# MEETINGS

#### Gas Dynamics

The Department of Mechanical Engineering and Astronautical Sciences and the Technological Institute of Northwestern University are holding a Gas Dynamics Colloquium during the 1963–64 academic year. Although the 1963 meetings are past, a number remain for 1964 and are scheduled as follows:

Jan. 14, Lasers: Stimulated Emission of Radiation, B. A. Lengyel

Jan. 21, The History of Pinch Research: Progress from Applied to Pure Physics, H. P. Furth

Jan. 28, Non-Equilibrium Composition of Monatomic Radiating Plasmas, S. R. Byron

Feb. 11, Geomagnetic Storms, E. N. Parker

Feb. 18, Advances in Theoretical Plasma Physics, M. N. Rosenbluth

Feb. 25, Dissociation Behind Strong Shock Waves, C. E. Treanor

Mar. 3, Experiments with Alkali-Metal Plasmas, N D'Angelo

Apr. 7, Plane Couette Flow, D. Mintzer

Apr. 14, Gas Breakdown at Optical Frequencies, R. G. Meyerand

Apr. 21, The AC Impedance of a DC Arc, H. W. Emmons Apr. 28, Plasma Diagnostics and Simulation by Correlation Techniques, H. Hodara

May 5, Solar Winds and the Geomagnetic Field, L. Lees

Address inquiries to Gas Dynamics Colloquium, Department of Mechanical Engineering and Astronomical Sciences, Northwestern University, Evanston, Ill.

#### Material Science

The second annual symposium on Fundamental Phenomena in the Material Sciences will be held at the Sheraton Plaza Hotel in Boston on January 27 and 28. Sponsored by the Ilikon Corporation, the meeting will concern itself with how surface phenomena are treated in the different material sciences of metallurgy, ceramics, and polymer chemistry. Further information can be obtained from B. L. Mulhern, Ilikon Corp., Natick Industrial Centre, Natick, Mass.

#### Polymers and Electrodes

Two winter Gordon Research Conference will be held early next year at the Miramar Hotel in Santa Barbara, Calif. Polymers, chaired by Maurice L. Huggins, will take place from January 27 to 31, and Electrochemistry: Electrode Reactions, chaired by Ralph N. Adams, from February 3 to 7. The purpose of these meetings, as is the case with the regular Gordon Research Conferences, held every summer in New Hamp-

shire, is to stimulate research in universities, foundations, and laboratories by holding informal lecture and discussion meetings on various topics.

Applications for attendance at the conferences, limited to about 100 for each, can be obtained from Dr. George W. Parks, Director, Gordon Research Conferences, University of Rhode Island, Kingston, R. I.

### Biophysics

The Biophysical Society will hold its 8th annual meeting at the Pick-Congress Hotel in Chicago on February 26, 27, and 28, 1964. In addition to the program of contributed papers, the meeting will present three symposia: macromolecular aspects of radiation actions on cells, organization and development of decision processes in the central nervous system, and new approaches to electron-microscopic resolution at the atomic level. No preregistration will be required for this meeting.

Further information can be obtained from Dr. R. B. Uretz, Committee on Biophysics, University of Chicago, 5640 Ellis Avenue, Chicago, Ill.

An international biophysics meeting will be held in Paris, June 22 through 27, 1964 in conjunction with the second General Assembly of the International Organization for Pure and Applied Biophysics. The first two days of the meeting will be occupied by general sessions organized by the French National Committee on Biophysics, including lectures by J. Duchesne (Liege), A. L. Hodgkins (Cambridge), J. Monod (Institut Pasteur, Paris), M. F. Perutz (Cambridge), and B. Pullman (Institut de Biologie Physico-Chimique, Paris).

