

NEWSLETTER

APRIL 1981

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Vol.9 No.2

TABLE OF CONTENTS

PAGE

Summary of Sessions6
Graduate Theses 19807
ARC 29
Institute for Environmental



CMOS NEWSLETTER is a bi-month'y publication of the Canadian Meteorological and Oceanographic Society

Editor:

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FROM THE PRESIDENT'S DESK

The 15th CMOS Congress is now less than two months away. The Program Chairman, Dr. Barry Goodison of AES, Downsview, has received a gratifyingly large submission of abstracts, and has put together what I feel will be a most interesting program. While hydrometeorology will be the primary theme several sessions revolve around the topics of air pollution and dispersion. Interest in this area was the direct result of active involvement in the Congress by our first Special Interest Group: Air Pollution Meteorology. The benefits to the Society of encouraging disciplineoriented affiliations are already apparent, and it is hoped that other such groups will come forth. To date we have bad indications of interest in the fields of hydrometeorology, agrometeorology and climatology, but to date no formal application for the formation of a second Special Interest Group has been received executive. If any are presented prior to this year's Congress, they can be incorporated of that time.

Back to the Congress, there will be sessions each day on oceanographic subjects as well. Indeed, submissions from ocean scientists remain high, despite the location of this year's Congress being 1000 miles from the nearest sea. For those oceanographers that do come, we promise to show them what salt water really is, for we have lakes near Saskatoon that reach 35% salt (not 35 ppm or even 35 ppt!).

In addition to the scientific sessions, the Annual General Meeting of the CMOS is, as always, a significant feature of our Congresses. It will be held Wednesday evening. The previous

evening, Tuesday May 26, is the occasion of our CMOS Council meeting, preceded during the course of that day by meetings of our various committees. CMOS members are reminded that they may attend these sessions, in particular that of the Scientific Committee, which has its meeting during the afternoon. In particular, all Centres should have a formally reorganized delegate at the Council meeting. If your chairman is not intending to be in Saskatoon, how about arranging to substitute for him?

Negotiations continue with the Canadian Association of Physicists to share their office and particularly their computer terminal. While it is too early to say definitely, indications are that CMOS will be sending out its own renewal notices this winter and will be directly handling the dues payments that then come in. I hope to keep you all informed of the course of these activities.

Another matter that was mentioned recently concerns the number of paper submissions to Atmosphere-Ocean. This has increased a bit in the last few months, but our editor, Dr. Henry Leighton, would like to see a further rise to a safe working level of new manuscripts. I have been given to believe by AES and Ocean Science and Surveys (OSS, what used to be OAS) officials that Atmosphere-Ocean is considered by them to be a fully-recognized refereed journal, such that publication in it provides equivalent credit to having an article in any other scientific journal. I hope more of our members begin to realise this and submit their work accordingly. The health of our whole Society depends to a considerable degeee on the continued well-being and enhanced stature of Atmosphere-Ocean.

(Continued on page 19)

RICHMOND WILBERFORCE LONGLEY ~ 1907 - 1981

We are saddened to report the death of Professor Richmond W. Longley, 'Dick' to his many friends and colleagues, who passed away suddenly on March 7, 1981, in his 74th year. He is survived by his wife, Margaret; his two sons, Douglas and Bruce; six grandchildren, and nine brothers and sisters.

Dick joined the Meteorological Service of Canada in 1939, shortly before the war. During the next 20 years he was active in research, teaching and forecasting, working in offices as diverse as Halifax, Toronto, Montreal, Suffield, Resolute and Edmonton.

In 1959 he resigned from the Meteorological Service and set out on a new career as a university teacher and administrator. On his retirement in 1973 the University of Alberta honoured him with the title of Professor Emeritus. He is the author or co-author of some 70 scientific papers and reports, and two textbooks on meteorology.

NEWS FROM THE CENTRES

Ottawa Centre:

The CMOS Ottawa Centre held its first speaker meeting of 1981 on January 14. Mr. Ray Fichaud, Regional Director AES Quebec Region reported on his recent special assignment with the World Meteorological Organization (WMO) in Zaire. His vivid and colourful presentation on the frustrations he experienced while attempting to evaluate the Zaire National Meteorological Service for WMO was thoroughly enjoyed by a good turnout of over 40 members and guests. On February 11. the Ottawa Centre hosted Dr. Geoff Austin, the AES "Travelling Speaker" (Eastern Canada), at another luncheon His talk, accompanied by excellent slides, certainly brought the attendees up-to-date on the latest advances and techniques in weather radar and short range precipitation forecasting.

