

# K-STATE ENGINEERING

## impact

Vol. 15, Number 3

Spring-Summer 1980

### Council hears report

## Energy program explained



**Richard Hayter**

A new energy conservation program at KSU will utilize the talents of engineers in providing assistance to businesses and government agencies wishing to make their operations more energy efficient.

The new Energy Extension Service, which will operate through the KSU Cooperative Extension Service and the College of Engineering, is under the direction of Richard Hayter. A former assistant professor of mechanical engineering at KSU, Hayter was with Energy Management and Control Co. of Topeka before being named to his present post.

Hayter explained the new program at the spring meeting of the College of Engineering Advisory Council. Members also heard a presentation on the College—Industry Liaison Program, designed to help graduate students financially and provide industry with more graduates with advanced engineering degrees. The council also was brought up to date on enrollments, faculty research and Engineering Phase II.

Chairman Ray Adee called the meeting "one of the best we've ever had," and credited Dean Donald E. Rathbone with doing a "tremendous job of getting things organized." He pointed out a particular interest expressed by council members in the energy program because of its pertinence today.

The K-State project is part of a national program in which each state will develop an Energy Extension Service tailored to its own needs. The majority of the funding will come from the federal government.

Hayter said the K-State program will be directed primarily at business and industry, although government agencies are included in the target audience. He said owners of private residences may take advantage of the service, but there will be less stress in this area because of already existing programs. He also emphasized that in serving business interests, "We don't want to compete with private consultants."

**See page 8**

## Hodges to leave post



**Teddy Hodges**

Teddy O. Hodges, who has served 6½ years as associate dean and director of the Engineering Experiment Station, will leave his post to return to teaching. Hodges had asked to be reassigned and, according to Dean Donald E. Rathbone, "We hope to honor his request by Jan. 1, 1980."

Rathbone added that Hodges has done "an excellent job as director of the experiment station." He noted that research funding was increased from \$1 million to approximately \$3 million during Hodges' tenure as director. Hodges also was credited with developing summer research support for faculty members and with strengthening the staff of support personnel.

Hodges joined the KSU faculty in 1959 as professor of agricultural engineering after receiving his Ph.D. degree from Michigan State University. As experiment station director, Hodges coordinates research activities for nine departments.

### It's a fact . . .

. . . that the First Engineers' Open House at Kansas State University was held May 1-4, 1917, with a parade and exhibits during a meeting of the Kansas branch of the National Association of Engineers.

## Benson honored



**Fred Benson**

Fred J. Benson, a KSU graduate who became one of this country's leading engineering educators, received an honorary doctor of engineering degree at all-University commencement exercises in May.

Benson served as dean of engineering at Texas A&M University for 21 years and currently is deputy chancellor for engineering for the Texas A&M System. A native of Grainfield, Benson received a civil engineering degree from K-State in 1935. He earned an M.S. from Texas A&M in 1936 and taught a year at Purdue University before joining the Texas A&M faculty in 1937.

Long a leader in the field of engineering education, Benson has served on the KSU College of Engineering Advisory Council for many years and in 1967 was honored with a Distinguished Service Award from the College.

Among Benson's other honors are the Tasker H. Bliss Award of the American Society of Military Engineers, an honorary membership in the American Society of Civil Engineers and the Distinguished Service Award of the Highway Research Board.

The honorary doctor of engineering was the first of such degrees to be awarded at K-State in 36 years.

### INSIDE

**DSA's  
Faculty Activities  
Open House  
Canoe race  
More alumni news**



## Slaughter tapped for NSF position



**John Slaughter**

John B. Slaughter, a 1956 graduate in electrical engineering, has been nominated to become director of the National Science Foundation. If confirmed by the Senate, the 46-year-old Topeka native will serve a six-year term.

Slaughter is currently academic vice president and provost at Washington State University. He served as assistant director for astronomical, atmospheric, earth and ocean sciences at NSF from 1977-79.

According to Donald E. Lenhart of the electrical engineering department, who was Slaughter's roommate during their undergraduate years and continues to correspond with him, Slaughter's rise to his present status is not too surprising. "There was never any question in anybody's mind that he was going to be a success," Lenhart said. "He was not only a good student, but he had drive, and he was also very personable."

