



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



JUNE/JUIN

1983

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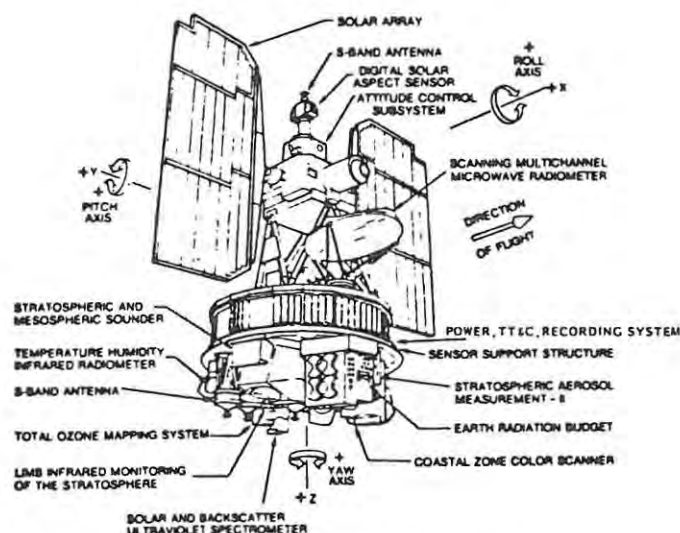
RESULTS OF THE 1982 "SURVEY OF EXPECTATIONS FROM CMOS"

THE SURVEY CARRIED OUT LAST YEAR WAS VERY SUCCESSFUL. ABOUT 750 COMPLETED QUESTIONNAIRES WERE RECEIVED, SOME OF THEM FROM NON-CMOS MEMBERS AS THE QUESTIONNAIRES HAD BEEN SENT NOT ONLY TO CMOS MEMBERS BUT ALSO TO ALL AES AND OSS STAFF, STUDENTS OF METEOROLOGY AND OCEANOGRAPHY AND OTHERS.

THE REPLIES TO THE FIRST FIVE QUESTIONS IN THE QUESTIONNAIRE LEND THEMSELVES TO STATISTICAL PRESENTATION AND ANALYSIS; THEIR RESULTS WILL BE PUBLISHED IN A FUTURE NEWSLETTER. IN ADDITION, THERE WERE SOME 150 REPLIES CONTAINING MORE DETAILED VIEWS, MANY OF THEM IN RESPONSE TO QUESTION No. 6 ("SUGGEST CHANGES THAT CMOS SHOULD MAKE"). THE FOLLOWING GIVES A BRIEF SUMMARY OF THESE REPLIES WHICH ARE BOUND TO STIMULATE THINKING AND DISCUSSION. THE EDITOR WOULD BE PLEASED TO PUBLISH CORRESPONDENCE ON THE SUBJECTS RAISED IN THE SUMMARY IN FUTURE ISSUES OF THE NEWSLETTER.

BROADENING THE APPEAL OF CMOS

A LARGE NUMBER OF SUGGESTIONS DEAL WITH THE NEED TO BROADEN THE SOCIETY'S APPEAL: TO SYNOPTICIANS, OPERATIONAL METEOROLOGISTS, AMATEURS, EVEN THE GENERAL PUBLIC. IN OTHER WORDS, CMOS SHOULD CATER TO ALL THOSE INTERESTED IN METEOROLOGY AND OCEANOGRAPHY, TO TECHNICIANS AND AMATEURS AS WELL AS TO SCIENTISTS. HOWEVER, THE VIEW THAT THERE SHOULD BE MORE ATTENTION TO (SPECIFIC) SCIENTIFIC SUBJECTS IS ALSO REPRESENTED, BUT NUMBERS ARE MUCH SMALLER (ABOUT 3:1).



Nimbus 7 Spacecraft

PUBLICATIONS OF THE SOCIETY

MANY REPLIES DEAL WITH ATMOSPHERE-OCEAN. WHILE THE MAJORITY REGARDS IT AS BEING TOO SCIENTIFIC AND DEALING TOO LITTLE WITH APPLIED METEOROLOGY, THERE ARE SOME WHO BELIEVE THE OPPOSITE, CALLING FOR HIGHER QUALITY ARTICLES. SEVERAL SUGGEST THAT THE MAGAZINE SHOULD NOT BE PART OF THE YEARLY MEMBERSHIP FEE, EITHER BECAUSE OF LACK OF INTEREST OR BECAUSE IT CAN BE OBTAINED FROM THE LIBRARY.

SPECIFIC COMMENTS ON CHINOOK ARE FEWER BUT MOSTLY POSITIVE; SOME CALL FOR THE MAGAZINE'S EXPANSION IN SIZE OR CONTENT. THE POSSIBILITY OF AMALGAMATING CHINOOK WITH THE NEWSLETTER IS ALSO BROUGHT UP. THERE ARE ALSO A FEW SUGGESTIONS FOR IMPROVEMENTS TO THE NEWSLETTER WHICH SEEM TO FULL-FILL AN INCREASINGLY IMPORTANT ROLE. AMONG THE VERY FEW COMMENTS ON THE CLIMATOLOGICAL BULLETIN, THE HOPE IS EXPRESSED THAT IT WILL BE MORE ATTUNED TO THE NEEDS OF APPLIED CLIMATOLOGY THAN THE OTHER CMOS PUBLICATIONS.

CMOS STRUCTURE AND MEMBERSHIP/FEE QUESTIONS

SOME OF THE MANY SUGGESTIONS UNDER THESE HEADINGS DEAL WITH THE DESIRABILITY OF ELECTING OFFICERS BY GENERAL BALLOT LIKE THE AMS (WHICH IS SOMETIMES CITED AS A GOOD EXAMPLE IN OTHER RESPECTS TOO). THE QUESTION IS ALSO RAISED WHETHER METEOROLOGY AND OCEANOGRAPHY SHOULD, OR WILL IN THE LONG RUN, CONTINUE TO BE ASSOCIATED. COMMENTS ON MEMBERSHIP AND FEE STRUCTURE DEAL WITH THE PUBLICATIONS THAT SHOULD BE INCLUDED IN THE FEE, THE FEE ITSELF (TOO HIGH), FEE REDUCTIONS FOR RETIRED MEMBERS AND THE DESIRABILITY OF ATTRACTING FOREIGN MEMBERS. THE LATTER ECHOES CALLS ELSEWHERE FOR MORE INTERNATIONAL (AS WELL AS NATIONAL) RECOGNITION FOR CMOS.

CONGRESS/AGM

MANY COMMENTS DEAL WITH QUESTION OF PUBLICATION OF PROCEEDINGS. SOME CALL FOR LESS FREQUENT CONGRESSES, THAT CONGRESS SUBJECTS SHOULD BE MORE- /LESS SCIENTIFIC AND BE ATTENDED BY A LARGER SEGMENT OF MEMBERS.

CMOS AIMS AND ACTIVITIES

QUITE A FEW WANT THE SOCIETY TO BE CONSIDERABLY MORE ACTIVE PROMOTING NATIONAL PROGRAMMES AND POLICIES IN METEOROLOGY AND OCEANOGRAPHY, IN LOBBYING WITH GOVERNMENT, INFLUENCING UNIVERSITY CURRICULA AND RESEARCH, AND BEING AN INTERMEDIARY BETWEEN PROVIDERS AND USERS. GREATER EDUCATIONAL AND PUBLIC RELATIONS EFFORTS ARE CALLED FOR, AND THERE ARE SEVERAL WHO CALL FOR ACCREDITATION PROCEDURES, ALTHOUGH A MINORITY IS OPPOSED. THERE IS NO CONTROVERSY CONCERNING THE NEED FOR MORE ATTENTION TO SPECIAL INTEREST GROUPS, AND SEVERAL NEW ONES ARE PROPOSED. ACTIVITY BY CENTRES AND CHAPTERS, BY SOME THOUGHT THE BACKBONE OF THE SOCIETY, SHOULD ALSO BE PROMOTED. FINALLY, THERE ARE A NUMBER OF SUGGESTIONS FOR GREATER INVOLVEMENT IN ENVIRONMENTAL MATERS, AND SOME MISCELLANEOUS SUGGESTIONS, SUCH AS THE SALE OF A SOCIETY TIE OR PIN.

URI SCHWARZ

PUBLICATIONS COMMITTEE

The publications' committee has been disbanded as a separate committee. It is to be replaced by a more business-oriented structure composed of a Publication manager and publications ad hoc committee resembling a publications board. Members of this ad hoc committee will likely consist of the Senior Editors of all C.M.O.S. publications, the Technical Editor of A-O and an advertising manager.

CMOS AWARDS

1982

<u>Recipients & Awards</u>	<u>Citation</u>
Mr. Ross Howard: Citation Award	"his book and numerous articles in the Toronto Star have contributed significantly towards public awareness of air pollution and acidic precipitation problems".
Mr. M.K. Thomas: Dr. Andrew Thomson Prize	"for his substantial contributions to applied climatology, with particular reference to his vigorous leadership and diplomacy in launching national and international climate programs, and for his many papers, all highly lucid, practical, and widely quoted, illustrating the nature and value of climatology".
Dr. G.J. Boer: President's Prize	"for his outstanding contributions to climate modelling and diagnostics over many years and in particular for his paper "Diagnostics Equations in Isobaric Coordinates" which provides a consistent, comprehensive and coherent framework for the diagnosis of the general circulation".

