

FERMILAB NEWS

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McCORMACK EXHORTS SCIENTISTS TO GET INVOLVED IN POLITICS

"He is a great friend to research, to high energy physics and to Fermilab."

Leon Lederman (on introducing Mike McCormack).

Former U. S. Congressman Mike McCormack (D-WA) strongly encouraged his fellow scientists to become more involved in the decision-making processes that shape national science policy.

Speaking at a special colloquium at Fermilab, McCormack said the path ahead for science is wrought with considerable peril unless the U. S. Congress has access to more informed and respected input. Two ways to accomplish this are for scientists to run for public office or for them to serve as advisors and consultants to the decision makers in the House and Senate.

McCormack, himself formally educated as a chemist, was chairman of the House Subcommittee on Energy Research and Production and served on the Subcommittee on Energy Development and Applications. From Richland, WA, he was defeated in November for re-election. He first won the seat in November 1970.

The speaker said the need for informed scientific input on Capitol Hill is acute, citing an impressive statistic. In the entire House of 435 members, only three congressmen--including himself--had formal scientific backgrounds. Because of his sub-committee positions, he was the most influential. Now, with this defeat at the polls, a powerful voice for science has temporarily been stilled.

But McCormack told his listeners that he is not returning to his home state, rather, "I plan to stay in Washington, D.C., working on energy and other science policies and doing what I can to help you and scientific research. I plan to help other leaders obtain support for high energy physics, nuclear science and basic energy sciences."

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COUNCIL OF PRESIDENTS TO MEET HERE

The Council of Presidents of Universities Research Association will meet Feb. 13 at Fermilab for an all-day agenda.

The council, made up of the presidents and chancellors of the 53 universities that comprise URA, oversees the operation of URA. Because of their busy schedules, the university presidents appoint officials on their staffs to represent them at the annual meeting of the council. Usually the council meets in Washington, D. C., where URA maintains an office. The last time the council met at Fermilab was in 1977.

The agenda calls for the council to hear reports from Dr. Harry Wolff, chairman of the Board of Trustees; Dr. Norman Ramsey, URA president; and Dr. Leon Lederman, Fermilab director. Other business includes the election of new trustees to three-year terms and a review of applications from universities that would like to join URA. Following lunch, the council will tour the Laboratory.

Dr. William G. Bowen, president of Princeton University, is currently chairman of the council. Fifty-one of the universities are located in the contiguous 48 states, one in Honolulu and one in Canada.

RAMSEY NEXT COLLOQUIUM SPEAKER

Norman Ramsey of Harvard University will speak at the Physics Colloquium Feb. 18. He also is president of Universities Research Association, Inc.

Ramsey's topic will be "Electric Dipole Moment of the Neutron," and will begin at 4 p.m. in Wilson Hall auditorium. Leon Lederman, Fermilab director, and Petros Rapidis, will be his hosts.

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GREENHOUSE GOES SOLAR

The sign, mounted six feet off the ground, simply says, "Solar Assisted Greenhouse, south face passive wall design." Those eight words describe another one of the many energy-conservation projects now going on at the Laboratory.

Fermilab's greenhouse in the Village has gone solar. Not entirely though, but enough so that in this time of conservation awareness, the additional heat provided by the sun acting on two passive solar panels keeps the plants at a comfortably thriving temperature when combined with the normal heating units of the greenhouse.

Penny Horak, head of the Energy Conservation group of Technical Services, explained that the panels, built and installed by her group, help the Laboratory meet the energy conservation requirements of the building. They also help scientists increase their knowledge about this manner of solar heating that can be used in many other applications. "These solar panels are providing us with free heat," she said. "Even on a cloudy day, there is enough diffuse light to heat the incoming air."

The panels work in a straightforward fashion. Air in the greenhouse enters circular vents in the bottom of the panels (see photograph on this page). The air is heated, moves by convection up through the panels and back into the greenhouse through ports at the top of the panels. This sets up a constant circulation, she explained.

In the summer, the panels help keep the greenhouse cooler than the outside temperature. Inside air again enters the panels, is heated by the sun, but instead of returning to the greenhouse, the heated air is vented to the outside. A circulation and ventilation occurs that is quite efficient in keeping the greenhouse comfortable.

But back to winter. An ingenious arrangement of solar panels and plastic tubing helps solar heat caress the roots of plants. Water warmed in solar panels is pumped in plastic tubes throughout the soil on plant tables. This approach keeps the soil warm and the plants thriving. Horak and other scientists are enthusiastic about the versatility of solar heating and are making plans for other applications. These will be reported on in later issues of FERMINEWS as they come about.

