

**FACULTY RESEARCH EDITION**  
of  
**The Savannah State College Bulletin**

*Published by*

**The Savannah State College**

Volume 20, No. 2

Savannah, Georgia

December, 1966

HOWARD JORDAN, JR., *President*

**Editorial Committee**

Blanton E. Black

J. Randolph Fisher

Mildred W. Glover

Joan L. Gordon

Elonnie J. Josey

Charles Pratt

Forrest O. Wiggins

JOHN L. WILSON, *Chairman*

*Articles are presented on the authority of their writers, and neither the Editorial Committee nor Savannah State College assumes responsibility for the views expressed by contributors.*

BOUND BY THE NATIONAL LIBRARY BINDERY CO. OF GA.

75036

## Table of Contents

A Guide to the Study of Current Introduction to Education Textbooks	7
Charles I. Brown .....	
Synthesis of 4:6 Thio 1, 3, 5-triazine Derivatives II	10
Kamalaker B. Raut .....	
The Humanities	12
James H. Hiner .....	
The Influence of Religion on the Political Process in Burma	22
Johnny Campbell .....	
Creating a National Sense of Direction in Industrial Arts	34
Richard Cogger .....	
The Teaching of Mathematical Induction	36
William M. Perel .....	
The Evolutionary Role of the International Labor Organization	40
Sarvan K. Bhatia .....	
What Motivates Students in the Choice of Subject Majors	48
Dorothy C. Hamilton .....	
A Device for the Improvement of Study Habits	55
Maurice A. Stokes .....	
On Variation of Velocity and Pressure Behind and Along a Shock Surface in Lagrangian Coordinate System	65
Nazir A. Warsi .....	
On Vorticity Behind a Shock Surface in Lagrangian Coordinate System	68
Nazir A. Warsi .....	
On Gradients of Specific Volume and Pressure Behind a Shock Surface in Lagrangian Coordinate System	71
Nazir A. Warsi .....	
The Community College: An American Innovation	73
Philip D. Vairo .....	
Force Field Calculations in Octahedral Water Complexes	76
Venkataraman Ananthanarayanan .....	
The Negro in International Affairs-Prospects for the Future	80
George L-P Weaver .....	
The Law of Karma as Reflected in Hinduism, Buddhism and Jainism	85
Samuel Williams .....	
Economic Growth and Income Distribution	92
Sarvan K. Bhatia .....	

## Table of Contents – (Continued)

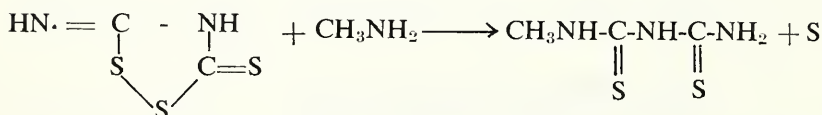
India's Experience in Developmental Planning Kanwal Kumar .....	98
Utilizing Emerging New Instructional Materials and Mechanical Devices-Implications for the Library Dorothy B. Jamerson .....	103
The Moynihan Report: A Critical Analysis Isaiah McIver .....	108
Modern Art: The Celebration of Man's Freedom Phillip J. Hampton .....	122
A Review of "The Use of Selected Technical Language as a Means of Discovering Elementary Teachers' Operational Definitions of Teaching" Thelma Moore Harmond .....	128
An Analysis of NTE Scores and Quality Point Ratios of Selected SSC Graduates from 1961 through 1966 Martha W. Wilson .....	141
The Man Behind "Trees" James A. Eaton .....	147
Watts: A Tragedy of Errors Elonnie J. Josey .....	153
Personal Characteristics in Secondary School Social Studies Student Teachers as Related to Certain Measures of Potential Teacher Behavior Shia-ling Liu .....	159
Some Possible Ways of Improving Instruction in Our Colleges Robert D. Reid .....	165
Needed: A Program to Save Freshmen! James A. Eaton .....	174

# Synthesis of 4:6 Thio 1, 3, 5-triazine Derivatives (II)

by

Kamalakar B. Raut

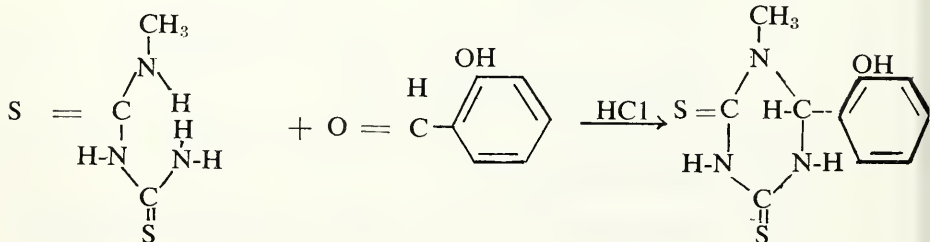
The interaction of dithiobiurets with aldehydes and ketones was first reported by Fromm<sup>1</sup> who prepared dithiobiurets by the action of isopersulphocyanic acid and aromatic amines. Later on Fairfull and Peak<sup>2</sup> have shown that Fromm's aldurets and keturets are really hexahydro-4:6 thio-1, 3, 5-triazine derivatives. In continuation of the previous work<sup>3</sup>, the present work describes the interaction of 1-methyl dithiobiuret with different aromatic aldehydes and by analogy have been shown to be hexahydro 4:6-thio 1, 3, 5-triazines. The experimental details are as follows.



Isopersulphocyanic acid

Methyl amine

Methyl dithiobiuret



Methyl dithiobiuret

Salisaldehyde

1-methyl-2-O-hydroxy phenyl 4:6 dithio 1, 3, 5-triazine

## Experimental

A mixture of methyl dithiobiuret and salicylic aldehyde (1:1) in ethanol was cooled to 0°C. Dry hydrogen chloride gas was passed through this mixture for thirty minutes. The reaction mixture was poured in 1N sodium hydroxide, warmed to 50°C. and filtered. The filtrate was acidified with dilute acetic acid and cooled overnight. The solid that precipitated was separated by filtration and crystallized from ethanol or ethyl acetate.

Similarly, other derivatives were prepared.

Aldehyde	M.P. of the 4:6 thio 1, 3, 5-triazine derivatives
1. Benzaldehyde	198°C
2. Vanillin	132°C
3. Anisaldehyde	95°C
4. Alpha-Toluidin	197°C
5. Alpha-nitrobenzaldehyde	197°C
6. Alpha-dimethylamino benzaldehyde	102°C
7. O-hydroxybenzaldehyde	228°C
8. Veratric aldehyde	73°C
9. 2-Hydroxynaphthaldehyde	228°C

#### References

1. Fromm, E., *Ann.*, 384-94.
2. Fairfull, A.E.S. and Peak, D.A., *J. Chem. Soc.*, 1955, 796-802.
3. Raut, K. B., *Faculty Research Bulletin*, Savannah State College, 19, 29 (1965).