



C.M.O.S.

# NEWSLETTER

S.C.M.O.



FEBRUARY 1982

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## FROM THE PRESIDENT'S DESK

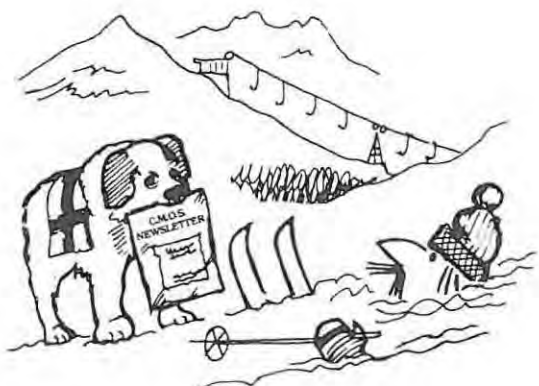
With 1982 well upon us, may I wish all Society members "many challenges". May the year bring you challenges, the opportunity for personal and intellectual growth, and the type of satisfaction that comes from striving to attain lofty goals!

As a more pedestrian note, let me try to bring you up-to-date on a number of recent matters concerning the Society.

## CONGRESS

At this time of year much of the activity of the Society begins to centre upon the upcoming Congress which will be held in Ottawa, May 25-28. The scientific sessions on the 26th to the 28th will be preceded by meetings of Society Committees on the 25th. Council will meet in the evening of the 25th and the Annual General Meeting will take place on the evening of the 26th. The local arrangements committee would like attendees to pre-register if possible. (See the pre-registration package elsewhere in this Newsletter).

The theme of the Congress is sea ice and several theme speakers will be invited to review current developments in this field. Scientific sessions in the theme area and in the area of "data collection platform networks" are already planned. Other sessions, including poster sessions, will also



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## Editor:

Avard S. Mann  
Atmospheric Environment Service  
Argyll Centre  
6325 - 103 Street  
Edmonton, Alberta  
T5H 5H6

be organized according to paper submission. The deadline for the submission of abstracts to the Scientific Program Committee is February 1. Should you have a later abstract to submit, contact the Chairman of the program Committee (Dr. George Isaac, 417-667-4683) about possible inclusion in the program.

Speaking of deadlines, may I remind those of you who are responsible for submitting annual reports on behalf of Centres, committees, etc., that they should reach Pete Kociuba, Corresponding Secretary, by February 1. It would be helpful if copies of reports which will be published in the Congress Issue of Atmosphere-Ocean could also be sent to Ed Truhlar, Editor of the Congress Issue. The appropriate addresses are:

Mr. P. Kociuba  
Corresponding Secretary CMOS  
Atmospheric Environment Service  
6325 - 103 Street  
Edmonton, Alberta  
T6H 5H6

Mr. E. Truhlar  
Editor, Congress Atmosphere-Ocean  
Atmospheric Environment Service  
4905 Dufferin Street  
Downsview, Ontario  
M3H 5T4

Some of you may be wondering what has happened to the final two numbers of Atmosphere-Ocean, Volume 19. Publication of these two issues has been delayed somewhat due to loss of the original manuscripts and figures for one of them by Air Canada. Henry Leighton, Editor, however has worked hard along with the authors to put the issue back together. Consequently, 19 (3) should appear in early February and 19 (4) by the end of March. Manuscript submissions to A-O are now at a reasonable level. Keep them coming in!

#### MEMBERSHIP RENEWALS

As of early January, about half the membership renewal forms (400 or so) had been received and processed at the Ottawa office. If you haven't yet submitted yours, please consider this to be a reminder. This new procedure represents a significant benefit to the Society inasmuch as we will now be banking our own membership fees and earning interest on the principal until it is disbursed. Previously, the University of Toronto press had done the renewals and the banking for us, but had not credited the interest to the Society.

Handling our own membership renewals will also mean that we can exercise a greater degree of control over the membership list. This in turn raises the question of what is a legitimate use for the membership

list. To what extent should members have access to the list? What about non-members? Since these questions concern your privacy, Council welcomes your advice before trying to make firm policy decisions on these matters.

