

Mexico City is at an elevation of 10 000 feet and the climate is always pleasant and invigorating. It is surrounded by majestic mountains and volcanoes—and also charming lakes, brooks, and forests. One of the pictures was taken during a joint excursion of the participants when they went for a boat ride on Lake Xochimilco.

About 35 students participated at the conference. Eight came from the United States, one from Canada, and the rest from all over Latin America, with a natural preponderance of Mexican students.

Marcos Moshinsky was the moving spirit behind the conference and he was responsible also for most of the arrangements. These were excellent. The conference was sponsored by the Nuclear Energy Commission of Mexico, but special grants were provided also by the US Department of State and UNESCO. A similar conference will be held during the coming summer in Brazil, with a program to be announced later.

The writer hopes that the preceding lines have conveyed the impression that participating at the conference was not only profitable but also enjoyable and that students and staff deeply appreciated the cordial hospitality of University and people.

Eugene P. Wigner
Princeton University

APS New York State Section

ENERGY conversion and science teaching were the topics of two symposia of invited papers held October 30–31 at the University of Rochester on the occasion of the Fall Meeting of the New York State Section of the American Physical Society. About 160 physicists attended the meeting.

At the Friday symposium ("Modern Advances in the Useful Conversion of Energy") David Douglas of General Electric outlined the history and principles of fuel cells, in which the chemical energy of a conventional fuel is converted directly and usefully into low-voltage dc electrical energy. In the ensuing discussion, led by George Evans of National Carbon, it developed that while present cells will yield 0.8 to 1.15 volts, and hydrogen cells are widely used in special applications, there are a "good many years" to technical feasibility of large-power high-temperature cells. R. R. Heikes of Westinghouse, in describing the principles of thermoelectric converters, pointed out that the same figure of merit of a thermoelectric material is of interest for both power generation and refrigeration, and is a function of thermal conductivity, resistivity, and the Seebeck coefficient. He discussed, in a well-organized presentation, the fundamental parameters in materials such as doped semiconductors upon which the macroscopic parameters depend.

Converters relying upon radiant energy input received attention as Joe Loferski of RCA and Peter Glaser of A. D. Little discussed fundamentals of the photovoltaic process and of arc or sun-imaging systems and applications, respectively. The General Electric work on thermionic converters was detailed by J. M. Houston, who described the various means for over-

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coming space change, particularly the use of cesium vapor for ionic neutralization in both low- and high-pressure designs. He observed that while efficiencies of 5 to 8 percent are now achieved, in 1915 the efficiency was 10^{-9} percent!

Finally, University of Rochester biologists Punnett and Bannister deeply impressed their physicist friends with their analyses of plant photochemical processes that might eventually be employed in efficient utilization of solar energy. The close interplay of the sciences was strikingly illustrated as they pointed out that discussions of the solid-state mechanisms used for developing the theories in the previous papers are very stimulating to workers in photosynthesis research. These same mechanisms promise to give some understanding of certain aspects of photosynthesis. Dry chloroplasts, for example, simulate semiconductors in luminescent and conductive properties.

The group relaxed Friday evening at the Faculty Club banquet, where Joe Howland, chief of the University of Rochester Atomic Energy Project Medical Division, provoked a great deal of thought as he spoke of human problems accompanying our present rapid technological advances.

Saturday morning, a large group of physicists and science teachers heard Professor Powers describe the Science Teachers Institute at the Pennsylvania State University. He was followed by Professor Gehman of the University of Buffalo, who discussed shortcomings of our precollege mathematics curricula and what the new School Mathematics Study Group is doing about it. Both papers set off much vigorous discussion from the floor.

As a windup to the program, and to amplify the papers of the previous day, demonstrations were given of fuel cells, thermoelectric devices, solar batteries, and a thermionic converter. The demonstrators ran trains, turned windmills, cooled baby bottles, operated lamps, or just simply deflected a meter needle, using only a gas burner, or a flashlight, or oxygen from the air to obtain the electrical energy.

The group adjourned well satisfied with the excellent program assembled by Don Morey of Eastman Kodak, who promises another informative two days at the Section's April Meeting at Colgate University, when radio astronomy and rocket probe studies will be discussed.

C. J. Parker

Corning Glass Works

Solar Energy

SEVEN or eight sessions dealing with the present importance of solar energy, solar collectors, water heating, furnaces, refrigeration, distillation, and other related topics will be presented at a Solar Energy Symposium to be conducted by the Mechanical Engineering Department of the University of Florida and the Solar Energy Applications Committee of the American Society of Mechanical Engineers. The meeting will be held April 4-5 in Room 512 of the University's Engineering and Industries Building. Additional information may be



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