



C.m.o.s.

NEWSLETTER

S.c.m.o.



FEBRUARY 1981

Vol.9 No.1

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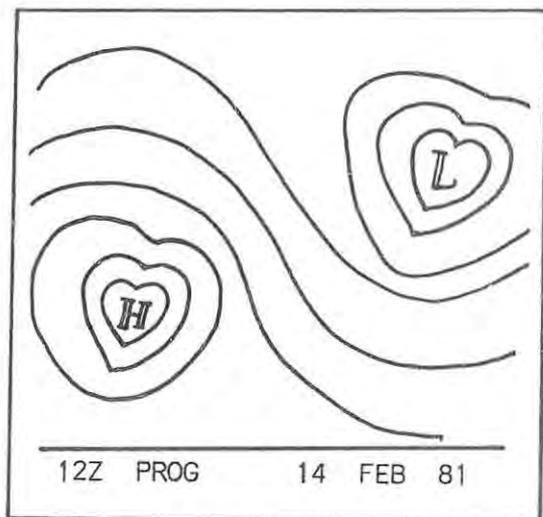
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FROM THE PRESIDENT'S DESK

In the last Newsletter it was announced that CMOS now has a permanent address in Ottawa, together with mail re-direction service. It is hoped that within the next few months our complete membership list will be on a data disc computer console in that office, whereupon updated lists would be readily produced for us on demand (and payment, of course). Once that has been set up, and a new CMOS membership renewal notice designed, we shall be in a position to mail these out and to receive and bank directly next year's dues payments. At present we are engaged in negotiations with the U of T Press to determine how to separate effectively and fairly the printing and distribution of Atmosphere-Ocean from these renewal notice activities. It will be essential, naturally, to ensure the uninterrupted continuity of the journal printing function, which was the reason for naming the editor, Henry Leighton, to be chairman of the committee charged with overseeing the establishment of our permanent office.

Last fall Environment Canada issued a draft policy for Public Consultation and Information Availability, and invited the CMOS, among others, to comment on it. The task of drafting a reply was given to the Public Information Committee. Their comments were approved at the 3rd CMOS Executive Meeting, November 27, and presented to Environment Canada at a hearing on December 3 in Edmonton. While generally favourably disposed towards the proposed policy, the CMOS stand was critical of the Information Availability aspects as containing little that was new or likely to lead to more open availability of



CMOS NEWSLETTER is a bi-monthly publication of the Canadian Meteorological and Oceanographic Society

Editor:

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Atmospheric Environment Service
Argyll Centre
6325 - 103 Street
Edmonton, Alberta
T5H 5H6

environmental information material. Concrete suggestions were presented for making the public aware of the existence of reports rather than simply releasing them in a passive unpublicized manner. Individuals wishing to receive copies of the CMOS presentation (or of the Environment Canada document) should contact the chairman of our Public Information Committee, Joe Kotylak.

In common with most nations, Canada is a member of the International Commission for Scientific Unions (ICSU). The national agency through which contact is maintained with this body and with other international non-governmental scientific bodies is NRC. Recently they requested that CMOS nominate a member to their Committee on International Scientific and Technological Affiliations (CISTA) which oversees and coordinates such contacts. On our recommendation, they have appointed Dr. Paul LeBlond of UBC as the CMOS representative. The complete committee will consist of some 15 members drawn from the entire spectrum of scientific and engineering disciplines.

The recently announced decision by AES to close out operation of Ocean Station "Papa" in the Pacific sometime this year has once again exorcised the meteorological and oceanographic community. CMOS's Scientific Committee considered the matter at its November meeting in Toronto. While deeply regretting the decision, they did not feel that CMOS should attempt to have it reversed. The cost implications were such that continued operation would require unacceptably large cuts in even more valuable programs, due to the severe financial constraints presently in effect on AES. In particular, there would be no opportunity to develop the alternate satellite observing programs that could replace the single point site provided by the ship station. Accordingly, a letter was sent to the Environment Canada Minister, John Roberts, from CMOS regretting the loss of the observations and pointing out the effect this will have on meteorological services. He was further urged to accelerate the development of alternative data acquisition systems both for meteorology and for oceanography. Whether this or any other plea has a positive effect, only time will tell. Don't hold your breath!