Dr. J.R. Wilson:
Applied Oceanography Prize

"for his dedication and expertise as Director of the Marine Environmental Data Service over the past decade. In particular for his central role in developing the Canadian Wave Climate Study as a highly regarded source of accurate data for both practical and scientific uses".

Mr. P.A. Haering:
Rube Hornstein Prize

"in recognition of his outstanding work in the application of satellite data to operational meteorology".

Mr. Glen B. Lesins:
Graduate Student Prize

"for his contributions in the design and construction of a unique pressure-controlled wind tunnel for cloud physics research and his joint publications".

LIST OF CMOS AWARD RECIPIENTS

1982

Mr. Ross Howard Toronto, Ontario	Citation Award
Mr. M.K. Thomas Toronto, Ontario	Dr. Andrew Thomson Prize
Dr. G.J. Boer Downsview, Ontario	President's Prize
Dr. J.R. Wilson Nepean, Ontario	Applied Oceanography Prize
Mr. P.C. Haering Delta, British Columbia	Rube Hornstein Prize
Mr. Glen B. Lesins Toronto, Ontario	Graduate Student Prize

TERMS OF REFERENCE FOR EACH AWARD

President's Prize

President's Prize may be awarded each year to an individual or individuals for a recent paper of special merit in the fields of oceanography or meteorology. The paper must have been published in ATMOSPHERE-OCEAN or have been presented to the Society membership at a national or local meeting, and have been accepted for publication in a refereed journal.

The Dr. Andrew Thomson Prize in Applied Meteorology

A prize in applied meteorology may be awarded for each calendar year to a member of the Society for an outstanding contribution in the field of applied meteorology.

Graduate Student Prizes

When contributions of special merit in meteorology and/or oceanography by graduate students come to the notice of the Awards Committee, special graduate student prizes may be awarded.

The Rube Hornstein Prize in Operational Meteorology

A prize known as the Rube Hornstein Prize in Operational Meteorology may be awarded for each calendar year to an individual for providing outstanding operational meteorological service in its broadest sense, but excluding the publication of research papers as a factor, unless that research is already incorporated as an aid in the day-by-day performance of operational duties. The work for which the prize is granted may be cumulative over a period of years or may be a single notable achievement.

The Prize in Applied Oceanography

A prize in applied oceanography may be awarded in each calendar year to a member or members of the Society, for a significant contribution to the application of oceanography in Canada.

Citations

The Society may award citations to individuals or groups who in the opinion of Council have, in the previous year, made some outstanding contribution in helping to alleviate pollution problems, in promoting environmental improvements, or in developing environmental ethics.

RAPPORT SUR LE PROGRAMME SCIENTIFIQUE MÉTÉOROLOGIE DYNAMIQUE

Six présentations composaient cette session, à laquelle une vingtaine de spécialistes ont participé. Steve Lambert du Centre climatologique canadien a fait une analyse détaillée des observations d'une onde no 5 qui semble être une caractéristique principale de l'hémisphère sud; Kevin Hamilton de l'Université de Colombie Britannique a présenté une étude sur la conservation du momentum stratosphérique par les ondes de gravité, ce qui confirme généralement par une approche nouvelle les théories actuelles; Jacques Derome de l'Université McGill a démontré que la solution linéaire des équations du tourbillon pour des perturbations d'amplitude bornée forcées par la topographie est en fait une solution non linéaire; il enchaîna en présentant les résultats qu'il a obtenus avec Hersh Mitchell du Centre de recherche en prévision numérique et qui indiquent qu'il est possible pour des sources de chaleur assez intense mais de structure arbitraire de produire des résonances ressemblant à des blocages dans des courants pour lesquels le tourbillon potentiel est en phase avec la fonction de courant; Doug Phillips de l'Université d'Alberta a présenté une étude analytique de l'effet de la forme des barrières montagneuses sur la distribution de la pression autour de l'obstacle; enfin de l'Université de Toronto, Han-Ru Cho, en collaboration avec Mary Ann Jenkins, a présenté les résultats qui établissent la validité d'un ensemble d'équations principales pour les perturbations tropicales par comparaison avec les observations obtenues dans l'Expérience Globale Tropicale (GATE).

Il n'est pas possible ici d'aller dans les détails mais il suffit de dire que chacun de ces travaux était de très bonne qualité scientifique et qu'ils ont générée beaucoup de discussions. Les auteurs représentaient plusieurs centres d'expertise canadiens, ce qui indique que la météorologie dynamique, c'est à dire la base fondamentale de l'étude du fluide atmosphérique, est bien en vie au Canada.

R. Asselin

REPORT ON DECISIONS REACHED AT THE SEVENTEENTH ANNUAL GENERAL MEETING OF CMOS - MAY 3, 1983, BANFF, ALBERTA

1. The reports of the Executive, Committee Chairmen, Centre Chairmen, Special Interest Groups and Editors were received. Most of the reports were contained in the Annual Review 1982 but were updated based on meetings held at Congress.
2. The majority of the meeting was spent discussing motions from Council and the floor.

2.1 CMOS Logo

A motion to accept the "iceberg logo" as displayed on the Annual Review and the abstract issue of A-O was defeated. A second motion to hold a binding mail ballot to determine the most favoured logo was also defeated. What eventually passed was a motion to hold a ballot with numerous candidate logos, with the final decision resting with Council.

2.2 Chinook

The purchase of Chinook from Mike Newark for the price of \$1.00 was passed by the AGM. From the time of purchase, Chinook will be a totally CMOS Publication, joining Atmosphere-Ocean, the Newsletter, the Climatological Bulletin and the various Congress Publications.

2.3 Fee Structure

In one of the most historically significant moves by the Society, the AGM approved the splitting of membership fees from all subscription fees, except for the Newsletter. This means that beginning in 1984, the regular member will have complete freedom of choice as to which publications he receives. It was seen as a positive situation that Atmosphere-Ocean need not remain as a compulsory subscription for all members, and a statement that it had matured into a world class journal in high demand by individuals and institutions around the world. The resultant decrease in straight membership fee is hoped to attract more CMOS members.

2.4 1984 Fees

The fees were left substantially unchanged from 1983, except as required by the previous motion.

Membership Regular Membership - \$20.00 - (receive Newsletter)

Student Membership - \$12.00 - (received A-O, Newsletter)

Corporate/Sustaining Membership - \$75.00 - (receive A-O, Newsletter)

Subscriptions

(CMOS Members)	Atmosphere-Ocean	\$20.00
	Climatological Bulletin	\$10.00
	Chinook	\$ 7.50

Subscriptions

(Institution)	Atmosphere-Ocean	\$50.00
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2.5 Associate Membership

Since Regular Membership without A-O is now available at \$20.00/year, the AGM approved dropping this membership class.

2.6 A-O Subscription to Non-CMOS Members

The AGM approved the subscription to A-O by individual, non-CMOS members at the rate of \$25.00/year.

2.7 Retired Members

As noted in the last Newsletter, Council was asking the AGM for the ability to approve a reduction in fees for retired members who so apply. The AGM defeated this proposal, primarily because they felt it might be too hard to administer.

2.8 Scientific Committee (SCICO) Travel

The AGM approved a \$2,000.00 addition to SCICO's budget to enable a sub-committee on meso-scale research to complete a study on problem areas.

3. In other business, the AGM approved Montreal as the site of the 1985 Congress (1984 - Halifax). It is also likely that Halifax will be the location of the National Executive in 1985/86, after Ottawa.

S.I.G.'S

A new special interest group on Sea Ice is in the making. Approximately twenty people attended a preliminary meeting at the Banff Congress and elected Mr. J. Eley of Gulf Canada as acting Chairman until an official slate of officers is chosen. Those interested in participating in this group are asked to contact Joe Eley by writing to:
P.O. Box 130
CALGARY, Alberta
T2P 2H7
(403) 233-4352.

CHANGES TO ATMOSPHERE-OCEAN

At the Banff Meetings the Editorial Committee and CHCS Council have agreed on the following changes to Atmosphere-Ocean.

1. The new Co-Editors are Dr. Phil Merilees, Canadian Climate Centre, AES, Toronto, and Dr. Fred Dobson, Ocean Circulation Division, BIO, Dartmouth, Nova Scotia. Dr. Merilees is the Senior Co-Editor, and henceforward will be handling all submissions for publication in the atmospheric and hydrological sciences. Fred Dobson will be handling manuscripts in oceanographic sciences. Prospective contributors should note they they should send their manuscripts directly to the Co-Editor dealing with their discipline at the address given below:

<p>Dr. P.E. Merilees Canadian Climate Centre Atmospheric Environment Service 4905 Dufferin Street City of North York Downsview, Ontario M3H 5T4</p>	<p>Dr. F.W. Dobson Ocean Circulation Division Atlantic Oceanographic Laboratory Bedford Institute of Oceanography P.O. Box 1006 Dartmouth, Nova Scotia B2Y 4A2</p>
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2. The Editorial Committee has decided to update the list of Associate Editors and has authorized the Co-Editors to invite new people and release incumbents from their obligations as appropriate. The new list will be published in the Newsletter and in A-O when it is complete. The affiliations of all Associate Editors will be listed on the inside cover of A-O.
3. In our "Instructions to Authors," we are deleting the sentence that reads "Because of space limitations, articles should not normally exceed 16 printed pages."
4. After careful consideration of the financial position of the Society and A-O, the Council has decided to separate the CMOS membership dues and the A-O subscription, so members now have the choice of subscribing to A-O or not. The new A-O subscriptions will be \$20 for members and \$25 for non-members. Payment of page charges will remain voluntary.

