



Canadian Meteorological
and Oceanographic
Society

La Société Canadienne
de Météorologie et
d'Océanographie

C.M.O.S.

NEWSLETTER / NOUVELLES

S.C.M.O.

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RETIRED HYDROGRAPHER

In his 31-year career as a Canadian hydrographer, federal Fisheries and Oceans' Mike Eaton has participated in and contributed to a technological revolution that took Canadian navigational charting into the 21st century.

In the late 1950's, depth soundings of the waters of the Far North were charted by dropping lead-lines from giant fishing-reels through seal holes in the ice. Eaton was one of the first to try to systematically map the Arctic sea-floor by measuring the time for transmitted sound waves to be received back from the sea-floor. He later developed a method for profiling Arctic channels using a helicopter to tow a fibreglass "fish" equipped with a sounder beneath the sea. These are a few of many examples of innovative methods of surveying the Arctic that he has pioneered. Many of these methods are still in use to this day.

His most recent project has been to monitor the development of an electronic video-display screen onboard ship that could replace the traditional paper navigation charts and enable the mariner to read at a glance the position of the ship relative to shore, buoys, rocks and other obstacles.

Mike Eaton was elected a Fellow of the Arctic Institute of North America for his work in the North. Aside from the technical challenges imposed by the harsh environment, he recalls the Arctic as "a very beautiful place" full of broad vistas and "the marvellous play of lights in the sky and over the snow." Eaton and his colleagues captured that beauty on film. "Summer at Hell Gate" is a labour of love in which the cook shot the pictures, and Mike and Rosemary Eaton wrote and edited the script.

Source: "Retiring DFO Hydrographer Leaves Blueprint to Take Canadian Navigational Charting into 21st Century", Information Note, Communications Branch, Department of Fisheries and Oceans, Halifax, Nova Scotia, April 28, 1988.

NEW PROGRAM AT UBC

Gordon A. McBean has been appointed Chairman of the new Atmospheric Science Program and Professor of Geography at the University of British Columbia. He assumed his new position July 1 and will be responsible for the development of the curriculum and for the scientific leadership of the new program. The Atmospheric Science Program, jointly sponsored by the Departments of Geography and Oceanography, will provide undergraduate and graduate programs in atmospheric science. The research emphasis of the new group interactions will be atmospheric processes, atmosphere-ocean interactions, and climate variability and impacts.

Gordon is a graduate of the University of British Columbia (B.Sc. (Physics); Ph.D. (Oceanography)) and McGill University (M.Sc. (Meteorology)). From 1972-80, he was Chief of the Boundary-Layer Research Division of the Atmospheric Environment Service (AES) in Downsview, Ontario. From 1980, he has been an AES senior scientist located at the Institute of Ocean Sciences, Sidney, B.C.

For many years, he has been active in international atmospheric and oceanographic programs, including chairing the WMO Working Group on Atmospheric Boundary Layer Problems (1975-81), the CCCO Study Group on the Pacific Ocean transport of heat and salt (1981-85), and co-chairing the Canada-U.S. Research Consultation Group on LRTAP (acid rain; 1978-80). He is now Vice-Chairman of the Joint Scientific Committee for the World Climate Research Program, and a member of the IUGG Bureau and the Steering Committee for the International Satellite Land Surface Climatology Project.

He has been equally active in Canadian scientific activities, particularly the CMOS. Gordon was a founding member of the CMOS, served as chairman of two Centres (Toronto and Vancouver Island) and as program chairman for two Congresses (1974 & 1986), and is presently co-editor of Atmosphere-Ocean. He has also just completed a term as chairman of the Canadian National Committee for the IUGG, to which he had been appointed by the CMOS.

NEW CMOS MEMBERS

The following new members were approved at the Executive Meeting of 12 August, 1988:

| <u>NAME</u> | <u>CENTRE</u> |
|-----------------------------------|---------------------|
| Dr. Wayne R. Rouse (Regular) | Toronto |
| Mr. Wm. D. Hogg (Regular) | Toronto |
| Mr. Garry M. Pearson (Regular) | Toronto |
| Ms Sara L. Bennett (Student) | United States |
| Mr. David M. Kuntz (Regular) | Halifax |
| Mr. Lewis Poulin (Regular) | Toronto |
| Dr. Peter Zwack (Regular) | Montreal |
| Dr. R. Ian Perry (Regular) | New Brunswick |
| Miss Ria Alsen (Student) | Toronto |
| Mr. Alfred Klausmann (Regular) | United States |
| Mr. F. E. Stephenson (Regular) | Vancouver Island |
| Dr. Virji Hassan (Regular) | United States |
| Mr. Scott Akenhead (Student) | Newfoundland |
| Mr. Michael Oliver (Student) | Vancouver Island |
| Mr. Dennis M. Narazenko (Student) | Montreal |

The following new member was approved at the Executive Meeting of 9 September, 1988:

| <u>NAME</u> | <u>CENTRE</u> |
|---------------------------|---------------|
| Mr. Joseph Nasr (Regular) | Ottawa |

CMOS AWARDS

The Canadian Meteorological and Oceanographic Society established the Prizes and Awards Committee to focus attention on the achievements of its members and their influence on the sciences of meteorology and oceanography in Canada.

