

High School Design Contest Is Planned For KS Open House

"The Great Mad Race," a mousetrap applications design contest for high school students, has been planned by the KSU Engineering Student Council as part of the 49th annual Engineering Open House. It will be conducted Saturday, March 31, starting at 9:30 a.m.

Interest in the contest has been excellent. Already indications are that there will be 100 or more entries in the contest by students from all parts of Kansas.

Several prizes will be awarded, announced Ron Wilson who is in charge of the contest.

Contest rules are as follows: design a vehicle powered by one mousetrap spring and constructed using any of the following materials—

- Any or all parts of one mousetrap.
- Masonite.
- Epoxy glue.
- Wire.
- Nylon cord.

The vehicle should remain within a straight four-foot wide track. That entry which has the fastest overall time (electronically measured) over the length of the 30-foot track will be considered the winner.

COMING EVENTS

March 25-31, 1973

- Kansas State University Engineering Open House Week in Kansas.

March 30, 1973

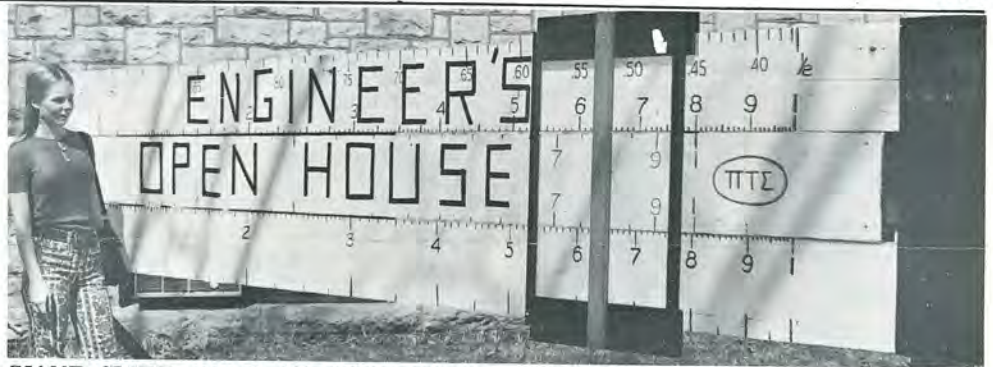
- Semi-Annual Meeting, K-State Engineering Advisory Council.

March 30-31, 1973

- 49th Annual K-State Engineering Open House.

March 31, 1973

- Fifth Engineering Alumni Symposium, 8:30 to 11:30 a.m.
- Informal Noon Luncheon.
- Sixth Annual Engineering Open House Awards Banquet, 6:30 to 8 p.m.

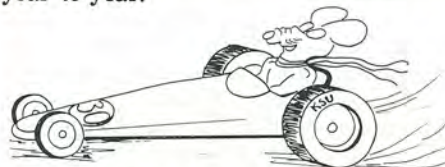


GIANT SLIDE RULE AT OPEN HOUSE — The 49th annual KSU Engineering Open House is set for 6 to 9 p.m. Friday, March 30, and 9 a.m. to 4 p.m. Saturday, March 31. This traditional K-State engineering student activity, following theme — "Today's Engineering, Tomorrow's World," is expected to attract several thousand persons to view students' displays and exhibits.

You're Invited to K.S.U. For Engg. Open House

March 30-31 looms as the biggest weekend of the year at KSU for many undergraduate engineering students. Those dates, Friday evening and all-day Saturday, have been designated for the 49th annual KSU Engineering Open House.

Students will spend all day Friday, March 30, putting the finishing touches on their new displays and exhibits for the Open House. They will also dust off and update some displays which are on exhibition from year to year.



**Artist's Conception:
Mousetrap Vehicle
For The Great Mad Race**

Participants in engineering activities that weekend including the fifth annual Engineering Alumni Symposium, 8:30 to 11:30 a.m. Saturday morning, March 31, can attend an informal noon luncheon (one speech) in the K-State union. Tickets are available at \$2.50 each from the Dean of Engineering, KSU, Seaton Hall, Manhattan, KS 66506. Make your check payable to KSU Endowment Ass'n. Your request must reach us by March 23.

There will be an awards banquet starting at 6:30 Saturday evening in the K-

State Union. Tickets are \$3.50 each. Instructions listed in the previous paragraph also apply to banquet tickets.

K-State President James A. McCain will present the Distinguished Service Award in Engineering to an outstanding Kansas engineer. The recipient's name will be announced Wednesday, March 28.

