

## Views conflict during SCONA

# 'Sun may supply all energy'

By MARILYN BROWN  
The sun, so sorely missed the last few weeks, may one day supply all the world's electricity, says Harlan Smith, University of Texas professor of Astronomy.

Dr. Smith was part of a three-member panel which spoke on future energy technology during a Friday morning meeting at the Student Conference on National Affairs.

The other speakers were E. Linn Draper, University of Texas professor of Nuclear Engineering, and Dr. Stephen Riter, head of Texas Engineering Experiment Station Center for Energy and Mineral Resources.

Riter spoke first on what he termed "mundane solutions to the energy problem." These include biomass conversion — deriving energy from organic matter — and the use of alcohol, coal, and solar energy.

Riter contended that the sun is the ultimate source of all energy and that oil and gas represent that energy trapped in plants and tapped a millennia later. Because the world's population can't wait another millennia, Riter suggests direct fuel production from crop, animal and municipal wastes.

Riter said the greatest misconception about the energy crisis is that "we think we have to make large-scale, irrevocable decisions between nuclear or solar power."

Riter said small-scale power production would lessen the need to build large power plants or to convert existing ones. This would involve individual solar or coal units in the home and farms which supply their own energy with methane gas made from manure and alcohol made from crop wastes.

He said many small projects across the state researching these energy sources.

Panelists agreed the federal government would be a major influence on the types of energy developed because it regulates the energy industry so extensively.

Riter said he thinks large-scale energy production encourages further government regulation and restriction and enables a few large corporations to dominate the industry.

He said nuclear energy now accounts for half the Carter administration's energy research funds.

"It's a question of whether the government will put its eggs in one basket or provide the incentive for a variety of energy sources," Riter said.

Draper, a nuclear energy proponent, said he thinks nuclear energy and coal "will bear the lion's share" of the U.S. energy needs of the next 25 years.

"Unless the government allows the construction of more (nuclear) plants we face a critical energy shortage," Draper said.

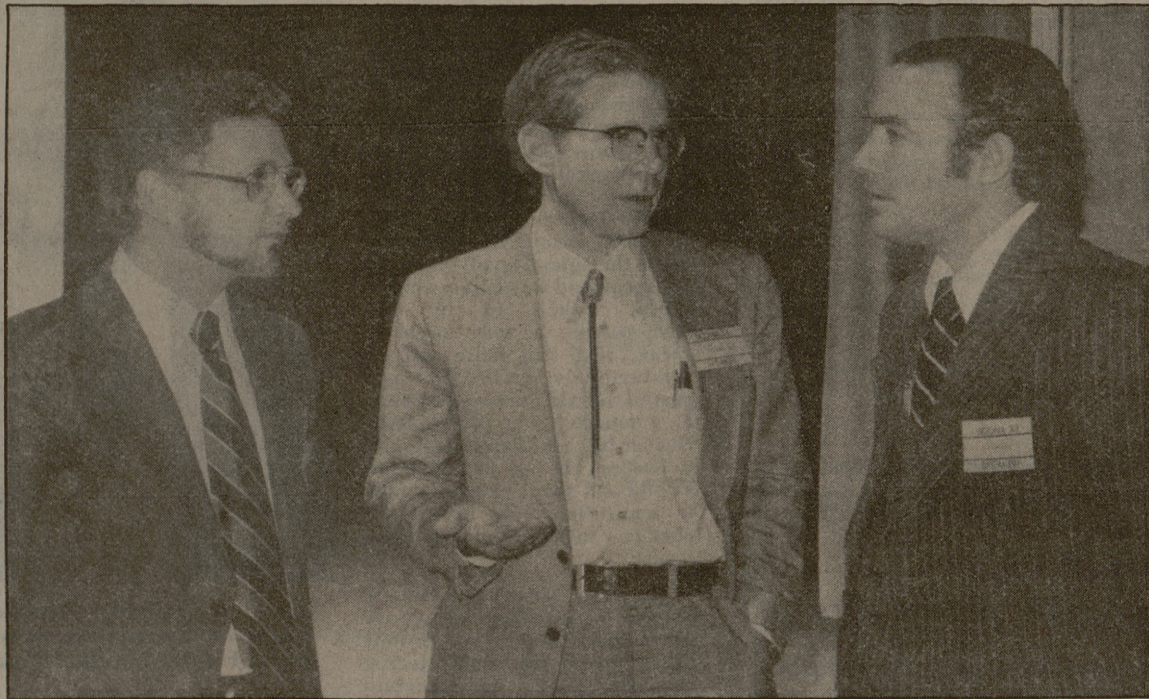
He said there are 68 nuclear plants in the U.S. which provide 10 percent of the country's electric power. They provide as much as 70 percent for the Chicago area when coal is in short supply, Draper said.

