

won awards for their achievements at the Junior Science Fair to hear Dr. Linus Pauling, past president of the American Chemical Society, who spoke simply, eloquently, on the contributions of chemistry to human welfare "from nylons to antibiotics." A meeting much lauded by the newspapers, it was a photographer's field day with flash bulbs bursting—literally—in the hall.

Pittsburgh had been one of the first cities where no restrictions were placed upon the admission of women to laboratory classes (Professor Phillips had seen to that in 1892) and now, in the spring of 1949, with much credit to Dr. Earl K. Wallace, a chapter of student affiliates at the Pennsylvania College for Women was granted a charter by the ACS and 100% of the young ladies eligible signed up.

But even Dr. Phillips might have been surprised to learn that there were enough women in professional chemistry in Pittsburgh to hold their own sessions in the Section and be addressed by their own number, such as Dr. Mary Lynch Bailey of the University of Pittsburgh's Virus Research Laboratory.

Awards continued. At a meeting of the *Pittsburgh* Section, October 20, 1949, the City of *Philadelphia* awarded Dr. Charles G. King, now Scientific Director of the Nutrition Foundation, the John Scott Award for his isolation and identification of Vitamin C (a prize of \$1000 and a copper medal previously accorded Mme. Curie, Sir Frederick Banting, Sir Alexander Fleming and Irving Langmuir).

In 1949 the Pittsburgh Award went to H. V. Churchill, chief of the Analytical Division, Aluminum Research Laboratories, who devoted 30 years to making aluminum the best-

analyzed of all industrial metals. Churchill was the pioneer adopter of spectrography for the quantitative analysis of aluminum, an innovation that permitted the aluminum industry in World War II to meet the 500% increase in production demands made on it. In one year spectrographs made some 6,000,000 determinations in the aluminum laboratories. (A versatile man, Harry has been interested in everything from the design of ham boilers to inhibited shaving cream!)

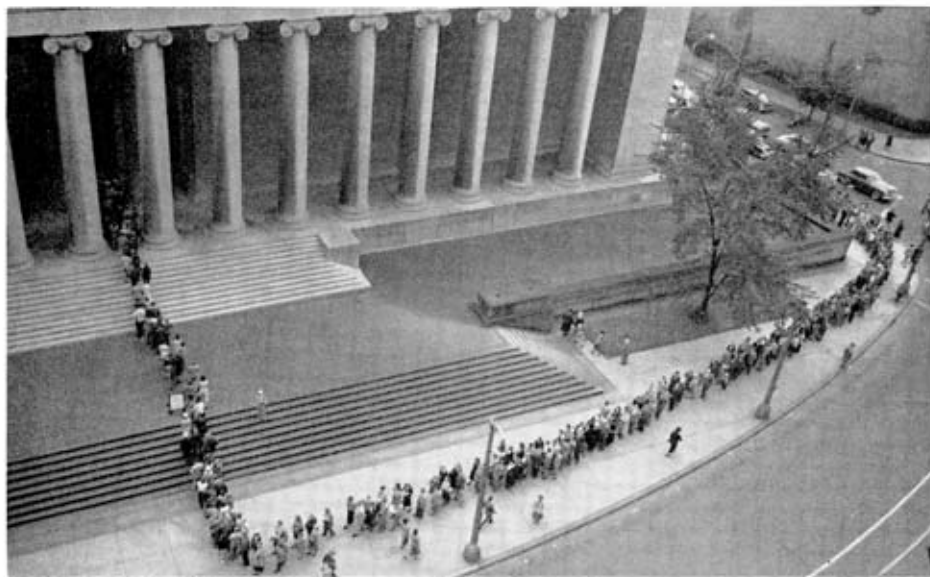
In 1949, too, the newspapers accorded their own form of tribute to Koppers research head Dr. G. Frank D'Alelio by quoting his predictions of eight years previous that "some day people will wear clothing made of chemicals"; men's nylon shirts were now in all the department stores.

