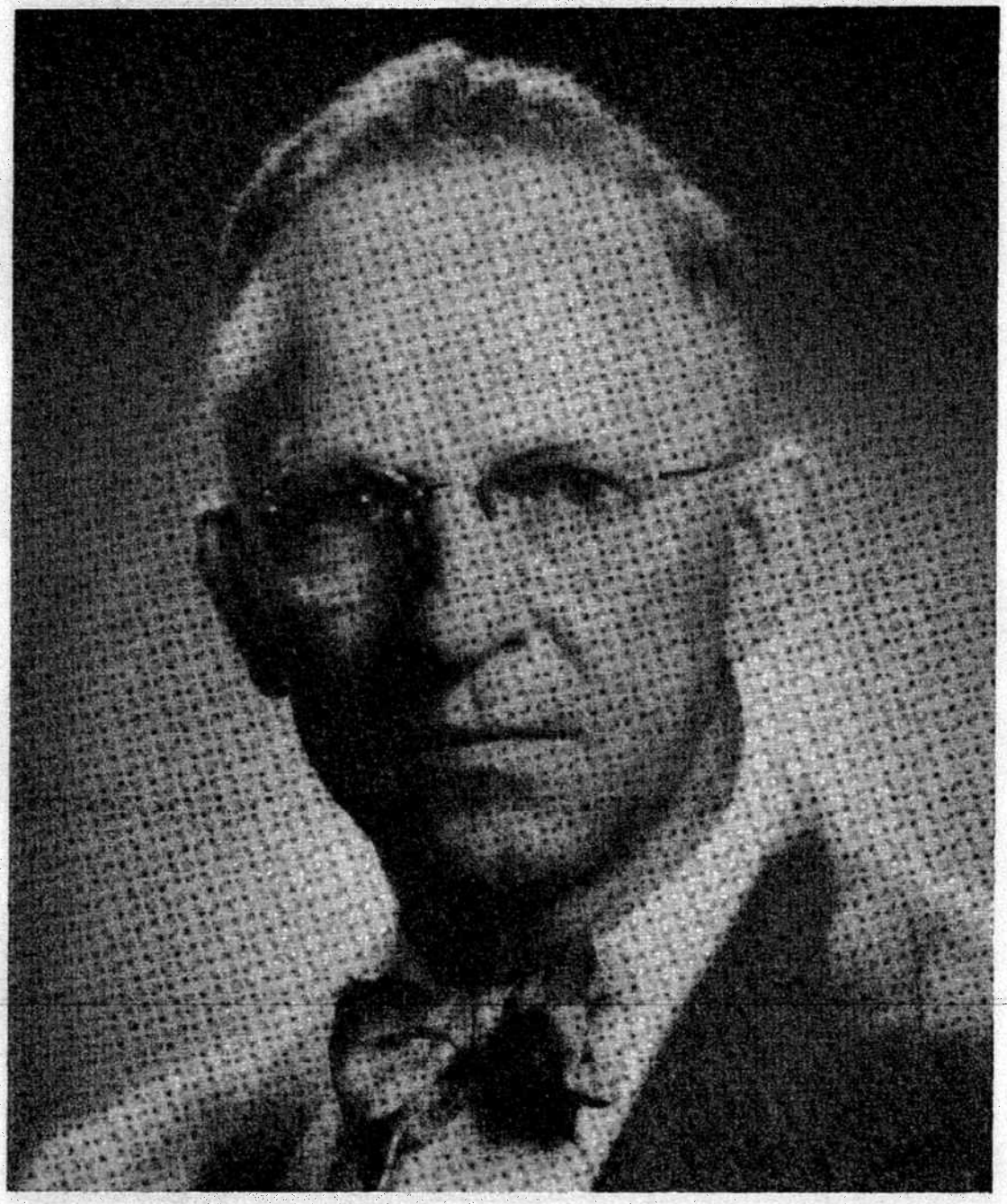
THE CHEMICAL RECORD

Bulletin of the Columbus Section of
The American Chemical Society



Dr. E. J. Crane, who will be honored at the October 20th meeting

October, 1958

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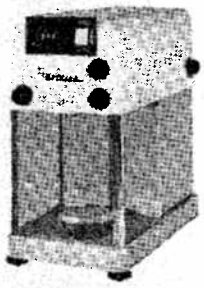