After leaving K-State, Slaughter worked for General Dynamics, and from 1960-75 was employed by the Naval Electronics Laboratory Center in San Diego where he conducted significant research in digital control technology.

Slaughter received an M.S. degree from the University of California at Los Angeles and a doctorate from the University of California at San Diego. He has received wide recognition for professional activities and for his efforts to encourage the employment of blacks in science and engineering. He was named by the National Junior Chamber of Commerce as an "Outstanding Young Man of the Year" in 1969.

*This edition of the Impact Newsletter is published by the College of Engineering, Kansas State University, Manhattan, Kansas 66506. Subscriptions are available without cost upon written request. Material from this newsletter may be reproduced without permission, although credit to the source is appreciated.*

*Dean of the College  
Dr. Donald E. Rathbone  
Associate Dean of the College  
Dr. Ted O. Hodges  
Impact Editor  
Carolee Stark*

## Graduates receive awards for distinguished service



**Christy**

**Kesler**

**Peltier**



Three engineering graduates who have made outstanding contributions to their profession and to their alma mater received Distinguished Service Awards this spring from the College of Engineering.

Honored were Donald Christy (AE '33), former state senator and currently chairman of the board of directors of the First National Bank of Scott City; Joel P. Kesler (EE '33), retired partner in Black & Veatch Consulting Engineers, Kansas City, Mo.; and Eugene J. Peltier (CE '33), retired U.S. Navy rear admiral and retired president of Sverdrup, Parcel and Associates, St. Louis.

Christy has accumulated many years of service on state agricultural boards and has received awards for contributions to agriculture, engineering and banking. He is a charter member of the Engineering Advisory Council.

Kesler was associated with the Kansas State Highway Commission and Westinghouse Electric Corp. before joining Black & Veatch. He was a partner in the company for 23 years and also served as a consultant before retiring. His three children are also graduates of K-State.

Peltier retired from the Navy as chief of the Bureau of Yards and Docks and Chief of Civil Engineers. At Sverdrup and Associates, he was responsible for developing subsidiary companies and for major administrative restructuring. He received an honorary doctorate from KSU in 1961 and is a former member of the Engineering Advisory Council.

## Teachers honored



**C. Bissey**



**E. Lindly**

Two engineering faculty members received outstanding teaching awards during commencement exercises in May.

Edwin C. Lindly, associate professor of civil engineering, was one of four KSU faculty members chosen to receive the University's 1980 Award for Excellence in Undergraduate Teaching. The awards were presented at the all-University commencement.

Charles R. Bissey, associate professor of architectural engineering and construction science, was honored at the College of Engineering commencement with the James Hollis Award for Excellence in Undergraduate Engineering Teaching.

Lindly, who received the Hollis award in 1978, has been on the KSU faculty for 31 years. He has been active in the Manhattan Engineering Explorer Post sponsored by the College of Engineering and in the American Society for Engineering Education.

A 1942 graduate of Oklahoma State University, Lindly received an M.S. degree from Purdue University in 1949, an M.S. from K-State in 1957 and a Ph.D. from Iowa State University in 1964.

Bissey joined the KSU faculty in 1969. He formerly taught at the University of Massachusetts, where he was honored as an outstanding instructor for freshman students. Bissey earned his bachelor's degree from Colorado State University in 1957 and a master's in architecture from K-State in 1961.

## Youths explore careers

Some 60 Kansas high school students got a chance in June to explore careers in engineering and science.

The Engineering and Science Summer Institute, an annual event, is directed by John P. Dollar, assistant dean of engineering. The program is designed to familiarize youths with current topics in engineering and to illustrate some of the challenges of the future.

Students attended lecture-discussion sessions covering such topics as the computer revolution, energy in agriculture, alcohol fuels, job functions, engineering technology and current ideas in physics, mathematics and chemistry. They also got hands-on experience with computers.



## Scientists visit

The K-State engineering complex took on an international flavor this spring in two separate visits by scientists and dignitaries from 27 countries who were on campus to exchange energy research ideas.

Some 40 persons representing countries in South and Central America, western Europe, Africa and Asia met with K-State faculty members in engineering and agriculture to discuss biomass for energy production.

In another visit, four Republic of China chemical engineers met with L.T. Fan, head of the Department of Chemical Engineering, and E. Stanley Lee of industrial engineering to familiarize themselves with coal research being conducted by K-State engineers.

