

Laughlin Steel Corporation, which the visitors will view.

On May 18 the party will visit the laboratories of the Hercules Powder Company, at Wilmington, Del., where O. A. Pickett, director of the Experiment Station, will personally direct the tour of inspection.

The party will reach Washington on Thursday night, May 18, remaining there on Friday and Saturday, May 19 and 20. The two-day technical meeting of the institute will be held in the building of the National Academy of Sciences, where the members will be welcomed by Dr. Albert L. Barrows, executive secretary of the National Research Council.

The American Express Company is in charge of travel arrangements for the laboratories tour.

The membership of the institute is made up of executives in charge of research laboratories for small and large industries in the United States. It was formed a year ago "for cooperative study of the members' common problems of research management, for mutual criticism, exchange of ideas in an effort to bring about constant improvement of laboratory management."

AWARDS OF THE LALOR FOUNDATION

THE Board of Trustees of the Lalor Foundation has announced five awards for research in chemistry for the academic year 1939-40. These awards, which are for \$2,500 each, are designed to enable men of outstanding ability to carry on special investigations at research centers of international importance. The recipients of the awards were chosen from a group of fifty-one candidates representing applicants working in the major fields of chemistry and related sciences.

The applications received indicate a wide-spread interest in these awards, 40 per cent. having come from candidates from universities in the eastern United States, 30 per cent. from the Middle West, 5 per cent. from the South, 15 per cent. from the Far West and 10 per cent. from candidates outside the boundaries of the United States.

As respects institutions where applicants elected to carry on their research, 50 per cent. selected eastern universities, 10 per cent. middle western institutions, 7 per cent. the Far West, 25 per cent. chose English universities, none selected Germany and 8 per cent. selected other European continental institutions.

The recipients of the awards are:

DR. OTTO KARL BEHRENS, of the Rockefeller Institute of New York, to work with Dr. D. Keilin, of the Institute of Biochemistry, Cambridge, England, on the chemistry of peptide metabolism in tissue slices.

DR. ANDREW CALVIN BRATTON, instructor in pharmacology at the Johns Hopkins University Medical School, to continue work with Dr. E. K. Marshall on chemical

aspects of chemotherapy of compounds of the sulfanilamide type.

DR. ROBERT BYRON JACOBS, of the Research Laboratory of Physical Chemistry of the Massachusetts Institute of Technology, to continue work with Dr. F. G. Keyes on the fundamental properties of materials at low temperatures.

DR. WILLIAM EARL ROSEVEARE, assistant professor at the University of Wisconsin, to work with Dr. Henry Eyring at Princeton University on the determination of intermolecular forces in binary gaseous mixtures.

DR. CHARLES E. WARING, assistant professor at the Brooklyn Polytechnic Institute, to work with Dr. C. N. Hinshelwood at the University of Oxford on the kinetics of decomposition of silicon alkyl compounds.

The selection committee acting for the foundation consisted of Dr. Roger Adams, director of the Department of Chemistry of the University of Illinois; Dr. Hans T. Clarke, professor of biochemistry, Columbia University; Dr. Charles A. Kraus, of Brown University, president of the American Chemical Society; Dr. Arthur B. Lamb, director of the Division of Chemistry of Harvard University, and C. L. Burdick, secretary of the Lalor Foundation.

CELEBRATION OF THE SIXTIETH BIRTHDAY OF ALBERT EINSTEIN

THE sixtieth birthday of Albert Einstein, which occurred on March 16, was marked by a special radio program from Oakland, Calif., in which Professor J. Robert Oppenheimer spoke as follows:

This program is in celebration of the sixtieth birthday of Albert Einstein. His name is perhaps more widely known than that of any other living scientist; and to many millions of people it has come to stand for science itself, and for all that we admire in the way of life and thought of the scientist.

Most of us who are concerned with research in one or another branch of scientific work, are proud to have in Einstein a popular symbol of what we are doing and trying to do. Few men have contributed so much to our understanding of the Physical World, to our ability to predict and follow and control its behavior. And we see in Einstein, especially those of us who have come to know him a little, all those personal qualities that are the counterpart of great work: selflessness, humor, and a deep kindness.

But if few scientific workers would quarrel with the fact that Einstein is in many ways a perfect symbol of their work, there are many who would feel that there is something a little false and fabulous in the way he is thought of. There was a fable at one time that there were only a dozen men who could understand what Einstein had done; there is certainly a general impression, supported in part by his eminence, that his work has been qualitatively different from that of his fellow workers; that it is abstruse, and remote, and useless. This

seems to me a very strange ground for admiration. And of course it is not true; and the truth is much better than the fable.

