Joseph H. Koffolt
Memorial Statue
Dedication Program
Alumni who contributed to the statue fund

Anonymous
Robert A. Bates
Clyde Bazell
John Bishop
Roger L. Briggs
David E. Buskirk
Louis O. Elsaesser
Donald Finlay
Robert T. Hewitt
George E. Koch
Paul R. Kumler
Wilfred C. Ling
Don MacDougall
John Mahoney
William H. Potter
Ernest Reinmuller
Manoj Kumar Sanghavi
Harold L. Stelzer Jr.
Michael A. Tallarico
James Lloyd Wilson
Robert A. Wiseman
William H. Wiseman
Program

Dedication ceremony
November 10, 2005 11:00 AM

Master of Ceremonies
Stuart Cooper
Chair

Speakers

Barbara Snyder
Provost

Bud Baeslack
Dean, College of Engineering

Robert Bates
Class of 1953

Marty Shuter
Sculptor

Robert Brodkey
Faculty Emeritus

Tom Koffolt

Video biography

Statue Unveiling

Lunch 12:30

Alumni Roundtable 1:30
Chemical Engineering at The Ohio State University traces its roots back over 100 years. Offered initially as a “B.S. in Chemistry from the College of Engineering,” the first degree was awarded to Samuel Vernon Peppel in 1899. In the 1902-1903 University Bulletin, The Outline of the Course in Chemical Engineering was listed for the first time, although the degree conferred remained a “B.S. in Chemistry from the College of Engineering”. In 1904 the name of the degree changed to “Bachelor of Science in Chemical Engineering.” Its first two recipients were Arno Fieldner and Lewis Benjamin Case in 1906. The first M.Sc. was issued in 1910 to Orlando Sweeney, the first Ph.D.s in 1918 to Herbert Spencer Coith and James Howard Young.

From 1902 to 1924, chemical engineering was a division of the chemistry department, a common practice among universities at that time. (The beginning of chemical engineering education in the United States is usually attributed to M.I.T. where the first degrees in chemical engineering were awarded in 1881.) Dr. James Withrow headed the Division until 1924 when it became the Department of Chemical Engineering. He was Department Chair until 1948. In 1925, the degree program was one of the first 10 to be accredited by the American Institute of Chemical Engineers.

In 1968, Dr. Aldrich Syverson succeeded Joe Koffolt as Chair. When his health failed in 1976, Dr. Edwin Haering served as Acting Chair until Dr. Jacques Zakin took over in 1977 and held the position until 1994 when Dr. Liang-Shih Fan became Chair. The current Chair, Dr. Stuart Cooper, joined the faculty in January 2004.

Ground breaking for the current chemical engineering building took place in 1958; it was later named to honor Dr. Joseph Koffolt, the Department Chair from 1948-1968. Plans are currently under way to initiate construction of a new facility within the next 5 years, as the department enters its second century of service to its students, to the University, and to the profession.
Dr. Joseph H. Koffolt
A Biographical Sketch

Excerpted from the Department History

*From Tub Scale to Nano Scale: 100 Years of Chemical Engineering at The Ohio State University*

by Geoffrey Hulse
Dr. Joseph H. Koffolt, the man chosen to replace James Withrow in 1948 as Chairman of the Chemical Engineering Department was cut from a wholly different cloth than his predecessor. A graduate of the department and faculty member since the 1930’s, Joe’s appointment as Chair was the harbinger of a new style of leadership in the Department. Their personalities couldn’t have been more different. Doc was a teetotaler; Joe liked a drink. Doc abhorred tobacco, Joe virtually slept with a cigar in his mouth. Doc was stern and somewhat distant. Joe was outgoing and friendly; he made it a point to learn all the names of his students, their wives and children. “I decided when I started to teach that I owed an obligation to the children of the state. I was going to know everybody I taught and not forget them.” According to E.H. Strobel, (M.S., 1940),

My father and I graduated exactly 25 years apart. We returned together for our respective 25th and 50th class reunions. Dad and I both wanted to see the department as it was the first time either of us had returned to Columbus since our graduations. It was a Saturday morning with no one in the office except Joe. Where else would he be? When he came out of his office he called both of us by name saying “You are the senior and junior Strobels” although he hadn’t seen me for 25 years and had never met my father. He took us into his office and showed us a picture frame with graduation pictures of both Dad and me. He then proceeded to tell us that we were one of the first two fathers and sons to graduate from Ohio State in Chemical Engineering.