Fan, a noted authority on the subject, said the Chinese seemed well informed on coal research at KSU and had requested presentations on nine projects. Lee, who met the Chinese engineers while in their country last fall, talked with them about several of his books and his more than 100 published research reports. The group also visited several other universities as well as national scientific laboratories while in this country.

Walter P. Walawender of the Department of Chemical Engineering, who helped arrange the meeting with the larger group, said the visit, which was informal, "gave us a very good opportunity for a one-to-one information exchange." He added, "This was a unique experience for us to have that many authorities gathered together on our campus."

The group included scientists as well as high-level technical administrators and directors of national laboratories. Their visit was part of an international conference on bio-energy which took place in Atlanta. After leaving K-State, the visitors went on to tour several other universities and farms in the country.

## Traffic experts meet

Traffic specialists got their choice of three meetings on the K-State campus this spring. The conferences were directed by Bob L. Smith, assisted by Eugene Russell, both of the civil engineering faculty.

Approximately 400 persons attended a transportation engineering conference, which focused on joint interests and problems dealing with street and highway, air and rail transportation. Sessions included presentations on airline deregulation, solar energy, traffic control and marking systems, public transportation and highway management.

City and county personnel responsible for traffic safety met for two other workshops which dealt with means of reducing accidents. Procedures for analyzing high-accident locations was the subject of one workshop in which participants were given experience in setting up accident records systems, identifying high-accident locations and selecting appropriate measures to reduce roadway hazards.

In a third program, participants attended lectures, demonstrations and work sessions on street planning, traffic control devices, roadside hazards and accident statistics and use.



Sue Barsamian, junior in electrical engineering, accepts congratulations from Dean Donald E. Rathbone after students in her department won a trophy for outstanding participation in the KSU Telefund.

## Telefund a success

The College of Engineering did its share, and more, in a Telefund campaign conducted this spring by the Kansas State University Foundation.

Students, faculty members and alumni from the Colleges of Engineering, Agriculture and Arts and Sciences manned a bank of 15 telephones in the K-State Union to solicit pledges from alumni across the country.

Engineers brought in \$52,571 of the \$140,000 in pledges. The College of Agriculture raised \$47,209 and Arts and Sciences \$40,871. More than 550 persons participated in the 30-day Telefund. About 15,000 alumni were contacted and pledges were obtained from approximately 6,000.

The College of Engineering awarded a trophy to electrical engineering students for the greatest number of participants, 21, and the highest dollar amount in pledges, \$8,840. Engineering student groups competed for the prize.

Arthur Loub, executive vice president of the KSU Foundation, termed the Telefund an "outstanding success." The original goal was \$75,000. The project was designed to reach all graduates of the three colleges who did not make a contribution to the University in 1979.

## Potpourri

by Donald Rathbone  
Dean of Engineering



The good news of 1980 is that Durland Hall, Phase II, was funded by the State of Kansas. Thanks for this accomplishment are due to K-State President Acker and his staff, the Board of Regents, the Governor, some key legislators and some interested alumni.

Phase II has a total cost of just under 8 million dollars and will house the Departments of Electrical Engineering and Mechanical Engineering, the Dean's offices, classrooms and an Industrial Engineering laboratory. It should be an excellent facility, and we hope to break ground for Phase II in early 1981, about six months from now.

Legislators did extract "a pound of flesh" in their funding bill. They asked the University to raise \$250,000 toward the Phase II complex. This was about the same amount of monies that we had listed for fixed equipment for the building. Since we also need a similar amount of money for movable equipment, the College is hoping to raise a minimum of \$500,000 for equipping the new building. I am working with the KSU Foundation in establishing a fund-raising campaign for this purpose. *If you would like to help with this project, please let me know.* The key people in the campaign will be our alumni and our friends in industry. We have already received an anonymous gift of \$94,000 from an alumnus, which is a tremendous start for us.

Something else that is new in the College this Fall is the initiation of a Leadership Institute for interested students. I have been (slowly) working on this idea for a few years now, and it is finally coming to fruition. I'll report on its success in the next issue of *Impact*.

