

Minutes
AGM for CNC/SCOR
June 1, 2003
at the CMOS Congress, Ottawa, Ontario

1. Welcome and Introductions

The meeting was called to order at 9:10.

Attending: Bjorn Sundby (Chair), Dick Stoddart, Paul Myers, Bob Duce (part time), Rob Macdonald, Jim Collins (part time), Susan Davidson (part time), Neil Campbell (part time), Susan Allen, Louis Fortier, Allyn Clarke, Bill Miller (part time), Ken Denman (part time), Jinyu Sheng

Regrets: Mike Stacey, Phil Hill, Ken Lee, Suzanne Roy

2. Approval of 2003 Agenda

The draft agenda was sent to members on May 6, 2003. No additional items were proposed; the agenda was adopted as circulated.

3. Approval of January 14, 2003 Draft Minutes

The minutes of the January 14th meeting were distributed to members on January 20, 2003; no suggested changes to the minutes were proposed. It was **moved** by Susan Allen, **seconded** by Louis Fortier, that the minutes be adopted as circulated. **Carried.**

4. Review of 2002/2003 Actions

Most actions from the May 25, 2002 meeting and the January 14, 2003 were covered within the appropriate agenda items of this meeting. A few not clearly covered elsewhere included:

- a) No letters of support were requested of CNC/SCOR on emerging scientific programs/issues; so none were drafted. The closest issue was one of a draft policy statement on the Kyoto Protocol, discussed under agenda item #10(iii).
- b) The pre-proposal for C-GEOHAB was still under preparation (June 1st deadline) so it was still premature to consider implementation of a C-GEOHB web site until such time as their funding becomes assured.
- c) C-GLOBEC has had various opportunities throughout the past year to meet together informally, so there was no need to rely upon CNC/SCOR resources to conduct C-GLOBEC meetings via conference call.
- d) The need for “special issues” of Atmosphere/Ocean, such as in the past for Northwater, has yet to be identified by CNC/SCOR. Possibilities might include issues on SOLAS, the International Polar Year, Northern Contaminants, Canadian Arctic Shelf Exchange Study (CASES), and Arctic and Subarctic Ocean Flux (ASOF). All members were asked to consider future possibilities for special issues of Atmosphere/Ocean and pass along proposals when appropriate. **Action: All Members.**
- e) No new SCOR Working Group proposals were received from Canadians.

- f) A major evaluation on the collection of information on MSc and PhD theses was undertaken and sent to CNC/SCOR members on Jan. 2, 2003. To date UBC has provided information which has been posted on the CNC/SCOR web site, and Dalhousie has provided information that, with a little bit of additional effort (identifying which theses are PhD and MSc), would be suitable for posting as well. Given the somewhat slow process in gathering information to date, CNC/SCOR discussed the need for this initiative to be continued – it was agreed that there were a variety of reasons why this was an important venture and should be pursued further. Accordingly it was agreed that Jinyu Sheng would pursue information at Dalhousie, Bjorn Sundby and Louis Fortier would gather information from Quebec universities, Paul Myers would investigate the availability of information from UofA, and Rob Macdonald would investigate information from UVic. **Action: Jinyu Sheng, Bjorn Sundby, Louis Fortier, Paul Myers, Rob Macdonald.** Once the above noted critical mass of information has been gathered and posted on the CNC/SCOR web site, the Secretary will contact other universities with ocean science programs in an effort to broaden the initiative to include all Canadian universities. **Action: Dick Stoddart.**
- a) CNC/SCOR discussed the possible development of an electronic newsletter on ocean science for greater outreach to the community as a whole, beyond the somewhat passive web site postings. Rather than expending efforts to initiate an electronic mailing list for such a newsletter, it was decided that it would likely be more fruitful to come up with a first issue of such a newsletter and then distribute it to a network of interested department heads and individual scientists with a request that they distribute it further to their own networks, asking recipients to contact CNC/SCOR to be added to the mailing list for future direct mailings. The initial mailing would (i) have assurance that there would be a de-listing capability if it turned out that the newsletter proved to be less than useful for individual recipients, and (ii) solicit other newsworthy items for the next and/or future newsletters. A possible table of contents for the first trial newsletter was suggested, with authors identified, as follows: results of the CNC/SCOR AGM (Sundby/Stoddart), ocean science at 2004 Edmonton Congress (Stoddart), CASES/Icebreaker (Fortier), new faculty appointments (Allen/Sheng), Quebec Oceans (Sundby), Centre for Marine Environmental Prediction (CMEP) (Sheng), Centre for Offshore Oil and Gas Environmental Research (COOGER) (Lee), CORIOLIS/ Franklin

