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Chemists advance ammonia quest

Scientists have discovered a way to alter nitrogen into ammonia, a chemical used in fertilizers

BY NICHOLAS WILBUR
NEWS REPORTER

The pursuit to produce ammonia, the fertilizer that made the "Green Revolution" in agriculture possible, is making progress thanks to a recent discovery by professor David Tyler and two graduate students, John Gilbertson and Nate Szymczak, of the University chemistry department.

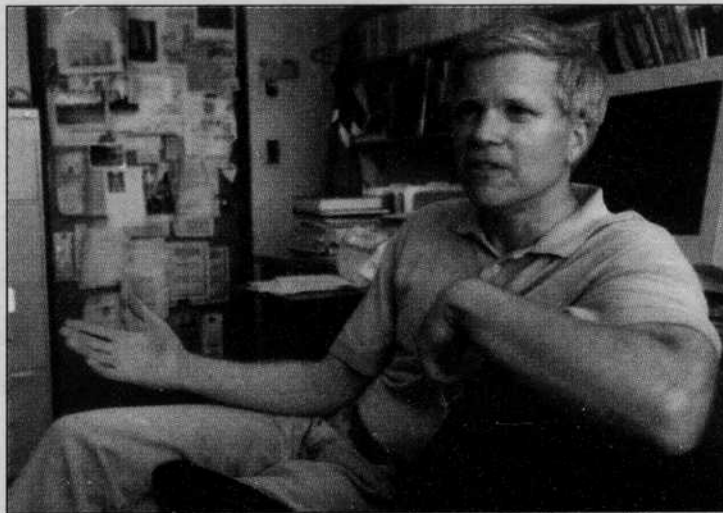
After four years of research, the team discovered a way to "fix" nitrogen, an atmospheric gas devoid of reactive properties, by using iron as a catalyst to combine the electrons of hydrogen and make

ammonia. The process was carried out in an ether solution, but all of the steps except one have been found to work in water.

"Previously they've had to do this with very exotic materials," Tyler said. The team discovered a way to convert nitrogen to ammonia at low temperatures and pressures "the process doesn't require as much energy. We've opened up a way that can lead to other research that can do that."

Ammonia is used as food for plants and is the fertilizer used for much of the world's food supply.

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TIM BOBOSKY | PHOTO EDITOR

Chemistry professor David Tyler talks about the efficient production of ammonia used for fertilizers.

Increased loan interest rates effect students

Tuition raises and federal grant budget cuts are making college harder for families to afford

BY NICHOLAS WILBUR
NEWS REPORTER

The recent increase in student loan interest rates on July 1 is a contributing factor to debates over higher education affordability. Tuition is predicted to rise an additional 3 percent over the next two years, federal funding to education grants is stagnating and now the 2005-2006 student loan interest rate has increased by 70 percent from last year, the first increase in five years.

After several years of record-breaking lows, last year's interest rate fell to 3.37 percent, the lowest it has been in nearly 35 years.

Every year the Federal Reserve reevaluates the bond-equivalent rate through what is called a 91-day Treasury bill. For 91 days an "auction" watches the investment value of Federal Reserve funds and then determines the loan interest rates for the next year. From July 1, 2004 through June 30, 2005 the auction set the bond-equivalent rate at 1.07 percent. The auction determined that the rate from July 1, 2005 through June 30, 2006 was 2.998 percent. This 1.97 percentage point increase is the biggest increase since 1980. Adding the base 1.7 percent for all loans of in-school, grace or deferment status brings the total to 4.7 percent, up from 2.77. For loans already being repaid, 2.3 percent is added, totaling 5.3 percent.

This increase is a result of the Federal Reserve raising short-term interest rates for banks and loan companies to balance the market by bumping up the funds rate.

A decrease in the quantity of money coincides with an increase in interest rates when adjusting to market demands and attempting equilibrium, according to the basic principles of macroeconomics.