John Maybank
President

NEWS FROM THE CENTRES

Alberta Centre: A well attended meeting was held on Wednesday, November 26, 1980 when some 27 members and guests were treated to a presentation by Mr. Hennie Veldhuizen of the Environmental Protection Service. The very current topic of 'Acid Rain' generated considerable discussion.

Saskatchewan Centre: On December 4, the Saskatchewan Centre held its annual meeting. New officers were elected and a new budget struck. The new officers are:

Chairman : Dr. Earl Ripley
Chairman-Elect : Dr. Stan Shewchuk
Treasurer/Secretary: Don Bauer
Membership : Elaine Wheaton
Public Relations : John Dublin

Following the business meeting, an introduction to Acid Rain was given. This composed of three parts: a slide/tape (on loan from AES-Winnipeg), Elaine Wheaton gave the reaction of hydrometeorologist from across Canada who attended a recent AES Hydromet workshop, and Stan Shewchuk presented the Alberta-Saskatchewan situation.

Balfour Currie

Internationally-known physicist Balfour Currie, a longtime professor at the University of Saskatchewan, died at his Saskatoon home Thursday. He was 78.

Born in Helena, Mont., and educated in Saskatchewan and at Montreal's McGill University, Currie joined the U of S in 1928 as a physics instructor, rising to head that department from 1952 to 1961.

He was dean of the college of graduate studies and research from 1959 to 1970 and vice-president in charge of research from 1967 to 1974.

Currie established the Institute of Space and Atmospheric Studies at the university in 1956 and directed it for 10 years. He was widely recognized for his studies of the upper atmosphere and represented Canada at numerous international conferences on applied physics, meteorology and the peaceful uses of outer space.

Appointed a companion of the Order of Canada in 1972, he also served on the U of S board of governors, was president of the alumni association and chaired the faculty association.

He received the Patterson Medal for distinguished service to meteorology in Canada in 1967.

NEW AND SUSTAINING MEMBERS

New Members

David McCulloch
Edmonton, Alberta

F. J. Ocampo-Torres
Sn Ysidro, Ca. U.S.A.

R.G. Drobig
Edmonton, Alberta

Robert Black
Edmonton, Alberta

Kevin J. Keen
Montreal, P.Q.

Bruce J. Bevan
Victoria, B.C.

Dr. J. N. Smith
Dartmouth, NS.

Anastasio Tsonis
Montreal, P.Q.

Peter Berrang
Victoria, B.C.

Stewart Meeres
Edmonton, Alberta

Man Kong Yau
Montreal, P.Q.

Sustaining Members

Airflow Development Canada Ltd.
Richmond Hill, Ontario

Bristol Aerospace Ltd.
Winnipeg, Manitoba

Dobrocky Seatech Ltd.
Victoria, B.C.

Younge Atmospheric Consulting
Services Ltd.
Calgary, Alberta

Plansearch Inc.
Dartmouth, N.S.

N. Sargent
Downsview, Ontario

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

Beak Consultants
Vancouver, B.C.

Hermes Electronics Ltd.
Dartmouth, N.S.

Nordco Ltd.
St. John's, Nfld.

Alberta Agriculture Advisory Committee
on Weather Modification
Three Hills, Alberta

Ontario Hydro
Toronto, Ontario

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

SCOR NEWS - Chris Garrett

The Scientific Committee on Oceanic Research (SCOR) is a sub-committee of ICSU and plays a useful international role in establishing working groups, providing advice to intergovernmental organizations and organizing international conferences. The following news items may be of interest to Canadian oceanographers.

1. The SCOR Executive. Bob Stewart (Victoria) is no longer an ex-officio member, having retired from the Presidency of IAPSO in December 1979. His influence will be sadly missed, but Canada is still well represented, with Warren Godson (AES, Downsview, President of IAMAP) and Tim Parsons (UBC, President of IAOB) still ex-officio members, and at the 15th General Meeting in Woods Hole in September 1980 Alan Longhurst (BIO) was elected to the Executive as Secretary.
2. The SCOR Secretariat has recently moved from the Royal Society in London England, to Dalhousie University, Halifax. The new Executive Secretary is Mrs. Elizabeth Tidmarsh, Department of Oceanography, Dalhousie University.
3. JOA 82. The next Joint Oceanographic Assembly will be held at Dalhousie University from 2-13 August 1982. The topics for symposia are being finalized and will be incorporated into the Second Circular, to be issued shortly. Leo O'Quinn, Fisheries and Oceans, Ottawa, is the Executive Secretary for the JOA and may be contacted for a copy of the circular.
4. Working Groups are the main raison d'etre of SCOR. The following WG's are still in existence (or being formed). Canadian members are also listed. (National Committees may nominate Corresponding Members who may attend working group meetings at their own expense)