Nominations are now being solicited for the various award and prize categories in our Society. Cooperation of the membership in identifying individuals for whom an award or prize would be appropriate is requested.

Outstanding achievers in the fields of oceanography and/or meteorology should be recognized by their CMOS peers and members of the Canadian community. This awards program is important to CMOS as it brings credit and recognition to those who deserve it. Both media and Society attention is focussed on the recipients, thereby highlighting important work and Canadian contributions to specific science programs.

Please give serious consideration to this request. A list of the various awards can be found on the next page. Please note the established, approved and necessary criteria for each award or prize. It is essential that your written recommendation for a particular award be supported by complete documentation, illustrating that the candidate has met all the prize requirements.

The deadline for nominations to be received by the undersigned, complete with supporting documentation, is 27 January, 1989. Thank you for your cooperation.

J.B. Merrick

Secretary, Prizes and Awards Committee

Atmospheric Environment Service

1496 Bedford Highway

Bedford, Nova Scotia. B4A 1E5 Tel: (902) 426-9181

Please note:

1. The deadline for submissions is rigidly observed due to other Committee deadlines and the high volume of copying required. Complete submissions must be in the hands of the Secretary by that date and material indicated 'to follow' will not be accepted. Allow sufficient time for mail or courier. Some couriers do not offer overnight service to Halifax from all regions of Canada. Also, first class mail from Vancouver (for example), has on occasion taken over ten days to reach Halifax. If desired, the Secretary of the Prizes and Awards Committee has access to an automatic telecopier. Please contact the Secretary for the current phone number.
2. Some prize categories specify that a nominee must be a member of CMOS. Nominees in these categories who are not members of CMOS on the date which nominations close will be disqualified and their nomination submissions will not be considered. Membership status will be confirmed with the Executive Director of CMOS by phone.
3. Receipt of submissions by the Secretary will not be acknowledged unless requested. Acknowledgement when requested, will be by telephone.
4. The current title, full address and phone number of the nominee must accompany the submission.
5. Nominees from previous years, who have not received awards may be renominated. All criteria provided above apply to renominations. All renominations must be complete with justification since nomination material is not retained from year to year.

PRIZES AND AWARDS CRITERIA

The criteria listed below are extracted from the bylaws of the Society. Note the conditions on the preceding page.

a) **PRESIDENT'S PRIZE**

May be awarded each year to an member or members of CMOS for a recent paper, book or contribution of special merit in the field of either meteorology or oceanography. The paper or work;

1. MUST have been accepted for publication in Atmosphere-Ocean, Climatological Bulletin or another refereed journal; or
2. MUST have been presented to the Society membership at a national or local meeting.

b) **THE DR. ANDREW THOMSON PRIZE IN APPLIED METEOROLOGY**

May be awarded for an outstanding contribution in the field of applied meteorology. The nominee MUST be a member of the Society.

c) **GRADUATE STUDENT PRIZES**

May be awarded for contributions of special merit in meteorology and/or oceanography by graduate students.

d) **THE RUBE HORNSTEIN PRIZE IN OPERATIONAL METEOROLOGY**

May be awarded 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.

e) **PRIZE IN APPLIED OCEANOGRAPHY**

May be awarded for a significant contribution to the application of oceanography in Canada. The nominee MUST be a member of the Society.

f) **THE J. P. TULLEY MEDAL IN OCEANOGRAPHY**

May be awarded to a person whose scientific contributions have had a significant impact on Canadian Oceanography.

g) **ENVIRONMENTAL CITATIONS**

May be awarded to individuals or groups who have in the previous year, made some outstanding contribution in helping to alleviate pollution problems, in promoting environmental improvements, or in developing environmental ethics.

h) **CITATION FOR OUTSTANDING RADIO AND TELEVISION WEATHER PRESENTATION**

Only Canadian television weather productions will be considered. Any regular ongoing weather program series may be submitted for consideration in the Citation review process. VHS recordings of three consecutive telecasts will be required, along with the date and time of the programs, the name of the presenter, station, city, etc. VHS tapes need to be accompanied by written justifications. Submissions may be made by either Centres or by individual members.

Submissions should be based on the programs' informative and/or educational value, appeal to the public, a high level of technical and professional presentation, etc. Centres are strongly encouraged to participate in the review of television weather programs in their area. Centres which determine that a routine weather program meets the listed 'Criteria' should consider nominating the program to the Prizes and Awards Committee. Centres whose nominations are not selected for a National Award may wish to recognize a regional winner in some way in their own region.

