

# SCIENCE EDUCATION

## *Fluid Mechanics Films*

As a means of overcoming a lack of adequate instructional facilities in the rapidly growing field of fluid mechanics, a group of educators has recently established an organization to produce a series of approximately 25 college-level films over a three-year period. The newly formed National Committee for Fluid Mechanics Films will use the organizational and technical facilities of Educational Services Inc., the nonprofit, operational arm of the Physical Science Study Committee, and will be supported in its first-year activities by a \$324 000 grant from the National Science Foundation. One of the features of the program will be the creation of series of reference texts, called "films in print", which will describe the highly compressed content of each film.

Two films in the program are already available for rental or purchase.

*The Fluid Dynamics of Drag* illustrates the drag of streamlined and unstreamlined bodies moving through fluids of low and high viscosity and small and large density. Viscosity, Reynolds number, creeping (Stokes) flows, boundary layer, separation, laminar flow, turbulent flow, viscous drag, pressure drag, and streamlining are some of the ideas which are described.

*Vorticity* deals with the ideas of vorticity and circulation, and with the related dynamical theorems of Crocco, Kelvin, and Helmholtz.

Other films for the current academic year are planned on kinematics, boundary layers in relation to potential flow and separation, flow-visualization methods, lift, drag, turbulent flow, one-dimensional waves, and one-dimensional, steady, gas dynamics.

Pending the working out of a permanent distribution procedure for both sales and rentals, the films will be distributed by Educational Services Inc., 47 Galen Street, Watertown, Mass. During the early development of the program, the prints will be made available free of charge for classroom use.

The Committee is under the chairmanship of Ascher H. Shapiro of the Massachusetts Institute of Technology. Other members are Arthur E. Bryson (Harvard University), Donald Coles (California Institute of Technology), Stanley Corrsin (Johns Hopkins University), Dave Fultz (University of Chicago), Robert A. Gross (Columbia University), Stephen Kline (Stanford University), Walter L. Moore (University of Texas), and Hsuan Yeh (University of Pennsylvania).

## *Commission on College Physics*

Edward D. Lambe, professor of physics at the Long Island Center of the State University of New York,

has accepted a one-year appointment as executive secretary of the Commission on College Physics, beginning September 1. He has been granted a year's leave of absence from his teaching post and will be located at the offices of the Commission on the campus of Bryn Mawr College, Bryn Mawr, Pa. The position of executive secretary of the Commission had been vacant since February of this year, when Lyle W. Phillips, who previously served in that capacity, returned to the National Science Foundation. During the intervening period, Walter C. Michels of Bryn Mawr served as acting executive secretary in addition to his responsibilities as chairman of the Commission. Prof. Lambe, who received his doctorate from Princeton, was formerly an assistant professor of physics at Washington University in St. Louis. Starting in 1959, he shared responsibility with John M. Fowler for the development of a new introductory physics course that is now being offered both at Washington University and at New York's Long Island Center.

