

WEATHER

FORECAST for FRIDAY:
Cloudy, becoming partly cloudy in
afternoon, with a 40 percent
chance of showers and thunder-
storms
HIGH:85 LOW:62

A&M takes another step in fusion experiment

FROM STAFF & WIRE REPORTS

Another step in the direction of "cold" fusion was taken at Texas A&M Wednesday when Dr. John Appleby, director of the Electrochemical Systems and Hydrogen Research Center, said experiments with a micro calorimeter, which measures heat output, showed for the first time that palladium and heavy water are crucial for producing excess energy.

Two other groups of scientists at A&M also have confirmed part of the results of Utah researchers, producing excess energy from the apparatus, college officials said Wednesday.

"Experiments are in progress to deter-

mine the critical parameters that govern the generation of excess heat," Appleby said in a statement.

Last month, researchers of A&M's Texas Engineering Experiment Station Thermodynamics Research Center first announced they had confirmed part of the findings of the University of Utah group that earlier claimed to have produced so-called "cold" fusion in a lab experiment.

The findings by B. Stanley Pons, chairman of the Utah chemistry department, and Martin Fleischmann of the University of Southampton, England, sent scientists around the world scrambling with their March 23 announcement of the fusion reaction.

"Experiments are in progress to determine the critical parameters that govern the generation of excess heat."

— Dr. John Appleby
research director

Last week, Appleby's group also announced it had produced excess energy in another experiment. And a third group at A&M headed by Dr. John Bockris, distinguished professor of chemistry, has yielded

similar results.

"Basically, the bottom line is that a second A&M group confirmed what is being called the 'Pons-Fleischmann effect' — excess energy being generated (from the experiment) and are the first to indicate that only heavy water and palladium will produce this excess energy in an experimental setting," A&M spokesman Ed Walraven said.

"The third group is also producing excess energy but they don't feel like they are producing a sufficient amount in that they yet have publishable results," he said.

"They are getting lower levels than the other two groups. In essence, all three are producing excess energy. Some is higher

than in others and that has to be explained."

Walraven said Dr. Supramania Srinivasan, a senior researcher in Appleby's group and assistant director of the electrochemical and hydrogen center, will present some of the results this weekend at an Electrochemical Society meeting in Los Angeles.

Physicists meeting this week at the American Physical Society in Baltimore have been highly critical of the fusion research. They maintain that the original experiment and the confirmations suffer from im-

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Weather poses only threat to repaired shuttle

CAPE CANAVERAL, Fla. (AP) — The countdown marched smoothly Wednesday toward a second attempt to launch the shuttle Atlantis with a crew of five and a space probe destined for Venus. NASA's only worry was a worsening weather forecast.

"All in all, things look good for a 1:48 p.m. launch tomorrow (Thursday) and the start of our trip to Venus," launch test director Albert Sofge said of shuttle preparations.



The weather outlook, however, was not promising, with forecasters saying Wednesday afternoon there was a 40 percent chance that either rain or high winds would prevent a launch during the available 64-minute launch period. That was up from 30 percent in the morning and 20 percent two days ago.

The first launch attempt last Friday was aborted just 31 seconds before the planned liftoff because of a short circuit in a fuel pump. NASA said the delay cost about \$300,000.

The mission to take the Magellan spacecraft into orbit will revive a U.S. planetary program that has been dormant since the launch of Pioneer-Venus in 1978.

"After an 11-year gap in the planetary program, we're anxious to get

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Senior splash

Walter Giroir (left) and David Marshall (right) and three other nuclear engineering seniors graduating this spring celebrate

their freedom Wednesday in the fountain at Zachry Engineering Center.

Photo by Fredrick D. Joe

S. Korean riots prompt warning from president

SEOUL, South Korea (AP) — President Roh Tae-woo on Wednesday threatened to invoke emergency powers, which could mean martial law, if students and workers continue the kind of violent protest in which six riot policemen were killed.

He said his government was determined to stop the wave of radical protest that has battered South Korea in recent weeks, but he did not outline specific action in a televised speech to the nation.

"If violence and illegal acts endanger democracy and the future of the country, I would be obliged to invoke emergency measures as empowered by the constitution," he said.

South Korea's constitution permits the president to rule by decree or impose martial law in cases of emergency.

Roh's warning responded to the killing of six riot troopers early Wednesday at Dongguk University in Pusan, a southern stronghold of the opposition.

People seldom are killed in South Korean protests. Riot officers wear protective helmets and shields, along with fireproof fatigues, and normally are armed only with tear gas and batons.

The six who died were set afire when they broke into a room on the seventh floor of the university library to free five comrades held hostage. They were the first policemen killed since a riot officer died in June 1987.

Authorities said students seized the hostages Tuesday after a violent demonstration against the firing of warning shots by police on Monday when protesters menaced a police station.

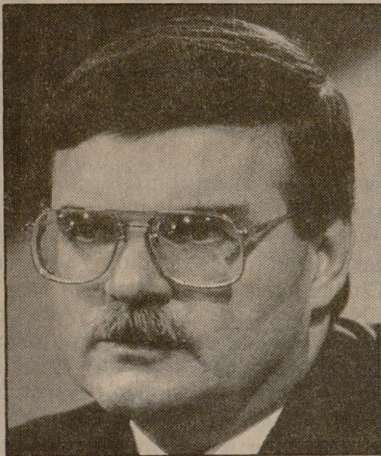
Mobley: Bush library, state support crucial

UNIVERSITY NEWS SERVICE

While President Bush's visit and a proposal to locate the presidential library on Texas A&M's campus are attracting widespread attention, the battle for more state support for higher education and a commitment to excellence in the classroom are crucial, Texas A&M University President William Mobley said Wednesday in his first "state of the University" address.

