Massachusetts Institute of Technology

September 26, 1979 Volume 24 Number 8

# IAP '80 To Feature **Emphasis On Energy**

By MARY ENTERLINE Editor, IAP Guide

The official kick-off for the planning for Independent Activities Period, MIT's January intersession, takes place this week, but it does not take a crystal ball to predict that IAP '80 will combine a celebration of IAP's tenth year with an emphasis on energy-related activities.

With the energy crisis on almost everyone's mind, faculty members in several departments are already thinking about offering seminars and projects examining the technological, political, and economic aspects of the energy problem. Woodie C. Flowers, chairman of the IAP Policy Committee and professor of mechanical engineering, believes that such activities are a very appropriate way to observe IAP's tenth

"Energy has always been a major topic during IAP," said Professor Flowers, "but it seems clear (Continued on page 8)

## Canadian Leader To Address Alumni Officers Conference

Allan J. MacEachen, deputy leader of the Oppostiion and

Opposition Leader Canada's House Commons, will speak at MIT Saturday, Sept. 29.

Mac-Eachen, deputy prime minister and president of

Mr. MacEachen the Privy Council during the Trudeau administration, will deliver the third annual Robert H.

Richards Lecture at the 1979 MIT Alumni Officers Conference. More than 500 alumni leaders and their guests are expected to be on the campus for the two-day conference that begins Friday, Sept. 28.

The Richards Lecture-to be given at 11am in Rm 10-250honors the founder of the 66,000 member MIT Alumni Association. The lecturer is chosen from the ranks of those with close ties to MIT who are active in public service. An underlying theme of the lectureship is the responsibility

(Continued on page 8)

### Parents Workshop to be Offered On Getting Along with Teenagers

A six-session workshop for parents on "How To Get Along Better With Your Teenager" will be offered by the Medical Department starting on Thursday, Octo-

The workshop for fathers and mothers will be held from 11:30 to 1:00pm in the Emma Rogers Room, Building 10-340. Lunches can be brought. Beverages will be

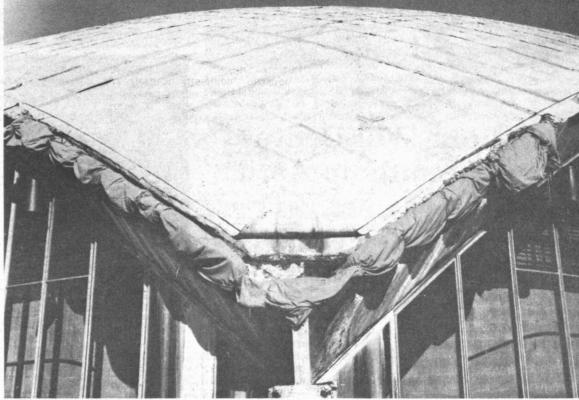
The program will address such issues as arguments between teenagers and parents, problems with relationships, the feeling of drifting apart, loss of communication, and questions about teenagers' independence. Brief lectures, discussions, practice exformation Office at 253-1316.

ercises, audiovisual aids and handouts will be used.

The leaders will be Jennifer Coplon, MSW, family life education specialist and a faculty member of the Boston University School of Social Work and Wheelock College; and Myra Rodriques, MSW, social worker in the MIT Medical Department. Constance Bean, coordinator of health information and education for the MIT Medical Department, will assist the two leaders

The group will be limited in size. The charge for the six sessions is \$18.00 per person and \$28.00 per

For further information and preregistration, call the Health In-



Peeling back the lead sheeting reveals some of the deterioration of the western abutment of Kresge

# Kresge Closed for Roof Repairs

By JOANNE MILLER Staff Writer

Exploratory investigation into the extent of weathering damage to the western buttress of Kresge Auditorium is continuing this week after the auditorium was closed for repairs last Friday, Sept. 21.

Notice of the closing of the building was circulated Friday afternoon to Institute residences and to the rest of the community on Monday. A meeting of users of the auditorium was held Monday afternoon to outline procedures for assigning new locations for displaced activities.

"What has happened is that the weathering damage to the western abutment turned out to be more extensive than we expected," William R. Dickson, director of the MIT Physical Plant, said. "Prudence dictated that we proceed immediately with the renovations and repairs that we had planned to start next spring. The building has to be closed for that work to be

The extent of the deterioration of the concrete was discovered, Mr. Dickson said, last week when Physical Plant personnel and engineers from Ammann and Whitney, structural designers of Kresge,

were doing exploratory studies in preparation for the planned replacement of Kresge's roofing

system next spring (see Tech Talk, January 24, 1979).

(Continued on page 8)

#### Religious Observances Notice

The Institute will be open and regularly scheduled classes will be held on Monday, October 1. Institute employees who wish to attend the observances of Pope John Paul II's visit should make leave arrangements with their supervisors in accordance with the "Leave for Religious Observances" Policy found in the MIT Personnel Policy Manual, Section 4.13. Those employees providing essential services will be asked to work on this day.

Although classes will be held, long-standing Institute policy is to recognize the variety of religious convictions represented within the academic community and to honor individual students' decisions with respect to participation in religious observances without their being placed at academic disadvantage for so doing.

The above policy is consistent with the expected declaration that October 1 will be a legal holiday without Sunday laws applying.

## New Directions In Welding Conference Planned Here

A two-day international conference on New Directions in Welding Research and Development will be held Oct. 29-30 at MIT.

Dr. Koichi Masubuchi, professor of ocean engineering and materials science in the Department of Ocean Engineering, is chairman of the conference, which is cosponsored by the MIT Laboratory for Manufacturing and Productivity and the MIT Center for Advanced Engineering Study.

Professor Masubuchi, an expert on the design and fabrication of welded structures, heads several research projects at MIT including development of underwater welding techniques for deep sea applications, and a study of residual stresses and distortion in structural weldments in highstrength steels. He recently completed an extensive book entitled Analysis of Welded Structures: Residual Stresses, Distortion, and Their Consequences to be published from the Pergamon Press.

In announcing the conference, Professor Masubuchi said that the increasing size of industrial plants and the proliferation of hazardous substances that must be handled have raised new problems for welding technology.

"As priorities change and begin to focus on safety issues, en-

vironmental concerns, and energy conservation, new answers must be found in order to maintain and improve welding's reliability. Unless such action is taken, welding research may sacrifice the confidence of industrial management and the public.'

The conference will bring together technical experts from industrial and welding fields with high level managers and educa-

Scheduled speakers include Dr. J. Herbert Hollomon, director, MIT Center for Policy Alternatives and Japan Steel Industry Professor of Engineering; Robert T. Lund, senior research associate, Center for Policy Alternatives; Professor Masubuchi; Dr. Robert C. Seamans, Jr., dean of the MIT School of Engineering and Henry R. Luce Professor of Environment and Public Policy; Professor Nam P. Suh, director of the MIT Laboratory for Manufacturing and Productivity; Richard Weck, visiting professor at MIT from Imperial College of Sciences and Technology, University of London. and former director general of the Welding Institute, and Toshio Yoshida, president, Japan Welding

Additional information and registration material can be obtained from the Seminar Office, CAES, Rm 9-335.



the SALT II agreement and the U.S.-Soviet strategic balance at a meeting Monday (Sept. 24) with about 30 MIT faculty members and students at the Center for International Studies. From the left are Dr. James R.

Corporation: Professor Jack P. Ruina, director of the CIS's Arms Control and Defense Studies Program, which arranged the visit; Mr. Brown, and Provost Walter A. Rosenblith.



Dr. David Rose, center, the 1979-80 James R. Killian, Jr., Faculty Achievement Award Lecturer, meets with Dr. Killian, left, and President Wiesner on the occasion of the presentation of the \$5,000 stipend accompanying the award.

## David Rose Will Deliver Killian Lectures in April

Dr. David Rose, the 1979-80 James R. Killian Jr., Faculty Achievement Award Lecturer, will give three lectures in April, all dealing with society's need to reintegrate its efforts to solve major world problems.

Professor Rose, who accepted the \$5,000 stipend accompanying the award during a brief meeting September 19 with Dr. Killian and President Wiesner, said his lectures will use energy as a starting point and will underscore his belief that most global problems are not unique "and have existed in various guises throughout history." The lectures will be given April 10, 15 and 24 at 4pm in Rm 10-250.

The recent World Council of Churches meeting on Faith, Science and the Future, held at MIT in July, was an attempt to foster such a reintegration in the approach to society's problems, Professor Rose said. He intends to discuss during the lectures the significance of the WCC meeting, both to MIT and the world.

During his meeting with Dr. Killian and President Wiesner, Professor Rose said he plans to use the stipend to endow a stained glass window at the National Cathedral in Washington, DC., in memory of his late daughter, Victoria Ann. The presentation ceremony also was attended by Professor Sheila E. Widnall, chairman of the faculty, and Professor John S. Waugh, chairman of the faculty

committee on the Killian Award and Lecture.

## Echoes

September 26-October 2

#### 50 Years Ago

Some 240 members of the Class of 1933, 30 upperclassmen, faculty members and officers of Technology left in buses from Walker for the fourth annual freshman orientation weekend camping trip at Camp Massapoag sponsored by

A small, non-rigid dirigible was given to MIT during the summer by the Goodyear-Zeppelin Corporation, over which Paul W. Litchfield, '96, president of the Alumni Association, presides. The airship, recently christened Mayflower, will be used for fog navigation experiments.

#### 40 Years Ago

"Into the mouth of hell rode the 600," was the cheerful greeting President Karl T. Compton ex tended to the 600 freshmen at the All-Tech Smoker. "There are just a few over 600, but we allow a little for depreciation," Dr. Compton

Teas at Radcliffe and Simmons have been arranged for a follow-up to the annual dormitory freshman get-acquainted dance in the main

# Engineers Win Opener, 18-8

By KEN CERINO

Director of Sports Information With ten seconds left in the game, some 300 fans started the countdown. 10-9-8-7-6-5-4-3-2-1. It was official-the final score was MIT 18, Norwalk 8. The Engineers had won their first football game since 1900 and Dwight Smith was a winner in his first game as a head coach.

"It's a good feeling," said a happy Smith. "The kids played well and they deserved to win."

MIT dominated the first half as quarterback Bruce Wrobel led the team on scoring drives of 61, 73, and 97 yards on a rain-soaked field. Halfback Jeff Olson scored two touchdowns on runs of one and six yards while Wrobel threw a 10-yard scoring pass to Barry Jordan to account for MIT's points.

For Wrobel, it was a special day. He was a key figure in organizing the team last year, and now his hard work had finally paid off in a victory. "It was fantastic," he said. "We worked five weeks for it and we went out and did the job. It's an incredible feeling. The coaching staff did a great job in preparing us for the game.

"The weather hurt us in the second half, but the defense came through. The offensive line opened holes you could drive a truck through. You know, we have a lot of confidence in ourselves.

The stingy MIT defense held Norwalk to 130 total yards (minus 17 passing) as Art Aaron led the way with eight tackles, Brad Pines intercepted a pass, and Keith Therrien recovered a fumble.

MIT (1-0) makes its first road start of the season this Saturday with a 7:30pm contest against Roger Williams in Bristol, RI.

In other MIT sports over the weekend, the cross-country team opened its season with a pair of wins over host RPI and WPI. Cullen Karwin was second, Pat Hamilton third, and Bob Collins fifth for the Engineers.

The golf team raised its record to 4-1 with a 420-428 win over Tufts, the soccer team (1-1) lost to Babson, 5-1, and the water polo squad lost to Brown, 21-2.

In sailing, the men finished third in the Wood Trophy at Dartmouth and eighth in the Lane Trophy at Tufts. The women, meanwhile, placed fifth at the Captains's Cup at Tufts and sixth in the President's Trophy at BU.

Most of MIT's teams are away this week, but coach Walt Alessi's soccer team hosts Trinity this Saturday at 2. Coach John Benedick's water polo team hosts the MIT Invitational with Ohio State, Brown, Yale, Fordham, and Monmouth Friday and Saturday in the Alumni Pool.

### French Journalist To Speak Here

Dominque Desanti, historian, journalist for the French newspaper, Le Monde, novelist and biographer, will give a lecture at MIT-in French-on Tuesday, Oct. 2, at 8pm in Rm. 37-252.

Her lecture is the first in a series-The Political Role of the Writer in Twentieth Century Western Society-presented this year by the Foreign Languages and Literatures Section.

Ms. Desanti was a member of the French Resistance and is a former member of the French Communist Party. She is the author of several books.

Her lecture is "L'Intellectuel et

INSTITUTE

**NOTICES** 

Announcements

Friday, Sept. 28, 1979.

x8-1419 Draper.