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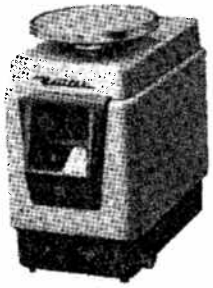

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THE CHEMICAL RECORD

VOLUME 1, NUMBER 1 October, 1958

Outstanding October Meeting

The 420th regular meeting of the Columbus Section will honor Dr. E. J. Crane for his exceptional contributions to chemistry. The speaker of the evening will be Dr. Donald R. Martin of the Olin Mathieson Chemical Corporation, whose topic will be "Boron: A New Source of Power". The meeting will be held in Room 331 of the Ohio State Union, with dinner being served at 6:30 p.m. During the after-dinner program a Life Membership Scroll will be awarded to Dr. Crane. A biographical sketch of Dr. Crane will be presented by Dr. Harvey Moyer, Chairman of the Ohio State University Department of Chemistry.

Two of the Section's fifty year members, Dr. Charles W. Foulk, and Dr. William J. McCaughey will also be honored at the meeting. Dr. Foulk joined the A. C. S. in 1902, while Dr. McCaughey joined in 1906.

In the main address, Dr. Martin will discuss the history, chemistry, and usefulness of high energy fuels containing boron and the commercial development of these fuels over the last four years. The talk will cover boranes, diboranes and higher boranes, including their structures, physical properties, and reactions, as well as the preparation of fuels.

Dr. Martin is Associate Director, Fuels Chemical Research, High Energy Fuels Division of Olin Mathieson. He has a background including industrial experience with DuPont in Cleveland, Western Reserve Station of the U.S. Naval Research Laboratory in Cleveland, and the Naval Research Laboratory at Washington, D.C., as well as academic experience as Assistant Professor of Chemistry at the University of Illinois.

1958-1959 PROGRAM

For your convenience, the 1958-1959 program is presented below. This list might prove of value during the coming active "year", so save for later reference.

Oct. 20 – Dr. Donald R. Martin, Olin Mathieson Chem. Corp.
"Boron: A New Source Of Power"

Nov. 17 – Mr. Francis M. O'Connor, Linde Company
"Molecular Sieves"

Dec. 15 – Dr. Francis O. Rice, The Catholic University of America
"Chemistry On Jupiter"

Jan. 19 – Dr. Andrew A. Benson, The Pennsylvania State University
"The Ionic Lipids"

Feb. 16 – Dr. Wm. E. McEwen, The University of Kansas
Topic to be selected.

Mar. 16 – Dr. Lewis F. Hatch, The University of Texas
"The Oxo Process"

The programs for April and May are being arranged.

FUTURE FEATURES

A Letters to the Editor column would liven things up a bit. How about hearing from you? Good; controversial topics include professional status for chemists, the A.C.S. building fund, what the A.C.S. should do for its members, the A.C.S. radio program "Objective" (Tuesdays at 5 p.m. on WOSU).

Building Fund Report

Maynard Baldwin reports that the Columbus Section has reached a total of $15,226, which is over 98% of its goal. There is still time for anyone who has not yet contributed to do so.

EVAN JAY CRANE

To a very great extent, the biography of E. J. Crane is the history of *Chemical Abstracts.* Dr. Crane has been editor of *Chemical Abstracts* since 1914, having joined the staff in 1911 as Associate Editor under the late Austin M. Patterson. *Chemical Abstracts* itself was established only 4 years earlier, in 1907 by the American Chemical Society in Washington, D.C. It was transferred to the University of Illinois later that same year and then to Ohio State University in 1909. From that time until 1955, it was housed in various offices in the chemistry buildings. In the latter year, the new Chemical Abstracts Building was completed and *Chemical Abstracts* was transferred to relatively spacious quarters. The organization is now expanding at an accelerating pace and employs approximately 115 chemists as Associate and Assistant Editors. *Chemical Abstracts* editors before Dr. Crane were: W. A. Noyes, Sr., 1907-09; Austin M. Patterson, 1909-14; and John J. Miller, 1914.

Evan Jay Crane was born in Columbus, near the Ohio State University, on February 14, 1889. He received his B.A. degree in chemistry in 1911 and immediately went to work for *Chemical Abstracts.* He was awarded an honorary Doctor of Science degree by O.S.U. in 1938. His other honors include the Chemical Industry Medal from the Society of Chemical Industry of London in 1937, the Priestley Medal of the American Chemical Society in 1951, and the Austin M. Patterson Award for documentation in chemistry from the Dayton Section of the American Chemical Society in 1953. Dr. Crane is retiring Nov. 1, 1958, a few months before his 70th birthday.