WG10	Oceanographic Tables and Standards Dr. E.L. Lewis (IOS), Dr. C.K. Ross (BIO)
WG34	Internal Dynamics of the Ocean Dr. G.T. Needler (BIO)
WG42	Baltic Pollution
WG44	Ocean-Atmosphere Materials Exchange (OAMEX)
WG46	River Inputs to Ocean Systems Dr. A. Walton (BIO)
WG47	Oceanic Programme during FGGE
WG51	Evaluation of CTD Data Dr. E.L. Lewis (IOS), Dr. T.M. Dauphine (NRC)
WG52	Estimation of Micro-Nekton Abundance

WG54	Living Resources of the Southern Ocean
WG55	Prediction of 'El Nino'
WG56	Equatorial Upwelling Processes
WG57	Coastal and Estuarine Regimes
WG58	Arctic Ocean Heat Budget, Cr. E.L. Lewis (IOS) Dr. E.C. Carmack (Inland Waters, Vancouver)
WG59	Mathematical Models in Biological Oceanography Dr. T. Platt (BIO), Dr. K.H. Mann, Chairman (BIO)
WG60	Mangrove Ecosystems
WG61	Sedimentation Processes at Continental Margins Dr. D.J.W. Piper (Dalhousie)
WG62	Carbon Budget of the Ocean
WG63	Marine Geochronological Methods
WG64	Ocean Atoll Drilling
Committee on Climate Change and the Ocean - Dr. A.R. Longhurst (BIO), Dr. R.W. Stewart (Victoria)	

The following new Working Groups are being established:

WG66	Oceanographic Applications of Drifting Buoys J.F. Barrett (IOS)
WG67	Oceanography, Marine Ecology and Living Resources B.T. Hargrave (BIO)
WG68	North Atlantic Circulation F.W. Dobson (BIO), R.A. Clarke (BIO)

Abbreviations

SCOR	Scientific Committee on Oceanic Research
ICSU	International Council of Scientific Unions
IAPSO	International Association of Physical Sciences of the Ocean
IAMAP	International Association of Meteorology and Atmospheric Physics
IABO	International Association of Biological Oceanography
BIO	Bedford Institute of Oceanography, Dartmouth, N.S.
IOS	Institute of Ocean Sciences, Patricia Bay, B.C.

CALL FOR NOMINATIONS - 1980 AWARDS

Nominations are requested from members and Centres for 1980 CMOS Awards to be presented at the 1981 Annual Meeting. Four awards are open for competition: (1) the President's Prize, for an outstanding contribution in the field of meteorology and/or oceanography by a member of the Society; (2) the Dr. Andrew Thomson Prize in Applied Meteorology, for an outstanding contribution by a member in that field; (3) the Graduate Student Prize, for a contribution of special merit; and (4) the Rube Rube Hornstein Prize in Operational Meteorology, for outstanding service in providing operational meteorological service. The awards will be made on the basis of contributions during the 1980 calendar year, except (4) which may be awarded, also for work performed over a period of years.

Nominations are also requested for the award of citations to individuals or groups in Canada who have made some outstanding contribution in helping alleviate pollution problems or in developing environmental ethics.

All nominations should reach the corresponding secretary no later than February 1, 1981.

APPEL AUX CANDIDATURES POUR LES PRIX ET CITATIONS 1980

On demande aux membres et aux centres locaux de soumettre leurs nominations aux candidatures pour les prix de la Société pour l'année 1980. Il y a quatre prix: (1) le prix du président pour un travail exceptionnel en météorologie et/ou océanographie par un membre de la Société; (2) le prix de météorologie appliquée Dr. Andrew Thomson pour un travail exceptionnel dans ce domaine par un membre; (3) le prix aux étudiants gradués et, (4) le prix de météorologie opérationnelle Rube Hornstein pour un travail exceptionnel dans l'exploitation des services météorologiques.

Tous les prix seront attribués pour un travail qui a été effectué durant l'année 1980, à l'exception de (4) qui peut aussi être attribué pour un travail effectué durant une période couvrant plusieurs années.