NORTHERN DATA BASES

QL Systems Ltd. has announced an expansion of its collection of data bases concerning the north with the addition of the data base from the Scott Polar Research Institute at the University of Cambridge, England. The new data base contains over 12,000 bibliographic references concerning political, industrial, scientific and social aspects of the polar regions. This data base, the Arctic Science and Technology data base, the Boreal Northern Titles data base and the Yukon Bibliography data base comprise the largest collection of cold region bibliographic data in the world. Searching the data bases has been made easier with QL's new global data base capability that combines all four collections in one search. Information on other QL data bases may be obtained by writing to QL Systems at Box 4036, 250-6 Ave.S.W., Calgary, Alberta, T2P 3H7 or by calling the toll-free number 1-800-387-0899.

**Canadian Meteorological and Oceanographic Society
1988/89 Council**

| | |
|-------------------------|--|
| President | Dr. Jim Young |
| Vice-President | Dr. Han-Ru Cho |
| Treasurer | Mr. Bruno De Lorenzis |
| Corresponding Secretary | Mr. Howard Kagawa |
| Recording Secretary | Mr. William Schertzer |
| Past President | Dr. Stuart Smith |
| Councillors-at-large | Dr. Carl Anderson Mr. Fred Herfst Dr. Vladimir Koutitonsky |
| Local Centre Chairman | Elected Locally |

**Le Conseil de la Société canadienne de météorologie
et d'océanographie pour 1988/89**

| | |
|--------------------------|--|
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| Conseillers | Dr. Carl Anderson Mr. Fred Herfst Dr. Vladimir Koutitonsky |
| Présidents régionaux | élu localement |

OBITUARY

Michael Blake

The Society was informed recently that Michael Blake had died suddenly on July 18th, 1987. He joined the Canadian Meteorological Service in the summer of 1954, receiving his Master's degree in 1955. After his assignment at the Dorval Weather office, he joined the Canadian Navy on a 5-year appointment. He served as a meteorologist on the H.M.C.S. Bonaventure for 2 years and spent the rest of his appointment at the Naval Weather Service office in Ottawa. From 1966 until his death, he was in charge of the Meteorological Office at H.M.C. Dockyard, Esquimalt.

Michael was born in London, England, of Scottish parents. He graduated from St. Andrews University, Scotland, in 1949 after serving in the British Navy during World War II. Before coming to Canada he worked as a geophysicist in Persia (now Iran) and New Guinea.

ADVERTISING RATES

Rates based on black and white camera-ready copy. Sizes (inches) are full page (7.5x9.5), 1/2 page (3.5x9.5) and 1/4 page (3.5x4.5). Other charges apply where typesetting or artwork are required. Distribution per issue is approximately 1000.

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** Corporate and Sustaining members advertisements are charged at the Position Vacancy rate.

HAMILTON-SCOURGE Project

Those that attended the Banquet at the recent CMOS Congress will remember the speaker, Emily Cain. The Society has received a request for help in interpreting historic weather records. The letter from Emily Cain, Research and Co-ordinating Officer for the HAMILTON-SCOURGE Project asks:

"We would be happy if your members could undertake research into weather records for the HAMILTON-SCOURGE Project. Primary historical sources which relate to weather include the WOLFE (British flagship) log; Ned Myers' description of the storm in which the HAMILTON and SCOURGE sank; at least two farmers' diaries; and newspapers. There may be other logs and memoirs that focus on the weather and which we do not have in our files. Would such a volunteer collect these primary records and then interpret them in light of modern knowledge of the weather?"

Anyone interested can contact Emily Cain through The Corporation of the City of Hamilton, 71 Main Street West, Hamilton, Ontario L8N 3T4.

EDITOR'S COLUMN

The editor would appreciate articles on items that may be of interest to your colleagues. If you have news on members or on activities of CMOS, please send to Malcolm Still, Atmospheric Environment Service, 4905 Dufferin Street, Downsview, Ontario. M3H 5T4.

The deadlines for issues of the CMOS Newsletter:

| <u>Issue</u> | <u>Date</u> |
|----------------|------------------|
| October, 1988 | October 14, 1988 |
| December, 1988 | December 9, 1988 |
| February, 1989 | February 3, 1988 |

The storm of 15-16 October, 1987, was a momentous event in many ways. The damage to trees transformed the scenery of southern England overnight. Long-standing meteorological records were broken. The media plunged the Meteorological Office into the limelight, as questions were asked about the apparently poor forecast of that night. The March 1988 issue of the Royal Meteorological Society's monthly magazine is dedicated to a study of various aspects of this storm.

Weather

March 1988 Vol. 43 No. 3

Published by the Royal Meteorological Society



Editor K. P. Shine
 Editorial Board W. J. Burroughs M. D. Dennett G. P. Eden
 H. D. Lawes D. A. Mansfield R. A. S. Ratcliffe
 K. E. Woodley M. V. Young

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*The individual titles in this Contents list have been modified to avoid repetition of the date of the storm, &c.

