


FERMINES

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LEDERMAN WELCOMES CONFERENCE PARTICIPANTS

Dr. Leon Lederman, Fermilab director, gave his "warm welcome" to participants attending the Department of Energy fifth annual Energy Management Symposium held Oct. 17 - 19 in the Central Laboratory.

Nearly 300 attendees heard Dr. Lederman say Fermilab was "delighted to be able to play host to this distinguished group." He urged the men and women to visit Fermilab and "see some frontiers in technology... see some astonishing things." Lederman mentioned the superconducting magnet program, which reduces power consumption and "gives greatly improved technology."

He ended his remarks by saying, "I hope you have a very successful conference."

Andrew Mravca, area manager of the DOE Batavia Area Office, introduced Lederman.

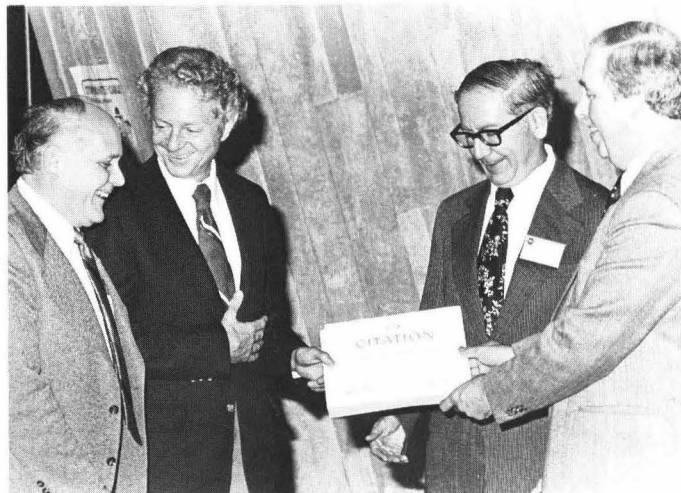
Speaking briefly after Lederman was Robert H. Bauer, manager and regional representative of the Chicago Operations and Regional Office. He said that by "sharing information and working together, we will be able to solve what faces us... that of lessening our dependence on imported foreign oil." In the audience were representatives from government, industry, education and the public.

He also said he believes conferences like this one can be productive and can further emphasize what nearly everyone already is convinced of: the need for energy conservation.

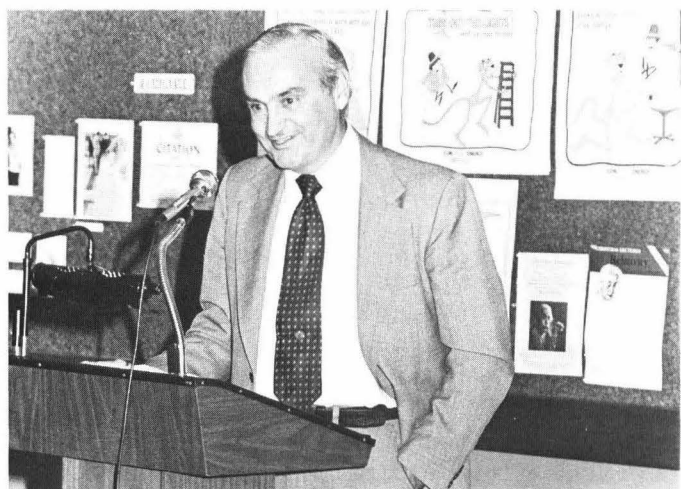
Chairman of the opening session was Dr. Karel Klima of the Engineering Support Division, Chicago Operations and Regional Office.

The conference was timed to coincide with the observance of the first International Energy Conservation Month, October 1979. The United States is one of 20 major industrialized nations belonging to the International Energy Agency. The impetus during the month will be to stimulate greater public awareness of the urgent need for conservation.

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...Robert H. Bauer (right), manager and regional representative of the DOE Chicago Operations and Regional Office, presents Fermilab officials with a citation recognizing the laboratory's outstanding energy conservation program. Accepting the citation on behalf of Fermilab are (L-R) John Colson, head of Support Services; Leon Lederman, Fermilab Director; and Hank Hinterberger, head of Technical Services Section and site conservation officer...



...Worth Bateman, DOE deputy undersecretary, calls for national unity in this country's fight to overcome the mounting energy crisis...

CONSERVATION POWERFUL IN HELPING
SOLVE NATION'S ENERGY PROBLEMS

Let energy conservation be the rallying motto of the next decade, the keynote speaker said during the Department of Energy's fifth annual Energy Management Symposium at Fermilab.

In his message, John P. Millhone set the tone for much of the symposium that was to follow. He is director of the Office of Buildings and Community Systems, Conservation and Solar Energy, DOE.

"Energy efficiency is the cheapest, cleanest and fastest way to go," he said. "Energy efficiency should be the rallying motto of the eighties."