On a very sad note, the College lost two of its staunchest supporters and good friends this year in LeRoy Culbertson and Daric Miller. Their deaths were not only a great shock to us, but we also felt a very personal loss. They will be missed.

## Student leaders elected

Todd Smith, junior in mechanical engineering from Leoti, will serve as president of Engineering Student Council for the 1980-81 school year.

Vice president is Robert B. Curry, junior in construction science from Wooster, Ohio. Richard R. Mercer, sophomore in construction science from Wichita, is new secretary, and Suzi Shirvani, junior in architectural engineering from Manhattan, is treasurer.



# Faculty members busy with research projects . . .

Grants from the National Science Foundation and the Department of Energy are supporting research projects by **Larry E. Erickson**, professor of chemical engineering, on the energy value of waste products.

The possibility of converting brewery by-products into a commodity for use in commercial feed is the objective of a study by **Do Sup Chung** of agricultural engineering. The research is being supported by a grant from Anheuser-Busch Co.

**L.T. Fan**, professor and head of the Department of Chemical Engineering, is using a process of semifluidization, which he discovered in 1958, for various studies on coal gasification and liquidization and on the conversion of waste matter into fuels.

**Fan** and **Walter P. Walawender** of chemical engineering are working on a technique to blend high-sulfur Kansas coal with feedlot manure to reduce the amount of sulfur dioxide given off by the coal.

**Thomas W. Lester** and **Joseph F. Merklin** of nuclear engineering are studying the chemical processes involved in pollutant formation from coal. They also are attacking the problem of soot formation in jet engines for the Office of Naval Research.

**Naim Z. Azer** of mechanical engineering is using a National Science Foundation grant to improve the efficiency and performance of heat exchangers.

**Richard R. Gallagher** of electrical

engineering and **Anthony Kiorpes** of anatomy and physiology in the College of Veterinary Medicine are applying electronic instrumentation in locating congested areas in the chest, for possible use in the diagnosis of respiratory problems of man and animals.

**Jerome J. Zovne** and **James K. Koelliker** of civil engineering are compiling information to help water users in the Solomon River Basin make better decisions on allocation of water supplies. Their study will take into consideration farm conservation practices, the increased use of ground water for irrigation and changes in rainfall patterns.

**Frederick H. Rohles**, director of the College of Engineering's Institute for Environmental Research, is conducting a study on the control of the environment in enclosed spaces, including the effects of temperature, humidity, color, crowding and lighting.

**Rohles** and **Stephan A. Konz**, professor of industrial engineering, are developing guidelines which will give permitted levels of heat stress for workers who are exposed to high temperatures intermittently. The study will take into consideration clothing characteristics and physiological responses of workers who are acclimatized to alternate periods of heat and recovery. The Department of Health, Education and Welfare provided \$230,000 for the project.

**Herbert D. Ball** of mechanical

engineering is investigating the impact of lighting fixtures on heating and cooling loads of buildings for the American Society of Heating, Refrigerating and Air-Conditioning Engineers. **Robert L. Gorton**, **Paul L. Miller** and **J. Garth Thompson** are working with him on the project.

**Nasir Ahmed** of electrical engineering has received additional grants from the U.S. Air Force via Sandia Laboratories to continue studies on an intrusion detection system which would reduce false alarms.

**Eugene R. Russell** and **Bob L. Smith** of civil engineering are in the final phases of a project to determine whether reducing the number of rail-highway crossings would increase safety without an adverse effect on community development or travel patterns.

The National Science Foundation has designated **Stuart E. Swartz** and **K.K. Hu** of civil engineering to conduct a study of the cracking behavior in concrete structures with an eye toward better design of concrete highway pavement.

**Swartz** also is doing research on fatigue failures in pre-stressed concrete beams commonly used in bridge structures.

Grants from Motorola Corp. will enable **Donald Hummels** of electrical engineering to look into the problem of noise interference in the transmission of communications signals to and from earth satellites.

# . . . and a host of other professional activities

**Thomas W. Lester**, associate professor of nuclear engineering, has received the 1980 Dow Outstanding Young Faculty Award from the Midwest Section of the American Society for Engineering Education.

The award, sponsored by Dow Chemical U.S.A., is given annually to 12 engineering faculty members across the nation who have made significant contributions to the society and to engineering education.

