by education to do this very thing. Sir Robert Hadfield, F.R.S., has said, after England had been struggling with belated preparation for nearly two years:

> Until quite recently many mistakes were made, either because the scientific man had been installed in view of his special knowledge, or, at the other end of the scale, the practical man was given the preference. In a general way neither of these types has been a success.

Admitting Sir Robert's conclusion, how can we produce the leaders who shall adequately combine both qualifications? That is one of the greatest and most interesting problems awaiting solution by our educators, and on its correct solution depends in a larger degree than many imagine, the future of successful and contented industry in this country. I shall not attempt in the presence of so many educators of acknowledged ability, to show the way, even if I felt persuaded that I knew it, as the matter is of too great consequence to run the risk of an amateur indicating the wrong road. I shall content myself by pointing out the need, with the hope of turning the attention of the great public to its existence. In our free country, the people generally get what they really want, and it is worth while to lead them to want the greater things, and not to be satisfied with the lesser.

There are certain fundamentals, however, that all will agree to, if it be true that the leaders of the future will have far greater problems to solve than have yet been conceived.

1. The candidate for leadership should have a healthy body. Great things have been accomplished by men and women of fragile physique, but they would have accomplished greater if they had not been thus handicapped.

2. He should have good habits, which involves good character. This is vital if we would have leaders who would be a blessing and not a curse. We can easily call to mind men of splendid health and intellect who used these gifts to the injury of their fellows, and not to their advantage. Do not waste time or energy in educating for leadership a man of bad or doubtful character or whose aims are selfish.

3. Of course he should have a good mind, educated to the highest degree attainable. This education should be specialized in the desired direction, while good all around. No really great leader can be lop-sided if he would avoid being a "crank."

4. He should have a thorough knowledge of human nature. To play on the "harp of a thousand strings" requires on unusual acquaintance with the instrument. How many men otherwise great have broken down here, sometimes because they have given too much confidence, sometimes not enough, sometimes because they did not know how to select assistants. The knowledge of human nature is a great gift in itself, which can be acquired and increased. It lies at the foundation of wisdom, which King Solomon pronounced the "principal thing."

With the qualifications enumerated and others which will occur to you, the candidate for leadership is well equipped. To direct him to full fruition is a noble task. Let us proceed to fill our high places of every kind with the men and women specifically prepared to fill them, being assured that the effort to do so will produce an army of those not quite qualified for the top, but of the greatest value to assist those who are, and who without such aid would resemble "faith without works," we are told, is "dead being alone."

Research leads to discovery, discovery to invention, invention—no one knows where. Applied and supervised by those prepared for the task, the strides of progress will be long, and the benefit to the human race in proportion. Let us educate for living—certainly—but let us also educate for leadership—that superlative leadership of which civilization will stand more and more in need, as it increases in complexity, and reaches higher and higher planes.

Wm. H. Nichols

THE INTERALLIED CHEMICAL CONFERENCE[1]

The delegates of the Federated Chemical Societies of America, Belgium, England, France and Italy met in London, July 14 to

[1] Based on advance sheets from *Journal of Industrial and Engineering Chemistry.*

17, 1919. The United States was represented as follows: Dr. F. G. Cottrell, chief metallurgist, U. S. Bureau of Mines; Dr. C. L. Parsons, chief chemist, U. S. Bureau of Mines, secretary of the American Chemical Society; Dr. E. W. Washburn, professor of ceramic chemistry at the University of Illinois, past chairman of the division of chemistry and chemical technology of the National Research Council.

The proceedings of the conference were conducted in French, M. Moureu acting as chairman and M. Gérard as secretary. Almost the whole time was taken up in framing the constitution of the new body, which is to be known as the "International Union of Pure and Applied Chemistry," and in discussing the desirability of its inclusion in the scheme of organization projected by the Conference on Scientific Academies. The following officers were elected for a term of three years: *President,* M. Moureu; *Vice-presidents,* M. Chavanne (Belgium), Signor L. Parodi Defino, Dr. C. L. Parsons and Sir William Pope; *General Secretary,* M. Jean Gérard, 49 rue des Mathurins, Paris.

In addition to the five countries represented at this meeting, it was agreed that the British Dominions and the nations signatory to the Peace Treaty should each have separate representatives on making application. In this connection Canada and Poland have already signified their adhesion. It was also decided to admit neutral countries. With the exception of Belgium, each of the nations at present represented in the International Chemical Union has formed a national organization similar to the British Federal Council for Pure and Applied Chemistry; thus the United States has instituted a Chemical Division of the National Research Council; France, the Fédération Nationale des Associations de Chimie Pure et Appliquée; Italy, the Associazone Italiana di Chimica Generale ed Applicata.

The following resolutions were passed:

The International Union of Pure and Applied Chemistry, meeting in conference in London from July 14 to 18, 1919, hereby records the following opinions:

1. That the Confederation should be included in the scheme of organization contemplated by the Conference of Scientific Academies, with autonomous powers, as the Chemical Section of the International Research Council.

2. That it shall constitute "The International Committee of Chemistry."

3. That the various international delegates representing chemistry at the meeting of the International Research Council shall be appointed by the same National Federation which appoints the delegates to the Confederation.

4. That the officers of the present Confederation be, *ex officio* officers of the Chemical Section of the International Research Council.

It was decided to hold the next meeting of the International Chemical Union in Italy during the first two weeks of June, 1920.

The conference adjourned to meet again in Brussels on July 22 in connection with the International Research Council. The American delegates were joined by Dr. H. S. Washington. Professor Albin Haller joined the French delegation and presided over the meeting.

The meeting at Brussels was largely engaged in the discussion, modification and final adoption of the statutes of the new International Union of Pure and Applied Chemistry. It was informally agreed that the only apparent basis for international cooperation on the abstracting of chemical literature was a simple exchange of proof sheets of abstracts between the various countries interested, although it was thought possible that the Latin countries might be able to combine to advantage in publishing an abstract journal in French. Also it was informally agreed that America should go ahead with her proposed program on Scientific and Technical Monographs, the issuance of these to be later correlated, if possible, with the English program on Compendia of Organic and Inorganic Chemistry should their plans at first proposed be extensively modified.

The election of officers as made in London was confirmed and the International Union of Pure and Applied Chemistry became officially the chemical section of the International Research Council.