Joe summarized his relationship with the Alumni in the 1967 Annual Report, noting that, “I have the advantage over other department chairmen in that I know over 95% of out alumni personally – everyone who has graduated during my thirty-eight years in the department and practically all of those who graduated before.”

Born on March 19, 1902, in Cleveland, Ohio (which at that time was one of the industrial centers of the United States) Joseph Howard Koffolt began his life almost simultaneous with that of the Ohio State University degree program in Chemical Engineering. His father, George was a Slovenian immigrant, his mother was the former Mary Zimmerman. As a student of Cathedral Latin High School, Joe spent many years committing to memory long passages from Shakespeare. He also studied Latin and Greek; it was not uncommon for him later in life to scribble margin notes in those languages. One can almost

1 According to Joe’s baptismal certificate, he was born on March 25th rather than the 19th. His mother disputed the official date, however, noting that “she knew when I was born.” Never one to look a gift horse in the mouth, Joe celebrated his birthday on the 19th instead of his legal birth date, “except when someone wants to give me a birthday present for both dates.”
envision him as a real-life Mr. Keating (the rebel instructor in the movie *The Dead Poets Society*), invoking the phrase “carpe diem” (cigar in hand, of course) and urging his students to make the most of their lives, both personally and professionally.

At age 14, Joe began his career working for Union Carbide as a *block grinder*, making carbon brushes for electric motors, “by pulling on a pair of long pants and lying about my age”. It was around this time that he began smoking cigars. “I did it to look big since I was making big money-$12 a week.” Around 1919, he took a job in the automobile industry. Matt Braidech (B.ChE 1925) remembered, “We were both old ‘Cleveland Boys’ – he lived on the West Side (which I kiddingly referred to as the ‘Worst Side’)…We worked together, without knowing each other, on different jobs, at the ‘Old Winton Motor Car Company’ - he worked as a tool-boy in the machine shop and I was the ‘jackup kid’ putting on tires on the assembly chassis.”

Matt finally met Joe at Ohio State in 1922. A neighbor told him about a “‘Koffolt Boy’ – into whom I bumped in old Dr. Withrow’s ‘Industrial Lab.’(known as the ‘Black Hole of Calcutta’, where old bathtubs were used as mixing tanks and reaction vessels) – I was a sophomore and Joe a Junior – we the second year men were subordinates helping with the dirtier tasks (moving and pushing equipment around and cleanup)”. Since both of them had “some industrial experience, ‘Jimmy Withrow’ used us on various lab setup work and his private consulting projects…Withrow was not an engineer – he had worked in the coal tar industry…he roped ‘Joe’ to do work with benzol and dyestuff bases – and I on setting up the ‘Tyler Vitreosil S-Absorption Tower for HCl Production’. Much of the work was of a particularly noxious nature. “Joe jus [sic] reeked from coal-tar-benzol odors…while I was a red-eyed HCl Acid Operator under Howard Fritz.”

After graduating with a degree in chemical engineering from Ohio State in
1924, Joe began his professional career working for the Industrial Rayon Corp. of Cleveland, Ohio, earning the princely sum of 43 cents an hour to design and construct bleach room equipment. Two years later, he moved to the Skenandoa Rayon Corporation, of Utica, New York, supervising the efforts of 150 men and women engaged in the “washing, bleaching, and drying” of rayon yarn. Many years later he would recall, “30 years ago no one thought of using rayon in tires. And the first pair of rayon panties – when washed and hung out to dry – stretched out to about two feet.” In an early manifestation of professional success, he was able to increase production from 250 to 5000 pounds of rayon per day with no increase in labor cost. Having won a fellowship from Ohio State in 1928, Joe received a five-year leave of absence from his employer and went on to earn his M.Sc. in 1929. This was followed by a Ph.D. in 1931, whereupon he severed his employment with Skenendoa Rayon and became a member of the chemical engineering faculty.