METEOROLOGICAL CALENDAR 1989

The Royal Meteorological Society has informed us that the 1989 calendar is available for distribution. Each month has a picture of a cloud formation from different parts of the world and some extremes of climatic conditions for the United Kingdom. The storm mentioned above is recorded for the month of October. The cost of the calendar is 1.90 (Pounds Sterling) plus postage and packing. For 5 or more the cost is 1.60.

The "Global Climate Change Digest" is a comprehensive and up-to-date guide to current literature focusing on the causes, dynamics and effects of the global climate changes triggered by human industrial activity and man-made compounds. This new monthly digest places special emphasis on the critical topics of ozone depletion, global warming, and the continuing build-up of atmospheric carbon dioxide, chlorofluorocarbons, methane, and other "greenhouse" gases.

Another publication of interest is the "Acid Precipitation Digest" that is a monthly summary of news, research and policy initiatives involving acid precipitation phenomena.



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 GLOBAL CLIMATE CHANGE DIGEST will commence with the July 1988 issue.

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04/88

Printed in U.S.A.

PSJW B05 A B C D E F G H
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An ever changing global system defines the scientific and social issues of our time that clearly cross traditional scientific boundaries. Elsevier Science Publishers will launch a new scientific journal "Global and Planetary Change" with the objective to achieve a multidisciplinary view of the causes, processes and limits of variability in planetary change. Topics will include changes in the chemical composition of the oceans and atmosphere, climate change, sea level variations, human geography, global tectonics, global ecology and biogeography.

Criteria for manuscripts, whether research contributions or review articles, are for a focus on global scope or implications for global scale problems, significant beyond a single discipline, and on the causes, processes and limits of planetary change. Part of the intent of "Global and Planetary Change" is for new discoveries in one discipline to foster advances in understanding the earth as a system. A guide for authors is available from the publisher at P.O. Box 330, 1000 AH Amsterdam, The Netherlands.

The first issue is scheduled for the fall of 1988. Subscribers to "Paleography/Climatology/Ecology" will automatically receive "Global and Planetary Change" as part of their subscription.

Climatological Bulletin Bulletin climatologique

Vol. 22, No. 2, August/Août, 1988

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CONFERENCES

The Mexican Organization of Meteorologists

Third Interamerican Congress on Meteorology Third Mexican Congress on Meteorology

Meteorology and its Applications
to Regional Development

Mexico City, Mexico, 14-18 November, 1988

The organizing committee invites all professionals of the region to participate in this third Interamerican Congress on Meteorology that is to take place in Mexico City, 14-18 November 1988. Sessions will be held at the Hotel Holiday Inn Crowne Plaza, Av. Paseo de la Reforma No. 80, Mexico City.

The objective of this Congress is to promote development and dissemination of the science of meteorology between the nations of the American continent by sponsoring the establishment of joint programs of study and application of this science to help the progress of nations in the region.

The specific goals are:

1. To establish the exchange of work and studies between the representatives of the participating nations;
2. To promote the integration of all American meteorology by means of the Latin American Federation of Meteorological Societies;
3. To promote to the respective governments the required support toward meteorological science; and
4. To contribute to the personal development of the participants at the Congress, as well as that of their association.

Information on this Congress can be obtained from:

La Organizacion Mexicana de Meteorologos, A.C.
(OMMAC)
Apartado Postal 90-112
Del. Gustavo A. Madero, CP 07500
Mexico, D.F. Mexico

Intergovernmental Oceanographic Commission (IOC)
International Council of Scientific Unions (ICSU)
Scientific Committee on Oceanic Research (SCOR)
World Meteorological Organization (WMO)

International WOCE Scientific Conference

Unesco Headquarters, Paris
28 November - 2 December, 1988

Stream Three of the World Climate Research Programme (WCRP) is concerned with the prediction of decadal climate change. Since the major scientific problem which needs to be resolved is that of describing and modelling the circulation of the World Ocean, the organizers of the WCRP have defined the World Ocean Circulation Experiment (WOCE) as the principal activity within Stream Three; they established, jointly under the SCOR-IOC Committee of Climatic Changes and the Ocean (CCCCO) and the ICSU-WMO Joint Scientific Committee (JSC) for the WCRP, the WOCE Scientific Steering Group (SSG) to plan the Experiment.

The WOCE SSG has formulated the Goals and Objectives of WOCE and these have been published in the WOCE Scientific Plan (WCRP Publications Series, No. 6, 1986).

