

# PROCEEDINGS OF MEETINGS

Session of 1961 - 1962

(Meetings were held in the Medical Sciences Building of Dalhousie University, the Sir James Dunn Science Building of Dalhousie University, the Naval Research Establishment, Nova Scotia Technical College, the Queen Elizabeth Auditorium, and the Lord Nelson Hotel.)

*100th Annual Business Meeting: October 16, 1961*

The meeting was presided over by the President, Dr. W. J. Archibald. The Officers presented their reports.

*The Treasurer, C. R. Masson, reported:*

Receipts .....	\$2,132.75
Expenditures .....	2,693.92
Bank Balance .....	1,347.19
Permanent Fund .....	397.50

*The Librarian, Miss E. M. Campbell, reported:*

There have been no significant changes in the Institute's library during the year 1960-1961. The binding program is being continued and the work of checking and arranging the material housed in the attic is going on continually.

There is a possibility that with the expansion of the Nova Scotia Technical College programs there may be some encroachment on the small space we have in the attic. In 1948, when the Provincial Science Library was divided, there was an arrangement made that the attic would be used solely by the Institute for its exchange material. Unfortunately that agreement has not always been kept and we are finding it difficult to keep the material in an accessible condition. We use the Institute's holdings for interlibrary loans and there has been a greatly increased use made of the exchange material in the last year.

We have added another range of steel shelves to the library this year, chiefly to make more room for Institute material.

The Proceedings, of which there have been two issues, have been mailed from the library to the exchange societies. There have been no new exchanges this year. Correspondence has been carried on with various societies about the exchanges, missing numbers, changes of address, etc. The Research

Foundation is continuing to finance subscriptions to societies which no longer send their material on an exchange basis.

The Quarterly Journal of the Geological Society of London will be sent to the Dalhousie Science Library where it will be kept in the Geological Library.

*The Editor, H. S. Heaps, reported:*

Two numbers of the Institute Proceedings were published during the year. These were Volume 24, Part 4 and Volume 25, Part I. They are dated 1957 - 1958 and 1958 - 1959. The next issue, Volume 25, Part 2, dated 1959 - 1960 will contain a paper entitled "A Forest Classification for the Maritime Provinces" by Dr. Loucks. Publication is awaiting the delivery of maps by the Department of Mines and Technical Surveys.

At present there are no manuscripts on hand for inclusion in Volume 25, Part 3 which will be dated 1960 - 1961.

*Officers elected for the year 1961-1962 were:*

President .....	Dr. W. J. Archibald
First Vice-President .....	Dr. J. A. McCarter
Second Vice-President .....	Dr. C. R. Masson
Treasurer .....	Dr. J. E. Stewart
Secretary .....	Dr. W. Yaphe
Editor .....	Professor H. S. Heaps
Librarian .....	Miss E. M. Campbell
Council .....	Dr. E. H. Anthony
	Professor E. L. Cameron, Dr. N. J. Campbell, Dr. J. H. Greenblatt, Dr. J. G. Retallack
Auditors .....	Dr. H. L. Bronson
	Dr. A. E. Cameron

*New Members:*

During the year the following new members were proposed and were elected by Council:

Ordinary: A. C. Neish, J. L. McLachlan, A. G. McInnes, D. L. Whalen, K. E. Hayes, P. Chadwick, H. B. S. Cooke, D. J. G. Nota, F. Aumento, M. J. Keen, Sylvia J. Fullerton, D. R. Idler, P. M. Townsley, H. Brockerhoff, G. C. Clough, I. M. MacQuarrie, H. Herata, F. Uyeno, W. S. J. Mass, A. L. Splitstone, G. A. Dauphinee, G. W. Holbrook, T. Randall, D. H. Loring, R. Platford, R. Chevrier, D. Peer, P. Tascherau,

W. F. Take, E. J. Dimelow, E. Levy, C. Boyd, M. R. Morgan, J. Findlay, C. Cheung, F. Weil.

*Student Members:* Carol Fleming, G. Digout, S. Lee, M. Telford, T. Wyatt, J. Waithaka, S. Pearre, A. Cotz, I. Harris, H. MacPherson.

*Extraordinary Meeting, October 30, 1961.*

Dr. Ramdohr, Professor Emeritus of Mineralogy at the University of Heidelberg, addressed the Institute on "Comparison of the Witwatersrand, Blind River District, and Dominion Reed Mineralization".