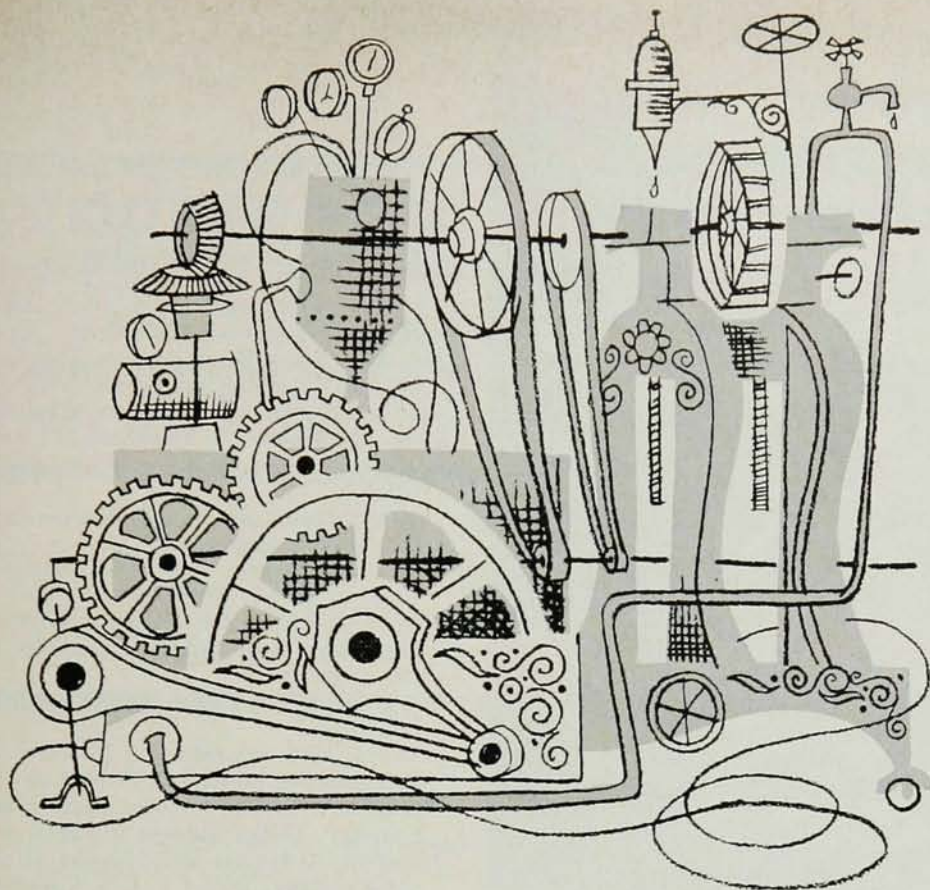
The Commission on College Physics was established two years ago under the auspices of the American Association of Physics Teachers. Supported by the National Science Foundation, the Commission serves as a coordinating agency devoted to the improvement of physics education at the college level. To that end, its programs are aimed at encouraging the development of new and better physics courses and of new teaching aids, including films, books for supplemental reading by physics students, and improved laboratory and demonstration apparatus.

## *Philosophy of Science Seminars*

During the next nine months, the University of Delaware will present a series of nineteen lectures making up the 1962-63 Delaware Seminar in the Philosophy of Science. The attendance fee is \$2 for individual sessions, or \$25 for the entire series. As in the case of the first such seminar, held last year, the papers presented in the series will be published as a bound volume. All inquiries should be addressed to Prof. William L. Reese, Department of Philosophy, University of Delaware, Newark, Del. Listed below are the lectures included in this year's seminar:

Sept. 18: Survey of the Literature in Philosophy of Science (For Registered Students Only); Bernard Baumrin, University of Delaware

Sept. 25 & 26: Philosophical Foundations of the Special Theory of Relativity; Adolph Grunbaum, University of Pittsburgh