In addition to Centre meetings, several of our members are becoming involved in the planning for the 1982 Congress which will be held at Ottawa University. Also in preparation for the move of the National Executive here in the same year, two of our members, Leo O'Quinn and Richard Asselin have accepted positions on the 1981 National Executive.

Our annual dinner meeting is planned for March 18. The speaker will be Murray Forbes, OIC of the Ottawa Weather Office, who promises to entertain us with an overview of the history, trials and tribulations of weather service to the public in this area.

We would like to take this opportunity to extend best wishes, upon retirement, to four of our Centre's members. First to Cliff Stead, long-time CMOS supporter, who left the government service in December 1980. We were very pleased to hear that Cliff intends to remain active in CMOS by continuing to serve as Science Fair Coordinator and by volunteering to help in some capacity on the National Executive during its stay in Ottawa. Also at the end of 1980, Dr. Warren D. Forrester retired from Canadian Hydrographic Service. Dr. Forrester, as well a member of the Ottwa Centre for many years, has recently (1978) been a quest speaker at a Centre meeting. Roy Woodrow left the Environment Department in February 1981 after over thirty years of service. Roy who also is a long-time CMOS member has held many positions connected with the Arctic, DND and ice services. Finally, Ted Hamilton, who is finishing his term on the Centre executive as past Chairman, will retire in May 1981. Ted plans to move to Belleville, Ontario this summer and he will be taking with him considerable CMOS experience and knowledge which will be missed in the coming year.

NEWS FROM THE CENTRES (Cont'd)

Alberta Centre:

The Annual Meeting of the Alberta Centre was held on January 21, 1981. The main business of the meeting consisted of the presentation of the 1980 annual report and the election of the 1981 executive which consists of:

Chairman - D. Sortland
Vice-Chairman - C.M. Sackiw
Secretary-Treasurer - T.G. Medlicott
Public Information Officer - Dr. R.G. Humphries
Calgary Representative - Prof. R.D. Rowe

As quest speaker for the evening the Centre was fortunate in obtaining Dr. John Maybank, the Society's National President. Dr. Maybank reviewed the history of the Society which has grown steadily during its fifteen-year history. He then reviewed the highlights of the 1980-81 The Society has established a permanent office in Ottawa in an effort to assure members a means of Secondly, contacting the National Executive. Executive has been taking a new look at the journal and thirdly, is suggesting that the Society's base could be broadened by catering to special interest groups. Maybank also expressed his current concerns which center around the National Executive and the Centres. concern is that the Annual General Meeting is not attended by a true spectrum of the Society and, therefore, may not represent the wishes of the membership as a whole.

On March 24, 1981 members gathered at the new premises of the Atmospheric Science Division of the Alberta Research Council for an address and demonstration by Dr. John Ramsden entitled "The Computer as a Data Analysis Tool". Dr. Ramsden likened the design of software to that of tools and outlined a number of criteria which must be met. He then proceeded to demonstrate the use of four computer programs involving the manipulation and display of radar data.

NEW AND SUSTAINING MEMBERS

New Members

Marie P. Adam Ottawa, Ontario

Dr. David Blackburn White Rock, B.C.

Chris Ewing Edmonton, Alberta

Hu Wallis Victoria, B.C.

Brad de Young St. John's, Nfld.

John Goll Reston, Virgina, USA

Kenneth B. Yuen Nepean, Ontario. Gary N. Kierstead Greenwood, N.S.

Anne-Marie Leduc Gatineau, Quebec.

F. Deborah MacDonald-McGee Nepean, Ontario.

C. Fraser NacNeil Dartmouth, N.S.

Michel Roch Montreal, P.Q.

Roger Street Brampton, Ontario

Sustaining Members

Airflow Development Canada Ltd. Mississauga, Ontario

Bristol Aerospace Ltd. Winnipeg, Manitoba

Dobrocky Seatech Ltd. Victoria, B.C.

