

## EXHIBIT OF TECHNOLOGY OPENS

The 1981 Exhibit of Technology of the Fermilab Industrial Affiliates opened at Fermilab Sept. 7 and will continue for the remainder of the month.

Industrial Affiliates will display exhibits that portray their products and involvement in research in high technology and technological innovation. The exhibit will be held in the atrium of Wilson Hall and in the exhibit area, WH2S. It will be open to the public from 9 a.m. to 5 p.m. daily and on weekends.

The Fermilab Industrial Affiliates was established somewhat more than a year ago to improve communications between industry and academic research as well as to enhance the transfer into industry of the high technology developed by the Laboratory and its university users in the course of their research.

Some of the areas of Fermilab technology that are of particular interest and importance to industry include: cryogenics, superconductivity, neutron cancer therapy, electronics and computer technology, particle detectors, holography in visual detectors, solar energy and vacuum systems.

"The equipment we design to do basic research is always on the cutting edge of technology," said Leon Lederman, director of Fermilab. "It may well have commercial value. We, on the other hand, need to know about every possible new development in industry.

"Since our work is funded by the public, it is appropriate that we serve as a medium of exchange of this information between private industry and government-funded research."

# FermiNews

Fermi National Accelerator Laboratory September 10, 1981

## FERMINEWS ACKNOWLEDGES

The new logo on this page was produced by Carmen Valdes of Technical Services. We wish to acknowledge her work and express appreciation for her effort.

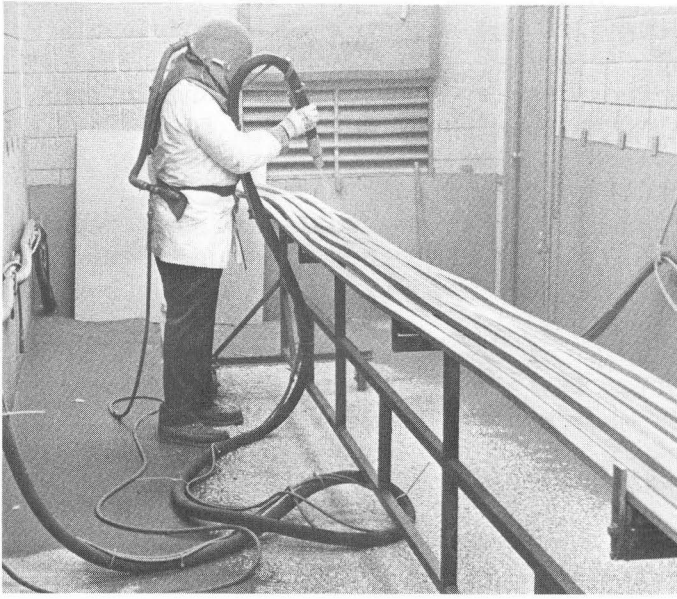


Phil Livdahl (third from right) accepts in behalf of Fermilab an achievement award from the Department of Energy that recognizes the Laboratory for its exceptional performance in contracting with small disadvantaged and small businesses during fiscal year 1979. Presenting the award to Livdahl, acting deputy director of Fermilab, is Andy Mravca (second from left), area

manager, Batavia area office, DOE. Observing the presentation are Bruce Chrisman (far left), head of the Business Services Section; Ed West (far right), contracts manager; and Ron Zeitler, contracts specialist with the DOE office here. This is Fermilab's second award for meeting or exceeding assigned goals.

## PROTECTIVE CLOTHING: A WINNER

In almost every area of the site, some type of protective clothing is required, said Bob Scherr of the Safety Section.



That's Eris Foster inside the protective clothing. He's sandblasting in a special room in Industrial 2 Building.

"The Laboratory has adopted safety policies that require employees to use safety equipment and protective clothing in their work," Scherr said. "The idea, of course, is to protect employees." He added that first line supervisors have the responsibility to make sure their employees are properly equipped and clothed for the type of work they are doing.

"But the bottom line is you--the worker, the individual," Scherr emphasized. "You are the one who can keep yourself safe and accident free by applying some common sense rules." These are:

1. Know the hazards of your job.
2. Know what safety clothing and equipment is required.
3. Know how to properly use that equipment and clothing.
4. Actually use the safety gear while doing those specialized jobs.

For additional information or to have your questions answered, call the safety hotline: ext. 4646.

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## WORTH READING

*"The Heart of Matter," article by Leon Lederman, photos by Erich Hartmann, Geo, The Earth Diary, July 1981, page 20.*

Accompanied by spectacular photographs of Fermilab and other high energy physics research laboratories around the world, the article takes the reader almost layer by layer into the atom to where the elusive quark nests. Lederman, Fermilab's director, approaches the topic from practical, philosophical, theoretical and historical views. Not only does he tell the reader about the atom, but he also enlightens him about the cosmos and the intricate relationships between these two extremes.

