Polymers

Charles L. Segal and Jack R. Knox are chairman and vice chairman, respectively.

27 January. (J. Johnson, discussion leader): H. Mark, "Recent progress in polymer chemistry and technology"; A. Eisenberg, "Some physical properties of non-crystalline organic ionic polymers." (W. MacKnight, discussion leader): R. Simha, "Polymer solids at very low temperatures"; M. Shen, "Low temperature thermal expansion of polyethylene unit cell."

28 January. (S. Atlas, discussion leader): J. Stille, "Polyphenylenes"; H. Levine, "Polybenzimidazoquinazolines." (G. Pezdirtz, discussion leader): H. Schroeder, "Boron-based polymers with high temperature stability"; P. Hergenrother, "Poly-*as*-triazines: synthesis and preliminary stability evaluation."

29 January. (R. Conley, principal speaker and discussion leader): Open panel discussion on thermal decomposition; (D. Vincent, discussion leader): I. Goldfarb, "Kinetics of thermal decomposition of model aliphatic and aromatic polyimides."

30 January. (W. McDonald, discussion leader): J. Halpin, "Property-structure concepts in composite materials"; R. Bacon and R. Didchenka, "Interface problems in resin/graphite fiber composites." (F. Bailey, discussion leader): J. Lando, "Crystallization and polymerization on graphite surfaces"; R. Lundberg, "Poly-ε-caprolactone: polymerization and application studies."

31 January. (J. Knox, discussion leader): M. Huggins, "A new theory of intermolecular interactions in polymer solutions"; M. Goodman, "Conformational analysis of stereoregular polymers."

Calendar of Events—Courses

Immunology, Lake Forest College, Lake Forest, Ill., 14–26 July. Sponsored by the American Association of Immunologists and supported by a training grant to the University of Illinois, the course is intended primarily for university or college instructors who require more breadth of knowledge of immune mechanisms for teaching and research. Selection of participants (limited to approximately 50) will be on a competitive basis and will be decided by the Committee on Admissions. Applications must be received not later than *1 April 1969* and should be accompanied

by (i) curriculum vitae, (ii) current research and teaching activities, (iii) reasons for wanting to enroll in the course, and (iv) background in immunology. Fee: $100; per diem costs at the college are approximately $10. (Dr. David M. Talmage, University of Colorado Medical Center, Denver 80220)

Electron Microscopy in the Biological Sciences, Boston, Mass., 19–31 January. Tenth session and intensive program in the preparation of biological materials as electron microscope specimens, electron microscopy and interpretation of results. Designed for doctoral level investigators who wish to use the electron microscope in their research but who have little or no experience in the field. Advanced graduate students will be considered. Limited to 12 students. (Prof. Clifford Youse, Center for Continuing Education, Northeastern University, 360 Huntington Ave., Boston 02115. Telephone 617-427-3850.)

Vacuum Techniques—Theary and Practice, Hopatcong, N.J., 20–22 January. The course will emphasize generation, measurement, and use of high vacuum in research and development and industrial processes. Included in the lecture topics will be pertinent equations of the kinetic theory of gases, flow of gases through orifices and tubes, gassing and degassing of surfaces, measurement to total and partial pressures, leak detection, pumps and pumping calculations, vacuum hardware (except pumps), materials used in vacuum, their joining and cleaning, and examples of typical vacuum systems. Fee: $155. (Dr. Saul Gordon, Center for Professional Advancement, P.O. Box 66, Hopatcong, N.J.)

Modern Methods of Numerical Analysis, Berkeley, Calif., 8–16 March. The course will cover computer techniques in the area of approximation methods for the solution of scientific problems. It will include an introduction to the theoretical framework of approximation methods, examples of practical applications, numerical procedures, a description of some of the difficulties that may arise and advice on how to recognize and deal with them. Fee: $275. (Mr. Marvin Chachere, University of California Extension, 2223 Fulton St., Berkeley 94720)

Physics of Quantum Electronics, Flagstaff, Ariz., 16–27 June. The course will cover atomic coherence effects (light scattering, self-induced transparency, theory of the laser), nonlinear optical phenomena (pico-second pulses, parametric optics), and statistical properties of radiation. (Prof. Stephen F. Jacobs, University of Arizona, Tucson 85721)

Ocean Engineering—Minerals and Petroleum, Washington, D.C., 24–28 February. This course is designed for engineers, scientists, and managers who are presently, or expect to be, in the business of extracting minerals, petroleum, or natural gas from the ocean floor. The course will cover methods, problems, economics, legal factors, developing technology, and trends. The course was prepared in coordination with the Department of the Interior. (Jack E. Mansfield, Coordinator of Continuing Engineering Education, School of Engineering and Applied Science, George Washington University, Washington, D.C. 20006)