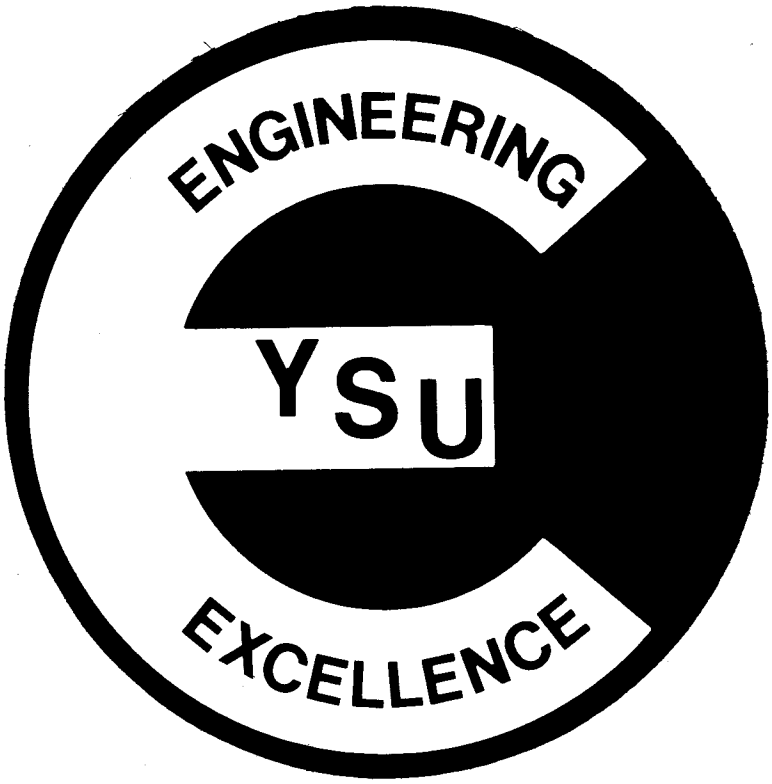
WILLIAM RAYEN SCHOOL OF ENGINEERING

"ENGINEERING EXPOSURE"



Memories are treasures

recorded in the log of time!

Virginia Davidson
Secretary, Dean of Engineering

Logo: Originated by: Dean George E. Sutton

Designed by: Dr. Frank A. D'Isa, Chairman
Mechanical Engineering
and
Mary Kay D'Isa
Limited Service Instructor
Art Department

Dean of Engineering resigning his YSU post

1-14-75
A. LEASE

YOUNGSTOWN—Dr. M. Jean Charignon, dean of Youngstown State University's William Rayen School of Engineering since 1956, will leave his administrative post to return to full-time teaching duties effective fall, 1976.

Dean Charignon, a professor of mechanical engineering, will continue in his present capacity until a successor is appointed.

Dr. John J. Coffelt, YSU President, in making the announcement recently, stated, "I wish to acknowledge the contribution Dean Charignon has made to this institution during his years of service in developing a solid foundation for our future engineering program and for our students." A search committee will be appointed for the selection of a new dean.

Dean Charignon explained that "after 25 years of piloting the William Rayen School of Engineering, chronological age dictates that I relinquish this function to a younger man."

Engineering Dean at YSU Will Return to Teaching

Dr. M. Jean Charignon, dean of Youngstown State University's William Rayen School of Engineering since 1956 will leave his post to return to full-time teaching effective the fall quarter 1976.

Dr. Charignon, a professor of mechanical engineering, will continue at his present post until a successor is appointed.

He explained that, "after 25 years of piloting the William Rayen School of Engineering, my age dictates that I relinquish the post." He will serve as a consultant to the new dean.

Dr. John J. Coffelt, YSU president, acknowledged the contributions of Dr. Charignon saying, "His leadership has provided a solid foundation for our future engineering program and for our students." Dr. Coffelt said a search committee would be appointed to select a replacement.

Planned Program

Dr. Charignon served as an assistant in developing the YSU graduate engineering program and also supervised the design and construction of the Engineering Science Building.

He joined the YSU faculty in 1950 as an assistant dean for the engineering school, taking over the top post in 1956. He had worked for Republic Steel Corp. as assistant combustion engineer and general foreman of steam generators before coming to YSU.

He received his undergraduate degrees in mechanical and electrical engineering from North Dakota State University and master of science and doctorate degrees from the University of Pittsburgh. A professional degree in mechanical engineering was also granted from North Dakota State.

Served in Army

Dr. Charignon served in the Army from 1941 to 1946 and was promoted to colonel of infantry in 1944. He was awarded the Legion of Merit and the Chinese "great order of clouds" for his service in India, Burma and China.

He also authored a four-volumn set of books on infantry tactics, later translating them into Chinese.

A registered professional engineer and a licensed stationary engineer, Dr. Charignon is a member of Kappa Delta Pi, Sigma Tau, Sigma Xi, Phi Kappa Phi and Tau Beta Pi honorary fraternities.

In 1969 he wrote an article on the establishment and growth of the YSU engineering school for the "The Ohio Engineer."

He lives at R.D. 1, New Waterford.

Colonel Michael J. Charignon, Ph.D.,P.E., was Assistant Dean of the School of Engineering from 1950 to 1955. In 1956, he was appointed Dean of Engineering and served in that capacity until he retired in 1976.

Mr. Byron T. Mottinger was the first administrator of the Engineering Department in the School of Arts and Sciences under the title of Director of Engineering. In November of 1941, Mr. Louis A. Deesz replaced him, and in October of 1945, became the first Dean of Engineering. Upon his death due to a heart attack on April 12, 1950, Mr. Frank Ellis became Acting Dean of Engineering. Mr. Edward Franklin became Dean of Engineering in 1954 and remained so until the appointment of Dean Charignon.

The Department of Engineering then in the School of Arts and Sciences was located in Jones Hall until 1941, then was moved to an old barn near what is now Ward Beecher Science Building. In October of 1945, the old Rayen High School, (Wick Ave., one block south of Jones Hall) was rented from the Board of Education and became the original location of the William Rayen School of Engineering. In the winter of 1967, the Engineering School was moved to the new Engineering Science Building. This was the first state structure on the campus and is located on Lincoln Ave between what was Bryson St. and Elm St.

Long live the William Rayen School of Engineering!

Dr. Sutton Is Dean Of YSU Engineering

6 Youngstown Vindicator
Thursday, July 15, 1976

Dr. George E. Sutton, former director of professional services for the National Council of Engineering Examiners, has been appointed dean of Youngstown State University's William Rayen School of Engineering.

Dr. Sutton succeeds Dr. M. Jean Charignon, who served in that capacity 20 years. Dr. Charignon will return to the teaching faculty.

Dr. Sutton, a West Virginia native, holds a bachelor of science degree in mechanical engineering from West Virginia University, a master's degree from the University of Florida and a doctorate from Michigan State University.

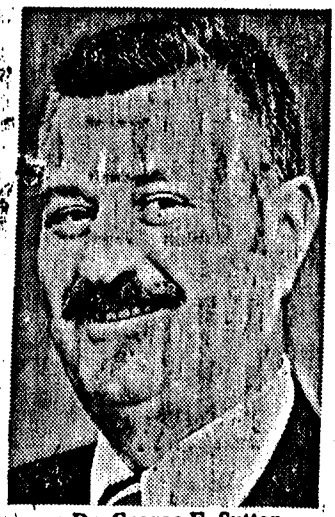
The new dean's previous jobs include service from 1961 to 1973 as chairman of the University of Nevada's mechanical engineering department, where he helped with the development of its graduate and research-support program. He was director of the Nevada Products Laboratory from 1967 to 1973 and served on the university's space planning board from 1969 to 1971. For five years, he was administrator of the university's patent policy.

He was a professor at Arizona State University from 1957 to 1961, and before that taught at the University of Florida. He was also a consultant to the Sierra Pacific Power Co. and to the Naval Weapons Center in China Lake, Calif.

One of Dr. Sutton's research articles, "Atmospheric Cooling Tower Performance," established a new concept in cooling-tower design.

Dr. Sutton, a retired lieutenant commander in the U.S. Naval Reserve, flew for the Royal Canadian Air Force during World War II, later transferring to the U.S. Navy as an aviator.

Dr. Sutton, who lives at 2602 Algonquin Drive, Poland, holds memberships in numerous professional fraternities and societies, including the American Society of Mechanical Engineers and the American Society of Heating, Refrigerating and Air Conditioning Engineers.



Dr. George E. Sutton

YSU Dean Puzzled by Report of Decline—

Lauds Engineer Prospects

By JIM WOODS
(Vindicator Staff Writer)

A National Science Foundation report saying that jobs for engineers have been declining since 1970 puzzles George E. Sutton, dean of the William Rayen School of Engineering at Youngstown State University.

"I don't find any evidence of employment opportunities for engineers declining," Sutton says in reply to the report.

And Sutton has good reason to differ with the science foundation's findings: All graduating seniors from Youngstown's school of engineering this year have been placed in jobs. Starting salaries for engineers are running $14,000 to $18,000, well above the national average for college graduates entering the job market.

The National Science Foundation report, issued by its science resources division, says overall employment of scientists and engineers decreased 5 per cent between 1970 and 1975, in contrast to a 14 per cent gain between 1965 and 1970.

Loss in Private Sector

According to the survey, most of the engineering employment loss was in the private sector, especially in the durable-goods industry. The decline was most noticeable in research and development, where activity has declined 12 per cent since 1970.

The only sector showing an increase in engineer employment was the non-manufacturing industries which have increased 11 per cent since 1970. Manufacturing industries showed an employment decline of 13 per cent between 1970 and 1975.

Sutton says he believes the National Science Foundation statistics are misleading because they include non-engineering scientific research jobs, which have been cut back in recent years. He supports his belief with a report from the American Council of Education, which says 47 per cent of all college graduates placed in jobs this year were engineering graduates.

Although he disagreed with the science foundation's report, Sutton in keeping with the survey's findings says most of the employers are looking for students who are concerned with design rather than the research oriented fields. As a result, Sutton says employers prefer hiring students directly out of college than on the graduate school level.

Sutton says another reason for the research cutback is more industries have become "cautious" about testing out new products.

Industries now are more especially when people have to pay for it."

Faced with these choices for the future, Sutton says America is going to have to get to work to avoid a greater energy crisis five or ten years from now.

Recently Sutton was polled by President Carter's energy

★ ★ ★

The Vindicator/Paul R. Schell

Dr. George E. Sutton, dean of Youngstown State University's School of Engineering, differs with a report that opportunities in the engineering field are fewer, citing the university's 100 per cent placement of engineering graduates this year.

★ ★ ★

interested in getting their products out at a lower cost, Sutton reports.

Because energy resource use is a critical problem , Sutton says he believes job opportunities for engineers will continue to increase in the future.

" Energy conservation has always been a part of engineering in getting the product out at the lowest possible cost," he says," There's more urgency now than in the past,

★ ★ ★

consultant James Schlesinger on his feelings about a national energy program. Sutton says he believes America in the past has wasted "unrealistic expenditures" because the top levels of government were handled by persons who knew little or nothing about science or commerce.

" There are going to be an awful lot of people involved in renovating the energy system, and engineers are going to be a part of it," he said.

Sutton to Speak To Plant Engineers

G.E. Sutton will discuss "Education and Registration of Plant Engineers" at a meeting of Western Reserve Chapter 149 of the American Institute of Plant Engineers Wednesday, March 9, in the Belmont Room of the Ramada Inn, Rt. 193.

A cash bar will begin at 6 p.m., followed by dinner at 7 and the meeting and program at 8.

Sutton, dean of engineering at Youngstown State University, will center his discussion on a proposed curriculum for plant engineers with a Bachelor of Science degree at YSU. AIPE members are encouraged to attend and offer their suggestions.

This article was in the Vindicator, March 1977.

This interview was published in the Vindicator, May, 1977.

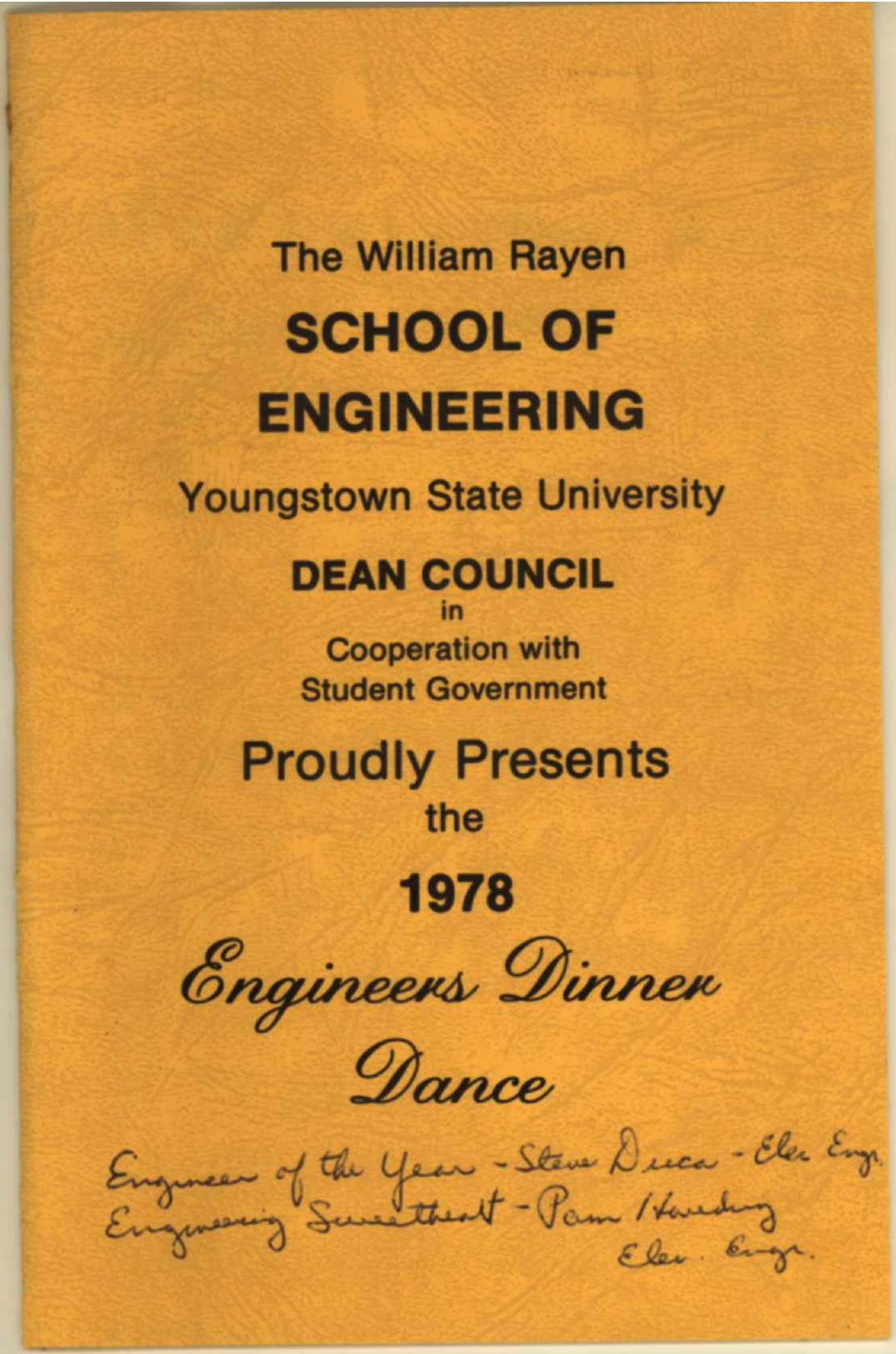
1 of one

The William Rayen

SCHOOL OF ENGINEERING

Youngstown State University

The Faculty



For many years, in addition to departmental and departmental societies activities, the two major Engineering School social events of the year were the Engineers' Ball and the Engineering School picnic both sponsored by the Engineering Dean's Council. The highlight of the ball was the announcing of the selection by student vote of the year's Engineering Sweetheart and Mister Engineer. As more women became candidates for the B.E. degree, Mister Engineer became Engineer of the Year and was received for the first time in the history of the Engineering School in 1977 by Miss Laurie Johnston, Chemical Engineering and Materials Science Department.

Good work makes things more valuable, says engineering prof

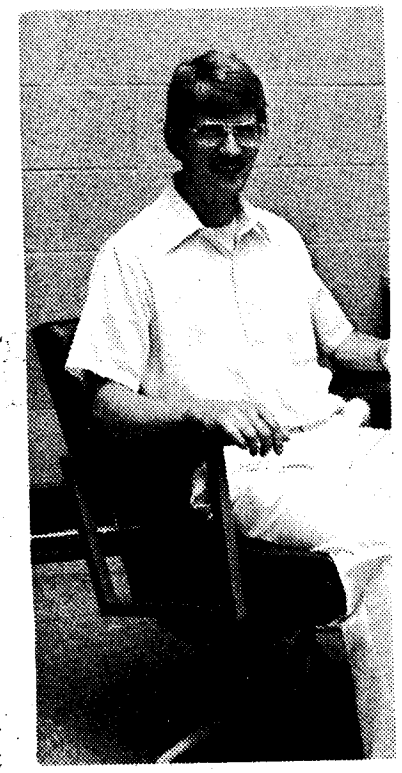
by Sharon Blose

"It's a reward for when you think you are doing good work; it makes things worthwhile." Dr. Robert Foulkes, electrical engineering, sums up in his own terms what he feels about being named a Distinguished Professor. "The award has made me aware of what I'm doing-it may help me to do better."