Near the end of his article, Lederman writes, "The goal of the citizens of these laboratories (high energy physics laboratories) and of the scientists that they serve around the world is to comprehend the astonishing order that we find under-

lying phenomena that cover so vast a range of space, time and energy. The human obsession with these problems also spans a wide variety of conditions, from the earliest philosophers to present-day theorists, spreading across thinkers imbued with every conceivable theological and political bias."

Lederman ends his article by writing, "It must have been important in the evolution of our species that this kind of shared culture (exchanging scientific knowledge) should be so inbred. The consequences of this long process have been to alter irrevocably the way that all humans live, through the applications of the acquired knowledge. Because of these endeavors, people are drawn far closer together than might otherwise have been possible."

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## BIRTH



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## NEXT FUN RUN

The next fun run will be held by the Fermilab Running Club Sept. 17 at 11:30 a.m. It will begin in the parking lot east of Wilson Hall. Participants will run to the Village on the bicycle path, then return to Wilson Hall. The fun run is open to all runners, regardless of their age or experience. The club organizes many activities throughout the year.

## FERMILAB SCIENTISTS EARN HONOR

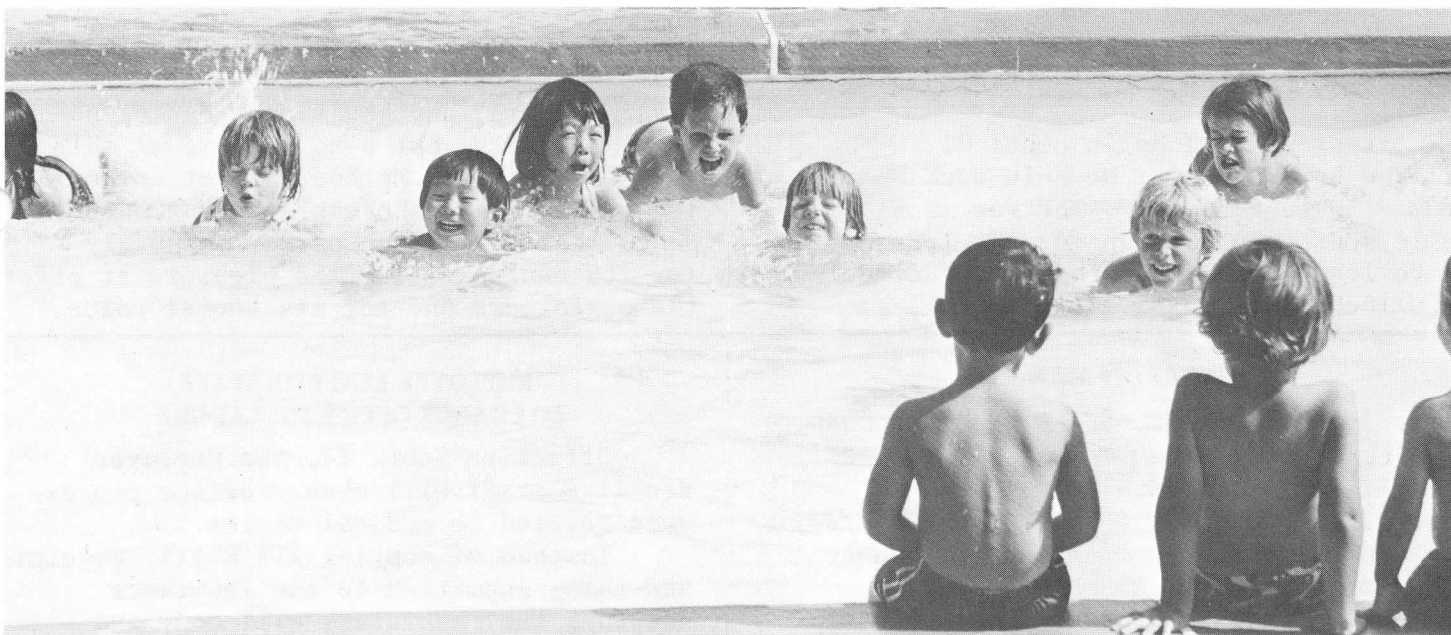
Four Fermilab scientists and engineers have been named winners of the Russel B. Scott Cryogenic Engineering Award. This is the first time members of the Fermilab staff have earned the award.

Eddie Leung, Ronald Fast, Joseph Heim and Howard Hart were recognized at the 1981 Cryogenic Engineering Conference (held in San Diego last month) for their paper *Techniques for Reducing Radiation Heat Transfer between 77 and 4.2K*. It had been presented in the 1979 conference at Madison, Wisc. "The paper describes a method, using a combination of commercial aluminum tape and multilayer insulation, that reduces thermal radiation heat leak into superconducting magnets," explained Leung and Fast. "The performance of this insulation method is a factor of two better than other commonly used techniques.