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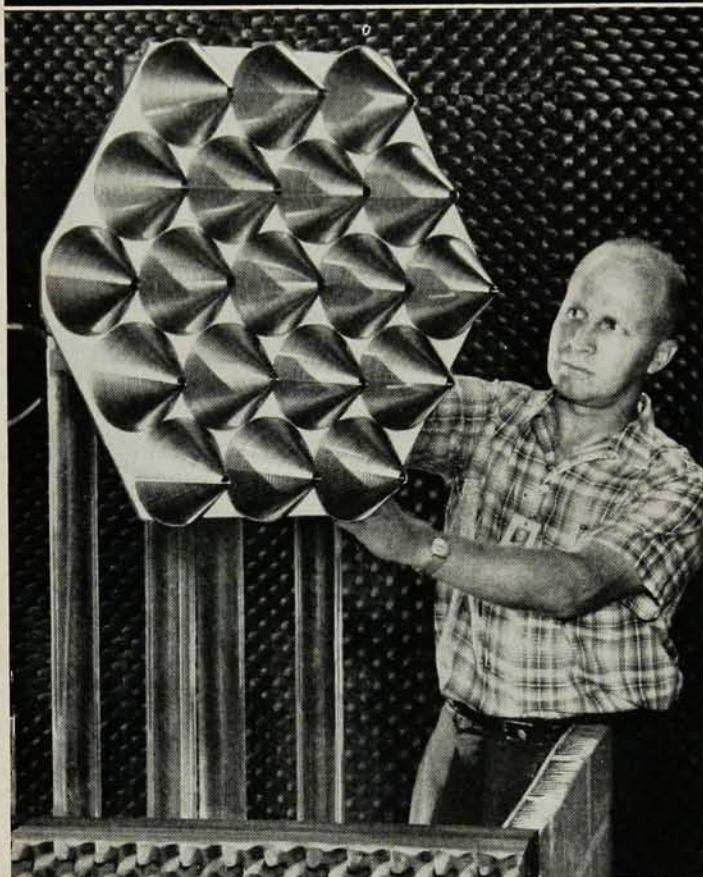
Refrain: If you require clean vacuums, or if mechanical vibration is undesirable, there is a simple three-syllable answer. VacSorb pumps.

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- Oct. 9: Philosophy and Science in Education; Sterling McMurrin, US Commissioner of Education
- Oct. 23: The Pernicious Influence of Empiricism; Paul Feyerabend, University of California
- Nov. 6: Derived Measurement, Universal Constants, and The Expression of Scientific Laws; Brian Ellis, University of Melbourne, Australia
- Nov. 20: Physics, Ethics, and the Thermodynamic Imperative; R. Bruce Lindsay, Brown University
- Dec. 4: The Structure of Matter; Abraham Pais, Institute for Advanced Study, Princeton
- Dec. 18: Inductive Inference; Wesley Salmon, Brown University
- Jan. 8: Particles and Fields in Modern Physics; E. L. Hill, University of Minnesota
- Jan. 22: Explanation and Systematization; Sylvain Bromberger, University of Chicago
- Feb. 5: Fundamental Problems in the Theory of Scientific Explanation and Prediction; Nicholas Rescher, University of Pittsburgh
- Feb. 19: Theoretical Explanations; Wilfred Sellars, Yale University
- March 5: Conventionalism in Geometry; Hilary Putnam, Massachusetts Institute of Technology
- March 19: The Physical Concepts of Space, Time, and Causality; Dudley Shapere, University of Chicago
- March 26: Reflections on Philosophy of Science in the Soviet Countries; Robert S. Cohen, Boston University
- April 16: The Role of Probability in Quantum Mechanics; Patrick Suppes, Stanford University
- April 30: Are Life Processes Governed by Physical Laws?; Ernest C. Pollard, Pennsylvania State University
- May 14: The Limits of Physical Explanation; Michael Scriven, Indiana University
- May 21: Philosophical Aspects of Contemporary Cosmologies; Norwood R. Hanson, Indiana University

## Grants and Fellowships

Research grants totaling nearly a quarter-of-a-million dollars have been awarded this year to physics and chemistry graduate departments of 22 schools by the Eastman Kodak Company. The grants, which take the place of awards previously made under the company's fellowship award program, range in size from \$6000 to \$12 500. Each \$12 500 grant provides a \$1000 award recognizing the achievements of an outstanding doctoral student. The major portion of the funds are for unrestricted use in research programs and in providing new or improved facilities. Graduate physics departments receiving funds under the program include the California Institute of Technology, the University of Illinois, the Massachusetts Institute of Technology, the University of Rochester, and Baylor University.

The Scripps Institution of Oceanography is offering postdoctoral fellowships for research in physical, chemical, and biological oceanography, submarine geology, and marine geophysics. Stipends for the one-year appointments (renewable in some cases) are \$6000, plus allowance for children, to a maximum of \$7500. Allowances for travel are also provided. Inquiries should be sent to Scripps Institution of Oceanography, La Jolla, Calif.

PHYSICS TODAY