



Canadian Meteorological
and Oceanographic
Society

La Société Canadienne
de Météorologie et
d'Océanographie

C.M.O.S. NEWSLETTER/NOUVELLES S.C.M.O.

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NEW PRESIDENT

Following a B.Sc. in physics, maths and biology from Mount Allison University in 1968, Mrs. Nancy Cutler took the 9-month course in meteorology offered by the then Meteorological Branch of the Department of Transport. Over the following years, as one of the small cadre of female meteorologists, Nancy worked as a forecaster in Vancouver and Toronto, a marine specialist in Halifax, a public relations coordinator for metric conversion, a meteorological trainer, and as a staff officer in the policy, planning and administrative areas of AES Headquarters in Toronto.



In 1984, she was appointed as Chief of General Weather Services for Ontario where she had the responsibility for the dissemination of all weather information and forecasts across the Province. In November 1987, Nancy Cutler was promoted to the position of Director, Climatological Applications Branch of the Canadian Climate Centre. The Branch houses the national weather archive as well as being responsible for climate applications work, and for general climatic analyses and most climate publications in Canada. Nancy sits as a member of the Canadian Climate Board, chairs a Resource Group for the Canadian Global Change Program and supports the Director-General of the Climate Centre in the development of the Canadian response strategies for climate change. At the moment she is acting for the Director-General who is on assignment. All the above activities, with a national focus, have also resulted in her involvement in many related international activities as well. Nancy Cutler has been associated with the Canadian Meteorological and Oceanographic Society for many years. She has served as Chairperson on two separate occasions for two CMOS Centres: Halifax and Toronto. Her activities with these Centres have included the organising of two CMOS Congresses.

NOUVELLE PRÉSIDENTE

Après avoir complété un B.Sc. en physique, mathématiques et biologie à l'Université Mount Allison en 1968, Mme Nancy Cutler a suivi le cours de météorologie d'une durée de 9 mois alors offert par la Direction de la météorologie du Ministère des transports. Par la suite, Nancy, l'une des rares femmes météorologistes, travaille comme prévisionniste à Vancouver et Toronto, spécialiste maritime à Halifax, coordonnatrice des relations publiques lors de la conversion au système métrique, instructrice en météorologie, et agent supérieure du personnel pour les politiques, la planification et l'administration au Bureau chef du SEA à Toronto.

En 1984, elle devient la Chef des Services météorologiques pour l'Ontario; elle est alors responsable de la diffusion de toutes les informations et prévisions météorologiques à travers la province. Nancy a été promue Directrice de la Direction des applications climatologiques du Centre climatologique canadien (CCC) en novembre 1987. La Direction entretient les archives météorologiques nationales et est aussi responsable des travaux sur les applications climatologiques, d'analyses générales sur le climat et de la plupart des publications climatologiques canadiennes. Nancy est membre du Comité canadien sur le climat et présidente d'un groupe de ressource du Programme canadien sur le changement global et apporte son soutien au Directeur général du CCC dans le développement de stratégies canadiennes de réponse au changement climatique; présentement, elle remplace ce dernier durant son affectation à l'extérieur. Toutes ces activités, d'envergure nationale, ont mené à sa participation à plusieurs activités internationales. Nancy Cutler participe aux activités de la Société canadienne de météorologie et d'océanographie depuis plusieurs années. Elle a été présidente des centres de la SCMO de Halifax et de Toronto; chaque fois, elle a participé à l'organisation du Congrès de la SCMO dans ces villes.

NEWS FROM HEADQUARTERS

The many members who attended the Victoria Congress (more than for quite some years) know how successful it was. The excellent preparations by the local arrangement and scientific committees, and the lovely surroundings contributed materially to its success. Those who were unable to come will find additional details about the Congress in the well-produced Program and Abstracts, a copy of which they should shortly receive. Highlights of results of the Annual General Meeting (AGM) that as usual took place during the Congress are given in this issue. During the next few months, the Executive will be busy following up the decisions of the AGM.

The year 1990 is, as many will be aware, an important year as far as weather observations in Canada are concerned (150 years of unbroken record in Toronto), and CMOS will of course participate in celebrating this event. Relevant information and material will be sent in the near future to all CMOS Centres and Chapters. This year holds also historic relevance for CMOS: 50 years ago the first Council of the Canadian Branch of the Royal Meteorological Society, the ancestor of CMOS, started functioning. Since then the Society has of course expanded, numerically as well as professionally. And that we are continuing to expand professionally is shown by the election of our new Vice-President, Dr. L.A. Hobson who is a biological oceanographer at the University of Victoria, B.C.

Talking about CMOS history, let me congratulate two persons who have contributed a lot to the success of that history and who were made Life Members by the Annual General Meeting. The new Life Members are Hans VanLeeuwen, the long-time editor of Chinook, and Ron Burling, the well-known west-coast oceanographer.

Let me wish them and all of you a very pleasant summer.