Younge Atmospheric Consulting Services Ltd. Calgary, Alberta

Geneq Inc. Anjou, Quebec

N. Sargent Downsview, Ontario

MacDonald Dettweiler Assoc. Ltd. Richmond, B.C.

Beak Consultants Vancouver, B.C.

Hermes Electronics Ltd. Dartmouth, N.S.

Nordco Ltd. St. John's, Nfld.

Alberta Agriculture Advisory Committee on Weather Modification Three Hills, Alberta

Ontario Hydro Toronto, Ontario

Bendix Aviation Electric Ltd. St. Laurent, P.Q.

CMOS CONGRESS - Saskatchewan Saskatchewan

Summary of Sessions

Tuesday, May	25	Location
Tours:		
0800-1630 1100-1630 1300-1700	Prince Albert Satellite Station Cominco Potash Mine Gardiner Dam	
Meetings:		
0930-1200 1300- 1300- 1300- 1800-2300 1900-2300 1900-2300	Editorial Committee Meeting Scientific Committee Meeting Public Information Meeting Membership Committee Meeting Registration CMOS Executive Council Wine and Cheese-Reception	Room 175 Room 175 Room 128 Room 129 Marquis Hall Room 175 Marquis Hall
Wednesday, M	ay 27	
0745-1000 0830-0845 0845-0930 1000-1200 1300-1450 1300-1450 1300-1450 1520-1700 1520-1700 1520-1700 1900	Registration Opening Welcome Theme Presentation 1A Hydrometeorology 1B Atmospheric Dynamics 2A Drought 2B Forecasting 2C Entrainment, Mixing, Upwelling 3A Hydrometeorology II 3B Boundary Layer 3C Estuarine Circulation and Coastal Currents Annual General Meeting of CMOS	Physics Bldg. Room 107 Room 107 Room 107 Room 165 Room 107 Room 165 Room 103 Room 107 Room 165 Room 107 Room 165 Room 107
Thursday, May	y 28	
0800-1030 0830-0945 0830-1000 0830-1000 1030-1150	Registration 4A Air Pollution Theme Presentation 4B Agrometeorology 4C Low Frequency Waves and Surges 5A Air Pollution Field Studies - Planned and Inadvertent	Physics Bldg. Room 107 Room 103 Room 165
1030-1200 1300-1400 1400-1540 1400-1530 1400-1540 1610-1710 1600-1720 1830-1900	5B Energy and Water Balance Poster Session 6A Acidification in Western Canada 6B Polynya I 6C General Metreorology 7B Polynya II 7C Hydrometeorolgy III Cocktails Awards Banquet	Room 103 Room 131 Room 107 Room 165 Room 103 Room 165 Room 103 Marquis Hall

CMOS CONGRESS - Saskatchewan Saskatchewan (Cont'd)

Summary of Sessions

Friday, May	29	Location
0830-1000 0830-1000	8A Air Pollution Modelling and Assessment 8B Precipitation and Severe Storms	Room 107 Room 103
1030-1210 1030-1210	9A Air Pollution Modelling and Assment; Feedback Discussion 9B Climate	Room 107
Tours:		
1100-1700 1300-1600	Cory Potash Mine Riverboat Trip	

GRADUATE THESES 1980

University of Alberta

Sc. Meteorology	
	The thermodynamics of icing sprays
Greaves	Satellite-measured changes in thermal fields of an Arctic island
Dupilka	Natural dipoles as a source of mountain-associated- infrasonic-waves
Johnstone	An application of two Markov chain models to precipitation at some Alberta locations
Rudo1ph	A numerical model of pollutant transport in a small urban valley
	Auld Greaves Dupilka Johnstone Rudolph

University of British Columbia

L. Braun	Scale Dependence of Factors Controlling the Release of Water from Snow and Ice Storage
Ph.D R. Marsden	Synoptic Estimates of Air-Sea Fluxes
D. G. Steyn	Turbulence, Diffusion and the Daytime Mixed Layer Depth over a Coastal City

Dalhousie University

M.Sc.

bullious ic officer sites	
Ph.D.	
Michel J. Gagnon	The Fate of Anthropogenic Surfactants in the Marine System
Paul E. Kepkay	Microbial and Chemical Controls of Carbon Cycling in Marine Sediments
John W. Loder	Secondary Tidal Effects in Tidally-Energetic Shallow Seas with Application to the Gulf of Maine
Jerome A. Smith	Waves, Currents and Langmuir Circulation

GRADUATE THESES 1980 (Cont'd)

University of New Brunswick

Ph.D

Robert E. Chapman Laser spectroscopy of atmospheric gases

University of Guelph

Ph.D

I. Brunini New devices for in situ measurements of soil and root water potentials and transport of water in the soil-plant system.

