BRITISH CHEMICAL AND PHYSIOLOGICAL ABSTRACTS

ISSUED BY THE

BUREAU OF CHEMICAL AND PHYSIOLOGICAL ABSTRACTS

1944

A., I. GENERAL, PHYSICAL, AND **INORGANIC CHEMISTRY**

BUREAU

Chairman: L. H. LAMPITT, D.Sc., F.I.C.

Hon. Treasurer: F. P. DUNN, B.Sc., F.I.C.

JULIAN L. BAKER, F.I.C.

G. L. BROWN, M.Sc., M.B., CH.B.

C. W. DAVIES, D.Sc., F.I.C.

H. J. T. ELLINGHAM, B.Sc., Ph.D., F.I.C. F. G. YOUNG, D.Sc., Ph.D.

C. R. HARINGTON, M.A., Ph.D., F.R S.

L. A. JORDAN, D.Sc., F.I.C.

G. A. R. KON, M.A., D.Sc., F.R.S.

H. W. CREMER, M.Sc., F.I.C., M.I.CHEM.E. H. McCOMBIE, D.S.O., M.C., Ph.D., D.Sc., F.I.C.

B. A. McSWINEY, B.A., M.B., Sc.D.

Editor: T. F. BURTON, B.Sc.

Assistant Editors:

J. H. BIRKINSHAW, D.Sc., F.I.C.* H. BURTON, M.Sc., D.Sc., F.I.C. F. G. CROSSE, F.I.C. A. A. ELDRIDGE, B.Sc., F.I.C.

W. JEVONS, D.Sc., Ph.D.†

E. E. TURNER, M.A., D.Sc., F.I.C., F.R.S. F. L. USHER, D.Sc. H. WREN, M.A., D.Sc., Ph.D.

SAMSON WRIGHT, M.D., F.R.C.P.*

* Assisted by J. D. BOYD (Anatomy), A. HADDOW (Tumours), F. O. HOWITT (Biochemistry), A. G. POLLARD (Plant Physiology), K. TANSLEY (Sense Organs), V. J. WOOLLEY (Pharmacology), and F. G. YOUNG (Ductless Glands). † Assisted by A. J. E. WELCH (Physical Chemistry).

Indexer: MARGARET LE PLA, B.Sc.



PRINTED IN GREAT BRITAIN BY RICHARD CLAY AND COMPANY, LTD., BUNGAY SUFFOLK.

BRITISH CHEMICAL AND PHYSIOLOGICAL ABSTRACTS

Foreword.

An important change is being made this year. In future all abstracts of papers dealing with analysis and laboratory apparatus (not chemical plant) will be collected together in a new section of the Abstracts to be entitled "C, Analysis and Apparatus" and will no longer appear in their accustomed places in the respective sections of A and B, but cross-references to these abstracts will be inserted in appropriate places. In consequence, sections XII and XIII of A I will be re-numbered x and XI respectively, XI of A II will be deleted, and xxix of A III will become xxviii. The section will be sub-divided as follows: 1, Inorganic, Pure and Applied; 11, Organic, Pure and Applied; 111, Physiology; Biochemistry; Foods; Agriculture; Sanitation; IV, Laboratory Apparatus and General Technique. The new section will be available without additional charge to all contributing members, who will thus be provided with a comprehensive series of Abstracts of this class of paper and patent, some of which may otherwise tend to be overlooked, especially in the case of those processes and apparatus which, though for a specific purpose, may have much more general applications than that indicated by the author or may contain ideas adaptable to other purposes. For the present Abstracts C will be issued quarterly (the first number in March, 1944), and will have its own annual index.

Attention may be drawn to changes in the titles of some of the sections and sub-sections of the Abstracts. A III will in future be entitled "Physiology. Biochemistry. Anatomy" and B I will be "Chemical Engineering and Industrial Inorganic Chemistry." Further, A III, sub-section xvIII, previously called Nutrition and Vitamins, is now entitled "Animal Nutrition" and contains a sub-head "Vitamins." The title of sub-section xvI, "Other Organs, Tissues, and Body-Fluids" is extended by the addition of "Comparative Physiology (not included elsewhere)," and that of sub-section xxv becomes "Fungi. Micro-organisms. Immunology. Allergy." These last two alterations have been made by arrangement with the Society for Experimental Biology, which is now one of the supporting Societies of the Bureau.

It is confidently believed that these changes will be appreciated by all readers of the Abstracts.

The classification of the seven Sections of the Abstracts is given on the next page.