A classic workaholic, Joe nevertheless did have a life outside of the Department. He married Ivy Louise Johnson on April 30, 1930. They had one child, Thomas Joseph Koffolt in 1932. He enjoyed sports - bowling for exercise and watching baseball (the Cleveland Indians was his favorite team). He liked to read, listen to music (both classical and Laurence Welk) and watch television (Jack Parr and Sid Caesar were amongst his favorite shows). From the mid 40’s on, he was involved with the Central Ohio Boy Scouts as a rocks and minerals counselor. Unlike his predecessor, he was no teetotaler and liked to drink beer (Balentine ale, purchased in returnable bottles from Hawley’s at the corner of
Oakland Park and Indianola avenues) and whiskey, later in life.

In contrast to the rather formal persona offered by Dr. Withrow, Joe was in some respects more like a father figure to many of the students. On at least one occasion this extended beyond the bounds of the University, “Dow Chemical is sending down their plane for me…They have requested that I try to talk to one of our men who is down in the dumps.” Bob Bates (B.Ch.E. 1953) echoed this impression, “He really treated us as if we were his family. He took care of us, he looked out for us, he wanted us to do well….Anyone that needed a job, Joe would get on the phone and call people.” He cultivated their growth, the way a good parent does, knowing that the lesson of failure is often the key to future success. He told his students that “there is no such thing as a stupid question.” This did not mean, however, that he would tolerate sloppy work. F.R. Pullen (B.S.ChE. 1937) remembered one incident,

After much work, I submitted my final report. The next day, I received my graded report in my mailbox. The grade was “0”. I think it was also red. I too asked for and was granted an audience. As I pled my case, Joe gave me a lesson that I have never forgotten. He asked, “If you employed a consultant to investigate a problem and then develop a solution, what would be your reaction if you noted that the letter transmitted was unsigned?” There was no good answer. After signing the letter, my paper was graded. There were a few occasions in my career when I followed the same procedure.

It was Joe’s habit to personally write over 500 cards at Christmastime. He
apparently had a phenomenal memory for names and faces, and could often put them together in a meaningful way. John R. Parkinson (B.ChE, M.S. 1951) remembered the day he first met Joe,

My purpose in meeting Joe was to seek entry into the department while already a quarter behind in the normal sequence. I needed his permission to take two courses simultaneously during winter quarter 1948.

Upon asking my name, he remarked “You must be Charlie Parkinson’s boy.” It was only then that I became aware of the fact that my father, Charles Raymond Parkinson, had been a chemical engineer. Later, I found that he had graduated in Industrial Chemistry in 1913. Apparently, Joe worked with my father installing some of the first continuous crystalizers at the Ohio Salt Company in Rittman, Ohio. In Rittman, my father met and married my mother. Unfortunately, he died in 1930 when I was four years old—hence my lack of knowledge of his career.

Such an incident makes it clear why so many alumni feel genuine affection for the man. In general, he truly seems to have liked people and they returned the favor. “Students are the most important thing in teaching – their education is only secondary. Really my hobby is people. I like them. Every person is different and they’re all good.”

It has been noted previously that Doc Withrow was prim and proper; one can imagine his austere profile on some ancient coin of the realm. Joe Koffolt, who would undoubtedly appear on the other side of that coin, apparently liked to use colorful language at times. At his retirement banquet, Alex Lemon (class of ‘43), a former student of Joe’s and later faculty member, related a story from Bob Baldner, Class of ’43. While the details may be taken with a grain of salt (or cum salis gratis, as Joe would say), the overall impression is probably an accurate one. Apparently, Bob, or “pug ugly” as Joe referred to him, was experiencing difficulty landing a position. He went in to see Joe for advice and learned that one of the interviewers had said “you [Baldner] wouldn’t say blank even if you had a mouth full of them!” Joe advised him to “get out of here and just be yourself.” At his next interview, Bob put his “feet on the table, told a few dirty jokes and used an appreciable quantity of profanity. I was immediately offered a job!” He summarized the experience by noting that “I shall therefore always be grateful to Dr. Koffolt for teaching me, amongst other things, that one must use profanity to succeed in life.”

Joe stood apart from Dr. Withrow in
one other, shall we say pungent respect - that ever-present cigar. Like General Douglas MacArthur with his corncob pipe, it became a personal trademark of Joe’s. He always seemed to have one around whenever a photographer was present. In fact, the image of Joe with his cigar became so fixed in people’s minds that they apparently couldn’t visualize him without it. An article in a campus magazine many years ago noted that, “No one, it seems, owns a picture of Koffolt without a cigar…” Accompanying that very same article were two photographs of Joe, sans any cigar.