#### NEWFOUNDLAND CENTRE

Council has recently approved a petition of the Newfoundland Chapter to be granted full Centre status. This transition is a reflection both of the growing meteorological and oceanographic activity in Newfoundland and of the commitment of the M and O community to the Society and its objectives. Council offers its congratulations and heartiest best wishes to the new Centre.

#### AES/CMOS TOUR SPEAKER

Dr. Peter Taylor of the Research Directorate, AES has been chosen by Council as this year's tour speaker. As several good nominations were submitted by Centres and others, the choice was not easy, but we believe that Dr. Taylor will carry on the excellent tradition established by previous tour speakers.

He will be presenting the Centres and Chapters with a choice of two titles related to wind energy. The first, "Numerical models and field studies of boundary-layer flow over low-hills" will discuss the relevance of his recent research to the evaluation of hill sites for wind turbine installation. The second lecture, "wind power in Canada - some meteorological aspects", will be of a more popular nature, discussing wind energy conversion systems and, in particular, Canada's project AEOLUS.

Dr. Taylor will be getting in touch with the Centres in the near future to discuss the scheduling of his tour.

#### DEVELOPMENT FUND

The Bell Canada shares which the Society has held for quite a number of years have not been a profitable investment of late and have therefore been sold. The income from the sale (\$679.50) has been put into the Development Fund, which is held in short-term, high-interest bank deposits. This brings the total principal and interest in the Development Fund to almost \$9,000.

Although there seem to be no firm guidelines at present for the use of the fund, Council views it as both a cushion against potential deficits, and a revolving source of funding for special projects which could not be financed out at the normal operating revenues. Contributions to the Development Fund, which are tax deductible, and suggestions for its use would be welcomed by Council.

Edward Lozowski  
President

NEW MEMBERS

Steven Blumel  
Ft. Meyers, Florida

Paul J. Delannoy  
Belleville, Ontario

Ric Barlow  
Edmonton, Alberta

Stephen Calvert  
Vancouver, B.C.

Luc E. Cuypers  
Vancouver, B.C.

Gordon J. Mertz  
Vancouver, B.C.

Keith A. Thomson  
Vancouver, B.C.

Sylvain De Margerie  
Halifax, N.S.

Norman Donaldson  
Fredericton, N.B.

William Woolverton  
Gander, New Ffld.

Yves Paquin  
Rimouski, P.Q.

Sean M. McGinn  
Saskatoon, Sask.

Yvan Cardinal  
Cte. Verchere, P.Q.

Louis Garand  
Montreal, P.Q.

Brian Amiro  
Guelph, Ontario

Richard J. Heron  
Hamilton, Ontario

J. David Neelin  
Toronto, Ontario.

Michael Cowan  
Pacific Grove, CA.

Paul H. Ruscher  
Corvallis, OR.

James P. Ross  
Edmonton, Alberta

Dr. Ambury Stuart  
Calgary, Alberta

Josef Cherniawsky  
Vancouver, B.C.

Donald S. Dunbar  
Vancouver, B.C.

Thomas Pedersen  
Vancouver, B.C.

Martha Danks  
Lower Sackville, N.S.

Peter A. Dzikowski  
Truro, N.S.

Alex E. Hay  
St. John's, Nfld.

Andree Gendron  
Rimouski, P.Q.

Danny E. Blair  
Regina, Sask.

Brenda O'Connor  
Saskatoon, Sask.

Mario Daoust  
Valleyfield, P.Q.

Angele Simard  
Pierrefonds, P.Q.

Mike Flannigan  
Petawawa, Ontario

Douglas McDonald  
Toronto, Ontario



NEW MEMBERS (Cont'd)

Johannes Vanleeuwen  
Downsview, Ontario

Alcide C. Horth  
Rimouski, P.Q.

Daniel Kelley  
Halifax, N.S.

Glenn Gibney  
Saskatoon, Sask.