**Placement** 

Graduate Students \*\* applications for

advanced degrees in February 1980 must be

returned to the registrar's office, E19-335, by

Basic Pistol Marksmanship Course—duPont Pistol Range, 5 consecutive Thursday nights

beginning Sept. 27. Course stresses safety, care, handling and marksmanship skills. Fee,

\$25, includes everything. Info: Andy Platais,

MIT Furniture Exchange\*\*—Open Tuesdays and Thursdays, 10am-2pm at 25 Windsor St. to

buy or sell used furniture. Letters given for tax deductible donations. Info: x3-4293 during

The following companies will be

interviewing during the time period covered by the current Institute Calendar. Those interested may sign up in the Career Planning and Placement Office, Mon-Fri, 9am-3pm, Rm 12-170, x3-4733.

12-170, x3-4733.
Oct. 3 Avco/Systems Divisions; Mostek Corporation; Sertech Laboratories, Inc.; Weyerhaeuser Company; Boston University/PhD Program in Business;

Pennsylvania State/MS Program in

For more detailed information on UROP

opportunities listed, MIT undergraduates

should call or visit the Undergraduate

Research Opportunities Program Office, Room 20B-141, Ext. 3-5049 or 3-4849 unless

New UROP Listings

l'Engagement Politique de 1920 à 1980: Résistance et Col-Résistance et Collaboration." It will be followed by a short reception.

## **Good Neighbors**

Members of four MIT fraternities provided much of the manpower needed for a street dance sponsored by the Neighborhood Association of the Back Bay on Saturday night, September 15. The dance, an annual event, took place on Marlborough Street between Fairfield and Exeter Streets. Fraternities whose members helped out were Phi Kappa Sigma, Sigma Phi Epsilon, Tau Epsilon Phi and Theta Chi, all located in the immediate area on Beacon Street.

otherwise specified in the listing. Undergraduates specified in the listing Undergraduates are also urged to check with the UROP bulletin board in the main corridor

Proposal s for fall UROP support are now being accepted. Please submit them to the UROP coordinator in your faculty research supervisor's department. For details on proposal writing and submission read the "How to Participate" section of the 79/80 Directory. Also, see the Guidelines on the bulletin board in the main corridor near the Admissions Office

WHY DO WE EAT WHAT WE EAT?

normal and pharmacologically-treated rats in an attempt to understand the mechanisms which determine the selection of specific nutrients. This investigation may explain why pathological conditions, such as obesity, occur. Student's duties include special diet preparation, injecting animals, and measuring food consumption. Contact Dr. Joseph Hirsch, x3-6706 or x3-7558.

#### MASS. MENTAL HEALTH CENTER:

Neuropsychopharmacology Lab This lab invites a student to participate in a study of the effects of psychoactive drugs on rewarding electrical stimulation of the brain in rats. Background in biology, psychology, and bioelectrical engineering desirable.

PETER BENT BRIGHAM HOSPITAL

Research centering on the physical chemistry and biophysics of biologically important lipids, particularly understanding the structure and function of lipids of the alimentary tract in both health and disease.

LANGUAGE DEVELOPMENT

Opportunity for a student who is a native speaker of English to take part in a study investigating the nature of grammatical rules through experiments teaching young children novel rules and words. Background in psychology, linguistics, and experimental design is desirable. Contact Prof. Ken Hale at

1) ASPEN is a largbe interactive computer system for simulation and cost-analysis of industrial chemical processes. Several opportunities are available for qualified undergraduates to write or edit user documentation of ASPEN. 2) TROLL is a large interactive computer system for modeling and

#### A REMINDER

Behavioral, neurochemical, and neurophysiological parameters will be examined in

Strong background in the chemical and physical sciences desirable.

TROLL AND ASPEN COMPUTER SYSTEMS

#### Cable TV

September 26-October 2, 1979

1-3pm

POLITICS, POLICY, HUMOR AND SATIRE—Former Mass. Gov. Francis W. Sargent; Dick Flavin, Political Satirist; Ed Flavin, Political Satirist; Ed Diamond, Senior Lecturer, Dept of Political Science; Jack Cole; Freelance Media Critic; Danny Schechter, WBCN News Director and Producer WLVI TV, Ch. 56.

TECHNOLOGY. LABOR AND POLITICS—Arthur Scargill Pres. Yorkshire Miners, National Union of Mine Workers.

of Mine Workers

12-1:30pm

1:30-4pm

CLASSIC LUNCH—"PER-SONA"—Directed by Ingmar Bergman, starring Liv Ullmann & Bibi Anderson.

Cable Viewer's DEMAND—call x7363 to request repeat of a program or movie.

Thursday, September 27

Channel 8: 1-2pm

AFRICA: FIRST IMPRES-SIONS-Tom Wicker, Associate Editor, The New York Times. MOTHER AND CHILD CARE:
DELIVERING THE SERVICES
-Dr. Cecily Williams, Tulane
University Medical School,

Louisiana. TELEVISION 3-3:30pm WITHOUT GUILT-David Thorburn, Humanities Dept. AFTER CLASS-A documentary about MIT Dorm Life by Bennet 3:30-4pm

PHYSICS 8.01 LECTURE—Rec Wednesday, 9/26/79.

Channel 12:

2-4pm

CLASSIC LUNCH—"METROPO-LIS"—Directed by Fritz Lang Masses of robot-like workers march to their jobs in a machine-dominated city of the future. A look at things to come from the viewpoint of 1926. CABLE VIEWER'S DEMAND

Friday, September 28

1-2pm

THERMOECONOMICS—Prof. Myron Tribus, Director, Center for Advanced Engineering Study.

THE FUTURE OF TELEVISION NETWORKS—John O'Connor, TV Critic, New York Times Steven Scheur, Editor, TV Key; Ed Diamond, Dept. of Political Science.

2-4pm

CLASSIC LUNCH-"METRO-POLIS"-See Thursday's CABLE VIEWER'S DEMAND

Sunday, September 30

Channel 8: 8-9pm

PHYSICS 8.01 LECTURE-Rec. Friday 9/28/79.

Monday, October 1 1-2pm

THE ART OF THE INTERVIEW. RHETORIC & JOURNALISM—Ed Diamond, Dept. of Political Science: Chris Lydon, WGBH-Channel 2, anchorperson for the Ten O'clock News.

Ten O'clock News.

NEW WEAPONS AND THE DISPERSAL OF MILITARY POWER—James Digby, Executive
Director, California Seminar on
Arms Control and Foreign Policy.

AFRICAN JOURNAL—an interview with photographer Carol
Reckulth Beckulth.

12-2pm

2-4pm

3-4pm

8-9pm

9-10:30pm

3:30-4pm

CLASSIC LUNCH-"HIROSHIMA MON AMOUR"—Directed by Alan Resnais. A French actress falls in love with a Japanese architect while working on a peace film in

CABLE VIEWER'S DEMAND

Tuesday, October 2 Channel 8: 1-2pm

NEW TECHNOLOGY IN EDITING/GRAPHICS.RHET-ORIC & JOURNALISM-Ed Diamond, Dept. of Political Science; Bernard Krisher, News-week Mag., Foreign Bureau (Japan) (Japan). THE CONTEMPORARY INTER-

THE CONTEMPORARY INTERNATIONAL SCENE: A VIEW
FROM EUROPE—Prof. Jacques
Freymond, Institute des Hautes
Etudes Internationale, Geneva.
AVIATION GROWTH IN THE
EIGHTIES: FOR WANT OF AN AIRPORT-Duane

AIR PORT - Duane Freer. Director, Office of Aviation Policy, Federal Aviation Administration. PHYSICS 8.01LECTURE - Rec Monday,

October 1.
PHYSICS 8.01 HELP SES-SION-With your tutor Lawrence Krauss. Call in your questions:

statistical analysis. Running on MIT's 370/168, the system is continuously expanded and refined in many research projects (e.g., in Departments I, XIV, XV, and the Energy Lab). Contact John Kirsch, 14N-229C, x3-7821,

#### Club Notes

Chess Club\*—Tournaments, speed chess for people of all strengths, every Saturday afternoon, fourth floor, Student Center. Info: Brad, 536-9596

MIT Chinese Martial Arts Club-Wu-Tang\*-Learn physical and mental discipline through the practice of Chinese Martial Arts, Kung-fu. Beginners welcome. New classes. Mondays and Wednesdays, 7-10pm; Saturdays, 11am-2pm, W20-491.

MIT/DL Bridge Club\*\*—ACBL Duplicate Bridge, Tuesdays, 6pm, Rm W20-491.

MIT Duplicate Bridge Club\*-Thursdays, 7pm, Rm 473 Student Center. All bridge players invited. Info: Adam Wildavsky, d15-7687.

Hobby Shop\*\*-Complete facilities for woodworking, metal working, darkroom

Rugby Football Club\*\*-Practice every Tuesday and Thursday, 5:30pm, on the Pitch, Briggs Field. Matches and social every

Beginning Sailing Instruction\*\*-Every Monday and Thursday at 5:15pm in the Shore School of the Sailing Pavilion.

MIT Radio Society\*—Meeting, Thursday, Sept 27, 9pm in Rm 4-270. All interested are MIT Rocket Society\*-Regular meeting, club

business and launch information, first Tuesday of each month, 7pm, International

Student Lounge (W50-210), one floor below MITRS Club Room. MIT Shotokan Karate Club\*\*-Rigorous training for self defense and physical and mental development. Black belt instruction. Practice Tuesdays and Fridays, 6-8pm, Varsity Club Lounge; Thursdays, 6-8pm, Dance Room, Beginners welcome. Info: Jim

MIT Tae Kwon-Do Club\*\*-Korean martial arts, Wednesday, 7-9pm, Saturdays, noon-2pm, T-Club Lounge. Beginners welcome. Info: Chung Sun Kang, d15-9272.

MIT Tiddlywinks Association\*—Club meetings Wednesdays, 8pm, usually West Lounge, Student Center, otherwise Rm W20-473 or 437; Saturdays, 1pm Student Center fourth floor.

MIT UHF Repeater Association\*—Meeting, Wednesday, Sept. 26, 8pm, Rm 66-154. All interested are encouraged to attend.

#### Religious Activities

The Chapel is open for private meditation 7am-11pm daily.

MIT Catholic Community\*—Sunday Masses: 9am, 12 noon, 5pm, MIT Chapel. Weekday Masses: Tuesdays and Thursdays, 5:05pm, Fridays, 1:05pm, MIT Chapel, Charismatic prayer meeting following potluck supper, Mondays, 6:30pm, Ashdown Dining Rm. Info: Marjorie, x3-7222, Karen, 266-9525. Gospel Study and Prayer, Wednesdays, 8pm, 312 Memorial Dr.

Lutheran-Episcopal Ministry\*—Interdenominational service of Holy Communion, Wednesdays, 5:10pm, MIT chapel. Supper follows in basement of 312 Memorial Dr.

Jewish Religious Services\*-Orthodox Fridays Sundown, Kosher Kitchen (50-005) Saturdays, 9am Bush Room (10-105); daily, 8am, Rm 7-102. Conservative/Reform: Fridays, 5pm, MIT Chapel.

MIT Hillel High Holiday Services\*-Reform, Rosh Hashana, 7pm, Sept 21, 9am, Sept 22; Yom Kippur, Kol Nidre, 7pm Sept 30, morning service, 9am Oct 1, MIT Chapel.Conserv ative/Egalitarian, Rosh Hashana, 6pm, Sept 21, 8:30am and 7pm, Sept 22, 8:30am, Sept. 23. Yom Kippur, Kol Nidre, 5:30pm, Sept 30; morning service, 8:30am, Mincha/N'Ilah, 4:30pm, Oct 1, Sala de Puerto Rico. Orthodox, 4:30pm, Oct 1, Sala de Puerto Rico, Orthodox, Rosh Hashana, 6pm, Sept 21, 8:30am and 7pm, Sept 22, 8:30am, Sept 23; Yom Kippur, Kol Nidre, 5:30pm, Sept 30, morning service, 8:30am, Mincha/N'Ilah, 4:30pm, Oct 1,

Student Center Mezzanine Lounge MIT Vedanta Society\*-Meditation and discourses on the Gita by Swami Sarvagatananda of the Ramakrishna Vedanta Society of Boston. Fridays, 5pm, Chapel.

Prayer Time and Bible Class\*-1-2pm. Fridays, Rm 20E-207. Guest speakers, music. refreshments. Led by Miriam R. Eccles, founder and director, Alpha and Omega Missionary Society.

> TECH TALK Volume 24, Number 8 September 26, 1979

Tech Talk is published 39 times a year by the News Office, Massachusetts Institute of Technology. Director: Robert M. Byers; Assistant Directors: Charles H. Ball, Robert C. Di Iorio, Paula Ruth Korn, Joanne Miller, Karen Ray, William T. Struble and Calvin D. Campbell, photojournalist; Reporters: Elizabeth C. Huntington (Institute No-tices) and Marsha G. McMahon, (Institute Calendar, Classified Ads).