To help with the planning of WOCE, an international WOCE Scientific Conference will be held. It will be hosted by IOC and organized by a committee chaired by Professor C. Wunsch. The objectives of the conference will be to:

1. Review and explain the scientific purpose of WOCE;
2. Outline the implementation plan of WOCE;
3. Identify means by which countries can contribute;
4. Identify major resource commitments as well as gaps and how the latter can be overcome;
5. Review additional requirements for WOCE, including data submission and distribution, access to ports and scientific data from Exclusive Economic Zones; and
6. Examine institutional arrangements for WOCE.

For further information write to:

Secretary CCCO,
IOC,
Unesco,
7 Place de Fontenoy, 75700 Paris, France
(telex 204461 Paris, telemail CCCO.PARIS).

CONFERENCES

Research & Technology Branch
Corporate Resources Division
Environment Ontario

Environmental Research Technology Transfer Conference

Royal York Hotel, Toronto, Ontario
November 28 & 29, 1988

INTRODUCTION

This Conference serves as a forum for presenting innovative environmental technologies and progress on research projects funded through the Research Advisory Committee of Environment Ontario. The conference will be of particular interest to environmental groups and consultants, industry, municipalities, provincial governments and the federal government as well as universities and research institutions. Research in the fields of air pollution, water quality, liquid and solid waste, analytical methods and instrument development, and environmental economics will be presented in five concurrent oral sessions, a panel discussion and in poster displays.

REGISTRATION FEES

| | |
|-------------------------------------|-------|
| Prior to November 14* | \$250 |
| After November 14 | \$300 |
| Attendance on day 2 only | \$150 |
| Students (does not include banquet) | \$ 50 |
| Banquet only | \$ 30 |

* Postmarked no later than November 12.

Registration includes:

- admission to all sessions
- luncheons and banquet with featured speaker
- a complete set of Conference publications distributed at the Conference

For Further Information

Please contact:
Conference Secretariat
c/o Congress Canada
73 Richmond Street West, Suite 300
Toronto, Ontario, Canada M5H 1Z4
Attention: Shelley Stienstra
Telephone: (416) 860-1772
Fax: (416) 860-0380

La Direction de la recherche
La Division des ressources ministérielles
Environnement Ontario

Les recherches sur l'environnement Congrès sur le transfert des techniques

Hotel Royal York, Toronto (Ontario)
les novembre 28 et 29, 1988

INTRODUCTION

Ce congrès a pour but de faire le point sur les dernières techniques dans le domaine de l'environnement et sur l'état d'avancement des travaux subventionnés par le Comité consultatif de la recherche d'Environnement Ontario. Il est de nature à intéresser les groupes de défense de l'environnement, les experts-conseils, l'industrie, les municipalités, le gouvernement fédéral et les gouvernements provinciaux, de même que les universités et les établissements de recherche. Les cinq séances simultanées, la table ronde et les montages d'affiches présenteront les résultats des recherches sur la pollution atmosphérique, la qualité de l'eau, les déchets liquides et les déchets solides, les méthodes et dispositifs d'analyse ainsi que les aspects économiques de l'environnement.

DROITS D'INSCRIPTION

| | |
|---------------------------------|--------|
| Avant le 14 novembre* | 250 \$ |
| Après le 14 novembre | 300 \$ |
| Deuxième journée seulement | 150 \$ |
| Étudiants (banquet non compris) | 50 \$ |
| Banquet seulement | 30 \$ |

* Le cachet de la poste doit porter la date du 12 novembre au plus tard.

L'inscription comprend :

- l'admission à toutes les séances
- les déjeuners ainsi que le banquet en présence du conférencier invité
- le jeu complet des actes, remis à l'occasion du congrès

Renseignements

Congrès sur le transfert des techniques
a/s Congress Canada
73, rue Richmond ouest, pièce 300
Toronto (Ontario) Canada M5H 1Z4
À l'attention de Shelley Stienstra
Téléphone : (416) 860-1772
Télocopieur : (416) 860-0380

CONFERENCES

Canadian Institute of Forestry
Canadian Meteorological and Oceanographic Society

Fire and Forest Meteorology
in a Changing Environment:
New Technologies and Concerns

Ottawa, Ontario, Canada
April 17-21, 1989

The Tenth Conference on Fire and Forest Meteorology is jointly sponsored by the Canadian Institute of Forestry and the Canadian Meteorological and Oceanographic Society. This meeting is being held in cooperation with the Society of American Foresters and the American Meteorological Society and with the support of the Atmospheric Environment Service, the Canadian Forestry Service and the Ontario Ministry of Natural Resources.

Presentations will cover the areas of relevant new technologies, smoke management and air quality, forest health and productivity, effects of climate change, and the effects of new technology on human resources in forestry. Contributions will also include traditional subjects such as fire meteorology, fire behaviour and danger, prescribed burning, lightning detection systems, fire ecology, fire management and fire climatology.

