original calcium fluoride is regenerated. Why not use calcium fluoride (or some other slightly soluble fluoride) in the first place?

Three years ago I discovered that certain fluorides whose solubility in water is less than that of barium fluoride are effective stomach poisons to leaf-eating insects and are so insoluble in water that they do not injure even such delicate foliage as that of the peach tree. Garman, of the Connecticut Agricultural Experiment Station, who collaborated in this investigation, found, for example, that strontium fluoride has a toxicity to the tent caterpillar (*Malacasoma americana* Fab.) comparable to that of lead arsenate.

The solubility in water of the more common inorganic fluorides is as follows:⁸

		Grams soluble
Fluoride	Formula	in 1 liter water
Ammonium fluoride	$\mathbf{NH}_{4}\mathbf{F}$	Very soluble
Potassium fluoride	\mathbf{KF}	923.0
Sodium fluoride	\mathbf{NaF}	40.0
Lithium fluoride	\mathbf{LiF}	2.7
Barium fluoride	BaF_2	1.63
Strontium fluoride	SrF_2	0.117
Magnesium fluoride	MgF_2	0.087
Calcium fluoride	CaF_2	0.016

The results of the tests with the insoluble fluorides as insecticides have been very encouraging and will be reported in detail in due time. Meanwhile, it is suggested that the insecticidal action of the less soluble fluorides be utilized rather than that of the fluosilicates, as it is believed that not only will more uniform insecticidal action be obtained, but injury to vegetation will be avoided.

U. S. DEPARTMENT OF AGRICULTURE

R. C. ROARK

THE TULSA MEETING OF THE AMER-

ICAN CHEMICAL SOCIETY

THE seventy-first general meeting of the American Chemical Society was held at Tulsa, Oklahoma, from Monday, April 5, to Friday, April 9, inclusive. The council meeting was held on the 5th; a general business meeting on the morning of the 6th; special divisional meetings and symposiums on the afternoon of the 7th, and regular divisional meetings all day Wednesday and Thursday morning.

At the business meeting on the morning of April 6 the following were unanimously elected honorary members of the American Chemical Society: Bohuslav Brauner, Guiseppe Bruni, Ernst Cohen, Frederick G. Donnan, James C. Irvine, W. Lash Miller, Charles Moureu, Ame Pictet, Ira Remsen, Theodore W. Rich-

⁸ Comey and Hahn, ''Dictionary of Chemical Solubilities, Inorganic,'' 2nd ed., 1921. ards, Paul Sabatier, Joji Sakurai, Edgar Fahs Smith, Frederic Swarts. The certificates of honorary membership will be presented in person to most of these gentlemen at a special ceremony at the semi-centennial of the American Chemical Society.

Upon recommendation of the council, the general meeting voted that the name of Emil Fischer be restored to the list of deceased honorary members of the American Chemical Society.

It was also announced at the general meeting that the second award of the Priestley Medal for distinguished service to chemistry had been made by the Priestley Medal Committee to Edgar F. Smith. The medal will be presented at the Philadelphia meeting.

The registration showed 431 members and guests present. The society was welcomed by Cyrus S. Avery, chairman of the Oklahoma Highway Commission, and was followed by a response by President Norris. Professor B. S. Hopkins presented to the general meeting his announcement with details of the discovery of Element No. 61. Messrs. J. Allen Harris and L. S. Yntema were associated with Professor Hopkins in this discovery.

On Monday evening following the council meeting a reception and a dance were held at the Mayo Hotel.

On Tuesday evening A. D. Little, of Boston, presented a public address on "The Romance of Carbon" before an audience of some 700 people.

On Wednesday evening a special entertainment and smoker was enjoyed by all.

On Tuesday afternoon there was a general symposium by the division of petroleum chemistry on "Lubrication," of which R. R. Matthews was chairman, and also one by the division of chemical education on "Orientation and Segregation as applied in Chemical Education," of which W. Segerblom was chairman. The division of agricultural and food chemistry joint with the divisions of biological, cellulose and industrial and engineering chemistry held a symposium on Wednesday morning and afternoon on "Cotton and Its Products and Vegetable Oils," with David Wesson as chairman. The division of water, sewage and sanitation held an unusually large meeting and had a special excursion on Wednesday to the plants supplying water for Tulsa. The division of physical and inorganic chemistry, division of organic chemistry, division of gas and fuel chemistry and the section of history of chemistry held successful meetings.

Thursday afternoon and Friday were given up to excursions to refineries and to lead and zinc plants in Oklahoma. The meeting was naturally of especial interest to petroleum chemists, and by far the majority of those present were especially interested in the chemistry of this important raw material.

> CHARLES L. PARSONS, Secretary