Uri Schwarz, Executive Director

CMOS LIFE MEMBER

Ron Burling began his career with a Diploma in Sheep Farming from the Massey Agriculture College in New Zealand. Exposed to adverse meteorological and oceanic conditions during World War II, while serving with the Royal New Zealand Air Force, Ron resolved to understand the situation better. He studied science at Victoria College (Wellington) and air-sea interaction at Imperial College, London, from which he received a Ph.D. in 1955. Coming to Canada in 1960, Ron was a leader of the vigorous air-sea interaction program at the University of British Columbia. A member of the Royal Meteorological Society since 1951, he has been very active in CMOS, both as a member of many committees and as president of the Society in 1978-1979.

NOUVELLES DU QUARTIER GÉNÉRAL

Les nombreux membres qui ont participé au congrès de Victoria (dont le nombre fut plus grand que pour les dernières années) sont au courant de tout le succès qu'il a remporté. Les excellents préparatifs du comité local d'organisation et du comité scientifique ainsi que les environs charmants ont contribué matériellement à son succès. Ceux qui n'ont pu venir trouveront des détails additionnels dans une publication qu'ils recevront bientôt sur le programme et les résumés des présentations du congrès. Les points culminants des résultats de l'Assemblée générale annuelle (AGA), qui s'est tenue comme d'habitude lors du congrès, sont présentés dans ce numéro. L'Exécutif sera occupé durant les prochains mois à faire le suivi des décisions de l'AGA.

L'année 1990 est, comme beaucoup le savent déjà, une année importante pour l'observation météorologique au Canada. La SCMO va évidemment participer à la célébration des 150 années consécutives d'observations à Toronto. De l'information pertinente ainsi que de la documentation seront bientôt envoyés à tous les Centres de la SCMO ainsi qu'à tous ses Chapitres. L'année 1990 est aussi une date historique pour la SCMO: il y a maintenant 50 ans, le premier Conseil de la section canadienne de la "Royal Meteorological Society" (l'ancêtre de la SCMO) commençait ses opérations. Depuis, la Société a évidemment étendu ses opérations tant du point de vue numérique que professionnel. La preuve de notre expansion professionnelle est l'élection de notre nouveau vice-président en la personne du Dr. L.A. Hobson, océanographe biologiste de l'Université de Victoria, C-B.

En parlant de l'histoire de la SCMO, laissez-moi féliciter deux personnes qui ont grandement contribué au succès de cette histoire et qui sont devenues des membres à vie à l'Assemblée générale annuelle. Je veux parler de Hans VanLeeuwen, l'éditeur du Chinook depuis fort longtemps et de Ron Burling, océanographe bien connu de la côte ouest.

Laissez-moi leur leur souhaiter, ainsi qu'à vous tous, un été des plus agréables.

Votre directeur exécutif, Uri Schwarz

NEW CMOS MEMBERS

These new members were approved May 17, 1990:

Dr. John Newell (regular)	Newfoundland
Mr. Nikolaos Balaskas (regular)	Ottawa
Dr. James D. Baker (regular)	United States
Mme Lily St-Amand (student)	Rimouski
Dr. Phillip A. Yeats (regular)	Halifax
Dr. Pierre Beland (regular)	Rimouski
M. Pierre-F. McDuff (regular)	Montreal
M. Pierre Dionne (student)	Montreal
Mr. James Cunmine (regular)	Winnipeg
Prof. Barry Richwien (regular)	United States
Dr. Da-Lin Zhang (regular)	Montreal
Dr. Steven Feldstein (regular)	Toronto

CMOS ANNUAL GENERAL MEETING

The President addressed the Annual General Meeting (AGM) and thanked the organizers of the 24th CMOS Congress for their excellent work. The Vice-President (later elected President) addressed the meeting from Moscow via high-tech satellite and mini-cassette technology and detailed the evolving issues with which the next Executive must contend.

The Society was very active during 1989/90 - a period in which both the government and the public was recognizing the importance of environmental issues. Current renewed membership as of June is 905 members which is higher than the preceding three years. The Society's accomplishments this year were impressive and included organizing or participating in the International Symposium of Operational Fisheries Oceanography, the Workshop on the Climate and Weather of Newfoundland, the Symposium on Arctic and Global Change and the Third Bi-annual AES/CMOS Operational Meteorology Workshop. A draft plan for the Canadian Mesoscale Meteorology Program was prepared, over 30 scientists have become Accredited Consultants, and the Broadcaster Endorsement Committee has been established and will soon accept applications for endorsement. The Council has undertaken a major reorganization of the CMOS publications. The President has received many documents and plans of relevance to the Society such as the Green Plan, the Environmental Agenda, JGOFS, GEWEX, Climate Program and the Global Change Program which the Society must consider.