**Robert L. Gorton**, professor of mechanical engineering, received an American Society of Mechanical Engineers Centennial Medallion for service to the society. He was honored for his contributions as faculty adviser to the KSU student section and for his 10 years of service on the Kansas City Section Executive Committee. He also served as chairman of the section.

**Arthur O. Flinner (ME '29, M.S. '33)**, professor emeritus of mechanical

engineering, received an ASME 50-year emblem for his service to the society and to the engineering profession. Flinner served on the faculty from 1929 until his retirement in 1973.

**John C. Lindholm (ME '49)**, acting head of the Department of Engineering Technology, is new vice chairman of the Midwest Section of the American Society for Engineering Education. Lindholm also is chairman of the Kansas Section of the Society for Experimental Stress Analysis; chairman of the Kansas City Section of the American Society of Mechanical Engineers; and faculty adviser to the student chapter of the Society of Women Engineers.

Three faculty members in the College of Engineering have been elected to office in the Tri-Valley chapter of the Kansas Engineering Society.

President-elect is **Robert Dahl**, head of the Department of Architectural Engineering and Construction Science. **James Koelliker** and **Myron Hayden**,

both of the Department of Civil Engineering, will serve as vice president and secretary-treasurer, respectively. Edwin Kittner, managing engineer for the Georgia Pacific Co. in Blue Rapids, is new president of the seven-county organization.

**L.T. Fan**, head of the Department of Mechanical Engineering, was in New Delhi, India, in March, to participate in the second International Course and Symposium on Bioconversion and Biochemical Engineering. On his return trip he visited the University of Cairo.

**Corwin A. Bennett**, professor of industrial engineering, has been elected Midwest vice president of the Illuminating Engineering Society of North America. Bennett, who is a licensed psychologist, has conducted a number of research studies on visual performance and aesthetic aspects of lighting.

See Page 6



# Here's news from engineering alumni

**William A. Sells (EE '33)** has retired after 31 years with the Los Angeles Department of Water and Power. He was assistant chief electrical engineer. Sells served in the Coast Artillery Corps during World War II and retired as a colonel in the U.S. Army Reserve.

**John G. McEntyre (CE '42, M.S. '48)**, former faculty member in the Department of Civil Engineering, received the Land Surveying Excellence Award from the American Congress on Surveying and Mapping. He is currently a professor of land surveying in the Purdue University School of Civil Engineering and a member of the Congress's board of directors. McEntyre's book, "Land Survey Systems," was recently published by John Wiley & Sons. He served on the KSU faculty from the 1940's until 1965.

**William R. Kimel (ME '44)** has been elected to the grade of Fellow by the American Society of Mechanical Engineers. Kimel is a former faculty member at KSU and became head of the Department of Nuclear Engineering in 1958. He received a Distinguished Service Award from the College of Engineering in 1972 and recently received the Faculty/Alumni Award from the University of Missouri, where he is dean of engineering, in recognition of outstanding achievement.

**James B. Lambert (ME '48)** is president and chief operating officer of T-Bar, Inc., manufacturers of on-line information systems. Before joining the company, based in Wilton, Conn., Lambert was vice president in charge of operations for Electronic Controls, Inc., Stamford, Conn., and also had worked for Yale & Towne Manufacturing Co. in Stamford as a methods engineer. He received a B.S. in business administration from K-State in 1949.

**Janis C. Butler and Charles D. May** have been selected as Associates with Wilson & Co., Salina, reflecting personal achievement and professional advancement. Butler, the first woman to become an Associate of the company, is director of Wilson Laboratories within the Industrial Division. She received a B.S. in chemistry from KSU in 1958 and an M.S. in 1961. May (CE '59) is production manager in the Civil Division.

A professional engineer in three states, May is currently president of the Kansas Engineering Society. Butler, an Engineer-in-Training in Kansas, has received several fellowships in chemistry and is active in chemical societies.

**Darrell M. Hosler (ME '59)**, P.E., is the new vice president-marketing for Burns & McDonnell, Kansas City, Mo. Hosler joined the company in 1959 as an engineer in the Special Projects Division and later advanced to project manager. He was made director of project development for the Division in 1975.