B. Grace A study of threshold sulphur dioxide concentrations for the lichen Cladina rangiferina (L) Harm

J. Walker Ozone uptake by corn (Zea mays L.)

J. Wilson Turbulence measurements in a corn canopy and

numerical simulation of particle trajectories in

inhomogeneous turbulence

Relation of leaf surface wetness duration to M. Pedro

meteorological parameters

Memorial University - St. John's

M.Sc.

Alison J. Stenning Synoptic Controls of Katabatic Layer

Characteristics above a Temperate-Alpine Type

Glacier--Peyto Glacier, Alberta

McGill University

Richard Jones

M.Sc.

Gilles Bolduc Preliminary assessment of the use of radiometer and radar measurements in atmospheric probing

Louis Garand

Méthode rapide de calcul de la radiation infrarouge dans l'atmosphère et évaluation de son influence

dans un modèle de prévision météorologique

Solar radiation transfer, including the effect of Louise Grondin aerosol, using the delta-Eddington approximation

Linearized stationary planetary wave modelling with

tropospheric forcing

Comportement des anomalies de circulation semi-Louis Lefaivre

permanentes

Rejean Michaud Initialization of a cumulus cloud model by using

random surface conditions

Total sferics rate related to total precipitation-Steven Prashker

filled volume aloft

McMaster University - Hamilton

M.Sc.

William Blackburn Linda Jordan

Determination of longwave irradiance at the ground Heat and Moisture Exchange in a Permafrost Active Layer, Churchill, Manitoba.

ARC 2 - British Commonweather Air Training Plan

As we more into the 1980's, the ranks of meteorologists who began their careers as Meteorological Officers with the RCAF, either at stations training air crew for the British Commonwealth Air Training Plan or at Home War units, are thinning rapidly.

The purpose of this short note is to ascertain if any of the surviving wartime Meteorological Officers have any knowledge of the station reports that were ordered prepared by Circular No. 716 on March 19, 1945. Reports are on file at AES Downsview from No. 1 AOS Malton, No. 5 AOS Winnipeg, No. 10 AOS Chatham, No. 1 SFTS Camp Borden, No. 13 SFTS North Battleford, No. 15 SFTS Claresholm, and No. 17 SFTS Souris (AOS: Air Observers School, SFTS: Service Flying Training School). The information contained in these manuscripts, written 35 years ago, is priceless. The reports cover the history of the station, the names of Meteorologial Officers, topographic and seasonal effects on the local weather, examples of the services provided to air crew, both for flying training and in ground school, etc. As one who took part in closing two BCATP schools -No. 14 SFTS at Dunnville in late 1944 and No. 10 SFTS in Kingston in September 1945, I have but a hazy recollection of the task that was put on us at that time and whether or not we submitted any material from those stations. Perhaps someone will remember whether or not the reports were completed for their stations and what was done with the manuscripts.

The reports are fascinating to read. Weather characteristics in the general area of the airfields are just as valid today as they were 35 years ago. Reading the names of the meteorological officers brings back memories, so few of the 400 or so of us who were recruited and trained in meteorology during the war remain in meteorology. Any information about the existence of other station reports would be gratefully received and added to the Society Archives.

Morley K. Thomas

INSTITUTE FOR ENVIRONMENTAL STUDIES - University of Toronto

The Institute for Environmental Studies is an interdisciplinary centre for research and study which offers association with a wide range of social and natural scientists. The primary goal of the Institute is to provide the facilities and academic climate for problem-oriented research to those who wish to maintain their discipline-based academic work. M.A./M.Sc. programs are therefore undertaken on a collaborative basis with one or more core departments; research programs usually involve at least one core discipline. The core disciplines which currently offer collaborative M.A./M.Sc. programs with the Institute are the departments of: Geology, Botany, Forestry, Zoology, Geography, and anthropology.