On demande aussi des nominations de candidats susceptibles de se voir décerner une citation par la Société. Une citation peut être décernée à un individu ou à un groupe qui a apporté une contribution exceptionnelle à la solution des problèmes de la pollution, à l'amélioration de l'environnement ou au développement d'une éthique écologique.

Toutes les nominations recueillies par le secrétaire-correspondant avant le 1^{er} février 1981 seront remises aux comités des récompenses et des citations, selon le cas.

Table of contents from the recently published CMOS Directory of Consultants
1st Edition, December 1980.

1. Acres Ontario
2. Atmospheric Dynamics Corporation Ontario
3. Campbell Scientific Canada Alberta
4. Case Existological Laboratories B.C.
5. DSMA International Ontario
6. EVS Consultants B.C.
7. Environcon B.C.
8. The Environmental Applications Group Ontario
9. Environmental Sciences Limited B.C.
10. Goodwood Data Systems Ontario
11. International Environmental Consultants (2 pp). Ontario
12. R.H. Loucks Oceanology (2 pp) Nova Scotia
13. Maclaren Engineers, Planners and Scientists Ontario
14. Marshall Macklin Monaghan Ontario
15. Martec Ocean Science Nova Scotia
16. Don McIntyre Speaking (2 pp). Ontario
17. Promet Environmental Group - MEP. Alberta
18. Remotec Applications (3 pp) Newfoundland
19. George Robertson Agrometeorologist Ontario
20. Seacast - MEP Newfoundland
21. Seakam Oceanography B.C.
22. Norman Thyer - Consulting, Research and Training . . . B.C.
23. Unies Consulting Engineers (2 pp) Manitoba
24. Weather Consultants of Canada Ontario
25. Western Research and Development Alberta
26. The University of Alberta Alberta
27. McGill University Quebec

Submissions total 33 pages.

Kindly send any comments or requests for copies to:

Dr. R.B. Charlton, Chairman
Committee on Professionalism, CMOS
Department of Geography
Division of Meteorology
University of Alberta
Edmonton, Alberta
T6G 2H4



CALL FOR PAPERS

FIFTEENTH ANNUAL CONGRESS

The Fifteenth Annual Congress and Annual General Meeting of the Canadian Meteorological and Oceanographic Society will be held at the University of Saskatchewan, Saskatoon, Saskatchewan on May 27-29, 1981. The THEME for the Congress will be HYDROMETEOROLOGY. In addition to invited and contributed papers, relating to the general theme, complementary sessions will be held on waves and tides, drought management activities, the Canadian Climate Program, environmental assessment, stratospheric dynamics, remote sensing, polluted precipitation any other aspects of meteorology and oceanography depending on contributions. Poster sessions may be held depending on response.

Sessions on air pollution meteorology, sponsored by the Air Pollution Meteorology Special-Interest Group of CMOS, will be featured concurrently with the Congress sessions. A separate bound volume of the proceedings of the air pollution sessions will be published and authors must submit camera-ready texts at the meeting. Instructions on format will be forwarded on acceptance.

Titles and definitive ABSTRACTS (less than 300 words), intended both for the Congress and special air pollution sessions, should reach the program committee by 1 FEBRUARY 1981 and should be addressed to Dr. Barry Goodison, Hydrometeorology Division, Atmospheric Environment Service, 4905 Dufferin Street, Downsview, Ontario M3H 5T4. Telephone (416) 667-4914. Please indicate if the paper is intended for the special air pollution sessions and if your paper would be suitable for presentation in a poster session.

Precongress activities, including tours, are planned for May 26. In addition, commercial exhibits will be on display during the Congress. Organizations interested in obtaining display space should contact:

P. Perkins
c/o SED Systems Ltd.
P.O. Box 1464
Saskatoon, Saskatoon
S7K 3P7 Phone: (306) 664-1762



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

INVITATION A PRESENTER DES COMMUNICATIONS

QUINZIEME CONGRES ANNUEL

Les quinzièmes congrès annuel et réunion générale annuelle de la Société canadienne de météologie et d'océanographie auront lieu à l'université de la Saskatchewan, à Saskatoon (Saskatchewan) du 27 au 29 mai 1981. Le congrès a pour thème l'hydrométéorologie. Outre les communications présentées par des personnalités invitées et d'autres participants, sur le thème général, il y aura des séances complémentaires sur les vagues et les marées, les activités du programme d'étude de la sécheresse, le programme climatologique canadien, les études prospectives sur l'environnement, la dynamique stratosphérique, le télédétection, les précipitations polluées et en fonction de la participation, sur d'autres aspects de la météorologie et de l'océanographie. Des séances de démonstration pourront avoir lieu, également en fonction de la participation.

