THE O.H. KRUSE FEED MILL AND BIOREFINERY
TEACHING AND RESEARCH CENTER

KANSAS STATE UNIVERSITY
MANHATTAN, KANSAS
At Kansas State University, the Department of Grain Science and Industry strives to lead the nation in teaching and research. As part of that goal, the department has recently expanded its facilities creating the Grain Science Complex that includes the International Grains Program Conference Center, the BIVAP building and the Hal Ross Flour Mill. Additionally, space is planned for a feed mill and biorefinery to provide the feed and biofuels industries with much-needed research and with trained employees to meet the nation’s feed and renewable energy requirements in future decades.

**Feed Science at K-State**

The feed science program at K-State was initiated at the request of industry leaders more than 50 years ago to provide training and skills for future employees of the feed industry. The original mill was built, using equipment and services donated by the industry, in a building provided by the university on campus. That mill serves as the primary teaching and research laboratory for our feed science program today, and though significantly remodeled, no longer meets all the needs of the program. It is challenging to teach our students modern feed science in a decades-old facility.

**A Building for the Future**

The proposed feed mill and biorefinery will contain updated capabilities to teach principles of feed science, grain handling and biorefinery operations: grain and biomass handling, storage, grinding, proportioning, mixing, flaking and pelleting as well as fermentation and distillation. It will have several integrated, self-contained spaces for training and research in many key processing elements. Teaching, contract research and industry short courses will be conducted in the new center.

The O.H. Kruse Feed Mill and Biorefinery Teaching and Research Center will be a unique training and research tool for feed science, grain operations, animal nutrition and renewable fuels. It is a strategic component of K-State’s ability to strongly participate in the opportunities for renewable bioenergy research and education. It will also serve the needs of students as a hands-on learning environment and industry professionals as a research tool to help advance the next generation of technologies in the field.

**How You Can Help**

The center is anticipated to cost $11 million. Thanks to generous private donors and corporations, only $7 million remains to be raised for the project. A significant gift was made in October 2007 by Ronald Kruse, an alumnus of the K-State Feed Science Program. To honor his dedication to this worthy project, the building will be named the O.H. Kruse Feed Mill and Biorefinery Teaching and Research Center.

As we continue the process of designing and securing funding for the new feed mill and biorefinery, friends and supporters of K-State and its feed science program play a critical role in our ability to provide future leaders and employees to the grain, feed and biofuels industries.
Keith Behnke, left, has been teaching future leaders in the feed industry for more than 30 years. “Having the opportunity to teach both fundamental and advanced feed processing concepts to young, talented students has been the absolute highlight of my career,” Behnke said. “Building a future leader is not unlike manufacturing high-quality feed; it requires high-quality starting material and careful nurturing along the way.”

Tyler Langton, right, is a senior in the K-State Feed Science Program and believes that the education he has received is second to none. “The experience and knowledge that the faculty members bring to the classroom is truly amazing,” Langton said. PREPARING THE LEADERS OF TOMORROW’S INDUSTRY
Dirk Maier, Ph.D., head of the Department of Grain Science and Industry, joined the department in 2008 after a long and successful career at Purdue University. “Because of the unique status of the K-State Feed Science Program, I am confident that the future for our students is very bright and that our students will become the next generation of industry leaders. Teaching and preparing our students for a career in the grain and feed industry still remains our top priority. Additionally, we are committed to providing new knowledge and technologies to the industry through research and outreach efforts. With the new biorefinery track within the feed science curriculum, we are expanding educational opportunities and career choices for our students across the grain, feed and bioenergy industries.”

EXPANDING PROGRAM TO MEET FUTURE NEEDS
Charles Fahrenholz, Ph.D., left, director of Global Formulation Development, PhiBro Animal Health Inc., began his graduate studies in feed science more than 20 years ago and has had a thriving career in feed-related research.

“Without the knowledge and experience that I gained at K-State, dealing with challenges facing today’s industry would be difficult at best. The feed science program has provided the industry with numerous feed manufacturing solutions to improve feed production efficiency and feed safety.”

Fahrenholz and his son, Adam, right, a doctoral student, share the experience of graduate work in the feed science program.

“I find it very rewarding to follow in my father’s footsteps as I prepare for a career in the feed industry,” Adam said.
Joe Ebert, left, a graduate of the Department of Animal Sciences and Industry at K-State, and Jim Brown, right, a graduate of the Department of Grain Science and Industry, have worked together to make Fourth and Pomeroy (Key Feeds) a successful and prosperous feed company.

Joe, who employs several K-State graduates, said he has found that K-Staters have a strong work ethic and an exceptional knowledge of the industry.
The accomplishments of many of our industry leaders have been recognized through the American Feed Industry Association’s Lifetime Achievement Award Program. Many of the recipients of this award either graduated from or were instructors in the K-State Feed Science Program.

“It is truly an honor for the Department of Grain Science and Industry to house and display the plaques honoring these outstanding industry leaders,” said Fred Fairchild, professor of feed science. “These awards are a true testament to the value of a K-State feed science education.”
HOW YOU CAN HELP

Through the generosity of friends and supporters of K-State, the goal of building a new feed mill and biorefinery can become a reality. Gifts of equipment, services and money are necessary to make this dream come true.

Let us know how you can help continue to develop the future leaders of the feed industry.

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