The new editors take this opportunity to express their heartfelt thanks to Henry Leighton and Paul LeBlond for the excellent job they have done in building A-O into an internationally-accepted and widely-read scientific journal.

P.E. Merilees

F.W. Dobson

PHOTOS - PHOTOS - PHOTOS

WE ARE CALLING ON METEOROLOGISTS/OCEANOGRAPHERS, WHO ARE AMATEUR PHOTOGRAPHERS, AND ON PHOTOGRAPHERS WHO ARE AMATEUR METEOROLOGISTS/OCEANOGRAPHERS, TO SUBMIT PHOTOGRAPHS SHOWING CANADIAN WEATHER (WITH OR WITHOUT LANDSCAPES) THROUGHOUT THE SEASONS, FOR A CMOS CALENDAR. BLACK/WHITE PHOTOS ON GLOSSY PAPER, SIZE 20X25 CM. (8X10 INS.) ARE WANTED. SUBMIT ANY TIME, AND IF WE RECEIVE SUFFICIENT PHOTOS BY THE END OF THIS SUMMER, WE WILL TRY AND PRODUCE THE CALENDAR FOR 1984. PHOTOS RECEIVED LATER WILL BE USED FOR A SUBSEQUENT CALENDAR. SO, START CLICKING! HERE IS YOUR CHANCE TO BECOME FAMOUS! PLEASE SUBMIT PHOTOS FOR THE ATTENTION OF URI SCHWARZ, EXECUTIVE DIRECTOR AT CMOS HEADQUARTERS. (ADDRESS ON BACK OF NEWSLETTER)

CHANGEMENTS À ATMOSPHERE-OCEAN

Aux réunions tenues à Banff, Le Comité de rédaction ainsi que le Conseil d'administration de la SCMO ont convenu d'introduire les changements suivants à ATMOSPHERE-OCEAN:

1. Les nouveaux codirecteurs scientifiques seront Dr. Phil Merilees du Centre climatologique canadien, SEA, Toronto (Ont.) et Dr. Fred Dobson, Division de la circulation océanique, IOB, Dartmouth (N.-E.). Dr. Merilees est le codirecteur scientifique principal et sera responsable par conséquent de toutes les soumissions pour publications traitant des sciences atmosphériques. Fred Dobson s'occupera des manuscrits portant sur l'océanographie. Tous les auteurs devront prendre note que leurs manuscrits doivent être envoyés directement au codirecteur s'occupant de leur discipline à l'adresse appropriée suivante:

<p>M. P.E. Merilees Centre climatologique canadien Service de l'environnement atmosphérique Environnement Canada 4905, rue Dufferin North York Downsview (Ontario) M3H 5T4</p>	<p>M. F.W. Dobson Division de la circulation océanique Laboratoire océanographique de l'Atlantique Institut océanographique de Bedford B.P. 1006 Dartmouth (Nouvelle-Écosse) B2Y 4A2</p>
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2. Le Comité de rédaction a décidé de mettre à jour la liste des directeurs scientifiques associés et a autorisé les codirecteurs scientifiques à inviter de nouvelles personnes et à dégager, tel qu'approprié, de leurs obligations, celles qui servent actuellement. Une fois complète, la nouvelle liste paraîtra dans le Bulletin de nouvelles de la SCMO et dans A-O. L'affiliation de tous les directeurs scientifiques associés apparaîtra au revers de la couverture de A-O.
3. Nous avons éliminé dans les "Renseignements pour l'auteur" la phrase suivante: "À cause des limitations d'espace les articles ne doivent pas dépasser 16 pages dans le format final."
4. Suite à un examen méticuleux de la position financière de la Société et de A-O, le Conseil d'administration a résolu de séparer les frais d'adhésion et d'abonnement à A-O, de sorte que les membres ont actuellement le choix de s'abonner à A-O ou non. Les nouveaux frais d'abonnement à A-O sont de \$20 pour les membres et de \$25 pour les non-membres. Les frais de publication restent à la discrétion de l'auteur.

Les nouveaux directeurs scientifiques aimeraient profiter de la présente occasion pour exprimer leurs sincères remerciements à Henry Leighton et Paul LeBlond pour l'excellent effort qu'ils ont fourni, parvenant ainsi à transformer A-O en une publication scientifique bien lue et reconnue internationalement.

P.E. Merilees

F.W. Dobson

DIRECTORY OF CANADIAN PHYSICISTS

THE CANADIAN ASSOCIATION OF PHYSICISTS IS PREPARING A DIRECTORY FOR ALL CANADIAN PHYSICISTS WHETHER OR NOT THEY ARE MEMBERS OF THE CAP. SOME SCIENTISTS OR ENGINEERS WHO DID NOT INITIALLY HAVE A BSC. IN PHYSICS BECAME PHYSICISTS BY TRAINING AND THROUGH CLOSE COLLABORATION IN PHYSICS. APPROXIMATELY ONLY 20 PER CENT OF CANADIAN PHYSICISTS ARE IDENTIFIED IN THE CAP MEMBERSHIP LIST. THOSE WHO ARE INTERESTED IN SUBMITTING THEIR NAMES FOR THE DIRECTORY ARE ASKED TO CONTACT THE CAP OFFICE AT:

151 SLATER ST., SUITE 805,
OTTAWA, ONTARIO
K1P 5H3

NEW MEMBERS

Mr. Dale R. Kimmett Winnipeg, Manitoba	Lloyd M. Dickie Dartmouth, Nova Scotia
H.R. Whiteley Guelph, Ontario	Mr. G.L. Holland Kanata, Ontario
Li-Chen Wang Vancouver, British Columbia	Maureen C. Cribb Sept-Îles, Quebec
James N. Moun Vancouver, British Columbia	Janet Dickie Winnipeg, Manitoba
Mr. W.D. Wilson Red Deer, Alberta	Maureen McHenry Calgary, Alberta
Dr. B.G. Sanderson Vancouver, British Columbia	James F.L. Knight Fredericton, New Brunswick
Patrick Cummins Ste-Foy, Quebec	Marie Bouille Sillery, Quebec
Marc Lucotte Montreal, Quebec	Marcia A. Faurer Winnipeg, Manitoba
Hae-Yong Shin Vancouver, British Columbia	Gordon C. Staples Vancouver, British Columbia
Daniel G. Wright Dartmouth, Nova Scotia	Patrick J. Murray Cornerbrook, Newfoundland
Mr. John Crawford Ottawa, Ontario	Dr. F.E. Bunn Rexdale, Ontario
Dr. M.J. Bowman Stony Brook, New York, USA	Dr. W.J. Stolize Saskatoon, Saskatchewan
Mr. R.V. Horne Vanier, Ontario	Dr. Diane Ingraham Richmond, British Columbia
Mr. W.D. Wilson Red Deer, Alberta	Mr. W.G. Lee Vancouver, British Columbia
Mr. David Forbes Windsor Junction, Nova Scotia	Mr. André Tremblay Outremont, Quebec
Ms. M.M. Burgess Ottawa, Ontario	M. Claude Masse St-Laurent, Quebec
Mrs. L. Royer Vancouver, British Columbia	Mr. Rod Olson Edmonton, Alberta
Mr. Robert L. Baldwin Anchorage, Alaska	Dr. Tarek Jandali Vancouver, British Columbia
Miss P. Gourley Edmonton, Alberta	M. Roger Bouffard Longueuil, Quebec
Mr. D. Ross Williams Islington, Ontario	Keith Ayotte Vancouver, British Columbia
Heather E. Auld Belleville, Ontario	Mark Christoforo Torbay, Newfoundland
Stephen Blackwell Edmonton, Alberta	Robert Cyr Ste-Dorothee Laval, Quebec
Michel Jean Montreal, Quebec	Karen A. Dewar Winnipeg, Manitoba
Ronald G. Perkin Sidney, British Columbia	David J. Cameron Nepean, Ontario
Richard Power Belleville, Ontario	Saroja Polavarapu Toronto, Ontario
David Broudhurst Toronto, Ontario	Roger Blais Ville de Quebec, Quebec
Wayne Hodgins Pointe Claire, Quebec	

NOTICE TO NEW MEMBERS

THOSE WHO APPLY FOR MEMBERSHIP MUST WAIT FOR ACCEPTANCE BY COUNCIL. AS A RESULT, NEW MEMBERS CAN EXPECT SEVERAL MONTHS TO PASS BEFORE THEIR NAMES ARE PRINTED IN THE NEWSLETTER.