*1st Ordinary Meeting, November 13, 1961.*

Papers: 1. "The Influence of Surface Structure on the High Temperature Corrosion of Aluminum", by J. H. Greenblatt and J. T. N. Atkinson; 2. "The Synthesis of Pyrroles Related to Porphobilinogen", by G. P. Arsenault and S. F. MacDonald; 3. "The Nature of the Heat Stable Protein Isolated from Cod Muscle", by P. H. Odense and W. Shinnars.

*Extraordinary Meeting, November 16, 1961.*

Dr. L. G. Elliott, Director of the Physics Division of Atomic Energy of Canada Limited, addressed the Institute on "Physics Research at Chalk River."

*2nd Ordinary Meeting, December 11, 1961.*

Papers: 1. "Large Signal Equivalent Circuits for Common-Emitter Transistor Amplifiers", by G. W. Holbrook; 2. "Protein Synthesis in Vitamin B6 Deficiency in the Rat", by W. W. Hawkins; 3. "Computation by Use of Completely Clipped Functions", by H. S. Heaps.

*3rd Ordinary Meeting, January 8, 1962.*

Papers: 1. "Position Annihilation in Zinc", by C. G. White; 2. "The Lipids of Cod Muscle and the Effect of Frozen Storage", by E. G. Bligh and Margaret A. Whitman; 3. "The Carbon-Oxygen Reaction in Liquid Iron", by W. D. Jamieson and C. R. Masson.

*Extraordinary Meeting, January 22, 1962.*

Professor Franklyn Hutchinson, Head of the Department of Biophysics of the Gibbs Laboratory at Yale University, addressed the Institute on "Progress in Radiation Biology".

*4th Ordinary Meeting*, February 12, 1962.

Papers: 1. "Systematics of the *Semiothisa Granitata* Complex (Insecta, Lepidoptera)", by D. C. Ferguson; 2. Immunoelectrophoresis of Tobacco Mosaic Virus from Radioactive Labelled Diseased Plant Extracts", by P. M. Townsley.

*5th Ordinary Meeting*, March 12, 1962.

Papers: 1. "Poliovirus Absorption to Cultured Mammalian Cells and Homologous Antibody", by K. R. Rozee, J. Casey, and S. H. Lee; 2. "Conversion of the Free Fatty Acids of Cod Oil to Methyl Esters in Situ", by R. G. Ackman; L. R. Gallay, P. M. Jangaard, and M. L. Hughes; 3. "Back-Scattering Strength of the Sea Surface", by R. P. Chapman.

*Extraordinary Meeting*, March 15, 1962.

Dr. Franz L. Alt, Assistant Chief of the Applied Mathematics Division on the National Bureau of Standards, addressed the Institute on "A Survey of Recent Progress in Machine Translation of Natural Languages".

*6th Ordinary Meeting*, April 9, 1962.

Papers: 1. "Formation of Cinnamic Acid Derivatives by Enzymatic Deamination of the Corresponding Phenylalanine Derivatives", by A. C. Neish; 2. "Inositol in Phospholipids", by H. Brockerhoff; 3. "A Seasonal Variation of Propagation on the Scotian Shelf", by N. O. Fothergill and J. D. Macpherson.

*Centenary Meeting*, Part I, March 27, 1962.

Dr. H. B. Newcombe addressed the Institute on "Man and his Genes."

*Banquet and Dinner Meeting*, April 6, 1962.

The Nova Scotian Institute of Science held its Centenary Dinner on Friday, April 6, 1962, as part of a program to mark the Institute's 100th year. Approximately 110 members' wives and guests attended. Among the distinguished guests were Major-General, The Honorable E. C. Plow, Lt. Governor of Nova Scotia; Mrs. Plow; The Honorable R. L. Stanfield Premier of Nova Scotia; Mrs. Stanfield; Mayor J. E. Lloyd of Halifax; Mrs. Lloyd; Captain W. Crook, Deputy Mayor of Dartmouth; Mrs. Crook.

In addressing the Institute the Lieutenant Governor congratulated the members on the long existence of their organization, especially since the first formal meeting of the Institute had been held in 1862. He expressed appreciation for the work of the Institute in the Province of Nova Scotia and he said that he was particularly pleased at the Institute's extensive publications on the flora and fauna of the Province in recent years.

The Premier congratulated the members of the Institute on the long existence of their organization and their high quality of scientific research. He expressed appreciation for the research effort of the Institute in Nova Scotia and acknowledged the contribution it had made to stimulating high quality scientific research in many disciplines of science in the Halifax area.

Mayor Lloyd in conveying greetings of the City of Halifax alluded to the fact that one of the founding members of the Institute in 1862 was then mayor of Halifax. He paid tribute to the Institute's contribution to the scientific research in the area and he hoped that the Institute would continue for a second fruitful hundred years.