Anticipated increases in administration costs and those due to new factors as the possible introduction of the GST made it necessary to increase membership and subscription fees. The AGM approved a new schedule of fees with modest increases for all levels, except for students, in order to maintain the healthy position of the Society and publications. Budgets for 1990 at the old schedule and for 1991 at the new schedule were approved by the AGM. The approved fees for 1991 are the following:

Membership Fees:

Regular	\$40
Student	\$20
Sustaining	\$150
Corporate	\$200

Subscription Fees:

	Atmosphere-Ocean	Climatological Bulletin
Members	\$25	\$15
Non-Members	\$35	\$20
Institutions	\$65	\$25

Atmosphere-Ocean is continuing to operate effectively and the future may see an increase to 6 issues per year. Chinook has been discontinued as recommended in the Consultant's report, however, based on recommendations of the Council and the AGM, the Climatological Bulletin will

continue to be published to the end of 1991. In the meantime, a working group will be formed consisting of three persons to explore the possibilities for revamping the Climatological Bulletin and Alex Paul will play a significant role in defining the future for the publication. The Newsletter has undergone several changes during the last couple of years and plans are being formulated for broadening its scope.

The Scientific Committee will be completing a document on release of public statements for review by the Executive. Terms of Reference for the Broadcaster Endorsement Committee have been approved by the Council and the Professionalism Committee will be reviewing a draft document on procedures for endorsement of media weather broadcasters. The Council has approved changes of Specialization for Accredited Consultants and the Professionalism Committee is also reviewing procedures for Accreditation disciplinary actions. The Education Committee for Meteorology will be working in close cooperation with the Broadcaster Endorsement Committee in suggesting appropriate courses to maintain a standard for Media Weather Broadcasters.

Special Interest Groups (SIGs) have been generally less active during 1989. There is interest in forming a SIG for Fisheries Oceanography. The AGM approved a motion that CMOS Centres and Chapters, SIGs and other bodies organizing national CMOS meetings such as Congresses or Workshops are entitled to retain 10% of any profits made from such meetings. Under special circumstances, Council may agree to increase this figure.

The AGM approved the granting of Life-Membership to Ron Burling and Hans VanLeeuwen for their significant contributions to CMOS.

September 5, 1990 is the date for the celebration of 150 years of weather observing in Canada. Preparations for the Sesquicentennial are extensive. CMOS has formed a Committee to suggest activities in which CMOS may actively participate. Suggestions are that CMOS Centres and Chapters may commission speakers to present relevant public lectures, that CMOS publish a booklet that gives recognition and makes known the nature of the historical contributions of weather observing in Canada, and that CMOS produce a display to be included in celebrations at the University of Toronto.

The AGM approved the following for the 1990/91 Council:

President	Mrs. Nancy Cutler
Vice-President	Dr. Louis A. Hobson
Treasurer	Mr. Bruno deLorenzis
Corresponding Secretary	Mr. Howard Kagawa
Recording Secretary	Mr. William Schertzer
Councillors-at-Large	Mr. Bevan Lawson Mr. Richard Leduc
	Dr. Kim-Tai Tee
Past-President	Dr. Han-Ru Cho

Before adjourning, the outgoing Executive was given a round of applause for its good work during the past year.

CMOS USES RECYCLED PAPER

In accord with national and international efforts to conserve renewable resources, the CMOS will use recycled paper in its publications. The June Newsletter and the Annual Review 1989 are printed on Miami (acid-free) paper that contains 62.5% post-consumer waste (see following article for more details).

Consideration is being given to printing ATMOSPHERE-OCEAN

on acid-free paper because of its durability, but only if half tones can be reproduced with the same detail currently achieved using glossy coated paper. Glossy acid-free papers are not commercially available for publications in Canada.

The following article, "The Greening of Gutenberg," has been reproduced from the January 1990 issue of On the Press (copyright: Laurie Lewis, University of Toronto Press) to provide further information about recycled paper and the permanence of papers.

The Greening of Gutenberg

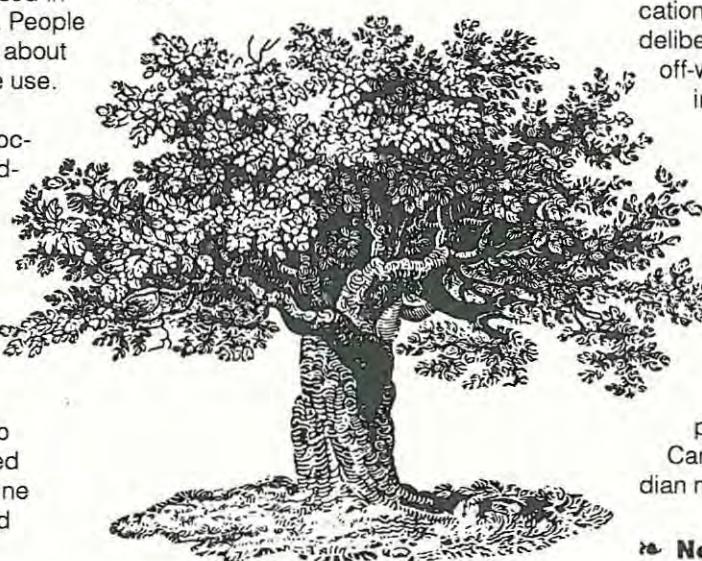
Because of the increasing concern about the environment, we at U of T Press are often asked about the content of the papers used in the printed materials we produce. People ask us about recycled paper and about the permanence of the papers we use.