For the uninformed, electrical engineering is based on the electrical properties of matter. It can explain things from how a motor works to what makes a computer run. The media, such as television and radio, need electrical engineers to operate, any large industry, such as a steel mill, must have an electrical engineer to do the maintenance and troubleshooting on the electrical controls on the boilers. "To fully understand electrical engineering, you would have to major in it, but this is the simplest way I can explain it in layman's terms." said Foulkes.

Foulkes is more interested in the research involved in electrical engineering, and this interest led to his position as a professor at YSU instead of in industry. He received his degree in systems engineering, but specialized in general systems theory. "Besides, I like the academic atmosphere. There is some drugery, but it is not really work."

Foulkes was awarded a research grant from NASA (National Aeronautics and Space Administration) in 1975-76, and was involved in a project that worked on the automatic control of landing systems for aircrafts. "It was a small part of a big project NASA and the FAA (Federal Aviation Administration) were working on."



Dr. Robert Foulkes

An "almost" native of Youngstown, Foulkes is orginally from Cleveland but calls Kent, Ohio, his hometown. Mary, his wife of 11 years, was working on her master's degree at KSU at the time that Foulkes received his Ph.D. Teaching at YSU was the best alternative at that time for Foulkes, who could have gotten a job in industry just as easily. After a while the Foulkes family, including Bobby, three, and Beth Ann, five months, decided to make Youngstown their home.

"A large part of my outside life is my family, especially my children. I guess you could call them my hobby." But when Foulkes has the time, he enjoys running. Not the ordinary run-around-the block jogging, but cross-country running. "Running around the block gets boring after a while," said Foulkes. "I started running for weight control after I was married, and found it enjoyable." Millcreek Park is Foulkes' favorite place to run. He and a companion from the University like to run from YSU to Millcreek Park and back. Or they run from YSU up to the Municipal Golf Links near Northside Hospital, and then return.

Foulkes received his B.S. degree from the Case Institute of Technology, his master's degree from the University of Southern California, and came back to Case Western Reserve for his doctorate.

Dr. Householder becomes new chairman of YSU civil engineering department

Dr. Michael K. Householder, associate professor of civil engineering at YSU has been appointed chairman of the YSU civil engineering department, effective fall quarter. He succeeds Dr. John Cernica who resumed full-time teaching duties.

Dr. Householder, a YSU faculty member since 1968, received a bachelor of science in civil engineering degree from Valparaiso University and a master of civil engineering and Ph.D. degrees from Purdue University. His field of specialization is hydraulics and sanitary engineering.

Author of several research articles in his field, the Chicago native recently received a faculty instructional improvement grant for work on "Interactive Computer-Based Lessons Engineering Education." This summer he presented a paper before an annual conference of The American Society for Engineering Education on "Interactive Design of Wastewater Treatment Plants."

Dr. Householder, a Professional Engineer, is a member of the American Society of Civil Engineers and American Society for Engineering Education.

Dr. Michael K. Householder

Appointed in 1976 - Left us for California Polytec-Fullerton - in 1978; the new department chairman was Dr. Jack Bakos

Strong Lawmaker Ethics Code Urged

The future of this society depends on a legitimate code of ethics for legislators, George E. Sutton, Ph.D., dean of engineering at Youngstown State University, told members of the Youngstown Rotary Club Wednesday at their noon luncheon held at the YMCA.

Dr. Sutton is not concerned about ethics in the personal affairs of legislators but about their legislative activities. He says they are creating an enigma for the professions because of political conflicts that follow their actions in legislative halls.

With government agencies redefining codes for the professions and becoming involved in licensing and certification of professions at the state level, he questioned whether the professions can survive.

While Dr. Sutton used the engineering profession as an example, he explained the confusion arising (because of the laws) over what is and is not ethical is a problem affecting all professions.

He mentioned consumer advocate Ralph Nader saying he is "dedicated to protecting every consumer from everyone."

Lawyers, he likened to "sidewinders," observing they profit from the discontent of others. He hit hard at the legal profession, since lawyers are overwhelming represented among legislators, and wondered about considering this a "conflict of interest" issue.

He called attention to the high cost of malpractice suits in medicine, saying engineers also are faced with the tremendous cost of defending themselves in lawsuits.

Washington and Columbus are even worse, he continued, citing instances of the confusion federal and state actions create. In one case a national administrative action was filed against engineers for violation of anti-trust laws in competition on the basis of price alone. However, he said the Supreme Courts wants to exempt engineers from the anti-trust law because public safety could be jeopardized by insisting on the low bidder.

With external pressures of this kind conflict develops over what is and is what is not ethical, he pointed out. Engineers have a national group to determine the answers when they find themselves in such conflicts and are also concerned with internal problems involving greed, ego, fear of lawsuits and similar matters.

Trends in professional rules have moved from codes of ethics, to codes of conduct enforcible by the law, to the law, Dr. Sutton observed. If it continues, the professions will lose their identity, he remarked.

VINDICATOR - SEPTEMBER 20, 1973

Voting takes place October 17 and 18

King-Queen candidates selected for Homecoming

AN ENGINEER AS KING

On Tues., Oct. 10, a panel of five judges met in Kilcawley Center to interview the six King and seven Queen candidates for the 1978 Homecoming Court. The judges were members of the YSU Faculty and Administration and Alumni Board. After questioning each candidate separately, the judges came to a final decission for the Homecoming Court. The finalists for Queen are Jane Moore, Pam Pogany, and Patricia McDowell. Paul Shiller, Chester Tabaka, and Paul Roberts are the King finalists.

Jane Moore, of 1411 Albans Dr., Youngstown, is a junior majoring in Advertisement/PR. Jane is presently the executive chairperson for the Kilcawley Center Program Board. She is also a member of the National Entertainment and Campus Activities Association, a former New-Student Orientation Group Leader, and a student co-chairman for the Association of College Unions International, Regional Conference to be held in Kilcawley Center. Jane's extra-curricular activities off campus include her serving as a Sunday School teacher at St. Christine's Church in Youngstown. Because of Jane's grade point average, she has qualified for YSU's Dean List.

Pam Pogany, 1181 South Raccoon Road, Youngstown, is a senior majoring in both Elementary and Special Education. Pam is affiliated with the Zeta Tau Alpha Sorority where she is presently holding the position of Ritual Chairwoman. Pam was the chapter's past treasurer for two years. Pam is also a member of the Phi Sigma Kappa Little Sister Organization. During the summer, Pam is very active in the Beeghly Day Camp and Mahoning County School for the Retarded. She is the Head Counselor at the Beeghley Day Camp. Because of Pam's excellent accumulated grade point average of 3.94, she has been on the Dean's List for 9 consecutive quarters. Pam has also received such awards as the Youngstown Educational Foundation Scholarship, Zeta Tau Alpha Foundation Scholarship, Panhellenic Council Top Women Scholar, and "Who's Who Among

Jambar
October 13, 1978

KING ENGINEER

American College and University Students." Pam is also a member of the Kappa Delta Pi Honorary Society and was honored at three Honor Convocations. Pam is presently a C.C.D. teacher at the Immaculate Heart of Mary Church and also a member of the Austintown Historical Society.

Patricia McDowell, 2834 Poland Village, Poland, is a senior majoring in Art Education. Patricia has been active in the Delta Zeta Sorority where she is presently a Rush Counselor for Panhellenic Council. She is also a Rush Consultant traveling out of the Delta Zeta National Headquarters in Columbus, Ohio. Patricia received the Golden Crest Award for outstanding chapter officer at the Delta Zeta State Day this past year. Patricia has also been active in such committees as Greek Sing, Greek Week, Winter Weekend, Spring Weekend, and the--KCPB Art Gallery. She is also a member of the Sigma Chi Little Sister Organization here on campus. Patricia is working as a guide in the Youth Development Association. She has also qualified for the Dean's List.

Paul Shiller, of 1725 Wellington, Youngstown, is a senior majoring in Chemical Engineering. Paul is a member of the American Institute of Chemical Engineers, Omega Chi Epsilon, treasurer of Tau Beta Pi and the American Nuclear Society. Because of Paul's excellence in

(Cont. on page 11)

Homecoming

(Cont. from page 1)

academics with a 3.8 average, he, too, has been on the Dean's List and has won special scholastic honors. During his free time, Paul is a member of the Intramural co-ed. Bowling team and the Intramural Men's Bowling team.

Chester Tabaka, 4980 Middletown Road, New Middletown, is a junior majoring in Civil Engineering. Chester is a member of the Sigma Alpha Epsilon Fraternity where he holds the position of Sports Director. Chester is also a member of the American Society of Civil Engineers. He is active by participating in various Intramural Sports.

Paul Roberts, 850 Penn. Ave., is a senior majoring in Chemical Engineering. Paul is also a member of the Sigma Alpha Epsilon Fraternity where he holds the responsibility as House Manager. Paul is active in Intramural Sports on campus. He is also a member of the American Institute of Chemical Engineers.

The final voting for the 1978 Homecoming King and Queen will take place on Tues., Oct. 17 and Wed., Oct. 18 from 9 a.m. to 4 p.m. and 5 p.m. to 8 p.m. in the Kilcawley Center Arcade. All students are asked to take part in voting for their favorite King and Queen candidate. Current YSU ID cards will be required to be presented upon voting.

The six finalists will then be presented to the student body on Fri. Oct. 20 at the Friday Night Dance. They will also participate in the Homecoming Parade and Car Caravan on Sat., Oct. 21. The crowning of the King and Queen will take place at halftime at the Saturday football game against Akron. The Homecoming King, Queen and Court will then be guests of honor later that evening at the Alumni/Collegiate Dance which will be held at the Mahoning Country Club.

DEAN GEORGE E. SUTTON AS OSPE REPRESENTATIVE WAS ONE OF THE GUEST SPEAKERS AT THE REGISTRATION CERTIFICATE PRESENTATION IN CANTON, OHIO SEPTEMBER 18, 1978

24 Youngstown Vindicator
Thursday, November 4, 1976

ROTC SCHOLARSHIPS — Dr. Grorge E. Sutton, dean of Youngstown State University's Rayen School of Engineering, presents three-year Army scholarships to, from left, William N. Prokopyk, 628 Wesley Ave.; David E. Janesh of Struthers, and Michael E. Bistrica, 530 Catalina Ave. Sophomore engineering majors and ROTC cadets, the students will receive $100 monthly for up to 10 months each school year. Tuition, fees and books also are paid.

Civil engineers launch concrete canoe

American Society of Civil Engineers (ASCE) members captured a second-place win in the annual concrete canoe race held at Ohio State University May 8 and 9.

YSU was represented by an 18 foot long, 3 foot wide, 2 inch thick, solid concrete canoe named "Yellow Submarine."

Diane Turek, junior, and Sam Toppi, senior, both CAST, guide the YSU concrete canoe to a second place finish. (Phote by C. Ferguson)

The rules of the contest stated: The canoe must be constructed entirely by students within the last nine months, must be made of concrete, and must float while submerged.

ASCE members spent the past four months casting, sanding, and painting the canoe in preparation for the event. Eight-inch styrofoam beads were added to the concrete mix to make it lightweight, and steel mesh was added for strength.

YSU was one of ten universities participating in the meet which included bridge-building contests and conferences culminating with the race on Saturday.

YSU's canoe finished in the top ten of all their races.

Jambar - May 22, 1981

YSU SCHOLARSHIP WINNER — Youngstown State University engineering student, David C. Ezzo, left, of Youngstown has been awarded the Engineers Foundation of Ohio Lloyd A. Chacey, P.E. Scholarship for the 1981-82 academic year. Ezzo, a junior majoring in mechanical engineering, received the $1,500 scholarship on the basis of his excellent academic record and extensive range of collegiate activities. Congratulating Ezzo are Dr. Frank A. D'Isa, right, chairman of the mechanical engineering department, and Jack C. Ritter, associate professor of civil engineering and the Ohio Society if Professional Engineers University Chapter adviser.

Vindicator - May 23, 1981

Forms group under OWL umbrella uniting Business, Engineering women

To the Editor of *The Jambar:*

A Committee for Women in Business and Engineering has recently been formed under the auspices of the Organization for Women's Liberation (OWL). The purpose of the committee is to bridge the gap between college and the "real world" by developing and maintaining contacts in both.

We want to develop contact with and provide support for women seeking careers in non-traditional and/or male-dominated areas in an attempt to reduce the isolation and obstacles that women often encounter in the professions.

On June 23, we will have a joint organization meeting with the Youngstown Area Women's Network in the Scarlet Room, Kilcawley Center from 7 to 9 p.m.

Individuals in other fields who would like to join together for similar purposes are invited to develop their own committees within OWL and to attend the June 23 meeting.

In the meantime, anyone interested in joining the Committee for Women in Business and Engineering can contact the Organization for Women's Liberation at YSU. We will contact individuals as soon as possible concerning the times and locations of other meetings and activities. Questions and suggestions can be directed to Celeste Erkard, Linda McKinney, or Allinda Hostetler, c/o OWL.

Allinda A. Hostetler
5th year student
Engineering

Jambar - June 3, 1981

PRESS ADVISORY FOR IMMEDIATE DISTRIBUTION

Dr. Daniel J. O'Neill, Department of Speech, Communication and Theatre, College of Fine & Performing Arts; and Michael K. Householder, Department of Civil Engineering, School of Engineering; at Youngstown State University, were two of 40 Fellows recently selected to participate in the Administrative Development Fellowship Program for Department Chairpersons. Dr. O'Neill will be working on a project to strengthen the structure and relations within his department, and Dr. Householder will be working on a project to develop a college-wide data based system and implement a program for evaluating student records. Dr. William R. McGraw, Dean of the College of Fine & Performing Arts, nominated Dr. O'Neill and will be working with him on his project. Dr. George E. Sutton, Dean of the School of Engineering, nominated Dr. Householder and will be working with him on his project. The overall goal of the two-year program is to enhance administrative management skills at the departmental level, and has participants from all sectors of postsecondary education in northern Ohio.

The program is funded by grants from the Cleveland Foundation, the Ohio Board of Regents, and the federal Fund for the Improvement of Postsecondary Education, and is administered by Projects for Educational Development, a Cleveland non-profit organization. The program is a model project designed to demonstrate that a systematic, inservice experience can result in more efficient and effective administration of collegiate affairs. The first year's activities consist of topical sessions and work on a department development project. An administrative development handbook will be developed during the second year, based upon the first year's experiences, and will be nationally disseminated.

NEWS RELEASE 11/14/78

FLYING HIGH–Dave King, senior, mechanical engineering, was the winner of the "Go Fly A Kite" contest which was part of Kilcawley Center's fifth birthday celebration. King, the winner of this 10-speed bike, attributes his success to a light weight kite made of cellophane and a couple pieces of wood.

FRIDAY, APRIL 13, 1979
JAMBAR

THE YOUNGSTOWN VINDICATOR, SUNDAY, APRIL 15, 1979

Engineers Will Install Sutton

George E. Sutton, dean of engineering at Youngstown State University, will be installed vice president of Region 4 of the Ohio Society of Professional Engineers during the OSPE's 101st annual convention, set for May 11 and 12 in Dayton.

A 1948 mechanical engineering graduate of West Virginia State Univerity, Sutton received his masters from the University of Florida and his doctorate in 1957 from Michigan State University.

He has been chairman of the mechanical engineering department at the University of Nevada and is a member of the National Society of Professional Enginners, the American Society of Mechanical Enginners, the American Society of Heating, Refrigeration and Air-Conditioning Engineers and the American Society for Engineering Education.

He lives at 2602 Algonquin Drive, Poland.

YSU Enrollment Slows In Graduate Sciences

By JANE LAMB
(Vindicator Staff Writer)

Enrollment in science and engineering graduate programs at Youngstown State University has begun to slow down in line with trends throughout the country.

The National Sciences Foundation in Washington reports the growth in graduate enrollment in the sciences, including engineering, appears to have halted in the fall of 1977. Its fourth annual survey indicates a possible 1 percent drop.

Whether this is significant at this point, nobody can say. It could be only a temporary drop in the midst of generally increasing enrollment at all levels of higher education, NSF comments.

Different influences are behind the declining graduate level enrollment in science/engineering. YSU will be watching enrollment anxiously this fall as steelworkers benefits run out.

However, at least two engineering departments at YSU say the excellent job opportunities in private industry for their bachelor's degree graduates are luring students away from graduate study.

The range for science/engineering majors with a bachelor's degree is between $17,000 and $18,000 a year, Mary Smith, director of YSU career and placement office, reports. Top offers are to those with degrees in mechanical and chemical engineering, the highest in chemical engineering, department chairmen say.

Job opportunities are good generally. Mrs. Smith's placement office is even hunting for English teachers, almost impossible to place in recent years. Salaries are lower in education than for those in the sciences. They range from $11,000 to $14,000, she says. The greatest numbers in graduate programs at YSU are in education.