All discoveries in science grow from the work, patient and brilliant, of many workers. They would not be possible without this collaboration; they would not be possible without the constant technological developments that are necessary to new experiment and new scientific experience. One may even doubt whether in the end they can be possible except in a world which encourages scientific work, and treasures the knowledge and power which are its fruits.

For science is not parasitic on society: it makes a good return. And it is for its return, and not its abstruseness, that our children, when they learn of Einstein's work in college or in school, will prize it. It will be part of their thought, as for us to-day the work of Newton and of Pasteur; they will be able to trace its history in the development of countless new and powerful technological methods. In fact it was some of the early work of Einstein on the theory of relativity that first pointed the way to vast and hitherto untapped sources of energy. We know now that most of the sun's heat comes from these sources. And it is one of the most spectacular projects of contemporary atomic physics to make this energy available terrestrially, and thus to solve as far as human wants are concerned the problem of mechanical and electrical power. One could multiply instances of the usefulness, in the most direct and immediate sense, of Einstein's discoveries. But in every case we would

find their development so closely interwoven with the work of countless other scientists and technicians that there would seem something artificial to such an analysis, and we would come away with only a deepened conviction of the cooperative and interrelated character of scientific achievement. And if we were to trace the effects of any great scientific discovery on human thought and culture, we should find a similar story.

It seems appropriate, on Einstein's sixtieth birthday, to speak of these simple things with a certain seriousness, for we know that he himself has been led to question the possibility of continued scientific progress in a world dominated by fascism and by fascist thought. We may be sure that it is not the special persecution to which he has been subject which has raised these grave doubts. It is a deeper thing. For it would seem that in a fascist world neither the technological nor the cultural fruits of science could find anything but abuse. For technology, by rendering less desperate the struggle for an adequate and rich existence, should tend to reduce and not increase the exploitation of man by man and of nation by nation. And in general the effect of science is to reduce too the absoluteness of the differences between people, and to increase their common understanding: that is just the content of its objectivity.

There are surely graver reasons for concern in the contemporary world than this threat to the future of science. But I doubt whether to-day there can be any better way to honor Einstein than to commit ourselves to the kind of world in which such work as his can be possible.

SCIENTIFIC NOTES AND NEWS

DR. SAMUEL C. LIND, dean of the Institute of Technology of the University of Minnesota, previously director of the School of Chemistry, has been chosen president-elect of the American Chemical Society.

A MEETING of the Harvey Cushing Society in honor of the seventieth birthday, on April 8, of Dr. Harvey Cushing, Sterling professor of neurology emeritus at Yale University, was held in New Haven on April 7. The speakers included Dr. Walter Freeman, professor of neuropathology at the George Washington University; Dr. James W. Watts, of the department of neurosurgery at the Hospital of the University of Pennsylvania, and Dr. Tracy J. Putnam, professor of neurology at the Harvard Medical School.

MERRITT L. FERNALD, Fisher professor of natural history and director of the Gray Herbarium of Harvard University, has been elected an honorary member of the Nova Scotian Institute of Science in recognition of his work on the flora of the Maritime Provinces.

At the annual meeting of the Philadelphia College of Pharmacy and Science held on March 27, Dr. Wilmer Krusen, formerly director of public health of Philadelphia, was reelected president for the thirteenth time.

PROFESSOR FRANK E. RICHART, professor of engineering materials at the University of Illinois, was elected president of the American Concrete Institute at the recent annual meeting in New York City.

Nature states that at the annual general meeting of the Ray Society, London, held on March 23, the following officers were reelected: *President*, Sir Sidney F. Harmer; *Treasurer*, Professor F. E. Weiss; *Secretary*, Dr. W. T. Calman. Dr. John Ramsbottom was elected a vice-president.

DR. FRANKLYN BLISS SNYDER, professor of English, vice-president and dean of faculties of Northwestern University, has been elected eleventh president of the institution. Dr. Snyder, who has been associated with the university for thirty years, will succeed Dr. Walter Dill Scott, who has been president since 1920. Dr. Scott joined the university in 1900 as instructor in psychology and pedagogy and later became professor of psychology and director of the Psychological Laboratory.

DR. ROBERT A. MOORE, assistant professor of pathology at the Cornell University Medical College, has been appointed Edward Mallinckrodt professor of pathology and head of the department at Washington