

“Antarctica and the Southern Ocean in the Global System”.

Session Title	oral	Poster only
Plenary		
Physical Sciences SSG Sub-Plenary		
Life Sciences SSG Sub-Plenary		
Geosciences SSG Sub-Plenary		
Variability and change in the Antarctic biota: molecules to ecosystems		
Pelagic predators and the Southern Ocean system		
Structure & function of Southern Ocean ecosystems		
Evolution and biodiversity of life in polar regions		
Ecology of the Antarctic sea ice zone		
Human responses to the Antarctic environment		
Ocean-atmosphere-land interactions		
Climate history of the Antarctic from ice cores and meteorological reports		
Astronomy from the Antarctic		
Arctic-Antarctic conjugacy in solar terrestrial physics		
Evolution of the Antarctic and Southern Ocean climate and biota: the geological record		
Antarctic neotectonics and geodesy		

Convenor: Alessandro Capra, Polytechnic of Bari, IT, Terry Wilson, The Ohio State University, US and Anya M. Reading, Australian National University, AU
 Tuesday afternoon, Wednesday morning, Wednesday afternoon
 Poster session: Tuesday

Growth of the Antarctic continent
 Convenor: German Leitchenkov, Institute of Ocean Geology (VNIIOkeangeologia), RU and Georg Kleinschmidt, University of Frankfurt, GE
 Wednesday morning
 Poster session: Wednesday

Antarctic permafrost

Convenor: Jerónimo López-Martínez, University of Madrid, ES and Wayne Pollard, McGill University, CDN

Tuesday afternoon

Poster session: Tuesday

Geospatial information, data management and information portals: Management & application in science

Convenor: Dean Peterson, Antarctica New Zealand, NZ and John Manning, Geoscience Australia, AU

Tuesday afternoon, Wednesday morning

Poster session: Tuesday

Ozone, aerosols and atmospheric composition

Convenor: Takashi Yamanouchi, National Institute of Polar Research (NIPR), JP and Sukhmal Jain, National Physical Laboratory, IND

Tuesday afternoon

Poster session: Tuesday

Physical oceanography and sea ice

Convenor: Eberhard Fahrbach, Alfred Wegener Institute for Polar and Marine Research (AWI), DE

Wednesday morning, Wednesday afternoon

Poster session: Wednesday

Upper atmospheric physics and geospace

Convenor: Maurizio Candidi, Institute of Atmospheric Sciences and Climate, IT

Wednesday morning

Poster session: Wednesday

Subglacial lakes exploration

Convenor: Robin Bell, Lamont-Doherty Earth Observatory, US, Martin Siegert, University of Bristol, UK and Mahlon C. Kennicutt II, Texas A&M University, US

Wednesday morning

Poster session: Wednesday

Bathymetry of the Southern Ocean

Convenor: Hans-Werner Schenke, AWI, GE

Tuesday afternoon

Ice mass ITASE (only poster)

Convenor: Paul Mayewski, University of Maine, US

Thursday Business meeting: Symposium on Ice mass ITASE

Poster session: Wednesday

COMNAP

XI SCALOP Symposium 28 July 2004

National Display of Antarctic Programmes 26 – 30 July 2004

XI SCALOP Symposium: Towards the International Polar Year and Beyond

The Standing Committee on Antarctic Logistics and Operations (SCALOP) of the Council of Managers of National Antarctic Programs (COMNAP) convenes the XI SCALOP Symposium to be held in conjunction with the COMNAP XVI meeting at the Congress Centre, Bremen, Germany on 28 July 2004.

Oral and poster presentations will cover the following topics:

- **New Transportation Technologies and Applications.**
- **Technology to Enable Science.**
- **Technology to Reduce Environmental Impact.**
- **Ergonomic issues related to polar work.**
- **Latest developments in energy storage.**

Keynote speakers are invited for special subjects of interest such as space and polar research and ergonomic issues related to polar operations.

The SCALOP Symposium Steering Committees will review abstracts submitted for oral and poster presentations end of April 2004. Notification of acceptance will be sent electronically by **15 May 2004**. All accepted abstracts will be published in a special issue of the journal “Terra Nostra” issued by the GeoUnion Alfred-Wegener-Stiftung.