NEW CORPORATE MEMBERS (1983)

Fathom Atlantic Ltd. Dartmouth, Nova Scotia	Ph.D. Associates Ltd. Rexdale, Ontario
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CORPORATE AND SUSTAINING MEMBERS

Fathom Atlantic Ltd. Dartmouth, Nova Scotia	Ph.D. Associates Ltd. Rexdale, Ontario
NORDCO Ltd. St. John's, Newfoundland	Beak Consultants Ltd. Richmond, British Columbia
Panarctic Oils Ltd. Library Calgary, Alberta	Frederick Goertz Ltd. Willowdale, Ontario
Seaconsult Marine Research Ltd. Vancouver, British Columbia	Wellsdale Research Limited St. Albert, Alberta
Dobrocky Seatech Ltd. Sidney, British Columbia	Bristol Aerospace Ltd. Winnipeg, Manitoba
Aanderaa Instruments Ltd. Victoria, British Columbia	Hermes Electronics Ltd. Dartmouth, Nova Scotia
Viatec Resources Systems Inc. Calgary, Alberta	Intera Environmental Consult Ltd. Calgary, Alberta
Alberta Agriculture Advisory Committee on Weather Modification Three Hills, Alberta	FENCO Consultants Calgary, Alberta
Ontario Hydro - Meteor. Systems Toronto, Ontario	Airflow Developments Canada Ltd. Mississauga, Ontario
Geneq Inc. Anjou, Quebec	M.E.P. Ltd. Downsview, Ontario
Hymeteq A.L. Ltd. Downsview, Ontario	Envirocon Ltd. Vancouver, British Columbia
Petro-Canada Calgary, Alberta	MacLaren-Plansearch Ltd. Halifax, Nova Scotia
Canada Oil and Gas Lands Administration Ottawa, Ontario	MacDonald Dettwiler & Associates Ltd. Richmond, British Columbia

MEMBERS WITH UNKNOWN ADDRESSES AS OF 29 MARCH 1983

Dan Budinski Edmonton, Alberta	James B. Dempsey Victoria, British Columbia
Dr. Donald McEwen Saskatoon, Saskatchewan	Don Keith Clark Belleville, Ontario
B.V. Tryggvason London, Ontario	Glenn Mainprize Edmonton, Alberta
Godelieve Deblonde Cambridge, Massachusetts, USA	

Anyone in contact with any of the above members is asked to send in their new addresses to the CMOS Secretary.

EDITORIAL POLICY

The CMOS NEWSLETTER is the principal medium by which Society members may exchange items of CMOS news and interest. It is a bi-monthly publication mailed to all members and, except for advertising revenue, is funded through Society membership fees. Articles are accepted in either official language, and responsibility for content rests with their respective authors. Although views expressed are not necessarily those of CMOS, the editorial staff shall endeavour to maintain a level of integrity deserving of the Society.

Mailing Address

Dave Mudry
Ice Climatology
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Service
Third Floor
365 Laurier Avenue West
Ottawa, Ontario
K1A 0H3

Editorial Board

Editor: Dave Mudry
Associate Editors: André Bolduc
Rick Lee

The Canadian Meteorological and Oceanographic Society 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 January 1967. Membership in the Society is open to individuals and organizations with genuine interests in the fields of meteorology and oceanography.

Members living in or near cities with local Centres or Chapters (there are now twelve Centres and two Chapters) have opportunities to hear guest speakers and participate in discussions at monthly meetings of the Centre. Members with special fields of interest 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 varies, with the local Centres serving as hosts.

ATMOSPHERE-OCEAN is the quarterly scientific journal of the Society. It contains articles on all aspects of meteorology and oceanography as well as relevant notes, correspondence and book reviews. The C.M.O.S. NEWSLETTER, issued every two months, carries reports on Society Activities and other items of interest to members. In addition, the Society sponsors the CLIMATOLOGICAL BULLETIN which is published twice a year and is available by separate subscription.

The CMOS Newsletter is sent to all members. A subscription to Atmosphere-Ocean is included in all categories of membership except Associate. Associate members are under some restrictions regarding rights and privileges at the National level.

New members are approved by the National Executive at monthly Executive meetings.

LETTER TO THE EDITOR

Sir:

It is with great pleasure I noted in the February 1983 NEWSLETTER, Vol. 11, No. 1, that Environment Canada has established the Morley K. Thomas Long-Service Award. This is fitting recognition for someone whose name has been so closely associated with Canadian meteorology for so many years.

When preparing notes for his speech on the occasion of Morley Thomas' retirement, the President, unfortunately, failed to go back sufficiently far in time. If he had gone back another decade and a half, he would have discovered that Morley was Treasurer of the Canadian Branch of the RMS, according to Vol. 1, No. 1, January 1950, of the Branch publication which preceded Atmosphere. In 1956 he was appointed Editor of the Branch publication, and served in that capacity for a number of years.

Wishing you continued success with the NEWSLETTER.

Keith R. Greenaway
Member, CMOS

LA POLITIQUE EDITORIALE

Le BULLETIN DE NOUVELLES de la SCMO est la voie principale par laquelle Ses membres peuvent échanger des articles d'information et d'intérêt. C'est une publication bimestrielle qui est expédiée à tous les membres et qui, sauf pour les revenus de la publicité, est financée par les frais d'adhésion. Les articles sont acceptés dans l'une ou l'autre des langues officielles et le contenu demeure la responsabilité de l'auteur. Même si les idées exprimées ne sont pas nécessairement celles de la SCMO, la rédaction tentera de maintenir un niveau d'intégrité digne de la société.

Adresse postale

Dave Mudry
Climatologie des glaces
Service de l'environnement
atmosphérique
3^e étage
365, avenue Laurier ouest
Ottawa (Ontario)
K1A 0H3

Conseil de rédaction

Rédacteur en chef: Dave Mudry
Rédacteurs adjoints: André Bolduc
Rick Lee

La Société Canadienne de Météorologie et d'Océanographie 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 de nom. Toute personne ou organisation intéressée à la météorologie ou à l'océanographie peut en devenir membre.

Les membres qui demeurent près des villes où la Société a des Centres ou des Sections locales (il y a maintenant douze Centres et deux Sections) ont l'occasion d'y entendre des conférenciers invités et de participer aux réunions mensuelles. Les membres qui ont des intérêts particuliers 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 elle présente des exposés, distribue des récompenses et tient la réunion générale annuelle. L'endroit du congrès varie selon le centre qui en est l'hôte.

ATMOSPHERE-OCEAN est le journal scientifique trimestriel de la Société. On y publie des articles sur tous les aspects de la météorologie et de l'océanographie, de même que des notes, lettres et comptes rendus de publications. Le bulletin de NOUVELLES de la SCMO, publié à tous les deux mois, rapporte les activités de la Société et d'autres communications d'intérêt pour les membres. De plus, la Société parraine le Climatological Bulletin qui est publié deux fois l'an et auquel les membres peuvent souscrire.

Le bulletin de NOUVELLES de la SCMO est distribué à tous les membres. ATMOSPHERE-OCEAN est distribué à tous sauf aux membres associés. Les droits et privilèges des membres associés au niveau national sont quelque peu restreints.

Les demandes d'adhésion sont approuvées par le bureau d'administration à ses réunions mensuelles.

OOOPS! - OUR MISTAKE(S)!

It has been noted that in the last issue of the Newsletter Mr. A. THOMSON's name was incorrectly spelled. We apologize for the superfluous "P" which escaped our scrutiny.

C.M.O.S. Editorial Staff.

NSERC OFFERS RECORD NUMBER OF SCHOLARSHIPS FOR 1983-84

The Natural Sciences and Engineering Research Council (NSERC) recently announced that, as a result of its annual competition for scholarships and fellowships, record numbers of awards are being offered to graduate students in science and engineering across Canada.

As part of NSERC's continuing program for the training of highly qualified Canadian researchers in science and engineering, Council has offered 2,486 postgraduate scholarships valued at \$10,500 each per annum. This is a 22% increase over the number of awards offered last year and reflects in part the dramatic 26% increase in the number of scholarship applications received from universities. The Council has also offered 181 postdoctoral fellowships valued at \$21,000 each per annum, up from 168 last year.

This dramatic upturn has been attributed to two factors acting in unison - the economic conditions of the country and the stimulative actions initiated by NSERC in the first three years of its Five-Year Plan.

Council has done everything possible within the confines of its current budget to respond to this unexpected, but welcome increase. Funding has been diverted from other programs and the value of the scholarships has been frozen at last year's level to permit the maximum funding to go towards an increase in the number of scholarships rather than higher stipends.

In addition to the postgraduate and postdoctoral awards mentioned above, Council has offered 125 of its prestigious 1967 Science and Engineering Scholarships, valued at \$15,750 each per annum, and 12 Postgraduate Scholarships in Science Librarianship and Documentation, valued at \$10,500 each per annum.

The potential total expenditure by Council for these scholarships and fellowships is \$30 million. The currently approved NSERC budget for all research training awards is \$46.1 million for 1983-84, an increase of 230% since 1980-81.

For further information, please contact:

Marilyn A. Taylor
Information Officer
Telephone: (613) 993-3659

NSERC 1983-84 AND 1984-85 BUDGETS INCREASED

The Minister of State for Science and Technology, the Honourable Donald Johnston, announced a Technology Policy for Canada on May 3, 1983.

The following are highlights of that policy which involve the Natural Sciences and Engineering Research Council and are of direct concern to the university research community.

