K-STATE ENGINEERING impact
NEWSLETTER

Vol. 18, Number 1 Spring 1983

It's a fact . . .

. . . Two Kansas State University chemical engineers, John Greene and William Honstead, were pioneers in dehydrating potatoes, developing a simple, inexpensive process when a method of shipping large quantities of potatoes to troops overseas during World War II was needed. Honstead (See p. 3) recently retired.

Only the finishing touches remain to be added on the facade of Durland Hall, Phase II, three-story structure at right above. The building is connected to Phase I by a lobby. The new facility is scheduled for occupancy in June, with dedication ceremonies set for early fall.

Durland funding at 2/3 mark

The campaign to raise $1 million to equip Durland Hall, Phase II, the new engineering building, has reached the two-thirds mark, with approximately $656,000 recorded so far in pledges and donations. The three-year fund-raising drive began in March of 1981.

"We feel that we're right on target, and that we've done extremely well, considering the state of the economy," Dean of Engineering Donald E. Rathbone said. "We are grateful to all of our alumni and friends who have been so generous in their contributions."

Rathbone added that "Our advisory committee has worked hard in contacting key industries. In the face of current economic conditions, we are going to have to be even more effective to raise the remaining $344,000."

Durland Hall, Phase II is the second stage in the construction of a modern engineering complex at Kansas State University. The first building was completed in 1976 and a third is scheduled for the late 1980s. Phase II is expected to be completed in June.

The majority of the funds will be used for laboratory equipment with a portion of the remainder earmarked for distinguished professorships. Funds also will be needed for a student lounge, which was included after the original design for the building was drawn up. The lounge will cost an estimated $110,000.

"The lounge will be located over the entranceway, overlooking the lobby," Rathbone said. "It will be a beautiful setting, and tastefully furnished. The College would like to name the lounge after the person or organization donating the funds for that portion of the building." Donors for teaching/research laboratories and other rooms will be so recognized also, Rathbone said.

The lecture hall has been named for LeRoy C. Paslay, who contributed $100,000 toward the building fund.

Durland, Phase II will be occupied by the central staff of the Dean of Engineering and by the Departments of Electrical and Mechanical Engineering.

The advisory committee, which is leading the Durland campaign, is a combination of the College of Engineering Advisory Council and other key individuals.

Construction continues on the main lobby area of Durland, Phase II. The lobby extends through the building. Balconies open onto the lobby from each of the upper stories, adding a pleasant airiness. A student study lounge will overlook the lobby from the south end of the building. Aesthetic appeal will be heightened with decorative stonework on stairwells and the use of bright colors on walls.

Plan to attend 1983 Open House activities (See form on page 7)

Durland Hall, Phase II Advisory Committee

Regional coordinators are: Midwestern Region—Charles Carter, president, ret., Arco Pipeline Co., Independence, Kan.; Eastern Region—A.J. (Al) Mistler, senior vice president, ret., Armco, Inc., Middletown, Ohio.

Committee members are: Ray Adee, vice president, ret., Hesston Manufacturing Co., Hesston, Kan.; Fred J. Benson, president, Texas A & M Research Foundation, College Station, Tex.; Don Curtright, president, Greb X-ray Co., Lenexa; Martin K. Eby, president, chairman, Martin K. Eby Construction Co., Wichita; Robert Exline, president, Exline, Inc., Salina; Gordon Goering, senior vice president, Phillips Petroleum Co., Bartlesville, Okla.

Stuart B. Hartman, president, Seaview Petroleum, Inc., Blue Bell, Pa.; Gil Johnson, chairman, Johnson Construction Co., Colorado Springs; Richard Kerschen, president, Law Construction Co., Wichita; Edward King, president, King Radio, Olathe; Ernie Nelson, senior vice president, Panhandle Eastern Pipeline Co., Kansas City; Eugene Peltier, Admiral, ret., Sverdrup & Parcel & Associates, St. Louis; Al Rector, senior vice president, ret., Burns & McDonnell, Kansas City; Robert L. Reid, principal, Reid, Inc., Houston.

Richard Scherer, business development manager, Boeing Engineering & Construction, Wichita; Harold Seigele, senior vice president, Exxon Company, U.S.A., Houston; Loyal M. Van Doren, principal, Van Doren-Hazard-Stallings, Topeka; John Walters, vice president, Stromberg-Carlson, Tampa, Fla.; Jack Way, president, Concrete Industries, Inc., Lincoln, Neb.; Jerry Wilbeck, vice president, Phoenix Aerospace, Inc., Kansas City; Claude Wilson, vice president, ret., Prairie View A & M, Prairie View, Tex.

Special Needs

Student Study Lounge (estimated cost $110,000)—This lounge will overlook the lobby and will provide an excellent study facility for the students. The lounge also will be the major display area for artwork and other exhibits.

Robotics Laboratory—This will be an interdisciplinary laboratory under the direction of Industrial Engineering. The lab will contain equipment that will allow the College to keep abreast of latest developments in manufacturing.

Computer Laboratory—This facility will be a special remote computing center for the College and will include equipment with computer-aided design capabilites.

Other Laboratories—These laboratories will be used primarily by the Departments of Electrical and Mechanical Engineering.

Distinguished Professorships—Funds will be used to attract and retain faculty members with superior teaching and leadership qualities.

S. Fred Eyestone

Engineering loses long-time friend

S. Fred Eyestone (EE '41), a member of the Engineering Advisory Council and a coordinator of the Durland Hall fund-raising campaign, died Dec. 27.

Mr. Eyestone, 63, of Woodside, Calif., retired in 1982 as vice president of Varian and Associates, Palo Alto. He was a long-time friend of the University and had been closely associated with College of Engineering programs for many years.

He was chosen in 1981 as a coordinator for the Durland Hall campaign, and had done an "outstanding job" in soliciting financial support for equipment for the building, according to Dean of Engineering Donald E. Rathbone.

"He had an immense loyalty to all the organizations and associations to which he belonged," Rathbone said. "We lost a great friend of the University and of the College of Engineering."

Mr. Eyestone's strong interest in his alma mater led to one of the largest gifts to the University ever recorded. In 1980, Mr. and Mrs. Eyestone presented the KSU Foundation with a $700,000 gift. Mr. Eyestone was a trustee of the Foundation.

In 1961, he received a Distinguished Service Award from the College of Engineering for his contributions to education and to the engineering profession.

Lecture hall named

The 180-seat lecture hall in the new Durland Hall engineering building will be named after LeRoy C. Paslay, a K-State graduate and a renowned engineer and inventor.

Paslay donated $100,000 to help equip the building.

