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BERKELEY, CALIFORNIA

the ASUC Senate last night.

ASUC President Marc Litchman.

LBL develops efficient methane energy source

By **MIKE CIRAOLIO**
STAFF WRITER

Researchers at the Lawrence Berkeley Laboratory have discovered a new economical energy source, laboratory spokesperson Adrienne Kopa said.

LBL scientists have developed a process which converts graphite, or pure carbon, into methane, a hydrocarbon gas useful as an energy source, said Kopa.

LBL's innovation is significant because it involves only one reaction step and can be carried out at low temperatures.

Traditional production of synthetic fuels, or synfuels, requires temperatures above 600 degrees centigrade to convert coal into gas by using steam, Kopa said, adding that high temperatures and two-step processes require large amounts of energy.

"The advantage is that this is a low temperature process, so there is energy economy in the method, and methane is produced directly in one step," said Gabor Somorjai,

one of the researchers who discovered the process.

The new process converts crystalline graphite, in the presence of water vapor, into methane and carbon monoxide or carbon dioxide, with temperatures of 250 to 300 degrees centigrade. The reaction uses alkali hydroxides, or the carbonates of the same alkali metals as catalysts, said Kopa.

LBL scientists Gabor Somorjai and Alejandro Cabrera deposited the catalyst on the surface of the graphite, which was then heated at atmospheric pressure. The water vapor was the source of hydrogen and oxygen, components of methane and carbon dioxide.

Somorjai foresees the potential for similar production of ethane, propane and even more valuable hydrocarbons.

Researchers have demonstrated the possibility of using large-surface-area graphite to produce large quantities of methane. It may also be possible to use more economical sources of carbon, such as coal and biomass, including weed and plant sources, to produce methane, Kopa said.

said, "Personally, I've enjoyed working with Bills. He has experience to do a job well and his performance is high caliber. I'm very comfortable with Bills' nomination."

"Bills is on excellent terms with employees and students. He's a fair man and direct, which fosters an atmosphere and flavor of this administration," said Addison.

Educational Democracy member John Kragh said, "He's a good administrator, not an innovator. He seems like a nice guy, honest and a nit-picker — he has things done his way."

ASUC Internal Affairs Coordinator Chris Cooper said, "He does things on a low level and keeps out of politics; he can remain objective."

The recommendation followed a three-month screening process of 220 applications and resumes by the seven member committee. Every application was read by each member and ranked as high, middle and low. The top 20 applications were then read over again and narrowed down to eight candidates.

Two of these candidates were "weeded out" and two more dropped out, leaving four candidates. Last week, these four went through day-long interviews. Each candidate met with the

loan from the city.

At Tuesday's Redevelopment Agency meeting, Acting City Manager Forrest Craven spelled out the city's plan for financing the loan. \$500,000 will be repaid during the next five years by private investors with the remainder coming from tax increments.

There was little dissent on the matter, except for concern expressed by some councilmembers that the loan would create a cash flow problem for the city, whose budget has already suffered a \$6 million reduction this year.

Those fears were apparently dispelled when city Finance Director BERNON ERICKSON reported that if a snafu developed in the loan repayments, the city could borrow money quickly from local banks under an emergency lending plan.

cancellation of grant money coming from OSHA.

But Steve Diamond, shop steward at the institute and an executive board member of the California State Employees' Association Local 41, claims the grant money is forthcoming and that the university is just stalling for time in an effort to cripple the union and its bargaining power.

"The university is using the transitional period between grants to get rid of what they call troublemakers, the people who are speaking up for their rights," said Diamond. "(The university administration) has never liked the program." Additionally, Diamond claims that in the past the university has paid for these employees' salaries whenever there was a delay in obtaining the

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recruitment special**
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