

International and Absolute Electrical Units

AT the recent meeting in Paris of the International Committee of Weights and Measures, the subjoined draft memorandum relating to international and practical absolute electrical units was approved for publication. The document makes clear the position of the Committee and shows that for practically all engineering purposes the change to the suggested new units involves no difficulty.

1. In accordance with the authority and responsibility placed upon it by the General Conference of Weights and Measures in 1933, the International Committee of Weights and Measures has decided that the actual substitution of the absolute system of electrical units for the international system shall take place on January 1, 1940.

2. In collaboration with the national physical laboratories the Committee is actively engaged in establishing the ratios between the international units and the corresponding practical absolute units.

3. The Committee directs attention to the fact that it is not at all necessary for any existing electrical standard to be altered or modified with a view to making its actual value conform with the new units. For the majority of engineering applications the old values of the international standards will be suffi-

ciently close to the new for no change even of a numerical nature to be required. If for any special reason a higher precision is necessary numerical corrections can always be applied.

4. The following table gives a provisional list of the relations between the international units and the corresponding absolute practical units, to the fourth decimal place. Since differences exist between the standards of the international units held by the various national laboratories affecting the fifth decimal place, and, further, because all the laboratories which have undertaken determinations of the values of their standards in absolute measure have not yet obtained final results, the Committee does not consider it desirable for the present to seek a higher precision. At the same time it hopes that it will be possible to extend the table of these ratios with a close approximation to the fifth decimal place well before the date fixed for the actual substitution of the practical absolute system for the international system.

1 Ampere international	=	0.999 9	"Ampere absolute"
1 Coulomb	"	0.999 9	"Coulomb "
1 Ohm	"	1.000 5	"Ohm "
1 Volt	"	1.000 4	"Volt "
1 Henry	"	1.000 5	"Henry "
1 Farad	"	0.999 5	"Farad "
1 Weber	"	1.000 4	"Weber "
1 Watt	"	1.000 3	"Watt "

Sixth International Congress of Entomology

THE Sixth International Congress of Entomology, attended by some four hundred delegates, was held at Madrid on September 6-12. On account of the financial restrictions, some of the mid-European countries were not so fully represented as at past Congresses, but despite these difficulties, entomologists from practically every country were present. The opening session had as its chairman His Excellency the President of the Spanish Republic, who greatly impressed the Congress by his personality and warm welcome.

The Congress itself was presided over by that veteran entomologist, Dr. I. Bolivar Urrutia, director of the Museo Nacional de Ciencias Naturales, Madrid. A heavy programme, divided into sections devoted to general, ecological, agricultural, forest, medical and veterinary entomology, with, in addition, sessions allotted to apiculture and nomenclature, provided something of interest for everyone, and considering the warm weather and the variety of languages in which the papers were presented, the meetings were very well attended. As these papers will be published and may then be read and digested in the quiet of the study, it is unnecessary to detail them severally by name here, but we might say that some of the illustrated ones, as, for example, Dr. F. W. Edwards's account of the British Museum Expedition to Ruwenzori, Dr. B. Mayne's film of the life-cycle of the malarial parasite in the body of the mosquito,

Dr. Escalera's one on apiculture, and Dr. Kamal's 'talkie' of *Prodenia littoralis* seemed to be much enjoyed. The Sunday sessions were held at El Escorial, and though most of the delegates spent their time exploring the beautiful and historic buildings and collecting their favourite families of insects in the neighbourhood, the meetings were well attended by the more enthusiastic seekers after knowledge.

Only a small part of the time, however, was devoted to serious scientific matters. The President of the Republic received and entertained the Congress at the Palace, and entomologists must have felt just a little awed on walking up the grand staircase between the lines of fully-accounted lifeguards; the Mayor of Madrid entertained it to music, and during the subsequent proceedings, outlined to some of the members in excellent English the town-planning schemes of the city; the organisers, to a charming *fiesta* of Spanish art, to lunches and *merienda* and a final evening banquet, and bore the expenses of excursions to such historic places as El Pardo, El Escorial (as mentioned above) and Toledo. A whole day was devoted to a sight-seeing trip to the Guadarramas, the Alpine Biological Station being visited *en route*, the Forest of Valsain, San Ildefonso (La Granja) and Segovia, where members gazed with delight on the beautiful west façade of the cathedral lit up by the setting sun. An afternoon visit to

Aranjuez provided an opportunity of viewing the luxuriant growth produced by irrigation.

Honorary doctorates were conferred by the University of Madrid on Prof. M. Caullery, University of Paris; Dr. R. Goldschmidt, director of the Kaiser-Wilhelm-Institut, Berlin-Dahlem; Dr. R. Jeannel, Muséum Naturelle d'Histoire, Paris; Prof. F. Silvestri, Portici, Italy; and Mr. B. P. Uvarov, Imperial Institute of Entomology, London.