Address news and editorial comment to MIT News Office, Room 5-113, MIT, Cambridge, MA 02139. Telephone (617) 253-2701

Mail subscriptions are \$12 per year. Checks should be made payable to MIT and mailed to Business Manager, Room 5-113, MIT, Cambridge, MA 02139.

Page 2, Tech Talk, September 26, 1979



Four of the key participants in the 1979 Underwood-Prescott Award ceremony and symposium gather at the beginning of the day-long event yesterday, Tuesday, Sept. 25, 1979. Receipient of the 17th annual Underwood-Prescott Award was Dr. William J. Darby, second from left, president of the Nutrition Foundation, Inc. With him, from left, are Dr. Virgil O. Wodicka, former director of the Bureau of Foods of the US Food and Drug Administration; Dr. Sanford A. Miller, who is on leave from MIT as present director of the FDA Bureau of Foods; and Dr. Samuel

A. Goldblith, professor of food science at MIT and vice president for resource development. Drs. Darby, Miller, and Wodicka presented an afternoon symposium on "Risks vs. Benefits: The Future of Food Safety." On the preceeding day, Dr. Goldblith-who for four years held the Underwood-Prescott Professorship of Food Science—was special guest at a symposium and dinner honoring his contributions to food science and celebrating his 60th birthday and also his appointment as a vice president.

## Scientists Call for Balanced Food Safety

Three internationally-known food and nutrition scientists, speaking Tuesday, September 25, at the 17th Annual Underwood-Prescott Symposium at MIT Massachusetts Institute of Technology, stressed the vital need for a balanced evaluation of the safety of food and food additives.

Dr. William J. Darby, president of the Nutrition Foundation, Inc.; Dr. Sanford A. Miller, director of the Bureau of Foods of the United States Food and Drug Administration (FDA); and Dr. Virgil O. Wodicka, a former director of the Bureau of Foods, were key participants in the Symposium on "Risks Versus Benefits: Future of Food Safety." During the seminar the trio examined the multi-faceted problems faced by scientists and regulators in determining the safety of substances in foods.

At a luncheon preceding the Symposium, Dr. Walter A. Rosenblith, provost of MIT, presented the Underwood-Prescott Memorial Award to Dr. Darby for his world-wide contribution to nutrition and

food protection.

During the seminar, attended by over 300 food and nutrition scientists, Dr. Darby urged the need to avoid semantic confusion between such terms as needs and wants. "Recently," he said, "I saw these terms simply differentiated: needs are what someone else decides you want; wants are what you decide you need.

'The protection afforded the US public has been outstandingly successful because of the balanced scientific judgment of responsible, ethical assessors and decision makers in regulatory agencies, industry and academia," Dr. Darby continued. "The United States has been virtually free of any demonstrated injury from any agent, especially chemical agents, in the regulated food supply. This fact is in great contrast with the concerns voiced of late in the media and by many advocates relating to presumptive risks...

"Much of the public debate concerning regulatory matters today stems from the failure to distinguish between matters of fact and matters of value," Dr. Darby said. Each individual in the decision making process he continued, "...is prone to feel that those whose concept of need varies from his own either must be protected from their ignorance or else are dishonest, self-serving knaves. I maintain that neither is true, but that an enlightened perception of the nature of benefits, coupled with the recognized right of the individual to make personal decisions concerning the value of the benefit to him can lead to a much clearer understanding of appropriate regulatory function.'

Dr. Miller noted that the increased well being of the American poeple "has led to an ambivalent attitute on their part toward the food industry. On the one hand, society recognized the importance of the industry to its continued survival. On the other hand, it makes demands on the industry that almost certainly will lead to restriction in the capacity of the industry to provide for the needs of

Dr. Wodicka emphasized that the calculation of the level of risk to society in any given food of food ingredient is a "problem because there is no scientific body of law or theories on which to base it. When this lack is compounded by the responsibility problem, the most frequent result is a calculated risk that is overstated and therefore leads to unnecessarily harsh restrictions or bans on environmental exposure.

Memorial Award and the Symposium are sponsored by MIT and the Wm. Underwood Co. of Westwood, the nation's oldest canning company. The award is named in memory of William Lyman Underwood, grandson of William Underwood, who founded the company in 1822, and Dr. Samuel Prescott, the first dean of science at MIT. In the 1890's the pair collaborated at MIT in research into why canned foods sometimes spoiled. Their discoveries led to the establishment of the basic time and temperature tables and food sterilization techniques that are the scientific basis of the present-day canning

Both the Underwood-Prescott

## Artist Jim Pomeroy To Have Exhibit, Performance at MIT

San Francisco artist Jim Pomeroy will make his Boston debut at MIT in a public performance, Thursday, Sept. 27, at 8pm and an exhibition, September 27-November 4 at the Hayden Corridor Gallery.

"Pieces of Performance: An Evening with the Artist" will be held in Room 2-190 (directions available at the gallery on the evening of the performance). The exhibition, which will open the same evening in the gallery, will include selections from Mr. Pomeroy's two stereoscopic photography series, "Considerable Situations" and "Making the World Safe for Geometry.

The artist also will be present for a public gallery reception on Friday, September 28, 5-7pm. Both the performance and the exhibition are sponsored and organized by the MIT Committee on the Visual Arts.

include home made music using hand built instruments. He began making instruments in 1974 with the creation of unorthodox music boxes. Featured in the MIT performance will be "Mozart's Moog," an eighteenth century synthesizer that consists of 44 mechanical music box movements amplified for live performance in stereo, "Apollo Jest," a commentary on science, publicity and the fragmentation of experience, and "Back on the Ladder, the Beat Goes On...," one of his latest works.

In Mr. Pomeroy's photographic series on display in Hayden Corridor Gallery, two identical photographs will be posed beside each other and seen through a stereoscopic viewer. Using early 19th century illusionist technology, he examines the problems of perspective and its cultural impli-

In 1977, Mr. Pomeroy wrote: "It's a sculptor's solution to the problem of the planar explaining the spatial. I play, I look, I find, I tell. The photographs record a space, trace an event, recreate an experience. I love the snap of that third dimension as it pops in and out, back and forth, on and on.'

Both his hand built instruments and his explorations of the techniques and apparatus for creating and viewing 3-D images, reveal an alluring and idiosyncratic involvement with technology. Mr. Pomeroy's work spoofs science and logic while maintaining the seriousness of their implications for our perceptions.

Mr. Pomeroy has performed previously at the Wadsworth Atheneum in Hartford, Conn., the Fort Worth Museum of Art in Fort Worth, Texas and in many California galleries and museums. He was a founding member and the first director of the alternative space for artists in San Francisco, 80 Langton Street, and has been an ists' spaces.

A curator of exhibitions at the San Francisco Art Institute, the University Art Museum at the University of California at Berkeley and Artists Space in New York City, Mr. Pomeroy has also been chairman of the Sculpture Department, San Francisco Art Institute. and consultant to the Visual Arts and Research Divisions of the National Endowment for the Arts, Washington, DC.

## Aga Khan to Visit

His Highness the Aga Khan will return to Cambridge Thursday (Sept. 27) to inaugurate his \$11.5 million Islamic architectural studies program at MIT and Harvard.

He will spend the day conferring with faculty and will attend a dinner with faculty, and administrators of the two universitites.

## Robert Mann Reappointed As Whitaker Professor

known pioneer in the field of rehabilitation engineering, has been reappointed the Whitaker Professor of Biomedical Engineering at

Professor Mann, of the Department of Mechanical Engineering, was the first to hold the chair that was established in 1974 under a grant from the late U.A. Whitaker, a 1923 graduate of MIT in mechanical engineering. Professor Mann has been reappointed to a five-year

Mr. Whitaker and his wife, Mrs. Helen F. Whitaker, a Life Member of the MIT Corporation, have been among the Institute's principal benefactors

Professor Mann's distinguished research career has had two main foci. During his early years he worked on internal power systems for missiles and in related research on solid propellants and turbomachinery. He also made significant early contributions in the formative years of the development of computer-aided design.

For the last two decades, Professor Mann has directed his activi-

toward biomedical engineering in general and to the development and application of rehabilitation technology in particular. He has become internationally for known



work in sensory aids for the blind, including computer-based rapid Braille production, for work in mobility-assistance devices for the bind, and for work on cybernetic limb prostheses and other orthopedic research, especially degenerative arthritis.

He was a co-developer of the socalled Boston Arm, a prosthesis

Dr. Robert W. Mann, the widely that uses faint bioelectrical signals from residual muscle tissue to operate an artificial elbow.

As an educator, Professor Mann has a reputation as an innovator in design education and in the teaching of biomedical engineering. He headed the Systems and Design Division of the mechanical engineering department from 1957 to 1967, during which time he was a major force nationally in the development of project-oriented approaches to engineering design education. Throughout his career, he has worked closely with students and has supervised more graduate and than 200 undergraduate theses during the last 20 years.

Professor Mann received the SB, SM and ScD degrees in 1950, 1951 and 1957, respectively, all from MIT. He was appointed assistant professor of mechanical engineering in 1953, became associate professor in 1958 and professor in 1963. From 1970 to 1972, he held the Kenneth L. Germeshausen Profes-

sorship at MIT.

He has been elected to a number of honorary societies and has received many important awards: he is a member of the National Academy of Engineering, the Institute of Medicine of the National Academy of Sciences, a Fellow of both the American Academy of Arts and Sciences and of the Institute of Electrical and Electronic Engineers, and a member of Sigma Xi, Pi Tau Sigma and Tau Beta Pi. He is a charter member of the Biomedical Engineering Society, a member of the American Association for the Advancement of Science and of the American Society of Mechanical Engineers, which awarded him its inaugural Lissner Award for Biomedical Engineering and the Society's Gold Medal in 1977. This year the Engineering Societies of New England awarded him its 37th New England

## Vincent C. DeBaun Named **Development Office Director**

The appointment of Dr. Vincent C. DeBaun, former director of corporate and foundation programs at Syracuse University, as director of the development office at MIT, has been announced by Nelson C. Lees, executive director of Resource Development.

A senior member of the MIT resource development

management team, DeBaun will support the fund-raising activities of senior officers of the Institute and the COchairmen of MIT's \$225



Dr. DeBaun

million Leadership Campaign. He will have primary responsibility for the support functions, including the coordination of clearance requirements for approaches by staff and faculty to prospects, and will strengthen and conduct a program of solicitation of moderate-sized and smaller private and corporate foundations, with particular emphasis on seeking funding with faculty members for approved needs. Following the conclusion of the Campaign, Dr. DeBaun will play a strong role in the overall resource development organization at MIT.

Dr. DeBaun brings more than 20 years experience in development to his new position. At Syracuse he was responsible for developing projects which produced major grants for arts and sciences, engineering and nursing. He also built a widespread program of corporate support for financial aid for minority students in engineering.

Earlier Dr. DeBaun had served as president of Lasell Junior College and of Cazenovia College in New York, where he guided the institution through four years of financial crisis by inaugurating extensive curricular changes and revising budgetary methods and long range planning.

He has also served as chairman of the division of humanities at Talladega College, a small black liberal arts college in Alabama. From 1968-71 he was a member of the Alabama Council for Higher

In addition, Dr. DeBaun has been a member of many committees involved in various aspects of higher education. He has held grants from the Carnegie Foundation and from the Amisted Research Center.

Dr. DeBaun received the AB degree in English literature from Union College and the AM and PhD, also in English literature from Rutgers University.

## **Annuity Seminars**

Insurance company representatives from Prudential and TIAA/CREF will again be conducting tax deferred annuity seminars. The seminars will be held on campus Wednesday, Oct. 3, and at Lincoln Lab Thursday, Oct. 4. The schedule is as follows:

Campus-Vannevar Bush Room (10-105)-Prudential:9am, 12noon, 3pm. TIAA/CREF: 10:30am, 1:30pm,4pm.

Lincoln Conference Rm(A-166)—Prudential: 10:30am, 1:30pm, 4pmTIAA/CREF: 9am, 12 noon, 3pm

Following each brief presentation, there will be an opportunity to obtain private individual counselling, including preparation of the tax calculation needed for 1980 income tax planning.

Tech Talk, September 26, 1979, Page 3



### September 26 through September 30

#### **Library Tours**

Barker Engineering Library\* — Wed, Sept 26, 3:15pm; Thurs, Sept 27, 5:15pm. For further information; contact Carole Schildhauer, x3-6051.

**Humanities Library 14S-200\*** — Self-directed tour available in Humanities Library Reading Room. Tours also available on request; inquire at the Humanities Reference Desk or contact Kathy Powers, x3-5673.