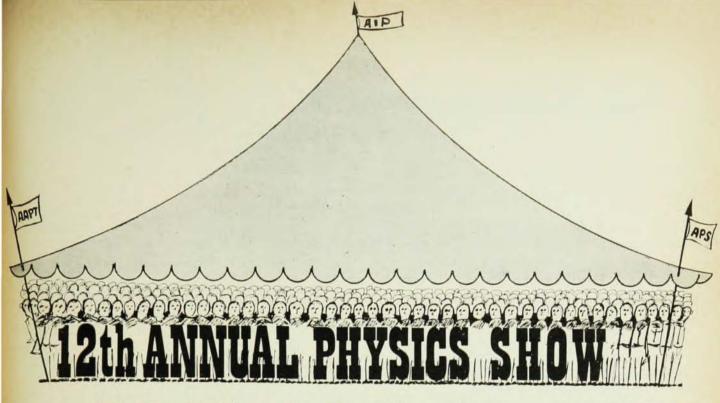
The remaining four days will be devoted to simultaneous sessions of the Commission on Cell and Membrane Biophysics, chaired by R. D. Keynes (Institute of Animal Physiology, Babraham, Cambridge, England) and the Commission on Biophysics of Communications and Control Processes, cochaired by W. A. Rosenblith (Massachusetts Institute of Technology, Cambridge, Mass.) and G. Frank (Biological Department, Academy of Sciences of the USSR, Protsojusnaja 7, Corpus 1, Moscow). Cell and membrane sessions will cover membrane and phase boundary phenomena, molecular biophysics of intracellular membrane systems, excitation-contraction coupling, cellular contractility and protoplasmic movements, and transport across cell membranes. The topics of the communications and control processes sessions will be coding and sensory mechanisms, coding and neural noise, and regulatory mechanisms in multicomponent systems. The final afternoon of the program will be de-

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## EXHIBITORS |

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voted to an open discussion of the problems of education in biophysics.

Inquiries regarding the meeting should be addressed to Prof. J. Tonnelat, Laboratoire de Biologie Physico-Chimique, Orsay, Seine-et-Oise, France.

## Direct Nuclear Reactions

Argonne National Laboratory will sponsor a symposium on nuclear spectroscopy with direct reactions at the Center for Continuing Education in Chicago, from March 9 to 11, 1964. This meeting has been accepted as an American Physical Society Topical Conference, which means that the abstracts of contributed papers will appear in the APS Bulletin, and must conform to the rules for abstracts prescribed therein. The deadline for abstracts of contributions is February 1, 1964. The part of the program devoted to invited papers, including topics and confirmed speakers, is listed below:

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- 1. Introduction: Direct Reactions (N. Austern)
- Reliability of DWBA in Giving Spectroscopic Factors (G. R. Satchler)
- Experimental Surveys of Pickup and Stripping Reactions with Deuterons (L. Green)
  - Nuclear Structure Studies with Deuterons (B. L. Cohen)
  - Spin Measurements (d, pγ), Polarization (J. P. Schiffer)
  - 3c. More Complex Single-Nucleon Stripping and Pickup (α, t), (d, He³), etc.
- Inelastic Scattering (J. S. Blair) (Spin Identification and Transition Probabilities)
  - 4a. Inelastic Scattering and Coupled Potentials
  - 4b. High Energy Inelastic Scattering and Nuclear Structure
  - 4c. (p, n) Reactions and Isobar States (J. D. Anderson)
- Nuclear Model Calculations of Spectroscopic Factors (M. H. Macfarlane)
  - Several shorter talks on various aspects of spectroscopic factors
- 6. More Complicated Reactions
  - 6a. Interpretation of More Complicated Reactions (p,  $\alpha$ ), (d, Li<sup>6</sup>), (d,  $\alpha$ ), etc. (B. Bayman)
  - 6b. Pairwise Stripping and Pickup Reactions (p, t), (He³, n), etc.

Abstracts and requests for further information should be sent to Dr. F. E. Throw, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Ill.

#### Minerals and Metals

Highlighted by sessions on geothermal power sources, lunar geology, laser materials, and mineral resources of the ocean floor, the 1964 Metals and Minerals Conference will take place in Los Angeles on May 14 and 15. Sponsor of the meeting is the Southern California Section, American Institute of Mining, Metallurgical, and

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