"Mr. Paslay has been a strong supporter of engineering education and we are very pleased to recognize him in this way," Dean of Engineering Donald E. Rathbone said.

Paslay was graduated from KSU in 1930 with a degree in electrical engineering. After working for General Electric Company, he returned to KSU as an assistant professor of electrical engineering while pursuing a master's degree, which he received in 1934.

Paslay, who now lives in Manalapan, Fla., was a pioneer in the development of seismic recorders and was the principal designer of the Marine Seismic Steamer, an underwater recording device. He later formed his own companies to manufacture and distribute the device. In the Spring of 1982, he received a Distinguished Service Award from the KSU College of Engineering.

Claude L. Wilson

Honorary degree awarded

Claude L. Wilson, founder and first dean of the College of Engineering at Prairie View A&M University, Texas, received an honorary degree from Kansas State University during graduation exercises in May. Wilson is a 1925 K-State graduate in mechanical engineering and received two masters' degrees from KSU. He is a native of Ottawa.

Wilson joined composer Aaron Copland and former Manhattan Christian College President W.F. Lown as recipients of honorary degrees last spring.

After post-graduate work at major universities, Wilson began teaching at Prairie View and in 1933 he also became superintendent of buildings and utilities. He founded the College of Engineering in 1941 and served as the first dean until 1966, when he was named dean of the university. In 1970, he was appointed vice president for planning and engineering. He is currently consulting engineer for Prairie View and for Bovay Engineers, Inc., Houston.

Wilson is a registered Professional Engineer and holds memberships in a number of professional, scientific and honorary organizations. He has contributed to professional journals and is listed in Who's Who in the Southwest and Who's Who in Engineering.

In 1962, Wilson received a Distinguished Service Award from the KSU College of Engineering. He has been active for many years in the Texas Society of Professional Engineers and was selected as Engineer of the Year for his region in 1977.

"It is the nature of man to rise to greatness if greatness is expected of him."—John Steinbeck

Course eases entry to computer age

The Manufacturing Option in the Department of Industrial Engineering is designed to meet the needs of manufacturers confronted with the computer age.

Though it is only two years old, the option is attracting increasing numbers of students, according to Frank Tillman, head of the department.

The program, the only one of its kind in Kansas, prepares students to handle the technological onslaught of computers in the manufacturing of goods for domestic and international markets.

"It's a body of knowledge that's coming into its own," Tillman said. "If a company is going to compete in the world market, its employees must understand how computers work in manufacturing."

Students in this option receive a broad background in industrial engineering and traditional manufacturing methods and are introduced to the special problems of the computer.

The decision to use computers and where to apply them varies with each company. Knowing when and how to use them to the best advantage is critical, Tillman said.

Computer upgrade part of 3-year plan

Computer-aided design is near reality at K-State as the first step in a multi-year upgrading of computer facilities in the College of Engineering.

A new VAX-II computer system, its accompanying programs and computer terminals, began arriving in August. Once on-line, the computer will enhance the College's abilities in computer-aided design and image processing.

The system is part of a three-year plan that will move the College to the forefront of computer education, according to Dean Donald E. Rathbone. He estimates that it will cost a minimum of $400,000 to establish the facility.

Rathbone said the Department of Electrical Engineering already has an "excellent reputation"in the area of image processing. But computer-aided design is relatively new and is a key to increasing the productivity of engineers and corporations throughout the world, he pointed out.

Terminals and connecting hardware will need to be installed with the new system before it becomes operational. Rathbone said this probably would take about one year.

Initially, mechanical engineering faculty and students will be the main users of the computer-aided design capabilities, although eventually the design ability will be used by all departments.

Charles Spillman

Spillman to head Ag Engineering

Charles K. Spillman, a professor in the Department of Agricultural Engineering, has been named head of the department.

Spillman has been at K-State since 1969. He replaces Gustave Fairbanks, who has been acting head of the department since the resignation of William H. Johnson. Johnson is now director of the KSU Engineering Experiment Station.

"Dr. Spillman has an excellent background in teaching, research and extension," Dean of Engineering Donald E. Rathbone said. "We are pleased to have such a qualified individual to continue the fine program in the Department of Agricultural Engineering."

Spillman was an extension agricultural engineer at Michigan State University from 1962 to 1966. He holds bachelor's and master's degrees from the University of Illinois and received his Ph.D. from Purdue University in 1969.

A noted authority on the use of solar energy in animal shelters, Spillman has done extensive research in this area and has a number of publications to his credit.

Spillman holds memberships in a number of honorary and professional associations. He is past chairman of the Kansas section of the American Society of Agricultural Engineers and a national director of ASAE, and has served on many regional and national committees of other organizations.

KSU joins NE program

Kansas State University has been chosen a participating university in a U.S. Department of Energy program designed to encourage graduate-level studies in nuclear science and engineering.

Selection of K-State was based on evaluation by a panel of individuals from the academic community, nuclear industry and national laboratories.

Under the program, selected students will receive fellowships for one year or less, for study and research in the Department of Nuclear Engineering at KSU.

After the first year, each fellow in the program will join in a practicum of ongoing nuclear fission energy research and development work at a DOE-approved national laboratory or nonprofit research institute associated with an academic institution.

The program is administered by the Oak Ridge Associated Universities and funded by DOE. The program at KSU will be coordinated by N. Dean Eckhoff, head of nuclear engineering.

William Honstead

Retirement ends 40 years of service

William H. Honstead, professor of chemical engineering and executive vice president of the KSU Research Foundation, retired in January after 40 years of service to the University.

Honstead is a former head of the Department of Chemical Engineering, and began his official duties at the research foundation as its first paid employee in 1972. He also served as director of the Kansas Industrial Extension Service from 1970 to 1981, when the service was reorganized under the Kansas Engineering Extension Service.

As executive vice president of the research foundation, Honstead has administered the patenting and licensing of inventions stemming from K-State research.

Honstead holds bachelor's and master's degrees from KSU and received a Ph.D from Iowa State University in 1956.

He was appointed to the K-State faculty as an instructor in chemical engineering in 1943 and achieved the rank of professor in 1957. He served as department head in chemical engineering from 1960 to 1968 before taking on duties in the Kansas Industrial Extension Service.

Honstead was honored recently at a reception and a dinner in the K-State Union. He was given a plaque and cash donations as a gift. In addition, more than $2,000 was collected toward a scholarship fund which has been set up in his honor.

Charles Jakowatz

LeRoy Paslay

College presents service awards

Two Kansas State University graduates in electrical engineering received Distinguished Service Awards from the College of Engineering during Open House last spring.