CORPORATE MEMBERS

Alberta Agriculture Advisory  
Committee on Weather Modification  
Three Hills, Alberta

Geneq Inc.  
Anjou, Quebec

Airflow Development Canada Ltd.  
Mississauga, Ontario

Hermes Electronics Ltd.  
Dartmouth, N.S.

Beak Consultants  
Vancouver, B.C.

MacDonald Dettwiler & Assoc Ltd.  
Richmond, B.C.

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

MacLaren Plansearch Ltd.  
Dartmouth, N.S.

Bristol Aerospace Ltd.  
Winnipeg, Manitoba

NORDCO Ltd.  
St. John's, Nfld.

Dobrocky Seatech Ltd.  
Victoria, B.C.

Ontario Hydro  
Oakville, Ontario

Frederick Goertz Ltd.  
Willowdale, Ontario

M. E. P. Ltd.  
Downsview, Ontario

Petro-Canada  
Calgary, Alberta

Fenco Consultants  
Calgary, Alberta

Hymeteq A.L. Ltd.  
Downsview, Ontario

SUSTAINING MEMBER

N. Sargent  
Downsview, Ontario.

### 16th ANNUAL CONGRESS

The Sixteenth Annual Congress and Annual General Meeting of the Canadian Meteorological and Oceanographic Society will be held at the University of Ottawa, Ontario, Canada on May 26-28, 1982. The theme for the Congress will be SEA ICE. In addition to invited and contributed paper relating to the general theme, sessions will be held on other aspects of meteorology and oceanography depending on contributions. Poster sessions may be held depending on response. Commercial exhibits will be on display during the Congress.

Two other meetings which should be of interest to potential participants are scheduled to be held in Ottawa during the Congress. The Committee on Space Research (COSPAR) of the International Council of Scientific Unions (ICSU) will sponsor a conference from May 17 to June 2 with some sessions being meteorologically oriented. There will also be a meeting on Data Collection Platform Networks on May 25-26 sponsored by the CMOS Hydrology Special Interest Group, the Canadian Advisory Committee on Remote Sensing and the Canadian Remote Sensing Society. The scientific papers for this meeting will be integrated into the first day of the CMOS Congress.

Pre-Congress activities will begin on the evening of May 25th with a wine and cheese "icebreaker" which is open to all. The Banquet will be held the evening of May 27th. All sessions of the Congress as well as the banquet and wine and cheese party will be held on the University of Ottawa Campus.

In addition, why not plan to bring your spouse with you to the Congress. Tours of the Parliament Building and the Governor General's residence have been arranged, or take a picturesque cruise along the Rideau Canal, have lunch at the National Arts Centre and shop along the Sparks Street Mall. All are within walking distance of the University of Ottawa and Congress hotels. There is also plenty of night life for your enjoyment. As tours and group-outings are subject to sufficient participation, please indicate your spouse's interest on the pre-registration form.

Accommodation is very tight in Ottawa in the Spring. The COSPAR conference alone has had many rooms booked for several months. You are urged to take advantage of the accommodations we have arranged by returning the enclosed pre-registration form before April 16th, 1982. Pre-registrations will be confirmed by the University of Ottawa.

\*\*\*ENCLOSED: PRE-REGISTRATION FORM. PLEASE MAIL BEFORE APRIL 16TH\*\*\*

PRE-REGISTRATION: ANNUAL CONGRESS AND GENERAL MEETING 26-28 MAY 1982

NAME \_\_\_\_\_ (PLEASE PRINT)

ADDRESS \_\_\_\_\_ POSTAL CODE \_\_\_\_\_

TELEPHONE NUMBER \_\_\_\_\_ EMPLOYER \_\_\_\_\_

I enclose the registration fee, as indicated:

☐ Member (\$60); ☐ Non-member (\$80); ☐ Retired Member (\$30); ☐ Student (\$10)

☐ My spouse will also be attending and would be interested in participating in one or more of the tours. \_\_\_\_\_

NOTES: Those attending the meeting of the CMOS Hydrology Special Interest Group will also use this registration form and register as CMOS Members (\$60).  
: Except for students, the registration fee includes the banquet.

