

vascular system and on blood clotting; effects of carbon monoxide on the central nervous system and on complex sensory-motor performance; effects of nitrogen oxides and ozone on the structural protein of the lungs; significance of shifts in oxyhemoglobin dissociation consequent to air pollution exposure; effects of lead exposure on porphyrin synthesis; effects of community exposure to beryllium and asbestos; occurrence and mechanisms of sensitivity of children to air pollution exposures; role of air pollution in the epidemiology of asthma; role of air pollution in the epidemiology of emphysema; methods of treating air pollution reactions and of protecting unusually sensitive individuals; interaction of air pollution exposures with other respiratory exposures; magnitude and significance of domestic air pollution (within homes, schools, offices in public buildings, and other places).

We investigators are asked to be both good scientists and good scientific citizens during the next few years. We must continue devoting zeal to the kinds of things which scientific peers will respect, and which will advance the several disciplines.

Whether it be to our taste or not, in order to provide a basis for action, what is reasonably well known must be separated carefully from what we need to know. What is reasonably well known must serve as a basis for policy if it is relevant, and what knowledge is needed in order to act must become a priority, a priority for uncommitted public resources, so that the policies can become as constructive as the public interest demands.

But at the same time scientists are asked how these findings can be used for relief of a public which is growing tired of air pollution, and anxious about its effects on health. We can surely pass this test. If what the next few years demand is done, we shall be given more to do with other environmental problems—such as the effect of poverty on illness, the influence of migration, the impact of noise, and extremes of temperature. If we fail to pass these tests, there will be more confusion, more contention, more strife, and more uncertainty. If so, unfortunately, there is also likely to be more smog and more health effects resulting from it.

For the scientists attending this meeting, it was only an episode in the intellectual history which we are writing. As scientists, we must continue to

write articles for the scientific literature, correspond with one another, visit each others' laboratories, challenge hypotheses, raise questions about the interpretation of data, speculate, and measure.

Above all, we should seek to understand the nature of the changes which man and his technology are making in our habitat. Once this understanding is at hand, there is an obligation to make it known, not only through meetings like this, but also in medical practice, through local medical societies, in various committees on which we serve, and as citizens relating to respective governments.

Proceedings will be published in the AMA Archives of Environmental Health.

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Calendar of Events

Courses

The **Marine Biological Laboratory** will conduct summer courses in (i) Experimental Marine Botany, (ii) Marine Ecology, (iii) Embryology, (iv) Physiology, and (v) Experimental Invertebrate Zoology. Each course is divided into two sessions. The first session, 16 June–26 July, is the formal course program and starts each day with a lecture. The postcourse research session, 27 July–30 August, divides the students into research projects with members of the instruction staff. Applications should be requested from the Laboratory and must be returned *before 1 March*. Limited financial aid for students is available. Two special research training programs on "Fertilization and Gamete Physiology" and "Excitable Membrane Biophysics and Physiology" will also be presented. (Homer P. Smith, General Manager, Marine Biological Laboratory, Woods Hole, Mass. 02543)

Laser Applications, St. Louis, Mo., 28 Apr.–2 May. The subject areas covered will include principles of gas, liquid, and solid-state lasers, parameter measurements, and beam control; applications in guidance, computers, communications and tracking, meteorology, diagnostics, medical, holography, and welding and machining. Fee: \$275. (Dr. G. L. Esterson, Box 1048, Washington University, St. Louis, Mo. 63130)

Pathogenesis and Pathology of Infectious Diseases, Burlington, Vt., 21–25 July. This course is designed for the microbiologist with an advanced degree and for medical technologists with a broad background in diagnostic microbiology. An effort will be made to acquaint the participant with the lesions and clinical syndromes caused by common human pathogens. Current concepts of the pathogenesis of bacterial,

fungal, and viral diseases will be emphasized. Registration fee: \$30. (Dr. J. E. Craighead, Department of Pathology, College of Medicine, University of Vermont, Burlington 05401)

Mössbauer Spectroscopy, Washington, D.C., 16–20 June. This is an introductory course on the theory and interpretation of Mössbauer spectroscopy. Topics to be covered include the theory, instrumentation, and application to chemistry, metallurgy, and nuclear and solid-state physics and biology. Fee: \$130. (Dr. Leopold May, Department of Chemistry, Catholic University of America, Washington, D.C. 20017)

Developmental Biology, La Jolla, Calif., 30 June–25 July. Is designed for those engaged in developmental research who wish to become proficient in the use of various molecular and cellular techniques. Participants are limited to 20. Is sponsored by the National Science Foundation which will defray the cost of travel and subsistence for each participant. Deadline for receipt of applications is 15 March. (Dr. Herbert Stern, Department of Biology, University of California, San Diego, La Jolla 92037)

Physical Measurement and Analysis, Cambridge, Mass., 18–29 August. Is intended for professional people who make and analyze measurements or who design or supervise the design of experimental equipment incorporating measuring apparatus. The course will provide the background needed to make and interpret from dynamical and statistical points of view, measurements in the general mechanical engineering field. Measurements discussed will include displacement, strain, force, torque, velocity, acceleration, flow, temperature, vacuum, wear and surface characteristics. Methods for making measurements will include optical (lasers), mechanical, pneumatic, electric (resistive, inductive, capacitive), electromagnetic, photographic, acoustical, and radioisotope techniques. Fee: \$450. (Director of the Summer Session, Room E19-356, Massachusetts Institute of Technology, Cambridge 02139)

Physics of Quantum Electronics, Tucson, Ariz., 16–27 June. The topics covered will include stimulated light scattering and self-trapping phenomena, photon statistics, physics of ultra-short pulses, nonlinear optical amplification processes, Rayleigh scattering and light beat spectroscopy, self-induced transparency, laser physics, quantum theory of coherence in radiation and superfluid systems. (S. F. Jacobs, Optical Science Center, University of Arizona, Tucson 85721, or M. O. Scully, Department of Physics, Massachusetts Institute of Technology, Cambridge 02139)

Solid State Chemistry—The Nature and Properties of Materials, Montreal, Canada, 29–30 May. Is designed for teachers, industrial chemists, and others who are not specialists in solids, who would like to update their knowledge of materials. Lectures will cover the nature of crystalline and noncrystalline solids, the preparation of materials, and the electronic, optical, mechanical, and chemical properties of solids. Emphasis will be placed on the fundamentals of solid-state chemistry. (Professor Marcel Bourgon, Department of Chemistry, University of Montreal, Montreal, P.Q., Canada)