Le groupe spécial d'étude en météorologie de la pollution atmosphérique (SCMO) tiendra des séances dans ce domaine en même temps que les séances du congrès. On publiera par la suite, en un volume (relié) les actes des séances sur la pollution atmosphérique. Les auteurs devront donc nous fournir, lors de la réunion, leur texte prêt pour la photocopie. Nous leur enverrons les instructions à suivre pour la présentation des textes après que ces derniers aient été acceptés.

Le résumé définitif (moins de 300 mots) et le titre des communications destinées au congrès et aux séances spéciales sur la pollution atmosphérique doivent parvenir au comité du programme, au plus tard le 1^{er} février 1981. On doit envoyer le tout à M. Barry Goodison, Division de l'hydrométéorologie, Service de l'environnement atmosphérique, 4905, rue Dufferin, Downsview (Ontario) M3H 5T4, téléphone: (416) 667-4914. Veuillez indiquer si vous projetez de présenter votre communication lors des séances spéciales sur la pollution atmosphérique et si on peut l'inclure au programme d'une séance de démonstration.

Diverses activités (telles que visites organisées), sont prévues le 26 mai. De plus, une exposition commerciale aura lieu pendant le congrès. Les organisations désireuses d'y participer devraient contacter M. P. Perkins (c/o SED Systems Ltd., P.O. Box 1464, Saskatoon, Saskatchewan S7K 3P7; tél (306) 664-1762.



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



30 Campus Drive, Saskatoon, Saskatchewan S7N 0X1

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Precongress activities, including tours, are planned for May 26. In addition, commercial exhibits will be on display during the Congress.

REGISTRATION: Members \$35.00. Non-members \$55.00. Students \$10.00.
PRE-REGISTRATION BEFORE APRIL 15, 1981.

TOURS:

- No. 1 - Cominco Potash Mine, May 26: 20 km from Saskatoon, tour of surface and underground facilities (limited to 30 people).
- No. 2 - Cory Potash Mine, May 29: 20 km from Saskatoon, tour of surface and underground facilities (limited to 30 people).
- No. 3 - Prince Albert Satellite Station, May 26 (all day): 170 km north of Saskatoon near Prince Albert. Receives pictures from Landsat and data retransmissions from hydrological stations. Return trip includes a stop at Batoche - site of the Riel Rebellion 1885.
- No. 4 - Gardiner Dam, May 26: 100 km south of Saskatoon, site of hydro-electric generating station Coteau on Lake Diefenbaker. Tour of powerhouse and tourist site.
- No. 5 - Riverboat Trip, May 29: scenic three-hour riverboat cruise along the Saskatchewan River south of Saskatoon. Meal will be provided. (limited to 40 people). Weather permitting.

SOCIAL EVENTS: A Wine and Cheese Party (\$5 per person) is planned for the evening of May 26 and the Banquet (\$15 per person) will be held on May 28.

UNIVERSITY OF SASKATCHEWAN
APPLICATION FOR ACCOMMODATION AND MEALS
CANADIAN METEOROLOGICAL AND OCEANOGRAPHIC SOCIETY - May 26-29, 1981

MR./MRS./MISS/MS./ _____
(Surname) (First) (Initials)

ADDRESS: _____

1. Please reserve accommodation in Residence as follows:
____ Single Room ____ Double Room (Roommate preference if any): _____

The residence rooms are on 3 levels. There is no elevator service. If you have a heart condition or any other handicap please check. _____

2. Package Rate: Single Rm & Meals - \$84/person. Double Rm & Meals - \$69/person.
The above rates include room on the night of Tues. May 27, Wed. 27, Thur. May 28 and meals as follows: Wed. May 27 - Breakfast, Lunch and Supper
Thurs. May 28 - Breakfast and Lunch
Fri. May 29 - Breakfast and Lunch

N.B. Banquet Thursday May 28 is NOT included in the package.

3. I require a car parking stall. _____ (check of yes)

4. I enclose payment for the full amount (Cheque or Money Order, made payable to the University of Saskatchewan) and understand that a full refund of this amount will be made, only if notice of cancellation in writing reaches the Residence Office by no later than Wednesday, April 29, 1981. Notice of cancellation received after this date will result in a forfeiture of \$20.00.

