



and VIEWS

PLEASANT

APS AT CLEVELAND

Karl Darrow recently classified meetings of the American Physical Society on the basis of whether they are "large" or "pleasant." The Cleveland meeting of the American Physical Society, March 10-12, was definitely of the second type, since it proved possible for all of the members who attended to spend considerable time discussing problems at leisure in the quiet way that characterized most of the meetings before the war.

One of the most noteworthy features of the meeting is that it represented the first gathering in which the majority of the program was devoted to work of the division of solids. There was one session of ten-minute papers and a few invited addresses on topics not directly related to solids but the overwhelming majority of the program dealt with those aspects of solids which are being pursued in this country at present. The members of the division were so enthusiastic about the results that a strong desire was expressed to duplicate the meeting in another year with the hope that an annual tradition might be established.

Each individual attending a meeting comes away with somewhat different impressions of the important parts of the pattern of presentation. In the writer's mind there were four outstanding contributions which are worth noting.

In the first place there were a number of papers on the properties of silicon and germanium which further advance our rapidly developing knowledge of these materials. This work ranged from investigations of the electrical properties at very low temperatures to work on the photoelectric effect near room temperature. Papers appeared from all of the prominent laboratories interested in these semiconductors. Dr. Goucher of the Bell Laboratories presented a thirty minute paper in which detailed measurements of quantum yield in the photoelectric effect was described. This work seemed to be particularly noteworthy because it provides an insight into the behavior of electron levels near the edge of the filled and empty bands.

Second, there was a group of papers on the plastic properties of metals. It is apparent that this highly complex subject has lost none of its attractions for the fundamental investigators. It is also apparent that study of plasticity is occupying a substantial part of the talent in all parts of the country.

Third were the group of papers on the study of order and disorder in alloys. Smoluchowski served as keynoter for this type of work by presenting an invited paper which surveyed the existing status of the field. In addition, there were a number of papers representing very recent advances in technique. To the writer, the outstanding papers of this type centered about Warren's group at MIT which is using x-ray techniques and has

greatly advanced the quantitative aspects of the determination of both short range and long range order.

Finally, there should be mentioned the papers on high pressure work emanating from the Institute for Study of Metals from the University of Chicago. Lawson and his co-workers described their relatively new installations in this field and work which they are undertaking. It now appears that additional outstanding results will soon be added to those which Bridgman has contributed almost singlehanded for so many years.

The Cleveland laboratories of the NACA provided opportunity for a visit on Friday afternoon. Those who took advantage of this opportunity were able to see, among other things, the new wind tunnel which is rapidly nearing completion.

—Frederick Seitz

RADIO ENGINEERS MEET

CONFERENCE ON HIGH FREQUENCY MEASUREMENTS

According to a communication from F. J. Gaffney, chairman of the American Institute of Electrical Engineers subcommittee on high frequency measurements, approximately nine hundred people attended the conference on high frequency measurements held January 10, 11, and 12 in Washington, D. C. The conference, which was jointly sponsored by the AIEE, the Institute of Radio Engineers, and the National Bureau of Standards, was the first meeting of its kind to be held on a national basis. It was divided into four technical sessions (devoted to the topics of frequency, power and attenuation, impedance, and noise and antenna measurements) and inspection trips were made by a number of the group to the Naval Research Laboratory, the Naval Ordnance Laboratory, and the National Bureau of Standards.

RADIOELEMENT POISONING

ARGONNE ANNOUNCES METAL DISPLACEMENT THERAPY

Argonne National Laboratory has recently announced important results in the treatment of radioelement poisoning by metal displacement therapy. The treatment, reported by Jack Schubert of the Laboratory's division of medicine, involves injections of a solution of zirconium citrate given to rats which have received previous injections of significant amounts of radioactive materials such as plutonium and yttrium. The zirconium treatment has resulted in at least three-fourths of the radioactive materials previously injected into rats being removed within six days. The method has been found to cause a great increase in the urinary excretion of plutonium and yttrium and a large decrease in the amount of these elements deposited in the animal's skeleton.

BEGINNINGS

UNIVERSITY OF ILLINOIS

Dedication ceremonies for the new electrical engineering building of the University of Illinois will take place May 19 through May 21 at Urbana. The new building has ample classrooms and laboratories for experimental work in communications, illumination, measurements, servo-mechanisms, and electrical machines. The cere-