Some government agencies, advocacy groups and concerned individuals are trying to encourage the use of recycled paper. There are many definitions of what constitutes "recycled." The Canadian pulp and paper industry is slowly developing a public information program which we all hope will clarify a very murky issue. In the mean-time, we will do our best to provide some simplified definitions. We hope that this outline will help us all to make careful and appropriate choices.

• Fibrous Waste

Fibrous waste includes scrap produced during the process of making paper; included are poor quality paper, paper trimmings, wood chips and some forest residues. These items are not usually considered "recycled" material according to government standards. The manufacturers regard these as recycled within the paper manufacturing process.

All papers manufactured in Canada contain some percentage of fibrous waste. Bond papers and offset printing papers may contain between 40 and 60 percent waste wood fibre. (Good quality rag-content bond papers, such as University Belfast Bond, contains post-consumer waste in the form of cotton fibres.)



Post-Consumer waste

Paper products which have passed through their intended uses as a consumer item and which have been separated or diverted for the purpose of collection, recycling, and disposition, such as old newspapers, magazines, corrugated containers, and office waste paper.

• Recycled paper

"Recovered paper", including both pre- and post-consumer waste, can be made into de-inked pulp for recycling into other paper products. At least two manufacturers in Canada are now marketing a kind of paper with 100 percent recycled content, with varying percentages of de-inked post-consumer and secondary recovered paper.

An unbleached paper using 50% recycled, de-inked, post-consumer waste will usually have an off-white or "dirty" appearance which would be adequate for most copy-paper uses. It is possible to obtain a good range of papers suitable for many different styles of communication. Some organizations not only wish to use recycled paper but wish their publication to *look* recycled. They may deliberately choose paper with a rough off-white appearance. However, it is important to know that if the "recycled look" does not suit the publication, other more suitable recycled papers are available.

• Canadian Content

Because of the lack of local facilities, a lot of Canadian waste paper is sent to the United States to be recycled. Some of the end products are imported back into Canada to fill the needs of the Canadian market.

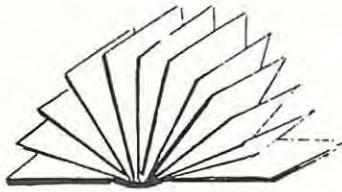
• Newsprint

At present, there are seven post-consumer recycling mills in the United States, where laws promoting the use of recycled paper in newsprint have been enacted in fourteen states. In Canada, the one functioning newsprint recycling mill is Noranda's mill at Thorold, Ontario. Another mill, scheduled to be operating "by 1990", is being built at Whitby, Ontario. Canadian newsprint mills are located near their source of supply of raw materials, which in the past has been in remote, heavily wooded areas. Now that raw materials, in the form of post-consumer newspapers, have mainly an urban source, the mills are faced with serious problems.

• Permanence

The permanence of a paper is closely related to its acid content and to the kind

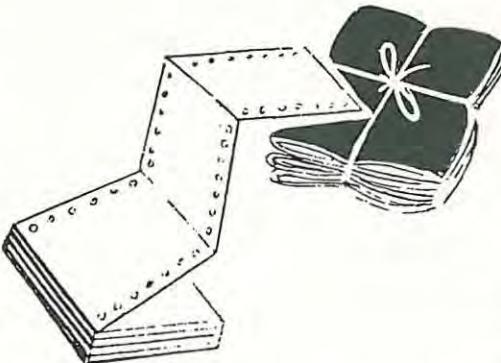
of fibres. In general, papers with high acid and short-fibres are less durable than low acid, long-fibred papers. At U of T Press we are particularly concerned about the durability of the books and journals which we manufacture. We keep on hand as a "house stock" a good supply of 55 lb. Miami Book, which is an acid-free paper (PH factor of 7.3 to 8.2) very useful for printing items which are expected to require a long life. The paper mill which makes Miami Book uses an



average of 62.5% de-inked and recycled stock in their paper products. U of T Press in 1989 used 165 tonnes of Miami Book, which is 27% of the mill's capacity. When selecting a paper for use in a publication, one consideration must be the relative durability required.

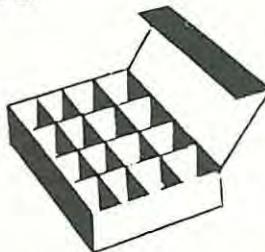
Managing Waste

At U of T Press we have maintained an active policy of waste management in paper and other materials for over twenty years. We carefully collect and dispose of waste printing papers, corrugated boxes, and out of date publications. The paper waste from our printing plant is used in several ways, depending on the type of waste:



Sortable mixed paper is a mixture of low and high grade papers. This material is used to make filler for roofing tiles. It is also used to make boxboard for shoe boxes, record sleeves, etc.