Signature

Please retain this portion for information

ACCOMMODATION can only be guaranteed if this application reaches the Residence Office by Wednesday April 29, 1981. Please complete and return this application to:

Residence Office, 128 Saskatchewan Hall
University of Saskatchewan
Saskatoon, Saskatchewan S7M 0W0

REGISTRATION for accommodation will be at the main desk in Saskatchewan Hall on Tuesday May 26, 1981 from 7:00 - 11:00 p.m.

PACKAGE RATE (Tax Included): Single Rm & Meals - \$84. Double Rm & Meals - \$69.

1) The University Residences are fully modern and located within or close to the centre of the campus. Provincial liquor regulations apply in the Residences and are the same as those for hotels and motels. 2) The residence rooms do not have private bathrooms. 3) Each person requesting accommodation must complete and application form for residence. 4) Parking permits are available from the Residence Office for delegates living in Residence. Non-Residents may pay for parking at the parking area. 5) There will be no rebate of charges for late arrivals or early departures. 6) Checkout time is 3:00 p.m. 7) Meals served at Marquis Hall: Breakfast 7:30am - 8:30am; Lunch 11:30am - 1:00pm; Supper 5 - 6pm.



Books

SCOPE REPORT 15: ENVIRONMENTAL RISK ASSESSMENT

Edited by **Anne V. Whyte** and **Ian Burton**

This book examines in a common framework a wide range of environmental risks not normally considered together. These include the environmental ramifications of technologies such as nuclear power; resource depletion through desertification and deforestation; toxic contamination of ecosystems; and the baseline risks arising from poverty. A major achievement of the book is to show how risks in all these fields are evaluated as "Acceptable" or requiring action, in accordance with common "yardsticks" based on natural, background levels of risk; zero risk; balancing the risks of substitutes, and comparison with other risks accepted by society.

The book illustrates the diverse assessment arrived at in different countries and argues that the application of common assessment methods will not bring about uniformity in acceptable risk or in standards and regulations because ultimately judgements about risks are based on reasonableness. What is considered reasonable varies according to the social, economic and political context in which a risk assessment is made. Thus the same scientific evidence can legitimately give rise to different national judgements about acceptable levels of safety.

Available from John Wiley & Sons Ltd. - US \$30 or £12

Quantitative Toxicology.

V.A. Filov, A.A. Golubev, E.I. Liublina, N.A. Tolokontsev.
John Wiley and Sons, Inc. (One Wiley Drive, Somerset, N.J.
08873). 1980. 462 + xvii pp., \$32.50.

The principal quantitative methods used in toxicology studies are summarized. The toxic effect of substances is related to the interaction between the poison and the living organism, the amount of poison, thermodynamics, kinetics, cumulation, and structure. This publication follows the form of the original Russian work which appeared in 1973, but it has undergone substantial revision and includes about fifty percent more material including the developments in the field through 1977.

Mathematical Modelling of Turbulent Diffusion in the Environment. Edited by C.J. Harris. Academic Press Inc. (111 Fifth Avenue, New York, NY 10003). 1980 500 + xvi pp., \$41.50

This volume contains the proceedings of a conference on Mathematical Modelling of Turbulent Diffusion which was held at Liverpool University in September 1978. The first chapter of the book is concerned with mathematical modelling techniques for turbulent diffusion, with an emphasis on theory. Chapter two is concerned with air pollution and atmospheric diffusion. The four papers in this section are entitled: "Mathematical Models of Dispersion of Air Pollution around Buildings and Hills", "The Application of Field-Experimental Data to the Parametrisation of the Dispersion of Plumes from Ground Level and Elevated Sources" "Use of Diffusion Approximation to Model Atmospheric Dispersion over Short and Long Distances", and "Statistics of the Concentration Fluctuations in Short Range Atmospheric Diffusion". The final two chapters are concerned with turbulent diffusion in an aqueous medium.