The second annual Knights of St. Patrick awards will also be presented by Dr. Ralph G. Nevins, KSU dean of engineering. These awards go to outstanding seniors based on nominations by the Engineering Student Council.

Hope to see you at Open House. Your trip to Manhattan will be more than worth the time and effort.

Funds for a new Chemical and Industrial Engineering Building were recommended by Kansas Gov. Robert B. Docking in his budget message to the 1973 session of the State Legislature. When funds become available for the building, it will be built in the southwest corner of the old football practice field north of Ahearn Fieldhouse.

NEWSWORTHY NOTES

The ninth annual Engineering and Science Summer Institutes at K-State for currently-enrolled Kansas high school sophomores and juniors are set for June 10-15 and June 17-22.

The fall 1972 student evaluation of undergraduate instruction in the College included 1,534 questionnaires from 98 classes taught by 64 faculty members. The evaluation was coordinated by the KSU Engineering Center for Effective Teaching.



E. Lindly



N. Ahmed

John R. Schlup, 20, Tonganoxie, Kan., junior at K-State, has been awarded the 1972-1973 scholastic achievement award of the student chapter of the American Institute of Chemical Engineers for maintaining a 3.73 grade point average his freshman and sophomore years.

Dr. Nasir Ahmed, associate professor of electrical engineering, is an associate editor of the Institute of Electrical and Electronics Engineers Transactions on Electromagnetic Compatibility.

Dr. Edwin C. Lindly, associate professor of applied mechanics, taught the third annual shelter survey technician course for 18 undergraduate architectural and engineering students Jan. 2-5 at K-State.



BUTTON DESIGN — Above is the design of the lapel buttons traditionally worn during the 49th annual KSU Engineering Open House March 30-31 at K-State. The design will also appear on the cover of the Open House printed program. The artwork is based on the Open House theme, "Today's Engineering, Tomorrow's World."



ST. PAT AND ST. PATRICIA FINALISTS — Candidates for royalty to reign over the 49th annual KSU Engineering Open House March 30-31 include (l. to r.) — front, Cathy Parr, Karen Schumacher and Sue Seyfert; back, Michael French, Dennis Anderson and Robert Grace.

KS Electrical Engineers Conduct Varied Research

With this issue of **IMPACT** Newsletter, we present our third in a series of brief reports on continuing research activities coordinated through the KSU Engineering Experiment Station. The department of electrical engineering is featured.

Coaxial Cable Shielding: The effectiveness of coaxial cable shields against externally-induced signals has been studied, using more realistic models for the braided shield layer than have been considered in the past. This work, conducted by Dr. Kendall Casey, is supported by Dikewood Corporation.

Electromagnetic Theory: Wave propagation in inhomogeneous media is being studied extensively, using a novel mathematical technique. Applications to inhomogeneously loaded waveguides and inhomogeneous layers in the troposphere and ionosphere which affect radio communication are being considered by Dr. Kendall Casey. The National Science Foundation is the supporting agency.

Respiratory Control System Simulation: Development and evaluation of human respiratory control system simulations and their relationships to other physiological systems. The major emphases are on the simulations' adaptability to altered environments and their usefulness in analyzing and predicting man's performance in these environments. Dr. Richard Gallagher is the investigator. The work is supported by General Electric.

Earth Resources Technology Satellite (ERTS): Interdisciplinary research on the detection of wheat diseases and estimation of statewide yields. This is an effort with the KSU Evapotranspiration Laboratory, plant pathology, agricultural engineering and entomology. Dr. Donald Lenhart says the object of the work is the data analysis, reduction, and enhancement of the digital data.

Humidity Sensors for Grain Storage: Thick film humidity sensors are being developed for use in grain storage silos. These devices consist of a cobalt dioxide sensing material fired at 1,500 C upon an alumina substrate. The devices are capable of measuring relative humidity to better than one per cent. The object of Dr. Michael Lucas' research is to produce a humistor capable of operating in the environment of the grain storage silo. The work is supported by the U.S. Grain Marketing Research Laboratory, Manhattan, Kan.

To Judge Open House Displays

A team of three judges has been chosen to judge student exhibits for the 49th annual K-State Engineering Open House. They are Cecil H. Best, K-State's associate engineering dean; Paul Young, vice president for development at KSU; and Charles Jakowatz, dean of engineering at Wichita State University. Open House dates are March 30-31.

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