**Doug Exline**



**Doug Exline**, vice president of Exline, Inc., Salina, has received an award for meritorious service to the Diesel and Gas Engine Power Division of the American Society of Mechanical Engineers. A 1961 graduate in industrial technology, Exline's role in the ASME began when he was a student member. He became an associate of the Division in 1971. He currently is chairman of the Division's Exhibits Committee and a member of the Executive Committee and will advance to the presidency in five years.

**Craig A. Roberts (CE '65)**, P.E., partner in Wilson and Co., Salina, has been appointed to the engineering post on the Kansas Board of Technical Professions. Roberts has been active in the Kansas Engineering Society and is presently vice chairman of the Kansas Consulting Engineers.

**John D. Bridwell (EE '65)** has been elected vice president of marketing services and planning for the GTE Telecommunications Systems unit of GTE Com-

**John Bridwell**



munications, Stamford, Conn. He has served since 1979 as senior planner in the corporate planning office. Bridwell, who received a doctorate from the Polytechnic Institute of Brooklyn, is a former employe of the Boston Consulting Group, Bell Telephone Laboratories and Lincoln Laboratory at the Massachusetts Institute of Technology.

**Tom W. Scott (CE '67)** has a new position at Betz Laboratories of Travose, Pa. He has been named supervisor of engineering services, Gulf Coast, with headquarters in Houston, Tex. Scott has been with the Houston office for five years and has served as project engineer for the top 50 accounts in Texas. He was associated with British Nuclear Fuels Ltd. and Gulf Oil before joining Betz.

**Pat Patton (CE '69)** has been promoted to director, engineering management, on the refining administration staff of CRA, Inc., the petroleum refining subsidiary of Farm-land Industries, Inc., Kansas City, Mo. Patton worked for CRA as an engineer the summer between his junior and senior years and returned on a permanent basis after graduation. He became chief engineer at CRA in 1977.

**See page 6**



*Members and guests of the College of Engineering Advisory Council are pictured during their meeting in May. Standing, from left, are Ray Hightower, John Dollar, Bob Exline, Ted Hodges, Frank Tillman, Jerry Wilbeck, Don Curtright, Jim Richards, Stan Smith, Fred Eyestone, Dick Scherer, Todd Smith, Howard Eberline, Ed Smalley, Jim Miller. Seated, from left, are E.O. Nelson, Claude Wilson, Carolee Stark, Loyal Van Doren, Don Rathbone, Ray Adee, LeRoy Culbertson, Glenn Wood, Richard Hayter. Members not pictured: Fred Benson, M.A. Durland, Martin Eby Jr., Al Mistler, Robert Reid, R.C. Taecker, Jack Way.*



# Deaths



Miller



Culbertson



Potter

**W. Leroy Culbertson (ME '39)**, member and past chairman of the College of Engineering Advisory Council, died in July in West Virginia of an apparent heart attack. Mr. Culbertson, 61, had been senior vice president for corporate planning and budgeting at Phillips Petroleum Co., in Bartlesville, Okla. He received the College of Engineering Distinguished Service Award in 1970 and the University's Alumni Medallion Award in 1972.

**Daric M. Miller**, former chairman of the College of Engineering Advisory Council, died in April of a heart attack. Well known in the electric utility industry, Mr. Miller was senior vice president in charge of electric operations for Kansas Power and Light Co. at the time of his death. He received the College of Engineering Man of the Year Award in 1977 in conjunction with the Tau Beta Pi, engineering honorary, Company of the Year Award. A son, Karl, is a freshman in mechanical engineering at K-State.

**Andrey A. Potter, 97**, former dean of engineering, in November. Mr. Potter joined the KSU faculty in 1905, became head of steam and gas engineering in the Department of Mechanical Engineering in 1910 and was dean of engineering from 1913 to 1920. He was dean of engineering at Purdue University from 1920 until his retirement in 1953. He received an honorary doctorate in engineering from KSU in 1925. Scholarships honoring Mr. Potter and his wife, Eva Burtner Potter, a 1905 graduate in home economics who died in 1968, were established in 1978.

**Hermon H. Conwell (EE '07)**, Beloit, Wis., in January. Dr. Conwell had taught mathematics at the University of New Mexico, the University of Idaho and Beloit College.