The awards were presented to Charles V. Jakowatz of Wichita and LeRoy C. Paslay, a native of Manhattan now living in Manalapan, Fla.

Jakowatz is a former dean of the College of Engineering at Wichita State University and is currently professor of electrical engineering at WSU. Paslay has been involved in the production of marine equipment and in underwater exploration.

Jakowatz received his engineering degree from KSU in 1944 and Paslay in 1930. Both hold masters' degrees in electrical engineering from K-State and taught for brief periods in that department.

After receiving a Ph.D degree from the University of Illinois in 1953, Jakowatz worked for more than a decade for the General Electric Research Laboratory. His research there resulted in four patents on new developments in electrical engineering.

In 1965, Jakowatz became dean of the College of Engineering at Wichita State. Among his accomplishments there was a dramatic increase in faculty as well as the initiation of research activities, including development of the Center for Engineering Research. He also introduced a Ph.D program in aeronautical engineering and a bachelor of science in engineering.

Paslay became vice president and director of research for the National Geophysical Company, Dallas, Tex., after leaving K-State. In 1942, he was appointed director of the Underwater Sound Division of the Naval Ordinance Laboratory, where his work won him the U.S. Navy Distinguished Civilian Service Award.

Paslay was the principal developer of the Marine Seismic Steamer, a recording device which earned him a patent and the Society of Exploration Geophysicists Medal Award for 1976.

In 1946, Paslay formed the Marine Instrument Co., Dallas, to carry out his ideas for seismic exploration.

Publication lists research projects

A newly published report of research activities in the College of Engineering is available through the Engineering Experiment Station.

The biennial report describes in brief the current projects of engineering faculty members. It also contains a list of published articles and papers written by the research faculty.

For a free copy of "Research Activities 1981-82," write to Dr. William H. Johnson, Director, Engineering Experiment Station, Seaton Hall, Kansas State University, Manhattan, KS 66506.

Dean Morton

H-P represented

Dean Morton, executive vice president and director of Hewlett-Packard Co., Palo Alto, Calif., has been named to the College of Engineering Advisory Council. He will serve a three-year term.

A native of Wichita, Morton received an electrical engineering degree from K-State in 1954 and holds a master's degree in business administration from Harvard University.

Morton has been with Hewlett-Packard since 1960. He became a vice president in 1973 and assumed his present position in September 1977. As executive vice president, Morton oversees the company's operations in medical and analytical instrumentation, electronic components, personal computers and calculators, and corporate manufacturing services.

Morton is a member of the board of directors of a number of companies and institutions, including Stanford University Hospital.

All Charged Up

The KSU Office of Security and Traffic now has an electric car, thanks to Engineering students. The car was given to the College of Engineering by Kansas Power & Light Co. in 1976, used in research for a period, then stored. The students gutted, cleaned and painted the vehicle and redesigned it to suit the purposes of campus traffic personnel.

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Dean of the College
Dr. Donald E. Rathbone
Director, Engineering Experiment Station
Dr. William H. Johnson
Impact Editor
Carolee Stark

Here's news from Engineering alumni

Sirjang Lal "Jugi" Tandon (M.S., ME '65), president of Tandon Corp., is presented with a plaque by Bradley Jones of INC. magazine honoring Tandon Corporation's 13th place listing in the INC. annual listing of the 100 fastest-growing companies in the United States. Tandon, based in Chatsworth, Calif., is one of the world's leading producers of disk drives for computers.

Col. (Ret.) Edwin O. Earl (EE '29) is rebuilding his home in Falls Church, Va., after retirement from the U.S. Army and from Melpar Division of E-Systems. A son, David, graduated from K-State in electrical engineering in 1962 and now lives in Enid, Okla.

Howard A. Coleman (CE '31) has retired from Missouri Portland Cement Co. as vice president, marketing, and is now an account executive with R. Rowland & Co., a securities investment firm in St. Louis.

Harold G. Deters (CheE '38) is president of ICE Corp., Manhattan.

Richard Christy (AgE '39) is farming in Scott City.

Bruce Roberts (CE '39) received the Outstanding Engineer award for 1982 from the Smoky Valley chapter of the Kansas Engineering Society. Roberts is retired executive partner of Wilson & Company, Salina, and president of Wilson-Murrow Consulting Engineers.

Joe E. Thompson (CE '39) is retired vice president of Natural Gas Pipeline Co. of America, Chicago. He lives during the summer months in Dover, Del., where he taught at Delaware State College. He also has taught at Pennsylvania State University and University of Delaware. His winter residence is Ocala, Fla.

Donald S. Brown (ChE '40), Havertown, Pa., is retired from Atlantic Richfield Co.

J.H. Eppard (ChE '40), Frazer, Pa., is retired from Sun Oil Co. He spent 10 years in Liberia with the company.

Robert G. Lake (EE '40) is retired from General Electric Co. and lives in Broomall, Pa.

J. Ralph Marshall (ChE '40), Topeka, is retired after 37 years with the DuPont Co.

William Keogh (ChE '42) is on the faculty of Stanford University Law School.

Arthur D. McGovern (ME '42), Hutchinson, is retired from General Electric Co. in St. Petersburg, Fla.

Vinton D. Carver (ME '43) is chief operating officer for Basic Enterprises, Newport Beach, Calif.

Ed King, Jr. (EE '43) of King Radio Corp., Olathe, was recognized as one of two Kansas Exporters of the Year in 1982 by the International Trade Institute at K-State.

J. Dan Skelton (EE '48) is manager, exploration data processing, for Exxon in Houston.

Arthur Cotts (EE '49, MS '50), Silver Spring, Md., has retired from the Applied Physics Laboratory of The Johns Hopkins University after more than 24 years. He is pursuing a new career as a consulting engineer.

Eugene L. (Gene) Fieldhammer (CE '50) is president of Booker Associates, Inc., an engineering, architectural and planning firm in St. Louis. After graduating from K-State, Fieldhammer worked as a consulting engineer for firms in major cities, including New York, where he participated in the design of the Mackinac Straits Bridge in Michigan and the Kingston-Rhinecliff Bridge over the Hudson River.

See Alumni, p. 6

1930's graduates tell it like it was

Those who think times are tough today should listen to KSU engineering graduates from the class of 1932. They're a reminder of how much worse things were during the onset of the Great Depression. Graduates who attended the alumni reunion in April agreed that if they had been a couple of years older they at least would have had jobs.

"All of the grads had jobs in 1930," said William Hall, 1932 graduate in mechanical engineering from Lindsborg. "Only one of them had a job in 1932."