He said nuclear energy is the least sensitive to fuel cost increases because the amount of fuel required is so small. It now costs \$15 per kilowatt hour, 20 percent cheaper than coal at \$.18 per kilowatt hour, and half the price of natural gas at \$.35 per kilowatt hour.

Draper said he thinks nuclear energy has caught on slowly because "politicians have misconceived the public sentiment." He said national polls have found 60 percent of the public "at the grass roots level" in support of nuclear energy. He also said extensive government regulation impedes private investments in nuclear plants.

Draper said nuclear plants were "among the safest devices devised by man," calling them safer than any other type of power plants. As a guard for potential nuclear blast, government strictly regulates their construction and it takes about 13 years to build a nuclear plant that meets government safety standards.

He said waste disposal and radiation leaks are not a problem because wastes are sealed in glass and buried 3,000 feet beneath the earth's surface. After 700 years they are no more toxic than any known radiation



Battalion photo by Susan Webb

Friday's SCONA Energy Technology Panel presented three views on future energy sources. Left to right are Dr. Stephen Riter, who proposed simplistic solutions to the

energy crisis; Dr. Harlan Smith, who looks to the sun to supply the world's energy needs, and Dr. Linn Draper, who is a nuclear energy proponent.

damage due to leaks from nuclear plants.

However, such damage would cause irreparable damage to a large body of land.

Draper said that no nuclear plants in this country have been used to build atomic weapons.

Harlan Smith called the sun a "super nuclear fusion plant," and said he believes that solar space stations are the only run, large-scale solutions to the energy crisis.

Solar space stations would reflect the sun's rays and send energy in the form of microwaves to collection points on earth. Smith said he thinks they will provide substantial amounts of our energy within 40 to 50 years.

Smith said every square inch of the sun has 10,000 times the amount of energy used in the world — virtually an infinite supply. The sun always shines in space, and the stations could use the sun's energy without atmospheric interference.

The stations would be constructed in space by workers living in orbit around the earth. Smith said by 1980 the space shuttle would be making weekly runs to "park" supplies in orbit unless the administration loses its nerve. The stations

can be constructed of lightweight materials because of the weightlessness of space.

Smith said the solar collectors on earth would not block sunlight and the land beneath them could be used for farming.

"All this may sound like science fiction, but we're not so far from it," Smith said. "We have the technology, we just need to develop it to reduce costs."

The initial cost is estimated between \$40 to \$100 billion. But Smith said he thinks by the year 2000 profits will outweigh costs.

One thousand space stations would cover the world's needs, and between 50 to 100, depending on the size, would be needed for the U.S.

Smith said the solar space stations would add a "human constellation" to the night sky. He said he thinks they will be the driving force toward making use of space — the "next frontier."

"We'll find that space isn't the last frontier, but our birthright and a necessity to man's future."

"I'm concerned with getting the human race through the next 20 to 25 years," Smith said. "After that our supplies and our room to grow are infinite."

## Tupinamba

Eddie Dominguez '66  
Joe Arciniega '74



If you want the real thing, not frozen or canned... We call it "Mexican Food Supreme."

Dallas location: 3071 Northwest Hwy 352-8570

## Episcopal Student Center

902 Jersey  
(adjacent to southside of campus)  
846-1726

Tuesdays, 5:30 p.m.:

Eucharist & Supper

Wednesdays 12 noon Bible Study

Fridays, 6:30 a.m.:

Eucharist & Breakfast

Sundays, 6:30 p.m.:

Fellowship & Eucharist

Fr. James Moore, Chaplain

## TIP TOP

RECORDS AND TAPES

1000 S. COULTER — BRYAN — 823-5745

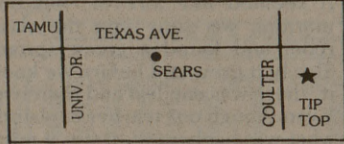
TAPES • STEREOs • MUSIC BOOKS • NEEDLES

Blank Tape Quantity Prices

Member Student Purchase Program

COMPLETE SERVICE DEPARTMENT

Store Hours:  
9:00-6:30 Mon.-Sat.

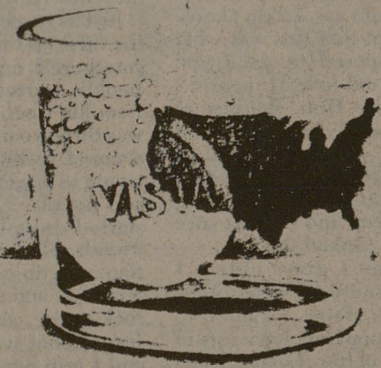


## Embrey's Jewelry

We Specialize In  
Aggie Rings,  
Diamonds Set —  
Sizing —  
Reoxidizing —  
All types watch/jewelry  
Repair  
Aggie Charge Accounts  
9-5:30 846-5816

RABBITS CAMPERS  
MAZDAS BUSES  
DAILY RENTALS

We Pick Up & Deliver  
**BUD WARD**  
VOLKSWAGEN INC.  
693-3311



This is how we spell "relief":  
VISTA

SENIORS/GRADS  
INFORMATION BOOTH  
M.S.C.