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From left standing, Penny Horak and Bud Stanley, buildings manager. From left kneeling, Margaret Meister, groundskeeper who cares for the plants in the greenhouse, Inpeng Samayavong and Estella Lesure, laboratory assistants with Horak's energy conservation group who helped build the solar panels. They are currently working in magnet production in the Magnet Facility. The five are examining two passive solar panels on the south side of the greenhouse.

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SOLAR ENERGY SOCIETY TO MEET HERE

The Illinois Solar Energy Society will hold its next monthly meeting at Fermilab Feb. 17.

The session will begin at 7:30 p.m. in the conference room on the west side of the first floor of Wilson Hall. It is open to the public. The topic that week will deal with solar assisted heat pumps.

This is the third consecutive month the organization has met here, said Hank Hinterberger, head of Technical Services at Fermilab and a member of the society's Board of Directors.

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TOM DILLMANN NEEDS YOUR FRIENDSHIP

Tom Dillmann, Accelerator Division engineer who was seriously injured in an automobile accident, has had extensive surgery. While he can have no visitors at this time, his father believes one of the best things for his morale is for his friends to send him cards and notes. The address is St. Francis Hospital, 355 Ridge Avenue, Evanston, IL., 60202.

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ALL THAT WATER FOWL, WOW

By now, many Fermilab employees and users have watched in awe the hundreds of geese and ducks that have darkened the skies and have made Swan Lake their temporary home this time of year.

According to James Kalina, senior groundsman and Fermilab's unofficial wildlife expert (he takes care of all the wildlife problems on site), the reasons for this huge spurt in water fowl population here are relatively straightforward. Swan Lake and its adjoining pond are comfortable open water spaces that seldom freeze during winter. Furthermore, food on the ground at the site is accessible because there is little snow cover.

So, with adequate open water and food, the fowl do not need to migrate farther south, Kalina explained. Some of them have come from Canada and some from the Horicon Wildlife Refuge in Wisconsin, which apparently has gone through a severe cold spell. He also said that the Amoco Research Center, several miles southeast of Fermilab, with its open water sites, is another area the ducks and geese find attractive. Apparently they get some of their exercise by flying back and forth between Amoco and Fermilab, he added.

Kalina explained that during these inclement months, Fermilab feeds the Laboratory's popular swans leftover bread and lettuce from the cafeteria as well as a commercial fowl feed. The swans are thriving on Swan Lake and its adjacent pond. Several cornfields on site have not been plowed under, and the geese and ducks frequently feed there.

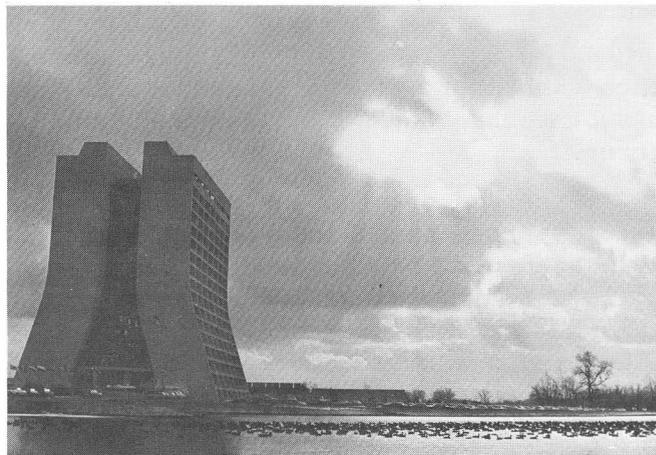
Kalina, who has been with Fermilab for five years, said he "grew up with it," explaining that he's developed his knowledge about wildlife throughout the years and is an avid duck and pheasant hunter.

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SPECIAL THOUGHT OF KINDNESS

James Kalina, senior groundsman at Fermilab, asked fishermen to throw away all fishing lines that become snagged or that they do not want. Please do not leave the lines on the ground, he said, because they can become entangled in the legs of geese, ducks and the swans, possibly cutting off circulation and causing the loss of a leg, or great discomfort.

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Swan Lake Ballet

PEOPLES HEADS INTERNAL TARGET GROUP

John Peoples has agreed to become the next group leader for the Internal Target Group.

