analysis of the ash shows it to be rich in titanium, a character common to the few examples yet analyzed of the basaltic volcanic rocks of Iceland, the Færoes, and Greenland.

## UTILIZATION OF THE FORESTS OF ALASKA

COLONEL W. B. GREELEY, the new chief forester of the United States, has returned from a month's inspection of the timber, water power and national resources of Alaska. In an interview in the Seattle *Post-Intelligencer* he is reported to have said:

Alaska has more than 100,000,000 cords of pulp wood. The territory has sufficient timber resources to produce 1,500,000 tons of paper annually. The Alaska Pulp and Paper Company, comprising California interests, is now constructing the first pulp plant at Port Snettisham, in southeastern Alaska. This mill will be supplied with 100,000,000 feet of timber just purchased from the Forest Service and is probably the forerunner of a large pulp and newspaper factory at that point.

In addition to the vast pulp resources of Alaska, Puget Sound offers splendid opportunity for at least six large pulp and paper mills. There are frequent inquiries of the Federal Forest Department for pulp wood concessions in this state. Even at the present time there is enough or would be enough wood of inferior quality cut in logging camps to support a large local paper industry here.

Establishment of such an industry on Puget Sound would be a great accomplishment from the standpoint of practical conservation—it would afford a market for inferior woods now being wasted in logging camps already established. In addition, there are large areas of hemlock and spruce and balsam on the Olympic Peninsula and in the Snoqualmie national forest. The entire forestry industry of the United States is moving westward, and with it is coming the paper industry.

Alaska contains 100,000,000 cords of pulpwood. She has the resources to produce 1,500,000 tons of paper yearly. That is nearly a third of the paper used in the United States, an amount nearly equal to what we are now compelled to import from Canada. With reasonable care, under the methods followed by the Forest Service, this output can be kept up from the national forests of Alaska perpetually. There is a real solution of the paper **shortage**. A few years ago we heard much about the inferior character of the forests in Alaska. As a matter of fact, aside from enormous quantities of good pulpwood and serviceable construction timber, the territory probably contains the largest quantity of clear, high-grade spruce to be found in the United States.

During the war this spruce passed every test for airplane construction, and it is now being shipped to the eastern states in increasing quantities for car and factory stock and high-grade finish. One of the things we shall accomplish by bringing the paper industry into Alaska will be to open up her thousands of miles of coastal forests and make available a much larger supply of special products like cedar, clear spruce and long piling.

## THE INTERNATIONAL CHEMICAL CONFERENCE

THE third session of the International Chemical Conference met at Rome, June 21 to 25, with Professor Charles Moureu, member of the Institute of France, as president. According to the account of the Journal of Industrial and Engineering Chemistry the program began with the meeting of the council of the International Union of Pure and Applied Chemistry. composed of the representatives of the five nations which founded the Union. The council considered the adhesion to the union of seven new countries: namely, Canada, Denmark, Spain, Greece, the Netherlands, Portugal and Czecho-Slovakia, which were all admitted. The plan of organization and administration of the International Union of Pure and Applied Chemistry, which was presented by M. Gerard, was as follows:

To adhere to the union a country must establish a liaison between its chemical groups by the formation of a national council or federation. The initiative of this organization must be taken by a chemical society, the National Academy, the National Research Council or a similar national institution, or by the government.

The union is governed by the council, composed of delegates from each of the supporting countries, whose executive power is vested in a bureau. The general assembly receives reports from the council, approves the accounts of the past session, adopts the budget for the following session, and considers the questions to be included on the program. Under the council and an executive committee, a permanent staff carries out the program of action as defined by the bureau. This staff is situated at the headquarters of the union, and is the pivot of all the organizations connected therewith. The council can also establish permanent committees as they may seem necessary.

An advisory committee, divided into sections corresponding to the different scientific and industrial branches, considers in detail the questions figuring in the program of action. The associated nations are represented in each section by delegates, elected for three years. The delegates of each nation constitute a national committee, whose duties include the study of questions interesting to chemistry from scientific, industrial, and economic points of view.

A meeting of the council, of the permanent committees, of the advisory committee, and of the General Assembly is held each year, under the vitle of the "International Chemical Conference."

The report presented by Professor Lindet, for the Fédération Nationale des Associations de Chimie de France, asking that the International Congress be joined to the union, provides that the International Conference shall every four years be converted into an International Congress of Pure and Applied Chemistry. Elections to the council, to permanent committees, and to the advisory committee shall take place at this time.

The languages for the congress are English, French and Italian. Communications may be made in another language, provided authors give a translation or an abstract in the official languages. To avoid errors in interpretation, communications, votes, resolutions, and official acts, if not originally offered in French, must be translated into that tongue.

To encourage research, the council may, within the limit of funds granted each year by the assembly, award prizes and medals to the authors of work considered worthy of such distinction.

## MISSOURI EXPERIMENT STATION OF THE BUREAU OF MINES

SECRETARY OF THE INTERIOR PAYNE, acting on the recommendations of Dr. F. G. Cottrell, director of the Bureau of Mines, has selected Rolla, Mo., as the place for the latest mining experiment station of the bureau. This station will look after the mining interests of the Mississippi Valley and will give consideration to the various problems which are met with in the production of lead and zinc. After a careful investigation, The Missouri School of Mines and Metallurgy at Rolla, Mo., was selected as an ideal place to carry on much of the actual laboratory and investigative work of the new station. However, it was also decided that the central offices of the station should be at or near St. Louis, Missouri. Consequently, the plan is that the actual laboratory and investigative work shall be done in cooperation with the Missouri School of Mines and Metallurgy at Rolla, but that headquarters of the station should be in St. Louis.

For a long time the Bureau of Mines has desired to take up, in cooperation with the mining and metallurgical industry, those problems met with in the Mississippi Valley where lead and zinc deposits occur. As is well known, the ores of this district are for the most part sulphide ores and are ordinarily not difficult to treat. However, there are also large deposits of oxidized lead ores in certain districts of Missouri, and their mining and metallurgical treatment presents a serious problem. Concentration by gravity methods had been tried for years on these ores, and there are many thousands of tons of high grade tailings, as well as crude ore, awaiting proper methods of recovering metallic values. Such being the case, the bureau will carry on such research and investigational work in connection with the treatment of these ores as will assist in the development of processes which will prevent their being wasted, due to the lack of a metallurgical process which it may be commercially feasible to apply to them.

## SCIENTIFIC NOTES AND NEWS

PROFESSOR R. ROUX, director of the Pasteur Institute at Paris, has been awarded by the United States government the Distinguished Service Medal for especially meritorious and distinguished service which was of great consequence to the American Expeditionary Forces.

A PRESENTATION from more than two hundred subscribers has been made to Dr. W. L. H. Duckworth, fellow of Jesus College and senior demonstrator in anatomy, in the Uni-