**Joseph Lincoln Gale (MS in AE '36)**, Berkeley, Calif., in March, of a heart attack.

**Frank C. Lewis (AE '19)**, in November.

**John Yost (EE '27)**, Laguna Hills, Calif., in February, as a result of an auto accident. Mr. Yost retired as engineering department head at Sperry Rand Corp., Roslyn, N.Y., in 1967.

**Louis E. Noel (ME '52)**, last August. He was 61. Mr. Noel was employed by Ralston Purina Co. for 30 years.

**Mayanne Lee**, 48, wife of E. Stanley Lee, professor of industrial engineering, in June. Mrs. Lee was born in Peking, China, and had lived in Manhattan since 1966.

# Scholarships

**Brandeberry Mechanical Engineering Scholarship**, established by Mr. and Mrs. Norman W. Brandeberry, Russell. The scholarship will pay in-state tuition for a sophomore, junior or senior majoring in mechanical engineering at KSU.

Brandeberry, a 1955 graduate in mechanical engineering at K-State, is active in oil operations as president of Pioneer Operations Co., Inc. A former varsity basketball player, Brandeberry has been a strong supporter of the athletic program at K-State.

**Professor and Mrs. Alley H. Duncan Scholarship**, established by family and friends of Alley and Avis Hubble Duncan. The scholarship will cover tuition and fees for students majoring in mechanical and/or electrical engineering or foods and nutrition.

Duncan retired from the KSU mechanical engineering faculty in 1978 after 33 years of service. He received a bachelor's degree in electrical engineering from KSU in 1937 and an M.S. in mechanical engineering in 1949. Mrs. Duncan is a graduate of St. Francis School of Nursing, Wichita. Three of the couple's four sons are KSU graduates.

## Activities, from p. 4

**Paul L. Miller**, professor and head of mechanical engineering, is chairman of the Council of Sections, Zone III, of the American Society for Engineering Education. He is also on the ASEE board of directors.

**Stephan A. Konz**, professor of industrial engineering, is editor of the Educators Newsletter of the Human Factors Society.

**Peter B. Cooper**, professor of civil engineering, served as president of the

K-State Faculty Senate during the 1979-80 school year.

The first national nuclear engineering honor society, Alpha Nu Sigma, has been initiated by the Department of Nuclear Engineering. The department also had the first accredited program in that field in the country. **Hermann Donert** is faculty advisor to the new organization.

**James F. Goddard**, assistant professor of construction science, has been re-elected president of Sigma Lambda Chi, national construction honor society. As president, he coordinates the activities and correspondence of the 20 chapters of the society.

## Alumni, from p. 5

**W. Gary Cooper (IE '69)** has been named head of the metal products engineering department at the Bendix Corp. Kansas City Division. A former employee of the U.S. Atomic Energy Commission, Cooper joined Bendix 11 years ago and served in advanced development and production engineering before assuming his present position.

Three KSU graduates have assumed new positions at Kansas Power and Light Co. **Mike Crawford (ME '69)** has been promoted from superintendent of the Tecumseh Energy Center to superintendent of the company's Jeffrey Energy Center. He has been with KPL for 13 years.

**Fred Rogge (ME '70)** will replace Crawford at Tecumseh. Rogge, who has been with KPL for nine years, was formerly superintendent of the Hutchinson Energy Center.

**Larry Conrad (EE and ME '74)**, who joined KPL in 1974, has moved from assistant plant superintendent at Lawrence to superintendent at Hutchinson.

Hal Munger



**Hal Munger (CE '70)**, P.E., will manage the new Hays office of Wilson & Company, Salina. Munger is the son of **Elmer L. Munger (CE '36, M.S. '38)** and the grandson of **Harold H. Munger (CE '39)**, professor Emeritus at KSU.

**George P. Sugars (CE '77)**, Engineer-in-Training with the Washington County Highway Department, has been named "Outstanding Young EIT" for 1980 by the Tri-Valley chapter of the Kansas Engineering Society.

**Mark A. McAfee (ArE '79)** is employed by Dudley Williams and Associates, Wichita.



# Open House a glimpse of '80s

Visitors got a glimpse of "Engineering into the '80s" during Open House.

