

1977

## Cover - Front Matter - Table of Contents

Follow this and additional works at: <https://scholarworks.uni.edu/istj>



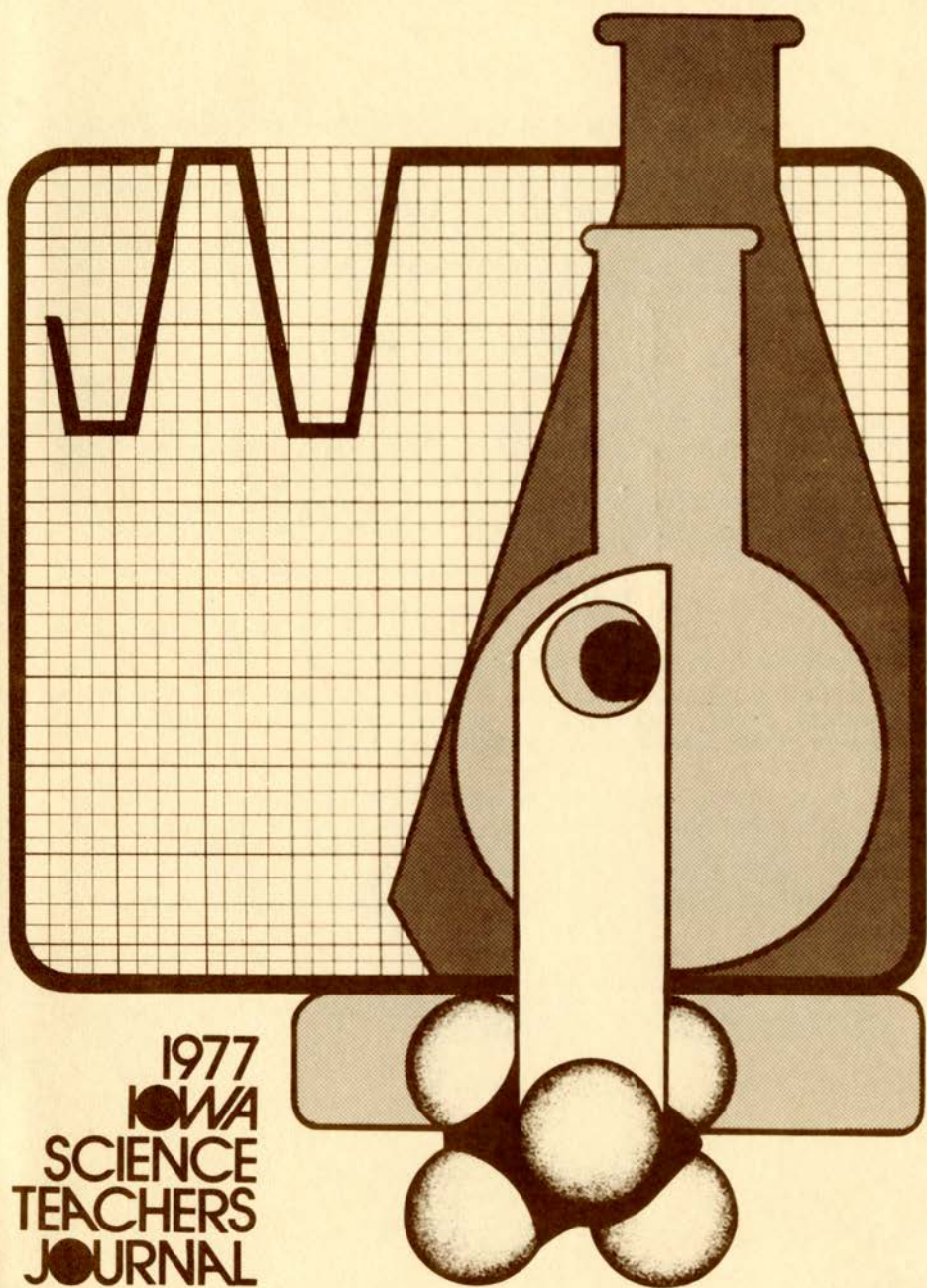
Part of the [Science and Mathematics Education Commons](#)

---

### Recommended Citation

(1977) "Cover - Front Matter - Table of Contents," *Iowa Science Teachers Journal*: Vol. 14 : No. 1 , Article 1.  
Available at: <https://scholarworks.uni.edu/istj/vol14/iss1/1>

This Front Matter is brought to you for free and open access by UNI ScholarWorks. It has been accepted for inclusion in Iowa Science Teachers Journal by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).



1977  
IOWA  
SCIENCE  
TEACHERS  
JOURNAL  
Vol. 14 (1)

## THE IOWA SCIENCE TEACHERS JOURNAL

*The Iowa Science Teachers Journal* is co-sponsored by the Iowa Academy of Science and the University of Northern Iowa. The journal is mailed by the University of Northern Iowa Extension Service and is published tri-annually. The journal is dedicated to the improvement of science teaching and to the stimulation of interest in scientific studies.

### SUBSCRIPTION

For subscriptions, circulation data, additional copies and change of address, contact the Managing Editor, ISTJ, Iowa Academy of Science, University of Northern Iowa, Cedar Falls, Iowa 50613. Single copies may be obtained for \$1.25; a year's subscription is \$4.00. Any secondary science teacher in Iowa may obtain a subscription free of charge if a request is mailed to the Managing Editor of the journal; all such requests must be made on school stationery.

### PUBLICATION POLICY

Publications will be received from all individuals interested in science education at any academic level. Preferential treatment will be given to Academy members and to papers with problems indigenous to the scientific and educational interest of science educators in Iowa.

All non-solicited manuscripts submitted to the editor will be reviewed by two authorities in the area concerned. All manuscripts should be typewritten, double spaced on one side of the paper, and submitted in duplicate. They must reach the editor twelve weeks prior to publication if they are to be considered for a specific issue. Publication deadlines are April, September and December.

For information concerning the submission of news items or articles, contact A. C. Haman, Editor, ISTJ, Department of Biology, University of Northern Iowa, Cedar Falls, Iowa 50613.

# IOWA SCIENCE TEACHERS JOURNAL

Volume 14

Number 1

April, 1977

## CONTENTS

Large-scale Industrial Application of Solar Energy .....	3
<i>W. C. Dickinson</i>	
A Solar Water Heater .....	9
<i>John Bridgenell</i>	
Some High School Biology Electives.....	11
<i>James Meyer and Robert Nelson</i>	
Drought: A Time to Teach .....	18
<i>Owen Primavera</i>	
Aging Iowa Trees .....	21
<i>Roger Landers</i>	
The Mole Hill Mnemonic .....	25
<i>Mike Williams</i>	
Can a College Level Biology Course for Majors be Educationally Accountable? .....	26
<i>Betty Allamong and Jon Hendrix</i>	
Eighteen Years of the Hawkeye Science Fair .....	33
<i>Dean Stroud</i>	
Parsimonious Education .....	35
<i>Darrell Young</i>	
Purebred? .....	37
<i>Wilmer Miller</i>	
The Hazards of Window Peeping .....	39
<i>Sondra Waltz</i>	
Iowa's Earliest Spring Flower .....	40
<i>Roger Knutson</i>	
Iowa Assist: Outreach Foci .....	43
<i>Daniel Sheldon and Robert Yager</i>	
Bioassay and Corn Coleoptiles .....	46
<i>S. Lane Wilson</i>	
Quickies .....	52
<i>Paul Joslin and Joe Moore</i>	

Cover by:

**Tim O'Leary, Sr. Art Major, UNI**  
Tim is a graduate of  
Heelan High School  
Sioux City, Iowa .