## Study focuses on reduction of fuel costs

A detailed engineering study. to reduce energy consumption in campus buildings by at least 30 percent has been initiated at

Dr. Swiki Anderson, assistant professor of mechanical en-gineering, heads a team studying energy consumption levels of Texas A&M buildings and determining the measures which will produce the greatest sav-

ings.

If the goal of a 30 percent fuel reduction can eventually be attained, it would mean tremendous monetary savings. Fuel used for heating and airconditioning and for generating

electricity in 1973 cost about \$1.2 million. Despite current conservation practices, this fi-gure is expected to rise to more than \$7 million in 1977. This means that fuels will cost

nearly six times as much for these tasks as they did only four years earlier. A 30-percent re-duction of projected fuel costs in 1977 would amount to a savings of more than \$2.1 million.

Part of the increase in the amount which Texas A&M pays for fuel is due to higher enrollments and more buildings in operation, but most comes from the higher cost for fuel itself. For example, the university

spent about \$76 per student for these fuel needs in 1973. The projected fuel cost per student in 1977 is \$296, nearly a fourfold increase in four years.

Anderson is using the 15-story Oceanography and Meteorology Building as the model for his study. Put into service in 1973, the building is one of the campus' major energy-consuming facilities. About 4.3 million kilowatt hours per year are needed for the building. The fuel and related maintenance costs amount to about \$130,000 a year at current \*fuel rates.

Anderson and his co-workers

have conducted detailed monitoring of the energy-consumption patterns in the Oceanography-Meteorology

The next step will involve computer techniques. A prog-ram will be established to correlate with the actual energy con-sumption patterns of the building. The computer program can then be subjected to the many variables involved in the

energy-consumption pattern. This will produce a detailed analysis of the conservation measures which can be taken and the amounts of energy and money which can be saved by

each measure.
Support for the project comes from the Texas Engineering Experiment Station, Center for Energy and Mineral Resources, and the Physical Plant.

Anderson says findings from the study of the Oceanogra-phy-Meteorology Building will not be completely applicable to all other large buildings, be-cause each building is different and has unique characteristics

But we do think we can transfer many of the energyconserving practices we get from this study to other build-