(Cont'd. on Page A-20, Col. 3)

INTERESTING ARTICLE ABOUT GRADUATE STUDIES IN RELATION ENGINEERING
VINDICATOR - SUNDAY, JULY 23,

(CONTINUED NEXT PAGE)

(Continued from Page One)

YSU's graduate enrollments generally have been going up steadily and impressively since 1968 when it became a state university, rising from 575 in 1969 to a peak of 1,855 in the fall of 1976. It was 1,824 in 1977 but still higher than in 1975.

Science and engineering peaked in 1975 with a graduate enrollment of 176 and has dropped off slightly since then. They had 155 in 1977 but consideraly more than in 1974. No one knows what this fall will bring.

So far YSU has not felt the impact of the valley's steel problems but benefits for unemployed steel workers will begin to run out in September and October.

In the light of the local steel crisis, Dr. Leon Rand, dean of the graduate school, believes the slight turndown may actually represent an improvement for this area, since YSU could have lost graduate students rather than maintaining a holding pattern.

Factors contributing to the leveling trend are the same here as elsewhere, he observes.

NSF lists as major causes a more favorable job market for graduates, continuing decrease in federal support for graduate science students, expiration of G.I. Bill benefits which cut graduate veteran enrollment by 38 percent in the fall of 1976 at institutions of higher education, and the continued increase in tuition and living costs at the undergraduate level.

Chairmen of most graduate departments at YSU think there has been little impact here from the expiration of G.I. benefits or decreasing federal support. Dean Rand suggests a fourth factor at work in the Youngstown area might be that industry is not putting as much income into research and development because of the tight money situation.

The fact is that the great majority of YSU graduate students are part-timers already employed and working toward degrees a few courses at a time. This applies particularly in the engineering fields. Companies themselves often send students for advanced study.

Yet, the YSU academic community watches the leveling off in graduate study with concern.

Dean Rand believes the oversupply which plagued doctorate and other graduate job seekers in the early 1970s will catch up, causing a shortage again. Those with advanced degrees affected by the surplus of the early 1970s have taken work outside their fields and won't go back, he comments. He notes the importance to Youngstown for those with advanced training as it attempts to attract new industry here.

Mrs. Smith also shares the concerns of academia that this could presage a lack of teachers in higher education.

Dr. Frank D'Isa, chairman of mechanical engineering at YSU, says salaries for bachelor degree graduates in mechanical engineering around $18,000 are definitely the reason for the leveling off. One graduate was offered $19,800 by a large company. The university can't offer more than $18,000 or $19,000 for a Ph.D. to teach, he remarked, although the advantages of teaching nine months and other advantages have an affect afer 20 years or so.

Highest job offers are going to chemical/materials science engineering majors with B.S. degrees, Dr. T.K. Slawecki, chairman of that department, comments. None of the offers is under $18,000, and the highest offers are going to women, who make up a high percentage in the undergraduate program.

Different factors are at work in YSU's other graduate programs — mathematics, chemistry and biology — although their chairmen have noticed a similar slowing down. Most students in chemistry and biology don't major in these fields since they are going into the health field, such as medicine, pharmacy, or other professional work, so are not affected by salary attractions, educators report.

Dr. Dean Brown, chairman, notes a slight decline in graduate mathematics students, but says most are teachers who already hold jobs.

The big jump in undergraduate math enrollment comes from the interest in computer science, reflected in an increase from 40 to 140 students in three years, he says. YSU is developing a graduate program in computer science which he predicts could increase enrollment if it is adopted.

He points out the number of job offers to undergraduates this year was twice that of the previous year, and salary offers have gone up 10 percent.

Figures he quoted from the College Placement Council in March show bachelor degree students in computer science are being offered $14,880 with job offers up 86 percent over last year.

Dean Rand says the steel crisis certainly hasn't shown up in graduate enrollments for science/engineering. He believes some skilled people have been lost to the area but not so many as one might think.

Mrs. Smith reports YSU's career placement office has found jobs for some, and some still continue courses under industry scholarships. She knows others have found other jobs, been employed by other area companies, or created their own jobs. Jobs seem to be there, but it could hit this fall, she remarks. But so far as the placement office is concerned, it seems as if nothing has happened.

NSF reports that academic employment of scientists/engineers rose at doctorate institutions by 3 percent and at master institutions by 5 percent between January 1976 and January 1977 and is expected to continue.

Eastman Kodak Gives YSU $1,800

Vindicator 12-7-78

Youngstown State University has received $1,800 in employee/alumni grants from the Eastman Kodak Co. in recognition of the contributions to the photography corporation's success by three recent graduates.

The grants, each worth $600, were made in behalf of the work done by Zena Grzywna Wych and Olga Malito Pilak, both YSU class of 1973, and George E. Zurawick, '69.

The money will go toward scholarships to students enrolled in the university's Chemical Engineering Department. Winners will be announced later.

Vindicator - December, 1978

Scholarships for winter quarter, 1979

YSU engineers place sixth in competition

"We were up against the top schools in the nation - Penn State, Purdue, Ohio State, Georgia Tech. And we came out sixth. I'm not aware of any other campus student group that has gotten this kind of recognition from their national professional organization."

So said Dr. John L. Kearns, faculty advisor for the YSU chapter of the American Institute of Industrial Engineers (AIIE), which recently placed sixth in national chapter development.

Criteria used for the selection was overall growth and activity of the student chapter. This includes field trips, primarily plant visits, membership growth, speakers and other activities.

Part of their other activities included a contest for which the AIIE members built rubber - band powered vehicles. "The object was to see who could build their vehicle closest to a formula where it would go up a ramp the fastest and drop off the closest to the end," said Kearns.

In addition to the contest, the YSU AIIE student chapter has brought in three speakers during the 1977-78 year. Eight members attended a convention in February at Ohio State and four attended the May national conference in Toronto.

"The reason they got the award was that they had good leadership. Part of that leadership was by inspiring and motivating the membership," Kearns added. Officers for the year were Frank Gartolic, president; Mark Shasteen, vice-president; and Keith Carnahan, treasurer.

The 28 members of the local student chapter found themselves in competition with 60 or 70 other chapters from almost every engineering school in the United States, Canada and Mexico. Ohio State, General Motors Institute, and Virginia Polytech were among the schools that came in ahead of YSU, but the local chapter led such schools as Penn State and Purdue.

JAMBAR - THURSDAY, JULY 27, 1978

Engineering prof selected for natural disaster seminar

Dr. Jack D. Bakos, Jr., associate professor of Civil Engineering, YSU, has been selected as a participant in a nationally sponsored seminar dealing with natural disasters.

The week long seminar,' the Summer Institute on Multi-protection Design, will be held at the Defense Civil Preparedness Agency's (DCPA) Staff College in Battle Creek, Michigan, July 31-Aug. 4.

Dr. Bakos reports the seminar will consist of four principal structural design courses including earthquake design, fire, wind engineering, and energy conservation. Bakos will be enrolled in the earthquake division.

Funds for the seminar have been provided by the DCPA, National Science Foundation and Department of Energy.

A member of the YSU faculty since 1969, Dr. Bakos is a specialist is structural mechanics. Prior to joining the University, he served the U.S. Army Corps of Engineers.

JAMBAR
THURSDAY, AUGUST 3, 1978

Engineering student transforms hobby into profitable enterprise

by Kim Becker

If you admired the miniature stained glass windows and jewelry boxes on display in Kilcawley, then you'd like to meet the artist.

The *Jambar's* interesting Student of the week is 25-year-old Bill Bailey, senior, engineering. Although he sold several small pieces at the Craft Fair during Spring Week, his real specialty is tiffany lamps. These range in price from $100 to $500.

Bailey will be graduating from YSU in August with a degree in electrical engineering. At the present his main interest is in designing and selling his lamps.

"I'll eventually get into electrical engineering, but for awhile I'd like to make these (lamps)," Bailey stated.

Raised in Garrettsville, Ohio, Bailey moved to Youngstown and has been attending YSU off and on since 1971.

Bailey first became interested in his hobby when a friend showed him his collection of stained glass. After reading some books and looking through catalogues, Bailey began trying out his own ideas. During the past year, he has become seriously involved with the craft.

To keep down the expenses, Bailey works in part of his basement, which has been converted to a workroom. The tools involved in the actual construction amount to only about $50 - along with a little improvising. Bailey has to go to New York to buy the glass, which is sold in sheets. Although the glass can be mailed, Bailey visits a friend in New York City so the trip itself is also inexpensive.

The real expense goes into the time that is involved, Bailey said. For example, Bailey's most recent lamp has taken him approximately 40 hours.

Bailey likes to start with an original design, which he feels requires as much work to execute, if not more, than the actual construction requires.

"I don't very often copy things 100 per cent because I'm always picking up different ideas," Bailey said.

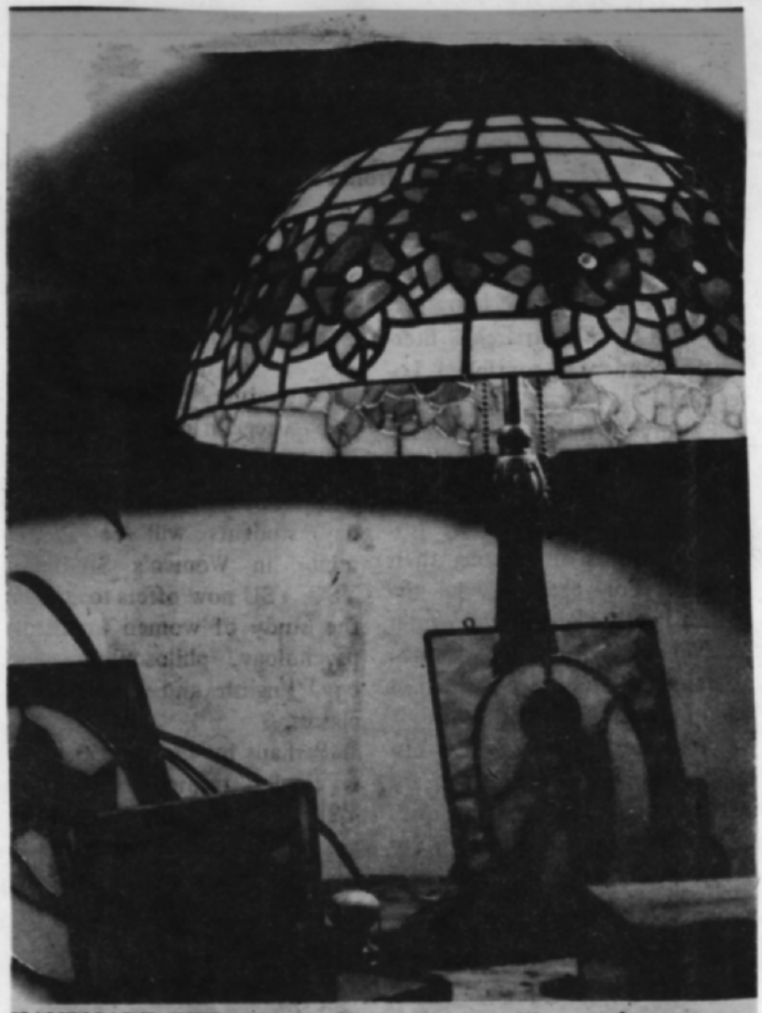
The next step is to draw the design on the mold. Bailey's talent at improvisation is evidenced by his constructing one particular mold out of paper machē modeled from a large mixing bowl.

Next, the glass pieces are cut from the large sheet to fit the design and then are individually wrapped in copper foil. Precision and patience are required to cut the glass to fit the design exactly right, Bailey said. The lamp is priced partly according to the number of pieces of glass involved in the design.

The final step involves soldering all the pieces of the lamp together.

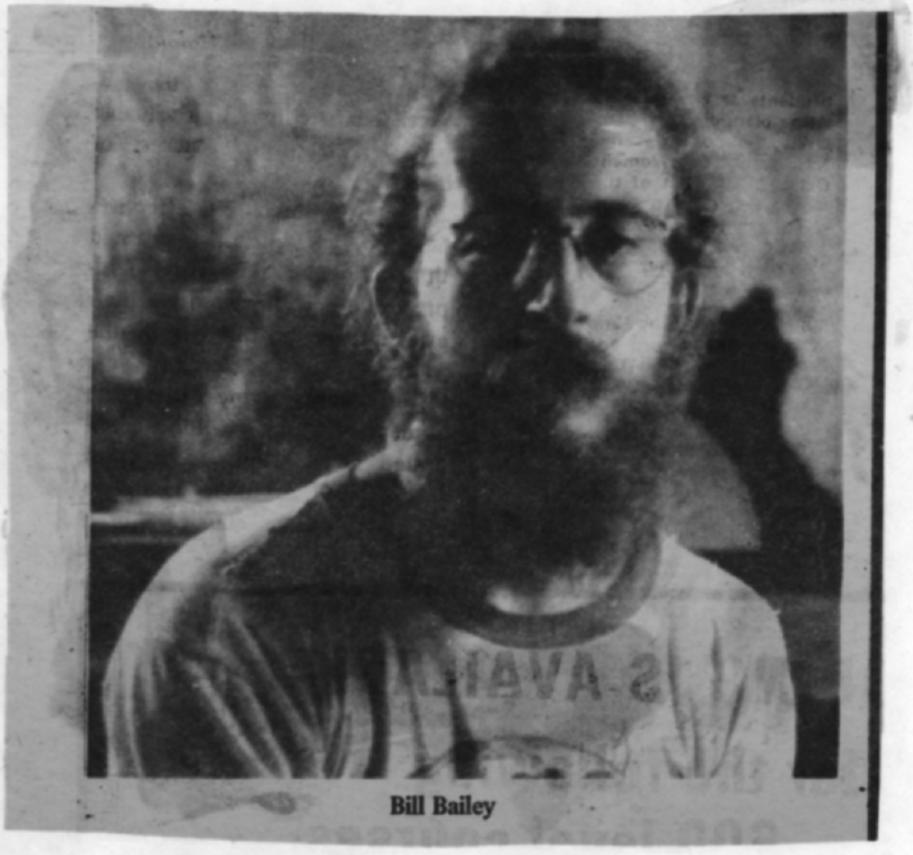
Bailey feels that stained glass was taken for granted for awhile but that people are again becoming interested in it. For this reason, he would like to prepare a large amount of his work and travel across the country selling it.

At present, Bailey is selling through several antique dealers. If his business looks good, Bailey would someday like to sell on consignment through one particular store.



HANDMADE TIFFANY - - - Bailey can custom-make his wares to his customer's design. Some samples of his work, shown here, are a tiffany lamp, two window hangings (right and far left), and a glass jewelry box (foreground.) photos by Bob Camp

Continued from previous page.



Bill Bailey

Engineering Dean Becomes New Mahoning Valley Chapter President

George Sutton, P.E., (left) engineering dean at Youngstown State University, recently became the new president of the Mahoning Valley Chapter of the Ohio Society of Professional Engineers during installation ceremonies in May. He is shown here with the outgoing president, Roy Hall, P.E.

This picture was in the Ohio Engineer newspaper published by the OSPE.

The Dean had been Vice President of the MVSPE June 1977-June 1978 at which time he was elected to the office of the President for the year June 1978 to June 1979.

He was Secretary of the MVTSC from June 1977-June 1978. He was elected Vice President for the year June 1978-June 1979.

July, 1978

Dr. Szirmay Views Missile Launch

Dr. Leslie V. Szirmay, Youngstown State Universty associate professor of engineering, recently returned from the Kennedy Space Center at Cape Canaveral, Fla., after witnessing the submarine launching of a Poseidon missile.

Dr. Szirmay was one of 30 college and university professors invited by the Navy for a three-day review of the spacecraft facilities and to observe the demonstration and shakedown operation of the Patrick Henry, a nuclear powered sub. The missle system testing is required each time a Poseidon submarine completes an overhaul or conversion.

A strong proponent of the Navy's advances in nuclear engineering, Dr. Szirmay teaches engineering and materials science at the University specializing in nuclear reactors, petrochemistry and absorption.

Vindicator, July 1978

14 at YSU Receive Awards

Dow Chemical Company and Diamond Shamrock Corporation recently awarded scholarships, totaling $4,000, to 14 Youngstown State University students.

The Dow scholarships were awarded in memory of the late Dr. John A. Stevens who was a member of the university's chemical engineering faculty and a long time Dow employee.

University students receiving $300 Dow scholarships are Scott Campbell, 2613 Hamilton Ave., Poland; Paul Hartley, RR 1, Fowler; Cynthia Robinson, 3423 Tall Oaks Lane; Gary Smaldino, 202 Smithfield St., Struthers; Richard Street, 2292 North River Road, Warren; Louis Isabella, 108 Crestview Drive, Butler, Pa.; Lani Whittaker, 6676 Shawbutte St., Poland; Donald Hurt, 570 Wakefield Drive, Cortland; Thomas Secich, 175 Fox St., Hubbard, and Paul Shiller, 1725 Wellington Ave.