Moving to the main thrust of his talk, Millhone said, "It is a fact--surprising as it may seem--that since 1973, we have extracted more energy from systems efficiency improvements than from any form of supply, including oil imports. Americans are learning that it is cheaper to conserve a barrel of oil than to produce it. Seldom before in our history has the Biblical dictum 'Waste not, want not' been more applicable."

Millhone refuted the persistent rumor that conservation is synonymous with curtailment, with sacrifice. "Yet both government and non-government energy studies recently have shown that this country could operate on 30 to 40 percent less energy than it now does with virtually no penalty for the way we live and without inhibiting production, as industry already has proved," he said.

"If we are an energy intensive society, we also are a capital intensive society, and these days it takes less capital to save energy than to produce it, freeing much needed capital for more socially useful investments."

Energy conservation also is the cheapest known method of reducing oil imports, the speaker said. He added that it lessens the drain on the dollar, deflects inflationary forces, avoids polluting the environment, eases the tension over such issues as nuclear power and strip mining, and is the precondition for a transition to a renewable resource society.

Millhone added that the DOE "has the rare opportunity...to set an example for the country in the application of energy conservation methods as well as lead in the implementation of solar technologies." He

then provided some thought-provoking statistics.

"Today, the federal government is the nation's single largest energy user, accounting for more than two percent of the U.S. energy consumption. This represents the equivalent of about 282 million barrels of oil valued at almost \$4 billion a year.

"This energy is used within the federal sector by almost six million people, in more than 400,000 buildings and in operating more than 650,000 vehicles of all types. The possibility and necessity of a strong federal leadership role in developing an effective energy conservation strategy is immediately apparent."

Peering into the future, Millhone said the DOE is promoting and developing "innovative energy conserving technologies, both within and outside the government." Some of these he listed as: a long-life, energy efficient replacement for the incandescent bulb; a blue flame, oil-fired heating system that can save 26 percent of the fuel now used in conventional boilers; a heat pump water heater; high efficiency refrigerator and freezer; gas-fired heat pump; building energy control systems; more energy-efficient windows; and appliance standards.

Despite the determination, enthusiasm and optimism in the people working for conservation, "the deck, in most cases, remains stacked against it," Millhone said. "There is no real constituency for conservation. It still has a tough time competing against oil, gas, electricity and other energy interests.

"For this reason, the government must continue to take the lead in the nation's energy conservation efforts. Our future depends on it."

Yet, Millhone left his audience with a note of optimism. "However, the good news is - according to a report issued by the President's Council on Environmental Quality earlier this year - energy use in the United States need not increase greatly between now and the end of the century, perhaps by no more than 10 to 15 percent and still maintain a healthy economy.

"If we, starting here within the Federal government, can hold the line at that, our country can look forward to a secure energy future."

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IN MEMORIAM
MILTON G. WHITE JANUARY 12, 1910 -- OCTOBER 16, 1979

It was only 18 months ago that Milton Grandison White had told a writer for the Princeton Weekly Bulletin that "the ideal would be to find a nice project which would be socially rewarding, physically interesting...."

What he really wanted at that time was to make a contribution to the discipline of energy, particularly in the fusion field. He was telling of his future dreams on the eve of his transfer at Princeton University to emeritus status. For 41 years he had been with the university, a pioneer in experimental high energy physics in the truest sense of the word. He had held the Eugene Higgins Chair in Physics since 1949.

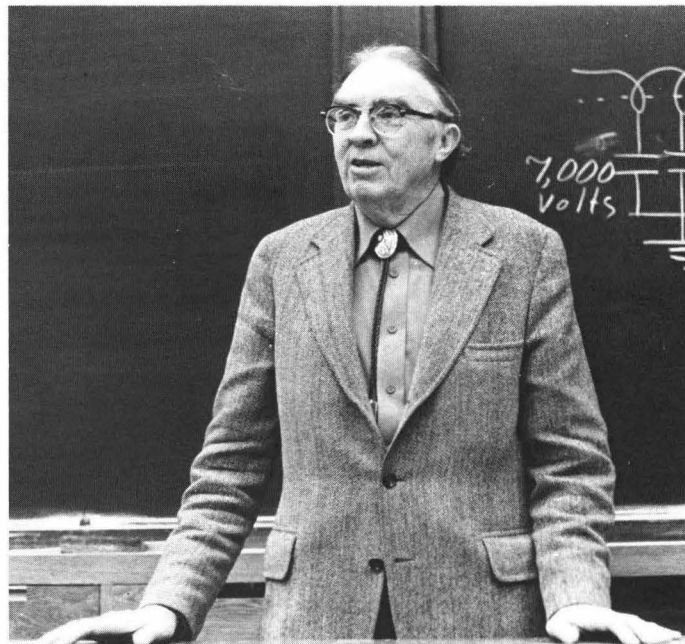
In March of this year, White was elected president of Universities Research Association, Inc., the consortium that runs Fermilab under contract with the Department of Energy. He had been a member of the Board of Trustees for six years and its chairman for three.