Dr. Crane was married in 1914 to the late Marie F. Grant and has two children, Grant and Martha. Grant Crane is a chemist with Firestone Tire and Rubber Co. in Akron, but finds some spare time to do work on the *Chemical Abstracts* subject indexes. In 1943, Dr. Crane married Helen Game, who had been an Associate Editor of *Chemical Abstracts* for many years. Mrs. Crane is also retiring from *Chemical Abstracts* this November.

E. J. Crane is the co-author (with Austin M. Patterson) of "Guide to the Literature of Chemistry", first published in 1927. A revised edition with Eleanor B. Marr as an additional co-author appeared in 1957. He is the author of many articles on abstracting and related subjects. Dr. Crane was the first chairman of the ACS Division of Chemical Literature (1950) and has been Chairman of the ACS Council Committee on Nomenclature, Spelling and Pronunciation since 1918. He is the U.S. representative on the Abstracting Board of the International Council of Scientific Unions, member of the Coordinating Committee on Medical and Biological Abstracting for UNESCO, member of the Nomenclature Committee of the International Union of Pure and Applied Chemistry, and American representative on the IUPAC Publication Committee. He was chairman of the meeting which resulted in organization of the National Federation of Science Abstracting and Indexing Services, held in January, 1958. He holds membership in the American Chemical Society, the American Documentation Institute, the American Association for the Advancement of Science, the New York Academy of Science, Phi Beta Kappa, Sigma Xi, Phi Lambda Upsilon, Lambda Sigma, and Alpha Tau Omega.

Dr. Crane has been active in civic affairs, serving as Mayor of Upper

Arlington in 1924-25. He has been President of the Columbus Rotary Club, Secretary of the Kit-Kat Club, and a member of Torch. His hobbies have been sports and books. Skills in canoeing, golf, tennis, baseball, horseshoes and bridge have led to several trophies.

COMMUNICATION, ADVERTISING, AND CoSACS

During the past two years, evaluation of the communication needs of the Columbus Section of the American Chemical Society, as exemplified by the section bulletin, has indicated the desirability of improving and expanding publication activities to meet the requirements of a growing membership. Recent work of the publication staff to meet the section's growing informational needs is climaxed in this issue of *The Chemical Record;* it is hoped that our readers will find it more readable and informational than previous publications.

Plans for the expanded bulletin include: increased coverage of members' activities, increased usage of informational material from other publications, and a new service, advertising, which furnishes reliable sources of chemical apparatus, supplies, and services.

Few members of the section are in a position to appreciate the old saw, "Advertising is the basis of progress," more than the section's publication staff, because the improvements evidenced in this issue were made possible by our advertisers. For current information on sources of chemical supplies and services, follow the ads on *The Chemical Record!*

To those of you who offer quality supplies and services for chemists and who want to reach directly that large group of productive chemists in the 19 counties of Central Ohio, We suggest that you join our growing group of advertisers.

Randall G. Rice

THE CHICAGO MEETING

The second week of last month found many members of our Section "going West" to Chicago to attend this year's Fall Meeting of the A. C. S. It was a typical meeting in many respects, with the more conscientious attending as many papers as possible, others gaining at least as much information by the well known method of "corridor osmosis", while still others seemed most eager to seek out the locations of the expense account cocktail parties.

The highlight of the meeting was the testimonial banquet honoring Editor Crane of Chemical Abstracts. Five hundred of his friends payed tribute to him for his 48 years of unselfish service to the chemical profession. Speakers at the dinner, in addition to all major A. C. S. officials, included Dr. Dyson from England and Professor Viktor Kafarov, representative of the Russian chemical abstracting service.

Most of those attending the meeting took advantage of the many and varied places of interest that are so truly an integral part of the city of Chicago, such as its many famous restaurants specializing in European dishes, the unique Museum of Science and Industry, the night spots, be they intimate or featuring what has become known as "Chicago jazz".

Marshall Field's seemed to be a most popular spot. Early in the week the chemist's wives went there to shoot holes in the budget, while by Thursday the men seemed to be rushing through the store hurriedly purchasing presents for their children.