Ralph Roderick (CE '32) remembers "wearing my thumb out hitchhiking along the highways for a year trying to find work." Roderick, who now lives in Corvallis, Ore., finally landed a position with Wilson & Company, Salina, in 1933. "Wilson was just starting up," he said. "Somebody told me they had a job open, and I was there the next morning knocking on the door."

Hall and Alvin D. Meyer, Kenmore, N.Y., said they eventually went to work for IBM, Meyer in 1933 and Hall in 1934.

According to Merl L. Burgin (EE '32), "Only two graduates got jobs with companies with 'electrical' in their names. He went to work that year for American Electric Co. in St. Joseph, Mo., as a repairman. Another graduate, he said, was offered a position, but the starting date was deferred until 1933.

Karl Martinez (EE '32) said he moved to Seattle, Wash., in 1935 and taught physics "to wangle my way into Boeing." He did flight test research there for 35 years, with time out for World War II, repairing B-17s and B-29s for the Army Air Force. He recalls being "quick frozen" during a particularly cold flight and being "taken out of a plane with an ice pick." He later was involved in the U.S. space program.

Lester Hagadorn

George Boys

In 1963, Martinez received the Centennial Award from K-State, one of 12 graduates to receive the honor, given on the 100th anniversary of the establishment of the University as a Land Grant college.

About 45 engineering graduates, most of them from the classes of 1922, 1932 and 1942, attended the engineering luncheon in the K-State Union. Represent-

See Graduates, p. 6

Eugene L. Fieldhammer

Alumni cont'd.

Marlon E. Sack (EE '50) has retired from Eby Construction Co., Wichita, after 31 years. During that time he served in a number of positions, including vice president and director. Two of his children are graduates of K-State, and a daughter, Ann, is a junior in chemical engineering.

Bert E. Beeghly (ME '51) is manager of technical services for Phillips Pipe Line Co., Bartlesville, Okla.

Austin W. Stedham (EE '52) is vice president of Kansas Power & Light Co., Topeka.

Virgil H. Snell (ArchE '54) heads the civil structural department of the Power Division of Black & Veatch, Kansas City. He became a partner in the company in 1981.

Thomas D. Stade (EE '59) is a section head at Hughes Aircraft Co., El Segundo, Calif.

Pat Nevins (CE '60), director of public works and city engineer of Auburn, Wash., was selected as one of the nation's top 10 public works leaders for 1981 by the American Public Works Association.

Ray E. Huebner (EE '62) retired from the U.S. Marine Corps as a lieutenant colonel and is now in systems engineering with E-Systems Garland, Tex., Division. He was involved in research and development of command control and communications equipment in the Marine Corps.

Tom Roberts (NE '65) is in engineering training and development with Black & Veatch, Kansas City.

David Wainwright (CheE '68) is a process engineer with the Phillips Petroleum Co. refinery in Kansas City.

John L. Mitcha, Jr. (ME, Bus. Ad '69) is manager of project planning and engineering for Conoco in Houston, Tex.

Rick Radcliff (CnS '74) has been elected vice president-projects for Tefft and Donaldson Contractors, Inc., Topeka.

Elizabeth M. Huning (CE '80) received the 1982 Outstanding Engineer-In-Training award from the Smoky Valley chapter of the Kansas Engineering Society. Huning is employed in the Environmental Division of Wilson & Company, Salina.

Christopher Patzell (ME '80) is a service engineer with Babcock & Wilcox Co., Birmingham, Ala.

Ron Rodveldt (EE '80) is a project engineer with Didde Graphics Systems, Emporia.

Emery F. Wiens (AgE '80) is an agricultural engineer with the Soil Conservation Service at Beloit.

Jane Yarbrough (CnS '81) was the subject of a recent article in the Parsons (Kan.) Sun describing her work at the Parsons-based LaForge and Budd Construction Co., and her appointment as manager of a $1.9 million project in Oklahoma.

Graduates cont'd.

ing the class of 1922 were Orville K. Brubaker, with his wife Isabel, George H. and Rena Reazin and Mr. and Mrs. Lawrence Whearty, of Billings, Mont.

All of the graduates had memories of what college was like in the first half of the century. Some were "oddities," as Lester Hagadorn (CE '32), Salina, described himself. "I was a married man." He said his wife Susan, who worked in the mechanics plant on campus, "put me through school."

Hagadorn said the "real reason" he got his degree came out in a conversation he overheard between a professor and M.A. "Cotton" Durland, then Dean of Engineering. Asked why he was giving Hagadorn a degree, Durland reportedly answered, "Because we felt sorry for Mrs. Hagadorn."

George W. Boys (EE '33), Chevy Chase, Md., recalled his days at K-State when he lived in the historic Ulrich home at 8th and Humboldt. He lived there with his grandmother, who was the original owner of the home, the only building in town made of red brick manufactured in Manhattan.

Boys earned a law degree after leaving K-State and worked in the U.S. Patent Office until his retirement in 1975.

Edgar Furse (EE '32) and his wife Maria Villavicencio Furse returned to the campus from Lima, Peru, where they have lived since 1936. After a stint with ITT, Furse spent 25 years with Pan American Grace Airlines (later Brannif Airlines), retiring from the communications department in 1972. This was the Furses' first visit to Manhattan since 1965, although they travel to California about once a year to see their two sons.

Graduates noticed the changes in the College of Engineering, and in Lawrence Whearty's estimation, "The campus has changed all for the better." Whearty worked for the U.S. Bureau of Reclamation, and in 1956 joined the U.S. State Department as an engineer in the foreign aid program.

Others who were present at the alumni luncheon—From the class of 1927: Glen H. and Elynor Stoffer, Irvin D. Wright and R.G. and Margaret Manley Cortelyou.

From the class of 1932—H. Gerald Bobst, Merl L. Burgin, John W. and Dorothy M. Burke, Raymond K. and Wilma Finney Hoefener, Howard and Annella Shepard Kipfer, Phil O. and Bess Williams Lautz, Clifford A. Palmquist, Henry and Florence Ruff, Robert J. and Gay Rychel, Roy N. Selby, Ernest J. and Edith Underwood and Wayne and Ozelle F. Tolley.

From the class of 1937—Michael J. Kilroy, Palmer M. Mellgren, Robert V. and Lois A. Blanche, Alwin and Joyce Rector, Professor Emeritus Alley Duncan and Avis Duncan.

From the class of 1942—A.W. and Jewel Acker, Benson and Ruth Bachus, Clarence B. and Frances Brown, Wilber and Loma Hole, John G. McIntyre, Walter R. Meyer, Eugene B. Mills, Wilbur B. Reed and Oliver V. and Garnett Wilson Riley.