Collaborative M.A./M.Sc. Program

Each student in the Collaborative M.A./M.Sc. Program in Environmental Studies undertakes a research project leading to a thesis or research paper in his/her basic discipline. Students also have the opportunity to intern with a government agency, a consulting firm or a public interest group. The internship provides students with 4 to 8 months of "real world" work experience in some environmental field related to their program of studies and research. For each of the collaborative programs, the Institute offers required courses in environmental management and man-environment theory and over 15 electives in applied ecology, economics, environmental law, technology, environmental microbiology, interdisciplinary toxicology, water resources management, population and resources, mathematical ecology and socio-ecology.

Research Activities

A large and varied group of individuals is associated with the Institute for research purposes. Many opportunities exist for both formal collaboration and informal discussion including laboratory and field studies, weekly seminars and hot seats, symposia, workshops and working groups.

Working Groups

The Institute Working and Study Groups have proven to be a very successful means of organizing people from diverse disciplines and departments around a problem of common interest. Formed either to resolve specific problems or to study fields of current interest, they often receive funding, produce reports and publications and provide resources for the university and surrounding and rural communities. Currently active groups are involved in: Arctic Studies, Chemical Analysis, Climate and Human Response, Computer Aided Planning, Ecosystem Breakdown, Energy Studies, Environmental Monitoring, Environmental Perception and Policy, Great Lakes Rehabilitation, Oil and Gas, Persistent Substances, Risk Assessment, Snow and Ice Control, Solid Waste Studies, Technolgy, Environment and Development, Urban Natural Systems, Water Resources Management.

Other fields of research at the Institute are environmental conservation, social impact assessment, public participation and socio-ecology.

The Institute for Environmental Studies also offers the use of an excellent library, specialized laboratory facilities for ecotoxicology, the Slowpoke Nuclear Reactor and Baie du Dore field station on Lake Huron.

How to Apply

The Collaborative Graduate Program in Environmental Studies is seeking self-directed students whose career interests encompass problem-oriented research. Normally students must hold a degree from a recognized university with at least a B+ (or second-upper) standing. Admission and degree requirements are the same for both part-time and full-time students. Financial assistance and Scholarships are available to qualified applicants. For further information write to: Prof. A.P. Grima, Coordinator of Graduate Studies, Institute for Environmental Studies, Haultain Building, 170 College Street, University of Toronto, Toronto, Ontario, Canada M5S 1A4 Telephone: (416) 978-3486.

CMOS INVOLVEMENT IN NATIONAL COMMITTEES

Increasingly, the CMOS is being asked to nominate or propose meteorologists and oceanographers to serve on various national committees, either as representatives of the Society or as spokesmen for the relevant scientific discipline. A brief summary of involvement to date is given here so that members may be aware of some of these committee activities.

1. Canadian National Committee for the International Union of Geodesy and Geophysics - (CNC/IUGG)

This committee, under NRC auspices, serves as the Canadian interface for the various associations within the IUGG, as well as for the Union itself. NRC pays the Canadian contribution to IUGG, and through this committee attempts to ensure information transfer with Canadian scientists and their adequate representation at the relevant international meetings. The CNC/IUGG is also responsible for the annual publication of the Canadian Geophysical Bulletin.

Membership on the committee totals 14, two representing each of the scientific disciplines that are grouped into the seven Associations making up the IUGG (geomagnetism and aeronomy, hydrology, meteorology, oceanography, seismology, etc). They generally remain members for a four-year term, leading up to each quadrennial IUGG Congress (the next one will be in 1984). The members are chosen through nominations by the relevant scientific societies. The committee customarily meets at least once a year, in Ottawa.

CMOS nominates two meteorologists and two oceanographers to the CN/IUGG, providing for contact with the International Association of Meteorology and Atmospheric Physics (IAMAP) and for the International Association for Physical Sciences of the Ocean (IAPSO). Currently, there are respectively: Dr. K.D. Hage, University of Alberta, Dr. G.A. McBean, AES, presently at Institute of Ocean Sciences, Sidney, B.C.; Dr. Stephen Pond, UBC; and Dr. G.T. Needler, Bedford Institute of Oceanography, Dartmouth, N.S. Efforts are made to ensure, through some common membership close liaison between CNC/IUGG and CMOS's Scientific Committee; Dr. Hage and Dr. Pond are presently members of this latter committee.