Based on the abstracts that have been submitted to the Editorial Sub-committee, papers may be selected for either poster or oral presentations. Abstracts and papers from authors will be included in the preprint abstract and proceedings. Authors will be contacted after September 15, 1988, at which time instructions and material for camera-ready papers will be issued. Page charges may be assessed to defray publishing costs.

Displays by relevant fire or meteorological equipment manufacturers and distributors as well as computer manufacturers will be available during the conference. Space and time during the program will be provided to these companies. Interested parties should contact the Corporate Exhibitor Subcommittee Chairperson, Mr. Paul Ward (705-942-1800), before January 15, 1989.

Further information may be obtained from the Program Co-chairpersons, Roger B. Street (Atmospheric Environment Service 416-739-4786) or Dr. Paul Woodard (University of Alberta, 403-432-4413).

Canadian Society of Agrometeorology (CSAM)

Agricultural Institute of Canada
Annual Conference
Agrometeorology Session

Montreal, Québec
July 9-13, 1989

"International Trade & Development" is the theme for the 1989 Agricultural Institute of Canada (AIC) annual conference. The Agrometeorology session provides an opportunity to share information on research, extension and/or service activities with agricultural relevance in the range of disciplines from micrometeorology to climatology. Agrometeorology is a broad area of study which combines the use of meteorology and climatology in applications involving plant science, pest control, engineering and others. You are encouraged to share your information and to attend the other AIC sessions to better understand what is happening in the agricultural industry in Canada.

Poster presentations, and equipment or instrumentation displays are invited. A business meeting will be held following the technical session.

Please send a proposed title of your paper by November 15, 1988, and a 200 word abstract with the finalized title by January 15, 1989, to:

Dr. Peter Schuepp
Department of Renewable Resources
MacDonald College of McGill University
2111 Lakeshore Road
St. Anne-de-Bellevue, Quebec
H9X 1C0
(514) 398-7935

EDITOR'S NOTE ON CONFERENCE ANNOUNCEMENTS

Announcements of conferences are welcomed to be placed in this newsletter. To facilitate their publication, the editor would appreciate if those that submit prepared copy could follow these guidelines:

- copy should be camera-ready black and white as colours do not necessarily duplicate well
- appropriate sizes (in inches) are full page (7.5x9.5), 1/2 page (3.5x9.5) and 1/4 page (3.5x4.5).

CONFERENCES

International Association of Meteorology and Atmospheric Physics (IAMAP)

FIFTH SCIENTIFIC ASSEMBLY OF IAMAP

31 July to 11 August, 1989, University of Reading

IAMAP is to hold its Fifth Scientific Assembly at the University of Reading in the United Kingdom. The assembly will consist of invited lectures, four major symposia, topical symposia and workshops. The four major symposia will be:

- The Global Weather Experiment - 10 years later
- Atmospheric Trace Constituents and Global Change
- Global Energy and Water Fluxes
- Middle Atmosphere Sciences

There will be topical symposia on Boundary-layer Parameterization and Larger-scale Models, Effects of Aerosols and Cloud on Climate, Influence of Polar Regions on Global Climate, Large-scale Nonlinear Dynamics and Atmospheric Flows, Mesoscale Phenomena Analysis and Forecasting, Mesoscale Processes in Extratropical Cyclones, Meteorological Aspects of Mesoscale and Long-range Pollutant Transport, Meteorology and Climate of Mars, Noctilucent Clouds, Remote Sensing in Polar Regions, Remote Sensing of Atmospheric Constituents, and The Earth's Radiation Budget.

Anyone wishing to make a presentation (oral or poster) at any of the symposia should submit a camera-ready abstract plus two copies to the Scientific Programme Committee, IAMAP 89, Department of Meteorology, University of Reading, 2 Earley Gate, Reading, RG6 2AU, UK. by 15 February 1989. The abstract should not exceed 150 words and should be typed single spaced in black on a sheet of white paper. Maximum line length is 6 inches (15cm). Heading should consist of the following on successive lines: title in capital letters; name(s) of author(s); and affiliation, town and country. All lines in the heading and text should be aligned to the left. Each abstract should be accompanied by a separate page containing: symposium name; title of paper; name, address and telephone number of the author to whom all correspondence is to be sent; name of author to make presentation; and whether an oral or a poster presentation is preferred.

For further details and registration forms please contact Ross Reynolds at the University of Reading.

FOURTH INTERNATIONAL CONFERENCE ON AEROBIOLOGY

3-7 September, 1990
Stockholm, Sweden

The next IAA conference is scheduled for 1990 in Sweden. Field trips and short excursions are planned during the conference. A Congress dinner and other special events for both delegates and accompanying members will be arranged.

The scientific program will be covered by the following symposia:

The Significance of Air Pollution in Aerobiology
Aeroallergens
Meteorological Aspects of Aerobiology
Ecological Aspects of Aerobiology
Bio-aerosols Indoors
Methodology, Sampling and Analyzing
Microbiology and Palynology
Phytopathology

In addition there will be a general symposium to hear the reports of the committees and the working groups, and minisymposia on special topics.