### The Pittsburgh Conference

The week of February 15, 1950, saw the first Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, a merger of conferences previously held separately by the Pittsburgh Section and the Spectroscopy Society of Pittsburgh.

Although both meetings had always been well attended, the *joint* conference, combined with an exposition of the newest in analytical and spectroscopic instrumentation, helped focus attention on Pittsburgh as the world center of analytical chemistry. To hear papers by the men whose analyses guide the area's vast aluminum, coal, oil, food, chemicals, glass, iron, steel and ceramics industries, came some 800 top scientists from all parts of the United States and Canada, while 1200 attended the exposition.

By 1953, the Conference and accompanying Exposition had mush-



**PITTSBURGH SECTION** made the first attempt to join the chemist with the public that enjoys the fruits of his labors when it had an open house at its "Kilauea volcano" lecture in 1913. Never dreamed of this coming to pass, though—Western Pennsylvanians waiting in 5-block lines to meet the men in the laboratory.

roomed into a five-day session, the largest scientific meeting in the City's year, with as many scientists as attended the *entire* first Conference now sitting in on a Symposium on X-Ray Fluorescence (the nation's first).

The connection of the two fields (analytical chemistry and spectroscopy) was revealed in a poem that a steel chemist (like Lot's wife, looking back to the Section's earlier glories) sent to the Section, two stanzas of which go . . .

They are becoming critical  
Of chemists analytical  
(Some think it is political).  
But I maintain

It would be hasty to assume  
The analytical chemist's doom  
Is sealed. He has no cause to fume  
Or to complain.

Some people think the spectrograph  
Will write the chemist's epitaph.  
Such hooley either makes me laugh  
Or want to fight.

For results of spectrography  
Must be confirmed by chemistry.  
Without it how the heck can we  
Be sure they're right?

Books were in the news again, summer of 1950, when Chairman-elect Edmund O. Rhodes journeyed to Germany to visit the University of Göttingen on behalf of the Pittsburgh Section and the CARE-UNESCO Book Fund Committee, where he presented the Library with funds for replacing some of the 250,000 technical books lost by the University's world-famous library during the war. Later, an illuminated scroll was to arrive in Pittsburgh: "To the Pittsburgh Section of the American Chemical Society . . . All Germans of honest hearts are dedicating this work as a Monument of Gratitude."

The Pittsburgh Award in 1950 went to Dr. William A. Hamor "chemist, research manager and author," in his early days closely identified with shale-oil and petroleum de-

velopments . . . a staff member or editor of a host of important journals; and editor, since 1947, of the ACS's *Chemical Monographs*. His chief field now is human relations and he did yeoman service for the Scientific Personnel Committee of the Atomic Energy Commission.

But this was the age of the young scientist, too. And in this period the Section was addressed by such men as Dr. Edward C. Creutz, of the new generation of physicists who have lived and worked behind the "lead curtain" of Los Alamos, and head of the Nuclear Research Center at Saxonburg . . . and Dr. Jonas Salk, who early in 1951 addressed the Biological Chemistry Division on variations in viruses, data that were to come alive in news headlines two years later with the announcement of his work with polio vaccine.

It was, in a way, to prepare for future Creutzes, future Salks, that on June 14, 1951 the Section held

its first Meeting-in-Miniature, with 19 original papers read by graduate students and junior scientists from district colleges and laboratories, the winner receiving \$150 for a trip to the World Chemical Conclave in New York. Not only did the Meeting-in-Miniature give graduate students an immediate annual incentive; it was also a chance for them to compare notes and get a first-hand account of the various fields of research open to them in the area.

### Jubilee!

The season 1951-1952 saw a dazzling array of speakers and of subjects (clinical medicine, antibiotics, hormones, cancer research, cosmogony, tracers in medical research, the state of scientific industry in China, the chemistry of crime detection, the selection of scientific personnel, chemicals from coal, and chemical calculating machines). A total of 6500 persons attended.