He was stricken while playing tennis at Princeton, apparently of a heart attack. A memorial service was held October 20 at the Unitarian Church, Princeton. The family suggests that contributions may be made to the Milton G. White Fund, Physics Department, P. O. Box 708, Jadwin Hall, Princeton University, Princeton, N. J. 08540.

In recalling the vital decisions of his life, White invariably went back to one that unerringly set his career pattern. The recipient of a National Research Council fellowship, he considered Stanford, Caltech, Harvard and Cornell. "But I knew I wanted to build a cyclotron. There were none in those days except the one at Berkeley. I knew that was going to be the wave of the future--very obviously the big thing." Only Princeton agreed to provide funds to build the research instrument. So White went to Old Nassau.

White's experimental work for his Ph.D thesis was directed at the University of California by E. O. Lawrence. In this collaboration, White's research was the first ever performed using a cyclotron. He designed and led the construction of Princeton's first cyclotron.

For 12 years White served as a



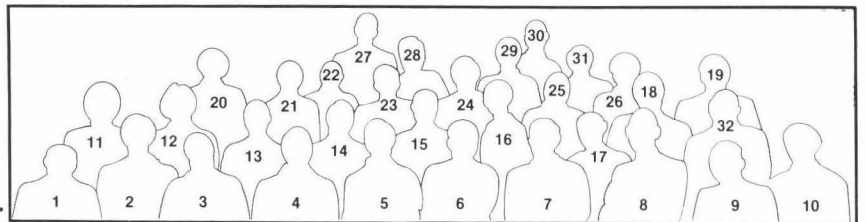
trustee of Associated Universities, Inc., the consortium that operates the Brookhaven National Laboratory. During his long tenure, he also served from time to time as a member of the Executive Committee and as chairman of the Trustees' Committee for BNL.

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...Honored for 10 years of service are: (1) J.Riffell, Site 38 Whse.; (2) G.Guyer, Supply Office; (3) H. Clover, Neutrino; (4) M. Wilks, Accel E/E; (5) T. Larson, Accel/Mech; (6) M.Kampikas, ED/Parts Procure.; (7) M.Kokuska, Mach.Shop; (8) Howard Hart, RS/Cryogenics; (9) R.Lauer, Fab. Procure; (10) A.Weermann, Meson; (11) W.Couch, Purchasing; (12) G.Zielbauer, Proton; (13) R.Meisner, Mach.Shop; (14) C.Kerns, Physics; (15) J.Ziober, Accel/Main Ring; (16) D.Carey, Computing; (17) Delbert Hoffman, Proton; (18) J.Ramus, Mach.Shop; (19) Delmar Miller, Neutrino; (20) W.Habrylewicz, ED/Supr.Mag.Devel.; (21) R.Hanft, ED/Mag.Msmt. & QC; (22) H.Monaco, Mach. Shop; (23) J.Mistal, Accounting; (24) D.Theriot, Neutrino; (25) J.Bobbitt,



Res.Serv/BEST; (26) J.Caffey, RD/Meson; (27) P.Livdahl, representing the Director's Office; (28) F. Moore, BS/Site Services; (29) S. Pruss, Accel/Main Ring; (30) J. Zuk, Accel/EE; (31) E. Bosworth, TS Engr. Serv.; (32) C. Andrlle, Res.Serv/Elect.Sprt. Not pictured, R. Currier, Proton; A.Burwell, Directorate; D.Edwards, ED/Mag.Msmt. & QC; D.Fearnley, RS/Elect.Suprt.; D. Ray, Director's Office; R.Stefanski, Neutrino; A. Neubauer, RS/Elec.Suprt.; J.Walker, Neutrino...

GLASHOW, WEINBERG AND SALAM WIN NOBEL PRIZE IN PHYSICS

Sheldon Glashow, Steven Weinberg and Abdus Salam were together awarded the 1979 Nobel Prize in physics for their theoretical contributions to high energy physics.

More specifically, it was their work in setting up an elaborate mathematical theory that joined the electromagnetic force and the weak force. Known as the Weinberg-Salam theory, it represents a momentous step toward the grand unification theory physicists have sought for years; most of the experiments being conducted at Fermilab relate directly or indirectly to the confirmation of these theories.

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KIDS' HALLOWEEN PARTY

Wondering what to do the afternoon of Oct. 28 with your children?

The ideal place for them is NALREC's popular kids' Halloween party at the Barn in the Village. It runs from 2 to 4 p.m. and is for children ages 4 to 12.

Part of the fun time will include a costume judging contest, games and refreshments.

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ANNIVERSARY

This month (October) is the 100th anniversary of the invention of the first practical electric light bulb. The event marked the beginning of the electric age.

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