"We still have a few even better ideas that we would like to try out." The authors

expressed the hope of continuing their research if further funding is available. The award winning paper was published in *Advances of Cryogenic Engineering*, Vol. 25, and as Fermilab Technical Memo No. 905.

Fast, who had been chairman of the CEC and is now editor of *Advances in Cryogenic Engineering*, said, "The award carries a \$500 honorarium. It was named in honor of Russel B. Scott, the first head of the Cryogenic Engineering Laboratory of the National Bureau of Standards. He also was the founder of the Cryogenic Engineering Conference, the first of which was held in 1954. The objectives of the Scott Award are to provide an incentive for high quality papers at the conference and to provide recognition to authors who had presented the best paper in a particular year."



With an abundance of splashing, youngsters in the beginning swimming class race to the other side of the pool in the Village as part of their final class party. The party, also for the intermediate class, was given by Diane Carpenter, Patty Rohrbacher

and Chris Wallers, their instructors and lifeguards at the pool. Patty also is an intern working under Helen McCulloch, recreation coordinator for Fermilab. Many of the youngsters in the beginning class attend the Children's Center.

## MITCHUM STARS IN NEXT MOVIE

"Farewell, My Love" will be the next movie shown by the Fermilab International Film Society.

It will begin in Wilson Hall at 8 p.m. on Sept. 11. Admission is \$2 for adults and 50 cents for youths age 12 and younger. Released in 1975, this color film features Robert Mitchum as the world-weary Philip Marlowe. Marlowe is one of Raymond Chandler's most famous mystery characters.

## DISCOUNT TICKETS FOR CIRCUS AVAILABLE

Special discount tickets for the Ringling Brothers Circus may be obtained at Fermilab from Helen McCulloch, recreation coordinator, ext. 3126.

The circus will be held Oct. 15 at 7:30 p.m. at the Rosemont Horizon, near O'Hare Field. If 25 or more tickets are purchased together, the discount price for each is \$5.50. For additional information, contact Helen.



Edith Gibson (extreme left) leads a dance called Sellenger's round. Clockwise from her, the other dancers are Kevin Ford, Joan Bjorken, Sue Willis, Dick Gustafson and Patty Rohrbacher.



### ENGLISH COUNTRY FOLK DANCE CLASSES TO BE OFFERED

Edith Gibson, one of Fox Valley's more renowned dance teachers, will offer classes in English country folk dancing at Fermilab.

Lessons will begin Sept. 21 in the Village Barn and will be held each Monday from 7:30 to 8:30 p.m. The fee is \$15 for 10 lessons. To sign up for the lessons or to learn more about them, contact Helen McCulloch, WH1E, ext. 3126.

Gibson, who is from Geneva, said the dances she will teach come mostly from the early 1600's in England. For more than 30 years, she has taught dance, not only privately, but also in some of this area's colleges. Methodical yet enthusiastic in her approach, she explained, "Country dance has always been performed purely for its own sake, for the pleasure it offered the performers and for its social value."

### CHEZ LEON MENUS

Sept. 16, 12:30 p.m., \$6--Minestrone Soup, Canelloni, Fresh Tomatoes with Basil, Bisquit Tortoni.

Sept. 17, 7:00 p.m., \$11--Seafood Souffle, Pork Tenderloin with Mustard Sauce, Mor's Cabbage, Mushrooms Stuffed with Peas, Tomatoes-Onions-Zucchini Salad, Black Forest Cake.

Sept. 18, 7:00 p.m., \$11--Shrimp and Zucchini Tempura, Caesar Salad, Beef Tenderloin Diane, Fermi Egg Plant, Duchess Potatoes, Brandy Ice.

For reservations, call ext. 3082. The Chez Leon, located in the Users Center, Village, is an exquisite dining facility.

### LATEST CREF VALUES

The College Retirement Equities Fund (CREF) unit values for 1981 are:

January, \$50.20; February, \$51.21; March, \$52.85; April, \$52.39; May, \$52.56; June, \$51.94; and July, \$51.19.

### EMPLOYEE BENEFITS STAFF TO CHANGE OFFICE PROCEDURE

Effective Sept. 14, the Employee Benefits staff will change office procedure related to medical claims.

Instead of copying all bills, receipts and forms submitted to the insurance company, the Laboratory will copy and file only the claim form. Therefore, employees are encouraged to keep their own copies for reference.

The large increase in the number of claims over the past year has made it impractical to continue making and filing copies of all materials. If you wish to retain copies of recently submitted information, please contact Vivian Butler, ext. 3395.

### PUBLICATION DATA

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