(Sundby). **Action: Bjorn Sundby, Dick Stoddart, Louis Fortier, Ken Lee, Jinyu Sheng, Susan Allen.** Members were encouraged to identify other potential topics within the next couple of weeks for the first newsletter. **Action: All Members.** It was agreed that authors would provide their 1-2 paragraph articles to the Secretary by June 30th, and that the newsletter would be distributed as soon as possible thereafter.

5. CNC SCOR Finances

- (i) **CNC/SCOR revenues and expenses.** The audit for 2002 indicates revenues of \$14.7K and expenses of \$8K. The CNC/SCOR balance at the end of 2002 is \$21.8K. Expected revenues in 2003 are \$12K from DFO while expected expenses are travel support of members to the Ottawa AGM (amount unknown), travel to the SCOR meeting in Moscow (est. \$4K), and secretariat support (est. \$1.5K).
- (ii) **Agreement with DFO.** The agreement between DFO and CMOS for continuing funding support through 2005 is under (likely favourable) consideration by DFO, pending receipt of the CMOS audit report.
- (iii) **Agreement with NRC.** The agreement between NRC and DFO, for NRC to pay the international SCOR fees (currently at \$US 18K) is in effect until 2004. NRC normally undertakes a formal evaluation every 4 years to determine if they will extend such support into the future. It is expected that the NRC evaluation of CNC/SCOR and the benefits of continued Canadian participation in international SCOR will start in 2003, likely this summer or fall.

6. CNC/SCOR Issues and Activities

- (i) **Web site.** The CNC/SCOR web site (www.cncscor.ca) has been kept up to date and checked periodically for dead links. Major items added since last year include: what's new, results from the Sapporo international SCOR meeting, summaries of all SCOR related programs, summaries from Canadians on SCOR Working Groups, and theses titles/authors from UBC.

- (ii) **Articles for CMOS Bulletin.** An article on the research vessel CORIOLIS II is in hand, but not yet published. Articles on SOLAS, GLOBEC and SCOR WG 108 on Double Diffusion, were promised but have not as yet been forthcoming. It was noted that Congress papers are often not yet mature enough for the peer reviewed literature, but progress reports or initial findings identified in Congress papers could make excellent articles for the Bulletin. CNC/SCOR members should attempt to identify such potential contributions at Congresses.

- (iii) **Brochure.** The CNC/SCOR brochure has been updated with information from the international meeting in Sapporo, and the membership changes to CNC/SCOR for 2003; it is posted on the CNC/SCOR web site. Susan Allen agreed to try and format the pdf file for the brochure in such a manner that it could be printed, in a three-panel folding format, directly from the web. **Action: Susan Allen.**

- (iv) **Poster.** Ken Lee offered to organize and publish a CNC/SCOR poster on behalf of CNC/SCOR. His workload has prevented implementation of the poster in time for the Ottawa Congress, but it is expected that it will be completed in the coming few months. CNC/SCOR members were requested to help with providing some high resolution, physical oceanography pictures for possible use in the poster; any such pictures could be sent directly to Karen Hiltz at HiltzK@mar.dfo-mpo.gc.ca. **Action: All Members.** A first draft of the text and layout of the poster was provided to members for information. The Chair and Secretary will work with Ken Lee and Karen Hiltz over the summer to finalize the poster text and graphics content. **Action: Bjorn Sundby, Ken Lee, Dick Stoddart.**

(v) **Membership.** CNC/SCOR membership is currently as follows:

