

**THIRD
NATURAL PRODUCTS SYMPOSIUM
Mona, Jamaica**



**SCIENTIFIC PROGRAMME
and
ABSTRACTS OF PAPERS**

1970

Department of Chemistry
UNIVERSITY OF THE WEST INDIES

**ACADEMIC STAFF OF THE
CHEMISTRY DEPARTMENT**

Head of Department:

G. C. Lalor

Organic:

W. R. Chan

A. W. Sangster

K. E. Magnus

K. L. Stuart

D. R. Taylor

E. V. Roberts

K. H. McNeely

I. Duphorn

V. Box

Physical and Inorganic:

W. G. Bartley

M. Seakins

H. P. Cleghorn

H. C. King

C. S. Davis

A. Guest

A. Morris

J. Kelly

SYMPOSIUM COMMITTEE

W. R. Chan

D. R. Taylor

Mrs. W.R. Chan

K.E. Magnus

K.L. Stuart

Chairman

Treasurer

Ladies Programme

**THIRD
NATURAL PRODUCTS SYMPOSIUM**

Mona, Jamaica

January 5th to 9th

1970



SCIENTIFIC PROGRAMME

and

ABSTRACTS OF PAPERS

**Department of Chemistry
UNIVERSITY OF THE WEST INDIES**

REGISTERED VISITING PARTICIPANTS

| | |
|-------------------|-------------------|
| D. S. Allen | J. A. Kloek |
| J. ApSimon | M. P. Kunstmann |
| D. V. C. Awang | S. M. Kupchan |
| W. A. Ayer | J. P. Kutney |
| A. R. Battersby | B. M. Lawrence |
| J. P. Bays | T. J. Mabry |
| F. Benington | S. Mc Lean |
| G. B. Bennett | R. O. Martin |
| K. Bernauer | J. A. Marshall |
| C. Berse | H. Muxfeldt |
| I. J. Borowitz | K. Muzika |
| G. B. Borowitz | R. Nagarajan |
| A. K. Bose | G. Ourisson |
| A. Bossi | S. W. Pelletier |
| K. S. Brown, Jr. | G. T. Phillips |
| B. Brownlee | D. G. Pike |
| G. Buchi | A. R. Pinder |
| M. P. Cava | E. Premuzic |
| P. C. Cherry | J. W. Rowe |
| Y. L. Chow | C. A. Salemink |
| P. Crabbe | H. Schmid |
| J. Cymerman Craig | A. I. Scott |
| D. R. Dalton | L. L. Smith |
| W. G. Dauben | I. D. Spenser |
| J. P. Devlin | E. Spitzner |
| D. E. U. Ekong | C. L. Stevens |
| G. Fodor | J. J. Stofko, Jr. |
| B. Franck | G. H. Stout |
| A. J. Frey | D. P. Strike |
| H. L. Goering | W. A. Szarek |
| L. Goldman | B. M. Trost |
| H. Guilford | A. Usubillaga |
| G. Haas | Z. Valenta |
| G. Hardtmann | H. H. Wasserman |
| W. Herz | I. Weiler |
| C. G. Hoare | U. Weiss |
| D. K. Holdsworth | J. W. Westley |
| J. W. Huffman | W. B. Whalley |
| L. G. Humber | W. C. Wildman |
| G. E. M. Husbands | R. E. Williams |
| A. S. Kende | C. R. Willis |
| J. F. King | P. Yates |
| | F. E. Ziegler |

SCIENTIFIC PROGRAMME

MONDAY, JANUARY 5th

Morning

- 9.00-9.30 Completion of Registration.
- 9.30-9.45 Opening Address:
C. B. Lewis, Director, Institute of Jamaica.
- 10.00-11.00 Main Lecture. Chairman: A. I. Scott.
A. R. Battersby - Mechanism, Stereochemistry and Biosynthesis.
- 11.00-11.20 Coffee
- Short papers
- 11.20-11.40 I. D. Spenser - Biosynthesis of some Alkaloids derived from Lysine.
- 11.40-12.00 Y. D. Cho and R. O. Martin* - Studies on the Biosynthesis of Thermopsis Alkaloids from $^{14}\text{CO}_2$. The Primacy of Lupanine and Δ^5 -Dehydrolupanine, a New Alkaloid, as the Intermediate Between Lupanine and Anagyrine.
- 12.00-12.20 A. K. Bose - The Role of some Amino Acids in the Biosynthesis of Isoprenoids.

Afternoon

- 2.30-3.30 Main Lecture. Chairman: P. Yates.
W. A. Ayer - Diterpene Rearrangements - An Unusual Diazotization Reaction.
- 3.30-3.50 Coffee
- Short papers
- 3.50-4.10 A. Brossi* and S. Teitel - Cherylline.
- 4.10-4.30 S. J. Price and A. R. Pinder* - Some Chemical Constituents of Piper ovatum.
- 4.30-4.50 W. C. Wildman, * J. Clardy, F. R. Hauser and M. Slabaugh - 6-Hydroxybuphanidrine, A Novel Amaryllidaceae Alkaloid.

