme, led by W. K. Dallmann, PhD, focuses upon important gaps in regional-geological knowledge and stimulates other research projects by pointing out relevant scientific problems. The NPI is the national mapping authority for the polar areas, which includes non-commercial geological surveying. Geological map data are collected during field expeditions and through co-operation with international research groups. Maps are published together with detailed area descriptions.

PUBLICATIONS AND INFORMATION

Polar Research was launched in 1982 as NPI's peer-reviewed, multidisciplinary journal. The journal is widely indexed and abstracted, and is included in ISI products such as Current Contents. For more information, please see http://www.npolar.no/e/Products/Polar_Research

NPI also publishes a report series (Norsk Polarinstittutt Rapportserie) and a variety of other publications for scientists and the general public. The image library contains 40 000 historical and contemporary photographs from the polar regions. The NPI web-site, www.npolar.no, offers detailed information about selected aspects of the polar environment.



A rock wall in Jutulhogget by the Norwegian base Troll in Dronning Maud Land, Antarctica. Igneous dikes reveal the sequence of events deep inside the Earth's crust throughout the ages. Photo: Synnøve Elvevold