Bjorn Sundby, Chair, UQAR 2003, 2004, 2005

Ken Lee, Past Chair, DFO/BIO, 2003, 2004, 2005

Susan Allen, UBC, 2002, 2003, 2004

Rob Macdonald, DFO/IOS, 2002, 2003, 2004

Phil Hill, NRCan/PGC, 2003, 2004, 2005

Jinyu Sheng, Dalhousie, 2003, 2004, 2005

Louis Fortier, Laval, 2003, 2004, 2005

Dick Stoddart, Secretary, 2002, 2003, 2004

Neil Campbell, *ex-officio*, (CMOS)

Suzanne Roy, *ex-officio*, UQAR (GEOHAB)

Bill Miller, *ex-officio*, Dalhousie (SOLAS)

Mike Stacey, *ex-officio*, RMC (IAPSO)

Ken Denman, *ex-officio*, EC/CCCma + DFO (CMOS Scientific Committee)

“Nominated Members” from Canada are Bjorn Sundby, Ken Lee and Rob

Macdonald. The CNC/SCOR Executive Committee is Bjorn Sundby, Ken Lee, and Dick

Stoddart.

CNC/SCOR is still missing 2-3 "regular" members needed to reach the normal level of 10 "regular" members. Previous suggestions for additional members were reviewed, and additional names were proposed. It was decided that the Chair would initially approach Brad de Young (Memorial) and/or Ali Aksu (Memorial), and Marlon Lewis (Satlantic) to invite them to be CNC/SCOR members for terms of three and a half years; e.g. 2003, 2004, 2005, 2006. **Action: Bjorn Sundby.** If these individuals decline membership, the Executive Committee was delegated responsibility of completing the membership of CNC/SCOR from the roster of names previously discussed. No current members are due to be replaced until the end of 2004.

- (vi) **Special sessions at CMOS Congresses.** CNC/SCOR members were very active in identifying and convening theme sessions at the 2003 Ottawa Congress; witness GLOBEC, SOLAS and Arctic Oceanography and Meteorology sessions. CNC/SCOR also played a role in promoting other ocean sessions, namely operational oceanography and components of the climate session. Dick Stoddart served on the Ottawa Congress Scientific Committee.

7. SCOR International

- (i) **Remarks from SCOR President, Bob Duce.** Dr. Robert Duce, President of international SCOR and Chair C-SOLAS (Canadian Surface Ocean Lower Atmosphere Study) Board of Directors, joined CNC/SCOR for this agenda item. Dr. Duce reviewed a wide variety of issues, including the make-up of the international SCOR secretariat; recent elections of the international SCOR Executive Committee; the hosting of the Open Science Conference, OCEANS: Ocean Biogeochemistry and Ecosystems Analysis, January 2003 in

Paris; a planned 2004 SCOR/IOC Symposium on the Science of Ocean Carbon Sequestration (Ralph Cicerone Chairs the symposium planning committee); ongoing efforts with IGBP for an oceans vision statement; an ongoing ICSU review of the family of environmental programs of which SCOR is a part; the status of new Working Group proposals – one funded last year and five currently under review this year of which 1-2 will likely be supported; capacity building efforts of SCOR; and the upcoming meeting of the international SCOR Executive in Moscow, September 15-18, 2003. In concluding, Dr. Duce encouraged CNC/SCOR to provide comments on the five new Working Group proposals, and to send a representative to the SCOR Executive Committee meeting in Moscow. **Action: Bjorn Sundby.**

- (ii) **Existing SCOR Working Groups.** The following are the current active international SCOR Working Groups (WG), including of identification of Canadians participating in specific Working Groups:

WG 108, Double Diffusion, Co-Chairs are Yuli Chashechkin (Russia) and Joe Fernando (USA); Barry Ruddick is a Canadian WG Member

WG 109, Biogeochemistry of Iron in Seawater, Co-Chairs are David Turner (Sweden) and Keith Hunter (New Zealand)

WG 111, Coupling Waves, Currents, and Winds in Coastal Models, Co-Chairs are Norden Huang (USA) and Chris Mooers (USA)

