

Mines Branch Information Circular IC 159

BIBLIOGRAPHY OF HIGH-TEMPERATURE
CONDENSED STATES RESEARCH PUBLISHED IN
CANADA, JANUARY-MARCH, 1964

by

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SYNOPSIS

This report contains bibliographic information concerning research work on high-temperature condensed states published in Canadian journals during the period January to March, 1964.

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Direction des mines

Circulaire d'information IC 159

BIBLIOGRAPHIE DES RECHERCHES EFFECTUÉES
DANS LE DOMAINE DES ÉTATS CONDENSÉS AUX
TEMPÉRATURES ÉLEVÉES, AU CANADA,
DE JANVIER À MARS 1964

par

Norman F.H. Bright*

RÉSUMÉ

Le présent rapport contient des renseignements bibliographiques sur les recherches effectuées sur les états condensés aux températures élevées, publiées dans les revues scientifiques canadiennes au cours de la période de janvier à mars 1964.

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INTRODUCTION

This report is a further contribution to the series of bibliographic bulletins of information on high-temperature condensed states research that have been published as Mines Branch Information Circulars since March, 1960, on behalf of the Sub-commission on Condensed States of the Commission on High Temperatures and Refractories of the International Union of Pure and Applied Chemistry. The present document covers work published in Canadian scientific and technical journals during the period January to March, 1964, inclusive.

Any further information concerning these bibliographies can be obtained from the writer of this report at the following address:

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Anyone not now receiving these reports who wishes to do so, or anyone who no longer finds them of interest is requested to advise the writer accordingly in order that the appropriate changes may be made in the mailing list.

The writer would very much appreciate being advised of any work published in Canadian journals and lying within the scope of these bibliographies, that has escaped his notice, in order that such work may be mentioned in a subsequent issue of these Information Circulars.

The attention of recipients of this report is again drawn to the fact that on September 2-4, 1964, a Symposium on High-Temperature Inorganic Chemistry is to be held at Carleton University, Ottawa, with the writer of this report acting as Programme Chairman. The following speakers have agreed to present invited papers on the topics listed below:

1. Professor Leo Brewer, University of California.
"High-Temperature Metallic Phase Diagrams".
2. Professor John L. Margrave, Rice University, Houston, Texas.
"High-Temperature Fluorine Chemistry".

3. Professor Rustum Roy, Pennsylvania State University.
"Recent Advances in Crystal Chemistry".
4. Professor Lloyd M. Pidgeon, University of Toronto.
"High-Temperature Reactions that Produce a Metal Vapour".
5. Dr. Charles R. Masson, National Research Council of Canada,
Atlantic Regional Laboratory, Halifax, N.S.
"An Approach to the Problem of Ionic Distribution in Liquid
Silicates".

Several offers of contributed papers have been received from both Canada and the United States but more are invited. Abstracts (150 words maximum) and titles should be sent to the writer as soon as possible and definitely before the end of May, 1964. For the purposes of this Symposium, any reaction occurring at temperatures above 1000°C is considered as being "high-temperature"; no restriction is being made as to the physical state of the reactants, whether solid, liquid, gaseous or plasma. Further information regarding this Symposium, along with registration and accommodation details, can be obtained from the writer at the address already quoted.

BIBLIOGRAPHY OF WORK ON HIGH-TEMPERATURE
CONDENSED STATES PUBLISHED IN CANADA,
JANUARY-MARCH, 1964

International Union of Pure and Applied Chemistry
Commission on High Temperatures and Refractories
Sub-commission on Condensed States

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for Canada

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2. Some observations in explosive metallurgy.
H.P. Tardif (Canadian Armament Research and Development
Establishment, Valcartier, Quebec).
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B. Devices for measuring and controlling temperatures above 1500°C

Nil

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D. Properties, at temperatures below 1000°C, of materials that melt above 1500°C

a. Metallic materials

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J.J. Sebisty and R.H. Palmer (Physical Metallurgy Division, Mines Branch, Department of Mines and Technical Surveys, Ottawa, Ontario).
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7. Lightweight concrete aggregates from clays and shales in Ontario.
H.S. Wilson (Mineral Processing Division, Mines Branch, Department
of Mines and Technical Surveys, Ottawa, Ontario).
Mines Branch Technical Bulletin TB 51, Department of Mines and
Technical Surveys, Ottawa, Ontario
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C. Mixed materials

Nil

E. Properties, at temperatures above 1000°C, of materials that melt above 1500°C

a. Metallic materials

1. Thermal and electrical properties of Inconel 702 at high temperatures.
M.J. Laubitz and K.D. Cotnam (Division of Applied Physics, National
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b. Non-metallic materials

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J.W. Londeree (Corbart Refractories Company, Louisville, Kentucky).
Journ. Canad. Ceram. Soc., 32, 80-82 (1963).

c. Mixed materials

1. A hot model study of glass furnace ports and burners.
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Nil

c. Mixed materials

Nil

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