The official language of the conference will be English and, if possible, there will be simultaneous interpretation in French and German. Papers can be presented orally and/or by poster. Further information on the deadlines for submission will be found in a later circular.

The conference is being organized by:

| | |
|-------------------------|--|
| President: | Dr. Siwert Nilsson |
| Scientific Secretaries | Techn. Lic. Eva Henningson Dr. Gunnar Bylin |
| Local Program Committee | Dr. Mervi Hjelmroos |

Please signify your interest by November 1, 1988, to:

Mrs Christina Tannlund
Administrative Secretary
4th International Aerobiological Conference
Konferensservice AB, Box 4037
S-171 04 SOLNA, SWEDEN

Tel: 46-8-82 02 15
Telex: 127 54 SINTAB S
Telefax: 46-8-730 15 67

CONFERENCES

Conférences qui sont organisées ou parrainées
par la Direction du Développement Technologique
et des Services Techniques
Environnement Canada

10e Conférence canadienne
sur la gestion des déchets
25-27 octobre, 1988
Winnipeg (Manitoba)

11e Symposium international
sur le traitement des eaux usées
21-22 novembre, 1988
Montréal (Québec)

15e Atelier sur la toxicité aquatique
28-30 novembre, 1988
Montréal (Québec)

Pour obtenir plus d'information au sujet de ces
conférences, veuillez communiquer avec:

M. André Champoux 819-953-1199

ou

Ms. Stephanie Hunt 819-953-5363

Conferences to be organised or sponsored
by the Technology Development
and Technical Services Branch
Environment Canada

10th Canadian Waste
Management Conference
October 25-27, 1988
Winnipeg, Manitoba

11th International Symposium
on Wastewater Treatment
November 21-22, 1988
Montreal, Quebec

15th Workshop on Aquatic Toxicity
November 28-30, 1988
Montreal, Quebec

To obtain more information about these conferences,
please contact:

Mr. André Champoux 819-953-1199

or

Ms. Stephanie Hunt 819-953-5363

NOTICE AND CALL FOR PAPERS 2ND INTERNATIONAL WORKSHOP ON WAVE HINDCASTING AND FORECASTING

VANCOUVER, BRITISH COLUMBIA

APRIL 25-28, 1989

An international workshop on wave hindcasting and forecasting, sponsored by the Federal Panel on Energy Research and Development (PERD) and the Canadian Meteorological and Oceanographic Society (CMOS), will be held in Vancouver, British Columbia from April 25-28, 1989. This workshop will follow on the success of the first workshop, held in Halifax, Nova Scotia in September 1986.

The objectives of the workshop are:

- to provide a forum for the exchange of ideas and information related to practical applications of wave hindcasting and forecasting
- to discuss priorities for future research and development

Papers are solicited on both the research and operational aspects of wave hindcasting and forecasting. Papers dealing with the particular problems of the northeast Pacific Ocean are especially welcomed. It is expected that there will be sessions on the following topics:

- operational forecasting
- user requirements (in design and operations)
- hindcasting procedures
- data collection/instrumentation
- incorporation of satellite wind/wave data
- wave/current interaction
- wave/ice interaction
- wind fields for wave hindcasting/forecasting
- shallow water and nearshore effects

The program will consist of invited as well as contributed papers. As well, space will be available for a limited number of displays and posters.

Those wishing to present a paper should submit a title and abstract (100 - 300 words). Each abstract should contain the author's name, mailing address and telephone number. Those wishing to participate in the poster session should provide a description of their display including space requirements. The deadline for receipt of abstracts is October 15, 1988. Full papers will be required by March 15, 1989.

Address correspondence to:

V.R. Swail
Atmospheric Environment Service
4905 Dufferin Street
Downsview, Ontario M3H 5T4
CANADA
(416) 739-4347

First Circular: Call For Abstracts And Posters CANADIAN CONTINENTAL SHELF SEABED SYMPOSIUM (C2S3)

2 - 6 October, 1989,
Bedford Institute of Oceanography,
Dartmouth, Nova Scotia, CANADA, B2Y 4A2.

THE PURPOSE OF THIS SYMPOSIUM IS THE INTERCHANGE OF KNOWLEDGE, DEVELOPMENT OF NEW THURSTS AND DOCUMENTATION OF CURRENT RESEARCH ON THE NATURE AND STABILITY OF THE CANADIAN CONTINENTAL SHELF SEABED, IN TERMS OF THE PHYSICAL AND CHEMICAL ENVIRONMENT AND THE ASSOCIATED BIOLOGICAL COMMUNITIES.