REPS ON CAMPUS NOW! MON-WED., FEB. 20-22

## EXOTICA ORCHIDS

Beautiful plants that will easily grow and bloom in your home.

By appointment -  
Blanche Guthrie  
846-8941

## CHARISSA PACK joins "THE PRECISION HAIRCUTTERS"



## SHEAR CLASS

209 E. University 846-4771  
(In the George Green Bldg.)

# CHECK US OUT...

- ✓ **company** Dynamic, well-managed Texas company interested in employees as "persons" not numbers. Successful food retailer, manufacturer, & distributor.
- ✓ **career opportunities** Exciting career opportunities available in • Store Operations Management • Warehousing/Transportation Management • Bakery/Dairy Management
- ✓ **compensation & benefits** Good starting salary and rapid advancement. Benefits include: • Paid Relocation • Life & Medical Insurance • Credit Union • Free Use of Company Lodge • Paid Vacations • Tuition Assistance
- ✓ **locations** Training programs offered in • Austin • Corpus Christi • San Antonio Training & Initial Assignment typically available in the same city. All Company locations are in Texas.
- ✓ **professionalism** Dynamic, innovative, intelligent & progressive individuals with a strong desire to contribute to the organization & feel a sense of achievement.
- ✓ **development programs** Programs are designed to move you rapidly into responsible positions. Included are management seminars, on-the-job training, and continuing education.

See what you can do for you...  
Check with your Placement Center or contact us:  
Corporate Staffing

**H.E. Butt Grocery Company**

P.O. Box 9216, Corpus Christi, TX 78408

(512) 883-5288

An Equal Opportunity Employer M/F



## How Evelyn Wood Reading Dynamics gives you a competitive edge in school.

School at any level means reading... lots of it. Keeping up with thousands of pages can take a heavy toll in time and energy, and grades. If you're typical, you read 150 to 350 words a minute. But how do you get ahead of the rest?

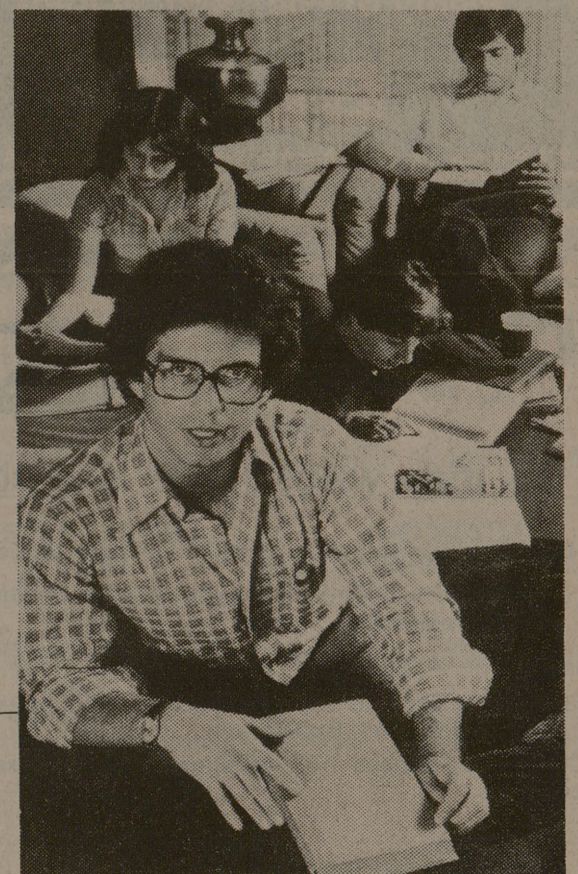
**Evelyn Wood can triple your reading rate and improve your comprehension and study skills.**

Hundreds of thousands of students use the Reading Dynamics Method. They find reading less of a chore. Concentration and retention improve, which can lead to better grades. A competitive edge is important... too important for you to delay.

**Prove it to yourself today!**

Whether you're thinking of grad school or the job market, or if you want to keep up with course reading today, let Evelyn Wood Reading Dynamics give you a competitive edge.

In fact Evelyn Wood guarantees that you will triple your reading rate if you follow the course correctly, or your full tuition refunded. That's our competitive edge.



**Attend a free Evelyn Wood Mini-Lesson at:**

**SUNDAY-THURSDAY**  
**5:30 & 8:00 P.M.**  
**COLLEGE STATION**  
**AGGIELAND INN**  
**1502 S. Texas Ave.**



**Evelyn Wood Reading Dynamics.**  
**The Competitive Edge.**