Recipients of $300 Diamond Shamrock scholarships are Chester Porzucek, 1856 Niles-Cortland Road, Warren, and Susanne DiFrangia, 527 E. Liberty St., while $200 scholarships went to Charles Rader, 749 E. Prospect St., Girard, and Jeffrey Stassin, 244 Adelaide, Warren.

Youngstown Vindicator
July 18, 1978

Everyone has a "ball" at the ball held this year at the Embassy in Poland, Ohio.

All the VIP's ready for the highlight of the ball - the announcement of the Engineer of the Year and the Engineers' Sweetheart for 1978.

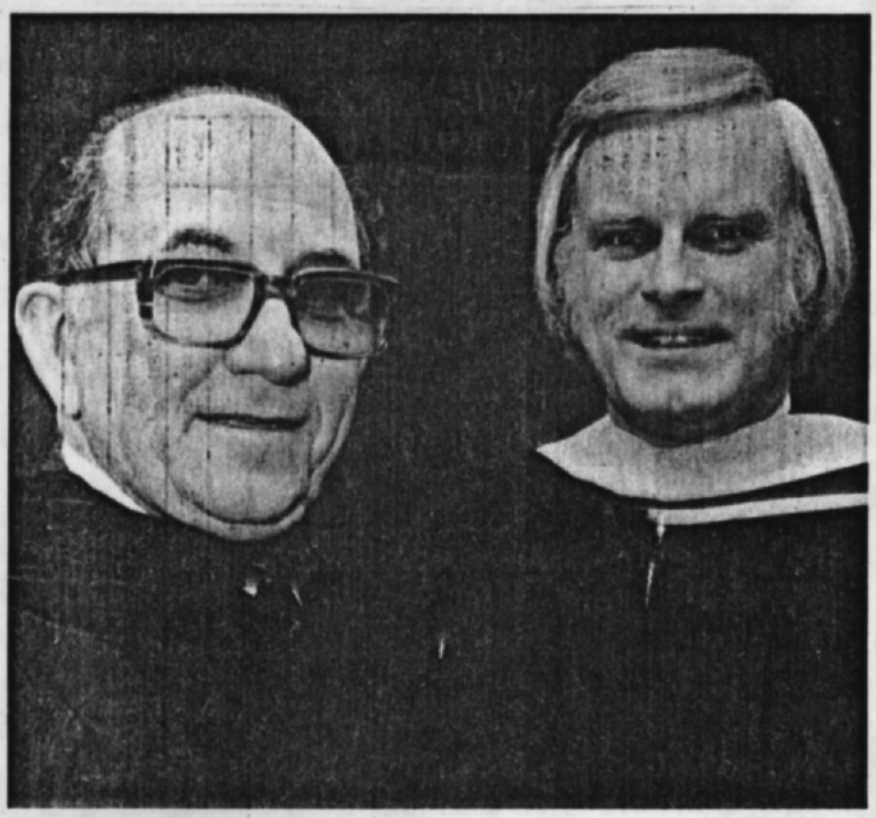
Steve Duca and the other candidates getting ready for the big announcement!

ENGINEERS' BALL - 1978

Dean Sutton congratulating Steve Duca, (Electrical Engineering) on being elected as Engineer of the Year by student vote.

Miss Bonnie Oblinger (Electrical Engineering) last year's Engineers' Sweetheart saying her "goodbye" with Jeff Taft (Electrical Engineering) as M.C. Vice President Neil Humphrey (Financial Affairs) and the Dean looking on.

Pam Harding (Electrical Engineering) registering great surprised as she hears she is Engineers' Sweetheart for 1978. Standing beside her are the other candidates and of course, Dean Sutton admiring all the beauty before him!



MERIT AWARD RECIPIENTS – Two YSU alumni who head academic departments at the University were honored during Winter Commencement ceremonies. Dr. Frank A. D'Isa (left), a 1943 graduate and chairman of mechanical engineering, and Donald W. Byo, a 1954 graduate and director of the Dana School of Music, received Watson Merit Awards in recognition of "significant and valued leadership." A faculty member since 1947, D'Isa is a full professor and has been active in the School of Engineering and University at large. Byo, an associate professor who joined the faculty in 1962, is active in the field of music as a performer and conductor. The $1000 award to each was made possible by the Walter E. and Caroline H. Watson Foundation, which has endowed awards to distinguished YSU faculty since 1959.

Graduation, Winter Quarter, March 25, 1978
April, 1978 edition - "Youngstown Today"
Published by Alumni and Friends

Robert J. Sorokach, chairman of the YSU industrial engineering department, was recently certified as a Professional Engineer in Ohio.

Chairman, Industrial Engineering
1961-Graduate-Youngstown State University
Obtained P.E.-April, 1977
"Youngstown Today"- April, 1978 Edition
Published by Alumni and Friends

Henry Sheng: "A Remarkable Engineer And Person"

EDITOR'S NOTE: *The following is a guest feature article written by Sylvester M. Ulicny, P.E., president of Trumbull Consultants, Inc., Canfield, Ohio, and a past vice president of the Ohio Society of Professional Engineers, Region 4.*

If someone were to ask, "Is he a concert pianist? gourmet cook? engineering professor? or lecturer on modern China?" — In the case of **Henry P. Sheng, P.E.**, he's all of these.

Only a small percentage of engineers can enjoy a symphony or choral concert. But to be the piano accompanist to a concert orchestra during a performance — well, that's something different.

And that's what Dr. Henry Sheng, a member of the chemical engineering faculty at Youngstown State University, did a year ago when he accompanied the Dana Music School Symphony Orchestra in the premiere performance of the "Mongolian Suite" and actually played several solo passages during its performance.

This is a major symphony in three movements, and through the persistent research of Sheng, it was brought to the attention of the university's music director, who immediately suggested its performance and the preparation of the orchestral parts by Sheng. The work was enthusiastically received by an audience of over 1,100.

To be a dinner guest of Sheng's is also a treat and an experience. Since he is a gourmet cook of Chinese foods, it is easy to get filled on all the delicate hors d'oeuvres, then not to have space when the main course arrives.

He visited mainland China several years ago, where he was born, and traveled extensively. He knows much more about its conditions than most visitors and reporters ever get a chance to learn. Consequently, he's in much demand as a speaker on the subject.

As a technical lecturer at Youngstown State University, Sheng talks on resource recovery of energy and materials and pollution abatement. He is well liked and respected by his students in the chemical engineering department, and some of his former students still correspond with him years after graduation.

"A REMARKABLE ENGINEER AND PERSON"

LEFT US FOR GREENER FIELDS

DR. HENRY P. SHENG, P.E.
LEFT YSU TO GO TO
CALIFORNIA'S POLYTECHNICAL
INSTITUTE (UNIVERSITY OF
POMONA) IN FALL, 1978.

Rendinell Gets DuPont Post in Puerto Rico

J. Scott Rendinell, a native of Youngstown, has been appointed by the E. I. du Pont deNemours & Co. to head the biochemical division of Caribe Biochemicals Inc., an international department of DuPont in Puerto Rico.

Rendinell, as assistant to the plant manager, is one of two Americans in the plant and , in this new facility, will develop the bichemical division and train Puerto Ricans in the operation.

Rendinell attended Ohio University and graduated from Youngstown State University as a chemical engineer. He joined DuPont in 1974 at its Belle, W. Va., plant, where he served as an engineer in the biochemical and environmental control areas.

Only 26, he was selected for the important Puerto Rican post from DuPont's huge engineering corps.

A graduate of Cardinal Mooney High School, he is the son of Mr. and Mrs. Nicholas E. Rendinell of 1543 Lynn Ave.

J. Scott Rendinell

Graduated Winter 1974
Vindicator Spring 1978

 May 3, 1978

Wedding Bells for the Shengs After Fighting Bureaucratic Nightmare

By CHARLES ROHRBACHER

PALO ALTO — More than five years after they first met, a Youngstown State University (Ohio) professor and a Shanghai medical practitioner were finally able to to marry in Palo Alto recently.

Prof. Henry P. Sheng, originally from Shanghai, and Sue H. Chao, daughter of a dispossessed Shanghai banker, spent four years trying to wade through the almost impassable quagmire of redtape and bureaucratic indecision they encountered when they decided to marry in the spring of 1973.

The Shengs.

EFFORTS

Their efforts to find some diplomatically acceptable way for them to be united, including a battery of letters and personal visits to U.S. and Chinese diplomats, interviews with U.S. Congressional and State Department officials and, finally, a letter to Vice Premier Teng Hsiao-ping, asking him to intervene and allow them to marry.

Sheng believes that this letter to Teng, which included an *East/West* clipping on a similar problem and its solution, was the decisive factor in obtaining permission for his prospective wife to leave Shanghai for Hong Kong last December.

It appeared that "their officials are so afraid of making a decision lest they sould get blamed later," said Sheng, explaining the bureaucratic shuffle he and Chao got from Chinese officials.

FRIENDS

Prof. Sheng was introduced to Sue Chao when he made a visit to China in 1972. The parents of the two young persons were old friends for many years. The two fell in love and after a period of correspondence they decided to get married.

Sheng then began the long process of botaining approval for Chao to leave China when he contacted the Chinese Liaison Office in Washington, D.C. in November 1973. Chao, who was a talented pianist before the Cultural Revolution, was working as an acupuncturist and herbalist in a Shanghai department store clinic. After Sheng applied for her exit, she too applied for an official passport at the neighborhood Public Security Bureau to leave China. Neither heard officially from the Chinese government for four years until approval was suddenly granted last October.

Although Sheng was grateful for the help of the State Department and the Immigration and Naturalization Service in Cleveland in trying to find a solution to their difficulty, his efforts met with almost as little success there as with the Chinese government.

"I wrote to Scretary Henry Kissinger; he sent me to former ambassador George Bush," Sheng said. "Bush contacted the U.S. Liaison Office in Peking, and Liaison officials had me contact Senator Henry Jackson, and so on."

APPROVAL

When approval finally came, Chao was told by a sympathetic Chinese official that Sheng's dogged peristence and the letter to Vice Premier Teng had tipped the scales in her favor. Undoubtedly the change in the political climate which occurred after the fall of the 'gang of four' also helped. "The situation in China today has definitely changed for the better," added Sheng.

In an attempt to break the deadlock during their long wait, Sheng had even offered to return to China and to serve there. "But not until last year, at least, American-trained Chinese scientists weren't welcome," Sheng said.

Sheng, the son of Mrs. Vena Y. Sheng of Palo Alto, received his Ph.D. in chemical engineering from the University of Oklahoma. He is a professor Youngstown State University and is now a visiting professor at the University of California at Berkeley. Sheng is also a concert pianist, and has devoted much time to promoting contemporary Chinese music. (*East/West* 4/27/77) □

Dr. Sheng was in the Department of Chemical Engineering and Materials Science for 10 years. After his marriage he decided to resign and teach at the California State Polytechnic University. His resignation was submitted June 10, 1978.

ysu news

Youngstown
State
University
Youngstown,
Ohio 44555
Telephone
742-3520

RELEASE:

Stephen R. McClure, News Bureau Editor

Mailed: May 9, 1978

YOUNGSTOWN, O. -- Youngstown State University is the recipient of an $11,700 grant from the National Science Foundation (NSF) in Washington D.C., according to an announcement by YSU President John J. Coffelt.

The grant is in support of a project entitled "Process Dynamics/Control Experiment Development." The project is under the direction of Dr. Tadeusz K. Slawecki, chairman of the YSU department of chemical engineering and materials science.

Dr. Slawecki said the NSF grant will allow his department to develop experiments for a new course for seniors called Process Dynamics Laboratory, which will complement a theoretical course.

# # #

YSU News Bureau
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FYI: Dr. Slawecki
4446 Mellinger Rd.
Canfield, O.

RECEIVED
MAY 24 1978
SCHOOL OF ENGINEERING

RECEIVED
MAY 10 1978
DEPT. OF CHEM. ENGINEERING
AND MATERIALS SCIENCE

ENGINEER'S ANNUAL SPRING PICNIC

Sponsored By

The William Rayen School of Engineering
Dean's Council

Coalburg Lake – Sheet & Tube Picnic Grounds

Softball and Volleyball Tournament
Beer and Food Provided

May 21, 1978 **11 A.M. - ?**
Donation: $2.50, $3.00/door, $10.00/family

Every year the highlight of the picnic is a softball competition. The faculty forms a team, plus each of the 5 engineering disciplines have a team. This year the game was won by the students of Civil Engineering.

Miss Laurie Johnston was the first woman to be chosen Engineer of the Year by student vote in 1977. She graduated from Chemical Engineering in June 1977. Wedding date, Saturday, June 3, 1978.

Johnston-Moore Rite Held; Bride, Groom are Engineers

Miss Laurie Jill Johnston, a chemical engineer with the Packard Electric Division of the General Motors Corp., became the bride of David James Moore, a metallurgist employed by the Republic Steel Corp., in a late afternoon ceremony Saturday, June 3, in the Westminster Presbyterian Church. Rev. George O. Mahaffey presided, and a reception followed at the Maronite Center.

Mrs. Moore, daughter of Mr. and Mrs. Harry D. Johnston of Warren, is a 1977 graduate of Youngstown State University with a bachelor's degree in chemical engineering. Mr. and Mrs. James H. Moore, Poland, are the parents of the groom, who holds a metallurgical engineering degree from Y.S.U. Upon return from a honeymoon in Quebec, Canada, the couple will live in Canfield.

Carrying a bouquet of roses and baby's breath, the bride wore a gown of organza and alencon lace with a matching veiled picture hat. Miss Karen S. Wagner and Mrs. Fred Efler, maid and matron of honor, were attired in white cotton skirts and eyelet blouses, and bridesmaids in peach ensembles were Miss Paula Carpentieri, Mrs. Ray Moore, Miss Ellen Yount, a junior attendant, and Miss Cindy Moore, flower girl. All wore white picture hats and carried tiger lilies, carnations and stephanotis.

Dennis J. Giancola was best man, and ushering were Calvin Jones, Ray Moore, Robert Brownlee and Doug Brownlee.

Mrs. David J. Moore Abey

Student charter presented

Nuclear Society formed at YSU

A student branch of the American Nuclear Society has been formed at YSU, and the presentation of the charter was received recently from Dr. Walter Meyer, past president of the ANA.

Ronne Proch, junior, engineering, is president of the student chapter and Joseph Leone, junior, engineering has been named as vice president.

The student branch of the ANS is provided the opportunity for students interested in nuclear science and engineering to become involved through active participation in ANS activities on all levels.

The organization was formed last October, but received their charter on May 15 at their inaugural dinner. Present at the meeting were representatives of Rep. Charles Carney and Mayor J. Phillip Richley, Dr. John J. Coffelt, and the organization's advisor, Dr. Leslie V. Szirmay, associate professor of chemical engineering.

Dr. Meyer said in his inaugural speech that the energy crisis in the United States could only be solved through the use of nuclear power. He further stated that nuclear plants are pollution free and have no dangerous radiation.

Dr. Leslie v. Szirmay - Associate Professor
Chemical Engineering (and Materials Science Department)
Jambar, Friday, May 26, 1978

THE YOUNGSTOWN VINDICATOR, SUNDAY, JUNE 4, 1978

SYMBOL OF UNITY — Observing the symbol of the national engineering movement are: facilities manager Floyd Shick, General Electric Co., Niles; Dr. John Kearns, associate professor of industrial engineering at YSU; Dr. John Bakos and John Ritter, both associate professors of civil engineering; and Dr. George E. Sutton, dean of the School of Engineering.

29 Are Installed at YSU Into Order of Engineers

Youngstown State University's William Rayen School of Engineering installed 29 new members into the "Order of the Engineer" during ceremonies held on campus.

The "Order of the Engineer," according to Dr. George E. Sutton, dean of the School of Engineering, is "a movement to bring unity among professional engineers and to bolster our profession's ethics."

The symbol of the order is a stainless steel ring worn on the little finger of the working hand, wedding the engineer to his profession.

YSU inductees include 15 department chairman. They are: Frank A. D'Isa, Mechanical Engineering; Matthew Siman, Electrical Engineering; Robert J. Sorokach, Industrial Engineering; and Tadeusz K. Slawecki, Chemical Engineering.

Other faculty members were: Gary P. Maul, Leslie Szirmay, Dr. Irfan Khan, Richard W. Jones, Henry Sendaula, Raymond E. Kramer, and Shaffiq Ahmed, Prakask Damshala, John Petrek, Samuel J. Skarote and Frank J. Tarantine.

15 students were also admitted: Frank Bartolic, Steve Duca, Charles Tomazin, Jeff Taft, Paula Jagatich, Patricia Harvey, Robert Linsley, Dominic Dannessa and David Bailey.

Also included were: Bonnie Oblinger, Ed Burnick, James Varner, Marge Martinko and Richard Claude Peoples.

The first ORDER OF THE ENGINEER installation ceremony to be held in the School of Engineering. Following the ceremony a plaque was presented to retiring Dean Michael J. Charignon by spokesman for the Engineering School faculty and staff, Dr. Frank A. D'Isa. The plaque was inscribed as follows:

Colonel M.J. Charignon, Ph.D.,P.E.
in recognition of his outstanding accomplishements as
DEAN
William Rayen School of Engineering
Youngstown State University
1956 - 1976
From
The Faculty and Staff

29 new members installed in Order of the Engineer

William Rayen School of Engineering has installed 29 new members into the Order of the Engineer at ceremonies held on the YSU campus Wednesday, May 31.