Introduction to the Libraries and the Institute Library Catalogue\* — Meet at the kiosk in the Humanities Library Reading Room, 14S-200. Thurs, Sept 27, 3:15pm. Tours also available on request, inquire at the Humanities Reference Desk or contact Kathy Powers, x3-5673.

Microreproduction Laboratory 14-0051\* — For tour information, contact Peter Scott, x3-5677.

Rotch Visual Collections 7-304\* — Tours included as part of the Rotch Library tours, tours also available on request. For further information, contact Merrill Smith, x3-7098.

Sea Grant Information Center E38-320\* — Tours available afternoons upon request. For more information contact Barbara Steen-Elton x3-5944.

Student Center Library W20-500\* — Tours available on request. For further information, contact Sylvia McDowell, x3-7050.

Von Hippel Reading Room 13-2137\* — Tours available on request. For further information, contact Betty-Ann Curtis, x3-6840.

#### Seminars & Lectures

#### Wednesday, Sept 26

On the Propagation of Free Topographic Rossby Waves near Continental Margins\* — Hsien Wang Ou, W.H.O.I.Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-915. Coffee and tea provided.

Aviation Work on a Congressional Staff, and at FAA\* — Joseph P. Tymczszyn, PhD in Aeronautics and Astronautics, '75. Aeronautics and Astronautics General Seminar, 3pm, Rm 37-212.

Overview of Oak Ridge Energy Programs\* — William Folkerson, Oak Ridge National Laboratory. Nuclear Engineering Department Energy Assessment Group Seminar, 3pm, Rm24-115.

Physical Aging of Glassy Polymers\* — R.R. Lagasse, Sandia Laboratories, Alburquerque, NM. Interdepartmental Polymer Seminar, 4-5pm, Rm66-110.

How to Apply to Graduate Schools\* — Prof Robert I. Hulsizer, Undergraduate Physics Colloquium, 4:15pm, Rm4-339. Social hour follows.

South Africa: Thirty Years of National Party Rule\* — Helen Suzman, leading member of opposition Progressive Federal Party in South Africa and visiting Webster-Mauze Lecturer, 8:15pm, Rm 9-150.

#### Thursday, Sept 27

New Thoughts in the Problem of Bending and Twisting of Beams\* — Prof Eric Reissner, applied mechanics & engineering sciences, University of California, San Diego. Aeronautics and Astronautics Seminar, 2pm, Rm 33-206.

Attention: Students Interested in Law\* — Informal meeting of prelaw advisors & students. Preprofessional Advising and Education Office Seminar, 3:30-5:30pm, West Lounge, Student Center. Refreshments served.

Automatic Computer Interpretation of Vapor-Phase Infra-Red Spectra For Gas Chromatography\* — Prof Michael Delaney, chemistry; Tufts University. Analytical Chemistry Seminar, 4pm, Rm 8-205.

Enhancement of Gas Flow in Collapsible Tubes by Reversed Pressure Pulses\* — Jose G. Venegas, Fluid Mechanics Seminar Series, 4 pm, Rm 5-233. Refreshments served 3:50pm.

Network Optimization: Two New Application Areas\* — Christoph E. Mandl, professor and chairman, mathematical methods and computer science, Institute for Advanced Studies, Vienna, Austria, visiting scientist, Operations Research Center. Operations Research Center Seminar, 4pm, Rm 24-121. Coffee and cookies will be served after the seminar.

Solitons in Particle Physics\* — Dr. Claudio Rebbi, Brookhaven National Laboratory. Physics Colloquium, 4pm, Rm 26-100. Tea served at 3:30pm, Rm 26-110.

Stages in the Production of Nerve Messages in the Ear\* — Prof T½ F. Weiss, electrical engineering and computer science, and Eaton Peabody Laboratory of Aud. Physiol., Mass Eye & Ear Infirmary. Committee on Biomedical Engineering Seminar, 4-5:30pm, Rm 37-212. Refreshments. served.

Trends in Telecommunications R&D\* — Jack Ruina; Dean Gillette, Bell Labs; Lynn W. Ellis, ITT; Hiroshi Inose, University of Tokyo; Gerald Dineen, Department of Defense. Research Program on Communications Policy Seminar, 4-6pm, Rm 37-252.

Automation and Workers: Challenge for Labor\* — Harley Shaiken, UAW journeyman, machinist, Detroit, author of forthcoming study of automation and labor, consultant to UAW national negotiating team on the issue of new technology. Technology and Work: The Perspective of Labor, 4:30pm, Rm 9-150.

Amino Acids as Neurotransmitters in the Basal Ganglia and Visual System\* — Dr. Frode Fonnum, Norwegian Defense Research Establishment, Division of Toxicology, Kjeller, Norway. Psychology Colloquium, 5pm, Rm E10-013. Coffee at 4:45pm.

A Protestant Looks at the Pope\* — Rev Jessica Crist, Lutheran Chaplain and Virginia Finn, Associate Catholic Chaplain lead a discussion of morder Protestant and Catholic views toward the papacy. Cosponsored by the Lutheran and Catholic Chaplaincies, 8:30pm, Mezzanine Lounge, Student Center.

#### Friday Sept28

University of Texas Law School at Austin\* — Rudolph Green, recruiting coordinator for Minority Opportunities Committee. Preprofessional Advising and Education Office Seminar, noon-2pm, Rm 8-150.

South Africa: Is Change Possible?\* — Helen Suzman, visiting Webster-Mauze Lecturer, in the first session of the African Luncheon Seminar Series, 12:45-2pm, Rm E38-762.

Chemical Engineering Seminars\* — Chau-Chyun Chen, A New Model for Activity Coefficient of Electrolyte Systems, 2pm; Daniel Dershowitz, Factors Affecting Degradation of Polymers in Dilute Solution Undergoing Extensional Flow, 3pm, Rm 66-110.

Geothermal Energy Conversion System\* — Hugh Matthews, Sperry Research Center. Mechanical Engineering Seminar, 3pm, Rm 3-133.

The Confessional Mode in Neruda's Poetry\*\* — Prof Jaime Giordano, SUNY at Stony Brook will speak, followed by a film biography "I Am Neruda", 7pm, Rm 14E-304. Film and talk in English, Sponsored by the Foreign Languages & Literatures, Department of Humanities.

#### Monday, Oct 1

Locally Projective-Planar Lattices Satisfying the Bundal Theorum\* — Dr. Jeffry Kahn, mathematics. Applied Mathematics Colloquium, 4pm, Rm 2-338. Refreshments served at 3:30pm, Rm 2-349.

The New Institute for Scientific and Technological Cooperation: Its Evolution and Mission\* — Dr. Eugene B. Skolnikoff, director, Center for International Studies, 4pm, Rm 16-310.

Research in Environmental Fluid Mechanics, Coastal and Oceanographic Engineering\* — Profs. Adams, Harleman, Mei and Stolzenbach, Parsons Laboratory. Water Resources and Environmental Engineering Seminar, 4-5pm, Rm 48-316. Coffee at 3:45pm, Rm 48-410.

#### Tuesday, Oct 2

Color Center Lasers, Picosecond Pulses and Fiber Optics\* — Linn F. Mollenauer, Bell Laboratories, Holmdel, NJ. Spectroscopy Laboratory and Research Laboratory of Electronics Seminar joint with Physical Chemistry. 11-noon, Rm 37-252. Coffee served at 10:30am.

A Problem of Fatigue in Rubber Bumpers\* — Lewis Erwin, assistant professor, mechanical engineering. Laboratory for Manufacturing & Productivity Seminar, 3-4pm, Rm 37-232.

Advanced Defense Power Systems\* — Arden Bement, director Materials Sciences Office, Defense Advanced Research Projects Agency. Colloquium Series on Materials and Energy, 4pm, Rm 9-150. Coffee served at 3:30pm.

Optical Bistability\* — Dr. Samuel McCall, Bell Telephone Labs. Electrical Engineering and Computer Science Optics Seminar, 4pm, Rm 36-428.

Probing Reaction Dynamics by Laser Induced Fluorescence\* — Dr. Henry U. Lee, Institut fur Physikalische Chemie, Universitat Stuttgart. Physical Chemistry, 4pm, Rm 4-270. Coffee at 3:45pm, Rm 6-321.

Stable Distributions and Infinite Variance Models In Statistics\* — Prof William H. DuMouchel, applied mathematics. Statistics Seminar, 4pm, Rm 2-338. Refreshment at 3:30pm, Rm 2-349.

Submicron MOS Technology\* — Dennis Buss, Texas Instruments. I.C. Seminar, 4pm, Rm 16-310.

Aerodynamic Uses of Conformal Mapping in Industry\* — Dr. D. Ives, Pratt & Whitney Aircraft. Aeronautics and Astronautics Seminar, 4:15pm, Rm 31-161.

Origin of the X-Ray Background\* — Prof George Field, Center for Astrophysics. Astrophysics Colloquium, 4:15pm, Rm 37-252. Coffee 3:45pm.

The Episodic Nature of Evolution\* — — Dr. Stephen J. Gould, Museum of Comparative Zoology, Harvard University. Biology Colloquium, 4:30pm, Rm 6-120. Coffee served at 4pm, Vestibule, 5th Floor, Bldg 56.

L'Intellectuel (le) et L'engagement Politique de 1920 a 1980\*—Resistance et Collaboration\*—Dominique Desanti to speak (in French). Sponsored by the Foreign Languages and Literatures Section, first in the series: The Political Role of the Writer in Twentieth-Century Western Society, 8pm, Rm 37-252.

#### Wednesday, Oct 3

Finite Amplitude Baroclinic Waves\* — Joseph Pedlosky, W.H.O.I. Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-915. Coffee and teaprovided.

The Numerical Computation of Nonlinear Supersonic Potential Flows\*

— Dr. Bernard Grossman, head, Theoretical Aerodynamics Laboratory Grumman Aerospace Corporation. Aeronautics and Astronautics General Seminar, 3pm, Rm, 36-153

Minimum Time Attitude Control of a Spacecraft Spinning at a Constant Rate About Its Axis of Symmetry\* — Charles Tse, doctoral thesis presentation, Aeronautics and Astronautics, 3:30pm, Rm 33-206.

On the Numerical Solution of Nonlinear Equations and Nonlinear Least Squares\* — Dr. Jorge More, applied mathematical division, Argonne National Laboratory. Laboratory for Information and Decision Systems Colloquium, 4pm, Rm39-500.

#### Thursday, Oct 4

Analytical Techniques in Forensic Chemistry\* — Dr. Michael J. Camp, Northeastern University. Analytical Chemistry Seminar, 4pm, Rm 8-205.

Approximations for Maximizing Submodular Functions: Theory and Applications\* — Prof George L. Namhauser, School of Operations Research and Industrial Engineering, Cornell University. Operations Research Center Seminar, 4pm, Rm 24-121. Coffee and cookies served after the seminar.

Communications Services for the US Government\* — Frank Carr, General Services Administration; Edward Zimmerman, NTIA, and Joseph Licklider. Research Program on Communications Policy Seminar, 4-6pm, Rm 37-252.

Diagnostic and Prognostic Use of the Infant Cry\* — H.L. Golub, PhD in Electrical Engineering, medical student in HST program. Committee on Biomedical Engineering Seminar, 4-5:30pm, Rm 37-212. Refreshments served.

Mixing in Laminar Flow\* — Prof Lewis Erwin, Fluid Mechanics Seminar Series, 4pm, Rm 5-233. Refreshments served at 3:50pm.

The Perverse Behavior of Electrons in Amorphous Solids: There is More to Glasses than Meets the Eye\* — Prof Marc Kastner, Physics Colloquium, 4pm, Rm 26-100. Tea served at 3:30pm, Rm 26-110.

User Charges for Aircraft Operations: Implications and Problems\* — Norman P. Seagrave, counselor, International and Regulatory Services, Pan American World Airways, Inc. Flight Transportation Laboratory Seminar Series, 4-5pm, Rm 36-225.

#### Friday, Oct 5

Chemical Engineering Seminars\* — Daniel Dershowitz, Factors Affecting Degradation of Polymers in Dilute Solution Undergoing Extensional Flow, 2pm, Prof W. John Thomas, head, School of Chemical Engineering, University of Bath, U.K., The Effect of Surface Diffusion on the Catalytic Selectivity of Concurrent and Consecutive Reactions, 3pm, Rm 66-110.

## **Community Meetings**

Legal Aspects of Equal Opportunity and Affirmative Action\* — Jerry Weinstin, Attorney for Herrick and Smith in Boston, and Jim Culliton, assistant to the Vice President for Administration and Personnel at MIT. Women Administrators' Organization first Fall meeting Wed, Sept 26, 11am, Emma Rogers Room, 10-340.

Wives' Group\*\* — Wed, Sept 26, "Shopping the Boston Area", 3-5pm, West Lounge, Student Center. Babysitting provided, Rm 473, Student Center.