1. To support university research and enhance its contributions to technology development, the funding of the Natural Sciences and Engineering Research Council has been increased by \$26.7 million over the next two years. The distribution of the \$26.7 million is as follows: \$13 million in 1983-84 and \$13.7 million in 1984-85.
2. To support the development of a National Microelectronics Design Network, an initial fund of \$7.5 million over two years has been awarded to NSERC. The fund will be used to establish a university-based computer-linked network of design and testing stations for Very Large Scale Integrated (VLSI) circuits. These facilities will help train the manpower critical to the expansion of the Canadian microelectronics industry.

LE CRSNG OFFRE UN NOMBRE RECORD DE BOURSES POUR 1983-84

Lors de son concours annuel pour l'obtention de bourses d'études et de recherche, le Conseil de recherches en sciences naturelles et en génie (CRSNG) a offert un nombre record de bourses aux étudiants de 2^e et 3^e cycles en sciences et en génie de tout le Canada.

Dans le cadre de son programme de formation de chercheurs canadiens hautement qualifiés en sciences et en génie, le CRSNG a offert 2 486 bourses d'études supérieures, d'une valeur de \$10 500 par année chacune. Cette augmentation de 22% par rapport au nombre de bourses offertes l'an dernier, ne répond que partiellement à l'accroissement spectaculaire de 26% du nombre de demandes. Le Conseil a également offert 181 bourses postdoctorales de \$21 000 par année chacune, soit une augmentation par rapport à 168 en 1982-83.

Cet important accroissement du nombre de demandes est attribuable à la combinaison de deux facteurs: la situation économique actuelle et les mesures d'incitation mises en oeuvre par le CRSNG au cours des trois premières années de son plan quinquennal.

Le Conseil a fait tout en son possible, étant donné les limites de son budget actuel, pour répondre à cette augmentation inattendue mais fort bienvenue. Le Conseil a prélevé des fonds à même le budget d'autres programmes et a gelé la valeur des bourses au niveau de l'an dernier afin de pouvoir accorder un plus grand nombre de bourses, plutôt que d'en augmenter la valeur.

Outre les bourses d'études supérieures et les bourses postdoctorales, le Conseil a décerné 125 de ses prestigieuses bourses en sciences et en génie 1967, d'une valeur de \$15 750 par année chacune, et 12 bourses d'études supérieures en bibliothéconomie et documentation scientifiques, d'une valeur de \$10 500 par année chacune.

Les dépenses totales prévues par le Conseil pour ces bourses s'élèvent à \$30 millions. Le budget du CRSNG actuellement approuvé pour toutes les bourses de formation de chercheurs est de \$46,1 millions pour 1983-84, soit une augmentation de 230% depuis 1980-81.

Pour de plus amples informations, veuillez communiquer avec:

Marilyn A. Taylor
Agent d'information
Téléphone: (613) 993-3659

AUGMENTATION DU BUDGET DU CRSNG POUR 1983-84 ET 1984-85

Le 3 mai 1983, le Ministre d'État chargé des Sciences et de la Technologie, l'Honorable Donald Johnston, annonçait une politique de développement technologique pour le Canada.

Certains aspects de cette politique concernent le Conseil de recherches en sciences naturelles et en génie et intéressent directement les chercheurs universitaires.

1. Pour appuyer la recherche universitaire et intensifier ses contributions au développement technologique, le financement du Conseil de recherches en sciences naturelles et en génie est augmenté de \$26,7 millions pour les deux prochaines années. Cette somme est répartie comme suit: \$13 millions en 1983-84 et \$13,7 millions en 1984-85.
2. À l'appui de la création d'un réseau national de conception en microélectronique, le CRSNG reçoit un financement initial de \$7,5 millions, répartis sur deux ans. Ce montant sera utilisé pour la mise sur pied d'un réseau universitaire informatisé de postes de conception et d'essai de circuits intégrés à très grande échelle (VLSI). Ces installations aideront à former la main-d'œuvre si importante pour l'expansion de l'industrie canadienne de microélectronique.

The Natural Sciences and Engineering Research Council offers a program of strategic grants to initiate or to accelerate research projects or programs in areas of Canadian interest. The aim of the program is to enable university researchers to make greater contributions than in the past towards the understanding or the solutions of problems of national concern either through specific applied research projects having potential for relatively short-term benefits or through more basic research activities designed to develop knowledge in areas of potential importance.

The program currently funds six specific areas and one open area. These are energy, environmental toxicology, oceans, communications, food/agriculture, and biotechnology. The open area supports research projects in areas of national concern other than those six areas already identified for support.

Projects are rated on scientific merit, excellence of the applicants, and relevance of proposed research. A selection of projects potentially of interest to CMOS members has been prepared from the seven summaries of 1982-83 research projects.

Food/Agriculture

Improved utilization of the resources within Canada's 200-mile fisheries management zone. Bligh, E.G., Fish. Res. & Tech., Tech. Univ. N.S., with R.G. Ackman, J.A. Gill, and J.H. Merritt.

Energy

An assessment of the spatial variability of solar energy at the earth's surface. Hay, J.E., U.B.C.

Open

Remote sensing of atmospheric pollutants by gas filter correlation spectrometer. Nichols, R.W., York U.

Oceans

Design, development and test of an improved ice surveillance radar system for marine use. Austin, G.L., McGill U.

Geochemistry of oceanic ferromanganese nodules. Calvert, S.E., U.B.C., with D.J. Huntley.

A study of marine natural products. Findlay, J.A., U.N.B., with E.W.K. Jay, C.S. Lobban, A.B.A. Taylor, M.L.H. Thomas, Z. Valenta, N.J. Whitney, and K. Wiesner.

Ice surveillance in the Arctic using surface-based radar. Haykin, S., McMaster U.

The movement of water and sediment near the sea bed. Huntley, D.A., Dalhousie U., with A.J. Bowen and D.J.W. Piper.

The ecology of the Atlantic herring and mackerel. Koslow, J.A.

A study of anthropogenic chemical traces in the Arctic. Moore, R.M., Dalhousie U.

Intermediate and large-scale motions in the Northeast Pacific Ocean. Mysak, L.A., U.B.C.

Experimental assessment of urchin-algae-lobster interaction in relation to fishery development. South, G.R., Memorial Un., with D.H. Steele.

Geologic buffering of the global carbon cycle. Veizer, J., Ottawa U., with P. Fritz, U. of Waterloo, and B. Jones, U. of Alberta.

The Ocean Science Affairs Branch of the Department of Fisheries and Oceans provides a coordinator for Remote Sensing activities and a national perspective on policies, programs and priorities. These functions include support to senior management in planning and development of remote sensing technology programs and headquarters liaison with other government agencies and industry.

Some of the current developments in the department are:

1. Moniteq Limited is under contract to develop a florescent line imager, an imaging optical spectrometer with a high radiometric sensitivity capable of ocean colour measurements of phytoplankton in the open oceans. The sensor development of Moniteq Limited is to be completed for September 1983 delivery. Applications evaluation projects are being coordinated by Dr. Gower of IOS of the department.
2. The Bedford Institute of Oceanography has received approval to acquire a digital computer based image analysis system. This system will provide the facility for BIO research scientists to integrate remotely-sensed data in synoptic analysis of oceanic phenomena.
3. The Canadian Hydrographic Service (CHS) continue the evaluation of airborne optical and laser sensor techniques for shallow water bathymetric measurements. The laser approach, together with accurate aircraft navigational information, form the thrust of this new development. A ground processing system will produce field sheets as input to the preparation of hydrographic charts from the flights.
4. The Institute of Ocean Sciences has acquired an image analysis facility which will provide the oceanographic application software system developed by the University of Miami.
5. Fisheries scientists continue to evaluate the Nimbus-7 satellite ocean colour data taken off Vancouver Island. This project is aimed at determining the correlation between fishing catch locations and satellite observed phytoplankton blooms.

Howard Edel
March 31, 1983

NEWSLETTER SCHEDULE

It is planned that the C.M.O.S. Newsletter will be published five times per calendar year. Deadlines for input to these issues will be approximately two weeks prior to the mailing dates listed below:

MAILING DATES	PRESS DEADLINES
1st- February 28th	February 14th
2nd- June 30th	June 15th
3rd- August 31st	August 15th
4th- October 31st	October 15th
5th- December 31st	December 10th

Once an editor always an editor!?...
It has just been learned that Av Mann is the editor for the proceedings of the 1983 C.M.O.S. Congress. Thanks Ed!

C.M.O.S. LOGO "CALL FOR FURTHER SUGGESTIONS"

Since a mail ballot is to be conducted to select a final logo for C.M.O.S., additional logo designs can be submitted for consideration if received at C.M.O.S. headquarters before August 15th 1983. All old and new entries will be printed in the next issue of the Newsletter. Those people wishing to submit new designs are reminded that logos should be black-and-white reproducible and of physical size near that in use by C.M.O.S.

SCIENTIFIC SEMINARS,
MEETINGS,
WORK SHOPS.

From time to time representatives of our respective meteorological and oceanographic government agencies attend scientific "state-of-the-art" sessions that are virtually unknown to the general membership. Since the C.M.O.S. newsletter offers a medium through which such scientific information can be communicated, it is urged that it be used. If you have been to a scientific seminar, meeting or workshop that may be of interest to others, let's hear about it.