Gerard Platau

MANPOWE

from "The Minnesota Che

by OTTO EISENCHIML

The impression seems to prevail that the Scientific Manpower Problem egins and ends with education, because far it has been discussed almost exsively by educators. I suggest that cators are not the only ones who ld plan the over-all program to or over-match Russian brain power, se education is only the first of the story.

is the crux of the problem as *attract enough of our brightest* s *to take up subjects per-our national survival, and* *stick to their professions* tion. To attract *and hold* ers, survival professions de more attractive than simple as that. To herd nto a scientific corral, y won't quit after the has worn off, is all s are now planning, hat schools can do. eak about chemists, to say pertains to as well.

t the right candi- recommend apti- What we need creative chem- v have talent- rve the pur- d non-creat- ess a high not inborn omposers t young- emists, ot. To vival- e we

Well, wh want from l absence of fa of high schoc of the Union, their goals, in importance:

1.—A comfortable for wealth.

2.—Recognition by with a chance fo

3.—A fair degree c security.

Let's first look at t According to a report Science Foundation, rele ber 31, '57, railroad e 20% more money than sc dustrial engineers with a ba Net incomes of physicia 2½ times scientific and bachelor salaries, and 1¾ t of scientists with a Ph. D. de special mention was made of but it is assumed that they are in these categories.) Dentist 44%, lawyers 65% more than bachelors and 16% more than s Ph.D.'s. Carpenters, painters, plast etc. who work 50 weeks a year m without overtime, about $7,500. T compares with $7,275 for physicists a $6,300 for mathematicians. A restaura manager makes about $7,500 and, accord ing to another survey, salesmen with ten year experience average $11,000.

Considering the cost of college attendance, plus the income which has to be foregone during those years, plu the discrepancies in the inc cited, what can we off careers finan young

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Now as to recognition or fame. Ask ten educated people of your acquaintance to name three living chemists and their accomplishments; ask them what part chemists have played and still play in our nuclear plans and achievements, and who they are. Ask them how many statues of chemists they have seen in America. Ask them the names of the great chemists to whom we owe aspirin, vitamins, chloroform, nylon, high-octane gas. Ask them the names of any street, park, school or public building in their city named after a chemist. Show your findings to your own youngster, then let him decide on the desirability of becoming a chemist, so far as recognition or fame is concerned.

Next – security. Of course, there is no such thing as absolute security for any trade or profession, but if there is such a thing as negative security, the chemists have it. Why? Because many industrial concerns do not hire new applicants after the age of 40, just when they, like other learned professions, reach the maximum of their mental capacity, and should reach the maximum of their earning power. For this practice industry has reasons which it considers valid, and with which I am not quarreling; I simply am stating a fact. If your youngster knew this, would he not rather become a physician, minister, business man, lawyer, salesman or a member of any profession which has no age limit?

Perhaps you may also tell him that if he becomes a banker, salesman or plasterer, his leisure hours will be his own. A chemist, on the other hand, has to use a large part of his free time to keep up with his profession. He must run a life-long rat-race just to stand still, and run at top speed if he wants to get near the head of the procession. Further: if a banker or a necktie salesman should be out of circulation a couple of years for one reason or the other, he can go back and become up-to-date again in no time. A chemist, under the same conditions, may be completely outdated, and must make Herculean efforts to climb back on the band wagon.

Fortunately, we can count on a nucleus of youngsters who will choose survival careers in spite of all drawbacks, just as some of them will become surgeons, ministers, etc., come hell or high water. But to make survival careers attractive for more than a small number, the drawbacks must be overcome. By scholarships? Scholarships are not the answer. They ease the way into a profession, but they do not make it desirable; and if it is not desirable, people will soon leave it for greener pastures. On the other hand, if the profession is desirable, there is no need for scholarships. When a new gold-field is discovered, people will flock there, and no one needs to pay their carfare. Make survival careers as attractive as a gold-field, figuratively speaking, and most students will find a way to go through college without a scholarship.

What can we do to improve the three essential factors I have mentioned – income, recognition and security?

About the income of industrial chemists nothing can be done, and nothing should be attempted. Income depends on the law of supply and demand, which is stronger than all man-made statutes, rulings or intentions, and is regulated by competitive pressure. The government, however, is free from this restraint, and should pay the highest grade creative scientists amounts far in excess of the present ones, and as much as their contribution to our survival is worth in dollars and cents – if it can be so figured. The men so favored are few, and the expense would be trivial.

continued to page 12

D. J. DEMOREST

Dana J. Demorest died on June 30, at the age of 76, bringing to a close his long and useful career including over 53 years of membership in the A.C.S. and 44 years of teaching at The Ohio State University.