Society of Women Engineers Meeting \*\* — Sally Harvey Cortese, President of Boston Society of Women Engineers will speak. Wed, Sept 26, 5 pm, Rm 3-133. Refreshments will be served.

First General Meeting\*\* — Guest speakers from MIT libraries, personnel, athletics, Dean for Student Affairs Office, Medical Department, etc. Sponsored by the Technology Wives Organization. Wed, Sept 26, 8pm, Mezzanine Lounge, Student Center. Refreshments at 7:30pm. Information call 876-5777, Donna Behmer.

Feminism in England\*\* — Miranda Chayton, Westfield College, University of London, visiting the US as part of a Feminist History Group Meeting in Worcester. Mon, Oct 1, noon-1pm, Rm 10-105.

Bioelectrical Engineering Open House\*\* — Sponsored by the Area VII, (a.k.a. Bio-electrical Engineering) of the Electrical Engineering and Computer Science Department. Tour some of the labs, excellent opportunity for new graduates to meet faculty members and to discover what Area VII has to offer. Wed, Oct 3, 3-6pm, Rm 36-428. Refreshments will be served.

10th Annual Plant Sale\*\* — Sponsored by the Women's League. Thurs, Oct 4, starts at 9am, Student Center.

24 Hour Access to Darkroom Available at Student Art Association \*\* — Chemicals provided also room in special projects in photography for people who know basics. Call 253-7019 between 1-5pm, Student Center, Rm W20-429.

#### Social Events

Undergraduate Economics Association Faculty Lunch\*\* — Prof Kindleberger will speak, all freshmen invited. Wed, Sept 26, noon, Rm E52-391.

Undergraduate Economics Association Faculty Lunch\*\* — Prof Farber will speak, freshmen welcome. Wed, Oct 3, noon, Rm E52-391.

Wine Tasting Gathering\*\* — Prof Brian McCay, mathematics, will speak. Sponsored by the Technology Wives Organization. Wine tasting lecture and experience. Thurs, Oct 4, 7:30pm, Eastgate Lounge. Fee: \$3 members & spouses; \$5 non-members/two guests. Enrollment limited to 30 people. Deadline for pre-registration is Sept 28. Call Donna Behmer 876-5777.

Faculty Club\*\*\* — Open Monday through Friday: Luncheon served noon-2pm; Dinner served 5:30-8pm. Happy Hour: Monday through Friday, 4:30-6:30pm, wide variety of drinks \$1.05.9 A to Insmitted and Sulface Sulf

ekburn Maclauri

#### Movies

The Boys from Brazil\*\* — LSC Movie. Fri, Sept 28, 7 & 10pm, Kresge. Admission: 75¢w/MIT or Wellesley ID.

It Happened One Night\*\* — LSC Classic Film Series. Fri, Sept 28, 7:30pm, Rm 10-250. Admission: 75¢ w/MIT or Wellesley ID.

An Unmarried Woman\*\* — LSC Movie. Sat, Sept 29, 7 & 10pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

A Shot in the Dark\*\* — LSC Movie. Sun, Sept 30, 6:30 & 9pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

The Great Gatsby\*\* — Department of Humanities Film Series. Mon, Oct 1, 3pm, Rm 66-144. Free.

Love of Jeanne\*\* — Department of Humanities Film Series. Wed, Oct 3, 7pm, Rm 66-110. Free.

Cousin, Cousine\*\* — LSC Movie. Fri, Oct 5, 7 & 9:30pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

The Blue Angel\*\* — LSC Classic Film Series. Fri, Oct 5, 7:30pm, Rm 10-250. Admission: 75¢ w/MIT or Wellesley ID.

Interiors\*\* — LSC Movie. Sat, Oct 6, 7 & 9:30pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

Three Penny Opera\*\* — Department of Humanities Film Series. German w/English subtitles. Sat, Oct 6, 7pm, Rm 66-110. Free.

Lolita\*\* — LSC Movie. Sun, Oct 7, 6 & 9:30pm, Rm 26-100. Admission: 75c w/MIT or Wellesley ID.

Lotus Lantent\* — Sponsored by the FLCC. Sun, Oct 7, 2pm, Rm 9-150. Donation: \$1; students 75¢.

#### Music

Guest Artist Concert\* — From the Music Section. LaSalle String Quartet, program will include Mozart's Quartet in A Major, K.464, Samuel's Quartet No. 1 (Boston premiere) and Mendelssohn's Quartet in A minor, Op. 13. Sun, Oct 7, 8pm, Kresge Auditorium. Free.

#### **Exhibits**

Corners\* — From the Committee on the Visual Arts. On view daily 10am-4pm; Wed evenings, 6-9pm, Sept 29 through Nov 4, Hayden Gallery, 160 Memorial Drive, Camb, Mass. Public reception: Sept 28, 5-7pm.

Jim Pomeroy\* — From the Committee on the Visual Arts. On view daily 10am-4pm; Wed evening, 6-9pm, Sept 29-Nov 4, Hayden Corridor Gallery. 160 Memorial Drive, Camb, Mass. On Thurs, Sept 27, 8pm, Rm 2-190, Jim Pomeroy will be present for "Pieces of Performance: An Evening with the Artist."

Exhibition and Sale of Original Graphic Art\*\* - Leading American and European artists, both contemporary and old masters, Beardsley, Daumier, Homer, Calder, Chagall, Gia Cometti, Maillol, Miro, etc. Speaker representative from Marson Graphics Inc. Sponsored by the Student Art Association. Oct 4 & 5, 10am-6:30pm, West Lounge. Information call 253-7019.

Photographs\* - Exhibition of works by Linda Cuccurullo, Rotch Library cataloguer. On view through Oct 5, Mon -Fri, 8:30am-6pm, Rotch Library Visual Collections, Rm 7-304.

- Sponsored by the Compton Gallery Committee. A '27 graduate of MIT, he is a noted photographer whose work for Time-LIFE Magazine; his pioneer use of stobe lighting; and his documentation of MIT will be exhibited. On view daily, Mon -Fri, 10am-5pm; weekends, 1-5pm, through Jan 31, 1980, Margaret Hutchinson Compton Gallery, Alumni Center, Rm 10-105. For information call 253-5014.

Fantastic Photography\* - Sponsored by the Creative Photography Gallery. American Premiere at MIT, includes the work of some 39 European and American photographers. Organized by the Canon Photo Gallery, Amsterdam, The Netherlands. On view Mon-Fri, 9am-10pm; Sat 10am-6pm; Sun noon-8pm, through Oct-18, for information call x3-4424.

The Outdoor Collection\* - There are many fine pieces of contemporary sculpture displayed on the MIT campus, including works by Alexander Calder, Louise Nevelson, Pablo Picasso, Henry Moore, Tony Smith and Jacques Lipschitz. For information and guides to the campus, call the Information Center, x3-4795.

MIT Historical Collections\* - Vannevar Bush, '16, Bldg 4 corridor. The New Technology Exhibit, 2nd floor balcony of Lobby 7. Energy Exhibit, Bldg E40, 1st floor. Solar Energy, Bldg8, main corridor. Harvard-MIT Rehabilitation Engineering Center, main corridor, Bldg 4. Rogers Building Exhibit, Bldg 4. Meteorology, main corridor, Bldg 8. Norbert Wiener, and Karl Taylor Compton, Bldg 4. Laboratory for Physical New Records\* - Music Library, RLm 14E-109. Exhibit of record jackets of

Strobe Alley\* - High speed photographs by Harold E. Edgerton, Institute Professor and Professor of Electrical Measurement, Emeritus.Bldg 4, 4th

MIT Science Fiction Society\* — Come and visit the world's largest lending science fiction library. Hours posted on door, Rm W20-421.

Hart Nautical Museum\* - Permanent exhibit of rigged merchant and naval ship models, half models of yachts and engine models. Open daily in Bldg 5, 1st floor.

#### Athletics

Home Schedule\* — Sept 27: JV Field Hockey vs Anna Maria College, 4pm. Sept 28: Baseball, Mass Bay Community, 3:30pm; Women's Tennis, Bow-Sept 28-29: Water Polo, MIT Invitational, all day. Sept 29:Baseball, Haverford, Pa., noon. Women's Sailing, Radcliffe Invitational, 9:30am; Soccer, Trinity, 2pm; JV Soccer, Trinity, 2pm; Women's Tennis, Bates, 2pm; Women's Volleyball, Northeastern, 1pm. JV Women's Volleyball, Northeastern, 1pm. Sept 29-30:Women's Sailing, Man Labs Trophy, 9:30am. Sept 30: Men's Sailing, Boston University Invitational, 9:30am; Frosh Sailing, Harvard Invitational, 9:30am. Oct 3: M Tennis, Boston University, 3pm; W Tennis, Tufts, 3:30pm; Waterpolo, Boston College, 5pm. Oct 4: Baseball, Brandeis, 3:30pm; Field Hockey, Boston College, 5pm. Oct 4: Baseball, Branders, 3:30pm, Fred Richts, Endicott Jr. College, 4:30; Volleyball, Boston College, 7pm. Oct 5: Cross Country, V & JV, Lowell, 3:30pm, (Franklin Park); JV Soccer, Harvard, 3pm. Oct 6: Baseball, Babson, noon; M Sailing, 3-Crew team race, 9:30am; Volleyball, Eastern Nazarene & Smith, 1pm. Oct 6 & 7: W Tennis, GBCAA. Oct 7: Frosh Sailing, MIT Invitational, 9:30am.

Hatha Yoga\*\* — Classes begin Mon, Sept 24. Intermediate 5:45-7:05pm, Beginners 7:10-8:30pm, Rm 10-340. For information call I. Turchinetz, 862-

Waltz Workshop\* - Sponsored by the Ballroom Dance Club. Beginning workshop in waltz. Sun, Sept 30, 2-4pm, Burton Dining Hall. Admission: 50c. Information call Alyssa x5-8516 Dorm.

Folk Dance Club\* - Sundays, International, all levels, 7:30-11pm, Sala de Puerto Rico; Tuesdays, Balkan, advanced, 7:30-11pm, Rm 407 Student Center; Wednesdays, Israeli, all levels, 7-11pm, Sala de Puerto Rico. Admission: 25c donation, optional. For additional information call x5-9185 Dorm.

Dance Workshop\* - Regular meetings Technique classes, Mon & Wed, 3-5pm; Improvisation, Thrus, 1-3pm, T-Club Lounge, Student Center. For information call 253-2908.

Hathe Yoga - Oki Zen Yoga\* - Taught by Cynthia Friedman, one and a half hour classes ongoing all year, beginning through week of Sept 26, Sat 10:30am & Wed, 6pm, dress comfortably. For more information call Mon-Thurs, 1-5pm, x3-4981.

Freshmen are encouraged to attend departmental lectures and seminars. Even when these are highly technical they provide students one means to learn more about professional work in a department and

\*Open to the public
\*\*Open to the MIT community only

\*\*\*Open to members only

Send notices for Oct 3 through Oct 14 to Calendar Editor, Rm 5-113, x3-3270, before Noon, Friday sept 28.

NOTE: Any events listed as happening in the rooms of Kresge Auditorium have been or will be scheduled elsewhere. Please check with the sponsoring organization for the new location.

## James W. Mar Appointed To Hunsaker Professorship

Professor James W. Mar of the surfaces and, most recently, ad-Department of Aeronautics and

Astronautics. an expert in aerospace structures. aeroelasticity and materials, been named Jerome Hunsaker Professor of Aerospace Education in

recognition of Dr. Mar his contributions to the educational programs of the department and

The announcement was made by Dr. Robert C. Seamans, Jr., dean of the School of Engineering and Henry R. Luce Professor of Environment and Public Policy, and by Dr. Jack L. Kerrebrock, head of the Department of Aeronautics and Astronautics and Richard Cockburn Maclaurin Professor in Aeronautics and Astronautics.

The Hunsaker Professorship honors Professor Jerome C. Hunsaker, one of the leading figures in the history of aviation, who organized the first formal courses in aeronautical engineering at MIT, the first of their kind in the country; Professor Hunsaker was the first head of the Department of Aeronautical Engineering at MIT.

Professor Mar, a member of the faculty since 1950, received the SB, the SM and the ScD degrees from MIT in 1941, 1947 and 1949. From 1941 to 1944 he was a structural engineer at Curtiss-Wright and from 1944 to 1946 he served in the US Navy. In 1968 Professor Mar was Distinguished Visiting Professor at the University of Utah.

At MIT, he has taught and carried out extensive research in aerospace structures and aeroelasticity, including work on structural design criteria for aircraft experiencing aerodynamic heating and dynamic loading, non-linear structural effects in lifting

#### Cable TV Seeks Course IV Students

Five students are needed for the MIT Cable TV System-Space Relationship Research Project, October-December 1979.