ACCOMMODATION - We have reserved accommodation as follows:

University of Ottawa - Single (\$18)  
(Residences on campus) - Double-twin bedded (\$25)  
- Shared Room (\$12.50)

Embassy Hotel - Bachelor Apt : Single (\$39) - Double (\$44)  
25 Cartier Street - 1 Bedroom Apt: Single (\$44) - Double (\$49)

Skyline Hotel  
101 Lyon Street - Single (\$55) - Double (\$55)

Park Lane Hotel  
111 Cooper Street - Single (\$51) - Double (\$63)

All reservations will be made by the University of Ottawa on a first-come first-served basis. Please indicate your preferences in the space below. Hotel preferences in order of priority should also be given in the event that University of Ottawa rooms are full. Dates/times of arrival/departure should also be included.

- 1.....
- 2.....
- 3.....

PLEASE RETURN THIS FORM BEFORE APRIL 16, 1982 ALONG WITH PAYMENT FOR REGISTRATION ONLY (CHEQUE OR MONEY ORDER PAYABLE TO CANADIAN METEOROLOGICAL AND OCEANOGRAPHIC SOCIETY) TO THE FOLLOWING ADDRESS:

University of Ottawa  
Convention and Catering Services  
648 King Edward Avenue  
Ottawa, Ontario (Canada)  
K1N 6N5

Reference: CMOS Congress

CALL FOR PAPERS - SIXTEENTH ANNUAL CONGRESS  
CANADIAN METEOROLOGICAL AND OCEANOGRAPHIC SOCIETY

The Sixteenth Annual Congress and Annual General Meeting of the Canadian Meteorological and Oceanographic Society will be held at the University of Ottawa, Ottawa, Ontario, Canada on May 26-28, 1982. The theme for the Congress will be Sea Ice. In addition to invited and contributed papers relating to the general theme, sessions will be held on any other aspects of meteorology and oceanography depending on contribution. Poster sessions may be held depending on response.

Titles and definitive abstracts (less than 300 words) should reach the program committee by February 1, 1982 and should be addressed to Dr. George Isaac, Cloud Physics Research Division, Atmospheric Environment Service, 4905 Dufferin Street, Downsview, Ontario, M3H 5T4; telephone (416) 667-4683. Please indicate if the paper is suitable for presentation in a poster session.

Other congress activities, including tours, are planned. In addition, commercial exhibits will be on display during the Congress. Organizations interested in obtaining display space should contact Brian O'Donnell, Atmospheric Environment Service, Ottawa, Ontario, K1A 0H3; telephone (819) 997-3511.

INVITATION A PRESENTER DES COMMUNICATIONS - SEIZIEME CONGRES ANNUEL  
SOCIETE CANADIENNE DE METEOROLOGIE ET D'OCEANOGRAPHIE

Le seizième congrès annuel et réunion générale annuelle de la Société canadienne de météorologie et d'océanographie auront lieu à l'université d'Ottawa, à Ottawa (Ontario) du 26 au 28 mai 1982. Le congrès a pour thème "La glace de mer". Outre les communications présentées par des personnalités invitées et d'autres participants sur le thème général, il y aura des sessions sur d'autres aspects de la météorologie et de l'océanographie en autant qu'un nombre suffisant de communications soient contribuées. Des présentations par affichage pourront avoir lieu également, dépendant de l'intérêt manifesté.

Le résumé définitif (moins de 300 mots) et le titre des communications doivent parvenir au comité du programme au plus tard le 1er février 1982. On doit envoyer le tout à Dr. Georges Isaac, Physique des nuages, Division de la recherche, Service de l'environnement atmosphérique, 4905 rue Dufferin, Downsview (Ontario) M3H 5T4; téléphone: (416) 667-4683. Veuillez indiquer si l'on peut inclure votre communication au programme de présentation par affichage.