Deaths

Glen I. Johnson (AE '28), June 11. Mr. Johnson was a longtime agricultural engineer for the University of Georgia Cooperative Extension Service, and was instrumental in the development of 4-H camps throughout the state. He also spent several years in Cambodia helping to develop ag training resources.

George F. Branigan (M.S., CE '33), Aug. 4. Dr. Branigan was dean emeritus of the College of Engineering at the University of Arkansas at Fayetteville and also was a former dean of engineering at Bradley University. Among his many other activities, he was a past president of the National Council of Engineering Examiners and served two terms as national president of Theta Xi Fraternity. He was named Engineer of the Year by the Arkansas Society of Professional Engineers in 1978 and received an award for distinguished service from the Arkansas College of Engineering in 1981.

What we like to hear

"Kansas State engineers are held in high regard." That's what Carl C. Steavenson (EE '57) says, and he ought to know. He recently formed Carl C. Steavenson, P.E., and Associates, a personnel search and placement firm in Sylmar, Calif. He places engineers in positions mainly in central and southern California, but in other areas as well.

Puzzle editor has challenge for you

George Muehler (ME '24, EE '25), West Lafayette, Ind., is puzzle editor for the newsletter of the Oceanic Engineering Section of the Institute of Electrical and Electronics Engineers. He presents the following challenge to fellow alumns (see next issue of IMPACT for answer):

"Five men were shipwrecked on an island. They took a survey of the food situation and found one monkey and lots of coconuts. They decided to wait until the next day and divide the coconuts into five equal piles.

"During the night, one of the men woke up and decided that the other members of the group were not very trustworthy and would try to cheat him out of some of his coconuts. He wanted to take care of himself, so he went to the coconuts and divided them into five piles. He found one coconut left over and gave it to the monkey. He then put four of the piles of coconuts back together, took his pile of coconuts and hid them.

"Later the second man woke up and had similar thoughts, so he got up and divided the remaining pile of coconuts into five equal parts and found one extra coconut, which he gave to the monkey. He put four of those piles back together, took his pile, hid it and went back to bed.

"In turn, each of the other three men woke up, had similar thoughts and made similar decisions about the piles of coconuts. Each time there was one coconut remaining, which they gave to the monkey. The next morning when they divided the remaining pile of coconuts, it divided evenly into five piles.

"What was the minimum original number of coconuts?"

According to Muehler, the above puzzle has been circulating for many years. After it appeared in a Purdue University publication for which he was puzzle editor during the late 1970s, he said he "had a call from a 1923 alumnus who had worked it out 40 years before."

Muehler taught electrical engineering at Purdue for 33 years. He was senior advisor to KSU Dean of Engineering Donald E. Rathbone when Rathbone was a student there. Muehler left Purdue in 1957 to work as a designer for Robbins & Myers, electrical manufacturers, in Springfield, Ohio. He later taught at Clark Technical College in Springfield. He now is consulting engineer for Capital Business Systems, Indianapolis.

Slaughter in new post

John Slaughter, director of the National Science Foundation for the past two years, has submitted his resignation to become chancellor of the University of Maryland, College Park.

Slaughter is a 1956 K-State graduate in electrical engineering. He received a Distinguished Service Award from the College of Engineering in 1981 and was named a "Distinguished Kansan of 1982" by the Topeka Capital-Journal.

In a recent interview, Slaughter said, "I had always hoped to have an opportunity at some stage in my career to head a major campus of a major university." Slaughter will be the first black to head the University of Maryland's main campus.

The College Park campus has an enrollment of 37,000 students.

Slaughter was appointed an assistant director of the National Science Foundation in 1977. He left NSF in 1979 to become provost and academic vice president of Washington State University, but rejoined NSF in 1980 as chief administrative officer.

Plan to attend 1983 Open House

"Engineers, Designing for Tomorrow Today" will be the theme for 1983 Engineers' Open House. The event, which will be held in conjunction with the all-University Open House, is scheduled for March 25-26. Activities will begin with a parade at noon Friday, March 25. Engineering displays will be open from 5:30 to 9 p.m. and again from 9 a.m. to 4 p.m. Saturday.

The College of Engineering is planning an alumni luncheon for noon Saturday at the University Ramada Inn. An awards banquet is scheduled for 6:30 p.m. in the K-State Union Ballroom, preceded by a social hour at 5:30 at the Ramada Inn. The KSU Jazz Band will perform after the banquet. We hope you can attend. Fill out the form below for reservations.

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PLEASE RETURN THIS FORM TO:

Donald E. Rathbone
Dean of Engineering
116 Seaton Hall
Kansas State University
Manhattan, KS 66506

ALUMNI RESERVATION FORM

Please make the luncheon check payable to Cotton's Plantation and the banquet check to the K-State Union

( ) I plan to attend the Engineering Alumni Luncheon on Saturday, March 26, 1983, and have enclosed my check for _______ tickets. ($4.25 per person) (Contributors to scholarship funds and other funds and activities administered through the Dean's Office are invited as guests of the College of Engineering.)

( ) I plan to attend the Engineers' Open House Awards Banquet on Saturday, March 26, 1983, and have enclosed by check for _______ tickets. ($6.95 per person)

( ) I will attend the social hour function at the Ramada Inn. Please reserve _______ places for me.

NAME ____________________

ADDRESS ____________________

PHONE ____________________ DATE ____________________

Some notes from Engineering faculty

Two patents issued

Two professors from the Department of Chemical Engineering were issued patents recently on inventions stemming from their research.

L.T. Fan, head of the department, received a patent on a method for treatment of wastewater. Kubota Corporation of Japan has been issued a license to use the process. A process to manufacture gasohol resulted in a patent for Benjamin G. Kyle.

Fan's process, developed with Chin-Yung Wen of the University of West Virginia, is patented under the title, "Methods of Wastewater Treatment in Fluidized Bed Biological Reactors." It involves the use of a two-layered "bed" containing bacteria which causes a biological reaction on the wastewater. When the upper portion of the bed becomes clogged with cellular material from the wastewater, the entire bed is fluidized with wash water, which passes through the bed to remove the excess material.

Fan and Wen now hold three patents on related processes using a semi-fluidized bed, and a fourth is pending.

Kyle's patent, titled "Low-Energy Process of Producing Gasoline-Ethanol Mixtures," covers a process in which gasoline is used as a solvent to produce gasohol directly by extracting alcohol from aqueous solution.