SYMPOSIUM ON RISK IN TRANSPORT
UNIVERSITY OF WATERLOO
DEC 6-7, 1983.

THE SYMPOSIUM WILL EMPHASIZE RISKS ASSOCIATED WITH THE CONVENTIONAL TRANSPORT MODES WHICH ARE USED FOR TRANSPORTING BOTH PEOPLE AND GOODS, I.E., ROAD, RAIL, AIR AND WATER.

INVITED AND CONTRIBUTED PAPERS WILL BE PRESENTED BY RESEARCHERS AND PEOPLE FROM THE TRANSPORT INDUSTRY. PRESENTATIONS WILL DEAL WITH RISKS TO BOTH TRAVELLERS AND THOSE LIVING ON OR NEAR TRANSPORTATION ROUTES. RISKS TO TRAVELLERS MAY INCLUDE LOSS OF LIFE, HEALTH, PROPERTY OR THE AVAILABILITY, RELIABILITY OR QUALITY OF TRAVEL ITSELF AND INCLUDE THE LIKELIHOOD, EFFECTS AND IMPLICATIONS OF SUCH EVENTS AS TRAFFIC ACCIDENTS, FAILURE OF THE MODE OF TRANSPORT, AND FAILURE OF ROAD SURFACE OR TRACK. THE RISKS TO PROPERTY AND THOSE LIVING NEARBY MAY ARISE FROM TRANSPORT VEHICLES OR FROM HAZARDOUS MATERIAL CARRIED BY THE VEHICLES.

DEADLINE ON WHICH TO INDICATE PRESENTATION OF A PAPER AT THE SYMPOSIUM WAS POSTED AS JUNE 15, 1983. IT IS NOT KNOWN IF THIS DATE WILL BE EXTENDED.

REGISTRATION: \$75.00

SUMMARIES OF PAPERS AND REQUESTS FOR FURTHER INFORMATION SHOULD BE FORWARDED TO:

PROF. SAM YAGAR
DEPT. OF CIVIL ENGINEERING
UNIVERSITY OF WATERLOO
WATERLOO, ONTARIO, CANADA
N2L 3G1

(519) 885-1211, EXT. 3929 OR 2535

ADVANCE NOTICE

CANADIAN HYDROLOGY SYMPOSIUM 1984

QUEBEC CITY JUNE 10-12

"WATER QUALITY EVOLUTION WITHIN THE HYDROLOGICAL
CYCLE OF WATERSHEDS"

CHS:84 will be held June 10-12, 1984, at Laval University in Quebec City. The Symposium is sponsored by the National Research Council of Canada's Associate Committee of Hydrology, and it will deal with the interaction between hydrological processes within watersheds and the substances which determine water quality.

Studies of the sources of substances transported by water and of the pathways along which they are carried will be emphasized. Topics initially identified for attention at the Symposium are:

- Atmospheric inputs and their impact on water quality
- Overland runoff processes influencing water quality
- Sources and mechanisms of transport in groundwater flow
- Water quality evolution in rivers, lakes and reservoirs
- Land use as a determinant of water quality
- Constituents and processes in urban runoff
- The hydrometry of water quality measurement

- Modeling of water quality using deterministic and stochastic hydrological models

The Symposium will bring together Canadian and other hydrologists to share and integrate knowledge of the hydrological aspects of water quality as determined through a wide variety of approaches. To receive the call for papers for the Symposium and future announcements, please fill in and return the form below.

I plan to attend CHS:84. Please enter my name on the Symposium mailing list.

Name _____ Position _____
Address _____ Phone _____

Return To: H.R. Whiteley
School of Engineering
University of Guelph
Guelph, Ontario N1G 2W1

PREMIER AVIS

SYMPOSIUM CANADIEN D'HYDROLOGIE 1984

QUÉBEC, LES 10, 11, 12 JUIN 1984

"ÉVOLUTION DE LA QUALITÉ DE L'EAU DANS
LE CYCLE HYDROLOGIQUE D'UN BASSIN VERSANT"

Ce symposium aura lieu à l'université Laval, Québec, les 10, 11 et 12 juin 1984. L'événement se tiendra sous les auspices du Comité associé d'hydrologie du Conseil national de la recherche et le thème portera sur l'interaction entre les processus hydrologiques des bassins et les substances qui déterminent la qualité de l'eau.

L'emphase portera sur les études sur l'origine des substances transportées par l'eau et leur cheminement dans les milieux atmosphérique, aquatique et terrestre.

Les sujets suivants seront aussi traités:

- L'impact atmosphérique sur la qualité de l'eau
- L'influence du ruissellement superficiel sur la qualité de l'eau
- Origine des substances et mécanisme de transport dans l'eau souterraine
- L'évolution de la qualité de l'eau dans les rivières, les lacs et les réservoirs
- L'influence de l'utilisation des terres sur la qualité de l'eau
- Les composantes et le processus du ruissellement en milieu urbain
- Les techniques de mesure de la qualité de l'eau
- La simulation de la qualité de l'eau à l'aide de modèles hydrologiques déterministes et stochastiques

C'est un rendez-vous pour les hydrologues canadiens et d'ailleurs qui désirent partager et assimiler les connaissances sur les aspects hydrologiques de la qualité de l'eau présentés par le biais d'un éventail étendu d'approches.

En retournant le formulaire ci-dessous dûment rempli, vous recevrez l'avis sollicitant des communications pour le symposium ainsi que l'information qui sera diffusée d'ici juin 1984.

J'ai l'intention d'assister au symposium canadien d'hydrologie 1984 et je vous prie d'ajouter mon nom à la liste de distribution.

Nom _____ Fonction _____
Adresse _____ Téléphone _____

Adresse de retour: H.R. Whiteley
School of Engineering
University of Guelph
Guelph, Ontario N1G 2W1

IAHR SYMPOSIUM ON ICE - HAMBURG - 1984

First Announcement and Call for Papers
for

7th International Symposium on Ice
to be held from August 27 - 31, 1984, in Hamburg

Sponsored by
International Association for Hydraulic Research

Organized by
Hamburgische Schiffbau-Versuchsanstalt GmbH.
Hamburg, West Germany

Time Schedule

Abstract submission : 31.12.1983
Preliminary acceptance : 29.02.1984
Full paper submission : 31.05.1984
Preregistration deadline : 31.05.1984

Practical Information

The Symposium will be held at the Congress Center Hamburg (CCH).

Several hotels of different price categories have been contacted to accommodate the guests.

Hotel reservation forms will be provided by the second circular.

During the Symposium, several technical and sightseeing tours will be organized as e.g. to the new ice model basin of H5VA in Hamburg, completed in 1984.

A boat excursion from Hamburg to the island of Helgoland, situated in the Germany Bay of the North Sea, is planned to provide a break in the sequence of technical sessions.

An icebreaking reception and a banquet (with dance) is planned.

A ladies program will ensure a pleasant stay in Hamburg for the wives.

Program

The program includes the following topics, which cover most of the fields of ice engineering.

After two days of single sessions on basic topics in ice engineering, the Symposium will be held in parallel sessions, one on river ice engineering and the other on sea ice engineering.

Basics in Ice Technology

1. Physics and Mechanics of River, Lake and Sea Ice
2. Instrumentation and Measuring Techniques in Ice Engineering
3. Statistical Methods in Ice Engineering
4. Physical Modeling of Ice Problems

Ice Engineering for Inland Waters

1. Formation of River and Sea Ice
2. Ice Hydraulics
3. Transportation Systems
4. Structures in Rivers
5. Ice Management in Rivers

Arctic Marine Engineering

1. Ice Conditions
2. Application of Geophysical Research to Ice Engineering
3. Marine Transportation in Arctic Regions
4. Offshore Structures and Harbours in Arctic Regions

5. Ice Piling and Ridiging

The official Symposium language is English. All correspondence, abstracts and papers are to be addressed to:

Dr. Joachim Schwarz
Ice Engineering Division
Hamburgische Schiffbau-Versuchsanstalt GmbH.
P.O. Box 600 929
2000 Hamburg 60
West Germany
Telephone: (040) 692 03-332
Telex: 2174 236

INTERNATIONAL CONFERENCE ON SCHOOL AND POPULAR METEOROLOGICAL EDUCATION

Lady Margaret Hall
A college of Oxford University, England

July 2, 3 and 4, 1984

The original concept of a meeting which is part-conference and part-workshop has not been changed, and an outline program has been drafted as follows:

- Day 1 - Morning: What is done now and why:
Accounts of educational activities in various countries, presented in a way which is likely to generate discussion.
- Afternoon: Workshops:
Demonstrations of apparatus and equipment (commercial and home-made), and practical sessions using teaching aids. Delegates wander from demonstration to demonstration, observing, discussing, and "having a go" themselves.
- Day 2 - Morning: Communication/teaching/learning techniques:
Papers concerned with the use of television, local radio, national radio, visual aids, books, projects, etc.
- Afternoon: Somewhat uncertain as yet:
Possibly an outing. Possibly demonstrations of equipment by manufacturers. Possibly a display of books.
- Day 3 - Morning: The future:
What needs to be taught? What technology can be used? Is it necessary to educate the general public meteorologically? The importance of teaching correct concepts. And so on.
- Afternoon:
Another chance to visit the workshops, followed by a closing session of summaries and discussion, with particular reference to the drafting of a communiqué or booklet containing proceedings and recommendations.