The Ibold Cigar Company manufactured Joe’s favorite smoke. “I prefer the dark Ibold to the light. I do not care for the Peter Ibold. It appears that the light Ibold are a little bit too strong for me.” Everett Strobel contacted Ibold in 1965, making arrangements for them to send Joe two boxes, notifying him that they were a present to “celebrate your 48th anniversary of smoking Ibold Cigars.” Joe thanked him warmly, noting that “I do hope like Winston Churchill that it will keep me going for many years to come.”

The cigar, clamped between his teeth, or used as pointer, became an obvious target of satire and pranks. Bob Brodkey, Professor Emeritus, recalls the following incident:

Joe used to smoke these particularly strong stogies (and somewhat sweet), one of which “OLGY”, I used to refer to as Rheology. I remember one time playing a trick on Joe in the 1960s. I purchased a box of Ibold cigars, one of his substitute brands and distributed them to every one of my students in room 205. We lit them up and literally filled the room with smoke. Not long afterward, Joe stopped by, and thinking the room was on fire, rushed in. Confronted with a class of students puffing away, some of whom had turned green, he displayed a look of
utter disbelief, wheeled around and left the room. It should be noted, however, that he never smoked them himself in the laboratory. Or did he?

While there do not appear to be any photographs of Joe smoking in a laboratory setting, at least one instance of it can be documented. Alvin Stiles (B.ChE 1931) related the following story:

During Joes’s pre and postdoctoral work, there was a running seri-comic bone of contention between Dr. Withrow and Joe. Joe’s work involved a large number of gas analyses run by the old Orsat procedure. It wasn’t clear to most of us what Doc’s objective was aside from getting Joe to stop smoking. We know that he had someone’s health in mind, but it wasn’t clear whether it was Joe’s or Doc’s. The contention took the form of criticizing Joe’s gas analysis on the basis that Joe’s smoking introduced 3 sources of error into his researches. The first was that the smoking introduced a large amount of carbon dioxide into the air, which was inspired into the apparatus and this introduced an error into the CO₂ measurement. Second, in as much as some of the O₂ has thus been removed from the air inspired into the apparatus, the air should not then be accepted as 21% O₂. Lastly was the fact (?) that Joe inhaled so vigorously on his cigar, that he reduced the atmospheric pressure in the room, so the measurements were off because of inaccurate barometric indicators. We all know that none of these arguments prevailed and Joe still gives a cigar a good working over, smoking one end and chewing the other one for a meeting somewhere in the middle!

Some of Joe’s students apparently took up the habit on his advice. Dr. R.J. “Ram” Rathi (Ph.D. 1950) remembered attending a dinner at Joe’s house shortly after he received his Doctorate, during which he was presented with a box of cigars. “After dinner Dr. Koffolt opened the box of cigars and showed me
how to cut the cigar before smoking it. He told me, ‘Ram, you are a big shot now, stop smoking cigarettes and start smoking cigars!’ I took one puff of the cigar and started coughing. Professor Koffolt taught me not to inhale the smoke but smoke in a leisurely fashion. Soon I learnt to enjoy smoking cigars.”

Of course, not everyone in the Department was a cigar connoisseur, even during a period when close to 75% of the American population used tobacco of one form or another. Jim Farst (M.Sc. Ch.E. 1956) wrote to Joe in 1957, “I think you’re missing a bet by not smoking those Burmese cigars. I enjoyed the one you gave me very much. It was quite mild and cool smoking.” Joe responded a few days later, “I tried to smoke one in the office yesterday and the girls closed the door. They said they didn’t smell but they stunk.”

The Ohio State University student chapter of the AICHE was the eighth school to receive a charter, in 1924. During Joe Koffolt’s tenure as Chairman, the entire graduating class often became associate members (7 years in a row by 1965), an achievement he helped extend to numerous other schools during his term as vice chairman of the membership committee. According to Bob Bates, “If you were taking Chemical Engineering under Koffolt, there wasn’t a question of if you joined – it was only a question of when you joined. He wouldn’t take no for an answer.” John J. McKetta, Chairman of the Membership Committee in 1956, referred to this success in a letter addressed to the Chairmen of Chemical Engineering departments nationwide:

If you are Joe Koffolt of Ohio State…then I am certain you feel a great amount of pride in this fine percentage. If, on the other hand, you are from Northwestern, Michigan State, University of Michigan, M.I.T., Cornell and so on then you cannot be particularly proud of the interest your students show in the national chapter.
During this period, the Department included a pitch in the letter sent to the parents of graduating students, suggesting that “membership in the Institute makes an ideal graduating present.” In a May 1952 note to Bill Burt (B.Ch.E. 1917), the recently retired president of the Institute, Joe related his promotional campaign with the students, noting that he had concluded it by “giving them a short talk last week and passing out your fine booklet KNOW YOUR INSTITUTE.”