Newsprint is used to make tissue paper such as facial tissue, bathroom tissue, etc. This grade is also used to make boxboard.



Corrugated containers go directly back into making more corrugated paper.

Mixed shavings with glue, trimmed from books during the binding process, is used to make tissue paper.

Coated papers are used to make tissue paper or boxboard.

The company that collects the paper waste from our Downsview printing plant estimates that 30 percent of that paper is used to manufacture roofing tiles. Gutenberg's legacy to us through this frosty winter may be a roof over our heads as well as a book in our hands.

The only certainty is change

The pulp and paper industry is in the process of change, in part because of environmental concerns, and in part because of the demands of the marketplace. As more and more customers request "recycled" paper, the manufacturers will develop more products. Environment Canada's "Environ-



mental Choice" program is expected to announce minimum voluntary standards for recycled paper soon. By the time you read this publication there will be new information and important changes. We will try to keep our customers informed about developments in the industry.

Show and tell

At the Campus Printing + Design Office we are collecting samples of various kinds of recycled papers from international sources. We will be happy to show you samples and suggest suitable papers for any of your publications.

CMOS LIFE MEMBER

Hans VanLeeuwen began his career as a Meteorological Officer in 1957, serving as a forecaster and meteorological aircrew instructor at a number of Royal Canadian Air Force bases in Canada and Europe. He retired from the Atmospheric Environment Service in 1988 as acting Director of Training Branch. During 18 years with the Branch he held responsibilities for training and development programs, educational leave activities, recruitment of meteorologists, and the coordination with Canadian universities. As a member of the Branch he recruited or came in contact with most Canadian meteorologists. He was an active member (secretary/treasurer) of the Education Committee for Meteorology from 1981 to 1988, the editor of Chinook since 1984, and, currently, a member of the Broadcaster Endorsement Committee.



Climate Program Research Committee

The 4th meeting of the Canadian Climate Program Research Committee, which doubles as the Canadian National Committee on the World Climate Research Program (WCRP), took place at the Bedford Institute of Oceanography April 23-24, 1990.

The Committee's members are drawn from eminent climate researchers from both the public service and university community under the chair of the Director-General, Canadian Climate Centre (CCC), Atmospheric Environment Service (AES). The principal purpose of the committee is to provide assessments and advice to the National Research Council and to the Climate Program Board on the state of Canadian climate research and on Canadian participation in the WCRP.

The committee reviewed developments regarding climate change since its last meeting in May 1989. Items covered included:

- Intergovernmental Panel on Climate Change
- WMO Activities (Commission for Climatology, Second World Climate Conference, and World Climate Research Program)
- Global Energy and Water Cycle Experiment (GEWEX)
- World Ocean Circulation Experiment (WOCE)
- Environmental Agenda
- Canadian Global Change Program
- Energy, Mines and Resources Activities

The main purpose of the meeting was to review progress in the development of a Canadian Climate Research Strategy. The main thrusts of such a strategy were confirmed as:

- i) Research into delivering an homogenized climate data set
- ii) WOCE
- iii) GEWEX
- iv) Arctic
- v) Modelling
- vi) Research into new impacts methodologies

Regarding i) above, it was noted that the AES CCC is leading this activity through its links with the WMO Commission for Climatology.

The committee agreed that Canada could contribute effectively in oceanographic work and that firm plans are already in place to support WOCE. The Department of Fisheries and Oceans and university researchers are the principals on this effort.

With respect to GEWEX, a major component of the WCRP, the committee's links with the International Scientific Steering Group for GEWEX is effected through Dr. G.A. McBean who is a member of both groups. Two recent workshops have been held in Canada as aids to developing a national scientific plan for GEWEX. The draft plan will be ready by September 1990.

Regarding iv), the committee was cognizant of its responsibilities for ensuring that a scientifically sound Arctic/Climate Strategy is prepared. See penultimate paragraph below.

As regards modelling, the committee affirmed the importance of continuing and strengthening climate modelling in Canada. Developing future plans is being carried by the technical Working Group on General Circulation Models which reports to the Research Committee.

Activities with respect to improving impacts methodologies are being addressed by the CCP Socio-economic Impacts Committee.

Other items resulting from discussions

The question of the need for, and the requirements of research into paleoclimate data is to be considered by the Modelling subgroup of the Research Committee.

The chair will convene a small expert group to develop a "straw man" strategy on Arctic-Climate Change, including an examination of paleoclimate research needs.

Inquiries concerning the work of the Research Committee should be addressed to the Secretariat, Research Committee, Climate Program Office, Atmospheric Environment Service, 4905 Dufferin Street, Downsview, Ontario M3H 5T4.