THE SYMPOSIUM WILL COMPRISE FOUR PLENARY SESSIONS OF ORAL PRESENTATIONS AND THREE POSTER SESSIONS. THE FIRST THREE PLENARY SESSIONS WILL EACH FOCUS ON ONE OF THE THREE MAJOR CANADIAN SHELF REGIONS (WEST COAST, EAST COAST, ARCTIC). THERE WILL BE 6 KEYNOTE PRESENTATIONS AND 8 UNSOLICITED PAPERS IN EACH SESSION. THE KEYNOTE PAPERS WILL REVIEW IN TURN THE CURRENT STATUS OF RESEARCH ON:

CHEMICAL INTERACTIONS AT THE SEABED;
BIOLOGICAL INTERACTIONS WITH THE SEABED;
PHYSICAL/OCEANOGRAPHIC PROCESSES IMPACTING THE SEABED;
SURFICIAL GEOLOGY;
SEDIMENT STABILITY; AND
ENGINEERING CONCERNS OF CONTINENTAL SHELF DEVELOPMENT.



Papers Will Be Selected By The Symposium Steering Committee On The Basis Of Submitted Abstracts. Please Submit Three Copies Together With The Preliminary Registration Form (Below) Before December 1988. Abstracts Should Not Exceed 300 Words, May Be Written In English Or French, And Should Deal With Aspects Of Canadian Continental Shelf Research.

Accepted Abstracts Will Be Bound And Distributed At The Symposium. Proceedings Of The Symposium Will Be Published As A Series Of Scientific Papers In A Special Issue Of Continental Shelf Research. Final Papers Should Be Submitted For Journal Review During The Symposium.

Final Details Of The Symposium Together With Accommodation And Registration Information Will Be Issued In The Second Circular (Dec. 88).

THE CERTIFICATE PROGRAM IN DIGITAL REMOTE SENSING AT THE UNIVERSITY OF WATERLOO

The five-day course on DIGITAL ANALYSIS IN REMOTE SENSING will be offered by the University of Waterloo, Faculty of Environmental Studies, and the Earth Observation Laboratory of the Institute for Space and Terrestrial Science. The course will be held from November 7 -11, 1988.

Participants will:

- receive an overview of current analysis techniques in hardcopy and digital LANDSAT imagery;
- learn how to incorporate the various remote sensing products and ground truth analysis in a multistrategy approach to analysis in geology, forestry, water resources and land use;
- gain "hands-on" experience in analysis of digital LANDSAT data using the interactive computers at the University of Waterloo.

A university degree is not required, although applicants should have an introductory course in air photo interpretation or remote sensing, or some practical experience in the field.

For further information, please contact:

Dr. Ellsworth F. LeDrew
Director, Earth Observations Laboratory
Institute for Space and Terrestrial Science
Faculty of Environmental Studies
University of Waterloo
Waterloo, Ontario
N2L 3G1
(519) 885-1211, Ext. 2783 or 6574

POSITIONS VACANT

CHEMICAL OCEANOGRAPHER

Applications are invited for a tenure-track position at the Assistant Professor level at the University of British Columbia (jointly appointed in the Departments of Oceanography and Chemistry) from candidates with a doctorate in marine inorganic, analytical and/or physical chemistry and relevant postdoctoral experience and strong research track record. The candidate will be expected to participate in undergraduate and graduate teaching and carry on original research related to chemical processes and reaction mechanisms in the ocean with particular emphasis on global chemical balances and fluxes of constituents between the oceans and other components of the Earth System.

Applications, together with a curriculum vitae, three referees (names, addresses and phone numbers), a statement of research interests and sample research publications should be sent to: Dr. P.H. LeBlond, Head, Department of Oceanography, University of British Columbia, Vancouver, British Columbia, V6T 1W5. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. The appointment will commence as soon as possible.

CANADIAN VOLUNTEERS ARE HELPING TURN THE WORLD AROUND. YOU CAN HELP TOO.

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CONSULTANTS' PAGES

Entries on these pages are restricted to CMOS Accredited Consultants. The accreditation process commenced in December, 1986, and to date there are 24 Accreditees. As set out in the document "CMOS Guidelines for Accreditation," the criteria are:

- (1) The applicant must possess an appropriate undergraduate degree from a recognized university.
- (2) The applicant must possess at least one of the following types of specialized training:
 - (i) post-graduate degree from a recognized university in meteorology or oceanography;
 - (ii) post-graduate degree from a recognized university in the natural or applied sciences or mathematics, specializing in one or more branches of meteorology or oceanography; or

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

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

Individuals interested in applying for accreditation may contact the CMOS Executive Director at the Society's Ottawa address for a copy of the Guidelines and an application form. Consultants who wish to obtain accreditation should note that applications received before April 1, 1989, are expected to be processed by July 1, 1989, if all the necessary information has been included with the applications. A complete list of CMOS accredited consultants can be obtained from the CMOS Executive Director.

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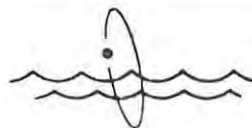
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