Some of the students apparently did not appreciate these efforts. “Pay your buck-and-a-half and get Joe off your back”, was how one of them expressed it. Others made lifelong commitments as a result of his efforts. One of them wrote to the Institute in 1981, requesting a bill for dues he had not paid during a financial rough spot in his career, “I would appreciate it if you would send me a bill for 1980 and 1981 as well as the 1982 dues. If necessary, I shall be pleased to also pay the $15 re-application fee.” He offered the following explanation. “I studied chemical engineering under Dr. Joseph H Koffolt. He was a staunch supporter of the Institute and preached the value of continuous lifelong membership. If I did not pay my back dues I would feel that I had not lived up to Dr. Koffolt’s expectations.”

During the continuing economic crisis of the Thirties, raises and promotions were hard to come by. In fact, most of the University faculty absorbed a series of pay cuts following the Crash of 1929. Dr. Withrow, for example, saw his salary drop from $6000 per annum in 1929 to $4860 in 1934. Not until 1946 would it return to its former level. Under these reduced circumstances, Joe Koffolt became an Assistant Professor in 1936 and Associate Professor in 1938 (at $3600/year) but the rise to Full Professor proved a thornier nut to crack. During this period he also
had job offers from the Rose Polytechnic Institute, Virginia Polytechnic Institute, Armour Institute of Technology, University of Missouri, University of Louisiana, and the Columbia Chemical Company. (According to Doc, it was only out of loyalty to OSU that prevented him from going overseas to Cambridge, England, “when they asked me to nominate the Head of the new Department of Chemical Engineering there.”) Doc even took the unusual step of going over the head of the Dean of the College of Engineering, Dr. Charles MacQuigg, making a direct appeal (albeit unsuccessful) to OSU President G.W. Rightmire. “…let us promote a worthy leader and not just be proud of him when some other University takes him from us”.

In 1940, the University of Alabama invited Joe to become Head of Chemical and Metallurgical Engineering. Doc immediately wrote to the Dean,

Dr. Koffolt is recognized as one of the outstanding chemical engineering teachers in this country, at least, among the six most promising younger ones… The University of Alabama asked me this week if I would release Dr. Koffolt to become their Head of Chemical Engineering, which position is now open through the resignation of Dr. Henry Coles, one of our graduates…Dr. Koffolt must inform the University of Alabama of his decision this evening, if possible.

A hastily called conference was held between Ohio State University President Howard L. Bevis, Dean of the College of Engineering Charles MacQuigg and Dr. Withrow. As a result of this meeting, Joe Koffolt was promoted to full professor at once. Furthermore, the President promised to “be on the lookout” for additional
funds to support Joe’s rise in rank. More importantly, the Dean promised Joe that, “If a vacancy should occur in the Chairmanship of our Department, through natural causes, that he would not have to go outside the Department for a successor.”

In the beginning, Joe had nothing but praise for Doc, the man who had tutored him in his rise from industrial worker to industrial kingmaker. They consulted on numerous projects together and published many papers under a shared byline. As the nineteen forties drew to a close, however, and Doc entered the twilight of his career, Joe realized that he was doing much of Chair’s job without the title. Doc would not step down voluntarily, however, telling Joe that he would never resign, “they would have to put him out.”

In March of 1948, the overwork and stress finally caught up with Joe. He contracted pneumonia and was dangerously ill. Fortunately, new drug therapies were just then becoming available for bacterial infections, and “with the new sulfa drugs I pulled through O.K.” While recovering, he wrote to Jack Gerster (B.Ch.E 1939), Professor of Chemical Engineering at the University of Delaware, that

the Dean hopes that we can pull through until August and then comes the revolution…I expect the fireworks to start sometime during the Spring quarter. We will have the election of a new department chairman for the next four years. ...we are determined to see it through (Kermit, Dr. Kay, the instructors and myself) and have a change for next year. I do not care how it goes but there will be a change.”