SCIENCE ADVISORY COMMITTEE

As the representative of CMOS at the 32nd Annual Meeting of the Canadian Commission for UNESCO (United Nations Educational, Scientific, and Cultural Organization), I was again struck by the lack of representation of science and scientists in the Commission's activities and functions including the Board. This situation is not simply an unfortunate incident - it has been noted before by others at other sessions. I welcome the initiative to bring together a number of concerned scientists to address this situation and strongly endorse the intent to establish a National Science Advisory Committee. As I understand its representation will come initially from the National Advisory Committees of the IOC, IGCP, IHD and MAB with the view that the committee should be kept small.

Given the above and the expectations that the committee will carry some weight and be properly recognized by the Executive Board, I would like to recommend that early recognition be given to the roles of science-based Member Organizations of the Commission on this committee. May I take the liberty of pointing out that the rationale for national Commissions is based on non-governmental educational, cultural and scientific functions. There are a number of ways such representation can be handled to maintain a small group but I do not think it would be a significant move to involve some of the Member Organizations in deliberations that could help fill some of the science void in the Commission.

N.J. Campbell, CMOS Representative

Canadian Commission for UNESCO

The 32nd Annual Meeting of the Canadian Commission for UNESCO (United Nations Educational, Scientific, and Cultural Organization) was held in Hull, Quebec, April 4-6, 1990. CMOS is a Member Organization of this Commission along with a number of other Canadian scientific organizations. Our membership comes about for a number of reasons not the least of which is the fact that UNESCO is not only the home of the Intergovernmental Oceanographic Organization but also because of the relationship of UNESCO with non-governmental organizations.

UNESCO is a United Nations body, made up of Member States with governments deciding on programs, budgets and operations. As the name implies it is concerned with ideas from the domains of the universities, research and service agencies in the public and private sectors, non-governmental organizations and individuals. To provide for such input the UNESCO Constitution stipulates that each Member State must establish an advisory and liaison body whose function is to associate the national professional constituency interested in education, scientific and cultural matters with the international work of the Commission.

In Canada, the Canadian Commission for UNESCO was set up under the Canada Council in 1958 with a Secretariat, an Executive Committee and various types of member associations. As a member organization, CMOS is in a position to provide the Commission with its views on UNESCO programs, to provide Canadian contribution to the formulation and the implementation of programs in Canada, and to avail itself of other functions and services.

This year's meeting was devoted to the theme Culture, Science and Development and was opened by Federico Mayor, Director-General of UNESCO. Discussions and workshops were held on Humankind Confronting Survival of the Planet, World Decade for Cultural Development (1988-1997), and the International Literacy Year (1990).

The work of the Canadian Commission is a direct reflection of its supporters and as such culture and education have been dominant topics over the years. Although science is a major undertaking of UNESCO it is not well established or supported in the Canadian Commission. At this year's session a group of concerned scientists met to discuss this situation in an effort to correct the imbalance. The Executive Board is supportive of this initiative in what is expected to become a National Science Advisory Committee, made up in the first instance of representatives from the National Advisory Committees of the IOC, IHD, IGCP and MAB. CMOS has expressed its support for this committee and has recommended that Member Organizations of the Commission be represented as well.

N.J. Campbell, CMOS Representative

CMOS PRIZES AND AWARDS FOR 1990

During the Banquet at this year's CMOS Congress in Victoria, the following prizes were awarded:

President's Prize

Dr. Keith Thompson
Department of Oceanography
Dalhousie University, Halifax

J.P. Tully Medal in Oceanography

Professor T.R. Parsons
Department of Oceanography
McGill University, Montreal

Prize in Applied Oceanography

Dr. R. Thomson
Institute of Ocean Sciences, Sidney, B.C.

Graduate Student Prize

Dr. Sven Vagle

Reviewer in Meteorology

Dr. Michael Novak

Reviewer in Oceanography

Dr. Brian Petrie

There were no awards presented for:

Dr. Andrew Thomson Prize in Applied Meteorology

Rube Hornstein Prize in Operational Meteorology

Environmental Citation

Media Presentation

EDITOR'S COLUMN

The Editor would like to see articles on meetings, global projects, special interest groups or any topic that may be of interest to our membership. Black and white photographs or diagrams are welcomed. Authors who wish to submit by computer disk, please contact the Editor to ascertain the wordprocessing packages that can be accepted.

Items for the Newsletter should be sent to Malcolm Still, Atmospheric Environment Service, 4905 Dufferin Street, Downsview, Ontario M3H 5T4 (Tel: (416) 739-4866). The deadline for next issue is August 10, 1990.

BRINGING TECHNOLOGIES TOGETHER

AVEC NOUS AU CROISEMENT DES TECHNOLOGIES

Vacancies exist in our Environmental Research Branch for the following:

Atmospheric Scientist File No. 2104

To study the transport of contaminants in the biosphere. The successful candidate will conduct research on atmospheric dispersion modelling, as well as on other atmospheric processes. The position is expected to complement existing studies of surface/atmosphere exchange of mass and energy, biosphere modelling for the Canadian nuclear waste management program, surface hydrology studies, and research on contaminant transport in terrestrial and aquatic environments. Other duties include support of a climatological station, applied dispersion analyses for industry, environmental assessment modelling, and emergency response in the event of contaminant release to the environment. Other research may consider the impact of future climate change from natural and anthropogenic causes on predictions of contaminant cycling through the biosphere.