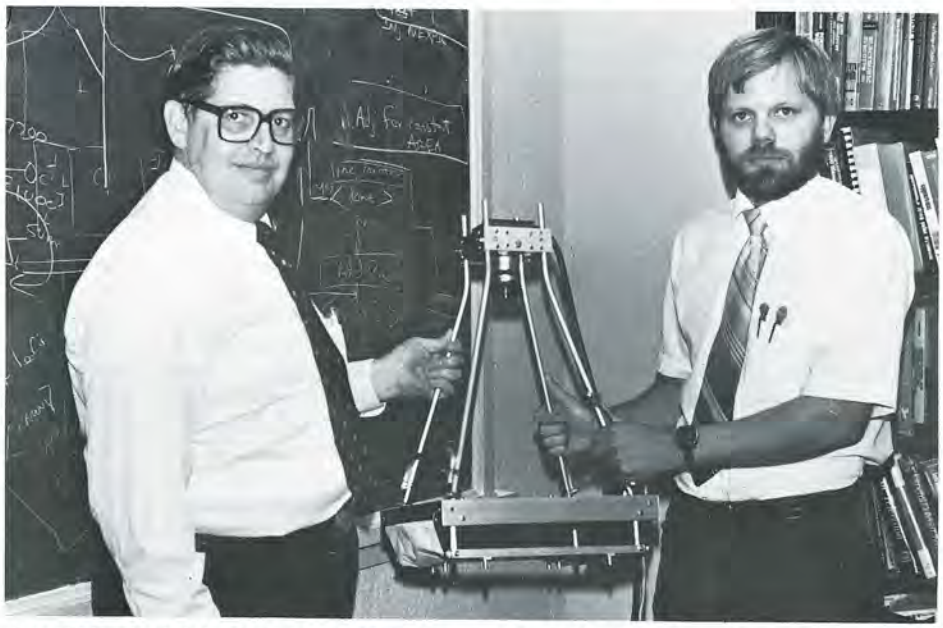
Gasohol has traditionally been produced by blending anhydrous alcohol with gasoline. The extraction process eliminates the need for anhydrous alcohol, which must be obtained through two costly and energy-consuming distillation steps.

Eddie R. Fowler

New on faculty

Eddie R. Fowler, former research analyst at Fort Leavenworth, has joined the Department of Electrical Engineering faculty. He is teaching in the area of electrical systems.

A 1957 KSU electrical engineering graduate, Fowler also holds a master's degree from K-State and was awarded a Ph.D degree from Oklahoma State University in 1969.



Donald Lenhert, left, electrical engineering, and Donald Gilliland, engineering technology, have developed a machine to improve the accuracy of meat grading. The unit consists of a solid-state camera, above, linked to a minicomputer which determines the grade by the different shades of the meat.

Fowler had been an operations research analyst and computer system analyst in arms activities and battlefield management at Fort Leavenworth since 1977. He also has worked as an electrical engineer for General Dynamics and for the Naval Electronics Laboratory Center in San Diego.

Fowler was an instructor at K-State from 1962 to 1966. He later taught at the University of Missouri-Rolla and also was an instructor in the Institute of Safety and Systems Management at the University of Southern California, Los Angeles. He is a native of Sasakwa, Okla.

Fulbright grant

Edwin C. Lindly, professor of civil engineering, has been awarded a Fulbright grant to lecture at Yarmouk University in Jordan.

Lindly is one of 800 Americans sent abroad for the 1982-83 academic year under the Fulbright exchange program. Grants are awarded to graduate students, teachers and professors to study, teach, lecture and conduct research abroad. Individuals are selected on the basis of academic and professional qualifications plus their ability and willingness to share ideas and experiences with people of diverse cultures.

A K-State faculty member since 1949, Lindly spent two years as a visiting professor at Assuit University in Egypt. He has been the recipient of several teaching awards.

ASAE honors

Two professors of agricultural engineering received awards at the American Society of Agricultural Engineers summer meeting.

Gustave E. Fairbanks received the Massey-Ferguson Medal given annually to honor those whose dedication to learning and teaching in the field of agricultural engineering has advanced agricultural knowledge and practice.

Charles K. Spillman was awarded the 1982 Metal Building Manufacturers Association Award for the ASAE member whose work has advanced the knowledge and science of farm buildings. Spillman was also elected Mid-Central Regional Director of ASAE.

Fairbanks joined the College of Engineering faculty in 1946. In 1964 he was elected ASAE Fellow and was awarded the Mid-Central Section ASAE Engineer of the Year Award.

Spillman has been a member of the engineering faculty since 1969 and has been named head of the Department of Agricultural Engineering.

Teaching awards

Robert Gorton, mechanical engineering, and James Koelliker, civil engineering, have been named Halliburton Professors in recognition of teaching excellence. The two are sharing an $8,000 grant from the Halliburton Education Foundation.

Grant money is being used for salary supplements and for funding of projects aimed at improving educational practices.

Gorton, who joined the KSU faculty in 1960, is using his award to help expand computer capabilities for research and specialized classroom use, particularly in design.

Koelliker, who was named to the faculty in 1973, is using his award to purchase equipment necessary to expand the range of a computer model he designed to improve the planning and management of limited water resources.

Charles Bissey, architectural engineering and construction science, was among five K-State professors to receive Excellence in Undergraduate Teaching Awards for 1982 from the University.

The awards included a $1,000 stipend made possible by the KSU Foundation and the Amoco Foundation of Indiana.

Bissey joined the K-State faculty in 1969.

Cecil Best, professor of civil engineering, received the 1982 College of Engineering Hollis Award for excellence in undergraduate teaching.

The award, which included a $500 stipend, was presented at the College's graduation exercises in May. In addition, a color portrait of Best will be displayed for the coming year in the lobby of Seaton Hall.

More honors

Ralph Lipper, agricultural engineering, has been named "Engineer of the Year" by the Kansas Section of the American Society of Agricultural Engineers (ASAE).

Rodney Horn, Hesston, a 1970 K-State graduate in ag engineering, was selected as "young Engineer of the Year" by the society.

Lipper has been a member of the K-State faculty for 36 years.

Horn is currently advanced development engineer with the Hesston Corporation.

Stuart Swartz, professor of civil engineering, has been elected president of the Society for Experimental Stress Analysis.

Established in 1943, the society has concentrated on promoting the development of new techniques for measuring stress in the materials used in manufacturing and on engineering applications of these techniques.

Most members are from academic and research areas, but Swartz said the society is attempting to expand its ranks to include more industry representatives who are directly involved in applications of research.

Robert Gorton, professor of mechanical engineering, has been selected as engineer for the National Research Council's newly formed Committee on Environmental Conditions in Laboratory Animal Rooms.

The committee will provide guidance on the Veteran's Administration's research program in this field. The VA is a primary user of laboratory animals.

Approximately six to eight other professionals—physiologists, architects and medical and veterinary personnel—will make up the committee.