CONFERENCES

Calgary, Alberta	March 2-6, 1981	4th Canadian Permafrost Conference
Gorham, Maine	March 19-20, 1981	Third Conference on Meteorology of New England and the Atlantic Canada
Anaheim, Calif.	March 30 - April 3, 1981	15th Conference on Agriculture and Forest Meteorology
Burlington, Ontario	April 7-9, 1981	20th Annual Canadian Hydrographic Conference
Seattle, Washington	April 8-10, 1981	The Northern Community - A Search for a Quality Environment
Vancouver, B.C.	April 13-14, 1981 Sponsor: NRC and and Canadian Society for Civil Engineering	3rd Canadian Workshop on Wind Engineering
Toronto, Ont.	May 7-8, 1981 Sponsor: NRC and and Canadian Society for Civil Engineering	3rd Canadian Workshop on Wind Engineering
St. George Utah	April 14-16 1981	Western Snow Conference
Albany, New York	April 27- May 1, 1981 Sponsor: CMOS-AMS	Conference on Long-Range Transport of Airborne Pollutants
Guelph, Ontario	April 28-30, 1981	Symposium on Multi-Disciplinary Studies on Hudson-James Bay
Montreal, P.Q.	May 5-8, 1981 Sponsor: CMOS-AMS	International Conference on the Aviation Weather System
Calgary, Alberta	May 11-13, 1981	Canadian Geophysical Union

CONFERENCES - cont'd

Miami Beach Florida	May 13-20, 1981	With USRI/NOAA/USN/NASA Symposium on Wave Dynamics and Radio Probing of Ocean Probing of the Ocean Surface
Saskatoon, Saskatchewan	May 27-29, 1981	15th Annual CMOS Congress
Toronto, Ontario	June 16-18, 1981 Sponsor: CMOS-AMS	4th Conference on Atmospheric Radiation
Quebec City P.Q.	July 27-31, 1981 Sponsor: AMS/ Université Laval, Ministère de l'Environnement, Gouvernement du Quebec	Port and Ocean Engineering under Arctic Conditions
Reno, Nevada	October 6-9, 1981	Fourth Conference on Hydrometeorology
Steamboat Springs, Col.	November 10-13, 1981	Seventh Conference on Fire and Forest Meteorology and Second Conference on Mountain Meteorology
Montreal, P.Q.	August 4-7, 1981 Sponsor: SESCO and Université of Quebec à Montréal	National Conference on Solar Energy
Calgary Alberta	August 25-26, 1981 Sponsor: Kananaskis Environmental Research Centre	2nd Plains Aquatic Research Conference
Palo Alto, CA.	August 25-28, 1981	12th NATO/CCMS International Meeting on Air Pollution Modelling and its Application

EMPLOYMENT

Head Hydrometeorology Unit

Ontario Ministry of Natural Resources

\$27,400 - \$32,300

Streamflow Forecast Centre is responsible for the monitoring of weather, cover and streamflow conditions, interpreting and forecasting flood flows in Ontario rivers and issuing appropriate advisories and flood warnings.

In this career opportunity with the MINISTRY OF NATURAL RESOURCES, conservation authorities and water management branch, you will be responsible for supervising the preparation and issuing of flood forecasts and warnings for Ontario rivers; implement, co-ordinate and control new projects to improve the system; initiate and plan research in hydrology and river management; supervise the development of operation procedures for dams and reservoirs to ensure effective flood control and water use; design hydrometeorological networks for improved streamflow forecasting; prepare training courses; provide expert advice and present papers on hydrometeorological matters.

Location: Toronto

Qualifications: A degree in applied science or math, physics and chemistry with postgraduate training in hydrology or meteorology; experience in the field of hydro-meteorology and computer applications; membership in a professional association or learned society; ability to conduct independent research studies; good communication skills; valid driver's licence.

Please submit application by February 23, 1981, quoting File NH-421/80 to:

Ministry of Natural Resources
Personnel Services Branch, Room 4601
Whitney Block, Queen's Park
Toronto, Ontario
M7A 1W3



STANDARD DICTIONARY
of
METEOROLOGICAL
SCIENCES

Through Sverre Orvig we have just learned that the McGill/Queen's University Press wishes to dispose of the remaining copies of a publication which should be of interest to CMOS members. The **STANDARD DICTIONARY OF METEOROLOGICAL SCIENCES** is a bilingual dictionary of 338 pages prepared by Gérard J. Proulx who was the Director of the Scientific and Technical Divisions, Bureau for Translations, Department of the Secretary of State, Ottawa.

The dictionary was prepared in 1971 and covers all fields of Meteorology as well as Oceanography. The Bulletin of the American Meteorological Society reviewed it and termed it not only the latest but most thorough of known meteorological vocabularies.

The normal price of \$22 has been reduced to \$10 for remaining stock. Send your order to:

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