

# South African National Committee for SCAR

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Much of the scientific research in the polar regions prior to the 1950s was concentrated on the Arctic or the sub-Antarctic regions. Of the 14 expeditions which participated in the First International Polar Year (1882-1883) only two were in the Southern Hemisphere and of these the French station at Tierra del Fuego at 55° S was the furthest south. Although there was a larger number of stations in the Southern Hemisphere during the course of the Second Polar Year (1932-33), there was only one station on a sub-Antarctic island and none on the Antarctic continent.

In 1952 a proposal for a Third International Polar Year (IPY) was adopted by the International Council of Scientific Unions (ICSU) and it was decided to set up a committee for the Third IPY (1957-58). However, instead of limiting the programme to the polar regions, it was decided to organise the International Geophysical Year (IGY) and ICSU established the Comité Spécial pour l'Année Géophysique Internationale (CSAGI). South Africa had been a member of ICSU since its establishment in 1931 and it was therefore in a position to participate in the Antarctic activities. Dr T E W Schumann, Director of the South African Meteorological Office, was appointed chairman of the CSIR National Committee to organise South Africa's participation in the IGY.

The first IGY Antarctic Conference was held in Paris in July 1955 and a committee charged with furthering the coordination of scientific activity in Antarctica was formed by ICSU in 1958. This Special Committee on Antarctic Research (SCAR) was later to become the Scientific Committee on Antarctic Research.

A feature of the IGY was the Commonwealth Trans-Antarctic Expedition led by Sir Vivian Fuchs, which has been described as "man's last great journey". South Africa was one of the sponsors of this expedition and Mr Hannes la Grange who accompanied the expedition was the first South African to reach the South Pole.

During the period of the IGY, 55 stations were engaged in research programmes in Antarctica and on the sub-Antarctic islands and more than 100 stations, including drifting stations on ice floes, in the Arctic. The efforts of the scientists in developing cooperation for the research programme in Antarctica during the IGY was one of the basic factors in diminishing the tension between nations making claims to parts of the Antarctic territory. From such cooperation grew the Antarctic Treaty. In fact, SCAR continues to act as scientific adviser to the Antarctic Treaty.

During 1960 and 1961 the South African Antarctic policy and logistics were managed by the Department of Transport through its South African National Committee for SCAR (SANCAR), whilst advice on the scientific programmes for Antarctic research was provided to SANCAR by the Scientific Advisory Committee to SANCAR, a committee established by the Information and Special Services Department of the CSIR (Council

for Scientific and Industrial Research).

Research programmes during these years were carried out at Norway Station, Marion Island, Gough Island and Tristan da Cunha. The station at Norway Base was abandoned on 12 February 1962 and was replaced by the SANAE station some twelve miles away. Because of violent volcanic activity the Tristan da Cunha station was abandoned on 9 October 1961. From 1962 scientific programmes were carried out from SANAE base, Queen Maud Land and on Marion and Gough Islands.

In 1961/62 the South African National Committee for Antarctic Research (SANCAR) and its Scientific Advisory Committee were dissolved. The Department of Transport, through its Antarctic Division, continued to be responsible for the administrative control and logistic support of the Antarctic Expeditions. An Interdepartmental Antarctic Committee was established consisting of the Secretaries of Transport, Foreign Affairs, Public Works and the President of the CSIR, to ensure high-level coordination and execution of South African Antarctic activities.

The Science Cooperation Division of the CSIR set up a Scientific Committee for Antarctic Research (SASCAR). They, in addition to acting as the South African National Committee for SCAR, advised the Interdepartmental Antarctic Committee on the scientific aspects of South Africa's research programmes in Antarctica. An improved method of financing the scientific programmes over a five-year period was also introduced to ensure better returns on the limited funds available.

SASCAR was instrumental in the successful staging of the SCAR-IUGS Antarctic Geological Symposium and VIIth Meeting of SCAR which took place in Cape Town during September 1963.

The IGY was organised to coincide with a sunspot maximum. Given its successes, including the discovery of the Van Allen radiation belts, it was natural that within the ICSU community it was decided to organise a successor concentrating on a solar minimum — the IQSY (International Quiet Sun Years in 1964/65). The knowledge about the earth's immediate spatial environment which came from these two landmark programmes, as well as the accompanying identification and description of the anomalies in this environment in the South Atlantic by Prof J G Gledhill and Prof P H Stoker and their co-workers, had an overriding influence on the activities of SASCAR in the seventies. SANAE proved to be excellently positioned to study solar-terrestrial physics. Much of the South African Antarctic research effort and thus of SASCAR's participation in SCAR activities was dominated by this fact. In biology the effort was restricted almost exclusively to first descriptive and later ecosystem type studies on Marion Island. In earth science it was limited to tedious overland geological exploration of the SANAE hinterland.

In the latter half of the seventies, however, for various reasons including the unease within the Antarctic Treaty about its ability to regulate the exploitation of Antarctic resources — fish and krill at that stage — the BIOMASS Programme was conceived in SCAR. This programme to which a number of superlatives applied at the time and to which South Africa made a number of key contributions, naturally then led to a much greater emphasis on biology in SASCAR and accordingly also to its involvement in SCAR activities.

A major new emphasis on earth sciences only became possible when two J model Puma helicopters, which were purchased for the Antarctic Programme made access to the exposed geology to the south of SANAE more practical. At about the same time the (then) West German station, NEUMEYER, was established to the west of SANAE. Thus, within the course of only a few years much more ambitious, multilateral earth science ventures could be and were embarked upon. Again these developments were reflected in SASCAR's participation in SCAR. Again it came at a propitious time, because these were the years when, in the Antarctic Treaty, the question of mineral resources received concerted attention.