The Order of the Engineer, according to Dr. George E. Sutton, dean of the YSU Engineering School, is more than an engineering organization. "It's a movement to bring unity among professional engineers and to bolster our profession's ethics."

Until a few years ago, engineers in this country had no identification other than their completed projects. Now, they have an appropriate symbol, a simple stainless steel ring worn on the little finger of the working hand.

The Order of the Engineer became active in the United States in 1970. According to figures provided by the Ohio Society of Professional Engineers, about 3,500 engineers in Ohio belong to the Order.

YSU inductees include 15 members of the University faculty. They are: Dr. Frank A. D'Isa, chairman, mechanical Engineering; Dr. Prakash Damshala, mechanical engineering; John Petrek, mechanical engineering; Dr. Matthew Siman, chairman, electrical engineering; Robert J. Sorokach, chairman, industrial engineering; Dr. Tadeusz K. Slawecki, chairman, chemical engineering; Prof. Samuel J. Skarote, electrical engineering; Dr. Frank J. Tarantine, mechanical engineering; Gary P. Maul, industrial engineering; Dr. Leslie Szirmay, chemical engineering; Dr. Irfan Khan, civil engineering; Dr. Richard W. Jones, chemical engineering; Dr. Henry Sendaula, electrical engineering; Raymond E. Kramer, electrical engineering and Dr. Shaffiq Ahmed, chemcal engineering.

Also inducted into the Order of the Engineer were 14 YSU students: Frank Bartolic, Steve Duca, Charles Tomazin, Jeff Taft, Paula Jagatick, Patricia Harvey, Robert Linsley, Dominic Dannessa, David Bailey, Bonnie Oblinger, Ed Burnick, James Varner, Marge Martinko, and Richard Claude Peoples.

Assisting Dean Sutton in the presentation of rings and certificates were: Floyd Shick, Manager of Facilities, General Electric Co., Niles; Dr. Jack Bakos, civil engineering; Dr. John Kearns, industrial engineering and John Ritter, civil engineering.

Jambar June 15, 1978

YSU installs engineers

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Until a few years ago, engineers in this country had no identification other than their completed projects. Now, they have an appropriate symbol: A simple stainless steel ring worn on the little finger of the working hand, wedding them to their profession.

YSU inductees include 15 members of the University faculty. They are: Dr. Frank A. D'Isa, chairman, Mechanical Engineering dept., 4120 Lockwood Blvd., Boardman; Dr. Prakash Damshala, asst. prof., Mechanical Engineering dept., Naylor-Lloyd Rd., Girard; Prof. John Petrek, associate prof., Mechanical Engineering dept., 2675 E. Calla Rd., Poland; Dr. Matthew Siman, chairman, Electrical Engineering dept., 109 S. Hazelwood Ave., youngstown; Prof. Robert J. Sorokach, chairman, Industrial Engineering dept., 110 Mill Run Dr., Liberty; Dr. Tadeusz K. Slawecki, chairman, Chemical Engineering dept., 4446 Mellinger Rd., Canfield; Prof. Samuel J. Skarote, associate professor, Electrical Engineering dept., 582 Edward Lane, Campbell; Dr. Frank J. Tarantine, Mechanical Engineering dept., 1221 Cherokee Dr., Yo; Prof. Gary P. Maul, asst. prof., Industrial Engineering dept., 8521 Bayberry, N.E., Warren; Dr. Leslie Szirmay, associate prof., Chemical Engineering dept., 948 Winona Dr., Yo.; Dr., Irfan Khan, assistant prof., Civil Engineering dept. 7506 Oregon Trail, Boardman; Dr. Richard W. Jones, associate prof., Chemical Engineering dept., 15058 Palmyra Rd., Diamond, O.; Dr. Henry Sendaula, assistant prof., Electrical Engineering dept., 461 Gypsy Lane, Youngstown; Prof. Raymond E. Kramer, associate prof., Electrical Engineering dept., 441 Arbor Circle, Liberty and Dr. Shaffiq Ahmed, Chemical Engineering dept., 269 Redondo Rd., Youngstown.

Also inducted into the "Order of the Engineer" were 14 YSU students: Frank Bartolic, Birchwood Dr., Transfer, Pa.; Steve Duca, 831 Almasy Dr., Campbell; Charles Tomazin, 9382 Cain N.E., Warren; Jeff Taft, 3936 Cascade Dr., Youngstown; Paula Jagatich, 33 Stevenson Rd., Masury; Patricia Harvey, 4 Trumbull Ct., Yo.; Robert Linsley, 6241 Appleridge, Boardman; Dominic Dannessa, 1403 E. Boston Ave., Youngstown; David Bailey, 5708 Palmyra Rd., Warren; Bonnie Oblinger, Box 7, Warren-Salem Rd., N. Jackson; Ed Burnick, 562 Fowler St., Cortland; James Varner, 4031 Glenwood Ave., Boardman; Margé Martinko, 2477 Knollwood Ave., Poland and Richard Claude Peoples, R.D. 2, Volant, Pa.

Assisting Dean Sutton in the presentation of rings and certificates were: Floyd Shick, Manager of Facilities, General Electric Co., Niles; Dr. Jack Bakos, associate prof.

Tribune Chronicle, Warren, O., Fri., June 2, 1978

YSU order has induction

YOUNGSTOWN — Youngstown State University's William Rayen School of Engineering has installed 29 new members into the "Order of the Engineer" at ceremonies held recently on the campus.

The Order of the Engineer is "a movement to bring unity among professional engineers and to bolster our profession's ethics, according to Dr. George E. Sutton, dean of the YSU Engineering School. He said the order bcame active in the United States in 1970 and boasts 3,500 members in Ohio.

Area YSU students inducted into the order include: Frank Batoloic of Transfer, Pa.; Charles Tomazin and David Bailey of Warren; Paula Jagatich of Masury; Bonnie Oblinger of North Jackson; and Ed Burnick of Cortland.

Several YSU faculty members also were inducted into the order, including: Dr. Prakash Damshala of Girard; Professors Robert J. Sorokach and Raymond E. Kramer of Liberty; Professor Gary P. Maul of Warren; and Dr. Richard W. Jones of Diamond.

Poland Union 6/21/78

Two are installed at YSU

YOUNGSTOWN—Youngstown State University's William Rayen School of Engineering has installed 29 new members into the "Order of the Engineer" at ceremonies held on the YSU campus recently.

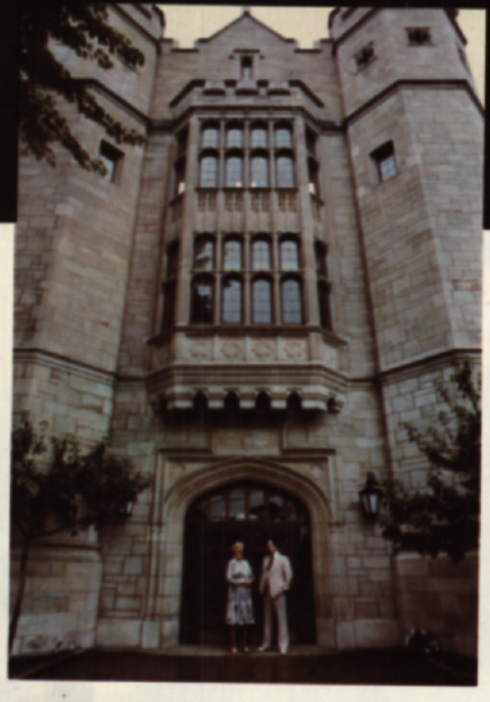
The "Order of the Engineer," according to Dr. George E. Sutton, dean of the YSU Engineering School, is more than an engineering organization. "It's a movement to bring unity among professional engineers and to bolster our profession's ethics."

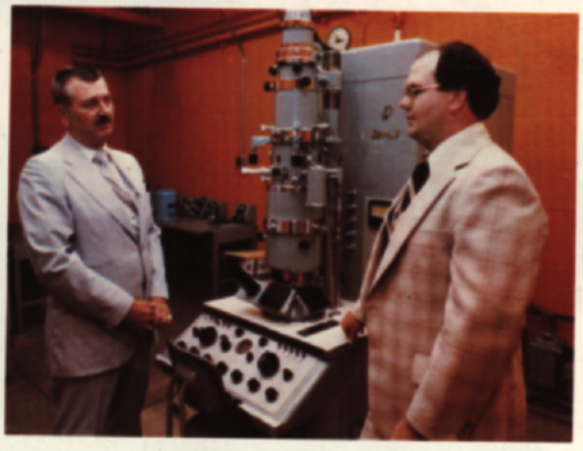
John Petrek, associate professor, Mechanical Engineering department, 2675, of E. Calla Rd., Poland was one of 15 members of the YSU faculty to be inducted into the "Order of the Engineer."

Marge Martinko, 2477 Knollwood Ave., Poland, joined 13 other YSU students that were inducted into the association.

up close

BEGINNINGS– a student becomes a steelmaker





Dave Moore ... on the job at Warren's melt shop ... visiting Youngstown State. At far left, he talks with Mrs. Mary B. Smith, YSU placement director; at left and below, he reminisces with Dr. George E. Sutton, dean of the engineering school.

Mahoning Valley native David Moore has moved from campus to career.

"When I was interviewing for a job, there were a lot of offers, but Republic had what I wanted. Some corporations were just too big. Others didn't have any training program," recalls Dave Moore. "Republic seemed right for me and besides they're the most modern steel company in the Valley."

A native of Youngstown, Ohio, 26-year old David J. Moore was graduated from Youngstown State University in December, 1974, with a bachelors degree in metallurgical engineering. He joined Republic the following month. As a participant in Republic's Associates In Management (AIM) program, he went to work in the production departments throughout the Mahoning Valley District as a metallurgical trainee.

"When I started, I was on an eight-week rotation schedule," he says. "I worked in the pipe mill at Youngstown, cold strip mill in Niles, and hot and cold strip, silicon and galvanizing departments in Warren and also at the primary steelmaking operations there."

Laurie and Dave check the food ads for bargains before a weekly shopping trip. When not working, they are busy furnishing their new home.

Then in January, 1977, Dave got his first permanent assignment at the blast furnace at Warren.

"I never thought I'd spend this much time in primary operations, but I love it. At the blast furnace I was helping to determine the raw materials mixes for charging in order to maximize iron output.

"This January I was transferred to the melt shop where our basic oxygen furnaces make steel. The best part of the job is that nothing is routine or boring. Every day is different."

Back in '75 when Dave came to work at Republic, he also enrolled in graduate school at Youngstown State. He received his MS in Engineering this spring.

"At YSU all the grad courses in engineering are offered at night. At that point, with a full time job, I wanted a more relaxing schedule, so I stretched the course to three years."

This June, Dave and Laurie Johnston, a chemical engineering grad from YSU, were married. She is a materials engineer in the Prodfct Engineering Department at Packard Electric in Warren, a division of General Motors.

"We really don't have a lot of spare time," says Laurie. "Dave's done some fund raising with the YSU alumni and we belong to several professional engineering societies. But right now we're busy with our new home...curtain rods, decorating and the lawn...we must get the lawn in someday."

Dave's family, who were early settlers in Youngstown, have strong ties in the Mahoning Valley.

"My ancestors on both sides of the family were pioneers in Youngstown," says Dave. "My dad went to Youngstown State back in the days when classes were held in barracks."

Today, YSU looks quite different...over 87 acres of campus, mostly new modern buildings and about 15,000 students. But the moores still have a close connection with Youngstown State—Dave's mom, Barbara Moore, is a secretary in the Placement Office.

A part of Dave's heritage in the Mahoning Valley also involves steel. His grandfather was an accountant at Republic and his brother Ray is in the accounting training program.

When Dave talks about his job at Republic, he mentions that the toughest part is telling someone with three kids that he or she has to work on Christmas Day. But most of the time, he finds the work challenging.

"I'm happy that I came to work in steel," he reports. "And as far as Republic is concerned ... well, Republic is big enough for me to grow professionally, but not so big that I'll get lost."

JAMBAR

January 19, 1979

Engineeers to Meet

The American Institute of Industrial Engineers is sponsoring a Student Chapter night, to be held Jan. 24. All students interested in Industrial Engineering are invited to meet senior members of the local chapter of the A.I.I.E. at a Senior-Student Mixer at 6 p.m. at the Saxon Club on Meridian Road. The night is broken down into five sessions where students are able to discuss the practical applications of Industrial Engineering. The topics for the sessions are: Facility Design, Management, Operations Research, Manufacturing and Cost Analysis.

Pizza and beverage will be provided. All students interested in attending are asked to sign up at the Industrial Engineering Department, Room 239, but this is not mandatory.

JAMBAR
friday, february 9, 1979
vol. 60 - no. 11

Collect dust in ESB

Vehicles remain idle

by Ed Shanks

Not many people know that there are two cars in the Engineering Science Building. There is an old Hillman that was brought to YSU around 1963 or '64 and there is a 1974 Vega, which was donated by the General Motors Lordstown Assembly Plant. These two cars are now the property of the Mechanical Engineering department, where the Vega is used as a sort of a working model or example for classes.

The Hillman was the thesis project of a student back in 1963 or '64, said Donald R. Arnett of the Mechanical Engineering department. According to him, the student obtained the car from a local junkyard, and for his thesis project turned the car into an electic--powered car, by means of some old golf cart type batteries obtained from an area golf course.

"The batteries are no longer able to hold enough of a charge to make a full 18 holes," said Arnett, "The car would make it once or twice around the block on a charge."

But the student that did the project gained experience, he stressed, and that was what the project was for.

The other car, described by Arnett as "probably the only '74 Vega in Youngstown without any rust at all," was donated to the University in 1974 by Lordstown. One student, again working on a thesis, installed a fiber--optics system whereby one can tell if, for example, the water in the battery is low, as well as other things.

However, since the car was donated to the University, YSU holds no title for the car. This means that the car cannot be driven on any public streets, or anywhere except private property. "The only place it's been driven (since it arrived here) is on the sidewalks," said Arnett.

The Vega has not been used as an instructional aid as much as the department would like. This is mainly because YSU does not have such equipment as a dynamometer, which is used to check whether an engine is in tune or not. "We tried to get G.M. to give us some testing equipment along with the car," said Arnett, "but they wouldn't." He went on to say that the department simply does not have the funds to purchase such equipment, which he says he priced several years ago as being around $20,000.

The department does have some older dynamometers, but to use these one has to take the engine out of the car. And since there are already engines donated by G.M. and Ford in the lab, there is no point in taking the engine out of the Vega, said Arnett.

So the Hillman sits amidst a pile of discarded steel pieces and under a thick layer of dust. The Vega, with three miles on the odometer, is used by an occasional student as an example in a lecture on carburetion or electronics. And that is where they will probably remain until YSU ceases to exist.

ysu news

Youngstown State University
Youngstown, Ohio 44555
Telephone 742-3520

RELEASE:

Stephen R. McClure, News Bureau Editor

IMMEDIATE

MAILED: February 15, 1979

(WITH PIX)

RECEIVED
FEB 16 1979
SCHOOL OF ENGINEERING

YSU ENGINEERING AWARDS -- At a recent Youngstown State University meeting, the YSU student chapters of the American Nuclear Society and American Institute of Chemical Engineers presented their annual scholarship awards. Accepting were senior engineering majors Joseph A. Leone, 4022 Sunset Dr., Boardman (far left) and Thomas J. Secich, 175 Fox St., Hubbard, (second from right). Presenting the awards were Dr. George E. Sutton, (far right) dean of the William Rayen school of engineering and visiting lecturer Dr. Richard N. Christensen, (second from left) professor of mechanical and nuclear engineering at Ohio State University. (YSU photo by C.J. Melnick).

# # #

YSU News Bureau
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YSU ENGINEERING AWARDS — Youngstown State University student chapters of the American Nuclear Society and American Institute of Chemical Engineers recently presented their two scholarship awards to senior engineering majors. They are Joseph A. Leone of Boardman (left) and Thomas J. Secich of Hubbard (second from right). Presenting awards were Dr. George E. Sutton (right), dean of the William Rayen school of engineering, and visiting lecturer, Dr. Richard N. Christensen, professor of mechanical and nuclear engineering at Ohio State University.

The William Rayen

SCHOOL OF ENGINEERING

Youngstown State University

DEAN COUNCIL

in

Cooperation with

Student Government

Proudly Presents

the

1979

Engineers Dinner Dance

ENGINEER OF THE YEAR - JOHNNY GINN - ELEC. E.

ENGINEERING SWEETHEART - AUDREY HALLOCHAK

CHEMICAL ENGR.

Spring Dinner-Dance At YSU

The public and general student body of Youngstown State University are invited to the annual spring dinner-dance sponsored by the William Rayen School of Engineering Dean's Council and YSU's student government.

The event will begin at 6:30 p.m. Saturday, March 31, at the Captain's Table, Ramada Inn, Belmont Avenue. Engineer and sweetheart of the year, who are elected by popular student vote, will be announced that evening. Tickets are $7.50 per person. Music will be provided by Five Grand.

