double qualifications of proficiency in one or more languages and expert knowledge of one or more subjects.

A translator who wishes to be registered on the panel is required to answer a questionnaire (which can be obtained by application to the secretary of the Association), which is framed so as to provide the association, in addition to necessary particulars, with full information regarding the applicant's qualifications, linguistic and technical. Applications are considered by a board, whose decision is final. In certain cases the board may require the applicant to submit to a test. As a rule only individuals are eligible for registration, but commercial translating bureaus may apply for registration in respect of full-time employees, or by satisfying the board of their ability to undertake high-class specialized work.

An applicant may apply to be registered for any foreign language and for any number of foreign languages, but a high standard will be required by the board. A "fair" knowledge of a language will not be accepted, except in special circumstances, for example, where, without possessing a general knowledge of a language, an applicant has special knowledge of some technical terminology in it.

An applicant may apply to be registered for any subject and for any number of subjects, provided that these are sufficiently specialized. What is meant by "sufficiently specialized" can not be closely defined. Broadly speaking, the "commoner" the language the higher will be the degree of specialization required. An applicant fully qualified in a "rare" language, such as Chinese, Hungarian, or Turkish, might be accepted with little or no specialized knowledge of any subject. Applicants must use their judgment in this matter and give as much information as possible. If in doubt they may, before completing the questionnaire, send in an inquiry as to whether their subject is likely to be acceptable to the board. All branches of knowledge—science, law, the arts, etc.—come within the scope of the scheme.

The panel should include translators living in any part of the country and applications are considered from those living abroad. Part of the value of the scheme to users is that, in cases where time is an important factor, it may be possible to put them into touch with a suitable translator living in their own locality. On the other hand, when the question of time is less serious and the subject-matter particularly difficult it may be worth while to send the work abroad.

Included in the panel are those who are prepared to act as interpreters. The need for this kind of assistance arises frequently when interviews take place between English people and foreign visitors. Often they know no language in common or their knowledge is not good enough to enable them to discuss technical matters.

The panel is a private register belonging to the association, and it will not be published. To members of the association the service is available without charge. To others a charge is made in respect of each name and address given. Once the association has served the purpose of effecting the introduction, which may establish a permanent connection of value to both parties, its interest in the matter ends.

THE INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

M. CHARLES LORMAND, of Paris, contributes to *Industrial and Engineering Chemistry* an account of the tenth conference of the International Union of Pure and Applied Chemistry, held in Liége from September 14 to 21, and of particular significance in that it became truly international. The German chemists, who at the preceding conference at The Hague had been invited to join the union, in the meantime had formed in Germany a federation of chemical groups. This federation sent to the Liége conference an important delegation composed of the most distinguished German chemists.

The union decided this year to suspend the activities of its committees, which had been censured for their concentration solely upon administrative work. Certain committees had been dissolved because of these criticisms. They will now, however, resume their full activity in the more extensive field of the congresses which they will call together.

This year a series of reports on sugars was placed in the order of the day. The president of the scientific committee of organization of the union, Professor Délépine, had asked several representative chemists to give reports, followed by discussions, on the results they had achieved in this field. The series of conferences which was thus held in Liége included all aspects of our present knowledge of the chemistry of sugars, starch and cellulose. Gabriel Bertrand, in the first report, gave the present status of our theoretical concepts of the constitution of sugars, and, in the course of the three days which followed, Messrs. Haworth, S. Hudson, T. M. Lowry, Smith, A. Pictet, Karrer, H. Pringsheim, H. Mark, Emil Heuser and Ettore Viviani reported in succession on the structure of sugars, the relation between the constitution of sugars and their rotatory power, the constitution of starch and of polysaccharides, molecular weights and the use of X-rays in the study of structure, the constitution and properties of cellulose and lastly on the constitution and physical properties of artificial silk.

Each of these reports, given in the language of the author, was followed by a discussion, first in French, then in English and later in German.

The union recorded the forthcoming entry of Swedish chemists.

The International Bureau of Physico-Chemical Standards, a section of the union, reported that more than two hundred samples of calorimetric standards have been distributed to different industrial laboratories. In this connection, a permanent committee on thermochemistry has been formed for the purpose of studying the use of salicylic acid as a secondary standard.

The Committee on Nomenclature of Inorganic Chemistry met under the presidency of Professor Hollman and discussed the different reports presented by Professor Grillart. No change will be made in nomenclature so long as the edition of Beilstein is unfinished. The plan will be drawn up by chemists universally and the bases of nomenclature which are now in use will serve as practical terminology until the new order is established.

Various modifications of statutes required by changes in the statutes of the International Research Council were approved.

The former Committee on Chemical Elements was then dissolved and replaced by three committees. One, the International Committee on Atomic Weights, will publish an annual atomic weight table. This committee is composed of the following persons: Mr. Urbain, honorary president, Mme. Curie, Messrs. Baxter, Hoenigschmidt, Lebeau and Meyer. A second committee, known as the International Committee on Atoms, will study the question of atomic structures. A third Committee on Radioactive Substances, in conjunction with the Committee on Radium Standards, will study radioactive substances solely.

The International Committee on Atomic Weights plans to publish an international table as soon as possible. This is to be the only official table, and to this end atomic weight sections of each separate country will refrain from publishing national tables.

The union will hold its next session two years from now in Madrid; the 1934 session will be held in Switzerland. The union will thus continue to meet every two years. Furthermore, it has decided to resume its international congresses, the last of which met in New York in 1912. Owing to the war, the 1914 congress, scheduled for Moscow, could not be convened. The next congress will be in Madrid in 1932 during the conference of the union. It will be international and will embrace all branches of chemistry, pure and applied. As in the Liége session, a certain number of questions will first be placed in the order of the day and different sections of the congress will receive a limited number of reports. One special committee will be authorized to accept or reject these reports, which should, of necessity, be of truly international interest, and should not duplicate publications which a chemist might present through his national society. In the details of organization of the congress, considerable attention was given to the report of Bernhard Hesse on the Eighth International Congress, and as a result problems, no matter how interesting, will be barred from the session if they are not of international significance.

INTERNATIONAL CONGRESS ON BITUMINOUS COAL

A THIRD international conference on bituminous coal will be held at the Carnegie Institute of Technology in November, 1931, according to a recent announcement made by President Thomas S. Baker, who organized the first two international congresses.

An invitation will be extended to the scientific men of all countries to take part in the meeting, which is the only one of its kind of international scope. Prominent men of affairs in America will assist Dr. Baker in organizing the meeting.

The purpose of the congress will be similar to that of the meetings held in 1926 and 1928: to present for discussion the results of recent studies of coal. Particular attention will be paid to the economics of the new methods and processes that are being evolved, he indicated.

The program will include papers on carbonization, liquefaction and gasification of coal, by-products of coal, the mechanism of combustions, cleaning of coal and its preparation for the market, pulverized fuels, power plants and domestic heating. The discussions will be confined to coal above ground. Beginning at the mouth of the mine, however, practically every phase of distribution and consumption will be treated by outstanding authorities in the several fields.

"The condition of the coal industry during the past few years can hardly be called healthy," President Baker said, "and the current business let-down has brought extreme depression to this basic world industry. We hope that as a result of the discussions held we may be of assistance in uncovering new processes which may help it on the road to recovery."

Announcement of this third world meeting comes in logical sequence to the previous congresses. The first conference was organized by President Baker in 1926 for the purpose of finding new uses for bituminous coal and especially to discuss the problem of liquefying coal to supplement the petroleum oil supply of the world. This meeting, although it was the first of