Diverses activités (telles que visites organisées) sont prévues. De plus, une exposition commerciale aura lieu pendant le congrès. Les organisations désireuses d'y participer devraient contacter M. Brian O'Donnell, Service de l'environnement atmosphérique, Ottawa (Ontario) K1A 0H3; téléphone: (819) 997-3511.



ANNOUNCEMENT

Second Workshop on Data Collection Platform Networks

The Second Workshop on Data Collection Platform Networks will be held at the University of Ottawa, Ontario on May 25-26, 1982. The meeting will be held in conjunction with the 16th Annual Congress of the Canadian Meteorological and Oceanographic Society. Sponsors include the Water Resources Working Group of the Canadian Advisory Committee on Remote Sensing, the Canadian Remote Sensing Society and the CMOS Special Interest Group on Hydrology.

Presentations by DCP and sensor manufacturers and data reception companies are planned. A manufacturer's display has been organized in conjunction with the CMOS Congress. In the afternoon of May 25, Environment Canada will present its policy on DCP data acquisition, communication and archiving. The policy will be discussed by a panel with audience participation.

Papers dealing with scientific aspects of DCP Networks will be presented on May 26 at the CMOS Congress. Anyone interested in submitting a paper on DCPs, should forward an abstract by February 1, 1982 to:

Dr. G. A. Isaac  
Cloud Physics Division  
Atmospheric Environment Service  
4905 Dufferin Street  
Downview, Ontario M3H 5T4

Further information on the Workshop may be obtained from Mr. J. Whiting Saskatchewan Research Council, 30 Campus Drive, Saskatoon, Saskatchewan S7N 0X1.

The organizing committee would appreciate an expression of your interest in the Workshop. Please return the reply form below.

Reply Form

-----  
Tear off

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

I do not expect to attend the Workshop [ ]

I expect to attend the Workshop [ ]

I wish to receive the next announcement and program [ ]

I would be interested in giving a paper [ ]

Please provide the name and address of any person(s) who might wish to receive information on the Workshop.

RETURN TO: MR. U. SPORNS, HYDROLOGY SECTION, B.C. HYDRO AND POWER  
AUTHORITY, BURNABY MOUNTAIN, 970 BURRARD STREET, VANCOUVER  
B.C. V6Z 1Y3



## *Books*

**AIR-SEA INTERACTION INSTRUMENTS AND METHODS.** 1981.  
Edited by F. Dobson, L. Hasse and R. Davis. \$39.50 (\$47.50  
outside United States). Plenum Publishing Corporation.

This book deals comprehensively and succinctly with practically all the instruments and methods now available for investigation of processes in the boundary layer above and below the sea surface. Most of the articles contain a description of the various sensors and also an explanation of the underlying physics and a critical treatment of instrumental responses and limitations, including functioning in the marine environment.

The contributions are grouped in terms of the parameters to be measured. The chapter on velocity, for example, comprises 12 papers that deal with the whole range of observational methods from in situ mechanical measurements and Lagrangian probes to acoustic and electromagnetic sensing techniques. Other chapters deal with air pressure, temperature, oceanic microstructure, humidity and gas exchange, radiation, precipitation, sea-surface configuration, sodar and lidar measurements of the boundary-layer structure, and, finally, a large variety of platforms for use above, below, and upon the sea surface. The book is designed as a reference volume. It invites use for a specific purpose or some general browsing rather than consecutive reading. Each article has its own list of references and there is an adequate common index.

**Introduction to Meteorology, Third Edition.** by Franklyn W. Cole. 1980. 505 pages. \$17.95. Hardbound. J.Wiley and Sons Inc.

This is the third edition of Franklyn Cole's introductory text which provides a summary of atmospheric science for those in disciplines other than meteorology, who require only a general knowledge of the subject. In addition, Cole states that it is designed for aeronautics students and pilots who require some knowledge of meteorology.

Sections on the general circulation, air mass classification, traveling cyclones, fronts and other subjects, lead the student eventually to a chapter on Climate Controls and Climates, in which these concepts are used to describe world climates in terms of the air masses that are most characteristic of the different regions.