Engineering alumni and other interested persons can make reservations by calling Mrs. Virginia Davidson, secretary to the dean of engineering, at 742-3009.

Vindicator
March 21, 1979

YSU nuclear reactor is monitored; radiation output considered safe

by Stacey Savka

Did you know that there is a nuclear reactor on the campus of YSU?

"It is a sub-critical reactor and there is no chance of a meltdown," said Dr. Edward Mooney, physics and astronomy.

"It is perfectly safe. It contains 5000 pounds of Uranium 238 isotope," added Mooney.

Although the reactor is on campus, located in Ward Beecher, Dr. Steven Hanzely, physics and astronomy, stated, "No havoc can occur. It is just not that kind of device."

"The nuclear reactor is used to study reactor parameters, the arrangement of the rods of the nuclear reactor and the amount of uranium in the reactor. It is only used under supervision," commented Mooney.

All faculty and students who use the reactor are required to wear field badges which are changed monthly and records are kept on the amount of radiation to which persons are exposed. The badges, according to Mooney, are sent monthly to Chicago to be checked for the amount of radiation they have registered.

"There is very little radiation here that can possibly cause a problem," added Mooney.

Dr. Leslie Szirmay, chemical engineering and material sciences, is in charge of the reactor. "The nuclear reactor is not dangerous because it was born out of wedlock. It was preceded by nuclear bombs," stated Szirmay.

However, Mooney revealed that the campus of YSU has recently housed a dangerous chemical. In January, the element Californium 252 was on loan from the Savannah River Plant, South Carolina and used for research. Californium 252 can "cause cellular damage," said Mooney. He added that the research entailed looking at the pollutants in the Mahoning River.

"It was the largest single source (Californium 252) outside of a government plant," remarked Mooney.

The Californium 252 was sent back to the plant in a container which was the size of a finger. The element itself was only about the size of a grain of sand.

Although Mooney does nuclear research, he is not an advocate of nuclear energy. "You cannot guarantee that there will not be an accident. And there is no place on this planet where the waste from a nuclear plant can be absolutely safe," commented Mooney.

Szirmay, who also does nuclear research, said that he is an advocate of nuclear power. "There is no substitution for nuclear power in the next 20 to 30 years if our country does not want to sell itself to the oil producing countries," stated Szirmay.

"So far nuclear power has an unblemished record--there have been no deaths that can be directly attributed to it," continued Szirmay.

However, Dr. Lorrayne Baird, English, said, "You are dealing with a tremendous power. Studies show that there has been a substantial increase in infant mortalities, leukemia, cancer and that kind of thing. The increase is about 50 per cent" among people who live in the area of nuclear reactor plants.

"Children seem to be particularly susceptible to radiation and even low levels, which are acceptable, have some health effects," added Baird.

Nevertheless, Szirmay remarked, "There is a hysteria about radiation, but not about X-rays. The medical profession has been using radiation freely."

Although according to Szirmay the medical profession uses radiation, Baird comment, "X ray of pregnant women are not done unless it is absolutely necessary."

Dr. Shaffiq Ahmed

★ ★ ★

Dr. Ahmed Is Invited To MIT

Dr. Shaffiq Ahmed, professor of chemical engineering and materials science at Youngstown State University, has won the American Society of Engineering Education Western Electric Award for excellence in teaching engineering.

Dr. Ahmed received the university's distinguished professorship in 1978 for excellence in teaching, research and scholarship and has made dramatic contributions to the metullurgical engineering and materials science cirriculum.

He has been invited to present a paper at the Massachusetts Institute of Technology during the international conference on martenistic transformations to be held this year and will present his newest theory on the electronic contribition to the martinistic phase transformation in metals and alloys.

Martensite is the hard, brittle, solid solution of iron and carbon or the carbide of iron into which hot steel turns when suddenly chilled by cold water.

Engineer School Has Gain

While Youngstown State University's total spring enrollment is lower than last year, the William Rayen School of Engineering has seen an increase, President John J. Coffelt reports.

There are 1,121 full-time and part-time engineering students enrolled, compared with 1,027 last spring. This is in line with the experience throughout the country, according to the College Placement Council in New York which reports "there just aren't enough engineers graduating to fill all the open jobs."

Another report says graduating engineers are cashing in with top salaries starting at an average of $18,000.

YSU's total enrollment is 13,508 this spring compared with 13,902 in 1978. There are 11,988 students enrolled in undergraduate classes and 1,520 in graduate classes.

Enrollment by schools and colleges shows the College of Applied Science and Technology in the lead with 4,120. Next are the School of Business Administration, 2,676; College of Arts and Sciences, 2,296; William Rayen School of Engineering, 1,121; School of Education, 1,019, and the College of Fine and Performing Arts, 756.

Another breakdown shows 4,109 freshmen; 1,917 sophomores; 2,403 juniors, and 2,559 seniors. Men outnumber women 7,243 to 6,265.

YSU Talk Set On Pa. Crisis

Dr. Leslie V. Szirmay, YSU associate professor of chemical engineering and materials science, will discuss "The Ordeal at Three Mile Island" at noon May 2 in Cushwa Hall on the Youngstown State University campus.

Three Mile Island is the nuclear generating plant near Harrisburg, Pa., which was shutdown recently as a result of equipment malfunction and radiation leakage.

Dr. Szirmay, a member of the YSU faculty since 1969, heads the university's nuclear reactor design program. He hold academic degrees from Eotvos University, Hungary; Iowa State University; University of Detroit and the University of Denver.

ysu news

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LEASE:

Stephen R. McClure, News Bureau Editor

IMMEDIATE

MAILED: April 25, 1979

(WITH PIX)

AMAZING FEATS OF ENGINEERING -- Ancient civilizations produced the Egyptian pyramids, while today's world is producing a new Saudi Arabian city (Jubail) and attempting to change the direction and flow of several Siberian rivers. Such present-day and vast engineering undertakings are defined as "macro-engineering" projects. Youngstown State University's Schools of Engineering and Business Administration recently presented one of the country's foremost macro-engineering specialists, Dr. Frank P. Davidson (right), Professor, Massachusetts Institute of Technology. Dr. George E. Sutton (left), Dean, YSU School of Engineering and Dr. A. Ranger Curran (middle), program organizer and chairman, YSU department of management, assist Dr. Davidson in preparation for his campus lecture. (YSU Photo by C.J. Melnick).

# # #

YSU NEWS BUREAU
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SCHOOL OF ENGINEERING
RECEIVED

Macro-engineering is topic

Past and future projects discussed

by Diana Cicchillo

"Man is an engineering animal," stated Frank Davidson, professor at MIT's Sloan School of Management, described by his colleagues as a "foremost authority in the world on macro-engineering."

Macro-engineering, defined as engineering on a large scale, was the topic of Davidson's speech given at noon last Tuesday to an audience of approximately 75 in SchwebelAuditorium. His appearance was sponsored by the School of Business Administration and the School of Engineering.

"Major engineering enterprises were necessary for the first cities," said Davidson, giving credit to the world's first macro-engineers for the development of civilization. He further stated, "Civilization would not have come into existence without it (macro-engineering)."

Davidson explained, "Stonehenge is certainly macro." He also included the early walls and fortification system of Jericho as examples of early macro-engineering projects. Roman aqueducts, the London Bridge, and the Chinese river canals were also among the long list of the first macro-engineering projects.

"Not all great ideas are destined to succeed," explained Davidson. A "one-rail" railway as opposed to the conventional two-rail method now employed was Davidson's example of a "perfectly good idea that never caught on."

Davidson spoke of "the wildest macro-engineering project" being a connection of England and France by way of a railway laid directly on the sea bed. The train would be above water by the use of long stilts.

Two other possible land-sea connections were mentioned by Davidson. The first he described was a connection between Europe and Africa. A bridge connecting Spain and Morroco is a possible future macro-engineering project.

The second land-sea connection Davidson spoke of would be between Sicily and the mainland of Italy. "I would watch for the Italy, Sicily bridge in the next decade or two," stated Davidson.

A subway across the U.S. which would connect all the large cities was another future macro-engineering project discussed by Davidson. He spoke of a connection between New York City and Los Angeles which would move faster than hypersonic flight and take a total of 21 minutes.

An understanding of the politics of business along with engineering knowledge were described by Davidson as prerequisites for the macro-engineering. He stated, "There is no direct way for engineering students to get into the act." Davidson suggested that interested students try to get summer jobs with the U. S. Corps of Engineering.

JAMBAR - APRIL 27, 1979

Honors Convocation stated for May 15; seniors, students to receive awards

YSU will hold its twentieth annual HOnors Convocation at 8 p.m., Tuesday, May 15 in the Kilcawley Center Chestnut Room to honor graduating seniors and students.

Students in the top one per cent of their class in the six undergraduate schools and colleges of the University will receive special recognition. A series of awards also will be presented to outstanding seniors and undergraduates.

Special awards include the *Youngstown Vindicator* awards to top academic students in the humanitites, English, social science and best all-around students; Outstanding Woman Scholar Award; and YSU Pins for leadership and scholarship.

Dr. Neil D. Humphrey, Vice President for Financial Affairs, will be the program's main speaker and Dr. Earl E. Edgar, Vice President for Academic Affairs, will explain the purpose of the event.

Presentation of special awards will be made by Dr. Edgar and Dr. James E. Scriven, Dean of Admissions and Records, in addition to the presentation of the YSU distinguished professorship awards.

Anthony T. Koury, President of Student Government, will present student government awards and Dr. Charles A. McBriarty, Dean of Student Affairs, will present Who's Who Among Students in American Universities and Colleges awards.

Presentation of class honors will be by Dr. Nicholas Paraska, Dean of the College of Applied Science and Technology; Dr. Bernard J. Yozwiak, Dean of the College of Arts and Sciences; Dr. Frank J. Seibold, Acting Dean of the School of Business Administration; Dr. Arnold J. Moore, Dean of the School of Education; Dr. George E. Sutton, Dean of the William Rayen School of Engineering; and Dr. William R. McGraw, Dean of the College of Fine and Performing Arts.

The invocation and benediction will be delivered by the Reverend D. Gary Schreckengost, Pastor, Lord of Life Lutheran Church.

The YSU Concert Band, conducted by Robert Fleming and Joseph Lapinski, will present the processional and recessional. Following the ceremony, a reception will be held in the Kilcawley Center Ohio Room.

YSU- OEA, administration bargain

Contract talks between University Administration and the YSU chapter of the Ohio Education Association (OEA) are officially underway with hopes of completing negotiations by May 10.

Under consideration are proposed salary hikes affecting YSU's more than 400 faculty members. The two parties signed a four-year aggreement in 1977 with a clause calling for a "wage reopener" this year. Specifically being discussed are salary ranges for faculty ranks and yearly salary increases for the next two years.

Both parties have agreed to withold comment on the progress of negotiations, therefore, "news blackout" will continue until an agreement of impasse is reached. Should the talks reach an impasse, either party may submit the matter to a federal mediator for assistance.

Members of the University's negotiating team include : Dr. Taylor Alderman, Vice-President for Personnel, Chief Negotiator; Dr. Neil Humphrey, Vice President for Financial Affairs; Dr. George Sutton, Dean, School of Engineering; and Dr. Barbara Brothers, Chairman, Department of English.

JAMBAR, FRIDAY MAY 4, 1979
INFLATION IS HERE WITH PRICES GOING UP AND UP. FACULTY AND STAFF ARE FIGHTING FOR HIGHER WAGES. GASOLINE, FOR EXAMPLE, IS ALMOST 80¢ PER GALLON....EVERYTHING IS GOING UP, UP, UP WITH NO END IN SIGHT!

Enrollment is up in Engineering; others drop

While total enrollment at YSU is down this spring compared to last year, the William Rayen School of Engineering has shown dramatic enrollment increases.

YSU President John J. Coffelt reports that 1,121 full-time and part-time students are now enrolled in engineering classes, compared to 1,027 last spring. The figures reflect a recent report by College Placement Council in New York, which said, "there just aren't enough engineers graduating to fill all the open jobs." Another report says graduating engineers are cashing in with the tops in starting salaries - an average of $18,000.

YSU's total enrollment this spring stands at 13,508 compared to 13,902 in 1978. There are 11,988 students enrolled in undergraduate classes and 1,520 in graduate classes.

Enrollment by schools and colleges shows the College of Applied Science and Technology leading all others with 4,120. Next comes the School of Business Administration, 2,676; College of Arts and Sciences, 2,296; William Rayen School of Engineering as previously noted, 1,121; School of Education, 1,019 and the College of Fine and Performing Arts, 756.

A further breakdown shows there are 4,109 freshman attending YSU; 2,917 sophomores; 2,403 juniors and 2,559 seniors. Men outnumber women 7,243 to 6,265.

JAMBAR - MAY 4, 1979
WITH INFLATION HERE AND SO MANY PEOPLE OUT OF WORK, THIS MAKES US REALLY HAPPY.

YSU Board of Trustees approves promotions of 36 faculty members

The YSU Board of Trustees has approved the recommended promotion of 36 faculty members and academic administrators, effective next academic year.

The promotions are provided under terms of the 1977-81 contract agreement between the University and the YSU chapter of the Ohio Education Association.

Faculty members promoted from the rank of associate professor to professor are: Dr. Aliberti, foreign languages and literatures; Ralph Burkholder, marketing; Robert Fleming, Dana School of Music; Dr. Aili Hakojarvi, home economics; Dr. James Henke, English; Dr. Sally Hotchkiss, psychology; Dr. Vern Kagarice, Dana School of Music; Raymond Kramer, electrical engineering; Richard Magner, accounting and finance; Dr. Margarita Metzger, foreign languages and literatures; Dr. Dean Roussos, marketing; Dr. John White, sociology and anthropology and Dr. Warren Young, physics and astronomy.

Faculty members promoted from assistant professor to associated professor are: Donald Arnett, mechanical engineering; Dr. Richard Bee, economics; Marilynn Biles, mathematical and computer sciences; Dr. Thomas Copeland, English; Dr. Ramaswami Dandapani, mathematical and computer sciences: Charles Darling, history; Barbara Engelhardt, nursing; Dr. Fred Feitler, secondary education; Dorothy Hille, business education and technology; Dr. Ahalya Krishnan, psycholoty; Dr. David Robinson, speech communication and theatre; Chester Rufh, biological sciences; Dr. Daniel Suchora, engineering technology; Dr. Sara Throop, elementary education and Dr. Mario Veccia, foreigh languages and literatures.

Faculty members promoted from instructor to assistant professor are: Sara Clark, English; Daniel DiEdwardo, health and physical education; Jane Kestner, psychology; Virginia Shale, speech communication and theatre and Mary L. Wedekind, health and physical education.

Academic administrators promoted from the rank of associate professor to professor are: Dr. Frank Seibold, acting dean, school of business administration and department chairman, advertising and public relations; and Dr. John Yemma, department chairman, allied health. Promoted from assistant professor to associate professor is Dr. Brendan Minogue, department chairman, philosophy and religious studies.

Announcement of the promotions was made recently by YSU President, Dr. John J. Coffelt.

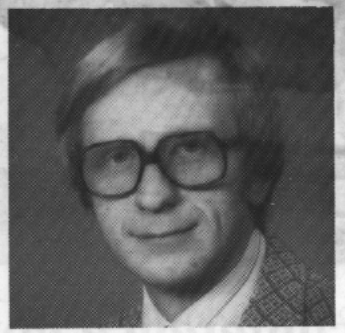
JAMBAR, MAY 11, 1979

Western Electric Fund Awards Announced

The Western Electric Fund Awards are given for excellence in the instruction of engineering students. The awards should serve as an incentive to engineering professors to make further significant contributions to teaching. Recipients of the award are given $1,000 and a certificate. There is one award in each ASEE section with fewer than 1,000 members, and two awards in sections with over 1,000 members.

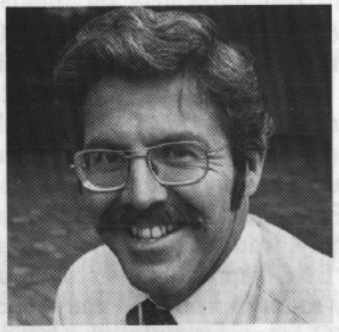
J. Kenneth Shultis

Warren F. Phillips



Robert Mattauch

Shaffiq Ahmed



James Wert

Tung Au

J. Kenneth Shultis, professor of nuclear engineering at Kansas State, will receive the 1979 Western Electric Fund Award for the Midwest Section. Recognized by his students and colleagues as an intellectual of the highest standard, Shultis has taught 20 distinct courses in the past nine years, many of which he developed completely or improved significantly. His research ability has been recognized by government and private industry; he has directed 17 research projects with budgets in excess of $600,000. His citation reads in part, "He has brought and continues to bring honor to himself, Kansas State University, and the engineering profession by his achievements as a teacher, a researcher and a leader of people."