Deputy Mayor Crook conveyed the greetings of the City of Dartmouth to the Institute and congratulated the members on the long existence of their organization.

Mr. D. C. Crowdis introduced the guest speaker Dr. C. B. Fergusson, the Provincial Archivist. Dr. Fergusson spoke on the scientific activity and organizations existing in Halifax before the formation of the Nova Scotian Institute of Science. He stressed the role of such prior organizations as the Mechanics Institute and the Provincial Museum in maintaining scientific interest before the founding of the present organization; he commented on their passing and recounted numerous interesting anecdotes about the activities and personalities of the period.

Dr. W. J. Archibald, President of the Institute, acted as Chairman of the Dinner. Before the dinner the members were received by Dr. Archibald, Mrs. Archibald, Dr. McPhee, President of the Institute's Annapolis Valley Chapter, Mrs. McPhee, and Dr. and Mrs. Fergusson. The toast to the Institute was proposed by Dr. E. G. Young of Halifax.

Among the guests present were the presidents of the local universities. They included Dr. A. E. Kerr, Dalhousie University; Dr. G. W. Holbrook, Nova Scotia Technical College; Rev. Canon H. L. Puxley, King's College; Dr. W. Kirkconnel, Acadia University; Rt. Rev. H. J. Somers, St. Francis Xavier University and Very Rev. C. J. Fischer, St. Mary's University. Dr. Lillian Wainright represented the President of Mount St. Vincent College.

*Centenary Meeting, Part 2, April 14, 1962.*

Sir Bernard Lovell, O.B.E., F.R.S. addressed the Institute on "The Exploration of Outer Space".

*7th Ordinary Meeting, May 7, 1962.*

Papers: 1. "The Kinetics of the Reactions of Active Nitrogen with Ethylene, Ethane, Propane, and Neopentane", by E. M. Levy and C. A. Winkler; 2. "A Tracer Study of the Phosphorus Cycle on Sea Water", by W. D. Watt; 3. "Life from Prehistoric Times, Discovery of Live Palaeozoic Bacteria", by H. Dombrowski.

## PROCEEDINGS OF MEETINGS

(Valley Chapter)

Session of 1961-1962

The Valley Chapter held eight meetings during the year.

*Annual Business Meeting, November 6, 1961.*

*Officers elected for the year 1961-1962 were*

President .....	Dr. A. W. MacPhee
Vice-President .....	Dr. J. S. Bleakney
Treasurer .....	Dr. A. D. Crowe
Secretary .....	Dr. R. G. Ross
Council .....	Dr. R. G. Moore

Dr. D. Dodds addressed the Chapter on "Aims and objectives of the recent Resources for Tomorrow Conference".

*Extraordinary Meeting, November 14, 1961.*

Dr. Elliott of Atomic Energy of Canada Ltd., Chalk River, addressed the Chapter on "Research in Physics at Chalk River".

*1st Ordinary Meeting, December 4, 1961*

Papers: 1. "Evidence of Three Pleistocene Till Sheets at Weymouth Mills", by R. H. MacNeil; 2. "Peoples and Problems of Nigeria", by F. C. Bent.

*2nd Ordinary Meeting, February 5, 1962.*

Papers: 1. "The Role of Organic Matter in Soil Formation", by J. R. Wright; 2. "Pollen Incompatibility and Fruit set in Lowbush Blueberries", by L. E. Aalders and I. V. Hall; 3. "Production of Perithecia of *Venturia Inaequalis* on Sterile Apple Leaf Discs", by R. G. Ross.

*3rd Ordinary Meeting, March 5, 1962.*

Papers: 1. "Microclimatology", by E. I. Mukammal; 2. "Terrestrial Molluscs in the Environs of Wolfville", by R. G. Moore.

*Public Lecture, March 26, 1962.*

Dr. H. B. Newcombe of Atomic Energy of Canada Ltd., Chalk River, gave a public lecture at University Hall, Acadia University, entitled "Radiation, Man and His Genes".

*4th Ordinary Meeting, April 2, 1962.*

Papers: 1. "Lung Resection for Tuberculosis in Children", by J. J. Quinlan, V. D. Schaffner, and J. E. Hiltz; 2. "The History of Chest Surgery", by J. J. Quinlan.

*5th Ordinary Meeting, April 30, 1962.*

Papers: 1. "Ageing Methods in Mammals with Special Reference to the Short-Tailed Weasel", by R. S. Cain; 2. "The Terpenes as Starting Materials in Steroid Synthesis", by Raymond Ng; 3. "Stratigraphy and Paleontology of a Section of the Windsor Group near Brooklyn, Nova Scotia", by D. MacDonald.