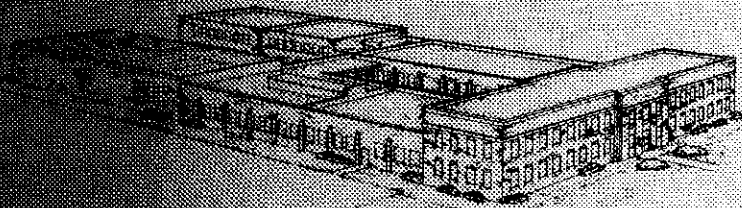
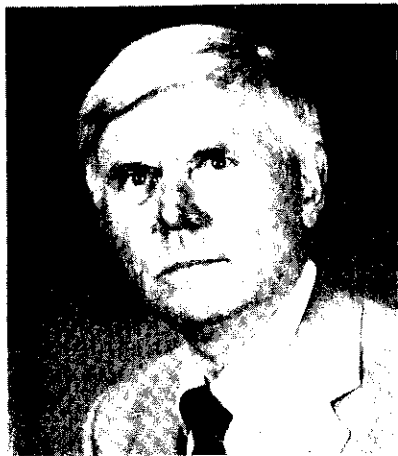


# Davidson Dialogue



Agricultural Engineering Department of Iowa State University summer 1985



## HEAD LINES

By Howard P. Johnson,  
AE Dept. Head

School is out; summer is here. New freshmen are taking exams for placement this fall. The new college catalog is out, and the budget is established for 1985-86. Several faculty changes are anticipated. And we are searching for a new president here at ISU.

Remodeling Davidson Hall is a high priority. The new support group, Friends of Agricultural Engineering, is contacting industry to provide lab equipment. The major gift (\$25,000) from Pioneer Hi-Bred provides a challenge for other companies. Maybe you can help with promotion and support.

## Present Status

The Board of Regents included planning money (\$100,000) as one of the priorities in the 1985-87 budget request. The Governor's veto of the bonding bill set back plans for a year, a remodeling fund has been established with the University Achievement Foundation. Contributions to this fund are targeted at \$400,000.

A volunteer committee of alumni and friends is providing information and soliciting support for the remodeling. The department welcomes the opportunity to arrange for a tour of the facilities, to personally visit with interested

groups, or otherwise provide information about remodeling plans.

Contributions from alumni continue to come in. The list of contributors help convince the legislature of our support--the dollars contributed assure that planning will be completed and construction begun.

## The Building

Davidson Hall, built in 1921, suffered major fire damage in 1941 and was only partially repaired because of World War II material shortages. No major improvements have been made since. Remodeling is recommended, because the cost (\$5.0 million) is one-half that of a new building, the present location is ideal, and our needs can be adequately met with the present structural system.

## Facility Inadequacy

The facilities are incapable of continued support of the leadership position in teaching, research, and extension for which this department has been nationally and internationally recognized during its 80-year history. During that time, student and faculty numbers have increased fourfold to the present 180 students in two undergraduate degree programs, 40 graduate students, and 75 faculty and staff members. Four campus locations are needed to conduct teaching and research programs.

## Accreditation and Safety

The national Accrediting Board for Engineering Training (ABET) judged the facilities to be inadequate in its recent review and reduced the accreditation renewal from the normal 6 years to 3 years.

A USDA-sponsored research review team was highly complimentary of faculty competency but critical of the facilities. Their report states that the facilities are seriously limiting the productivity of the department's research programs. The State Fire Marshall inspected Davidson Hall and ruled that use of some classrooms be discontinued.

## Support to Other Programs

About half the students in the College of Agriculture take course work in AE. The department has the fifth largest teaching load of 16 programs in agriculture at ISU and the seventh largest of 12 engineering programs.

## Service to Iowa

With improved facilities, we can continue to:

- \*Provide the young people of Iowa with the finest training in modern agricultural and engineering technology.

- \*Assure excellence of present and future faculty and graduate students.

- \*Supply Iowa business and industry with highly qualified graduates (two-thirds of AE grads accept jobs in Iowa).

- \*Contribute to making Iowa a better place to live and work through research discoveries and extension programs focusing on Iowa needs.