XI SCALOP Symposium Proceedings

All oral and poster contributions of the XI SCALOP Symposium will be published as “XI SCALOP Symposium Proceedings” in a special issue of the journal “Terra Nostra” by the GeoUnion Alfred-Wegener-Stiftung. The print-ready manuscripts have to be submitted as word and pdf files copied on CD at the beginning of the conference to the SCALOP Symposium organizer.

The formatting should be as follows:

- Page margin settings: 2.5 cm left, 2.0 right, 2.5 cm above, 2.5 cm below
- Font: Times New Roman
- Font size: title (18 bold), author/organisation (12 bold), subsection title (14 bold), text (12; line spacing 1.5)
- Figures and pictures black and white only.

For further information about the **XI SCALOP Symposium and submission of print-ready manuscripts**, please visit the homepage: <http://www.comnap16.org>

National Display

As a subsidiary event displays of national Antarctic operating agencies will be arranged at the Congress Centre, Bremen, Germany from 26 to 30 July 2004.

All COMNAP members will present up to three posters on their national activities and logistic facilities. The poster size should not exceed 120 cm height and 85 cm width.

Poster boards are available for all national operators.

Confirmation is requested by 31 May 2004 to secretary@scar28.org

COMNAP/SCALOP

Aircraft for polar research joins XVI COMNAP meeting 26 – 30 July 2004

Firstly in the history of COMNAP/SCALOP meetings scientists and operators will get the opportunity to visit an aircraft operated for polar research and logistics.

AIRCRAFT FOR POLAR RESEARCH

The Australian Antarctic Division (AAD) is going to operate a new CASA 212 aircraft in the frame of its Antarctic activities.

For about 20 years the Alfred Wegener Institute for Polar and Marine Research (AWI) successfully operates two Dornier 228 aircrafts. Flight missions contribute to

geophysical, glaciological and atmospheric sciences.

On the occasion of the XVI COMNAP/SCALOP meeting both aircrafts the CASA 212 and Dornier 228 (Polar 4) can be visited at the regional Luneort airport (www.flughafen-bremerhaven.de) close to the city of Bremerhaven, where AWI's aircrafts are based. The aircrafts are jointly operated by the AWI and Optimare Sensorsystem AG (www.optimare.de).

At the Luneort airport the AWI and Optimare Sensorsysteme AG have established all facilities for maintenance and service of the scientific mission equipment of the Dornier 228 aircraft. There will be a demonstration of this instrumentation and of selected scientific applications together with the aircraft.

JOINING THE POLAR AIRCRAFT FAMILY

The aircraft presentation currently arranged by AAD and AWI welcomes further participants. Operators of polar aircrafts are kindly requested to check this exceptional opportunity for coming together during the XVI COMNAP/SCALOP meeting. For arrangements please contact:

Dr. Hartwig Gernandt (Local Organizing Committee)

Email: hgernandt@awi-bremerhaven.de

and

Dr. Martina Kunz-Pirrung (Scientific secretary)

Dr. Manfred Reinke (Scientific secretary)

Email: secretary@scar28.org

DETAILS FOR VISITING THE AIRCRAFT PRESENTATION

The aircraft presentation is scheduled for 26 – 30 July 2004 at the regional Luneort airport (Bremerhaven). A shuttle bus will be available every day on demand of the meeting participants. This shuttle service will be arranged by Optimare Sensorsysteme AG.

Pre-registrations for the aircraft presentation should be addressed to secretary@scar28.org.

For final confirmation and further details please contact directly the **Optimare booth at the Industrial Exhibition** upon your arrival at the meeting venue.

COMNAP

Industrial Exhibition 26 – 28 July 2004

Engineering and Technology Meet Antarctic Science and Operations

In parallel to the XXVIII SCAR and COMNAP XVI meeting, the Council of Managers of National Antarctic Programs (COMNAP) together with the national organizers of the XXVIII SCAR and COMNAP XVI meeting invite to an Industrial Exhibition on “Engineering and technology meet Antarctic science and operations” at the Congress Centrum Bremen, Germany, 26-28 July 2004.