Research projects

Three professors of electrical engineering have received $127,000 to continue research on developing intrusion-detection systems.

The U.S. Air Force, via Sandia Laboratories, Albuquerque, N.M., has awarded an eight-month contract for the project to Nasir Ahmed, Michael Lucas and Donald Lenhert. They are working on systems that would provide reliable detection of intruders and at the same time decrease the number of false alarms.

Sandia Laboratories has awarded nearly $500,000 to K-State for the project since 1976.

Two professors of nuclear engineering have received a $90,000 grant from the National Science Foundation for a study of boiling phenomena under conditions of rapidly changing temperature and pressure.

Richard E. Faw and Thomas W. Lester, who are jointly conducting the research, will use optical techniques to study thermal conditions under which boiling begins. One of the goals of the research is to provide improved procedures for the design of industrial boilers and heat exchangers.

The National Science Foundation has awarded $120,000 to L.T. Fan, chemical engineering, for research on a new process to treat wastewater.

New books

Nasir Ahmed, electrical engineering, is author of a new book, ***Discrete-Time Signals and Systems,*** published by Reston, Inc., 1982. The book is his third.

Ahmed's first book, ***Orthogonal Transforms for Digital Signal Processing,*** was published in 1975 by Springer-Verlag and was translated into Chinese and Russian.

Byron Jones, assistant professor of mechanical engineering, is author of ***Inflation in Engineering Economic Analysis***, published in February 1982 by John Wiley & Sons, New York.

"It is good to rub and polish our brain against that of another."—Montaigne

Stanley Clark, agricultural engineering, adjusts dial on equipment which analyzes exhaust gas from an engine Clark uses to test performance of various fuels. Clark and his colleagues designed and constructed the system to fit the purposes of the research project.

Enrichment funds help boost salaries in Engineering

K-State suffered a blow in 1982 as a result of a 4.3 percent budget cut for state universities. But the College of Engineering got some good news earlier in the year with the announcement that it had received $220,000 in "enrichment" funds for faculty salaries.

The funds were part of a $302,000 salary package distributed by the University to the Colleges of Engineering and Business and the Department of Computer Science. The enrichment was a result of action taken by the Kansas Legislature to boost salaries in the areas of highest demand for faculty and graduates. A total of $900,000 was alloted to the seven Regents institutions, in addition to the 7.5 percent increase for all faculty salaries. University presidents made the final decision on which of their departments would receive the extra funds.

Dean of Engineering Donald E. Rathbone said that while the total salary increase was not as great as he had hoped, "It will definitely help the base."

Rathbone expressed appreciation to Kansas Engineering Society members and to industry representatives for their help in presenting engineering salary needs to the Legislature. He pointed out that faculty members in KES represent only 4 percent of the overall membership. Rathbone is chairman of the KES Legislative Committee.

Faculty salaries were not affected by the 4.3 percent reduction in state university budgets. In the College of Engineering, some cuts were made by filling open faculty positions with temporary appointments at a lower pay scale. General reductions were made in supplies, some lab equipment and in student help.

College names 'Company of Year'

Armco, Inc., Middletown, Ohio, and its wholly owned subsidiary, Burns & McDonnell, Kansas City, Mo., were the College of Engineering "Company of the Year" for 1982.

Four executives of the companies were on campus Nov. 5 to accept awards and to participate in a day-long program sponsored by Tau Beta Pi.

The two firms were selected for the annual "Company of the Year" honor on the basis of their strong interest in education, commitment to the engineering profession, and support of the K-State engineering program.

Accepting awards on behalf of their companies were Robert L. Purdum, group vice president for Armco; and Newton A. Campbell, president, Darrell M. Hosler, vice president, and Leslie J. Wood, project architectural superviser, all of Burns & McDonnell. Hosler received a mechanical engineering degree from K-State in 1959. Wood is a 1953 graduate in architecture.

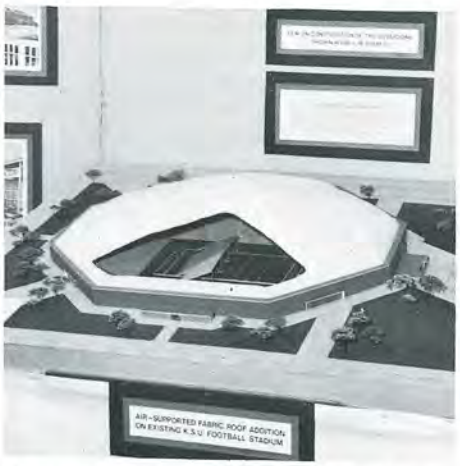
Company representatives spent the day lecturing to engineering classes, meeting with students and touring College of Engineering facilities. An awards banquet in the K-State Union topped off the day's activities.

Armco was established in 1899, and has divisions throughout the United States and abroad. Burns & McDonnell was founded in 1898 and became an Armco Professional Services Company in 1971.

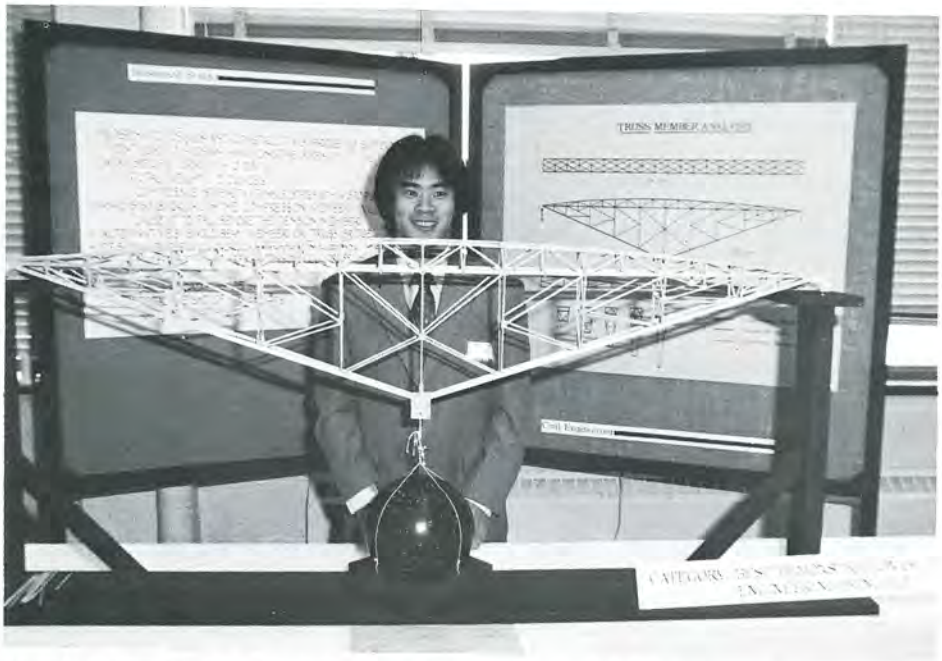
Newton Campbell, above, accepts awards from Tau Beta Pi member Sue Goss. Robert Purdum, at right presents lecture to engineering students as part of the day's activities.