"We are pleased that President Bush has selected Texas A&M as one of the four universities at which he will speak to graduates during his first year in office," Mobley told faculty and administrators at the annual spring faculty and staff meeting.

"Let me also note that we are proceeding with developing a formal proposal to locate the Bush Presidential Library at Texas A&M," he added, pointing out that an external committee, chaired by Michel Halbouty of Houston and involving other prominent alumni, is meeting regularly.



President William H. Mobley

"With good input from faculty and students, particularly from the colleges of Architecture and Liberal Arts, a preliminary proposal is taking shape," Mobley said. "Although a decision on the location will be well into the future, we will be well prepared."

"On another subject — one of intense interest to the entire University community — the Texas Legislature is approaching a critical stage in its deliberations," he said.

Mobley reported that the conference committee is working to reconcile the differences in the House and Senate versions of the appropriations bill for the next two fiscal years.

"The good news is that both bills are far better than the original Legislative Budget Board recommendations," he continued. "And there is some speculation that the State Comptroller will certify, before the end of the legislative session, that additional revenues will be available in the coming biennium, thus providing additional funds for appropriation."

He said the Senate appropriations bill comes closer to meeting the University's needs than the House version, and calls for 7.1 percent in appropriations for faculty salary increases each year and 4 percent in the appropriations for staff salaries.

"You may be assured that the appropriations bill is receiving top

priority of the administration, and will continue to get priority attention through the closing weeks of the legislative session," he said.

In addition, Mobley called for continued cooperation to increase private support for the institution and continued excellence in the classroom.

"We must continue to exercise excellence in the classroom," Mobley said. "You will likely hear me mention this often in the months ahead — I will mention it often, for we must never lose sight of the reason Texas A&M was established and the reason for the trust that the citizens of Texas have placed in our hands."

"Please understand that when I speak of excellence in education, I am referring to our responsibilities to young people in the broadest sense," he said.

As a highlight to the annual meeting, Mobley's first as president, 21 distinguished service awards sponsored by the Association of Former Students were presented.

Educational progress stagnant nationwide

WASHINGTON (AP) — Spending on education is up but progress is at a standstill, Education Secretary Lauro Cavazos said Wednesday in releasing a report

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card that rates the nation's students as "merely average."

"We are standing still, and the problem is that it's been this way for three years in a row," Cavazos said. "Frankly, the situation scares me."

The figures show a decline this year in the national high school graduation rate and falling scores on college entrance exams in half the states.

In reaction, the Council of Chief State School Officers, while acknowledging that "the task ahead is gigantic," noted that 44 of the 50 states have made college entrance test gains since 1982 and 38 states have improved their high school completion rates since then.

If educational progress has stagnated, the Education Department's chart shows the same cannot be said of per-pupil spending. The national average was \$3,977 per student in 1988, up from \$3,165 in 1982 — a 26 percent hike.

"We are already spending more money per student than our major foreign competitors, Japan and Germany," Cavazos said. "And yet our students consistently fall behind the competition in competitive testing. Money alone is not the answer to our education deficit."

Cavazos said he would urge state school chiefs, governors and



Lauro Cavazos

school board presidents to adopt specific goals such as boosting high school graduation rates to 90 percent and cutting in half the number of children who fail a grade.

Specifically, the department's chart shows that national scores on the Scholastic Aptitude Test (SAT) fell from an average of 906 to 904 (on a scale of 400 to 1,600) from 1987 to 1988. Scores on the American College Testing Program (ACT), marked on a scale of 1 to 36, showed a scant 0.1-point gain. The high school graduation rate rose from 69.5 percent in 1982 to 71.7 percent in 1985. But it edged down in 1986 to 71.6 percent and dropped to 71.1 percent in 1987, the latest year for which such statistics could be calculated.

The National Education Association issued a statement saying it agreed that U.S. schools are stagnating.

But the teacher union said Cavazos is wrong to minimize money as a factor for improvement, and it attributed the stagnation problem to federal cutbacks in programs for the disadvantaged.

A&M, BISD to become magnet school partners

By Melissa Naumann

STAFF WRITER

Texas A&M and the Bryan Independent School District will become partners in a magnet school for science and math if the U.S. Department of Education approves a joint proposal for the establishment of such a school.

Dr. Peter McIntyre, A&M physics professor and member of the task force that determined the feasibility of the magnet school, said plans for the school will proceed even though the College Station Independent School District will not participate initially.

The College Station school board voted not to participate in the magnet school, but McIntyre said plans remain virtually unchanged.

"It has not been delayed — just shifted slightly in focus," McIntyre said. "It's gone from a three-way project to a two-way project."

Dr. Guy Gorden, Bryan school superintendent, said if the schools receive the \$600,000 grant from the Department of Education, the magnet school will open in Fall 1990.

Gorden said the magnet school would serve fewer students because College Station has decided not to participate. The school would be open to students in surrounding school districts, but the schools outside of BISD must make fi-

nancial contributions in order for their students to attend.

The magnet school would be a four-year public high school concentrating on preparing students for careers in science and technology. It would be open to students who have above average scores on skills tests, McIntyre said.

"It's not an elitist institution," McIntyre said. Opponents of the magnet school say it would rob other schools of their top students, but McIntyre disagrees.

"It's for students who are high achievers and want and need the ambience this school can provide."

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