A post-graduate degree in atmospheric science, with experience in **atmospheric modelling**, atmospheric physics/chemistry and fluid dynamics. Fluency in English is essential for this position.

The starting salary for this position will be commensurate with qualifications and experience. AECL has a comprehensive benefits package.

Whiteshell Research employs approximately 1,000 people and is located at Pinawa, an attractive recreational/residential community on the banks of the Winnipeg River 105 km northeast of Winnipeg.

"AECL has an active employment equity program and encourages applications from women, aboriginal people, visible minorities, and people with disabilities."

Men and women who may be interested in this position and possess the necessary qualifications should apply in writing, quoting the appropriate file number and giving full particulars, to: E.A. McDonald, AECL Research, Whiteshell Laboratories, PINAWA, Manitoba ROE 1L0.

Nous avons les postes disponibles suivants dans notre Service de Recherche sur l'Environnement:

Spécialiste de l'étude de l'atmosphère (N° de dossier 2104)

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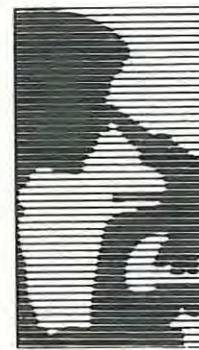
On demande un diplôme d'études supérieures en science de l'atmosphère et de l'expérience en **modélisation atmosphérique**, physique/chimie de l'atmosphère et dynamique des fluides. L'aisance à s'exprimer en anglais est essentielle pour ce poste.

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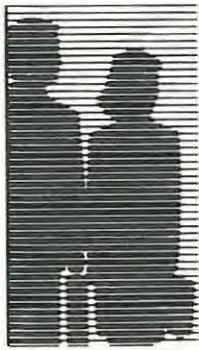
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RESEARCH ASSISTANT Cloud Physics and Radar Meteorology

Department of Earth and Atmospheric Science
York University

Applications are invited for a one-year position as a research assistant to work with Professors Ron Stewart and Peter Taylor on two separate projects related to Arctic precipitation and microbursts. Candidates should have a Masters degree in Meteorology with specialization and research experience in Radar Meteorology and Cloud Physics. The microburst project will require familiarity with the analysis of data from both Doppler and conventional radar and from mesoscale networks of surface weather stations (Mesonets). Experience with FORTRAN and C programming and with the use of both personal and mainframe computers for data analysis, numerical modelling and graphics display is essential.

The position is available for 1 year starting as soon as possible. Applications, including the names of two professional references, should be sent to:

Prof. P.A. Taylor
Department of Earth and Atmospheric Science
York University, 4700 Keele Street
North York, Ontario M3J 1P3
Tel: (416) 736-5245
Fax: (416) 736-5817

Deadline for receipt of applications is 7 August.

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

RESEARCH SCIENTISTS

The CDT group project at York University and the University of Toronto has positions for 2 research scientists. Candidates should possess a Ph.D. degree in atmospheric dynamics or related field and should have extensive experience with developing and running large atmospheric models on vector processors as well as relevant postdoctoral research experience in atmospheric dynamics. Candidates should apply to Prof. J.C. McConnell, CDT Project, Department of Earth and Atmospheric Science, York University, 4700 Keele Street, North York, Ontario M3J 1P3, from whom further details may be obtained (Tel: (416) 736-5245; Fax: (416) 736-5817). Candidates should enclose a CV, reprints of relevant published articles, a statement of salary expectations and arrange for three letters of reference to be supplied. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The deadline for applications is 10th September, 1990.

Research Assistant in Meteorology

Applications are invited for the position of research assistant in the Department of Meteorology, McGill University. The initial appointment will be for three years, starting January 1991, with renewal possible depending on funding. Duties will involve assisting in the development of micro- and minicomputer systems for the analysis of satellite data and the modeling of atmospheric radiation. A thorough knowledge of Fortran is required, as is familiarity with Macintosh, DOS, PRIME, and UNIX operating systems and their interface to optical archiving systems. The applicant should have a B. Sc. degree in Mathematics and Computer Science. Starting salary will be commensurate with experience in the range \$17,500-\$20,000.

Please send a résumé, course transcripts and the names of three references to:

Professor Roger Davies
Department of Meteorology
McGill University
805 Sherbrooke Street West
Montreal, Quebec H3A 2K6

The closing date for applications is August 31, 1990.

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

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ILLEGAL ACTIVITIES!

I read in a recent issue of Weather (Volume 44 No. 12, December 1989) that "The Pelican Social History of Britain: 16th-Century England" by Joyce Young has an interesting reference to weather forecasting. On page 36 it mentions that an Act of Parliament of 1541 included in its prohibition of all manner of sorcery the forecasting of weather. There is no record of how many meteorologists have been burnt at the stake!