From October 1985 the South African National Antarctic Research Programme (SANARP) was administered by the Antarctic Management Committee (AMC) whose membership comprised representatives of the Departments of Environment Affairs (in the chair), Foreign Affairs, Mineral and Energy Affairs, and the CSIR. Whilst the Department of Environment Affairs took over the Department of Transport's responsibilities for the administrative, logistical and financial aspects, the CSIR remained responsible for the coordination of the research programmes. Up to 1988 the role of SASCAR was dual-purpose, namely, to serve as the CSIR's National Committee for Antarctic Research (made possible because CSIR was the adhering body to ICSU), and as the research committee advising the CSIR on scientific research in the RSA's Antarctic Programme.

In addition to evaluating research proposals, recommending funding, preparing annual reports to SCAR on research results and activities planned for the following years, and hosting international conferences, SASCAR was also responsible for nominating the South African representatives to the various SCAR

working groups, namely Biology, Geodesy and Cartography, Geology, Geomagnetism, Glaciology, Logistics and Communications, Meteorology, Oceanography, Solid Earth Geophysics, Upper Atmosphere Physics, and Human Biology and Medicine.

It was also responsible for nominating the delegates to SCAR meetings, which were held annually at first, but are now held biennially. Table 1 lists the SCAR meetings, host countries and main delegates from South Africa. Mr J P de Wit, who was Chairman of SASCAR and also South Africa's delegate to SCAR from 1980 to 1985, became Vice-President of SCAR in 1982.

From 1988, following the restructuring of the CSIR and the FRD (Foundation for Research Development), and the coming into existence of the SA ICSU Secretariat to service ICSU membership for South Africa, SASCAR's role as national committee for SCAR was transferred to a new committee formed by the SA ICSU Secretariat, namely the South African National Committee for SCAR (SANCS). This committee for the first time included official representation from four independent professional societies, namely the Zoological Society of Southern Africa, the South African Institute of Physics, the South African Association of Botanists, and the Geological Society of South Africa.

In 1990 the responsibility for the management and coordination of the SANARP scientific research programmes was transferred to the Department of Environment Affairs. However, the FRD, as a new independent statutory organisation and as the national adhering organisation to ICSU, retained the South African National Committee for SCAR.

The National Committee at present is constituted of the South African correspondents of the SCAR working groups, Chairmen of the Scientific Committees of the Department of Environment Affairs, representatives from the Departments of Environment

**TABLE 1**

**MEETINGS OF SCAR AND LEADERS OF SOUTH AFRICAN DELEGATIONS**

First (inaugural)	Netherlands	The Hague	Febr 1958	Dr T Schumann
Second	USSR	Moscow	Aug 1958	Dr T Schumann
Third	Australia	Canberra	March 1959	Dr W Woodhead
Fourth	UK	Cambridge	Aug-Sept 1960	Dr J Taljaard
Fifth	New Zealand	Wellington	Oct 1961	Mr S A Engelbrecht
Sixth	USA	Boulder	Aug 1962	Dr S M Naudé
Seventh	South Africa	Cape Town	Sept 1963	Dr S M Naudé
Eighth	France	Paris	Aug 1964	Dr S M Naudé
Ninth	Chile	Santiago	Sept 1966	Dr S M Naudé
Tenth	Japan	Tokyo	June 1968	Dr S M Naudé
Eleventh	Norway	Oslo	Aug 1970	Dr F J Hewitt
Twelfth	Australia	Canberra	Aug 1972	Mr D G Kingwill
Thirteenth	USA	Jackson Hole	Sept 1974	Dr F J Hewitt
Fourteenth	Argentina	Mendoza	Oct 1976	Dr F J Hewitt
Fifteenth	France	Chamonix	May 1978	Dr F J Hewitt
Sixteenth	New Zealand	Queenstown	Oct 1980	Mr J P de Wit
Seventeenth	USSR	Leningrad	July 1982	Mr J P de Wit
Eighteenth	Germany (Fed Rep)	Bremerhaven	Oct 1984	Mr J P de Wit
Nineteenth	USA	San Diego	June 1986	Dr G Heymann
Twentieth	Australia	Hobart	Sept 1988	Prof T Erasmus
Twenty-first	Brazil	Sao Paulo	July 1990	Prof T Erasmus

Affairs, Foreign Affairs, and Mineral and Energy Affairs, and representatives of the societies mentioned above. The current Chairman is Prof T Erasmus. A list of chairmen from 1964 to 1991 is given in Table 2.

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## TABLE 2

### CHAIRMEN OF SOUTH AFRICAN NATIONAL COMMITTEES FOR SCAR 1964-1991

1964-1969	Dr S M Naude, CSIR
1970-1979	Dr F J Hewitt, CSIR
1980-1985	Mr J P de Wit, CSIR
1986-1987	Dr G Heymann, CSIR
1988-1991	Prof T Erasmus, University of Pretoria

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The National Committee is responsible for maintaining contact with SCAR, for electing the national delegate and alternate delegate to SCAR, for making funds available for the attendance of the national delegate to the biennial meetings of SCAR, and for the payment of the annual membership dues. The annual report to SCAR is prepared by the Department of Environment Affairs but is submitted to SCAR under the aegis of the National Committee.

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## REFERENCES

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- International Council of Scientific Unions Year Book* 1991. 428 pp
- SANAE (South African National Antarctic Expeditions) 1974. Supplement to *Scientiae*, 47 pp
- South African National Reports to SCAR 1958-1990*
- SCAR (Scientific Committee on Antarctic Research) Manual* 1987. 61 pp