COMNAP and SCAR in conjunction with international bodies such as the World Meteorological Organization (WMO) address the direct interaction with companies and agencies for promoting their products and services. Scientific Standing Groups (SSG), sub-groups as well as Expert Groups of SCAR will address matters on longer time scales and develop new challenging research programs on geosciences, life sciences, and physical sciences.

The Industrial Exhibition provides an ideal platform to offer latest and proved techniques, instrumentation, transportation facilities, support services, and technologies appropriate for Antarctic operations and science to the SCAR and COMNAP community. It is the largest and most efficient gathering between industrial providers and users as well as decision makers in the field of Antarctic research and operations.

For further information and arrangements about the **Industrial Exhibition**, please visit the homepage: <http://www.comnap16.org>
or contact

Congress Partner GmbH

Christine Kudla or Annette Gleich

Birkenstr. 37, 28195 Bremen, Germany

Tel. /Phone: +49 (0) 1805 052 612, Fax /fax: +49 (0) 1805 052 614

E-mail: scar@cpb.de

Structure of the meeting

XXVIII SCAR

Sunday, 25 July 2004:

Registration 12.00-18.00

13.00-17.45: SSG Business Meetings: Physical Science, Geoscience and Life Science

19.00-22.00: Icebreaker Party in the “Übersee-Museum”

Monday, 26 July 2004:

SCAR Open Science Conference

09.30-11.00: Official Opening Ceremony for SCAR, COMNAP and the Industrial Exhibition.

11.00-16.45: SCAR Symposium "Antarctica and the Southern Ocean in the Global System"

Keynote speaker only

18.00-19.30: Open Door Industry Exhibition

19.30-20.30: Public Talk (in German)

Tuesday, 27 July 2004:

SCAR Open Science Conference

08.30-12.00: Symposium of the Standing Scientific Group

Keynote speaker only

13.30-17.10: Parallel sessions

17.15-18.45: Poster session I in Hall 4.1

20.00-22.00: Reception at the "Universum"

Wednesday, 28.07.04:

SCAR Open Science Conference

08.30-16.50: Parallel sessions

16.50-18.20: Poster session II in Hall 4.1

19.00-20.00: Reception in the Bremen City Hall

20.00-22.30: SCAR Dinner

Thursday, 29 July 2004

SCAR Business meetings

8.00-9.00: Panel discussion on International Polar Year

Convenor: Chris Rapley

Business meetings:

- Paul Mayewski (Univ. of Maine), US: Symposium on Ice mass ITASE. Posters only; Poster session on Wednesday
- Takashi Yamanouchi (NIPR), Japan: Workshop of the Antarctic tropospheric aerosols and their role in climate (ATAC).
- John Storey (Univ. of New South Wales), AU: Meeting of the astronomy action and expert groups.
- Terry Wilson (Ohio State Univ.), US & Andrea Morelli (Istituto Nazionale di Geofisica e Vulcanologica), IT: ANTEC Business meeting
- Dean Peterson (Antarctica New Zealand), NZ: JCADM
- Phil O'Brien (Geoscience Australia), AU: Geoscience Business Meeting
- Steven Chown (Univ. of Stellenbosch), SA & Ad Huiskes (Netherlands Institute of Ecology), NL: Life Science Business Meeting
- Hans-Werner Schenke (AWI), GE & Reinhard Dietrich (Univ. of Dresden), GE: Antarctic Geodesy Symposium (AGS'04): Reports and Planning

- STEPS, MADREP, APTIC, ICESTAR
- Human Biology & Medicine
- A meeting of the Antarctica and the Global System PPG

Friday, 30 July 2004

SCAR Business meetings

8.00-9.00: Panel discussion on International Polar Year

Convenor: Chris Rapley

Business meetings:

- John Turner (BAS), UK: Physical Science Business Meeting
- Phil O'Brien (Geoscience Australia), AU: Geoscience Business Meeting
- Steven Chown (Univ. of Stellenbosch), SA & Ad Huiskes (Netherlands Institute of Ecology), NL: Life Science Business Meetings
- Dean Peterson (Antarctica New Zealand), NZ: JCADM
- Hans-Werner Schenke (AWI), GE: International Bathymetric Chart of the Southern Ocean (IBCSO) Business meeting
- Workshop: Advances in Airborne and Spaceborne Mapping Technologies and GIS: Applications to Antarctic Research
- Workshop: Enabling Technologies for Remote Geophysical Observatories: Status and Requirements for Continent-Wide Deployments
- Human Biology & Medicine

Saturday, 31 July 2004

SCAR/COMNAP Excursion

COMNAP XVI

Sunday, 25 July 2004:

Registration 12.00-18.00

14-16.00: EXCOM Meeting

19.00-22.00: Icebreaker Party in the "Übersee-Museum"

Monday, 26 July 2004:

SCAR Open Science Conference

09.30-11.00: Official Opening Ceremony for SCAR, COMNAP and the Industrial Exhibition.

11.00-16.45: SCAR Symposium "Antarctica and the Southern Ocean in the Global System"

Keynote speaker only

17.00-19.30: Joint COMNAP/ SCALOP Plenary

19.30-20.30: Public Talk (in German)

Tuesday, 27 July 2004:

08.30-10.00: SCALOP Plenary

10.30-12.00: MOLIBA, CENMAN & TANGO

13.30-15.10: AIROPS meeting,

CENMAN/ENMANET Workshop on sustainable energy management

15.30-18.00: CEDAT, ECG & COMED

CENMAN/ENMANET Workshop on sustainable energy management

20.00-22.00: Reception at the "Universum"

Wednesday, 28 July 04:

XI SCALOP Symposium

08.30-16.50: XI SCALOP Symposium

16.50-18.20: Poster session of the XI SCALOP Symposium in Hall 4.1

19.00-20.00: Reception in the Bremen City Hall

Thursday, 29 July 2004

09.00-10.30: SHIPOPS meeting

11.00-12.30: STADM & SYMP meetings

14.00-16.00: COMNAP meeting on the IPY with a few representatives of SCAR/IPY

Preparing of Working Group reports

16.30-18.30: COMNAP members meeting on the IPY to discuss logistics and cooperation for support to IPY

Preparing of Working Group reports

20.00-23.00: COMNAP/SCALOP Dinner

Friday, 30 July 2004

09.00-10.30: EXCOM meeting

11.00-12.30: COMNAP/SCALOP Plenary

14.00-16.00: COMNAP/SCALOP Plenary

16.30-18.30: COMNAP/SCALOP Plenary

Saturday, 31 July 2004

SCAR/COMNAP Excursion

Accommodation

Bremen and Bremerhaven

Reservation of hotels should be made by the participants attending the **XXVIII SCAR and XVI COMNAP/SCALOP Meeting in Bremen** and the **XXVIII SCAR Delegates Meeting in Bremerhaven** directly through the official travel agent.

Atlantic Travel Service

-SCAR XXVIII-

Bgm.-Smidt-Str. 20 A

27568 Bremerhaven

Germany

Phone: 0049 (0) 471-945 91 11

Fax: 0049 (0) 471-945 92 22

scar28@atlantic-travel-service.de

Participants are advised to book their accommodation well in advance. The final deadline for the pre-reservation for the XXVIII SCAR & COMNAP XVI Meeting in Bremen will be end of May 2004.

Naturally, any reservation received after this date will also be accepted on request; but rates cannot be guaranteed after on.

XXVIII SCAR & COMNAP XVI, Bremen, 25-31 July 2004

Hotel Rates Single Double

Maritim 110€ 130€

Park Hotel 180€ 230€

Marriott 119€ 129€

Hilton 153€ 196€

Intercity Hotel 84€ 96€

Hotel zur Post 78€ 98€

Mercure Columbus 82€ 115€

Tulip Inn Schaper 69€

Ibis Ostertor 68€ 77€

XXVIII SCAR Delegates Meeting, Bremerhaven, 3-9 October 2004

Nordsee Hotel 74€ 105€

Hotel Haverkamp 79€ 110€

All rates are per room and night, including breakfast, service and taxes.

Hotel descriptions, online reservation and reservation forms are available from the SCAR homepage <http://www.scar28.org> .