**Undersea Work Systems Ocean Engineering-Vol.1** by Howard R. Talkington. 1981. 184 pages. \$27.50 (20% higher outside U.S. and Canada). Hardbound. Marcel Dekker, Inc. 270 Madison Ave., New York, N.Y. 10016.

This book should be of interest to newcomers in the field of ocean engineering who will be concerned with various tasks underwater at inconvenient locations and in a less than comfortable environment. "Undersea Work Systems" in this book covers all forms of mobile devices that can be used to search, view and do certain mechanical tasks, usually under the control of a person. In most cases the observer is not at the wet end of the system. It does not include some of the larger equipment in the oil and mining industries except in a brief way.

This book is not a design handbook for underwater systems. It does point out trouble spots in the design of such systems and should save many headaches for the persons undertaking such designs.

The practicing engineer will find the book a convenient compilation of underwater systems as of 1980.

The book is well put together and has many excellent photographs of recent Underwater Work Systems with brief descriptions of each.

**Theoretical Bases of Phase Transitions of Water in the Atmosphere** by L. Krastanov and G. Miloshev. Budapest (Meteorological Service of the Hungarian People's Republic) 1980. Translation of original publication of the Bulgarian Academy of Sciences (1976). 189 pages, 66 figures. U.S. \$5.50.

This unique monograph describes the evolution of the thermodynamics and kinetics of phase transition and embryo formation since the publication of fundamental studies by Gibbs and Volmer. It stresses the contribution of Stranski and Kaischew to the theoretical description of crystal formation and shows clearly the foresight of Krastanov who as long ago as the early 1940s had correctly applied the theory of phase transition and the crystallization of supercooled water droplets. It revives the discussion between Findeisen and Krastanov on the role of the so-called 'sublimation nuclei' and demonstrates clearly the post-war achievements and contributions of the Krastanov school at Sofia to our nation of the processes governing cloud formation. Atmospheric physicists will appreciate the original study on the formation of liquid embryos on completely and incompletely wettable insoluble nuclei, the study of the activity of condensation nuclei, and the formation of liquid embryos on a rough substrate (Chapter II). Krastanov and Miloshev develop an original approach to the calculation of the change of surface energy due to the absorption of extraneous substances on the surface of liquid drops (Chapter IV) and of crystal embryos (Chapter VIII). Another interesting and original part of the book is the treatment of the crystallization of supercooled drops (Chapter V) and the kinetics of crystal formation on incompletely wettable isomorphic nuclei (Chapter IX).

The monograph is not a textbook giving a complete survey of phase transitions in the atmosphere, with quotations from many authors who have different approaches to this problem. Nevertheless, it should be very useful to cloud physicists, to research workers in weather modification and environmental problems, and to graduate students interested in theoretical atmospheric physics.



CONFERENCES

Washington, D.C.	March 14-18, 1982	Sixth Symposium on Temperature - Its Measurement and Control in Science and Industry.
The Hague, Netherlands	May 10-14, 1982 AMS/KNMI	1st International Conference on Meteorology and Air/Sea Interaction of the Coastal Zone.
Ottawa, Ont.	May 26-28, 1982	16th Annual CMOS Congress.
San Diego, CA.	June 8-11, 1982	4th Conference on Ocean-Atmosphere Interaction.
Denver, CO.	June 13-17, 1982 AMS/AWRA.	Internatioinal Symposium on Hydrometeorology.
Fredericton, N.B.	June 14-15, 1982	Canadian Hydrology Symposium - 82. Hydrological Processes of Forested Areas.
Madison, WI.	June 21-25, 1982	11th International Laser Radar Conference
Kingston, Ont.	June 21-24, 1982	1982 CAP Congress and Annual General Meeting.
Seattle, WA.	June 26-27, 1982	12th Conference on Weathercasting.
Seattle, WA.	June 28-July 2, 1982.	9th Conference on Weather Forecasting and Analysis.
Rolla, MO.	August 2-6, 1982	6th International Symposium on the Physics and Chemistry of Ice.
Chicago, Ill.	Oct/Nov.	Conference on Cloud Physics
Los Angeles, CA.	Nov. 29 - Dec. 3 1982.	International Conference on Precipitation Scavenging and Dry Deposition.