- \*Provide innovative engineering which increases the competitiveness and value of Iowa grown and manufactured agricultural products improve efficiency of Iowa crops and livestock producers; conserve land and water resources; and add to the quality of life of all citizens.

## "Friends" Support Group Formed

The Friends of Agricultural Engineering committee was formed in the summer of 1984. The purpose of the "Friends" group is to contact industry for financial support to remodel Davidson Hall and to increase awareness of agricultural leaders and legislators about the need for improved AE facilities.

Chairman Bob Dahlberg, BSAE'52, and co-chairmen, Glenn Lovig, BSAE'59, and Dale Hull, BSAE'38, have invited several department graduates and other supporters of agriculture and related industry to

become members of the committee. Dahlberg is president of the Central Division of Pioneer Hi-Bred; Lovig is executive vice president of the Iowa Rural Electric Cooperatives; and Hull is a retired ISU professor of extension and safety consultant.

## Pioneer Hi-Bred Gives Large Gift

Pioneer Hi-Bred International, Inc., pledged the first large industry gift to the AE department to remodel Davidson Hall. The \$25,000 gift was presented to the ISU Achievement Foundation by Bob Dahlberg, BSAE'52, president of the Central Division of Pioneer Hi-Bred.



## Two New Scholarships Offered

Two new scholarships will be exclusively available to AE and Ag Mech students at ISU beginning this fall, reports Mort Boyd, chair of the AE department student scholarship and awards committee.

The Hobart Beresford Scholarship will be open to sophomore, junior, and senior students in agricultural engineering. One tuition scholarship will be awarded. Beresford was a former AE department head and professor emeritus of agricultural engineering at Iowa State. The \$500 T.A. Hoerner Scholarship will go to an outstanding incoming freshman in agricultural mechanization. Thomas Hoerner, an AE faculty member, provided funds for this scholarship.

These two new scholarships are welcome additions to an outstanding list that includes the J.B. Davidson, L.F. Charity, and L.G. Keeney scholarships. If you are interested in helping the department in engineering or ag-

mech by sponsoring a scholarship, contact H.P. Johnson, AE department head, or the ISU Development Office.

## Laflen Named IA Section Engineer of the Year

John M. Laflen, USDA researcher, received the 1984 Engineer of the Year Award for the Iowa section of the American Society of Agricultural Engineers (ASAE). This award is presented to the outstanding engineer in the Iowa section.

In his research work, Laflen has contributed much to the understanding of the erosion process and of measures to control it, specifically using terraces and conservation tillage. Last summer, Laflen received the USDA Distinguished Service Award in Washington, D.C., and he spent three weeks recently in Brazil lecturing on soil erosion control at the invitation of the Brazilian government.

## Beers Named Parents of the Year

Retired AE professor Craig Beer and wife Janet were selected 1984 Parents of the Year last fall during Parents' Weekend at Iowa State University.

Nominated by their youngest daughter, Bonnie, a freshman in biochemistry at ISU, the Beers were honored for their longtime connections with ISU. Craig served on the AE faculty for 25 years after receiving his B.S., M.S., and Ph.D. from Iowa State. He retired in 1983 and is now consulting, building walnut furniture, and expanding his Christmas tree farm. Janet is a secretary for Ames Laboratory.

Besides Bonnie, the Beers have four other children who graduated from ISU--T.J. Beer Larson, '73; Alice Beer McCoy, '75; Stephen Craig Beer, '78; and James Andrew Beer, '84.

## Greiners Travel to Soviet Union

Extension Agricultural Engineer Tom Greiner and wife Joan spent 11 days visiting three Soviet cities in January as part of an ISU group visiting the U.S.S.R.

The Greiners, along with ISU Russian language instructor Tania Tipton, several students, and other ISU faculty, were part of a 32-member group who visited Moscow, Kiev, and Leningrad Jan. 3-14, 1985. They attended the circus, a ballet, and a concert while in the U.S.S.R. and enjoyed meeting people as they toured, shopped, and rode

the subway. Greiner said that some of the people they met knew English and all were very helpful and friendly to the usually lost Iowans.

The Greiners and fellow tour members, Extension Economist Bob Jolly and wife Colleen, are serving as a resource base for the 1985 ISU Ag Travel Course. This group of agriculture faculty and students will visit Europe and the Soviet Union this summer.

