

municipal bodies, and to restore these cuts at the earliest possible moment. The country's financial position is very different now from what it was in October, 1931. The national finances have been stabilized. Successive conversion schemes have reduced the burden of debt charges. The estimated revenue from the new tariffs for the current year is £24,500,000. Moreover, during the current year the revenue has received a windfall of more than £8,000,000 from death duties on the estate of the late Sir John Ellerman alone.

Trade is improving, and the adverse balance of trade is smaller than it has been for some considerable time. Employment is improving, whilst unemployment is decreasing. New industries are being launched, such as coal hydrogenation, which will be productive of increased employment and revenue. These new industries are frequently the outcome of scientific research; and it is not too much for scientific workers to expect that the conditions under which they have labored during the past two years shall, at least, be restored to the level of 1931. Point is added to this expectation when it is borne in mind that the government from time to time creates fresh appointments of a non-scientific character which carry no such burdens as salary cuts. A whole batch of appointments has recently been created under the Milk Marketing Board, none of which appears to have salary cuts imposed—notably a general manager has been appointed to this board at a commencing salary of £5,000 rising to £7,000; that is to say, this general manager's salary is not subject to the cut which is imposed on the Prime Minister's, and will eventually be higher than the Prime Minister's basic salary. Then recently a fresh appointment was made at the post office, and there was no mention of the salary being subject to an economy cut. It is obvious that the time is ripe for reviewing the whole situation.

THE NINTH INTERNATIONAL CONGRESS OF PURE AND APPLIED CHEMISTRY AT MADRID

Industrial and Engineering Chemistry gives an account of plans for the scientific organization of the Ninth International Congress of Pure and Applied Chemistry which were discussed at a gathering of chemists of Spain and other countries held at the summer university of Santander from August 8 to 18. Most of these chemists were present as lecturers in the summer school. The others were invited to attend these lectures and join in the exchange of opinions upon the best method of assuring the success of the Madrid congress.

Those present and the countries they represented were: E. Biilmann (Denmark); G. Barger (England); F. Haber and R. Willstätter (Germany); C.

Matignon and J. Gérard (France); N. Parravano (Italy); Fr. Fichter (Switzerland); E. Cohen (Holland); H. von Euler (Sweden); P. de B. Carneiro (Brazil), and A. Seidell (U. S. A.). The Spanish organizing committee and their collaborators included: H. Hauser, *president*; E. Moles, *secretary*, and J. A. de Artigas, E. Barrón, A. Campo, O. Fernandez, J. Giral, A. Madinaveita, F. Calvet, I. Ribas, C. del Fresno and A. Perez Vitoria.

The journal continues: The conditions under which the conferences were held were most delightful. The chemists were guests at the beautiful Palace of the Magdalena, the seat of the summer university of Santander, where every provision was made for their comfort and pleasure. Lectures were given by chemists of exceptional distinction, visits were made to the industries and points of interest in the surrounding region, and once each day there was a round table discussion of plans for the next International Congress of Chemistry.

The date of the congress early received attention. Although the Spanish committee pointed out the advantages of the month of June in regard to agreeable weather and greater facility in securing hotel, dormitory and meeting-place accommodations, practically every representative of the other European countries considered that a date in April, immediately following the Easter holidays, would permit a larger attendance of chemists from their respective countries. The Spanish committee immediately assented, and April 5 to 11, inclusive, was chosen as the date of the congress. The opening session will be held on April 5 at 11:30 A. M.; the ordinary sessions on April 6, 7, 9, 10 and 11, and the closing session on April 11. Sunday, April 8, will be set aside for excursions.

It was decided that a general lecture should be given on each of the five days devoted to the scientific program: two dealing with pure chemistry; two, with applied, and one, with a question of outstanding biological chemical importance. The choice of the particular subjects for these principal addresses was given most careful consideration and a decision will be reached and announced later. It is expected that these addresses, as well as the papers presented before the sectional meetings, will be printed and distributed in advance. Individual communications will, of course, be welcome, but in order to be placed on the final program they should be submitted prior to February 5, 1934. The committee plans, however, to make such thorough preparation in advance that little will be left to uncertainty.