WG 112, Magnitude of Submarine Groundwater Discharge and its Influence on Coastal Oceanographic Processes, Co-Chairs are Bill Burnett (USA) and Evgeny Kontar (Russia); Leslie Smith is a Canadian WG Associate Member

WG 113, Evolution of the Asian Monsoon in Marine Records:
Comparison Between Indian and East Indian Subsystems, Chair is Pinxian Wang (China)

WG 114, Transport and Reaction in Permeable Marine Sediments, Co-Chairs are Bernard Boudreau (Canada) and Markus Huettel (Germany); Björn Sundby is a Canadian Associate Member

WG 115, Standards for the Survey and Analysis of Plankton, Chair is Ivan Heaney (UK); Erica Head is a Canadian WG Associate Member

WG 116, Sediment Trap and 234Th Methods for Carbon Export Flux Determination, Chair is Ken Buesseler (USA)

WG 118, New Technologies for Observing Marine Life, Co-Chairs are David Farmer (USA) and Van Holliday (USA)

WG 119, Quantitative Ecosystem Indicators for Fisheries Management, Co-Chairs are Philippe Cury (South Africa) and Villy Christensen (Canada); Daniel Pauly, Tony Pitcher and Kees Zwanenburg are Canadian WG Associate Members

WG 120, Marine Phytoplankton and Global Climate Regulation: The Phaeocystis spp. Cluster as a Model, Co-Chairs are Winfried Gieskes (The Netherlands) and Sauveur Belviso (France)

WG 121, Deep-Ocean Mixing, Chair is Robin Muench (USA); Chris Garrett is a Canadian WG Member and Barry Ruddick is a Canadian WG Associate Member

The membership and terms of reference of these groups may be found at: <http://www.jhu.edu/~scor/wkgroups.htm>. Summaries of the working group

activities may be found on the CNC/SCOR site under item #B6, and, where appropriate, summaries from Canadians on these WGs may be found under #C5 on the CNC/SCOR site.

- (iii) **SCOR Scientific Committees; e.g. JGOFS, GLOBEC, GEOHAB, etc.** SCOR has been instrumental in the planning and coordination of large-scale ocean research projects for long-term, complex activities. SCOR provides a mechanism to bring together international scientists for this purpose. Details on each of these programs (GEOHAB, GLOBEC, JGOFS, Ocean Biogeochemistry and Ecosystems, SOLAS) may be found at <http://www.jhu.edu/~scor/lgscale.htm>, including details on membership, sponsors and terms of reference. Canadian scientists are on each of the scientific steering committees for these programs.
- (iv) **SCOR Affiliated Programs; e.g. ATOC, IMAGES, IOCCG, etc.** SCOR has developed a process for affiliation of research programs and long-term study committees with SCOR. SCOR does not provide financial support to these programs, but affiliation may increase a program's international visibility and access to scientists in SCOR member nations, as well as providing the benefit of SCOR advice on program committees and activities. Each affiliated program is reviewed for continued affiliation at each SCOR General Meeting and affiliation is automatically terminated at the end of 10 years. Details on the current affiliated programs (CoML, iAnZone, IMAGES, IOCCG, InterRidge) may be found at <http://www.jhu.edu/~scor/coop.htm>. ATOC completed its function as an affiliated program, effective the October 2002 Sapporo meeting.
- (v) **2002 Sapporo Annual Meeting.** The international SCOR Annual Meeting was held in Sapporo, Japan, October 1-5, 2002. Dick Stoddart attended for Canada; his meeting report was distributed to members on October 21, 2002, posted on the CNC/SCOR web site as item #B3, and discussed at the January 14, 2003 CNC/SCOR meeting. The full international report on the Sapporo meeting is presently undergoing final editing and will be posted on their web site shortly.