J.M. Walker
Education Secretary
Royal Meteorological Society
James Glaisher House
Grenville Place
Bracknell, Berkshire RG12 1BX
United Kingdom

The Public Service of Canada is
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des chances égales d'emploi à tous



Research Scientist – Physical Oceanography

Ref. No.: 82-NCRSO-DFO-6 (2024)

**Government of Canada
Fisheries and Oceans
Dartmouth, Nova Scotia**

IN-DEPTH SCIENTIFIC PURSUITS

The Bedford Institute of Oceanography requires a creative research scientist to be stationed at the Atlantic Oceanographic Laboratory. Your mandate will involve establishing a nucleus of scientific and technical expertise in the study, growth, movement and dispersion of sea ice and icebergs that occur in the waters off Eastern Canada. We are offering a program of independent research based on the need for a sound scientific interpretation of sea ice data in terms of large-scale surface layer processes. We will be relying on you to prepare proposals for new and expanding programs and, as necessary, to act as scientific authority for contracted work by providing advice to management and outside agencies. You will also be involved in certain field duties.

Qualifications

You require a doctoral degree in physical oceanography, physics, applied mathematics or a related field from a recognized university, or a lesser degree with research experience and scientific productivity equivalent to a doctorate. A sound background in oceanography teamed with experience

in the use of numerical models and in the utilization of large data sets is mandatory. A pre-employment medical will be required.

Language Requirements

Knowledge of English is essential.

Salary

We offer a salary ranging from \$25,315 to \$47,088 commensurate with your qualifications and experience.

Additional job information is available by writing to the address below.

Tout renseignement relatif à ce concours est disponible en français et peut être obtenu en écrivant à l'adresse suivante:

How to apply

Send your application form and/or résumé to:

**Joan Girling
National Capital Region Staffing Office
Public Service Commission of Canada
300 Laurier Avenue West
Ottawa, Ontario K1A 0M7
Tel.: (613) 593-5331, ext. 403
Closing date: June 30, 1983.**

Please quote the applicable reference number at all times.

Canada

PRELIMINARY NOTICE

ENGINEERING FOUNDATION CONFERENCE

EMERGING COMPUTER TECHNIQUES IN STORMWATER AND FLOOD MANAGEMENT

**October 30 - November 4, 1983
Niagara-on-The-Lake, Ontario, Canada**

The Canadian and American Societies of Civil Engineering are jointly sponsoring an Engineering Foundation Conference on the consolidation and evaluation of facts, field experience, research data and expert opinion regarding emerging microcomputer technology in the management of stormwater flooding and pollution. The conference aims to cover hardware and software applications in hydrometeorological data acquisition; data storage, retrieval and presentation; rainfall, runoff and water quality modelling; graphics, statistical and text processings; and real-time control of storage, diversions and treatment facilities.

A formal proceedings will be published by the ASCE.

Contact:

**Dr. William James
Civil Engineering Department
McMaster University
Hamilton, Ontario
L8S 4L7**

Telephone: (416) 527-6944

ARCTIC OPERATIONS RELATED TO
EXPLORATION AND DRILLING

1984 Energy Sources Technology Conference and Exhibit

Offshore Mechanics/Arctic Engineering Symposium

New Orleans, Louisiana, U.S.A.

February 12 - 16, 1984

ANNOUNCEMENT

This session is being organized by the Arctic Committee of the Petroleum Division of ASME.

Authors are invited to submit papers on any aspect of field operations that has particular applicability to the Arctic regions, directly or indirectly. Of particular interest will be papers on the subjects of offshore logistics, ice-breaking support, floating drilling operations in ice-infested waters, airborne logistics and support, and ice management. Specifically, the following subjects are considered representative but not necessarily all-inclusive:

- (a) High Arctic Surface Logistics.
- (b) Arctic Airborne Operations.
- (c) Operational Ice Surveillance Methods.
- (d) Marginal Ice Zone (MIZ) Marine Operations.
- (e) Polar Submarine Technology.
- (f) Icebreaker Support for Arctic Drilling Operations.
- (g) Ice Management and Drilling Program Simulation.

Inquiries regarding the session and all correspondence and manuscripts should be directed to the session organizer as follows:

Dr. Frank G. Bercha
F.G. Bercha and Associates Limited
938 - 2 Avenue N.W.
Calgary, Alberta
T2N 0E6
Telephone: (403) 270-2221
Telex: 03-827666

CALL FOR PAPERS

To facilitate planning, the organizer would appreciate receiving an abstract from prospective authors as soon as possible, preferably before March 1, 1983. Authors will be given notification of acceptance by April 1, 1983. Four copies of the complete manuscript in accordance with ASME guidelines will be due at the above address by July 11, 1983. All papers presented will be reviewed and authors will be given notification regarding final acceptance by August 15, 1983. Final manuscripts of accepted papers must be prepared on special typing mats supplied after acceptance and must be resubmitted by October 1, 1983.

PANEL

In addition, the above is organizing a panel session directed at delineating the state of art of Arctic offshore operations. Several individuals with considerable experience in the area have already been invited, but anyone who feels that he or she can contribute significantly is also invited to contact the organizer. However, participation cannot be guaranteed, as the panel will consist of six members in addition to the Chairman.

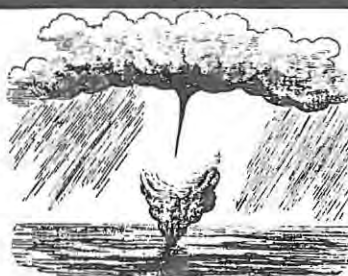
C.M.O.S.

XVIII ANNUAL CONGRESS, 1984

Planning is well underway for the 1984 CMOS Congress to be hosted by Halifax Centre. During the past year, a Congress Steering Committee comprised of CMOS and Canadian Geophysical Union (CGU) representatives examined the feasibility of holding the CMOS Congress in conjunction with the CGU Annual Meeting. This committee has submitted a report to Halifax Centre and the National Societies, with recommendations on meeting dates, site and format which form the basis of the present plans.

A fully-integrated meeting of the two Societies will be held May 29 - June 1, 1984, at Dalhousie University in Halifax, Nova Scotia. The scientific sessions will be spread over four days to allow time for one or more common sessions of interest to both CMOS and CGU attendees and for a half-day visit to an Open House at the Bedford Institute of Oceanography. The Local Arrangements Committee has been formed, co-chaired by Dr. Rod Shaw of CMOS (Environmental Protection Service, Queen's Square, 45 Alderney Drive, Dartmouth, Nova Scotia, B2Y 2N6, (902) 426-6132) and Dr. Patrick Ryall of CGU. The Program Committee, to be co-chaired by Dr. Stuart Smith (Bedford Institute of Oceanography, P.O. Box 1006, Dartmouth, Nova Scotia, B2Y 4A2, (902) 426-2558) of CMOS and Ms. Ruth Jackson of CGU, is presently being set up.

John W. Loder
Chairman, Halifax Centre



CHINOOK ADVERTISING INFORMATION

Established 1978.

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cancellation accepted after 7 days pre. closing date. Per year \$6.

Ag. Comm. - 15%; c.d. 2% - 10th of month following.

General Advertising Rates

SIZE	BLACK & WHITE	BLACK & 1 COLOUR	4 COLOURS
1 Page	\$ 680	\$ 750	\$1,000
2/3 Page	510	600	800
1/2 Page	400	495	800
1/3 Page	295	390	700
1/4 Page	220	330	
1/6 Page	150		
Double Page Spread	1,000	1,110	1,500

Discounts: 2 ti. 5%; 3 ti. 10%, 4 ti. 15%

Covers (noncancellable) - On request.

Bleed Pages - 5% extra.

Classified Rate

Display: \$50 per column inch.

Personnel

Pubr. & Editor: Michael J. Newark

Circulation

Average distribution 1,500.

Mechanical Requirements

Printed offset.

Type page: 7-1/8" wide x 9-1/4" deep.

Trim size: 8-1/2" wide x 11" deep.

Column width: 2-1/4".

Number of columns: 3.

Black and White: supply original artwork or repro proofs.

Black and 1 colour and 4 colours: supply colour-separated nega-
tive film, emulsion side down.
Progressive proofs or colour
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work charged to advertiser.

Mechanical Specifications

Double Page Spread	1/3 Page Vertical
15 - 1/2" x 9-1/4"	2-1/4" x 9-1/4"
Page	1/3 Page Square
7-1/8" x 9-1/4"	4-11/16" x 4-5/8"
2/3 Page	1/6 Page
4-11/16" x 9-1/4"	2-1/4" x 4-5/8"
1/2 Page Horizontal	1/4 Page
7-1/8" x 4-5/8"	4-11/16" x 3-5/16"
1/2 Page Vertical	
4-11/16" x 6-3/4"	

CALENDAR OF ACTIVITIES FOR 1983-84

The following schedule of activities is intended to provide
CMOS members with the approximate timing of certain activities
and decisions to be taken by the Executive during 1983-84.