CMOS also names the two editors for the meteorology and atmospheric sciences, and oceanography sections of the Canadian Geophysical Bulletin, who customarily serve for two or three years. The present editors ae, respectively: Mr. E.J. Truhlar, AES, Downsview; and Dr. G.T. Needler, BIO, Dartmouth. Responsibility for appointing these editors rests with CMOS's Scientific Committee.

2. Canadian National Committee for the World Climate Research Program

The CNC/WCRP was established in 1980 as the successor to the Coordinating Committee for the Global Atmospheric Research Program (GARP). In

common with the CNC/IUGG, it will provide the NRC linkage to the "non-governmental" part of the World Climate Research Program, i.e. to the International Council for Scientific Unions (ICSU). As, however, the WCRP is partly "governmental" through the World Meteorological Organization, the CNC/WCRP will also be directly involved with AES and Ocean Sciences and Surveys (up to this year, Oceans and Aquatic Science, OAS, now OSS) than is the CNC/IUGG. Accordingly, its present membership is appointed by NRC, through consultation with CMOS, AES and OSS. In addition, the President of the CMOS is an ex-officio member.

To date, NRC has appointed the following persons to the CNC/WCRP: Dr. J.F. Derome, McGill University; Dr. C.J. Garrett, Dalhousie University; Dr. W.L. Godson, AES, Downsview; Dr. J. Maybank, Saskatchewan Research Council; Dr. P.E. Merilees, AES, Downsview; Dr. T.R. Oke, UBC. As the selection basis is not specified, it is not possible nor desirable to identify any of these as "CMOS members" to the committee, AES nominees, etc.

3. Canadian Committee on Oceanography - (CCO)

The CCO is responsible for helping to co-ordinate marine science research in Canada. It reports directly to the Federal Cabinet, through the Minister for Fisheries and Oceans, and has a secretariat provided by Ocean Sciences and Surveys.

In 1980 the CMOS was asked to name an observer to this committee. Dr. G.T. Needler, BIO was appointed to this role, with Dr. Paul LeBlond, UBC as his alternate. As the Committee tends to vary its meeting location between Ottawa and one or the other coasts, the naming of two observers seemed appropriate.

4. Committee on International Scientific and Technological Affiliations - (CISTA)

This committee has existed for some time, but in 1980, NRC restructured it to oversee the broad spectrum of Canadian Scientific involvement in international, non-governmental activities and organizations. It thus serves as an "umbrella" committee to the NRC's Canadian National Committees. As such, membership covers the entire Science and Engineering spectrum, with two members from the biological sciences, two from the earth sciences, two from chemistry and physics, etc. to a total of 16 members. Nominations were sought from the appropriate scientific societies, and CMOS's National Executive provided the names of two of its members, with the understanding that only one would be chosen. The membership term is for three years.

We have recently learned from NRC that one of our nominees, Dr. P. LeBlond of UBC's Dept. of Oceanography, has been appointed to CISTA for a three-year term.

5. Climate Advisory Committee for the Canadian Climate Program - (CAC)

The CAC was created in July 1978 under the chairmanship of Gordon McKay to provide advice for the CCP which was formally approved in November 1978 by the Department of the Environment as the Canadian response and contribution to the World Climate Program (WCP). In April, 1978 a portion of the AES structure at Downsview was reorganized to create the Canadian Climate Centre (CCC) which has the lead role to design and coordinate the CCP and to support the developing WCP. The CAC reports directly to the Climate Planning Board (CPB) chaired by Dr. F. Kenneth Hare and composed of ADM's or equivalents from a number of federal departments or councils who have major responsibility for policy decisions concerning the CCP and liaison at the national international levels. The CAC is assisted by a secretariat provided by the Climate Program Office of CCC. Reporting to the CAC are a number of other committees, including eventually the Regional Climate Advisory Committees.