Prices.—The prices of the Abstracts to non-members are as follows:

AI.	•	7 10,000,000	£2:15:0	BI.		304	£2:15:0
AII.			2:15:0	BII.			2:15:0
A III	. 17 1		4: 0:0	BIII		1.	1:15:0
A, Index			12:6	B, Index			10:0
	- 13	C (inclu	ding Index) .	£,0	15:0		

Prices to Fellows of The Chemical Society, Members of The Society of Chemical Industry, and Fellows and Associates of The Institute of Chemistry who have participated in the new scheme of co-operation may be obtained from the Conjoint Chemical Office, 6, Burlington Gardens, London, W. 1.

The Bureau will welcome suggestions from users of the Abstracts for their improvement. The Editor will be pleased to give readers the name of libraries in which the various journals abstracted may be consulted.

BRITISH CHEMICAL AND PHYSIOLOGICAL ABSTRACTS

A-PURE CHEMISTRY AND PHYSIOLOGY

I-General, Physical, and Inorganic Chemistry

- 1, Sub-atomics.
- II, Molecular Structure.
- III, Crystal Structure.
- IV, Physical Properties of Substances (not included above).
- v, Solutions, Dispersions, and Mixtures.
- vi, Kinetic Theory. Thermodynamics.
- vII, Electrochemistry.
- VIII, Reactions.
 - ix, Preparation of Inorganic Substances.
- x, Lecture Experiments and Historical.
- xi, Geochemistry.

II-Organic Chemistry

- r, Aliphatic.
- 11, Sugars and Glucosides.
- III, Homocyclic.
- IV, Sterols and Steroid Sapogenins.
- v, Terpenes and Triterpenoid Sapogenins.
- vi, Heterocyclic.
- vII, Alkaloids.
- viii, Organo-metallic Compounds.
- rx, Proteins.
- x, Miscellaneous Unclassifiable Substances.

III-Physiology. Biochemistry. Anatomy

- 1, General Anatomy and Morphology.
- II, Descriptive and Experimental Embryology. Heredity.

- III, Physical Anthropology.
- IV, Cytology, Histology, and Tissue Culture.
- v, Blood and Lymph.
- vi, Vascular System.
- vII, Respiration and Blood Gases.
- viii, Muscle.
 - ix, Nervous System.
 - x, Sense Organs.
 - xi, Ductless Glands, excluding Gonads.
- XII, Reproduction.
- xIII, Digestive System.
- xiv, Liver and Bile.
- xv, Kidney and Urine.
- xvi, Other Organs, Tissues, and Body-Fluids.

 Comparative Physiology (not included elsewhere).
- xvII, Tumours.
- xvIII, Animal Nutrition.
- xix, Metabolism, General and Special.
- xx, Pharmacology and Toxicology.
- xxi, Physiology of Work and Industrial Hygiene.
- xxII, Radiations.
- XXIII, Physical and Colloidal Chemistry.
- xxiv, Enzymes.
- xxv, Fungi. Micro-organisms. Immunology. Allergy.
- xxvi, Plant Physiology.
- xxvII, Plant Constituents.
- xxvIII, New Books.

B—APPLIED CHEMISTRY

I-Chemical Engineering and Industrial Inorganic Chemistry

- 1, Chemical Engineering; Plant; Machinery.
- 11, Fuel; Gas; Tar; Mineral Oils.
- III, Acids; Alkalis; Salts; Non-metallic Elements.
- IV, Glass; Ceramics.
- v, Building and Road-making Materials.
- vi, Metals; Metallurgy, including Electrometallurgy.
- vii, Explosives; Matches.

II-Industrial Organic Chemistry

- 1, Organic Intermediates.
- II, Dyestuffs.
- m, Fibres; Textiles; Cellulose; Paper.

- IV, Bleaching; Dyeing; Printing; Finishing.
- v, Fats; Oils; Detergents.
- vi, Plastics; Resins; Adhesives; Paints; Coating Compositions.
- vII, Rubber.
- viii, Tanning Materials; Leather; Glue.
- ix, Photographic Materials and Processes.

III-Agriculture, Foods, Sanitation, etc.

- I, Agriculture.
- п, Sugars; Starches; Gums.
- III, Fermentation Industries.
- IV, Foods.
- v, Pharmaceutical Substances; Cosmetics; Essential Oils.
- vi, Sanitation; Water.

C-ANALYSIS AND APPARATUS

- I, Inorganic, Pure and Applied.
- II, Organic, Pure and Applied.
- III, Physiology; Biochemistry; Foods; Agriculture; Sanitation. IV, Laboratory Apparatus and General Technique.