The Southeastern Section has selected Robert J. Mattauch and James J. Wert as the 1979 award recipients. **Robert Mattauch** is a professor of electrical engineering and director of the semiconductor device laboratory at the University of Virginia. Mattauch was nominated for the award because of "the

Wert is the George A. Sloan Professor

and friend, well deserving of the Western

ings he receives, even though he is recognized as one of the most demanding teachers at Utah State." He has earned his title as an outstanding teacher because he continually instills a desire to excell in both his graduate and undergraduate students.

The North Central Section's two award winners are Shaffiq Ahmed and Tung Au. Professor of metallurgical engineering and materials science at Youngstown State University, **Shaffiq Ahmed** received the Distinguished Professorship Award at Youngstown in 1978. His students find his teaching abilities remarkable, for he can build a subject from its basic fundamentals to the most advanced theories in a truly unique way. As department head, he initiated innovative ideas for engineering education, such as starting a colloquium to present the research activities of local and national scientists and engineers to encourage the exchange of ideas. In the area of engineering research, Ahmed's main interests include phase transformation, thermodynamics, x-rays, defect structure and mechanical properties. In honor of his research capabilities and original papers, he was named a fellow of AAAS.

Tung Au, a professor in both the Department of Civil Engineering and the Department of Engineering and Public Policy at Carnegie-Mellon University, has been cited for his ability to motivate students, ranging from freshmen to Ph.D. candidates. He is the author of three textbooks, one dealing with structural mechanics, the other two with systems

Americans need nuclear energy, say Szirmay, class

by Stacey Savka

Atomic power is increasingly becoming a part of American life, according to Dr. Leslie V. Szirmay chemical engineering and material sciences and his Unit Operations Class.

"To try to eliminate nuclear power completely is suicide," said Kevin Rogers, senior, chemical engineering.

"The only way that we can cope with the energy crisis is by turning to nuclear power," commented Juan Carlos Soria, senior, chemical engineering.

Soria cited statistics which show that already seven to eight per cent of all power used in the U. S. is produced in nuclear power plants.

"The amount of nuclear power used by some states such as New Hampshire and Indiana exceeds 25 per cent," said Szirmay.

"People don't realize that they are already using it," added Soria

Szirmay and his class said that small amounts of waste from the plants coupled with the little upkeep and efficiency of nuclear power plants are the major reasons why reliance on atomic power is inevitable. Other forms of energy produce more waste and operate less efficiently.

"Nuclear waste is less than the coal pollutants which people breathe every day," stated Rogers.

Szirmay and his class also said that other forms of energy, such as solar energy and fossil fuels, are just not feasible for the rapid growth of energy consumption in our country.

According to Szirmay and his class, other energy forms such as petroleum and coal may alleviate some of the energy problems momentarily, but in the long run, the U. S. will gradually have to depend more and more on other countries.

"Oil supplies are diminshing. We need larger and larger amounts of oil and our country is unable to supply the demand," said Soria.

Soria added that to meet the demands of the energy of the U.S. our country must produce more coal.

"Coal production must be increased. But the production process is time-consuming and will never meet the long term demands of the U. S.," continued Soria.

Nevertheless, Szirmay said, nuclear power production oresently does not exceed all other types of energy, but it is growing.

According to Szirmay, there are 550 nuclear plants in the U.S., not all are operating, some are still under construction. In addition, Szirmay added that there are 350 operating in the rest of the countries of the world.

"We have no other foreseeable alternative. The U. S. must turn to nuclear power to support the demands of our country," concluded Szirmay.

JAMBAR - MAY 15, 1979

Ahmed honored for contributions to engineering

Dr. Shaffiq Ahmed, Department of Chemical Engineering and Materials Science, has been honored by the American Society for Engineering Education with the Western Electric Award for 1979.

The society recognizes and give gives awards each to engineering professors in United States' universities for excellence in teaching and for innovations in engineering education. Ahmed was chosen from a large number of nominations.

Ahmed received the Distinguished Professorship award of the University last year for excellence in research, teaching and scholarship. He has contributed considerably toward the development of the Metallurgical Engineering and Materials Science curricula in the graduate and undergraduate divisions at the University. He has also been quite active in research and consulting.

He has been invited to present a paper in Cambridge, Massachusetts at Massachusetts Institute of Technology during the international conference on martensitic transformations to be held this year. Ahmed plans to present his newest theory on the electronic contribution to the martensitic phase transformation in metals and alloys.

Ahmed is a Fellow of the American Association for the Advancement of Science and a member of NSPE, AIME, ASEE, ASM and the Institution of Metallurgists in England.

Kudos

The fire on the roof of the Engineering Science Building could have been a disaster. It was not, thanks to the Youngstown Fire Department. They arrived on the scene in a remarkably short time, and had the blaze extinguished within a half hour. In fact, students were permitted back inside the building a half hour after firemen finished.

But few people know the reasons why the fire department was able to get there so quickly.

In the YSU Security Office, there are two phones on a wall. One is red and the other is yellow. The red one is the campus emergency pone (dial 3333), and the yellow one is a hot-line to the fire departmen. It puts the officer in charge in direct voice contact with the fire department, thus enabling him to give directions and information about the fire while the trucks are en route to the scene of the blaze.

When the trucks arrived, two went to the side facing Kilcawley and three stayed on the Lincoln Avenue side. Firemen knew where to hook up their hoses and the location of standpipes, thanks to a Physical Plant program that allows local firemen to become familiar with various buildings and their protection systems. Ron Aey, the man in charge of this program, had said he felt "Like a tour guide herding a bunch of people all around the place."

But the results, as can be seen in times like yesterday, are certainly worth the effort.

William Rayen School of Engineering

American Institute of Chemical Engineers Student Chapter Award. To a junior student in recognition of academic excellence: Louis S. Isabella.

Paul C. Luginbill Chemical Engineering Award. To the best all-around senior student in chemical engineering: Joseph A. Leone.

Jambar-May 18, 1979

Structure was unused

Cooling tower burns on Engineering building

by Ed Menaldi & Ed Shanks

At about 5:30 p.m. yesterday a fire broke out in the cooling tower on the roof of the Engineering Science Building. The fire was confined to the cooling tower on the roof, which was in the process of being dismantled by the Prout Boiler Co.

John Ellis, a parking lot attendant, reported the fire to Campus Security, where Sergeant Robert Brown called the Youngstown Fire Department. Brown also dispatched men to evacuate the building.

The fire department arrived on the scene in about five minutes, and the fire was extinguished with little trouble.

"The evacuation worked well," said Rocky Mediate, assistant superintendant of building maintenance. Students were clear of the building in a matter of minutes.

Ron Aey, from the Physical Plant credited Tom Senedak, building maintenance, with the swiftness with which the firemen got up to the roof and were able to size up the situation. "He was effieicent as hell," said Aey.

Aey also gives credit to the fire program held annually on campus, wherein local fire department members actually tour the campus and note where standpipes and hydrants are, locations of sprinkler valves, and so forth.

"They have no reservations at all about standing on a desk in a classroom and pushing up a ceiling tile to see what's underneath," said Aey.

Youngstown Battalion Fire Chief Homer Whittenberger said he would estimate the damage at about $400. The fire department had a total of five trucks on the scene, three on Lincoln Avenue and two in the quad. The fire department had only 1½ inch hoses on the roof, with the snorkel standing by, although it was not needed.

Aey speculated the fire was caused by a worker's cutting torch. A spark might have flown into the wooden structure and smoldered, he said. The tower contained no water, and the wood was dry.

Richard Weber, superintendant of building maintenance, also said the fire may have been caused by a worker of a contractor hired by Prout Boiler who may have started the fire with his torch.

COOLING TOWER?--The tower on the roof of the Engineering Science Building caught fire yesterday, damage was estimated at $400, the cause is unknown. (Photo by Toni DiSalvo)

Jambar - May 18, 1979

(LEFT TO RIGHT)
DEAN OF ENGINEERING, G.E. SUTTON
RANGER CURRAN, SCHOOL OF BUSINESS
DR. FRANK DAVIDSON-GUEST SPEAKER

TUESDAY, APRIL 24, 1979

Mishap resulted from mechanical, human errors

by Stacey Savka

The Three Mile Island nuclear accident was the result of human and mechanical and technical errors, said Dr. Leslie V. Szirmay and his Unit Operations class.

"The incident is partly due to human error. It's not all design or mechanical malfunction. In nuclear power, like anywhere else, people are going to make mistakes," commented Glenn Eric Mankin, junior, chemical engineering.

However, according to Szirmay and his class, because of the mechanical and design malfunctions, human errors were made.

There were two major mechanical malfunctions, said Szirmay. The first occurred when the primary cooling system of the nuclear reactor over-heated. The second malfunction occurred when the relief valve of the primary system remained open.

The first malfunction, should have been relieved by a secondary cooling system. However, "someone forgot to turn on the valve which would have allowed water to continue to cool the reactor," stated Szirmay.

Nuclear plant mishap

(Cont. from page 2)

"This human error caused the cool, flowing water around the reactor to remain stationary," added Szirmay.

Because the water remained stationary, pressure built up in the reactor. This is the second malfunction, for there was not enough heat removal within the reactor container, continued Szirmay.

"Normally, the valve opened to release the pressure inside of the reactor, until it was back down to normal levels, but this didn't occur," said Kevin Rogers, senior, chemical engineering.

At this point, according to Szirmay, the operator checked the valve readings and corrected the problem according to those readings. But, the operator did not realize that the readings that he was working with were false.

"He (the operator) made the appropriate corrections for the readings he received," stated Rogers.

"In effect, the reactor was almost saved, for the operator did make the correct corrections The reactor seemed to operate for two hours, despite what had previously occurred," remarked Szirmay.

But, Szirmay added that two hours after the initial malfunction, the operator shut off the primary pump, and therefore left the reactor without heat removal.

"There was nothing really cooling the reactor, because the ways to cool it were shut-off," stated Rogers.

"Because heat was trapped within the reactor, it damaged the core. At this time, radioactivity escaped from the core," said Szirmay.

According to Rogers, the radioactivity that escaped from the core caused the formation of a hydrogen bubble, which could have exploded.

"The hydrogen bubble explosion was a danger, but not as great a danger as that of a meltdown," stated Szirmay.

"A meltdown is not an explosion. Fuel passes out ofthe reactor because it is so hot, about 3,000 degrees centigrade," said Bill Powers, senior, chemical engineering.

"If all cooling water is lost, the core of the reactor starts getting hotter and hotter, until it melts the bottom of the reactor and enters the ground. Eventually, it will contaminate the underground streams. The water in these streams instantly evaporates and quickly explodes. This causes the radioactive particles of the elements (which were originally contained in the core) to be emitted into the atmosphere," commented Rogers.

"This (a meltdown) is the worst possible thing that could happen," added Rogers.

He continued, "The amount of radioactive elements that can be left in the underground streams eventually can cause the contaimination of the rivers."

Although the Three Mile Island nuclear plant is now closed, the Nuclear Regulatory Commission is waiting for acooldown to occur at the plant.

According to Szirmay, a cooldown is when the radioactivity in the nuclear plant reaches safe levels.

"The cooldown may take months," added Szirmay.

JAMBAR, TUESDAY, MAY 22ND, 1979

In response to Chris Pruitt's comments written as Report's Insight, Tuesday, May 15, 1979:

As an ex-co-editor of the *Jambar* (maybe to you, 'way back in the dark ages of YSU), I was instructed to adhere to te Constitution of the United States, which states for posterity that we, the people, are entitled to Freedom of the Press. You seemingly are exercising that right by your comments, so why not let others?

You may be sick of reading about God, but how about those of us who want to throw up reading some of the "tripe" in the *Jambar* that you apparently call news? You may be speaking for the students who do not wish to read about God, but believe me, there are many students on this campus who honor God greatly and feel that He will always be Good News.

God will never die, but all *Jambars* just fade away!

Virginia Davidson
Secretary
Dean of Engineering

Engineers To Install Dr. Fok

Dr. Thomas Y. Fok, president of Fok & Associates, will be installed president of the Mahoning Valley Society of Professional Engineers, at a banquet to be held today in the Kilcawley Center at Youngstown State University.

Fok will succeed Dr. George E. Sutton, dean of YSU's William Rayen School of Engineering, who becomes vice president of Region IV of the Ohio Society of Professional Engineers. Installing officer for the Mahoning banquet will be Eugene Gerken, immediate past president of the Ohio Society.

Gerken also will be installing the new president of the YSU Student Chapter, Kimberly Sue Schmidt, and Scott Guiler, vice president; Brad Owens, secretary, and Marilyn Bota, treasurer.

Other Society officers to be installed are: Warren Drescher of Drescher and Associates, vice president; Floyd Shick, supervisor of plant engineering at General Electric, Niles, treasurer; and Al Roland of Ohio Edison Co., secretary.

Dr. Fok is a former staff member staff at the Rayen School of Engineering. He received his bachelor's degree from National Tung-Chi University at Szechuan, China, his master's in civil engineering from the University of Illinois, a masters in business administration and statistics from New York University, and a doctorate in civil engineering from Carnegie-Mellon University.

He is registered in several states and has a national certification by the National Council of Engineering Examiners. He is a registered surveyor in Pennsylvania and Ohio and is a member of various technical and professional societies.

WEDNESDAY, MAY 23, 1979
VINDICATOR

9 on YSU Faculty Get Research Posts

Nine Youngstown State University faculty members have been named to research professorships for the 1979-80 academic year.

Dr. Leon Rand, Dean of the School of Graduate Studies and Research, says two members of the chemistry department were chosen, Dr. Janet E. Del Bene and Dr. Charles G. Gebelein.

Others named to research professorships were Dr. Wade C. Driscoll, industrial engineering; Dr. Jane E. Kestner, psychology; Dr. Lauren A. Schroeder, biological sciences; Dr. Leslie V. Szirmay, chemical engineering and material sciences; Dr. Ronald G. Tabak, physics and astronomy; Dr. Joseph Waldron, criminal justice; and Dr. John White, sociology, anthropology, and social work.

VINDICATOR
JUNE 3, 1979

Deans from Ohio universities gathered at the ASEE meeting held at Akron U. From left are; Dean Robert Comparin, Cleveland State; Thomas McKeon, assistant to the dean at Case Western Reserve; Dean Russell Primrose, University of Dayton; UA's Dean Coleman J. Major; Dean Richard Mayer, Ohio University; and Dean George Sutton, Youngstown University.

THE UNIVERSITY OF AKRON - NEWSLETTER
MAY, 1979

York Is Top Engineer For Orbiter Data System

Former Youngstown resident Alan J. York, an aerospace systems engineer at NASA's John F. Kennedy Space Center, is lead engineer for the air data system of the reusable Space Shuttle orbiter.

The orbiter, an airplane-like craft about the size of a DC-9, will provide routine access to space. Its air data system will provide information on the atmosphere during reentry from orbit and landing.

York, a 1960 graduate of East High School, joined the center in April, 1968, as an engineer on the guidance and navigation systems for the Apollo spacecraft. He also did engineering work on the Skylab Program and the Apollo Soyuz Test Project.

Alan J. York

★ ★ ★

Following his 1966 graduation from Youngstown State University with a bachelor's degree in electrical engineering, York entered active duty in the U.S. Army. As an intelligence officer, he was involved in ground and air operations in the Mekong Delta, attaining the rank of first lieutenant and earning the Bronze Star Medal, the Combat Infantryman's Badge and the Vietnamese Cross of Gallantry.

His parents, Joseph and Helen Yorkunas, live in Maple Heights, Ohio. He has two daughters, Suzanne, 5, and Jennifer, 2, and lives in Cape Canaveral, Fla.

IT IS GREAT TO READ ABOUT OUR ALUMNI AND SEE WHO MADE IT BIG!

VINDICATOR - JUNE 11, 1979

OSPE's 1979-80 Executive Group Takes Office

The Ohio Society's 1079-80 officers installed during the OSPE 101st Annual Convention, May 11-12, in Dayton, included: (front row, left to right) Rodger Rogers,P.E., vice president, Region 1; Willis Richards,P.E., treasurer; and, G. Kenneth Copella,P.E., vice president Region 7: (middle row, left to right) George Sutton, P.E., vice president Region 4; Eugene C. Gerken,P.E.,P.S., immediate past president; John Wilson,P.E., secretary; and, Robert Marsh, vice president, Region 8; (back row, left to right) William Myers,P.E.,P.S., vice president, Region 6; Stanley S. Phillips, judge, Montgomery County, who installed OSPE's officers; Thomas Neff,P.E., P.S., vice president, Region 2; Carl Meglan, P.E., P.S., president-elect; and, Walter C. Roehrs,P.E., president. George Dougan,P.E.,P.S., vice president, Region 5, is not pictured.

Our Dean - a "standout" amongst men!

Camp Muskingum Committee Makes Plans

Members of the Camp Muskingum group discuss upcoming plans for this year's camp, August 21-26, at Leesville Lake, near Carrollton, Ohio.

Marilyn - the Dean's better half on the left) listening attentively and looking as lovely as usual!

The OSPE - Ohio Engineer Publication
June, 1979

Editorial

Engineering woes

While maintaining the quality of education in every academic department is a difficult task, engineering schools throughout the nation have encountered additional complications by the inability of universities to approach and maintain a pay scale for instructors comparable to that they might earn in private industry.