Following the '80s theme, students developed projects that included a robot; demonstrations of the capabilities of alcohol, solar and diesel fuel; and a model of a wastewater treatment plant that incorporated energy recovery and recycling of water and nutrients. The treatment plant won the Steel Ring



Mike McGeough, senior in chemical engineering, and Cathy Sabatka, senior in industrial engineering, above, reigned over Open House as St. Patrick and St. Patricia. Below, Glenn Wood, president of Steel Ring, which sponsored Engineers' Open House, and Dean of Engineering Donald E. Rathbone view a model of a wastewater treatment plant which won the Steel Ring prize for civil engineers for outstanding exhibit.



Trophy for civil engineers for outstanding individual exhibit.

Among other highlights was a device called the "Handy Hooker," which will automatically replace the draw bar on a tractor. Designed by agricultural engineering students, the device had earlier won top prize in the student design contest sponsored by the Mid-Central section of the American Society of Agricultural Engineers. The prize was the fourth in a row for K-Staters. They won the national competition three times, and will take the "Handy Hooker" to Chicago in December to try for a fourth in that category. Ag engineers won the Open House trophy for department-wide displays.

Other exhibits explained how plastics are produced; how railroad cars can be switched automatically; and what telephone companies are doing with new discoveries in communications.

Visitors also viewed, among other exhibits, a model of nuclear waste disposal shipping containers and a model of a fire station, designed from specifications for a proposed new sub-station for Manhattan.

The 1½-day event was topped off by the annual Open House Awards Banquet.



Cutting the ribbon which officially began K-State's Open House activities is President Duane Acker, who donned novelty sunglasses and hat for the occasion. Acker took the cue from a group of students who wore outsized glasses and beach attire in defiance of drizzly weather.



Mark Boguski, senior in agricultural engineering, explains the award-winning Handy Hooker to Open House visitors. Looking on, from left, are KSU President Duane Acker and G.E. Fairbanks, faculty advisor on the project.



### Energy, from p. 1

The program will rely on county agents as disseminators of technical information as well as on three engineering specialists headquartered at K-State, plus one field engineer. In addition, expertise existing at other universities within the state will be utilized. As the program develops, there will be more reliance also on existing Extension specialists at K-State who are versed in energy matters.

Hayter said the engineers will provide assistance to building design firms, real estate developers and agents and others who want information on energy standards in buildings. They also will aid transportation fleet operators such as school districts in designing bus and truck routes to save energy.

Those who want more information about the program may call Hayter at 913-532-5624.



John Chalmers, right, vice president for academic affairs, received an honorary Knight of St. Patrick award from Dean Donald E. Rathbone during Engineers' Open House. Chalmers retired from his administrative duties this spring and will return to full-time teaching. Also inducted into the society were 25 outstanding seniors in the College of Engineering.

## K-Staters paddle to victory



Civil engineering students and faculty paddled to victory in this spring's concrete canoe races, winning the prize for best performance of any of the 10 Midwestern universities entered in the contest.

Though they failed to take first place in the finals, K-Staters managed to accumulate enough points to wrest the traveling trophy from the University of Kansas, which had won last year.

Two student teams placed 2-3 in the men's race, while Jerome Zovne and Harry Knostman of the civil engineering faculty were second in the faculty race. KU won the men's and the faculty races. The women's race was won by the University of Missouri-Kansas City. A team from Texas A&M University had the fastest run of the day and also took the prize for the best-constructed canoe.

## Engineering students host two meetings

Engineering students rolled out the welcome mat in April for two meetings of professional organizations.

The National Organization of Student Chapters of the Associated General Contractors of America met in the K-State Union, with about 55 members attending.

Nuclear engineers hosted the American Nuclear Society Student Conference. About 135 persons attended.

The AGC program stressed professional development, and included sessions on construction supervision,

estimating procedures and a tour of an institution using solar heating.

Focus of the nuclear society conference was on presentation of papers by graduate students. K-Staters who presented papers were Hussein Khalil, Manhattan, Kenneth D. Matney, Kansas City, and Sharon Szydowski, Milwaukee, Wis. The students also heard James R. Schlesinger, former Secretary of Energy, who presented a Landon Lecture during the conference. Schlesinger's son Charles is a sophomore in construction science at K-State.



College of Engineering  
Kansas State University  
Manhattan, KS 66506

Nonprofit Organization

U. S. POSTAGE  
**PAID**

Permit No. 525  
Manhattan, Kan. 66502

**SECOND CLASS**