February 28, 1970 25 C vol. 97, no. 9, pp. 211-234

Checking out the Delta Computing the Gondwanaland Letter from Tokyo in space at last

an available solar eclipse

See "live" unstained organisms through the one microscope that offers three different views...



Phase Contrast unstained paramecium

and one low price.

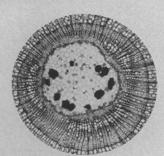
This new AO microscope is built for multiple use—it's like having three microscopes in one. And, importantly, the AO Phase Contrast Teaching Microscope is priced within the range of your departmental budget. Phase contrast allows your students to view living unstained specimens, does away with the time and need for treating specimens, and the distortion caused by the staining process. The AO Phase Contrast Teaching Microscope also offers darkfield and conventional brightfield viewing. It's easy to use, requires virtually no adjustments and no accessories.

A multipurpose microscope, a practical way to put life in your classroom. The AO Phase Contrast Teaching Microscope. Ask your AO Representative about

it or write for literature.



Darkfield



Conventional Brightfield stained basswood stem



science news®

OF THE WEEK



The accessibility of the March 7 solar eclipse offers an excellent opportunity to study features of the sun and its corona. See page 227. (Photo: NCAR)

A Science Service Publication Vol. 97/February 28, 1970/No. 9 Incorporating Science News Letter

Watson Davis, 1896-1967
Publisher: E. G. Sherburne Jr.

Editor: Warren Kornberg

Managing Editor: Carl Behrens

DEPARTMENTS

Behavioral Sciences: Lawrence Massett **Chemistry and Engineering:** Edward Gross

Earth Sciences: Kendrick Frazier

Environmental Sciences: Richard H. Gilluly

Life Sciences: Barbara J. Culliton

Medicine: Jeanne Bockel Physics and Astronomy: Dietrick E. Thomsen

Copy Editor: Nadine Clement

Faye Marley

Illustrations: Robert Trotter Production: Marilyn Binn

Production Assistant: Lisa Winters

Books: Margit Friedrich

Editorial Assistant: Esther Gilgoff

Advertising: Scherago Associates, Inc.

Circulation: Marcia Nelson

215 Theory for cell differentiation

216 Effects of income maintenance

217 Second wind for food irradiation

218 Arctic research intensifies Three-body antimatter

219 Newsbriefs: Abortion law; Thermal pollution

221 Engineering Sciences: Canceling jet noise; Laser under the bumper; Improving electron spectroscopy; Advanced diodes; Portable neutron radiography; India's first nuclear plant

222 Physical Sciences: Planets and pulsars; Saturn's rings; Analyzing the atmosphere of Venus; Pulsar magnetism; More against physical quarks

223 Environmental Sciences: Identifying pollutants; Prediction of shorelines; Lead in the soil; Using human waste; Analyzing auto emissions

224 Earth Sciences: Pulp mills and rainfall; Water in the mantle; Origin of the Coast Ranges; Bumps on the core; Beach erosion measured

FROM ABROAD

232 Letter from Tokyo Satellite on a shoestring

IN SCIENCE FIELDS

225 Astronautics: Troubles with the Delta
226 Astronomy: Four planets in March
227 Solar Astronomy: An available eclipse

229 Geology: Putting Gondwanaland together

214 Letters to the Editor

228 Films of the Week Books of the Week

230 New Products

SCIENCE SERVICE

Institution for the Popularization of Science founded 1921; a non-profit corporation

Board of Trustees—Nominated by the American Association for the Advancement of Science: Athelstan F. Spilhaus, West Palm Beach, Fla.; Wallace R. Brode (Treasurer), American Chemical Society, Washington, D. C.; Bowen C. Dees, University of Arizona. Nominated by the National Academy of Sciences: Henry Allen Moe, The Clark Foundation; Harlow Shapley, Cambridge, Mass.; Allen V. Astin, Bethesda, Md. Nominated by the National Research Council: Glenn T. Seaborg (President), U.S. Atomic Energy Commission; Leonard Carmichael, National Geographic Society; John R. Whinnery, University of California, Berkeley. Nominated by the Journalistic Profession: O. W. Riegel (Secretary), Washington and Lee University; Gordon B. Fister, Call-Chronicle Newspapers; Peter Clark, Evening News Association, Detroit. Nominated by the Edward W. Scripps Trust; John Troan, Pittsburgh Press; Ludwell Denny, Monterey, Calif.; Edward W. Scripps II (Vice President), Edward W. Scripps Trust.

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Staff: Youth Division, Howard Weisbrod; Things of Science, Ruby Yoshioka.



All week long, Wayne Daniel works out fuel problems on the internal combustion engine.

When he has his feet on the ground, amateur mountain climber Wayne Daniel spends his time answering one important question at the GM Tech Center Research Laboratories in Warren, Michigan: "How do traces of fuel escape combustion in automobile engines?"

Although there aren't any simple solutions, Wayne and other scientists like him have been making an increasing amount of prog-



ress. In fact, the 1970 models emit only one-third as much unburned hydrocarbon and carbon monoxide as the uncontrolled cars of 1960. And further reductions are on the

Meanwhile, some of Wayne's friends have been working on a mini-electric car that could be used for short trips in the suburbs. And on similar small commuter vehicles featuring gasoline or hybrid gasolineelectric power plants.

The point is, there are a lot of interesting people like Wayne holding down equally responsible jobs, helping prepare for future transportation needs.

General Motors

Interesting people doing interesting things.

NOTE: This advertising is being sponsored by General Motors in several youth publications. It is hoped that the subjects featured will serve to increase teenager interest in scientific studies and can be used, perhaps, to show how the things your students are learning are utilized in actual industrial activities. Reprints of this ad are available upon request. Simply write to General Motors, Advertising & Merchandising Section, P. O. Box 5446, Detroit, Michigan 48211.

science news, vol. 97