Sponsored by the MIT Educational Video Resources (EVR), the project will be directed by Dr. Mit Mitropoulos, fellow at the Center for Advanced Visual Studies. Dr. Mitropoulos' background deals with architectural psychology; he is seeking architecture students who have an interest in communications.

Students may obtain credit for working on the project by contacting UROP, by registering for Course 4,896, Special Problems in Environmental Art (Communications and Mixed Media), or by special permission of Dr. Edwin Taylor, director, EVR, x3-7433.

vanced composite materials. He is the author of many papers in these areas and a co-author of a classic text, Statistics of Deformable

Professor Mar was one of the founders of the department's Unified Engineering subject which introduces undergraduate students to aerospace engineering through a coordinated treatment of the major disciplines. He founded the Technology Laboratory for Advanced Composites, in which a large number of students, both undergraduate and graduate, conduct research on the behavior of advanced composite materials. He is also a co-founder of the Space Systems Laboratory which addresses the technology of large space structures and also involves large numbers of students in this exciting space venture.

His service to the Institute includes extensive activity in admissions, chairmanship of the Athletic Board, and membership on the Standing Committee for Lincoln Laboratory. He is also chairman of the Committee on Engineering Education which guides educational developments in the School of Engineering.

In addition to his Institute activities, Professor Mar has an extensive record of service to the nation and the aerospace profession. He is a member of the Air Force Scientific Advisory Board, the Space Systems Technology Advisory Committee of NASA, the National Materials Advisory Board and the Aeronautics and Space Engineering Board of the National Research Council.

He was chief scientist of the Air Force from September 1970 to Februrary 1972 and is a Fellow of the American Institute of Aeronautics and Astronautics. Professor Mar has participated in national committees dealing with structural problems of the F-111 C-5A, B-1 and, most recently, the DC-10 aircraft.

Professor Mar and his wife, the former Edith Lew, live in Lincoln,

## Draper Honored By Aircraft Group

Dr. Charles Stark Draper, Institute Professor Emeritus, will receive the Meritorious Service Award of the National Business Aircraft Association at its Honors Night Banquet on Wednesday, Sept. 26, in Atlanta. The citation reads:

"To Dr. Charles Stark Draper, Father of Inertial Guidance, who has enabled man to reach goals on earth and in space with unswerving accuracy through persistent dedication to his own goals of scientific achievement."

Former recipients of the award include Charles Lindberg, Eddie Rickenbacker and Igor Sikorsky.



Gearing up for a successful United Way/Boston Black United Fund Drive, co-chairmen of the drive meet with United Way loaned executive and coordinator of the fund drive. (L to r) co-chairmen John A. Currie and Michael S. Feld, loaned executive, Nancy C. Pitts, and coordinator, Ann M. Perkins.

## Plans Set for United Way/BBUF Drive

Area coordinators and chief solicitors for the 1979 combined United Way, Boston Black United Fund Drive at MIT met Monday, Sept. 24, to make preliminary plans for MIT's one large charity drive beginning Wednesday, Oct.

Co-chairmen of the drive, Michael S. Feld, professor of physics and director of the Spectroscopy Laboratory and John Currie, director of finance, addressed the group. Other speakers were Vice President for Administration and Personnel, John Wynne, and Chief Social Worker, Jacqueline A. Buck. Representatives of the two charitable funds, Paula Lawrence, director of the educational and medical service division of the United Way of Massachusetts Bay and John Marshall, executive director of the Boston Black United Fund also spoke.

"MIT as a citizen of the Greater Boston community has a responsibility to support these charities," said Dr. Feld, and this feeling of community involvement was reiterated by others. Ms. Buck in going over some of the many United Way agencies to touch the lives of people at MIT, said, "We use these agencies every week. What ever we can do to fill the coffers is appreciated." Mr. Wynne characterized the agencies as "the glue that holds the community together."

Two who have had outstanding success in past fund drives spoke briefly. Doreen Lopes, chief solicitor for the Center for Advanced Engineering Studies, told of her experiences, emphasizing the importance of broad participation, rather than large Lillian Giuliana, area coordinator for the Vice President for Research, spoke of the problems inherent in coordinating the work of solicitors in physically widely

A combined goal of \$150,000 has been set for MIT's 1979 drive. Last year, MIT gave \$135,000 with 33% participating. This year, Dr. Feld hopes for 45% participation. The Boston Black United Fund, new in this area last year, raised \$17,500 at MIT's 1978 drive. The Fund supports self-help agencies in the black community, with emphasis on education, community improvement, and job training. MIT was its largest single employee group donor last year. The Boston Black United Fund does not set a specific goal for its drive.

## Nine Artists to be Shown In 'Corners' Exhibition

"Corners," an exhibition of the works of nine artists who use the corner as a framework for their art, will be open to the public in Hayden Gallery from September 29 through November 4.

Many of the artists in the show will attend a public preview on Friday, Sept. 28, 5-7pm.

Installation pieces by Don Dudley, James Ford and Patrick Ireland for particular gallery sites will be featured along with permanently configured works by Richard Artschwager, Jennifer Bartlett, Anthony Caro, Bryan Hunt, Marilyn Lenkowsky and John Avery Newman.

Some of the works are readily identifiable as paintings or sculptures; others skirt such definitions. The plurality of represented visions underscores the variety of artistic intentions present in today's art world, and suggests the suprisingly protean nature of the corner itself.

An architecturally derived place where two converging planes meet, the corner provides a framework for engaging the viewer physically and perceptually. While the corner is composed of simple elements of measurable dimension, the interplay between flatness and threedimensionality creates a visually enigmatic situation.

The current interest in corners reflects a number of contemporary aesthetic, environmental and phenomenological concerns. Perhaps most crucially, the corner allows the artist to explore the relationship between real and illusory space. The charting of these concerns facilitates an understanding of the impetus for and implications of recent explorations, which often deviate from traditional formats and presentations by emphasizing site

A catalogue including an introductory essay, photographs of the works, artists' statements and biographical information will be available at the exhibition. Hayden Gallery is open to the public daily, 10am-4pm and Wednesday evenings, 6-9pm.

This exhibition is organized and sponsored by the MIT Committee sual Arts.

Tech Talk, September 26, 1979, Page 5

butions from a few people	on the visual Arts.
E <sub>CH</sub> ALK	Subscribe to Tech Talk and find out what's going on at MIT all year. Subscriptions are \$12 per year via first class mail and run for a calendar year from the starting date. Fill out this coupon and send it with a check made payable to MIT to Tech Talk, Room 5-113, MIT, Cambridge, MA 02139.
$C_{11} + A_1$	Name
ECH IALK	Address



Ads are limited to one per person per issue and may not be repeated in successive issues. All ads must be accompanied by full name and Institute extension. Persons who have no extensions or who wish to list only home telephones may submit ads by coming in person to the *Tech Talk* office, Rm 5-113, and presenting Institute identification. Ads may be telephoned to x3-3270 or mailed to Rm 5-113. Dead line is noon Friday before

#### For Sale, Etc.

TEAC reel to reel tape deck, echo, sound on sound, auto shut-off, move; vy gd cond, \$200. Call Jeff 277-6249.

Olympia man typewrtr, \$45. Call x3-5049.

Sofa, loveseat & ch Call Lloyd x3-2215. loveseat & chr, 2 yrs old multicolor, \$330.

Assorted comtemp fine art prints, several framed; slp sofa, \$200; sm writing tble, \$25; oak chr, \$25; 2 wd stools, \$10 ea. Call 354-3656 6-11pm.

Desk top lamp, portable, clamp on style, great study lamp or mech drawing lamp, 2 fluorescent tubes, gd cond, \$20 or best. Call Jeff x3-4311.

Waterbed, Kg sz complete w/chemelex htr, frme fitted sheet, filling hose, \$180; Calculator TI-SR51A, \$35; Computer Magnetic Tape, 4 2200' tapes usd on Multics once. perfect cond, best. Call 277-5055 eves.

Rex-strollo-chr set, carriage high chr stroller comb, exc cond, nw \$250, now \$100. Call x3-2868 anytime kp try.

Qu sz box sprng, \$10; Sansui recvr, \$75; Garrard trntble, \$40. Call Bill x5-6541 Dorm.

Upper & lower dish racks for Whirlpool Custom 300 dishwasher; 80" Woodmont travers curtain road, \$10. Call Jack x3-6053 or x3-6097.

Tw bed, matt & box sprng & Harv frme, \$40; wood ser, 4'Wx3'H, \$40, nego. Call Eli 876-5870 eves Kneissl skis w/Look-Nevada bingings; birdcage, 1g metal, both exc cond, best. Call Jerry x3-2309 or

262-3894 eves. TI-58 programmable calculator w/solid state module 25 prgs, all man & charger, \$80. Call x5-

3 spd Raleigh bike vy gd cond, \$35; M & L figure skates, sz 10 & 7, almst nw, \$12/pr. Call Madhu Singhal x5827 Lincl.

Matt & box sprng, dbl sz, gd cond, \$30, wl deliver.

Duncan Phfe DR set w/buffet, 6 chrs, tble, mah, vy

gd cond, \$500 firm. For info call 369-3775

Cakes! Have one decorated & personnally delivered anywhere at MIT many flavors & szs available, great for birthdays. Call Helen x5-6615

Leaf shredder Sunbeam 5 hp B&S eng, breaks down for trasport, \$150. Call Ed x3-5742.

Postage stamp for collectors, world wide mini souvenir sheets, 10-15¢ ea, many topics. Call Len x3-4215.

Stereo amp, Layfayette LA750, approx 20 watts RMS per chan, exc cond, \$40. Call Hank x3-7285.

Lovely 3 pcs curved sec sofa, not contemp, exposed curved wood legs, nw uphol, exc quality & cond, \$200 or best. Call x3-6148.

Apt sz washer & dryr, runs on 110 line, no spec hook-up, exc cond, \$400; blck leather jacket hardly worn, \$60. Call Velma x3-4914.

Pr Mich steel rads, 165x13, \$20 ea; some wear but

mny mi left. Call Manny x230 Lincl.

Hanging lamp w/chn, blck. Call 494-8220 RCA 19" color TV, \$150; Panasonic 12" B&W TV,

Want to trade my 10 spd B bike, nds some work but is quite rideable; for a gd cond 3 spd,pref G bike. Call 876-0845 eves.

Sail St. Maarten & Leeward Islands, 6 days over Thanksgiving, cabin for 2 on 248' windjammer schooner "Polynesia", \$370 ea inc meals: air reserv for 2 confirmed for Logan depart/return on 18/27 Nov via San Juan. Call x3-6291 or 729-6422 eves.

Waterbed; dishwash; K tble & chrs; port dryer; buffet; old working refrig; bkcase, 2 end tbles; TV tble; coffee tble; gold tweed rug. Call Pauline x3-1770.

Approx 80 linear feet of Georgia grey granite for frplc, curbing etc, \$3.50/ft nego, wl deliver. Call 648-8640 aft 6pm.

Proctor-Silex electric juicer; 2 lamps, 1 w/Venetian oven; Sunbeam wall clock best. Call Mary x3-5646. 2white blinds I" slats for 49x93" windows, 1k nw,

at \$150. Call G. Prado x8-4977 Draper

Pr 13" rims, Dodge Dart, 650-13 snows; 1 A78-13 snow, \$5 ea snows & ea rim. Call x5550 Lincl.

Woodwind musical instruments, nw tenor sax; nw clarenet usd clarenets, tenor, alto, baritone & soprano saxs, all great playing cond, fantastic und. Call x7500 Lincl.

Refrig Adminral side by side, 19.5 cf, \$150. Call

Slp sofa, \$150 or best; swivel rocker & misc bkcases, best. Call Jay x3-1409 or 547-1217.

Elect range 40" Hotpoint 2 ovens, white, gd worknd, \$50, u-haul. Call Aram x184 Lincl

Regrig 9 cf HotPoint w/2.5 cf frzr w/separate dr, 22

yrs old but runs well, avail in Lex. Call Whitman x3-7127 or 862-8510.

AM/FM stereo csstt recorder w/AC adpt & head phone Jack \$100 or best. Call Scott x5-7523 Dorm. G26" bike, 3 spd, \$50. Call Frank x8-2332 Draper.

HP67 programmable calculator, brnd nw uncked \$350 Call x3-5576

Ohm-E pr 112 yrs old, gd cond, \$120 or best. Call Saqib x5-6142 Dorm or 494-8502.

Ohm C2 loudspkrs, 6 mos old, lk nw w/wrrnty cards, list for \$550, asking \$415 or best. Call Stanley 494-0284 or x5-7427 Dorm anytime.