At the present time the CAC is made up of representatives from federal departments, two societies (CMOS and the Canadian Federation of Agriculture), two from the university community, and a private recreation consultant. Through the auspices of CCREM and its planned seminar in Regina, March 17-19, it is hoped that the provinces will become involved in the planning for the CCP in the future. Dr. J.M. Powell, past President and Canadian Forestry Service, Edmonton is the CMOS representative on CAC.

6. Youth Science Foundation (YSF)

The Youth Science Foundation (YSF) was founded in 1966 and is in a stage of continuing development. It has a small staff, working in an office in Ottawa, and is supported by many volunteers from all parts of Canada. Principal sources of funding are the Natural Sciences and Engineering Research Council (NSERC), substantial contributions also coming from Provincial Governments, Foundations, Corporation, and Associations such as CMOS. Membership is also open to individuals. Henry Watson is the CMOS liaison with YFS.

AES ACRONYMS

What are BASIC and NSERC? These are two of the many acronyms used by the AES. Do you know what they mean? Just published is a circulat DS#1-81 "Selected Listing of Acronyms and Abbreviations Relevant to the Atmospheric Environment Service". (liste de sigles et d'abréviations en relation avec le service de l'environnement atmosphérique). This listing gathers selected acronyms and abbreviations that have appeared in various scientific papers, management or committee reports or other publications of interest to the (AES). Many entries are either too new or too restricted to appear in general dictionaries of acronyms. The listing is bilingual with the equivalent in the other official language indicated. A copy of the circular can be obtained from the Climatological Services Division, AES, Downsview.

CONFERENCES

Toronto, Ont.	May 7-8, 1981 Sponsor: NRC and and Canadian Society for Civil Engineering	3rd Canadian Workshop on Wind Engineering
St. George Utah	April 14-16 1981	Western Snow Conference
Albany, New York	April 27- May 1, 1981 Sponsor: CMOS-AMS	Conference on Long-Range Transport of Airborne Pollutants
Guelph, Ontario	April 28-30, 1981	Symposium on Multi-Disciplinary Studies on Hudson-James Bay
Montreal, P.Q.	May 5-8, 1981 Sponsor: CMOS-AMS	International Conference on the Aviation Weather System
Calgary, Alberta	May 11-13, 1981	Canadian Geophysical Union
Miami Beach Florida	May 13-20, 1981	With USRI/NOAA/USN/NASA Symposium on Wave Dynamics and Radio Probing of Ocean Probing of the Ocean Surface.
Saskatoon, Saskatchewan	May 27-29 1981	15th Annual CMOS Congress
Toronto, Ontario	June 16-18, 1981 Sponsor: CMOS-AMS	4th Conference on Atmospheric Radiation
Quebec City P.Q.	July 27-31, 1981 Sponsor: AMS/ Université Laval, Ministère de l'Environ Governement du Quebec	Port and Ocean Engineering under Arctic Conditions ment

CONFERENCES - cont'd

Montreal, P.Q.	August 4-7, 1981 Sponsor: SESCI and Université of Quebec à Montréal	National Conference on Solar Engery
Calgary Alberta	August 25-26, 1981 Sponsor: Kananaskis Environmental Reseach Centre	2nd Plains Aquatic Research Conference
Palo Alto, CA.	August 25-28, 1981	12th NATO/CCMS International Meeting on Air Pollutioin Modelling ard its Application
Reno, Nevada	October 6-9, 1981	Fourth Conference on Hydrometeorology
Steamboat Springs, Col.	November 10-13, 1981	Seventh Conference on Fire and Forest Meteorology and Second Conference on Mountain Meteorology





Climatic Change in Canada

(C.R. Harington, Ed., 1980, Syllogeus No. 26, 246pp., n.p., paper bound, from National Museum of Natural Sciences, c/o C.R. Harington, Paleobiology Division, Ottawa, Canada K1A OM8).

Contains papers on: The Impact of Climatic Change on People in Canada; The National Museum of Natural Sciences Climatic Change Project; Historical Evidence of Climatic Change in Western and Northern Canada; Historical, Hydrological and Physical Evidence of Changing Climate in Eastern Canada; A Review of Paleobotanical Studies Dealing with the Last 20,000 Years; Alaska, Canada and Greenland; and Later Quaternary Paleoenvironments of Eastern Canada.