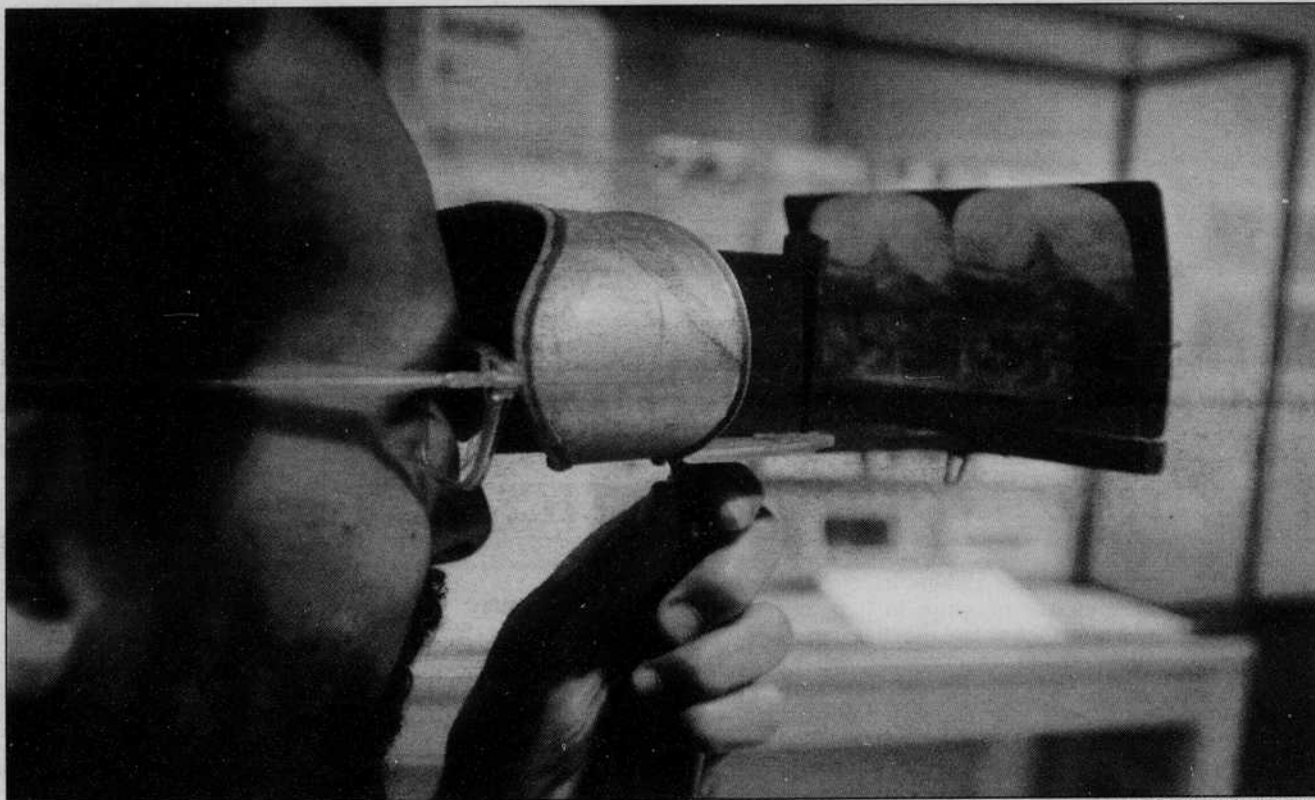
For students with subsidized loans, the interest rate will not affect them until graduation.

Elizabeth Bickford, director of Student Financial Aid and Scholarships, said, "if (the interest rate) gets higher or stays at this level it will impact (students) when they graduate. At some point it may reach the cap (8.25 percent), and these are the things we will be looking at this year. Right now it's too early to predict the implications."

Bickford expressed concern for the upcoming re-authorization of federal financial aid later this year and is hoping Pell Grants are given specific attention. She said that the interest rate will have no effect on the ability to obtain student loans. Whether fewer people apply for the loans because of the increased interest rate is something they will have to wait to find out.

A July 13 article in the New York Times, "Sharp Rise in Tax Revenue to Pare U.S. Deficit," reported that for the first time in George W. Bush's presidency, the federal budget deficit for fiscal year 2005 will shrink by \$100 billion. The Administration was said to announce that the budget will not match the February estimate of \$427 billion.

INTEREST RATES, page 6



Unfur Chaka Karlsson looks through a Stareograph at the Jordan Schnitzer Museum of Art while on a visit from Iceland to see his father Charles Dalton.

TIM BOBOSKY | PHOTO EDITOR

Photographs of a fragile frontier

The new exhibit at the Jordan Schnitzer Museum showcases landscape photography of the West, spanning three centuries

YEONG DOO MOON
FREELANCE REPORTER

Jordan Schnitzer Museum of Art.

Having kicked off last week, the museum's fresh exhibition "Advocates for the Land: Photography in the American West" includes art pieces from photography masters such as

About 140 historic photographs of the American West landscape are on display for public viewing at the University's

Timothy O'Sullivan, Ansel Adams and Robert Adams from the 19th century through the 21st century. The show will continue to run until Sept. 18.

As the title of the show indicates, the featured photographs display diverse points of view about the use of the landscape from preservation to development, although their creators might merely be trying to represent the

EXHIBIT, page 4

Information services makes new hire

Incoming Vice Provost for Information Services, Don Harris, places making computer labs more "group-use-friendly" as a top priority

BY GABE BRADLEY
NEWS EDITOR

Half his career has been spent in information technology management; the other half has been spent teaching information management to business students.

Currently, Harris has no plans for teaching at the University.

"I certainly need to focus on the administrative challenges facing me," Harris said.

However, Harris also said he has contact with the business school and will wait to see whether an opportunity to teach comes up.

"What I'm doing at the University is very

Emory University's Don Harris will leave Atlanta, Ga., where he is the vice provost for information services and chief information officer to fill the same position here at the University.

"This really has been my entire career," Harris said. "I started at Pepperdine University in California."

From Pepperdine, Harris went to Maryland, Pennsylvania and Tennessee before ending up in his current position in Atlanta.



DON HARRIS
VICE PROVOST FOR
INFORMATION SERVICES

much the practical side of allocating resources," Harris said.

The information services department deals with the campus networks, computer labs, help desks, and other technology-related services.

Harris said he would like to implement changes in the computer labs that would facilitate cooperation among students: "More small group dynamics as opposed to one student sitting at a computer." This consideration affects

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