## ASAE President Visits ISU

ASAE President Dr. James Anderson, PhD AE'62, was in Iowa May 16. Anderson visited the department and presented the dinner speech at the Iowa ASAE Section meeting that evening.

## Wille Named IA Section Young Engineer of the Year

Jerry Wille, BS'73, MS'78, received the 1984 Young Engineer of the Year Award of the Iowa section of ASAE. Wille, president of Curry Wille Associates, has been active in agricultural engineering consulting since graduating from ISU in 1973. His expertise is in commercial and experimental animal production facilities; Curry Wille Associates is recognized nationally and internationally for work in experimental livestock production systems. Wille is active in the ASAE Iowa section and national society and church and local service clubs.

## Hushak Wins Regional Student Paper Competition

Mitchell J. Hushak, son of Mr. and Mrs. Victor Hushak, of rural Clutier, Iowa, is the 1985 winner of the Mid-Central Region Student Paper Competition of the American Society of Agricultural Engineers. He presented his paper, "Performance of a Revolving-Tube Vertical Screw Conveyor", at the four-state regional annual meeting April 12 in St. Joseph, Missouri. Hushak received a bachelor's degree in Agricultural Engineering from Iowa State University in December 1984. He is employed as a project engineer with Kraft Foods, Inc., in Springfield, Missouri. Dr. Carl Bern advised Hushak on his paper.

## Grain Quality Lab Solves Grain Trading Problems

Developing protein and oil measurements for use in corn and soybean trading is the current

emphasis of the AE Department's Grain Quality Lab. Such measurements, reports lab director Dr. Charles H. Hurburgh, Jr., could increase grain values by \$ .05-\$ .15 per bushel.

The Grain Quality Lab was established in 1978 in response to Iowa farmers' concerns about grain trading practices. The two central goals of the grain quality studies are trading fairness and market development. Research results have been applied to policy issues, such as the elimination of suction-type grain probes, the recalibration of moisture meters, and the assessment of aflatoxin problems in the 1983 drought-damaged corn crop.

The program has attracted almost \$450,000 of outside research support, making it nearly self-sustaining.

## Do We Have It Right?

Moved? Been promoted, taken a new job? Help us keep up with your progress and let us share your news with your classmates in future issues of our newsletter by completing this reply form.

## Dept. Awarded Fellowships

The AE department won four of the 10 USDA-ARS Graduate National Needs Fellowships granted to ISU. The funded proposal, presented to the USDA and related to water resources, was developed by a team of engineers and scientists from ISU's agronomy, civil engineering, and AE departments. Eighteen of 73 universities received fellowships. Students with excellent academic records and working on PhD degrees will receive \$15,000 for the first year's support.

## Graduate Faculty Additions

Three members of the AE department faculty were awarded appointment to the graduate faculty. Drs. Charles Hurburgh, Ramesh Kanwar, and Thomas Colvin of the teaching and research faculty were appointed in the last year. Drs. Erdal Ozkan and Stewart Melvin, from the department extension service, were also appointed to associate membership. There are now 15 members of the graduate faculty in the AE department.

## Alumni Briefs

In this issue of Davidson Dialogue, we've included names and news from AE and Ag Mech (AM) grads from the graduating classes of 1933 through 1984.

Degree, major (AE or AM), and year of graduation are listed. Cities listed are the alum's home address.

If you'd like to contact any of the people listed here, write or call us at Agricultural Engineering Department, 102 Davidson Hall, Iowa State University, Ames IA 50011, 515/294-1434, and we'll put you in touch.

### 1933-1949

Clarence B. Richey, BSAE'33, professor emeritus, Purdue University AE dept., retired in 1976, West Lafayette, IN; Ronald A. Loveland, BSAE'42, retired in 1976 from Ford Motor Co. tractor division, Janesville, IA; Thomas Claue, BSAE'49, president of Health and Wellness Center of Minnesota, Inc., Bloomington, MN; Oscar A. Lunstrum, BSAE'49, plant manager for Paymaster Seeds division of Cargill, Inc., Lexington, IL; Elmo S. Renoll, MSAE'49, retired professor emeritus, Auburn University AE dept., Auburn, AL.