The congress will also include the usual social and excursion features. On account of the exceptional artistic, architectural and historical richness of Spain, the excursions should be of unusual interest. It should

be remembered, however, that the period chosen for the congress is that of the greatest affluence of tourists to Spain. Hotel provision can only be satisfactorily arranged by reservations made well in advance. It is especially desirable, therefore, that American chemists who plan to attend forward their names as early as possible, preferably before February 15, 1934, to Professor E. Moles, Secretaria general, IXth Congreso Internacional de Quimica, S. Bernardo, 49, Madrid (8).

The year 1934 will be an especially advantageous one for American chemists to visit Europe. In addition to the Madrid congress, the Third International Congress of Agricultural Industries will be held in Paris the preceding week. This will be devoted particularly to such industries as sugar, fermentation and distillation, fertilizers, foods, tropical products, etc. The French Maison de la Chimie is nearing completion and its inauguration with appropriate conferences will take place in the early fall of 1934.

COORDINATING COMMITTEES OF THE RAILROADS AND THE SCIENCE ADVISORY BOARD

THE three regional coordinating committees of the railroads were asked on October 11 by Joseph B. Eastman, coordinator of transportation, to name a committee of railroad officers to cooperate with a similar group selected by the Science Advisory Board of the National Research Council to determine whether efficiency of the roads could be increased by further scientific research.

The Science Advisory Board was created by an executive order of President Roosevelt on July 31 to deal with specific problems in various organizations of the government. At Mr. Eastman's request it has selected the following to treat with the railroads.

Dr. F. B. Jewett, vice-president, American Telephone and Telegraph Company; president, Bell Telephone Laboratories, Inc., *chairman*.

Maurice Holland, director, Division of Engineering and Industrial Research, National Research Council, director.

Dr. C. F. Kettering, vice-president and director, General Motors Corporation; president, General Motors Research Corporation.

Dr. John Johnston, director of research, United States Steel Corporation.

Dr. Francis C. Frary, director of research, Aluminum Company of America.

Dr. E. K. Bolton, chemical director, E. I. du Pont de Nemours & Co.

Dr. Harold G. Moulton, president, Brookings Institution.

Professor D. C. Jackson, head of the Department of Electrical Engineering, Massachusetts Institute of Technology.

R. L. Lockwood, director, Section of Purchases, office of Federal Coordinator of Transportation.

Dr. Isaiah Bowman, chairman, National Research Council, *ex-officio* member.

Mr. Eastman made public a letter he had written to Dr. Karl A. Compton, chairman of the Science Advisory Board, in which he stated that the success of scientific research by industries led him to believe that much might be accomplished to avoid waste and preventable expense by the railroads.

Dr. Compton said the suggestion fell exactly in line with the results of a preliminary survey which had been made, and which led to the question whether the railroads were taking adequate advantage of the opportunities and methods of applied science.

In his communication to the regional coordinating committees of the railroads, Mr. Eastman said that the appointment of the committee by the Science Advisory Board furnished an "opportunity to put this question to the test under excellent auspices."

SECTION F OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

SECTION F and the American Society of Zoologists will hold sessions for the reading of papers on Thursday, Friday and Saturday, December 28, 29 and 30, 1933. Certain sessions will be devoted to the reading of papers, while others will be given over to demonstrations. All demonstrations and exhibits will be presented in the new Institute of Biology at Harvard University, where there are ample accommodations for such presentation. In addition to this exhibit the facilities of the laboratories and some of the research projects in progress will be demonstrated by the staff of the institute. An all-day program for Friday, December 29, is being arranged at the institute.

Papers may be presented in three ways: "Read," "Demonstration" and by "Title." Those who can present their papers by demonstration are urged to do so in order to reduce the number to be read. Since Section F will hold no separate sessions for the reading of papers, all contributed papers will appear in the program of the American Society of Zoologists.

A symposium on the development and growth of the nervous system, led by Dr. S. R. Detwiler, is planned for Thursday afternoon, December 28. Other speakers will be announced later.

The annual dinner open to all zoologists will be held on Friday evening, December 29, and will be followed immediately by the address of the vice-president of Section F, Dr. A. S. Pearse. The title of the address is "Ecological Segregation."

The business session of Section F will be held on Friday, December 29, at 2 p. m. immediately preceding the business session of the Society of Zoologists.