

Fermi National Accelerator Laboratory

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## OLD MAGNETS NEVER DIE

A variation of an old cliche might go something like this: "Old magnets never die, they just turn up elsewhere." And that's exactly what's been happening at Fermilab.

With the expertise in the Magnet Facility in Industrial Building 2, few magnets at Fermilab, or even the parts in them, go to waste. Shorted magnets or magnets that have developed other problems are sent to the facility to be repaired, redone or revitalized and then sent back to duty in the Main Ring or in the beam lines. This recycling saves Fermilab tens of thousands of dollars each year.

"The primary function of the facility is to make sure the Main Ring always has enough dipole and quadrupole magnets," said Rich Isiminger, production chief. This means, for example, that shorted magnets are resurrected by an elaborate process that includes debonding, removing epoxy from coils in magnets, disassembly, sandblasting, coil reinsulation, reassembly and testing.

Another major mission is to build all new types of conventional magnets. (The facility deals with conventional magnets, that is, those that are not superconducting.) At the time of this interview (Dec. 10), the group was working on 10 jobs, all of them special purpose magnets.

A third responsibility for the group is to "help whoever needs help," said Isiminger. "We're a service organization." The facility is the sole supplier of all the half cores for the superconducting magnets that are being built for the Energy Saver. Their production goes on around the clock at the facility. He pointed out that the combined group expertise is highly regarded both in and outside the Laboratory, and that leads to what Isiminger calls the "'Magnet Facility philosophy.' It takes a lot of people and their creative ideas to get the job (Continued on Page 2) January 29, 1981



Sherry Hickey, Jack Jagger, Rich Isiminger, Paul Tomell and Dominick Carullo discuss a project.



Jan Clark (Left) and Annie Rogers wind a 3Q120 magnet coil for the Meson Department.



Mary Brooks (Left) and Eris Foster Sr. put 35-inch, 40-turn bump magnet coil into a curing fixture.



(L-R) Jim Rife, Pete Rodriguez and Wally Medernach wind a 60-inch bump magnet coil using a table that rotates.

(Continued from Page 1)

done, and no one person has all of the answers," he said.

The facility engineering design group is led by Don Olson. These experts are frequently consulted by scientists within and outside Fermilab about special magnet designs, explained Isiminger. "They have a significant amount of knowledge about how a conventional magnet should be built. They know what will work and what will not work."

A huge walk-in sandblasting chamber at the facility services the entire site. Not only is it used in the refurbishing of magnets, but it is also the place where a variety of other sandblasting operations is done.

"There is a great deal of pride here in the Magnet Facility," said Isiminger. He attributed this to a policy that "encourages all employees to become totally involved in what they are doing. We want no one to feel shunned. And we solicit their ideas on how to do a difficult job or how to do an ongoing job better."

The Magnet Facility, a part of Technical Services, is managed by Hank Hinterberger. Jack Jagger is the assistant section head. Before returning to his duties, Isiminger told FERMINEWS: "We do our thing. We feel we contribute." And indeed they must, for, as an example, John Elias of the Meson Department, praised their performance highly in resurrecting a magnet for him. It was stored outside for three years but the facility's team refurbished it.



Mark Shoun (left) and Richard Douglas braze an inner coil for a Bl Main Ring magnet.



Paul Tomell (left) and Jack MacNerland take measurements on a B2 magnet that will be used for reverse injection in the Main Ring.



Eris Foster Jr. paints a liquid nitrogen tank.



Jim Wright inspects an Energy Saver magnet half core.

#### PUBLISHER-WRITER NEXT HUMAN VALUES LECTURER

# By Ruth Ganchiff Cultural Editor

John Naisbitt, publisher of The Trend Report and a nationally syndicated columnist, will be the speaker in Fermilab's Science and Human Values Lecture Series Feb. 27.

His talk on "High Tech/High Touch: The Restructuring of America" will begin at 8 p.m. in Wilson Hall auditorium. Although free, admission is by ticket because of limited seating. Tickets may be obtained at the ticket sales desk in the atrium of Wilson Hall.

From Jean Dixon to Walter Cronkite, we are regularly bombarded by commentators who tell us about the trends around us. Much is pure speculation, according to Naisbitt. In his lecture, he plans to discuss this aspect of our society and to tell us where we're headed based on extensive research.

Everyday he and his staff analyze hundreds of newspapers from all over the country. Looking primarily at local news items, they divide them into 11 coding categories, some of which are: education, energy, environment, government and politics, consumer affairs, health and housing.