Circulation Models of Lakes and Inland Seas (T.J. Simons 1980, Canadian Bulletin of Fisheries and Aquatic Sciences No. 203, 146 pp., \$12.00 in Canada, \$14.40 in other countries paperbound, from Canadian Government Publishing Centre Supply and Services Canada, Hull, Quebec, Canada K1A OS9).

Summarizes "current understanding of large-scale water circulations in lakes and inland seas" and outline "the methodologies by which this understanding has been acquired and, undoubtedly will be enlarged in future years. More specifically this review is intended to provide the necessary background for analysis and simulation of material transport in large natural basins, as reuired by investigators of water quality problems and other ecological concerns. In view of the above, the monograph is directed at a readership with rather diverse training and interests."

Atmospheric Planetary Boundary Layer Physics (A. Longhett Ed., 1980, Developments in Atmospheric Science 11, 424 pp. \$70.75, hardbound, from Elsevier North-Holland, Inc., 5 Vanderbilt Avenue, New York, N.Y. 10017).

Presents proceedings of an International Course held in Sicily in February 1978. The book "gives an up-to-date survey of the most recent results of theoretical models of turbulence and presents the state-of-the-art in air pollution modeling. The first section is devoted to the introduction of basic concepts of the PBL and to the description of the development of the main phenomena occurring in it...The second section deals with transport and diffusion of airborne pollutants in the PBL... a third section has been reserved to observation problems of physical processes in the PBL and to models of pollutant evolution."

Ocean Science by Keith S. Stowe. 1979. 610 pages. \$17.95. Hardbound John Wiley & Sons, Inc.

The recent book Ocean Science by Keith S. Stowe, affiliate of the California Polytechnic State University, San Luis Obispo, represents a welcome addition to the list of available texts. The percentages of the book devoted to various topics are relatively conventional: history (4%); ocean origin, sediments, beaches (30%); chemistry, climate, physical oceanography (40%); nutrients and biology (22%); mineral and energy resources \$4%). However, at 610 pages, the book is somewhat longer than the usual. Equivalent lengths for comparable books are: Principles of Oceanography (R.A. Davis), 505 pages; Introduction to Oceanography (D.A. Ross), 438 pages; Oceanography: Exploring the Planet Ocean (J.J. Bhatt), 322 pages; and Elements of Oceanography (J.M. McCormick and J.V. Thiruvathukal), 346 pages.

LINEAR ACCELERATOR

PARTIAL MAP OF CAMPUS

CAMPING AT CMOS CONGRESS

For any members interested in camping facilities at Saskatoon there are two campgrounds in the vicinity:

Gordon House Camp Site - Avenue P. South of 11th Street no reservations; \$2.25 - \$4.50 per night. Facilities.

Mobile City KOA - 4.8 km S on Hwy. 11. Reservations - 373-4554 \$6.00 - \$8.25 per night. All facilities.

FROM THE PRESIDENTS DESK - (Cont'd from page 2)....

A large contingent of CMOS members recently took part in a Climate Change Seminar in Regina that had been organized for the Canadian Council of Resource and Environment Ministers. In addition to Dr. K. Hare, who gave the keynote speech, the officials present listened to talks by Dr. W. Kellogg of NCAR, Mr. M. K. Thomas of AES, and myself. The later stages of the meeting were given over the reviewing the implications of climate change on various sectors of the Canadian economy such as agriculture, forestry, fisheries, etc. The complete proceedings are expected to come out in due course from the Canadian Climate Centre at Downsview.

Last year a committee was set up to review CMOS prizes and other awards. They have suggested several changes, notably for the terms under which the President's Prize is awarded. They have also recommended that the actual prize be a plaque rather than a book. If you wish to comment on this, or have other suggestions, please write Dr. Richard Asselin, Chairman, CMOS #903, 151 Slater Street, Ottawa. Finally, I ask that any of our members who fancy themselves at logo design, send ideas for a new CMOS logo to Dr. E. Lozowski, c/o this same address. We hope to have several designs available for your criticism and vote at the time of the Congress. Thank you.

Suite 903 151 Slater Ottawa, Ontario, Canada K1P 5H3

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