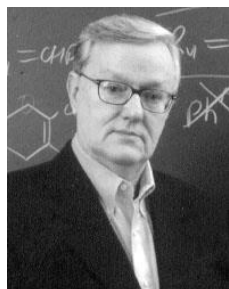




RICE NATURAL SCIENCES

## Department of Chemistry

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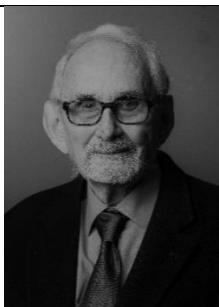


### **Ed Billups (1939- ), Professor of Chemistry 1970-**

Dr. Ed Billups received his B.S. degree in 1961, from Marshall University, West Virginia, and his Ph.D. degree in 1970, from Pennsylvania State University, Philadelphia. He joined Rice University as Assistant Professor in 1970, and rose through the ranks to Professor of Chemistry in 1981.

Dr. Billups' research interests are chemistry of small ring systems; reactive intermediates; synthetic organo-transition metal chemistry; chemistry of free metal atoms; fullerene, carbon nanotube and graphite chemistry, soluble nanocoal.

*Dr. Ed Billups Research Endowment in Chemistry was established in 2016, by Dr. Long-Jin Lin (a former student), in honor of Dr. Billups. The fund was created to provide funding for undergraduate students participating in research during the summer.*



### **Robert F. Curl (1933-2022), Professor of Chemistry 1958-2022**

Dr. Robert Curl received his B.S. degree in 1954 from Rice Institute (now Rice University) and went on to receive his doctorate in chemistry from the University of California, Berkeley in 1957. Dr. Curl further became a postdoctoral fellow at Harvard University, after which he joined the faculty of Rice University in 1958.

Dr. Curl received a Nobel Prize (1996) together with Richard Smalley and Harold Kroto for their work with nanotechnology and the discovery of a new structure named buckminsterfullerene, familiarly known as "bucky ball".

*The Robert F. Curl Legacy Fund was established in 2022 to honor the life and legacy of Dr. Curl. Dr. Curl is the recipient of the Nobel Prize (1996) together with Dr. Richard Smalley and Dr. Harold Kroto for their discovery of fullerenes. This discovery started the development of modern nanotechnology. The fund will provide fellowships and support for chemistry graduate students and chemistry undergraduate students for advancing research.*



### **Arthur L. Draper (1928-1998), former Alumnus, Class of 1951**

Dr. Draper graduated from Rice Institute in 1948 with a degree in chemistry. He also did his graduate work at Rice, earning a masters in 1949 and a Ph.D. in 1951. His specialty was physical chemistry and he worked under the direction of Dr. W. O. Milligan. After his postdoctoral research he accepted a position in the Chemistry Department at Texas Tech University. He taught there for twenty-six years and after retiring, returned to his roots, to Bowling Green, Kentucky where he continued to teach part-time at Western Kentucky University.

*The Arthur L. Draper Award in Chemistry was established in 1999 by Joan L. Draper (wife) in honor of her late husband, and his commitment to education, to chemistry and to Rice University. The award recognizes outstanding undergraduates in chemistry*



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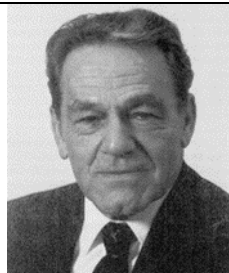


### **Paul S. Engel (1942- ), Professor of Chemistry 1970-**

Dr. Paul Engel received his B.S. degree in 1964, from the University of California, Los Angeles and his Ph.D. in 1968, from Harvard University under the direction of Paul D. Bartlett. He joined Rice University as Assistant Professor in 1970 and has been Professor of Chemistry since 1980.

Dr. Engel's research interests are in organic photochemistry and thermochemistry, photochemical reactions of azo compounds and peroxides, free radicals and carbon nanotube chemistry.

*The Paul S. Engel Research Endowment was established in 1998, by Rose C. Engel to honor her son. The fund was created to support undergraduate research in chemistry, more specifically to provide stipend support for summer undergraduate research.*



### **Norman Hackerman (1912-2007), University President and Professor of Chemistry 1970-1985**

Prior to coming to Rice, Dr. Hackerman spent twenty-five years at the University of Texas, Austin, Texas where he joined the faculty as an Assistant Professor of Chemistry in 1945 and progressed to president in 1967. He received his A.B. and Ph.D. from Johns Hopkins University. Dr. Hackerman was a member of the National Science Board 1968-1980, and chairman 1975-80. He was also awarded the National Medal in Science in 1993.

He authored or coauthored more than 200 publications on research involving metal corrosion, particularly on the electrochemistry of oxidation and the processes that prevent or slow corrosion.

*The Norman Hackerman Fellowship in Chemistry was established on Dr. Hackerman's 90<sup>th</sup> birthday to celebrate and honor his lifetime achievements. The first recipient of the award, Paul Cherukuri, had the honor of Dr. Hackerman presenting the award himself in December 2006.*

### **Marjory Meyer Hasselmann**

*The Marjory Meyer Hasselmann Fellowship was established in 1980 by Marjory Meyer Hasselmann for Post- Graduate Studies in the Field of Chemistry.*

### **Stephen C. Hofmann, former alumnus, Class of 1986**

*A portion of Stephen's Hofmann's estate was bequeathed to Rice University to be used for the need-based support of Graduate Students in the Department of Chemistry. This fellowship was established in 1998.*



### **John L. Margrave (1924-2003), E.D. Butcher Professor of Chemistry 1963-2003**

John L. Margrave received his B.S. and Ph.D. degrees from the University of Kansas. After postdoctoral work at the University of California (Berkeley), he taught at the University of Wisconsin from 1952 to 1963; went to Rice University in 1963 and was named Chairman of the Chemistry Department, Dean of Advanced Studies and Research and Vice-President for Advanced Studies and Research. In April 1986, Dr. Margrave was named E.D. Butcher Professor of Chemistry at Rice.