TUESDAY, JANUARY 6th

Morning

- 9.00-10.00 Main Lecture. Chairman: M. P. Cava.
K. Bernauer - Recent Work on Tetracyclic and
Meloquinoline Alkaloids.
- 10.00-10.20 Coffee
- Short papers
- 10.20-10.40 S.M. Kupchan - The Reactions of Conjugated
 α -Methylene-Lactones with Model Biological
Nucleophiles.
- 10.40-11.00 T. J. Mabry, * H. Yoshioka, W. Renold,
E. Rodriguez and J. Mears - Sesquiterpene
Lactones in Ambrosia and Parthenium Species
(Compositae).
- 11.00-11.20 B. A. Nagasampagi and J. W. Rowe* - The Sterols
of Coffee.
- 11.20-11.40 Coffee
- Short papers
- 11.40-12.00 C. L. Stevens* and G. H. Ransford - Synthetic
Cardenolides Incorporating Amino Sugars.
- 12.00-12.20 W. A. Szarek, * G. B. Howarth and J. K. N. Jones -
Syntheses Related to Lincomycin.
- 12.20-12.40 J. W. Westley - The Structure of Antibiotic X-537A.

Evening

- Short papers
- 8.30-8.50 P. Crabbe* and E. Velarde - Addition of Difluoro-
carbene to Sterically Hindered Steroidal Acetylenes.
- 8.50-9.10 B. Franck - The Biosynthesis of the Ergot Pigments.

WEDNESDAY, JANUARY 7th

Morning

- 9.00-10.00 Main Lecture. Chairman: W.B. Whalley.
H. Schmid - Recent Studies in the Alkaloid Field.
- 10.00-10.20 Coffee
- Short papers
- 10.20-10.40 M. P. Cava,* M.V. Lakshimikantham and
M. Srinivasan - Synthetic Confirmation of the
Structure of Oconovine and Ovigerine.
- 10.40-11.00 G. Fodor,* J.J. Ryan, F. Letourneau and
J.P. Fumeaux - Application of Novel Methods
to the Degradation and Synthesis of Piperidine
Alkaloids with Long Side-Chains.
- 11.00-11.20 J.W. Huffman* and C.E. Opliger - Synthesis of
Proaporphine Alkaloids.
- 11.20-11.40 Coffee
- Short papers
- 11.40-12.00 R. Nagarajan - Circular Dichroism and Mass
Spectral Studies of Aranotin and Related Metabolites.
- 12.00-12.20 P. Crabbe* and A. Guzman - Synthesis and
Physical Properties of Skewed Steroidal Dienes.
- 12.20-12.40 A.I. Scott - Absolute Configuration of Olefins.

Evening

- 8.30 - "Impromptu" Papers
Chairman: H. H. Wasserman.

FRIDAY, JANUARY 9th

Morning

- 9.00-10.00 Main Lecture. Chairman: J. W. ApSimon.
G. Ourisson - Recent Results in Organic
Geochemistry.
- 10.00-10.20 Coffee
- Short papers
- 10.20-10.40 A. Usubillaga* and A. Morales M. - Diterpenes
from Espeletia tenore.
- 10.40-11.00 W. E. Sanchez L., K. S. Brown, Jr., *T. Nishida,
L. J. Durham and A. M. Duffield - Hydrophilic
Constituents of Podocarpus sellowii Klotzsch.
- 11.00-11.20 D. E. U. Ekong* and M. D. Selema - BF₃-
Catalysed Rearrangements of 14, 15-Epoxides in
the Meliacins (Limonoids).
- 11.20-11.40 Coffee
- Short papers
- 11.40-12.00 J. W. ApSimon - Some Diterpene Epoxide
Rearrangements.
- 12.00-12.20 P. Yates* and D. J. Bichan - The Synthesis of
2, 4a-Ethano-2, 3, 4, 4a-tetrahydroxanthenes.
- 12.20-12.40 Z. Valenta - The Total Synthesis of Ormosanine.

Afternoon

- 2.30-3.30 Main Lecture. Chairman: A. Brossi.
G. Buchi - The Synthesis of Natural Products.
- 3.30-3.50 Coffee
- Short papers
- 3.50-4.10 K. S. Brown, Jr., and U. Weiss* - Additional
Constituents of Aphis nerii Fonscolombe.
- 4.10-4.20 G. H. Stout,* G. D. Breck, W. Butenko and
J. Hanson - Some Recent Advances in the
Chemistry of the Guttiferae.