His prediction rang true. Dr. Withrow finally stepped down in 1948, having served over 40 years at the helm of Chemical Engineering. A new era was about to commence.

When Joe assumed the Chairmanship in 1948, he inherited a full plate of problems confronting the Department. The most pressing issue involved space, or lack thereof; the physical plant occupied by the College of Engineering at that time was not in good shape. After a twenty-year period during which the nation experienced both a depression and world war, there was much catching up to do. In 1949, the Engineering Council for Professional Development (E.C.P.D.) reviewed the Chemical Engineering program at Ohio State and expressed their displeasure by issuing a provisional accreditation. To wit,

The situation at Ohio State is very unsatisfactory. In fact, if we were faced with this situation in a school which had not previously been accredited, it is doubtful if even provisional accrediting would have been allowed…The space available for instruction is also inadequate to handle the number of students enrolled.

Although, accreditation eventually was granted, Gordon Carson, Dean of the College of Engineering, knew the problem wasn’t going to resolve itself. He wrote to Joe, noting that this would be an opportune moment to take the long view
and “re-examine our position.” Three areas were spelled out: staff, equipment, and buildings and space, the purpose of which was to “crystallize our thinking as we look to the future.”

Joe began marshalling his forces. Faculty members were asked to provide detailed “comments concerning equipment, building and space and your work involving laboratory, research and teaching courses.” He went on to note that “Dean Carson plans to use it in connection with his request for the department.”

Information in hand, the Department initiated a series of nightly meetings, lasting four to five hours over a one-month period. “We had our first staff meeting last Friday night, starting at 7:30 and quitting at 11:30, in which we discussed what we would like to see in our new building”, Joe wrote Alvin Stiles on November 21, 1955. The current space was reviewed with regards to how well it functioned when compared to similar facilities elsewhere. Lists were compiled of needed offices and laboratories: Precision Standards, Thermodynamics or Physical Measurements, Optical, Kinetics, Mass Transfer, Nuclear, Design, and Unit Operations. Sketches of each laboratory, containing detailed specifications, were prepared. The entire facility, not counting such things as hallways, storage and utility closets amounted to some 82,000 square feet.

The new building was dedicated on May 5th, 1960. The ceremony was attended by close to 500 people: alumni (who awarded Joe with a standing ovation), friends of the department and numerous officers of the AICHE, including the President, Jerry McAfee, Vice President, John Healy and Past President, Sid Kirkpatrick, also known as “Mr. Chemical Engineering”.

Joe had very definite ideas regarding the training received by engineering
graduates of the Department. In the Eighteenth Annual Report to the alumni, he summarized it thus:

We are still producing engineers rather than pseudo-scientists. Many schools are putting their emphasis on so-called engineering sciences, but we feel that those men are really not ready to function as an engineer when they graduate. Some think that by sitting on their tail and deriving equations which contain many assumptions, 90% of which are incorrect, they can design or run a plant. We give as much, if not more, mathematics as other schools. We do give the so-called engineering sciences, but we do not stop there. This is followed up by our work in the Unit Operations and a heavy dose of laboratory work in which the gospel, as it always has been, is a course in blood, guts, sweat and tears.

That viewpoint was apparently no secret to certain industrial concerns. Hal Laube (B.Ch.E. 1941) recalled that during the course of the Unit Ops lab “We filtered and we dried and we distilled. In 1951, I was hired by the Chief Engineer of Standard Brands, Inc…He said ‘Now I can tell you what I hired you to do. We are going into the Instant Coffee business, and we will spray dry the coffee extract. Now being a Chemical Engineer from the Ohio State University you know all about spray drying.’”

According to Tom Koffolt, Joe had set two major goals for himself after assuming the mantle as Chairman of the Department. “His first priority was to build the staff up. And he put an awful lot of effort in going after… a staff that was compatible…and had a different bent to it…it was more on the research side as opposed to what it probably had been in the Thirties where it was practical applications of Doc’s hated word ‘Unit Operations’. The second priority was to get out of McPherson Labs and into quarters befitting one of the top chem. engineering schools in the country. He personally took over the whole job from the planning, to the looking over the architect’s shoulders and the construction – many, many, many hours and much, much stress. And in 1959 he suffered his first mini-stroke. I think that was really the beginning of the downhill slide. He just was worn out.”