The job market for engineering graduates, unlike those that exist for many individuals with liberal arts training, is large, offering excellent pay and attracting many persons to the business and industry sectors of the economy. As a result, engineering schools, unable to offer competitive pay, are losing, or at least not attracting some of the more qualified instructors. This will eventually result in the deterioration of the quality of education they offer.

YSU, long noted for its engineering program, has begun to be affected by this growing dilemma. Three positions in the school (the equivalent of 10 per cent of the faculty) have been vacant for the past year-a situation indicative of the increasing difficulty of obtaining qualified personnel.

What can be done to encourage competent individuals in engineering to enter and remain in the teaching field? To offer them more money would necessitate providing instructors in other departments with similar salaries, and would probably increase tuition rates. When one considers the current state of the economy, this does not appear to be a viable response to the situation.

What then, is the answer? Obviously, there is no simple solution to the problem. Yet, the future of YSU's engineering program is seriously threatened. Recognition of the situation and a committment by administrators and educators to direct attention towards solving the dilemma is essential, and the first step to be taken to insure the continuation of the excellant reputation YSU's Engineering School currently maintains.

Cat Foils 2 Dogs in Car Haven

When a cat outruns a dog nothing very spectacular happens, but when two dogs are involved and the cat takes refuge beneath the hood of a car and the dogs are leashed together it can be very spectacular indeed.

So it was at the home of Frank D'Isa, 4120 Lockwood Blvd., Thursday afternoon, when the Boardman Fire Department Rescue Squad had to extricate one miniature schnauzer from between the fan and the radiator, and a tow truck had to haul the car away because concerned neighborhood children had cut what they thought was the connecting leash between the two schnauzers and instead cut vital wires.

The dogs vs. cat bout began shortly after 1 p.m. when the two schnauzers, who live a few houses away, spied a cat strolling through their yard.

Snapping the single tether to which their joint leash was attached, they gave chase. Their prey scooted into the D'Isas' garage and climbed to "safety" under the hood of Nancy D'Isa's like-new Monte Carlo.

As soon as the dogs reached the car, the cat climbed down and out the other side — but the dogs didn't know it and the leader shinnied up inside, leaving the other pup on the floor but just as trapped as his companion.

It took William Elmo and Donald Mauch of the rescue squad a good half hour to free the leader, one turning the fan wheel and the other turning the dog, all the while being careful not to get bitten by the understandably frustrated schnauzer.

Nancy's insurance agent had hysterics when he learned the circumstances of the "accident," but the $80 involved in the repairs didn't seem very funny to her!.

VINDICATOR - JULY 20, 1979
EVERYONE HAS TO HAVE A SENSE OF HUMOR IN THIS WORLD! WOULDN'T YOU KNOW THIS WOULD HAPPEN AT THE HOME OF THE MECHANICAL ENGINEERING

THURSDAY, SEPTEMBER 6, 1979 Vindicator

There's No Lack of Energy, Professor Tells Rotarians

"We are not now, or ever will be, short of energy; we have just run out of the cheaper stuff, and it will not get any better," Dr. George E. Sutton, dean of the William Rayen School of Engineering at Youngstown State University, told the Youngstown Rotary Club Wednesday.

Dr. Sutton, speaking at the club's weekly luncheon at the YMCA, said the country's energy problems are traceable, in part, to politics.

"We have taken some gigantic steps backwards," he said, calling President Carter's summer ceiling on thermostat settings a step backward 30 years.

Saying his views were not necessarily those of YSU, Dr. Sutton spoke forcefully of his impatience with politicians and environmentalists.

Unlike some, he said he does not regard solar energy as "the answer to everything" and said it is economical only when supported by federal dollars.

A chart — which he admitted was controversial — was used to show that solar energy is 7 to 11 percent efficient for direct conversion to electricity, 3 percent efficient for thermal conversion, and unreliable both ways.

"It is impossible to have a machine that takes in energy and puts out work," he said. "There is some loss in any known process," he continued, saying that the efficiency loss for solar energy was more than 90 percent.

While sunshine may be free, solar energy is expensive because of the need for special collectors, he said. If the effectiveness of solar energy could be increased by converting it directly to electricity, it could become an important source of energy, he remarked

Observing that the price of gasoline hasn't gone as high proportionately as the price of hamburger, he commented on the ability of politicians to rationalize that "what they have done for us is good for us." "With the media's help we believe it," he added.

He was equally harsh on environmentalists, whom he defined as those concerned with the environment exclusive of everything else, and by increasing regulations dealing with the environment.

"We have virtually exhausted easily usable fuels," he said, noting that coal is available, but expensive, and that nuclear energy comes under increasing criticism.

Dr. Sutton said, however, that Three Mile Island had convinced him that a whole series of "goofs" could be made without a major consequence.

"All these nuclear plants won't explode," he said, remarking that he is encouraged by the quality and quantity of efforts to make nuclear power economical and safe. "I think we are doing it," he commented.

Geothermal energy looks nice on paper, Dr. Sutton said, but undesirable chemicals solutions go along with it.

The attempt to convert coal to liquid or gas is a history of near misses, he said. If there was a breakthrough to provide clean, converted fuel, a great deal of the energy problem would evaporate, he said.

Dr. Sutton blamed Ralph Nader for causing the public to believe that corporations are out "to commit economic rape." The portrayal of corporations as antisocial has cost consumers a great deal, he said, "because we pay the cost."

Dr. Sutton said the news media misrepresent and overemphasize the profits of oil companies. Instead, questions need to be asked about how much the companies kept in reserve to build refineries, he said, adding that he did not know of one oil company in this country that was building one. "Companies cannot economically build refineries with government regulations," he said.

Dr. Sutton said he believes progress in solving the energy problem depends on leaving it to responsible corporate bodies and taking it out of the hands of government.

Dr. Sutton would place the U.S. Department of Energy in the hands of engineers, scientists and technologists and take it out of the hands of lawyers.

Engineers claim to be constrained by logic and truth, he said. He said he was not so sure politicians and environmentalists are similarly constrained.

The Vindicator/Paul R. Schell

TEA FOR YSU WOMEN: Among those anticipating the annual tea for all women associated with Youngstown State University, to be held October 7, are, l to r, standing, Mrs. Donald Matthews, chairman; Mrs. George Sutton, program chairman; and Mrs. T.K. Slawecki, club president. Seated is Mrs. John Coffelt, whose husband is president of YSU.

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YSU Women's Tea at Coffelt Home

Sunday, Oct. 7, is the date of the annual Youngstown State University Women's Club tea, to be held from 2 to 4 p.m. at the home of Mrs. John Coffelt, honorary president of the club. All women associated with the university are invited to come and renew friendships, make new acquaintances, and sign up for various projects and activities.

Membership in the club is open to wives of full-time and part-time faculty members, women faculty members, the wives of administrative personnel or directors, women adminstrators or directors, widows and wives of retired faculty and administration, and retired faculty women.

The 1979-80 officers are: Louise Slawecki, president; Martha Shuster, vice president; Marilyn Zaccaro, recording secretary; Kate Shipka, corresponding secretary; and Barbara Foulkes, treasurer.

Heading committees are: Kitty McCabe, yearbook; Helen Yozwiak, membership; Roberta Sullivan, interest groups; Maryann Cox, publicity/historian; Sandra Driscoll, communications; Betty Beelan, hospitality; and Marilyn Sutton and Mary Humphrey, program.

VINDICATOR - SEPTEMBER 23, 1979 - MARILYN, AS SWEET AS SHE IS LOVELY IS THE WIFE OF DEAN SUTTON, AND LOUISE, A LADY IN EVERY SENSE OF THE WORD, IS THE WIFE OF DR. T.K. SLAWECKI, CHAIRMAN OF CHEMICAL ENGINEERING AND MATERIALS SCIENCE DEPARTMENT.

Dr. Prakash R. Damshala

Dr. Damshala Receives Highest Grade in Test

Dr. Prakash R. Damshala, assistant professor of mechanical engineering at Youngstown State University, was honored by the Ohio Society of Professional Engineers for receiving the highest grade in Ohio in mechanical engineering on the Professional Engineers examination.

Dr. Damshala received a special award of recognition along with his professional engineering certificate during ceremonies at the Cleveland Engineering and Scientific Center.

He received a master's degree in mechanical engineering from the University of Miami in Florida and a Ph.D. from Georgia Institute of Technology in Atlanta.

A member of the American Society of Mechanical Engineers and the American Society of Engineering Educators, Dr. Damshala joined the faculty of the William Rayen School of Engineering at YSU in September of 1977. He and his wife live at 472 S. Raccoon Road.

Koppers Gives 10 Students Scholarships

Ten sophomores and juniors in the William Rayen School of Engineering of Youngstown State University are sharing more than $8,000 worth of scholarships awarded them by the Koppers Co. Foundation.

Recipients who were chosen on the basis of need and scholastic achievement, and their area of engineering study, are: Anthony D'Eramo, 5426 Sheridan Road, and Robert Wise, 3838 Whippoorwill Lane, electrical; and Peyman Givi, 30 W. Madison Ave.,No. 2B, mechanical.

Scott Campbell, 2316 Hamilton Ave., and Glenn Mankin, 7536 Indian Trail, both of Poland, and Paul Hartley, R.R. 1, Box 110, Fowler, all chemical.

Richard Street, 2292 N. River Road N.W., chemica and Thomas Valentz, 3507 Atlantic N.E., electrical, both of Warren; George Buritica, 1300 Andrews Ave., Salem, electrical; and Daniel Huber, 2945 W. Tower Road, Dorset, mechanical.

What a winner! Vindicator-Sunday, September 30, 1979

Salaries start at $17,000

Sutton sees demand for engineers

by Diana Cicchillo

"The demand for engineers is such that there is no reason to think that it won't continue," stated George Sutton, Dean of the William Rayen School of Engineering.

One hundred and fifty eight graduated from YSU last academic school year with bachelor degrees and 34 with masters. The 158 graduating engineers were from the six different engineering curriculums which include: electrical, chemical, mechanical, industrial, civil and metalurgical engineering, also referred to as material science.

Sutton explained, "Every engineer who wanted a job got one. We could have placed a graduating class twice that big." Companies from all areas of the U.S. come to YSU to recruit engineers. Some companies make monetary contributions to the School of Engineering, Sutton explained.

Sutton said that Packard Electric is a major area employer but he added, "There are not a lot of engineering companies in Ohio, therefore, engineers must go out of the area. The fastest growing area is Texas, which we don't consider the best."

Graduating engineers can expect anywhere from $17,000 to $21,000 starting salary. "There is quite a difference in going salary for the masters," said Sutton. He explained that it is often more wise to get a bachelor degree and then let an employer finance any further education.

Sutton said, "Almost all the graduate students are employed engineers. Most companies give a raise at the time an advanced degree is earned."

Sutton explained that employers look for two things in an engineer: One, if they can solve problems, and two, if they can work with people. "Such a large percentage of YSU students work part time, they have already proved themselves," he said. "This is an advantage over Ohio State," Sutton added.

Being able to communicate and work well with others is an important part of an engineers job. Fourteen engineering clubs exist at YSU. Sutton explained that employers often consider club membership a job related sort of experience.

When asked if enrollment is held down by so called "weeding out" Sutton answered, "We don't need to hold enrollment down." He explained that the school is accredited and "certain preparation is required before we can let them loose. Employers have a right to expect a minimum quality." Sutton added, "If we required everything we would like to require they would be here seven years."

"The main problem with enrollment is not that we have too many," Sutton said, "but just too many in one area." He explained that too many students are in electrical engineering and not enough in chemical and industrial engineering. "Chemical is not popular. Kids get turned off by high school chemistry," Sutton noted.

An introduction course is offered each fall and is required of all engineering students. Sutton explained that this course is designed to help students decide what branch of engineering they want to study and if they really want to become engineers.

"More than half disappear along the way somewhere," said Sutton. The freshman class is usually twice as large as the graduating class."

Many students become engineers for the wrong reasons. "Money and jobs influence them. The right reason is that they want to solve problems," stated Sutton. A "desire and interest to solve problems" is a good reason to become an engineer, explained Sutton.

The Rayen School of Engineering's float recalls an earlier era as the young men sport sailors on their heads and garters on their sleeves. Guitars and banjos complete the theme.

Homecoming Float - 1979
Vindicator - October 28, 1979

YSU Civil Engineering Chairman Is Named

Dr. Jack D. Bakos Jr., associate professor of civil engineering at Youngstown State University, was recently named chairman of the YSU Civil Engineering Department for the 1979-1980 school year.

Bakos, a registered professional engineer in Ohio and Mississippi, specializes in structural mechanics. He joined the YSU William Rayen School of Engineering faculty in 1969.

Before that, he worked as an engineering aide with the Highway Engineering Department and the Urban Renewal Division in Akron. He also taught civil engineering at West Virginia University for three years and served with the U.S. Army Corps of Engineers.

While a captain in the Army, Bakos worked at the U.S. Army Engineers Waterways Experiment Station in Mississippi and as project engineer in the Protective Structures Branch of the Nuclear Weapons Effects Division.

He won the U.S. Army Commendation Medal for his development, design and testing work on protective features for personnel and parked Army aircraft in Southeast Asia.

Dr. Jack D. Bakos Jr.

A University of Akron graduate, he received his master's and doctorate degrees in civil engineering from West Virginia University.

He resides with his wife and son at 7962 Forest Lake Drive.

Vindicator - Oct. 31, 1979
Bakos is a very dynamic person; full of life and full of fun....and a terrific teacher!

Wants nuclear energy developed to reduce oil dependance

To the Editor of *the Jambar*.

This week's embarrassment in Iran clearly shows our nation's continuing dependence on foreign crude oil. Unfortunately, we have forced ourselves into dealing with an irrational government that cannot even comply with basic international rules.

The reason we are dependent on these oil-rich countries is because of our inability to utilize our own natural resources of energy. The energy that can solve our problems is not an undeveloped form, such as solar energy, and nor is it an insufficient supply, such as wood.

The energy that can solve our current and future needs in nuclear energy. There seems to be no question as to the tremendous amount of energy and the small cost associated with nuclear power. However, many are not convinced of the safety of nuclear reactors. To those who believe in the words of Jane Fonda, and to those who want to phase out nuclear power because they are convinced it is unsafe, I relay to you the following nuclear safety facts:

1. Sitting next to a nuclear reactor for a whole year would not expose you to as much radiation as taking a round trip from New York to Los Angeles in a 747. Also, according to the Reactor Safety Study, the risk of ten people dying from an airplane crash is 100,000 times greater than dying from 100 nuclear power plants.

2. Most of the radioactive wastes produced by fission either decays rapidly or can be reused. The small amount that remains radioactive is placed in specially sealed containers and shipped to licensed disposal areas. Here, they can be safely placed a mile underground at less than one percent of the cost of electricity.

3. In the event of an accident, nuclear power plants are insured up to $560 million dollars. Studies by the U.S. Atomic Energy Commission have shown that for each nuclear reactor, the chance of an accident is one in 5000 years.

4. The accident at Three-Mile Island proved the safety of nuclear reactors. In fact, the problems which occurred were strictly human and not mechanical. Not one person was injured and only a few persons received a dose of radiation which amounted to as much radiation as the potassium 40 in our bloodstreams produces in one year.

Daniel E. Hromyak, Secretary
American Nuclear Society
junior, Chemical Engineering

Urges U.S. to 'get tough' in Iran

To the Editor of *the Jambar:*

I would like to comment on the recent takeover of the U.S. Embassy by Iranian protesters. This mob is holding innocent U.S. citizens, our people there doing a job for our government, and Khomeini (who supports the protesters demands and actions) sees this as a just means of threatening the U.S. to give up the former Shah (who's just about on his deathbed with cancer).

We know President Carter is not going to give up the Shah, and shortly these protesters are going to start murdering the embassy personnel. Efforts to reason with these people are not working. Khomeini will not even recognize any of Carter's representatives.

So, Mr. Carter, what are you going to do? I say it's time to get tough. I, for one, am behind U.S. representative Ronald Mottl of Cleveland, who in an article in the Nov. 6 edition of *The Youngstown Vindicator* suggested to the President that *if necessary*, use military force to secure the release of the embassy personnel.

I quote Mr. Mottl's message to the President, "I respectfully suggest that you give the Iranian government 48 hours to release these hostages or take military action to effect their release."

"I also urge that if these hostages are not released unharmed, that the U.S. government break off all relations with the present Iranian regime, and the thousands of Iranian students now enjoying the educational advantages of this nation should then be deported.

"And Iran, now receiving 90 percent of its wheat imports from the U.S. should be denied any food, technology or other assistance from this nation."

To representative Mottl, I say Bravo! To America, I say wake up and give Iran a good, swift kick in the ass! If you let Iran get away with an antic like this, other third world countries will try to get their licks in on the U.S. in the same manner.

Sure, Iran will cut off the oil to the U.S. (which we only get 3.5 percent from Iran) but at the same time we could cut off all food, aid and technology, then let's see who chokes first!

If you do not believe that deporting the Iranian students back to Iran will have some effect, watch for all the squawking they do in protest to this letter in the next few issues of *the Jambar*. I realize to some my view maybe a little radical, but this is America and they are my views.

Dennis Noren
Sophomore
Engineering