- (vi) **2003 Moscow Executive Meeting.** The next SCOR Executive Committee Meeting is scheduled for September 15 – 18, 2003 in Moscow, Russia. It was agreed that Bjorn Sundby would represent Canada at the 2003 Moscow Executive Meeting. **Action: Bjorn Sundby.**
- (vii) **New SCOR Working Groups.** No Canadian proposals were received for consideration for new SCOR WGs. Five (5) new proposals from other countries have been provided by international SCOR for review and consideration. The proposals are:
- a) SCOR Working Group to Investigate Physical and Biochemical Classification of the coastal estuaries in the southeastern Pacific to be applied on Integrated Management of Coastal Areas.
 - b) SCOR Working Group to plan and implement GEOTRACES, a collaborative multi-national program to investigate the global marine biogeochemical cycles of trace elements and their isotopes.
 - c) Joint SCOR/IMAGES Working Group to Investigate the Reconstruction of Past Ocean Circulation.
 - d) SCOR Working Group on Analysing the Links Between Present Oceanic Processes and Paleo-Records.
 - e) SCOR Working Group on the Physical and Biological Structure of Meso-scale Rings in World's Oceans.

Rob Macdonald had provided the CNC/SCOR Chair with an overview of all five proposals. This review will be provided to Allyn Clarke and Louis Fortier for additional comment and consolidation if necessary. **Action: Rob Macdonald, Allyn Clarke, Louis Fortier.** This (revised if necessary) review will constitute the Canadian comments on the five proposals, and will be sent to international SCOR by the June 10th deadline. **Action: Rob Macdonald.**

8. Report on CNC/ECOR Activities

Jim Collins, Chair of CNC/ECOR, gave a report on their interests and activities. ECOR is investigating areas for new initiatives and new working groups; however, at present, progress is slow in this regard. CNC/ECOR is presently undertaking a review and redesign of its web site, and is actively pursuing the notion of an electronic newsletter for the ocean engineering community in Canada. "Oceanspace" (<http://www.oceanspace.net/>) is seen to be a good international model for an ocean engineering electronic newsletter. It is produced on a bi-weekly schedule and is distributed free of charge. A Canadian newsletter sponsored by CNC/ECOR should be viewed as an information exchange and distilling product that will bring the ocean engineering community, roughly estimated at about 500 individuals in Canada, closer together. A sample Table of Contents of a Canadian Oceanic Engineering Newsletter was tabled to give an idea of the intended scope of the proposal. CNC/ECOR's intent is develop a comprehensive mailing list of ocean engineers, contact them with an explanation of the intent and potential content of the newsletter, and issue the first newsletter (at the same time as soliciting input for future newsletters) sometime in the next few months. The possibility of a joint "ocean engineering" and "ocean science" newsletter was broached – the Chairs of CNC/SCOR and CNC/ECOR will investigate this possibility as the somewhat two parallel initiatives on newsletters evolve (see agenda item #4g above). **Action: Bjorn Sundby, Jim Collins.**

9. International Polar Year

The year 2007 will mark the 125th anniversary of the First International Polar Year (1882-1883), the 75th anniversary of the Second Polar Year (1932-1933) and the 50th anniversary of the International Geophysical Year (1957-1958). The IPYs and IGY were major initiatives which resulted in significant new insights into global processes and laid the foundation for decades of invaluable polar research. The Canadian Polar Commission (CPC) is the likely body to coordinate Canada's involvement in IPY.

CNC/SCOR has made several suggestions to CMOS, which have been accepted in principle, to direct several of its ongoing programs in recognition of IPY in 2007, namely: (i) awarding the 2007 CMOS Congress to a centre that would have arctic science as one of its main themes, (ii) awarding the series of CMOS prizes in 2007 related to efforts in the North, and (iii) having the 2007 CMOS tour speaker be on the topic of arctic science. Another suggestion, made by the CNC/SCOR Secretary to the Canadian Polar Commission is that of a commemorative stamp for IPY, through Canada Post. Finally, CNC/SCOR has suggested to international SCOR that, since 2007 is the 50th anniversary of the creation of SCOR, SCOR might devote one day of its 2007 scientific sessions related to the Poles, as a contribution to IPY. The SCOR 2007 meeting will be held at Woods Hole, the location of the 1st SCOR meeting.