The result of this content analysis is a treasury of easily retrieved, localized and high specific data that measure the nation's shifting concerns. It shows not only where we are, but where we are going. The technique itself was developed during wartime for intelligence purposes. These trends eventually appear in his publication, the only commercial application of this method. It's one way of measuring the country's pulse, as he sees it.

According to Naisbitt, we are moving from an industrial economy to one based on information exchange.

Political power is shifting from Washington to states and localities, even though our economy is becoming more global.

The work environment is changing. The interplay of technology and our way of life is modifying our personal relationships. Naisbitt has studied these trends and the important changes they imply.



Mike McCormack REMINDER ABOUT McCORMACK'S TALK

"Implementing Responsible Energy Policies--What We Must Do and How You Can Help" will be the subject of a talk by Mike McCormack at Fermilab Feb. 5.

His presentation will begin at 3:30 p.m. in Wilson Hall auditorium. A four-term U.S. congressman from Richland, Washington, McCormack was defeated for re-election in November. He was chairman of the House Subcommittee on Energy Research and Production and served on the Subcommittee on Energy Development and Applications. Both are subcommittees of the Committee on Science and Technology.

McCormack also served on the House Committee on Public Works and Transportation. He was a member of the Subcommittee on Public Buildings and Grounds, Subcommittee on Surface Transportation and Subcommittee on Water Resources. The former congressman holds a master of science degree in chemistry from Washington State University, Pullman.

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## NEXT COLLOQUIUM SPEAKER

Prof. Robert Greenler of the University of Wisconsin at Milwaukee will be the next Physics Colloquium speaker Feb. 4. His talk on "Sunlight, Ice Crystals and Sky Archeology" will begin at 4 p.m. in Wilson Hall auditorium. Mark S. Fischler will be Greenler's host during his stay here. The lecture is presented by the Physics Colloquium Committee.

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#### REMINDER ABOUT SCHOLARSHIP APPLICATIONS

The deadline for submitting Universities Research Association scholarship applications to the Fermilab Training Office is March 2.

The applications are available in that office, WH15SE, Ext. 4367. Students who have been awarded scholarships will be notified around April 1.

Here are some facts about the scholarships prepared by Ruth Christ, assistant personnel manager.

--URA sponsors a minimum of 15 scholarships for children of full-time employees.

--A scholarship can go up to \$2,000 a year and includes tuition and fees.

--A scholarship can be renewed for four years, provided a student remains in good standing at the school.

--They are awarded on the basis of American College Testing (ACT) scores.

--Students who are eligible must be high school seniors who plan to pursue a four-year college curriculum.

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### ANOTHER CONSERVATION HONOR FOR FERMILAB

The President's Council for Energy Efficiency has honored Fermilab with an award for its accomplishments in energy efficiency.

The certificate, signed by C. W. Duncan, energy secretary under the Carter administration, was sent to Leon Lederman, Fermilab director. In an accompanying letter, T. E. Stelson, assistant secretary for Conservation and Solar Energy, said, "Fermilab has demonstrated outstanding leadership in effectively promoting transportation conservation activities.

"The efforts of your Laboratory and other organizations and individuals around the country to promote transportation conservation have brought this nation closer to the twenty percent increase in ridesharing essential to President Carter's energy saving goals and to the overall reduction in our dependence on foreign oil which must continue to be our national objective."

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NALREC officers (L-R) are Jesse Guerra, Jo Baaske, Pat Yost, Ed LaVallie and Nancy Shanahan. Not shown is Ed Justice.

## NEW SLATE OF OFFICERS FOR NALREC

Pat Yost of Laboratory Services has been elected president of NALREC. Her term will run through December 1982.

Also elected to two-year terms are Ed Justice, first vice president, and Nancy Shanahan, secretary. Continuing officers whose terms will expire at the end of this year are Jesse Guerra, second vice president; Ed LaVallie, third vice president; and Jo Baaske, treasurer. Outgoing officers are Chuck Grozis, president; Keith Schuh, first vice president; and Jean Plese, secretary.

NALREC is an organization of Fermilab employees who organize a number of social activities throughout the year. Most of them are held on site, taking advantage of the variety of facilities here.

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#### CHEZ LEON MENUS

## Wednesday, February 4, 12:30 p.m. - \$6.00

Vegetable soup Stuffed cornish hens Zucchini gratin Artichoke w/mushroom salad Chocolate souffle

Thursday, February 5, 7:00 p.m. - \$10.00

Soup galiciana Paella Avocado w/red onions Flan

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