### 1952-1957

William E. Davidson, BSAE'52, vice president of design and development, The Singer Co., Easley, SC; Kenneth A. Fineran, BSAE'55, pastor, United Methodist Church, Yuma, CO; Robert E. Davis, BSAE'57, math teacher, Rancho Cotate High School in Rohnert Park, CA, Cotati, CA; J. William Waddingham, BSAE'57, Hancock County engineer, Garner, IA.

### 1961-1966

LaVerne D. Middleswart, BSAE'61, senior engineer, John Deere Product

### Where you live:

Name \_\_\_\_\_ Year graduated \_\_\_\_\_  
 Home Address \_\_\_\_\_ Degree received \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

### What you do:

Business Title/Profession \_\_\_\_\_ Phone \_\_\_\_\_  
 Company/Institution \_\_\_\_\_  
 Division/Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

News about you: (community service, board memberships, professional honors, career activities, family information)

\_\_\_\_\_

\_\_\_\_\_

Return to: Howard P. Johnson  
 Agricultural Engineering Department  
 Iowa State University  
 Ames, IA 50011

THANKS!

Engineering Center, Dike, IA; Loren W. Zabel, BSAE'62, major accounts manager for truck engine service, Caterpillar Tractor Co., Fort Mill, SC; Harold P. Feldkamp, BSAE'64, farmer, Sibley, IA; Virgil Dean Haverdink, BSAE'64, MSAE'67, project engineer, John Deere Des Moines Works, Ankeny, IA; William A. Anderson, BSAE'65, engineering manager, Musco Sports Lighting, Muscatine, IA; Ronald W. Brass, BSAE'66, MSAE'70, senior division engineer, John Deere Dubuque Works, Dubuque, IA.

#### 1970-1979

Douglas P. Brown, BSAE'70, MSAE'71, project manager, Deere and Co. Technical Center, Bettendorf, IA; Surendera Kumar, MSAE'70, project manager, U.S. Army Corps of Engineers in Frankfurt, West Germany, Bad Vilbel, WG; Brian J. Hunter, BSAE'71, assistant engineer for public works, Pottawattamie County Engineering Dept., Council Bluffs, IA; Eugene R. Person, BSAE'71, farmer, Batavia, IA;

Ronald O. Groth, BSAE'72, senior design engineer, Caterpillar Tractor Co., De Witt, IA; Thomas E. Hollander, BSAE'72, senior plant engineer, The Maytag Co., Newton, IA; Tom Pollock, BSAE'73, farmer, Malvern, IA.

Ronald Haden, BSAE'74, engineer, Sac City Surveying and Mapping, and farmer, Lytton, IA; Norman Paul Russell, BSAE'74, manager of engineering, Quaker Oats Co., Mechanicsburg, PA; Robert C. Wemer, BSAE'74, MSAE'76, farmer, Montezuma, IA; Charles L. Miksch, BSAE'75, design engineer, FMC Corp. Crane and Excavating Division, Cedar Rapids, IA; Bob Butin, BSAE'76, assistant resident construction engineer and licensed civil engineer, Iowa Dept. of Transportation, Ames, IA; David M. Sommerlot, BSAE'76, bean plant superintendent, Cargill Inc., West, Cedar Rapids, IA; Raymond P. Wainwright, MSAE'76, engineer, Overseas Division, National Institute of Agricultural Engineering, Bedford, England.

David Boeding, BSAE'77, farmer, Princeton, IA; Thomas J. Collogan, BSAE'77, project engineer, Allis Chalmers Corp. tractor division, Franklin, WI; Roger L. Groth, BSAE'77, farmer, Battle Creek, IA; David W. Nelson, BSAE'77, project engineer, Funk Seeds International, Normal, IL; Richard A. Ryerson, BSAE'77, project engineer, Vermeer Manufacturing, Pella, IA; Wayne Tiffany, BSAM'77, field and lab technician for experimental engineering, Allis Chalmers, Independence, MO.