Other possibilities that were tentatively proposed prior to the CNC/SCOR AGM, needing significant commitments of time and resources, included: (a) an Arctic Ocean conference and resulting publication, (b) an Arctic Ocean atlas, (c) “flag” ongoing efforts as supporting IPY, (d) investigate collaboration with others; such as COSPAR, CSA, CPC, SCAR, federal government (DFO, EC), (e) proposal of new SCOR Working Group(s) related to the Arctic, (f) investigate a new project/program in the Arctic, and (g) preparation of a bibliography on Arctic Ocean science. There was general support for initiatives that could produce a product that would have “longevity”, such a retrospective or atlas type publication. CNC/SCOR was requested to consider these and any other potential initiatives that might come to mind over the coming few months. **Action: All Members.** A subcommittee was formed, consisting of Rob Macdonald (lead), Louis Fortier and Allyn Clarke, to discuss and investigate further any prospective oceanographic contributions to IPY. **Action: Rob Macdonald, Louis Fortier, Allyn Clarke.**

10. Inter-Relationships Between SCOR and CMOS

- (i) **CMOS Awards.** In some recent years CMOS awards for eligible Canadian oceanographers have gone un-awarded due to lack of nominations. CNC/SCOR members were encouraged to ensure that one or more names were put forward in 2003 in categories for eligible oceanographers, and they did so. This year awards will be made in the eligible categories, and it was suggested that the practice continue of CNC/SCOR members ensuring that nominations are put forward recognize deserving oceanographers. The CMOS Executive Director has indicated that it would also be appropriate for CNC/SCOR to suggest names for the CMOS Prizes and Awards Committee (currently comprised of Mike Leduc (MSC), Jean-Guy Desmarais (CMC), Henry Leighton (McGill), Lawrence Mysak (McGill), Keith Thompson (Dalhousie)) since there will be a couple of vacancies on this committee after the 2003 Congress. A suggestion, endorsed by CNC/SCOR, was adopted by CMOS to have the winner of the President's Prize give a plenary talk at Congress – this was implemented for the 2003 Congress in Ottawa. Finally, the CMOS Executive Director has indicated that they would welcome suggested names from CNC/SCOR of prospective “tour speakers” to travel Canada (see <http://cmos.ca/scor/tourspeakers.html> for the names of past tour speakers).
- (ii) **Future Congresses.** CNC/SCOR (Dick Stoddart) has been invited to participate on the Scientific Planning Committee for the 2004 Congress in Edmonton. CNC/SCOR members identified several possible theme sessions for Edmonton (CASES, ocean/atmosphere carbon measurement and modelling, etc.). Members were asked to consider additional theme sessions for Edmonton, and to give early consideration to theme sessions for the 2005 Congress in Vancouver (revisit SOLAS, etc.?). **Action: All Members.**
- (iii) **Draft CMOS statement on Kyoto.** The CMOS Scientific Committee (Ken Denman is the Chair) drafted a policy statement relative to the Kyoto Protocol. CNC/SCOR, through its Secretary, offered comments relative to having a government priority for sustained observations (climate monitoring) added to the draft – this was subsequently accepted in principle by CMOS. CMOS adopted the policy statement during the Ottawa CMOS

Congress and transmitted it to the Prime Minister, and appropriate Ministers, for information and action.

11. Timing and Location of Future Meetings of CNC/SCOR

CNC/SCOR meetings have in the recent past been held in conjunction with CMOS Congresses, e.g. the 2001 Congress in Winnipeg, the 2002 Congress in Rimouski, and the 2003 Congress in Ottawa. One consideration has been to try and co-locate meetings with Congress to reduce travel expenses; e.g. several members would likely be attending Congress in any case. It was agreed that a conference call of CNC/SCOR would be held with the full committee half way between the 2003 and 2004 AGMs; e.g. around January 2004. The location of the 2004 AGM will be decided at that time – likely in conjunction with the 2004 CMOS Congress in Edmonton. **Action: Bjorn Sundby, Dick Stoddart.**

12. Other Business

No other business was identified.

13. Adjournment

The meeting adjourned at 12:45.