As the 1960s drew to a close, Joe’s health continued to deteriorate, causing him to miss professional conferences and events. In 1967, for example, he missed ACE Day due to a back problem severe enough to warrant traction in Grant Hospital; he recovered mobility with “the aid of a polio corset brace”. This was in marked contrast to his younger days when he “used to bound up and down the halls of the Chemical Engineering Department”, remembered Bob Bates. “He never walked, or strolled.” Joe also experienced a series of small strokes during this period, leaving him “very disorganized, repeating the same thing several classes in a row.” He was able to see the handwriting on the wall, however, and asked that he be permitted to step down as Chairman in 1968. Dean Harold Bolz appreciated Joe’s offer, and quickly responded in a memo dated August 9, 1967, stating that he was “deeply indebted to you for the orderly and considerate way in which you are handling matters during this vital transition period.”
Under the terms worked out between Joe and the Dean, Al Syverson would serve as Associate Chairman until his permanent appointment on July 1, 1968. During this period, Joe would be responsible for alumni relations, placement, industrial relations, fellowships, student relations, teaching and writing an account of the Department’s history. Al would assume the day to day tasks of running the Department, such as budgeting, staffing, class scheduling, curriculum development, purchases, travel and committee appointments. The Dean noted that “this arrangement should benefit all concerned” and would enable Joe to devote “his fine talents in especially significant ways to the enhancement of your department’s progress and prestige.”

At the start of the Fall term, Joe sent a memo to the members of the Department staff. He announced his planned resignation and the appointment of Dr. Syverson as Associate Chairman, effective immediately. “This will mark twenty years as department chairman in the forty years I have been with the University. It was my thought that giving up the chairmanship on June 30, 1968 would help make the transition smooth.” He wrote to the Alumni the following year, expressing thanks for the many pleasures they had given him over the years:

As I look back on my 20 years as Department Chairman, I have a wonderful feeling when I hear the progress all of you have made. This is especially true of those who have had an interim of tough sledding but have pulled out of it.

My relationships over these years have been heart-warming, stimulating, and very interesting. All of you have been very kind to me.

During that same year, he received formal recognition from the AIChE for his numerous contributions to chemical engineering education, as the recipient of the Warren K. Lewis Award. In a letter to Robert L. Bates (B.Ch.E. 1948), Joe wrote, “This is a very fine honor indeed. I will be the sixth to receive this. The others were Dodge of Yale, Hougen of Wisconsin, Gilliland of M.I.T., Wilhelm of Princeton and Katz of University of Michigan, and now myself.” The criteria for the award included:

- Success as a teacher, to be established as to both competence in subject matter and ability to inspire students and colleagues to high achievement.
- Contributions of lasting educational influence such as superior textbooks, lectures and laboratory techniques or models.
- Impact upon the education of chemical engineering students as a result of creative ability evidenced by scholarly contributions to the literature, by inventions, by contributions to developments in industry, through consulting, or through government service.
- The key leadership is administering a department or equivalent group, which has made the outstanding contributions which this award aims to recognize.

Joe finally called it quits in 1971. “My big trouble is a cerebral deficiency which means a very slow flow of blood in the cranium. This is due to an arthritic condition I have in the neck.” Age and overwork was finally taking it toll on the
men of his generation. “All I seem to hear is about the deaths of our alumni, and it makes me feel very bad,” he lamented to Parker Dunn (B.Ch.E. 1930) during his last spring quarter at Ohio State.

Originally Joe had hoped to retire in Columbus but spend the winters in either Florida, California or Arizona. “I have not decided yet what I am going to do in my retirement. I have most of my friends in Columbus and of course the alumni whom I appreciate very much.” This rosy scenario would not come to fruition. Due to advance arteriosclerosis, he was confined to a convalescent care facility shortly thereafter. Dean Bolz wrote Alvin Stiles in 1972, “As you know, Joe is in a rather sad state where he is not always aware of his surroundings and situations. However, he does have times when his mind is clear and if we are lucky enough to see him at one of those times, we have a really nice time hearing him reminisce.” When his wife Ivy required hospitalization a few years later, their son Tom moved them to facilities near his home in Stamford, Connecticut. Matt Braidech visited Joe there in July of 1974

