

**XXVIII SCAR and COMNAP XVI
Bremen, Germany, 25-31 July 2004**

A Brief Report of the Meeting

The first week of the XXVIII SCAR biennial meeting was held at the Congress Centre in Bremen, Germany. The centrepiece of the SCAR Science Week was the SCAR Open Science Conference on “Antarctica and the Southern Ocean in the Global System”. The SCAR Standing Scientific Groups and their various sub-groups met around the Conference. The COMNAP XVII meeting was held in parallel with the SCAR meeting and included the SCALOP Symposium “Towards the International Polar Year and Beyond”, a trade exhibition and an exhibition of polar aircraft at Luneort airport.

The whole SCAR and COMNAP meeting was attended by 1070 participants from 42 countries, including participants from 6 countries that are neither members of SCAR or COMNAP, nor signatory to the Antarctic Treaty (see Appendix 1). The Open Science Conference itself was attended by 890 participants of whom 35.5% were from Germany and 64.5% from overseas. 176 (19.8%) of the participants were described as “Young Scientists”.

The Conference was formally opened on Monday, 26 July 2004. After the initial speeches of welcome, four of the five SCAR Prince of Asturias Fellows were interviewed about their research; the fifth was currently wintering in Antarctica.

The five Conference Keynote Presentations followed:

Eric Wolff, British Antarctic Survey, United Kingdom

Understanding the past - climate history from Antarctica

Erik Ivins, California Institute of Technology, United States

Continent-wide Glacio-isostasy in Antarctica: Current Status of Modelling

Angelika Brandt, University of Hamburg, Germany

Evolution of the Antarctic biodiversity in the context of the past: the importance of the Southern Ocean deep sea

Chris Rapley, British Antarctic Survey, United Kingdom

A new phase of exploration and understanding: planning for the International Polar Year - 2007/2008

Karl Erb, Office of Polar Programs, United States

Antarctic research and COMNAP

On Tuesday the Symposium of the Standing Scientific Groups began with the following Keynote Presentations

John Storey, University of New South Wales, Australia

Astronomy from Antarctica

Lloyd Peck, British Antarctic Survey, United Kingdom

Prospects for survival in the Southern Ocean: extreme temperature sensitivity of benthic species

Terry Wilson, The Ohio State University, United States

Integrated studies on Antarctic neotectonics – Neotectonics for the International Polar Year

Jay Zwally, National Aeronautical and Space Administration, United States
ICESat and ice sheet mass balance

Diana Wall, Colorado State University, United States
Biodiversity and ecosystem functioning in terrestrial habitats of Antarctica

Phil O'Brien, Geoscience Australia, Australia
Marine acoustic technology and the Antarctic environment

The Conference continued through Tuesday with 11 parallel sessions and Wednesday with 10 parallel sessions on the following 23 scientific themes:

- Variability and change in the Antarctic biota: molecules to ecosystems
- Pelagic predators and the Southern Ocean System
- Structure and 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
- Growth of the Antarctic continent
- Antarctic permafrost
- Antarctic geospatial information, data management and information portals: management and application in science
- Ozone, aerosols and atmospheric composition
- Physical oceanography and sea ice
- Upper atmospheric physics and geospace
- Subglacial lakes exploration
- Bathymetry of the Southern Ocean
- ISMASSE/ITASE, only poster
- Antarctic history, only poster
- International Polar Year

In total at the Conference there were 280 verbal presentations and 260 poster presentations in two sessions, one on Tuesday and one on Wednesday. By any standard the SCAR Open Science Conference in Bremen was a resounding success.

The SCAR Executive Committee met on Sunday 25 July and again on Friday 30 July with the Chief Officers of the SSGs. The SCAR Executive Committee also met jointly with the COMNAP Executive Committee on Thursday 29 July.

There were two IPY discussion fora on Thursday and Friday led respectively by SCAR and COMNAP.

The rest of the Science Week, including the previous Sunday, was devoted to the meetings of the Standing Scientific Groups and their various sub-groups. Reports of these meetings were tabled for the XXVIII SCAR Delegates' Meeting in Bremerhaven, 3–8 October 2005. The changes to the officers in each group are noted here:

	<i>Officers 2002–04</i>	<i>Officers 2004–06</i>
SSG Geosciences		
Chief Officer	P E O'Brien (Australia)	A Capra (Italy)
Deputy Chief Officer	A Capra (Italy)	R D Powell (United States)
Secretary	B C Storey (New Zealand)	B C Storey (New Zealand)
SSG Life Sciences		
Chief Officer	S L Chown (South Africa)	A H L Huiskes (Netherlands)
Deputy Chief Officer	L A Palinkas (United States)	L A Palinkas (United States)
Deputy Chief Officer	G di Prisco (Italy)	
Secretary	A H L Huiskes (Netherlands)	K Conlan (Canada)
SSG Physical Sciences		
Chief Officer	J Turner (United Kingdom)	J Turner (United Kingdom)
Deputy Chief Officer	M Candidi (Italy)	M Candidi (Italy)
Secretary	T H Jacka (Australia)	T H Jacka (Australia)

Appendix 1

XXVIII SCAR and COMNAP XVII Meetings

	<i>country</i>	<i>number of participants</i>		<i>country</i>	<i>number of participants</i>
1	Argentina	9	22	Korea	7
2	Australia	44	23	Luxembourg ^{1,2,3}	1
3	Austria ^{1,2}	3	24	Malaysia ^{2,3}	9
4	Belgium	15	25	Monaco ^{1,2,3}	1
5	Brazil	16	26	Netherlands	14
6	Bulgaria	6	27	New Zealand	28
7	Canada	16	28	Nigeria ^{1,2,3}	2
8	Chile	22	29	Norway	16
9	China	14	30	Peru	2
10	Croatia ^{1,2,3}	1	31	Poland	12
11	Czech Republic ^{1,2}	6	32	Portugal ^{1,2,3}	2
12	Denmark ^{1,2}	1	33	Romania ^{1,2}	1
13	Ecuador	1	34	Russia	13
14	Estonia ^{1,2}	3	35	South Africa	20
15	Finland	10	36	Spain	17
16	France	39	37	Sweden	9
17	Germany	379	38	Switzerland ²	2
18	India	4	39	Ukraine	6
19	Israel ^{1,2,3}	1	40	United Kingdom	60
20	Italy	100	41	United States	134
21	Japan	22	42	Uruguay	2
Total number of participants from 42 countries					1070

¹ Not a member of SCAR

² Not a member of COMNAP

³ Not a signatory to the Antarctic Treaty