DEPARTMENT OF OCEANOGRAPHY  
DALHOUSIE UNIVERSITY  
HALIFAX, NOVA SCOTIA  
CANADA  
B3H 4J1

#### POSITIONS AVAILABLE

#### PHYSICAL OCEANOGRAPHY

Three grant-supported post-doctoral or research associate positions are available in the Oceanography Department of Dalhousie University. Current interests of the physical oceanography group cover many areas including continental shelf dynamics, the oceanography of straits, the use of sea-level data in studies of oceanic variability, waves, and near shore processes. There is close cooperation with scientists at the Bedford Institute of Oceanography which is nearby.

Applicants should send a curriculum vitae and the names of three referees to Professor Chris Garrett, Department of Oceanography, Dalhousie University, Halifax, Nova Scotia, B3H 4J1, before February 15, 1982. Applications from scientists with a Ph.D in physics or related subjects, but without a formal background in physical oceanography, will be considered if the candidate can demonstrate relevant interests or expertise.

These positions are open to Canadian citizens and Landed Immigrants only. Salary will be commensurate with experience.

THE UNIVERSITY OF BRITISH COLUMBIA  
6270 UNIVERSITY BOULEVARD  
VANCOUVER, B.C., CANADA  
V6T 1W5

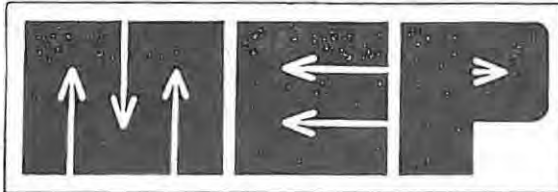
DEPARTMENT OF OCEANOGRAPHY

RESEARCH POSITION, PHYSICAL OCEANOGRAPHY

Applications are invited from recent Ph.D.s with specialization in fluid mechanics to participate in data analysis and interpretation as well as analytical and numerical studies of water circulation in the channels of the Canadian Arctic Archipelago. No field work contemplated. Familiarity with the methods and theory of geophysical fluid dynamics is desired, but candidates from related fields are also encouraged to apply. The position is temporary (one year with possible one year renewal) and available immediately; it will be filled at the post-doctoral (\$16,000) or research associate (\$20-22,000) level depending on experience. Canadian citizens and landed immigrants will be given preference at the research associate level. Send résumé and names of three references before March 1, 1982 to:

Paul H. LeBlond  
Department of Oceanography  
University of British Columbia  
Vancouver, B.C., Canada  
V6T 1W5

# METEOROLOGISTS



MEP (Meteorological and Environmental Planning Limited) is a progressive privately owned consulting company specializing in the application of Meteorology and Oceanography for industrial use.

THE FORECAST OPERATIONS DIVISION of MEP has several positions available for meteorologists interested in specialized forecasting for agriculture, air pollution, aviation and marine activities.

Successful candidates should have comprehensive knowledge of synoptic meteorology and operational procedures as would normally be obtained from a government sponsored forecasting course. Additional in-house training in specialized areas will be available to successful candidates. An understanding of computer techniques would be an asset.

MEP offers excellent compensation and a comprehensive benefit package, as well as the opportunity to become personally involved with a rapidly growing meteorological consulting company.

ALL APPLICATIONS WILL BE HELD IN STRICT CONFIDENCE.