**CHEMIST & FRIENDS**, Time magazine might caption this. Here Mellon Fellow Edward R. Frederick demonstrates ultra-comfy laboratory-made stuffing for an Armed Forces sleeping bag. Another result of this research: a synthetic fur coat!



By now each of the seven autonomous divisions within the Section, according to a unique plan of Chairman Rhodes, was in charge of one General Meeting. No less than Professor Kurt Meyer of Geneva, Switzerland, international authority on high polymers, addressed the Get-Acquainted Meeting that launched the year of division-sponsored sessions.

*1951 was also the American Chemical Society's Diamond Jubilee year. On August 27, Mayor Lawrence proclaimed September 2 to 8, Chemical Week; the Section issued posters to the Downtown stores . . . USSteel featured striking chemical exhibits . . . In Kaufmann's windows high-lights of the ACS's 75 years replaced the cocktail gowns.*

Prodded by the Section's John H. Nair III, chairman of the Jubilee Committee, radio stations and newspapers kept public interest high. And on September 15 and 16, some 26,854 men, women and children stood in lines five blocks long to get into Mellon Institute for the mile-long tour of 48 fellowships. This was a golden chance, Section veterans agreed, to let people know that "chemists are not always the men in white coats and goatees of the ads prepared by Madison Avenue agencies." And they seized it.

Some 200 foreign visitors to the International Chemical Conclave visited the Section; thus, in addition to Professor Meyer, Section members heard three other members of the International Union of Chemistry: Dr. Richard M. Barrer of the University of Aberdeen, Dr. D. A. Bowden of Imperial Chemical Industries, and Professor H. W. Melville of the University of Birmingham.

The Section also played host to 120 young chemists from abroad

who had attended the Jubilee meeting in New York and were now touring the educational and research and industrial institutions of America as guests of the Economic Cooperation Administration and the Ford Foundation.

The 1951 Pittsburgh Award went to Dr. William A. Gruse, administrator and teacher, who has given the major part of his life to Mellon Institute and the Gulf Petroleum Fellowship, and whose research in World War II won him special citation from the Office of Scientific Research and Development and the Ordnance Department.

In addition to the Pittsburgh Award, its awards to the young chemists of School Science Fair, its Secondary School Chemistry Contest, and the prize for the top paper at the Meeting-in-Miniature, the Section now offered a *fifth* prize: to the best paper at the Student Affiliate Meeting, a conference of young student chemists from the area. This included no less than Bethany College, California State Teachers College, Carnegie Institute of Technology, Clarion State Teachers College, Duquesne University, Geneva College, Indiana State Teachers College, Mt. Mercy College, University of Pittsburgh, Seton Hill College, Slippery Rock State Teachers College, St. Francis College, St. Vincent College, College of Steubenville, Washington and Jefferson College, Waynesburg College, and West Liberty College.

The 1952 Pittsburgh Award went to Dr. H. H. Lowry, director of the Coal Research Laboratory of Carnegie Tech, the Peking-born son of American missionaries whose contributions to the knowledge of carbon have enriched the science of chemistry, bringing international renown

to the Laboratory—and to Pittsburgh.

Dr. R. B. Anderson, of the U. S. Bureau of Mines Synthetic Fuels Research Laboratory, received the 1953 Ipatieff Prize which is given for "outstanding chemical experimental work in catalysis or high pressure"—a national ACS recognition of Pittsburgh leadership in coal chemistry.

And as a climax to the year's awards came news of the conferring of the Gold Medal, highest award of the American Institute of Chemists, on Carnegie Tech's John Warner.

Today Dr. Warner is one of Science's most articulate spokesmen for free intellectual inquiry. Commenting on the recent investigations into the teaching practices of American universities, Dr. Warner told an ACS-AIC conference earlier this year:

"Some heresy or unorthodoxy has been good for our institutions and has led to progress in our civilization. This has been especially true of new ideas and new

points of view which have arisen from the replacement of superstitions by knowledge. I believe we should make a real effort to understand the difference between heresy and subversion."

