

"is intended as a laboratory companion to *Textbook of Microbiology*; however, it is readily adapted to other current texts in the field." The manual contains some 57 exercises over a wide variety of routine subjects ordinarily covered in general bacteriology; however, as in most materials now being labeled general microbiology, the attention paid to microorganisms other than bacteria is very slight indeed. (There does seem to this reviewer to be a tendency for bacteriologists to consider the terms "bacteria" and "microorganisms" synonymous. This should be discontinued; but, at this point in time, it is doubtful if it ever will be.)

The format of Swatek's manual is a familiar one. Each exercise is preceded by a short explanation. The exercises themselves should be easy for the student to perform. Most are divided into sections on procedure, results, and questions. Appropriate tables are provided for recording results. If anything, most of the exercises may be just a bit too thorough to allow for much independent work by the student. However, many of the questions at the conclusion of these exercises do require thought. And the final unit of the manual, titled "Studies of Known and Unknown Organisms," contains some good ideas for directing the student toward real work as a bacteriologist. (This reviewer would prefer having the latter materials introduced slowly and much earlier in the course—thus forming a constant theme throughout.)

The manual will serve its stated purpose quite well. It has many of the strengths and weaknesses of other works of its kind, and perhaps this is our problem in microbiology. Microbiology does need new ideas and innovative approaches to the teaching and learning of a very interesting group of organisms. In the meantime, this manual will serve as well as some, and better than most, books of its class.

Glen E. Peterson  
University of Nevada  
Reno

## YOUNG ADULTS

**YOUR CAREER IN PARKS AND RECREATION**, by Virginia and Joseph R. McCall. 1970. Julian Messner Publishing Co., New York. 190 pp. \$3.95.

This is an easily read book intended primarily for the college or graduate student interested in working for the National Park Service. It contains, however, useful information for the biology teacher seeking summer employment or wishing to assist his students in identifying job opportunities in science-related fields.

Major emphasis is placed on careers in the national parks, but mention is made of jobs in national monuments and forests and in state parks and recreation areas. The book describes jobs for both men and women and appraises the possibilities for advancement. The authors are careful to mention the wide variety of careers available—many of them unknown to the casual summer tourist. Tables and lists specify the formal education required, current salaries, summer job opportunities, and how to apply. An appendix lists state agencies in charge of parks, colleges offering degrees in park management and recreation, and the locations of the regional offices of the National Park Service.

The authors interject first-hand experiences and historical background of many of our national parks; this keeps the book from being a mere statistical and descriptive presentation.

Elizabeth J. Davison  
Swarthmore (Pa.) High School

**A WORLD EXPLORER—FRIDTJOF NANSEN**, by Erick Berry. 1969. Garrard Publishing Co., Scarsdale, N.Y. 96 pp. \$2.59.

Living on a farm near Oslo, Norway, young Fridtjof Nansen spent much time skiing, skating, and hiking in the woods near his home. This interest in nature led to a career as a zoologist. A desire to study ocean currents eventually led Nansen to make several expeditions to the North. These trips included exciting and dangerous ones into the north-polar region. As a statesman during World War II Nansen did much for his own and other countries; for this he was awarded the Nobel peace prize.

This history in fictional form, intended for grades 4 to 6, is good reading and excellently suited for arousing interest in the lives of scientists.

Betty Wislinsky  
Lone Mountain College  
San Francisco

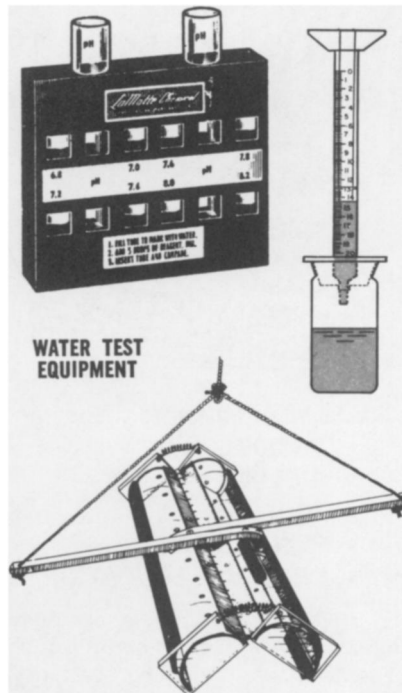
**YOU AND TODAY'S TROUBLED WORLD: A PSYCHOLOGIST TALKS TO URBAN YOUTH**, by Sarah Splaver. 1970. Julian Messner, New York. 190 pp. \$3.95.

Sarah Splaver addresses the urban high school student through the dialogue of four girls and four boys, who represent to the author (and she should know) a group of typical white and Negro youths with typical aunts, uncles, sisters, brother, parents—all with today's typical problems. Throughout the discussions, Splaver responds to each dialogue with definitions and clarifications; with admonishments that may become cloying to the adult reader but probably not to the questioning and troubled youth; and, most often, with a recommendation that the young student take his problems to the school psychologist. We are obliged to hope that school counselors and psychologists

*LaMotte Chemical*

## WATER POLLUTION STUDY PROGRAM

PROVIDES  
CLASSROOM-LABORATORY  
AND FIELD TRIP EXPERIENCES



WATER TEST EQUIPMENT

SAMPLING EQUIPMENT PLUS ILLUSTRATED TEXT

- 1 WATER POLLUTION DETECTION OUTFIT** ..... for Ammonia, Carbon Dioxide, Copper, Iron, Nitrates, Phosphates, pH, Sulfides plus 10 other water quality factors.
- 2 SAMPLING EQUIPMENT** ..... includes Water Sampling Bottles, Bottom Dredges, Visibility Discs, Plankton Nets, etc.
- 3 WATER POLLUTION HANDBOOK** ... An illustrated, "readable" text in paperback form, internationally acclaimed for academic use and for professional training.

WRITE TODAY FOR COMPLETE CATALOG OF ENVIRONMENTAL SCIENCE PRODUCTS.

EDUCATIONAL PRODUCTS DIVISION  
LaMOTTE CHEMICAL PRODUCTS CO.  
CHESTERTOWN, MARYLAND, 21620

Serving science and industry  
since 1919.