Martin P. Cleveland, BSAE'78, construction and maintenance engineer for the Papio Natural Resources District, Omaha, NE; LeRoy Mills, BSAE'78, U.S. Navy pilot/lieutenant stationed at San Diego, CA, Chula Vista, CA; Kent Oscar Rice, BSAE'78, civil engineer, USDA Soil Conservation Service, Mt. Pleasant, IA; David L. O. Smith, MSAE'78, research engineer/scientist, Scottish Institute of Agricultural Engineering, Penicuik, Midlothian, UK; Gary Lee Vandermolten, BSAE'78, engineer, John Deere Product Engineering Center, Waterloo, IA; Kevin L. Holtz, BSAM'79, district salesman, Talbot Carlson Inc., Atlantic, IA; Joseph S. Messer, BSAE'79, manager of applications engineering, Prab Robots, Inc., Kalamazoo, MI.

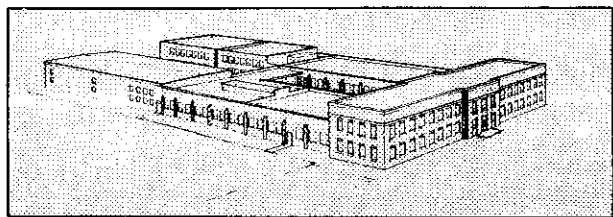
#### 1980-1984

Christopher Franklin, BSAE'80, extraction operations supervisor, Lauhoff Grain Co., Danville, IL; Jeffrey Hansell, BSAE'80, project engineer, Sundstrand-Hydro Transmission, Ames, IA; Mohd. Zainal Bin Ismail, BSAE'80, research officer, Malaysian Agricultural Research and Development Institute, Selangor, Malaysia; Soon-kuk Kwun, PhD AE'80, associate professor, AE dept., Seoul National University, Suweon, Korea; Mike Lentz, BSAE'80, design engineer, John Deere and Co. Product Engineering Center, Waterloo, IA; Mike McClannahan, BSAM'80, computer programmer, Dept. of the Army at Fort Leavenworth, KS, Easton, KS.

Dean Petersen, BSAE'80, farmer, Atlantic, IA; John K. Skerritt, BSAM'80, soil conservationist, USF Soil Conservation Service, Knoxville, IA; Scott Otto Stamy, BSAM'80, assistant sales manager, Bush Hog, Selma, AL; Don Barnes, BSAE'81, plant engineer and supervisor for maintenance, Cargill Inc., Washington, IA; Sarah J. Evans, BSAM'81, engine product support representative, Caterpillar Tractor Co., Overland Park, KS; J. P. Goullart, PhD AE'81, associate professor and head of AE dept., Universidade Federal de Pelotas, Pelotas, Rio Grande do Sul, Brazil; Larry Green, BSAE'81, test engineer, John Deere Plow and Planter, Grand Mound, IA.

Bruce C. Johnson, BSAE'81, design engineer, Building Components of Iowa, Monticello, IA; Michael T. Selle, BSAE'81, associate test engineer, International Harvester, Darien, IL; R.J. (Jeff) Chew, BSAM'82, area service manager, Minneapolis Zone, Chevrolet Motor Division, General Motors Corporation, Duluth, MN; Daryl F. Klas, BSAE'82, associate food technologist, Ralston Purina grocery products research and development, St. Louis, MO; Jim Korlund, BSAE'82, project engineer, Cargill Inc., Hopkins, MN; Roger L. Reimers, BSAM'82, farmer and rural letter carrier, Denison, IA.

Luis G. Salgado, PhD AE'82, research and teaching, University of Concepcion, Chillan, Chile; Tom Langan, BSAM'83, MS research assistant, Agronomy Dept., University of Wisconsin, Madison, WI; Ed Latimer, BSAE'83, MS candidate in AE/soil and water option, Texas AM University, College Station, TX; Alan R. McConeghey, BSAE'83, project estimator, Gaar Constructors Inc., Des Moines, IA; Clyde W. Tiffany, BSAM'83, agronomist, Pioneer Hi-Bred International Inc., Mankato, MN; Matt Miller, BSAE'84, project engineer, Ford Motor Co. tractor operations, Pontiac, MI; Andy Staebell, BSAM'84, broker, Magnimet, Eagen, MN.



**Agricultural Engineering Department of Iowa State University**