Garrard trntble, mod 42M, gd cond, \$30. Call x3-

Pr of B78-13 snows, \$10; iron pedestal tble base \$10; antique caned chrs; child's bike, \$25. Call 729

Antique art & plant sale, Sun, Sept 30, 41 Lakeview Ave, Newtonville; rain date, Sun, Oct

BSR 310 trntble, auto, nw Audio Technica AT90E cart, dust cover, gd cond, \$30, 4x5 fir gutter, 24′x4′-¹L, gd cond, \$3 & \$4/ft if nw, \$24 take w/ deliver, Call Glenn x8-1505 Draper or 329-9725.

Gold Kenmore compact movabl apt sz wash mach, not much used, \$195. Call 227-8510 Thurs.

Elect dryer White Westinghse, hvy duty, vary temp & timer control, yr old, nw cond, moved mst sell. Call Mitch x3-5128.

Tw bed w/head & foot boards, gd cond, \$75 or best. Call 547-2567.

3 gorgeous lk nw pcs for furn, desk, \$75 or best; maple dresser, 6 drawer w/lg frmd mirror attached match night tble, perfect cond, \$200 for set; plus assrt lamps & plants. Call Jill 288-8030 x207 days or 232-7582 eves.

Baldwin spinet organ, w/csstte & learning progra ideal for beginners, jst tuned, min cond, \$550. Call Edi x3-2741 or x3-2747.

Plants hang type \$4. Call Harry x3-5837.

stereo amp, 2 BMI audio senator spkrs, exc cond, paid over \$300, 3 yrs old, ask \$225. Call Tony x8-3708 Draper.

Tape recrdr, Roberts 778-X  $7^{+}2$ " reel to reel stereo & 8 track cart, gd cond, \$150 or best. Call Ron x3-6759 or 492-0379 eves.

Pr G white leather figure skates, sz 2 worn 1 season on rink lessons, \$15. Call x7189 Lincl.

Humidifier,\$70; foldup roll away bed, \$35; stereo record player, \$25; golf bag cover, \$15; elect paint remover, \$9; Ludwig drum set; antique pineapple mah BR set. Call Bob x8-1418 Draper or 862-5955

Stereo pw amp, solid state, 70 watts, nw \$350, \$100 or best. Call Ron x3-6759 or 492-0379 eves.

Pr 6 ply 750-16 truck tires, low mlg, \$25 ea; 1 750-16 slightly higher mlg, \$15. Call Dave x3-2363.

Kg sz water bed for sale, \$150. Call 864-7240 aft 7:30pm, ask for Robin.

Recvr, Fisher 201 20 w/ch vy gd cond, \$90. Call Luther x3-6746 or 864-6712.

Fundamentals of Fine Cooking, course pass, \$60. Call x3-2348.

Pr steel bltd tires E78-14. Call 395-7265

Fuel oil,  $40\varepsilon/gal$ , I am converting to gas & have a fll 275 gal tank, you have to pump it out. Call Howard 275 gal tank, you have t Baker x8-3411 Draper.

Moving, mst sell dble bed w/box sprng & matt \$100; 2 rungs, 1 approx 9x12, blue, 1 approx 12x15, gold/white, best. Call Ruth x3-3558.

Head Vectors 195 cm skiis w/Tyrolia bindings, \$25; Toni Sailer 190 cm fiberglass skiis w/bindin child x-country skis 150 cm w/bind, \$15; off-white curtains to fit 10 x4½, 9x4, & 7x8 best offer; white cab w/slide drs, 18x41½x27½, \$35. Call x3-

Micro Acoustic frm 3 spkrs, perfect cond, yr old, \$280 nw, sacrifice for \$200/pr; Pioneer H88 8 track tape deck, exc cond, \$50; free tapes. Call Sam x5-6330 Dorm or ly msg.

Dk br W Frye boots, 512 fits 612 worn 5 times, co \$90; sell for \$40, exc cond. Call Debbie x3-2740

#### Vehicles

'68 Toyota Corolla 1900 auto, 30mi/gal, some dents, some rust, 81K, \$425 or best. Call Brian Armstrong 494-0415 or lv msg at Burton Desk x3-

'69 AMC Rebel, 76K, 20 mpg, 4 dr, auto, PS ¼ nw tires, mtd snows, usd 2 mos, lks & runs gd. Call Bill x437 Lincl.

'69 Ford XL, best. Call x3-6272.

'69 Toyota Corolla, 67K, runs gd, nds muffler, some rust, make offer. Call x3-6814.

'70 Chevy Caprice, station, 10K on reblt eng, nw bttry, shocks, starter, runs vy well, \$800. Call 864 2389 or 864-0537 eves.

'70 Ford Galaxy, mst sell, gd cond, \$250. Call 484-4681 aft 3pm.

'70 Pontiac Lemans Sports, 70K, exc run cond, PS, man brks, nw radiator, nw brks, etc, \$450 asked. Call x5-9640 Dorm for Chen-dao Lin.

'70 VW Beetle, rebit eng, perfect run cond, gd bdy, some rust on floor, sunrf, \$600. Call Firoz 864-9106

'71 AMC Gremlin, 6 cyl, gd eng & trans, bdy rough, nds work but runs, \$350 or best. Call Gail 665-3285

'71 Matador, gd bdy, nw exh sys, wl maintained, ask \$725 or best. Call Joe x7501 Lincl or 458-1823. '71 T-Bird nw mffler & bttry, jst tuned vy gd cond, \$1595. Call x3-7154 or 494-8176.

'71 Vega Hatchbok, 2 dr gr, rubber fair, bdy rust, radio \$100 or best. Call 738-8333.

72 Buick LeSabre, 4 dr sedan, PS & PB, snows,

73K, \$750. Call 648-8264 aft 5pm.

'72 Ford Grand Torino stat wg, 74K, PS & PB, rf rack, 4 rads & 2 snows, A/C 351 V8 eng, 14-16 mpg, reg gas, vy clean, exc cond, \$1200. Call x3-6735 or

'72 Ford Ranch Wg, blt for Bos, power & st cosmetic rust only, \$450. Call John x3-5922.

'72 Ply Station Wg, A/C, PS & PB, V8, 80 mi, gd cond, \$750. Call 494-9020.

'72 Torino Wg, 85K, eng exc, bdy fair, \$300. Call

73Ford Pinto Hatchback: 4 cyl, 4 spd trans, AM exc commuter car - high mi. \$1400. Call

74 Datsun 710, 57K, \$2100. Call Meg x3-5756 or

'74Datsun 260Z, auto, gd gas, Mich rads, AM/FM, low mlg. Call Debbie x3-1508.

74Dodge Dart slant 6, 60K, rads, 20-25 mpg, \$1800

'74 Fiat 124 stat wg, 59K, exc cond, nw parts, extras. Call Eve x3-6688 or 367-2139.

74 Fiat 128, frnt whl drv, 4 dr sedan, gd cond, 54K, avoc gr, \$1400. Call x3-2285 or 646-0181 aft 6pm. '74 Vega, 30K, no rust, nw paint, AM/FM, exc eng, mst sell, \$1775. Call Avery x5-8254 Dorm.

'75 Suzuki motorcycle, 125cc, 1900mi, \$450, gd cond. Call Fred x7098 Lincl

'76 Datsun pick up, 54K, 25-30 mpg, exc insd & out, mny extras, \$3500 or best. Call Jim x3-5884 Linel.

Datsun B210, super cond, 40K, 2 dr, stand, AM/FM, tape csstte, spare, \$3400, 32 mpg. Call Chua 661-4852 eves.

Dodge Diplomat, 225 slant six, A/C, vnyl top, AM/FM PS & PB, 20K, super cond, well main tained, ask \$4000. Call x3-2772.

78 Pontiac Sunbird, 14K, red 2 dr auto, PS, AM/FM nr/window defrost, sport mirrors, 2 brnd nw snows, nvr usd, 4 cyl, great gas mlg, \$3600 or best. Call 354-0755 betw 5:30 & 8pm.

#### Housing

Bos nr Kenmore Sq & trans, lg sunny & quiet 1 BR, for Oct 1, \$235/mo incl ht. Call 267-4917, 6-9pm or all wkend until 8/27, aft 10/1 call x3-2848 days.

Friendship, me., two 130x230 ft. wooded lots on tidal cove, \$8,500 each. Call Marsha x3-2711 or x3-

Groton, NH for sale, pretty 2 storey sm hse, blt mid 1800 to fix up for summer or hunting cabin, nr Wht Mtns. Waterville Valley, etc, views on 14 acre, mid

teens. Call Karen x8-4531 Draper.

Reading spac well kept ranch 3 BR, den finish bsmnt mod K w/adj dine area, lg screen porch, ef-ficient 3 zone ht sys, low taxes, \$69,900. Call 944-

fam rm, eat-in K, 1 car gar, mny extras, \$500/mo-ht & util. Call x3-6907 or 653-9322.

#### **Animals**

Free to gd home, part Pointer/Lab, 3 yrs old nds love & affection, Call x3-2857 or 876-2676 aft 6pm. Affectionate black kitten trained, nds home. Call

492-5725 aft 6pm Rabbits 12 wks old, free to gd home, make wonderful pets for children. Call Nelia x3-2747 or 237-5125

#### Lost and Found

Lost:Smith College pinky ring in vicinity of student accounts office, Sept 12. If found, pls con-tact Etsuko x3-4133, Rm E19-215.

Lost: Gold religious medal, Sacred Heart w/chn, high sentimental value, lost in area of gym or Briggs Field, reward! Call Charlie 536-3931.

Found: 3 keys on Mem Drv Macrame key holder w/wooded beam. Call Blake x3-7920.

#### Wanted

2 quiet considerate post-doc fellows sk 2 BR apt in quiet setting, non-smokers, no pets. Call Nancy 926-1086 or Ginger 862-8881.

Wanted: Home pref co-op for Oct 1, friendly 25, an arts lover non-smoker, semi-veggie depend on finances, non-pet owner, non-drvr, yes I'm from NY. Call Adele x3-4063 or 731-4994 eves.

Rd to & from Bedford Ctr. 9-5 eves occasionally Call Gloria x3-5303 or 275-1181

Telephone answering mach, nd not be working. Call x5-6668 Dorm.

Sm jazz/R&B/Latin musical ensembles to perform on campus, send description to BGSA Concert Series, Rm 3-136. Student for part time lighting installation, general reprs & cleaning in staff member home, interest in energy conservation measure helpful. Call x3-7755.

Visit scholar, 80-81 academic yr, married w/teen nds 2 BR furn hse or apt Belmnt pref. Write: Richard L. Gordon, 201 Walker Bldg, University Park, Penn. 16802 or call (814) 238-4216.

Sm trailer for Sunfish type sail boat. Call Skip x8-

Mast, boom & sail for Skate (Lincl). Call x8-4588

Competent squash player, 2-3 nights per wk, Dupont 7:30pm. Call Larry x3-5870.

#### Roommates

2 W to shr apt in Arl w/2 W grad students, exc cond, own rm, on T, non-smokers, \$150/mo, inclutils. Call Beth x3-6032 or 643-3180.

Central Sq apt nds 2 nw people, M or F, shr food, have your own rm, bldg owned by MIT, \$105 incl ht. Call Art, Joan or Rhea 864-5398.

Resp non-smoker rmmate for delightful Cape l to shr in Belmnt, own rm, flly furn, \$265 incl utils. Call x3-3368 or 498-8509 eves. F rmmate wntd to shr mod 2 BR apt w 1 other F for

mos of Nov & Dec, only \$200/mo, located btw Harv & Central Sw. Call Debbie x3-4602. M rmmate, nonsmoker, lks dogs to shr furn No

End Bos apt, LR 4 K 4 sep Br, laundry fac, park, \$250/mo incl ht, gd T. Call Warren x3-4444, Pro M, quiet, love classical music sks humane living situation w/K priv, nr subway, not Gr Line, for ca \$100/mo, nego, for a few wks or mos until he has found a position w/increased income sufficient to afford his own apt. Call Bill Kalt x3-8100.

#### Carpools

Nd ride from Brockton from 8-1. Call x3-6695.

Rd or riders or join carpool from Nashua, NH or vic to MIT, flex hrs. Call x3-2031. Rd needed No Medford to MIT, 9-1, M,T, Thurs &

wl shr expenses. Call Marcia x3-4312 or x3-

#### Parking Stickers

Note to parking sticker swappers: please remember to inform your supervisor and the Campus Patrol of the exchange you; have made so that their records accurately reflect your new parking area.

WI swap West Garage sticker for Albany or East. Pls call Mary x3-2391. Would lk to trade Kresge sticker for East. Call

Trade West for East. Call Lam x3-3111.

SWAP WANTED—have West Garage parking sticker but want East or Albany. Call Sue x3-7286. WI swap West gar for Albany or East, Call Cliff x3-

WI swap East for Albany x3-2249.

Carolyn x3-4852.