He succeeds Peter McIntyre, who now has a joint appointment between Fermilab and Texas A & M. Peoples also will serve as the Deputy Head of the Colliding Beams Department under Don Young. Before joining the Accelerator Division the latter part of last year, Peoples was head of the Research Division, a position he held since early 1975.

One half of the Internal Target Group will continue to work on Energy Saver assignments, said Russ Huson, Head of the Accelerator Division. The other half will work on the antiproton source. At the completion of the Tevatron, the group will return to operating Internal Target areas.

"It is the policy at Fermilab to change group leaders every few years," explained Huson. "Peter has completed his tenure as group leader for the Internal Target Group. He has done an excellent job of guiding the group through a time of transition, that is, from operating experiments at CO to work on the Energy Saver and the antiproton source."

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SOFTBALL ORGANIZATION MEETING CALLED

A softball organization meeting for employees who wish to form teams for the Fermilab League will be held Feb. 26 at 5 p.m. at the Users Center in the Village. For additional information, contact Helen McCulloch, sports activities coordinator, Ext. 2136.

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ARTIFICIAL INTELLIGENCE
NEXT SIGMA XI LECTURE

John Batali of the Artificial Intelligence Laboratory at the Massachusetts Institute of Technology will give the Sigma Xi lecture Feb. 26.

Free and open to the public, his talk on "Prospects for Silicon Intelligence" will begin at 8 p.m. at the Amoco Research Center. The lecture is presented jointly by the Sigma Xi chapters of Fermilab and Amoco. Cy Curtis of Fermilab is president of the joint chapters. Although somewhat technical in nature, the talk will be aimed at a broad spectrum of audience interests.

In describing his presentation, Batali said, "My favorite definition of artificial intelligence (AI) is that it is the study of the mind. The use of computer programs to test and suggest theories makes it possible for AI research to extend the work of psychologists and philosophers. Recent work in AI has demonstrated the importance of an understanding of the structure and representation of knowledge and beliefs.

"Several common features of such knowledge structures are becoming apparent, and the tools of AI (programming languages and computers) are being prepared to best support the requirements of such systems." One of these programming languages--LISP--for example--is well suited for AI research with its power to create and manipulate complex data structures."

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ICE CAPADES TICKETS AVAILABLE

Tickets to see the Ice Capades are available in the Recreation Office, WH1E.

The troupe will perform March 10-15 in Chicago Stadium, 1800 W. Madison. Regular prices are \$5.50, \$7 and \$8, but when purchased for groups of 25-100, the price is reduced \$2 for each ticket. If the group size is 101 and up, the price is reduced \$2.50 per ticket. For additional information, contact Helen McCulloch, Ext. 3126.

This year's show will star the world champions and five-time U.S. national champions Tai Babilonia and Randy Gardner, and will feature scenes as "Light Up the Ice," "Alice at the Wonderland Ball."

TOMORROW IS "LUCKY 13"

"Lucky 13," that's tomorrow, Friday the 13th. And by a happy coincidence, would you believe, it's also the day of NALREC's popular gaming night.

This is a reminder that it begins at 5:15 p.m. in the Village Barn with a social hour and continues at 6:30 p.m. with the opening of the game tables. They include black jack at four tables, beat the dealer, dice, color roulette, chuck wheel, over-under and western poker (for the first time).

Pay \$2 and get \$10,000 in gaming money and a ticket toward one of three door prizes. Cash in winnings at 9:30 p.m. and get a door prize ticket for each \$5,000. Beverages and hot snacks will be available.

For additional information, contact Bob Shovan, Ext. 4347; Pat Yost, Ext. 4365; and Ed LaVallie, Ext. 3138.

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LONG-TIME EMPLOYEE DIES

Filomena J. Broccolo, an employee with Fermilab since November 1968, died Feb. 7.



Broccolo

She was a senior clerk with Purchasing and was responsible for typing purchase orders. Broccolo had been with Purchasing during her 12 years of employment here. A graduate of St. Mary's High School in Chicago, she attended DePaul University.

"We sincerely regret her loss," said Richard Auskalis, head of Purchasing. "She was a very loyal employee who rarely missed a day of work. She was a warm person, quite devoted to her family, and had the kind of personality that endeared her to her fellow employees."

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CHEZ LEON

The Chez Leon restaurant in the Users Center serves lunch each Wednesday at 12:30 p.m. for \$6 and supper on Thursday at 7 p.m. for \$10. The food is personally prepared by chef Tita Jensen. For reservations, call Ext. 3082.

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