- Mid-August - Preliminary drafts of submissions for grants and subventions from AES, NSERC and possibly DFO will be prepared.
- End of August - Proposals for subventions for the Centres and a list of names of proposed candidates for vacant Committee positions will be prepared.
- Requests for nominations for the Society's awards and citations will be published in appropriate journals and in the Newsletter.
- September 1 - Last day for the receipt of new proposals for the CMOS LOGO.
- Mid-September - A national membership campaign strategy will be initiated.
- Late September - The Chairman of the Nominations Committee will be chosen.
- Cheques will be sent out to the Centres.
- Candidates approved for serving on various Committees will be notified of their selection.
- Mid-October - The By-Laws Committee will submit a draft of by-law amendments.
- Late October - The first draft of the 1984-85 budget proposal will be prepared.
- Ballots for the vote on the LOGO proposals will be distributed.
- Early December - Centres will be asked to submit lists of speakers and their subjects.
- CMOS members will be asked to nominate candidates for the Society's awards.
- Mid-December - The submissions for grants will be approved and forwarded to appropriate agencies.
- Renewal Notices will be mailed out.
- Early January - Centres and Committees will be asked to submit their annual reports.
- The Awards Committee will begin to review candidates for the Society's awards and citations.
- February 1 - Deadline for:
 - Reports from Committees and Centres.
 - Nominations from the membership for the Society's awards.
 - Receipt of ballots for the LOGO design.
- Mid-February - LOGO design ballots will be tabulated.
- The Awards Committee will finalize its report.
- The 1984-85 budget proposal will be finalized.
- Early March - CMOS members will receive the report of the Nominations Committee and an invitation to nominate other members.
- Mid-April - If necessary, ballots will be sent to CMOS members for the election of officers.
- Late May - If necessary, the ballots for the election of officers will be counted.
- May 29-31 - The Congress will take place in Halifax.

Rick Lawford



GENEQ inc.

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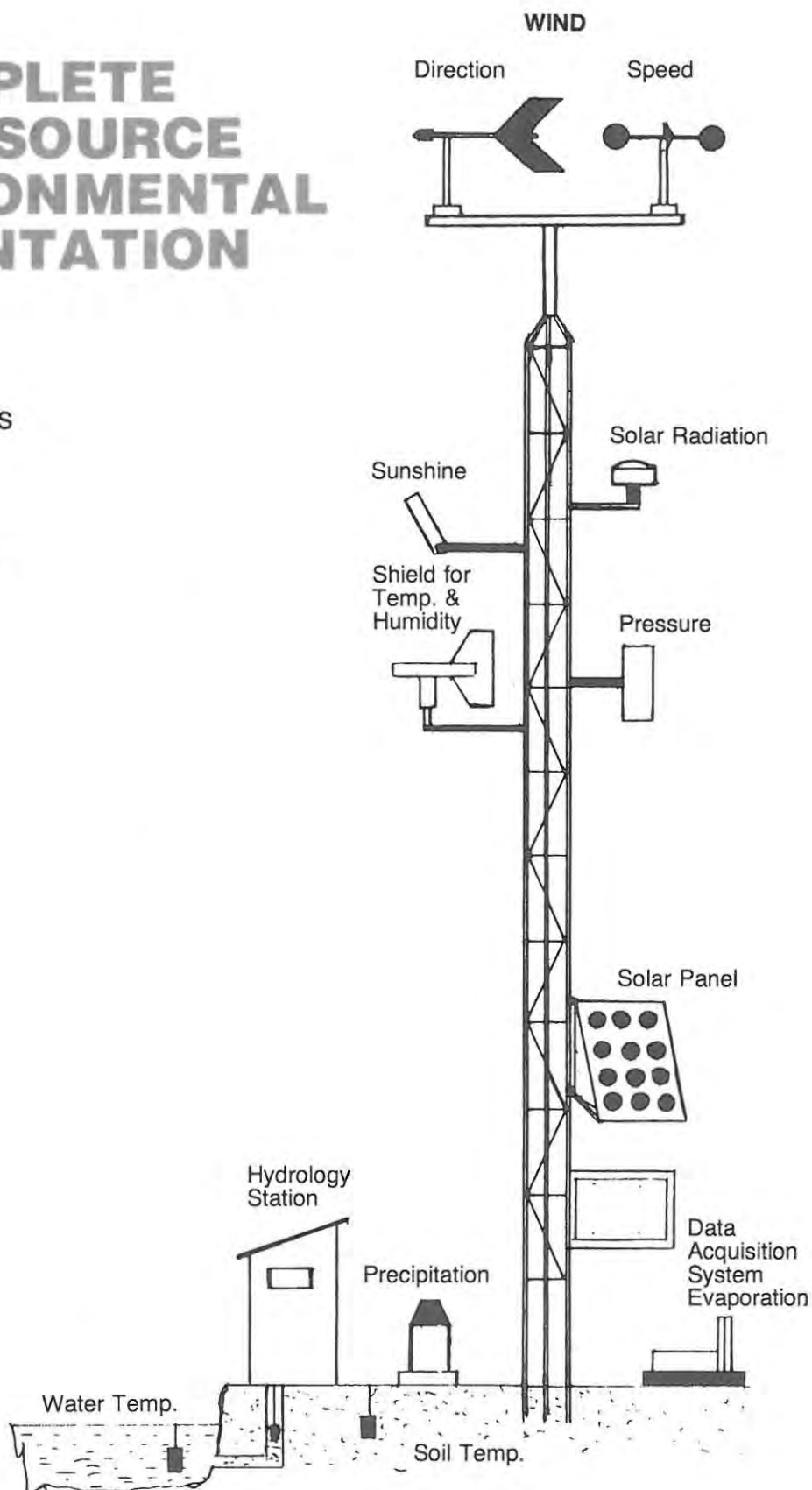
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RESEARCH MANAGER

EDMONTON

ALBERTA ENVIRONMENT
Research Management Division
\$35,700. - \$47,520.

This position involves establishing environmental research priorities for Alberta Environment in the areas of Acid Deposition and Technological Assessment and to co-ordinate environmental research through extensive involvement with government departments, industry, universities, research institutions, scientific advisory committees and others.

DUTIES:

- Conceive, plan, design, co-ordinate and manage consultant's research projects/-programs.
- Review and interpret research of others and prepare comprehensive research reviews and position papers.
- Participate with other scientists in interdisciplinary environmental research teams.
- Participate in scientific discussions and formal symposia with senior personnel in academic, industrial and government research establishments.
- Provide advice to department executive on technical matters.
- Represent the division or department on committees responsible for the implementation and guidance of both short and long term environmental research programs.

QUALIFICATIONS

The successful candidate will have a PhD. in Atmospheric Sciences (Meteorology) and experience managing applied research projects related to the environment. Experience in computer modelling related to the above area of study is preferred.

NOTE:

This is a project position presently funded on a yearly basis but with possibilities for permanency. Please contact Dr. Harby Sandhu at (403) 422-2071 for further information on this position.

Submit your resume and a list of your publications to:

Alberta Government Employment Office
5th Floor, Melton Building
20380 - Jasper Avenue
EDMONTON, Alberta
T5J 2W4

Competition No. EVM642-2
This competition will remain open until a candidate is selected.

MEMBERSHIP APPLICATION FORM - DEMANDE D'ADHESION (Please print in block letters - Lettres moulées s.v.p.)

Title/Titre Dr ☐ Mr ☐ Mrs ☐ Miss ☐ Other ☐
M ☐ Mme ☐ Mlle ☐ Autre ☐

Name/Nom _____

Address/Adresse _____

Telephone _____

Occupation/Emploi _____

(For records only; if student, indicate institution and year studies will be completed.
Pour dossiers seulement; l'étudiant doit inscrire le nom de son institution et l'année où il finira ses études.)

MEMBERSHIP CATEGORY - CATEGORIE DE MEMBRE (Please check one - Cochez un s.v.p.)

Regular ☐ Student ☐ Associate ☐
Regulier ☐ Étudiant ☐ Associé ☐
Corporate or Sustaining ☐ Subscription Only ☐
Corporation ou Soutien ☐ Abonnement Seulement ☐

PUBLICATION SUBSCRIPTIONS - ABONNEMENT AUX PERIODIQUES

Atmosphere-Ocean ☐ Climatological Bulletin ☐

PRIMARY FIELD OF INTEREST - SPHERE D'INTÉRÊT PRINCIPAL

Meteorology ☐ Oceanography ☐
Météorologie ☐ Océanographie ☐

Special Interest Group Affiliation - Affiliation de Groupe D'Intérêt Spécial

Hydrology ☐ Air Pollution ☐
Hydrologie ☐ Pollution de l'Air ☐
Agriculture and Forest ☐
Agriculture et Forêt ☐

— Please enroll me as a member of the Canadian Meteorological and Oceanographic Society in the category indicated for 1983.

Je désire devenir membre de la Société Canadienne de Météorologie et Océanographie dans la catégorie indiquée pour 1983.

ANNUAL FEES FOR / COTISATIONS ANNUELLES POUR 1983

Regular Membership / Membre Régulier - \$40.00
Student Membership / Membre Étudiant - 12.00
Associate Membership / Membre Associé - 20.00
Corporate (Sustaining) Membership /
Membre de Corporation (Soutien) - 75.00 (minimum)
Subscription to / Abonnement à
Atmosphere-Ocean - \$50.00
Subscription to / Abonnement à
Climatological Bulletin - \$10.00

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