I was told a little about Joe’s ‘senility, when I walked into a small room – there was Joe – he hear [sic] my voice and recognized me immediately and called me Hi – Matt and we shook hands – I kidded him about [sic] “missing trade mark’ *his cigar* and he smiled and beamed from ear to ear – we chatted slowly about a lot of common experiences in the old labs and Withrow. I also talked about ‘His Jewels’ and the money drive for equipment for the new building – which some of us termed – The K-K-K-K – Koffolt Kollege of Kemical Knowledge – as his eyes sparkled with a lip-drawn wry smile – and with chin stroking. Well – sad to relate – he is ‘slipping’ – [sic] did not want to tire him too much, and after a 20-minute visit I arose to signal my leaving…He smiled broadly again and shook his head sidewise with a ‘coughing chuckle’ – as I promised to see him again. We parted after a long hold of our hands – with a ‘So Long – Take Care’.

Dr. Joseph H. Koffolt died in May of 1977. He left behind a vast legacy of students, his “jewels”; men who helped transform the American chemical industry. When the University conferred an Honorary Doctor of Science degree upon him in 1972, his son Tom accepted the award for him. The citation that accompanied the degree remarked that “His inspiring teaching has been noted by more than forty graduating classes of chemical engineers.”
A Few Words Regarding The Jewels Club

Joe referred to his former students as “jewels”, an allusion taken from an old Roman proverb. It describes the story of Cornelia, the daughter of Scipio Africanus and wife of Tiberius Sempronius Gracchus, who upon being asked where were her jewels, pointed to her sons and said these are my jewels. According to some accounts, it was the inspiration of some unnamed student of Dr. Withrow to use it as a nickname for the Chemical Engineering alumni. Joe himself disputed this. Early in his tenure as Chair, he was searching for some way to describe the Department’s graduates, when he recalled a story from one of his high school textbooks, Latin for Beginners, by Benjamin L. Dooge, Ph.D. The rest is history. The illustration below, featuring a toga-clad Joe Koffolt, accompanied his translation of the latin proverb that was included in the 1966 Annual Report to the Alumni. (Ironically, Joe’s translation was criticized by a number of the Alumni, who suggested politely that his Latin skills were a little rusty.) Joe also provided a more pithy explanation, “Each member of these classes, coming into the department for the first time, was like a new mineral specimen from a mine, containing pay dirt but covered with gangue, the latter so easily washed away by the long time philosophy of the Department, of “blood”, “sweat”, “tears” a strong arm and the mop and bucket.”

In 1958, The University of Notre Dame sounded Joe out on becoming Dean of the College of Engineering. Although, “deeply honored”, he declined the offer. In a letter to Father Edmund P. Joyce, Executive Vice President, he gave his reasons

I am sorry, but I would not consider leaving Ohio State University under any
circumstances of my own will. I am very happy here. In the past 30 years I have been here, I have followed in much detail the career of each and every one of the 1400 alumni who have received their degree from our Department. I have kept in intimate contact with most of them through correspondence, meetings, and my travels throughout the country. If I would make a change at this time, I am sure that there would be a big void in my life.

He reiterated these points to Ed Schoenborn, adding, “I am having too good a time with our alumni.” Many of the alumni returned the sentiment. Ram Rathi observed,

Dr. Koffolt was a fine man and a wonderful teacher. He didn’t like us to stand on formality and address him as “Professor” but insisted that we call him by his first name Joe…During my years of association with him I found in him a true “friend, philosopher and guide”…In 1954, I went to visit him in his office. On the wall behind his desk hung photographs of several of his favorite students, including mine. Above the photographs was the proud caption, “My Jewels”. I was very touched by this loving gesture.

The Jewels Club exists to this day.
About the Author

Geoffrey Hulse is the Director of the Chemical and Biomolecular Engineering / Materials Science and Engineering Joint Computing Lab. A freelance photographer prior to joining Ohio State, he is also responsible for most of the photo related work in both of these departments, including student and faculty portraits, publications and other promotional material. He recently won the President’s Award for Photography in the annual OSU staff arts exhibit; the winning picture is featured on this year’s University holiday card. In addition to his information technology and photographic duties, he is currently preparing the Departments’s history, *From Tub Scale to Nano Scale: One Hundred Years of Chemical Engineering at The Ohio State University.*

Photo by Christopher Hulse