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Entries on the following pages are restricted to CMOS Accredited Consultants. The accreditation process commenced in December, 1986. A complete list of CMOS accredited consultants can be obtained from the CMOS Business Office. Individuals interested in applying for accreditation may contact the CMOS Business Office at the Society's Newmarket address for a copy of the Guidelines and an application form.

As set out in the document "CMOS Guidelines for Accreditation," the criteria are:

- (1) The applicant must possess an appropriate undergraduate degree from a recognized university.
- (2) The applicant must possess at least one of the following types of specialized training:

(i) post-graduate degree from a recognized university in meteorology or oceanography;

(ii) post-graduate degree from a recognized university in the natural or applied sciences or mathematics, specializing in one or more branches of meteorology or oceanography; or

(iii) three years of on-the-job meteorological or oceanographic experience.

(3) Upon completion of the above educational and training requirements, the applicant must have spent at least two years of satisfactory performance, at the working level, in the field of specialization included in this document. This should include at least some consulting experience.

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La Société Canadienne de Météorologie et d'Océanographie The Canadian Meteorological and Oceanographic Society

La Société Canadienne de Météorologie et d'Océanographie (SCMO) a pour but de stimuler tous les aspects de la météorologie et de l'océanographie au Canada. Sa constitution date de juin 1977, alors que la Société Canadienne de Météorologie, établie en janvier 1967, a reconnu la croissance et les contributions dues à l'activité de sa section d'océanographie et a changé son nom. Toute personne ou organisation intéressée à la météorologie et/ou à l'océanographie peut en devenir membre. Les treize centres locaux et sections de la Société fournissent aux membres autant de lieux pour discuter et recevoir des conférenciers invités. Les membres qui ont des intérêts particuliers à l'hydrologie, à la pollution de l'air, à l'agriculture, à la météorologie d'exploitation ou à la glace dérivante sont encouragés à joindre des groupes d'intérêts spéciaux au sein de la Société.

La Société organise un Congrès annuel au printemps d'une durée de trois jours où l'on présente et discute des exposés, où l'on distribue des récompenses et où l'on tient la réunion générale annuelle. L'emplacement choisit pour le congrès varie selon le centre qui en est l'hôte. La Société publie trois périodiques, comprenant le Bulletin de nouvelles de la SCMO. Le Bulletin publie des lettres, des avis, des revues de livres et d'autres communications d'intérêt pour les membres. ATMOSPHERE-OCEAN est le journal scientifique trimestriel qui renferme des articles sur tous les aspects de la météorologie et de l'océanographie, de même que des notes, lettres et revues de livres appropriées. Le Bulletin climatologique est un journal qui renferme des articles et des notes d'intérêt sur la climatologie. Il est publié trois fois par année. Le Bulletin de nouvelles de la SCMO est distribué sans frais additionnels à tous les membres.

Les demandes d'adhésion sont approuvées par le bureau d'administration à ses réunions mensuelles. Les demandes d'adhésion et d'abonnement reçues après le 1^{er} octobre sont pour l'année suivante.

Le Conseil de la SCMO pour 1989/90

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The Canadian Meteorological and Oceanographic Society (CMOS) exists to advance all aspects of meteorology and oceanography in Canada. It assumed its present constitution in June 1977. This development recognized the growth and contributions of an active Oceanographic section within the parent Canadian Meteorological Society established in 1967. Membership in the Society is open to individuals and organizations with interests in the fields of meteorology and/or oceanography. Through its thirteen local Centres and Chapters, the Society provides a forum for members to participate in discussions and hear guest speakers. Members with special interests in the fields of hydrology, air pollution, agriculture, operational meteorology or floating ice are encouraged to join Special Interest Groups within the Society.

The Society sponsors an annual Congress each spring, usually lasting three days, where papers are presented and discussed, various awards are given, and the yearly business meeting is held. The location of the Congress varies, with the local Centres serving as hosts. The Society publishes three periodicals, including the CMOS Newsletter. The Newsletter carries correspondence, notices, book reviews and other items of general interest to members. ATMOSPHERE-OCEAN is a quarterly scientific journal containing articles on all aspects of meteorology and oceanography as well as relevant notes, correspondence, and book reviews. The Climatological Bulletin contains articles and notes of particular interest to the field of climatology and is published three times a year. The Newsletter is distributed free to all members.

New members are accepted into the Society by the National Executive at their monthly meetings. Applications and subscriptions received after October 1 are for the following year.

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JUNE/JUIN

Vol 18 No.3

See over/au verso

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Please enroll me as a member of the Society. I attach a cheque for \$ _____ payable to the Canadian Meteorological and Oceanographic Society for the membership fee and/or publication subscriptions. I also include a tax-deductible donation of \$ _____ for (check one):

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Signature

Faire parvenir à la SCMO la demande d'adhésion complétée à l'adresse au dessus.