During the week preceding the meeting some of the members went on an excursion through the Picos de Europa under the guidance of Dr. F. M. de la Escalera, and after the Congress others visited southern Spain and the Canaries.

It is to the admirable organisation of the secretary, Dr. C. Bolivar y Pieltain, and his committee that the success of the recent Congress was due, and the lavish hospitality set a standard which few countries could hope to live up to, but there will remain in our memories also the courtesy and helpfulness of the people of Madrid to those who were ignorant of both customs and language.

It was decided to hold the seventh International Congress of Entomology in 1938 at Berlin under the presidency of Dr. E. Martini, and it is expected that the ninth will be held at Amsterdam in 1945 to coincide with the centenary celebrations of the Dutch Entomological Society.

Tercentenary of the University of Budapest

THE recent celebration of the tercentenary of the Royal Hungarian Péter Pázmány University of Budapest was worthy of a people that has played a great part in the intellectual and political life of Central Europe. The Hungarian nation began its corporate life in 896 when the Magyars entered the country from the plains of southern Russia and the slopes of the Carpathian mountains. In the fourteenth century, and again in the fifteenth century, universities were founded, but they lasted only a comparatively short time and none survived more than a few years after the disastrous Turkish victory in 1526. In 1635, when the greater part of Hungary was still under Turkish rule, Péter Pázmány, Archbishop of Gran (Esztergom) and later Cardinal, Prince Primate, founded a new university at Nagyszombat; more than a hundred years later it was transferred to Buda and in 1783 to Pest. The two cities Buda and Pest were united in 1872. Since 1922 the University has been known as the Royal Hungarian Péter Pázmány University of Budapest. This leading university of Hungary has now more than 5,000 students: its success is a remarkable demonstration of the intellectual aspirations and the national spirit of a nation which was deprived by the Treaty of Versailles of the greater part of its territory.

Unfortunately no list of delegates was given to the representatives of foreign universities and academies who assisted at the celebrations, and it is therefore impossible to mention the names of the foreign delegates. The celebrations began in the evening of Wednesday, September 25, with a reception in the Hotel Gellért. On the Thursday morning, the delegates and the university staff met in the great hall of the University and went in procession to the neighbouring University Church, where his Eminence the Cardinal Prince Primate, Dr. Jusztinian Serédi, assisted by a brother cardinal from Vienna and several bishops, celebrated Mass: Liszt's music was beautifully rendered. It was a memorable service. At the conclusion of the service the foreign delegates signed their names in a special commemorative book and, after visiting the University library where a collection of charters and old books relating to the Péter Pázmány foundation was exhibited, were entertained at luncheon in the Grand Hotel Hungaria, where several speeches were made by foreign ministers and some of the delegates. In the evening an

invitation performance at the Opera House, illustrative of Hungarian drama and national life, was followed by a reception given by the Minister of Education.

On Friday morning, September 27, the delegates of the University staff met under the central dome of the Parliament House to take part in the principal academic event of the celebrations. His Serene Highness, the Regent of the Kingdom of Hungary, their Royal Highnesses the Archduke Joseph and his son, the Archduke Francis Joseph, were present. The Rector Magnificus, Dr. Julius Kornis, opened the proceedings and, after other members of the University had spoken, a representative of the University of Bologna spoke on behalf of the foreign universities, and the foreign secretary of the Royal Society of London was asked to speak on behalf of the whole body of academies. The latter paid a special tribute to the memory of one of the greatest sons of Hungary, the founder of the Hungarian Academy, Count István Széchenyi, "a man whose enlightened attitude towards learning, breadth of vision and spiritual ideas are worthy of our most respectful and grateful homage". Delegates were then called upon to present their addresses: English, Scotch and Welsh universities were represented, universities of the Irish Free State, of Austria, Belgium, Egypt, Denmark, Latvia, France, Finland, Germany, Greece, Holland, Italy, Norway, Poland, Spain, Sweden, Switzerland, the United States of America, and other countries.

In the afternoon some of the delegates were present at the laying of the foundation stone of a new University hospital for lung diseases. Each medical professor has his own University hospital. An informal entertainment was given by students in the evening.

In the morning of September 28 a large number of honorary degrees were conferred. Unfortunately, the two English graduates, Sir Charles Sherrington and Sir F. Gowland Hopkins, were not able to receive their degrees in person.

In the afternoon the Regent received the delegates in the Royal Palace and talked with many of them with equal fluency in German, French and English. In the evening the visitors had the privilege of hearing Beethoven's "Missa Sollemnis" with an impressive accompaniment of a liturgical drama produced by the director of the National Theatre.