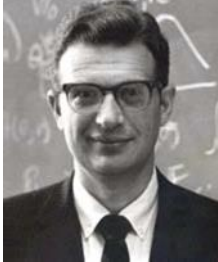




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	<p>During his long professional career Dr. Margrave and his associates published over 800 scientific articles, including four books and 25 patents. His research interests included fluorine chemistry; high temperature properties of liquid metals; matrix-isolation studies of metal atom and cluster reactions by FTIR, ESR and other spectroscopic techniques; laser vaporization of refractory materials; high pressure chemistry; chemical vapor deposition of diamond; environmental chemistry and nanoscience and technology.</p> <p><i>The Margrave Thesis Award was established in 1995 to recognize graduate students who authored a truly outstanding dissertation thesis. Dr. Margrave took pride in reading the dissertations of the students in chemistry and wanted to recognize those who provided an exceptional scientific dissertation.</i></p>
	<p><b>George Holmes Richter (1904-1987), Professor of Chemistry 1931-1974</b> Dr. Richter received his B.A, M.A. and Ph.D. from the Rice Institute. After a two-year research fellowship at Cornell University, where he furthered his research in organic chemistry, he returned to the Rice Institute in 1931 as an Instructor of Chemistry. He then began his long teaching career-to become eventually chairman of the chemistry department and the Dean of the Institute.</p> <p>Dr. Richter authored a Textbook of Organic Chemistry in 1938 and a Laboratory Manual of Elemental Organic Chemistry in 1940.</p> <p><i>The George Holmes Richter Memorial Fund was established in 1988, to be used to support undergraduate research, primarily during the summers.</i></p>
	<p><b>E.S. Rothrock (1897-1964), former Alumnus, Class of 1917</b> Edward S. Rothrock graduated from Rice University in 1917, enlisted in the Army and served in World War I. Following his discharge he took a job as a chemist in Kentucky and then joined Texas Chemical Co. in Houston. This company was absorbed into the Consolidated Chemical Co. and in 1954, Consolidated was merged into the Stauffer organization.</p> <p>In 1960, Rothrock was awarded the first distinguished service award for outstanding achievement in the chemical engineering profession from Rice.</p> <p><i>The Stauffer-Rothrock Scholarship was established in 1968 in memory of E.S. Rothrock and provides stipends for chemistry graduate students.</i></p>
	<p><b>Zevi W. Salsburg (1928-1970), Professor of Chemistry 1954-1970</b> Dr. Salsburg received a B.S. degree from the University of Rochester in 1950 and a Ph.D from Yale University in 1953.</p> <p>He joined Rice University as Assistant Professor in 1954 and rose to the rank of Professor in 1962. He published extensively on the free-volume theory of the liquid state, detonations and shock waves, hard sphere fluids at high density, lattice gases, distribution functions and light scattering from dense fluids.</p> <p><i>The Zevi and Bertha Salsburg Memorial Award Fund was established in 1990 and annually recognizes a Will Rice College freshman with the highest GPA as well as outstanding undergraduates in Chemistry.</i></p>



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### **Richard B. Turner (1916-1971), Professor of Chemistry 1951-1971**

Richard B. Turner, an internationally recognized organic chemist who spent his life at Rice University, was among those responsible for the preeminence of American organic chemistry in the period following World War II. From 1951 until his untimely death twenty years later, he was intimately identified with the transformation of the Chemistry Department at Rice into a major center for chemistry in the Southwest.

Turner's early education in the public schools was followed by eight years at Harvard University (A. B., 1938; PhD., 1942 with W. F. Ross and L. F. Fieser). His life-long interest in the synthesis of biologically active molecules was set in those years: first, in his doctoral work on vitamin K-related naphthoquinones; later, as a collaborator of E. C. Kendall at the Mayo Clinic on the adrenocortico steroids and of A. C. Cope at M.I.T. on the synthesis of antimalarial drugs, and ultimately independently, as a senior fellow of the American Cancer Society.

*The Richard B. Turner Memorial Lecture Series which features outstanding organic chemists started in 1977 with a lecture by Robert Burns Woodward. The prestigious lecture series continue to recognize R.B. Turner and his legacy at Rice. Additionally, the department recognizes outstanding undergraduate and graduate students in the field of organic chemistry with the Turner Award.*



### **Harry B. Weiser (1887-1950), Professor of Chemistry 1915-1950**

Dr. Weiser received his bachelor's degree from Ohio State University in 1911, and his master's and doctorate degrees from Cornell. For a year after receiving his Ph.D. he was Assistant Professor of Chemistry at the University of Tennessee. He then came to the Rice Institute in 1915 as Instructor of Chemistry, becoming Assistant Professor in 1918. He was Professor of Chemistry for 35 years, and also served as Dean of the Institute starting in 1933.

Dr. Harry Boyer Weiser was acclaimed as one of the 10 best colloid chemists in the world and he was author of at least six books on colloid chemistry.

*The Harry B. Weiser Scholarship in Chemistry was established in 1979 by his family and friends and is awarded annually to our students for excellence.*