### To Meet the People

The latest moves of the Society have been towards extending even further the area of contact between the people of Pittsburgh and their chemists. May 1, 1953 saw the Section's first Family Night, giving wives and children a chance to see what makes up this business of chemistry.

Even more important, the Section broadened its already successful attempts to interest the young men of the area. It now enters its sixth year of continuous broadcasting to the area. In its last year, 36 crisp yet chatty dialogues on chemistry, engineering, physics, scientific management and personnel were beamed to an area that included students of 124 high schools in Pennsylvania and West Virginia. Currently the Section is publishing a "treasury" of

**ANOTHER PIONEERING ATTEMPT** in public relations—the Section invited wives (and husbands) and children of member chemists to a movie on science, an all-member art show, a look at what the breadwinner does in his own organization.





**YOU'RE ON THE AIR**—George Gerhardt and Donald Gibson bring the ABC's of molecular structure to their radio audience via the Section's six-year-old show, "Chemistry and You." In the offing, perhaps, an additional medium: television.

the best programs of the past, not only for the reading pleasure of its "lay" listeners but to provide teachers with up-to-date materials in specialized fields with which they can interest high school students in careers in science.

And now, with an educational TV channel about to open in Pittsburgh, the horizons for this aspect of contemporary Section work are for the first time endless . . .

At the same time the Section's Chemical Education Committee has initiated a program of personal high school visits by Section members to determine how best to assist teachers and schools and how to act as a clearinghouse for providing counselors and speakers. (The national ACS Manpower Committee has already asked for permission to reprint this pioneering plan.)

The reason for these departures in

Section endeavor isn't hard to find. Pittsburgh now enters a period in industrial and institutional research and chemical activity that may be compared to what happened in the 1870's when professional chemistry was born in the iron and steel plants . . . As USSteel lays out a great research center for centralized work in new and better steels, Westinghouse builds a plant for the development of private applications in the atomic field. "The Steel City," as one reporter put it, "is likely to become the leader in the atomic energy industry as well."

It is noteworthy that the latest speaker in the 50 years of speakers to appear before the Section produced little clouds to simulate atomic fission and atomic fusion. *Pittsburgh's first great age of chemistry was heralded, one remembers, by puffs of smoke, too.*

50 YEARS OF  
**CHAIRMEN**

*Pittsburgh Section, American Chemical Society*

1903	Alexander G. McKenna	1928	Alexander Lowy
1904	Harry E. Walters	1929	Edward E. Marbaker
1905	George P. Maury	1930	J. Clyde Whetzel
1906	Joseph H. James	1931	Leonard H. Cretcher
1907	Joseph H. James	1932	Harry V. Churchill
1908	Joseph H. James	1933	William P. Yant
1909	Horace C. Porter	1934	T. George Timby
1910	James O. Handy	1935	Charles S. Palmer
1911	John K. Clement	1936	Chester G. Fisher
1912	Walter O. Snelling	1937	Gerald J. Cox
1913	George D. Chamberlain	1938	Charles Glen King
1914	Raymond F. Bacon	1939	Lloyd H. Almy
1915	Arno C. Fieldner	1940	Earl K. Wallace
1916	Karl F. Stahl	1941	James N. Roche
1917	George A. Burrell	1942	John C. Warner
1918	Samuel R. Scholes	1943	Helmuth H. Schrenk
1919	Rufus E. Zimmerman	1944	William A. Gruse
1920	E. Ward Tillotson	1945	Harold K. Work
1921	Henry C. P. Weber	1946	Robert N. Wenzel
1922	James O. Handy	1947	Herbert E. Longenecker
1923	Edward R. Weidlein	1948	Gilbert Thiessen
1924	Alexander Silverman	1949	J. Paul Fugassi
1925	Warren F. Faragher	1950	R. R. McGregor
1926	Clarence J. Rodman	1951	Bernard F. Daubert
1927	William A. Hamor	1952	Edmund O. Rhodes
		1953	Earl L. Warrick