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interdependant world in which we live, our have now become part of our every day scientific and technical personnel need to have the greatest possible degree of understanding of these terms, so that they can communicate with one another and speed up the general process of scientific and technical development everywhere.

I think all of us are aware of the fact that some scientific terms are already international in character. For example, it has been traditional in the botanical sciences to use Latin terminology, and I understand that this is accepted in all the major countries of the world as the standard way of describing plant life. These Latin terms therefore are evidently used by English speaking, French speaking, Russian speaking, Japanese speaking and other scientists working in the same fields to enable them to communicate with one another. This is a degree of standardization which was apparently achieved long ago. It is already very widely accepted. Perhaps it is not so easy in some of the newer sciences to make use of Latin or Greek or some other common language to define the scientific terms we are speaking of now. We evidently have a particular problem with new discoveries and new, exciting developments which call for an entirely new terminology.

• (5:20 p.m.)

What seems to happen at the present time is that a discoverer of some new phenomenon or process coins his own name for it. If it is a good name it is generally accepted. I am told for example that the word "laser" is a word that is understood in all scientifically developed countries by people who deal with that recently developed phenomenon of light and energy. Perhaps this is a good example of how scientists themselves-and I repeat this, scientists themselves-are already dealing with this problem of communication with one another, when it comes to new scientific developments.

I think it is true also to say that an extensive common technical vocabulary has inevitably developed as industrial countries have expanded their trade in machinery, in industrial and scientific equipment not only amongst themselves but amongst the developing countries. We saw how this development of specialized terminology for special equipment became accelerated and was accentuated during the world war II, when many names which are household words today were coined or invented. They were picked up by the allied nations and distribut-

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lexicon.

So, hand in hand with this expansion in industry and science there has naturally been a very extensive exchange of information between industrial and scientific communities throughout the world. This, in turn, has unavoidably involved the natural development of a very substantial measure of standardization of vocabulary. There is no reason to doubt, in my opinion, that these developments will continue at an increasingly rapid rate. In fact there is a long standing system of international scientific unions, each of which operates in one specialized field of science.

These unions, individually, deal among other things with terminology. If we take for example the field of chemistry, we find there is an International Union of Chemistry. The scientists who are prominent in this field have set up a committee on nomenclature, which is what we are speaking of today. Through this committee on nomenclature they are steadily developing agreement on chemical terms. I believe this extends, not just through the chemical terms or nomenclature but to standards of purity and so forth. These in turn must have names for themselves. It is necessary for scientists working in a given field to get together and iron out the differences of substance in the materials about which they are talking. It is a matter of agreeing on the structure of the material or on the combination of elements before one can decide what to call it and come to an agreement on a widely understandable name for the substance. It is particularly desirable, if possible, that this name should in some way describe the appearance or use to which that substance would be put. This is something which obviously only scientists, who have a highly specialized knowledge in a particular field, can deal with adequately. It is no job for amateurs.

It is also my understanding, Mr. Speaker, that there is close co-operation amongst the various scientific unions through an organization called the International Council of Scientific Unions. I understand this body is doing a great deal of work in co-ordinating the efforts of the various scientific disciplines so that they will be understandable to one another. In recent years the problem of the development of common technical knowledge has become much more acute, as the industrial and scientifically advanced countries of the world have come to rely so heavily on computers. The need to exchange computer ed by that means throughout the world, and stored information has, in fact, magnified the