An explanation of photo developing system captures the attention of company representatives during a tour of chemical engineering lab. From left are hosts, Professor Richard Akins and Gary Allred, senior, chemical engineering, with Leslie Wood, Purdum and Darrell Hosler.

Open House 1982



Construction science students took first place in the Outstanding Display category for their design of an air-supported roof for the KSU Stadium.



David Watase, senior in civil engineering, prepared the model and analysis of a truss bridge, which won for his department the Steel Ring Award for best demonstration of engineering principles.

A computerized checkerboard, designed by mechanical engineering students, was first runner-up for Outstanding Display Award.

They Chose K-State

Four of five winners of scholarships administered by the Kansas Society of Engineers have chosen Kansas State for their engineering studies. The scholarships, which ranged from $250 to $1,000, went to Russell Bailey of Junction City, Carol Lett of Goddard and Robert Moss and J. Chad Stanley, both of Manhattan. The students had distinguished themselves in high school in academics as well as in extracurricular activities.

Ag Engineering students capture national title

Agricultural engineering students have won first place in nationwide design competition with a device that retrieves ears of corn from the ground during harvest.

The win was the fifth since inception of the National Allis Chalmers Design Competition six years ago, said G.E. (Gus) Fairbanks, professor of agricultural engineering and instructor for the class which prepared the entry.

"We've done something that Jack Hartman (KSU basketball coach) would like to do," Fairbanks said, tongue-in-cheek. "We beat North Carolina State and the University of Kentucky." The three universities were finalists in competition that stretched into Canada.

The winning entry, named the "Golden Retriever," mounts onto the corn head of a combine and has "fingers" that lift the loose ears so that they can be dragged into the combine.

"Loose ears are a problem that nobody had found a solution for," Fairbanks said.

A survey conducted by the students indicated that harvest yields could decrease from one to 20 percent as a result of lost ears.

Universities from a 10-region area, including Canada, were allowed to submit up to two projects in the early stages of the national competition. But only three were invited to present their projects to the final judging panel.

K-State was disqualified from national competition last year because the students had not constructed a full-scale, working model of a proposed 40-foot, folding combine header. However, that design had placed first in the regional competition.

"They changed the rules after that," Fairbanks said. "Now we can have computer simulations instead of actual working models."

Members of the K-State team that designed "Golden Retriever" are all seniors in agricultural engineering. They are: Edward J. Heim, Hoxie; Stephen B. Hennessey, Tecumseh; Ronald D. Shinogle, Plains; R. Shannon Johnson, Ensign; Richard A. Weber, Blue Mound; Richard B. League, Leavenworth; and Curtis R. Janssen, Solomon.

Scholarships

A scholarship fund has been established in memory of Douglas L. Gfeller, who died last May in an automobile accident. Gfeller, 21, was a senior in construction science. The annual scholarship will be given to a junior or senior who is enrolled in the College of Engineering.

Honoraries established

Two new honorary societies have been established for engineering students at K-State.

Architectural engineering students have formed Kappa Sigma Alpha Epsilon (KSAE), believed to be the first honorary in the nation specifically for architectural engineering students, according to Charles Bissey, faculty advisor.

The first student chapter in Kansas of Tau Alpha Phi, an honorary for engineering technologists, also was established recently.

Tau Alpha Phi, which has more than 150 chapters nationwide, recognizes outstanding academic performance and leadership qualities of students.

In addition to academic recognition, members will participate in various campus activities, including Engineers' Open House. They also will be kept abreast of current events in engineering technology through group discussions and guest speakers, according to John Lindholm and Margaret Yaege, faculty advisors.

In forming the architectural engineering honorary, the students also selected their first honorary member. He is Wendell Lady, former speaker of the Kansas House of Representatives.

Lady is a 1952 K-State graduate in architectural engineering. He is employed by Black & Veatch, Consulting Engineers, Kansas City, and is part owner of Duplex, Lawrence.

To be eligible for KSAE, students must be in their fourth or fifth year of architectural engineering with both an overall and departmental grade average of at least a B. They also must be in the upper one-fourth of their class if a fourth-year student and in the upper one-third of their class if they are in their fifth year.

Anne Guislain

Students recognized

Anne Guislain, freshman in industrial engineering from Prairie Village, was chosen from among 1,000 nominees nationwide to receive the designation of Presidential Scholar in 1982.

President Lyndon B. Johnson began the program in 1965 as a means of recognizing the outstanding scholastic achievements of the nation's youth. Each year, 141 students are named Presidential Scholars. For the past three years, a $1,000 unrestricted grant has accompanied the honor.

Selection is made on the basis of a series of essays written by the students, after an initial screening of those who received high scores on pre-college tests.

A required essay on the student's qualities as a leader was the most difficult to write, Guislain said. "I've never been a traditional leader. The type of student I thought would win would be the kind with all sorts of extra-curricular activities. But I never was 'Miss Popularity.' In filling out the essays, I just tried to be as honest as I could."

Guislain's other winning essays were on Mozart and on the symbolism of a children's book she first read when she was in the second grade.

Awards were presented in Washington, D.C., by Secretary of Education Terrel H. Bell, prior to a three-day tour of the city.

Terry L. Davis, senior in electrical engineering, has been recognized by the National Action Council for Minorities in Engineering (NACME) for significant achievement in engineering programs. She was one of 12 minority students nationwide to receive the honor. Recognition was based on grade point average and extra-curricular activities.

A native of Memphis, Tenn., Davis has held office in a number of student organizations, and helped found the society of Ethnic Minority Engineers at K-State.

The NACME is a non-profit organization formed to increase the number of minorities in engineering.

Magazine wins awards

The Kansas State Engineer Magazine won four national awards at the Engineering College Magazines Associated meeting last spring at Purdue University.

The magazine, published by engineering students, won first place for best editorial, single issue; third place for best editorial, all issues; and honorable mention for best single issue and for best recurring feature.

Keith Wagner, junior in chemical engineering from Hoisington, wrote the editorial which won top prize. He and Brian Reinecke, then a senior in civil engineering from Overland Park, served as editors during the year for which the awards were given. Carolee Stark is faculty advisor.

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