His passing leaves not only sadness but also several vacancies, for he was active to the last. As Professor Emeritus of Metallurgical Engineering at O.S.U., he was still a willing and trusted advisor to other members of the department and to many of his former students. In the field of chemistry, he had served as a section editor in metallurgy for Chemical Abstracts since 1921. In community life, he will be missed at Indianola Methodist Church and by several charitable organizations, especially the Godman Guild of which he was a founder and, since 1951, was president. In the business realm, Utah Alloys Corporation also lost its president with Demorest's passing.

Born in Marysville, Ohio, August 21, 1882, Dana James Demorest graduated from the local high school in 1900. He then attended The Ohio State University from where he received the B.Sc. degree in Chemical Engineering in 1905. While a student, he was an assistant in the department of metallurgy for two years under the nationally known Professors Nathaniel W. Lord and E. S. Somermeier.

Prof. Demorest was married in 1907 to Margaret Wiltsee, a daughter of Rev. T. L. Wiltsee of Marysville. Mrs. Demorest died in 1913, after the birth of their only child, a daughter, now living in New York City.

His early career included periods with the State of Ohio Geological Survey and with the Union Pacific Railroad at Omaha, Nebraska. In 1908 he joined the faculty at Ohio State University, as assistant professor, and his academic career was thereafter interrupted only by a short term with the U.S. Bureau of Mines (in 1909) and by military service in World War I. In the U.S. Army he was first a Lieutenant in Ordnance, later a Major in charge of toxic gas production at the Edgewood Arsenal. In 1918, he returned to O.S.U. and replaced Professor Somermeier as Chairman of the department of metallurgy. He retired from the chairman's post in 1948 but continued to teach, deferring the emeritus status until 1952.

In 1915, Professor Demorest revised the book, *Metallurgical Analysis* by Nathaniel W. Lord, and the new revision was published jointly under the authorship of Lord and Demorest. Also Demorest has made many other contributions to metallurgical literature down through the years.

He was the first "life member" of the American Society for Metals and has been active in this organization ever since it was started. In addition, he has been an active member of American Institute of Mining and Metallurgical Engineers, American Electrochemical Society, American Society for Testing Materials, and the American Chemical Society. As an indication of the esteem in which he is held by those who know him best, the metallurgy alumni of O.S.U. have established a scholarship in his memory.

Dana Demorest was a lover of nature a friend of children and a fancier of dogs. A good bridge player and an avid conversationalist, he was sought out by many and well liked by all who knew him. He was a Methodist and a Mason. All of us will join in respectful admiration for the man and his accomplishments and in regret at his passing.

K. W. Greenlee

The Chemical Record
Chemistry Building
Ohio State University
Columbus 10, Ohio

There is a red light in front of us, to which I wish to call attention. If we, with the best intentions, stimulate the supply of chemists beyond the demand through too generous scholarships, one-sided propaganda, or other means, what is going to happen? Salaries will go down, and the best men will quit, leaving the mediocrities to carry on. I have read nothing about an awareness of this danger in the speeches of educators, nor of those who propose a flood of scholarships.

How about better recognition. This is a matter of intelligent publicity, and if ours has been poor so far, we chemists ourselves are largely to blame. We always talk about chemistry, hardly ever about chemists, so that the average layman has not concrete ideas what chemists do. The synthetic mystery hurts our survival program by perpetuating the much talked-about egg-head myth. As a remedy I suggest a truthful but picturesque presentation of chemists and their activities through speakers and Radio or TV shows. We have mighty good stories to tell, and don't tell them.

Now as to old-age security, that is, if you call 40 years old age. Well, why should chemists be given more security than others, who are up against the same age limit? For the simple reason that we need chemists for our survival. When we needed Uranium, we guaranteed all those willing to mine it a fair profit for a number of years, even after their product may no longer be wanted. Why not do the same for chemists? I suggest that we absorb those chemists who are competent, but cannot find a position on account of over-age, into the army as part of a scientific reserve. They keep officers of the army idle, just in case, why not chemists? Unlike army officers in peace time, however, chemists could be usefully employed, no matter what

To summarize: unless we hold out to our brightest youngsters prospects of a good income, an honorable recognition and a fair degree of old-age security—or perhaps even only two of the three—all other means of luring them into survival professions are half-measures which eventually will fall short of their purpose.

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