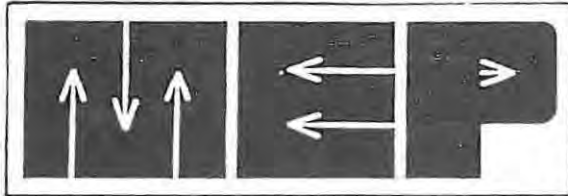
Interested persons are invited to submit a letter of application and résumé to:

DIRECTOR,  
FORECAST OPERATIONS DIVISION,  
MEP COMPANY,  
850 MAGNETIC DRIVE,  
DOWNSVIEW, ONTARIO.  
M3J 2C4



## CONSULTING PROFESSIONALS

WITH BACKGROUND IN ATMOSPHERIC SCIENCE, METEOROLOGY OR OCEANOGRAPHY



Meteorological and Environmental Planning Limited (MEP) is a rapidly growing Canadian consulting group providing Integrated Environmental Services for Industry and Government in the following areas:

- Air Pollution Assessment - meteorological and climatological studies, state of the art dispersion modeling, monitoring network design and interpretation
- Specialized Forecasting - forecasting for industrial and marine applications, supplementary control systems, comprehensive weather information
- Environmental Prediction Systems - ocean waves, oil spill motion, emergency preparedness

Several positions have been created in the Consulting Services Division requiring senior scientists with extensive background in atmospheric science (physics, chemistry, meteorology) or oceanography relating to the air-marine interface.

Scientists or engineers with relevant experience should send their résumés in strict confidence to:

DIRECTOR,  
CONSULTING SERVICES DIVISION,  
MEP COMPANY,  
850 MAGNETIC DRIVE,  
DOWNSVIEW, ONTARIO.  
M3J 2C4

HYDROLOGY  
METEOROLOGY  
EQUIPMENT



HYDROLOGIE  
METEOROLOGIE  
EQUIPEMENT

## HISTORY

January 20, 1982.

HYMETEQ A.L. LTD. is a Canadian Company Federally incorporated in May 5, 1981. having its principal place of business in Toronto. The President of the Company is Mr. Andrei Levy. The firm specializes in the fields of planning, management and execution of Development Projects in meteorology and hydrology in Latin American countries, Carribean region and Canada.

## STAFF

Our Staff include Canadian and Latin American professional experts: meteorologists climatologists, agro-meteorologists, hydrologists, electronical, mechanical and civil engineers, computer programmers with whom we have been linked for many years in the execution of development projects, among others, in Argentina, Canada, Central American Isthmus, Colombia, Brazil, Ecuador, Peru, and Uruguay, projects carried out in collaboration with UNDP, WMO, FAO, UIT, IDB, WB, CIDA, AES, and other international agencies and governmental institutions. The consultants of HYMETEQ are fluent in English, French, Spanish and Portuguese.

## SERVICES

The technical capacities of the Company permit the supplying of the following services: planning - feasibility studies - engineering design - supervising - management - equipment supply and communications in the fields of: meteorology climatology, agro-meteorology, sinoptical meteorology; Hydrology, hydro-geology, hydro-energy, water resources, water quality, hydrology for irrigation and drainage, data processing, and training of personnel. The services offered by HYMETEQ A.L. LTD. may range the execution of projects in the following subjects: environment, transportation, agriculture, agro-industry, rural integrated development, land improvement, alternative energy supply (solar and wind), ecology, forestry, water supply (surface and underground), warnings against floods, hydro-meteorological characteristics of sites, required for the implementation of projects for nuclear power development and uranium mines, master plans of river basins, water resources, design, installation operation and maintenance of hydro-meteorological networks, DCP platforms.

## FACILITIES

HYMETEQ A.L. LTD. counts with its own computer and its workshop and laboratory offer the possibility of systems building and maintenance of the equipment.

## ASSOCIATED COMPANIES

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Canadian Meteorological and Oceanographic Society  
La Societe Canadienne de Meteorologie et d'Océanographie

Suite 805, 151 Slater Street, OTTAWA, Ontario, Canada K1P 5H3

FEE RENEWAL NOTICE for 1982  
AVIS DE RENOUVELLEMENT DE COTISATION pour 1982

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Effective Date/Date d'entree

SERGE LAFRANCE  
3450 HUTCHISON #802  
MONTREAL Quebec  
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Membership Class / Type de Membre: STUDENT METEOROLOGY

Main Interest : METEOROLOGY — OCEANOGRAPHY —  
Interet Principal : METEOROLOGIE — OCEANOGRAPHIE —

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