#### Miscellaneous

Experienced piano tuner wi tune your piano make repairs, reasonable rates, exc serv. C Margie x3-4366 or drop a note to Rm 5-222.

Volunteer translators needed to help w/article writ-ten in German, would appreciate help w/1 pg, wl correspond w/Spanish-Eng translation if needed. Pls call Arturo 494-8170 eves.

Tech typist wl do all kinds of typing, IBM Correct Select. Call Scotti x3-3645.

WI type thesis, ms, tech, fast & accur, IBM Correct Select. Call Debbie x3-1848.

# **POSITIONS**

This list includes all non-academic jobs currently available on the MIT campus. Duplicate lists are posted on the Women's Ktosk in Building 7, out-side the affices of the Special Assistant for Women

Information on openings at Lincoln Laboratory (Lexington, MA.) is available in the Personnel Office.

Persons who are NOT MIT employees should call the Personnel Office on extension 3-4251.

Employees at the Institute should continue to contact their Personnel Officers to apply for positions for which they feel they qualify.

Susan Lester	3-1593
Appointments: Tertia Perkins	3-4270
Virginia Bishop	3-1591
Richard Cerrato	3-4266
Ken Hewitt	3-4267
Appointments: Marsha Gens	3-4268
Sally Hansen	3-4275
Lawrence Milan	3-2928
Kathleen Rick	3-4269

Appointments: Jenni Leibman

Academic Staff Postdoctoral Associate, in the Dept. of Nutrition and Food Science will study in activation mechanisms and stabilization of enzymes involved in solar energy bioconversion processes. Ph.D, required, preferably in Biochemistry of Physical Organic Chemistry. Biochemistry C79-26 (9/26)

Academic Stajj, Administrative Officer, with faulde financial, personnel and general administrative matters for the Division of Laboratory for Animal Medicine. Responsibilities will include budget development and management, expense control, pricing decisions, cost analysis and accounting anagement; coordinate personnel and relate matters; supervise support staff; identify operational problems and initiate necessary action. Bachelor's degree in Business Administration and at least 2 years work experience, preferably with financial management necessary. Master's degree in Business Administration desirable. C79-25

Sponsored Research Staff, Technical Asst., in the Nutrition and Food Science Dept. will assist with biological and analytical chemical techniques in a lab involved with metabolism of drugs, toxins, and natural products. Bachelor's degree in Biology, Chemistry or Biochemistry required. Laboratory experience in protein purification and/or HPLC also required. R79—247 (9/26)

Sponsored Research Staff, Sr. Shift Supervisor, in the Nuclear Reactor Laboratory will be responsible for safe and useful operation of the reactor: review and schedule experiments; perform surveillance

ed Research Staff, Scientific Programme Sponsored Research Staff, Scientific Programmer in the Meteorology Dept, will assist in a variety of data processing and scientific computing tasks related to physical oceanography studies. Ability to handle large volumes of data on tape and disk and to design and program appropriate analysis and display software required. Knowledge of FORTRAN and some background in mathematical search of the program of the

Energy Laboratory will assist in data entry and/or editing of technical data base for modelling of fluidized bed combustion. Bachelor's degree in ical o mechanical engineering required Background in fluidized bed combustion and/or

computers desired. R79-253 (9/26) Sponsored Research Staff, Technical Asst., partme, in the Division for Study and Research in time, in the Division for Study and research in Education will assist research project staff involved in developing a relationship between teachers and students methods of learning: observe classes; discuss observations; participate in weekly seminars; maintain journal of activities.

Virology group in the Center for Cancer Research will provide tissue culture and specialized media; prepare, sterilize and test solutions according to specifications with stringent quality control. Bachelor's degree in Chemistry or Biology required. Lab experience preferred. R79-246 (9/19)

(9/19)Sponsored Research Staff, Chemist, in the Nuclear

Reactor Laboratory to be responsible for general operation of radio chemistry experiments involving trace element analysis. A Bachelor's degree in chemistry and training and experience in analytical chemistry required. Experience in trace element analysis, with neutron activation/radio element analysis, with neutron ac chemistry desirable. R79-207 (8/15)

dent Accounts Office: verify accounts and if necessary take appropriate action; prepare a large

volume of loggings; review and assist students in the financial registration process; provide liaison services between students and other Offices; advance cash; handle collection of past due accounts. Excellent interpersonal skills, a mature analytical approach required. Position requires overtime work. Accounting background desired. E79—31

Exempt, Editorial Asst., in the MIT Press to handle editorial coordination and production for 12 journals in a growing program: schedule, traffic manuscripts, galleys, pages, blues, etc. between suppliers and editorial offices; supervise free lance suppliers and editorial offices; supervise free lance services; cost estimating and purchasing composi-tion, printing, binding services and stock; prepare reports and summaries; maintain production protocol and quality control. At least 3 years production or production/editorial experience with either books, journals or magazines and cost and budget experience required. Good organizational skills also required. Management experience preferred. E79—32 (9/26)

preferred. E79—32 (9/26)

Exempt. Supervisor — Illustration Service, in the Graphic Arts Dept. will be responsible for supervision, scheduling, hiring, training and other personnel matters. Thorough knowledge of art media and techniques, composition and standard drafting practices, ability to prepare camera ready mechanicals and working knowledge of typesetting, composition and the ability to schedule and order art or type from outside vendors required, as well as ability to supervise and train others and good organizational skills. Art school graduation and 5 years progressively responsible experience, or equivalent, also required. E79-30 (9/19)

Library Asst. in the Science Library will maintain reserves: collect, order, borrow and remove reserves; receive reserve lists; verify references; process materials; consult with faculty re: title problems; mark reserve materials; supervise student assistants. Will also assist in searches; verify order information; make catalogue changes; collect and process books for reclassification; solve catalogue problems; perform related tasks as catalogue problems; perform related tasks as necessary. Excellent interpersonal and good organizational skills required. At least 2.5 years direct/related experience also required. B79—607

Administrative Secretary, Editorial, in the Office of Personnel Services, to handle a full range of duties related to employment and recruitment activities. Responsibilities include the independent completion of the Tech Talk posting process: maintain various clerical records on job requisitions; write postings; prepare a weekly mockup to instruct publisher; maintain and compile statistics on various employment matters. Will write, ar-range for placement of, assist in formatting outside advertising through advertising agency; process billing through several MIT department; assist in identifying and assessing new recruitment resources and strategies. Will also perform general secretarial duties for Employment Officer and par-ticipate in recruitment functions such as job fairs, school visits. Applicants must have four and a half or more years applicable experience, ability to promote employment at MIT enthusiastically, good general secretarial skills, ability to handle a volume of clerical detail with accuracy. Demonstrated ability to write promotional material is also necessary. B79—608 (9/26)

Administrative Secretary to the Associate Director, Parsons Laboratory, Civil Engineering Dept. to handle various administrative and secretarial duties: arrange seminars and meetings; compose and type correspondence; transcribe machine dic-tation. Position involves substantial amount of student contact. Excellent typing skill, ability to coordinate many activities simultaneously re-quired, as well as a command of English grammar. MIT experience is preferred. B79—618 (9/26) Sr. Secretary to a faculty member in the Biology

Sr. Secretary to a faculty member in the Biology Dept. will perform secretarial and administrative duties: answer telephone; open mail; type letters, manuscripts, recommendations and proposals (usually from dictaphone); order supplies; aadminister petty cash; process requisitions and other routine procedures. High school graduation and two and one half years' applicable experience necessary. Excellent typing and interpersonal skills and ability to make independent decisions also necessary. B79—596 (9/26) Sr. Secretary to several faculty members in the Economics Dept. will type correspondence, manuscripts and course materials; answer phones;

arrange travel; file. Good typing skill required. High school graduation and at least 2.5 years ex-perience also necessary. Technical typing skill and college study preferred. B79—599 (9/26) Sr. Secretary will provide reception and secretarial support to a health care team for the Medical Dept.: answer phones; schedule appointments; order records; coordinate lab tests with preparation of necessary forms; transcribe medical notes; type correspondence and reports; arrange travel; maintain files; provide support occasionally to other areas. May be asked to assist with routine physical exams. Good organizational and excellent typing skills, ability to respond maturely and sen-

medical terminology necessary. At least 2.5 years applicable experience also necessary. 37.5 hrs./wk. B79—611 (9/26) Sr. Secretary in the Center for Materials Process-ing reporting to a senior faculty member will type correspondence (from machine and dictation), technical reports, proposals and course material; arrange travel and appointments; monitor research accounts; answer and place large volume of calls; organize records and filing system; compose and edit correspondence. Good secretarial skills essen-tial. At least 2.5 years direct/related experience, or equivalent, also necessary. B79—584 (9/26) Sr. Secretary in the Center for Materials Process

sitively to patients' needs and ability to transcribe

Sr. Secretary in the Nuclear Reactor Laboratory to the Director of Reactor Operations and the Administrative Asst. will arrange various committee meetings; schedule appointments; arrange travel; type correspondence, technical reports and related duties. Excellent secretarial (including technical typing skills) and good interpersonal and organizational skills, ability to work with figures required. At least 2.5 years applicable experience also required. B79—601 (9/26)

Sr. Secretary in the Alumni Association will perform reception and secretarial duties: type correspondence; arrange travel; maintain calendar and files; perform reception duties. Excellent typing, good interpersonal and organizational skills required. At least 2.5 years applicable experience also required. Knowledge of MIT and/or MIT receptions belief. 1970, 2000 (2005) procedures helpful. B79-609 (9/26)

Sr. Secretary for MIT Leadership Campaign District Office to arrange travel, compose a bishtet Office to arrange traver, compose and transcribe correspondence, provide secretarial support to a variety of fund raising activities. Excellent typing, ability to organize work independently and 2.5 years or more applicable experience required. College training and familiarity with MIT preferred. B79—620 (9/26)

Sr. Staff Asst. to Financial Aid Officer, Nuclear Engineering Dept. will prepare and process graduate awards, financial aid notices, and maintain financial aid records: provide information to faculty staff and students; type draft and final technical research reports (equations), class notes, correspondence; answer phones; maintain files; arrange luncheon and dinner meetings; coordinate travel; arrange luncheon/dinner meetings; comtrave; arrange function/dinner meetings; copies letters; edit and proof—read; supervise temporary help as required. Ability to work with frequent interruptions, and to set priorities required. At least 2.5 years' applicable experience also necessary. B79—616 (9/26)

Sr. Staff Asst. to 2 faculty members in Nuclear Engineering to type correspondence, technical reports from rough draft, and class notes; schedule classroom use; arrange travel; organize meetings; schedule appointments. Important part of job involves interaction with students and maintenance

Page 6, Tech Talk, September 26, 1979

Peabody, for sale, ranch, most desirable area, 3 BR, gar, pool, well landscapped. Call 233-3190.

9091 or x8-4072 Draper. Wayland, hee for rent, 3 BR ranch, lg LR, frpl, DR,

# **AVAILABLE**

side the offices of the Special Assistant for Women and Work (10-215) and Minority Affairs (10-211), and in the Personnel Office, (E19-239).

Dick Higham	3-4278
Pat Williams *	3-1594
Susan Lester	3-1593
Appointments: Tertia Perkins	3-4270
Virginia Bishop	3-1591
Richard Cerrato	3-4266
Ken Hewitt	3-4267
Appointments: Marsha Gens	3-4268

Academic Staff, Administrative Officer, will han-

(9/19)

and schedule experiments; perform surveillance testing and maintenance; handle equipment and procedural changes; prepare routine reports. High school graduation, at least 3 years responsible reac-tor operation experience, or equivalent, required. Current Sr. Operator's License and ability to suc-cessfully requalify biannually for License renewal also required. R79—250 (9/26)

also required. Experience with large computer systems, software design, analysis and documentation and background in statistics preferred. R79— 158 (9/26) Sponsored Research Staff, Technical Asst., in the

Elementary school certification necessary. At least 2 years classroom experience, experience in teacher training and in cognitive research also necessary. 17.5 hrs./wk. R79-239 (9/19) Sponsored Research Staff, Technical Asst., in the

Sponsored Research Staff, Postdoctoral Physicist, Sponsored Research Staff, Postdoctoral Physicist, part-time, in the Center for Space Research to carry out scientific analysis and interpretation of x-ray data from the SAS-3 and HEAD-1 satellites. Experience in analysis and theoretical interpretation of such data is desirable. 20 hrs./wk. R79-243

Exempt, Student Accounts Representative, will assist students in understanding the accounting of charges and credits to their accounts in the Stuof undergraduate records. Technical typing is required. Very good secretarial and interpersonal skills, ability to set priorities also necessary, as is at least 2.5 years' applicable experience. B79—617

Sr. Secretary, part-time, to a faculty member in the Architecture Dept. will type manuscripts, course material and correspondence; provide liaison services between students and faculty member, answer phones; arrange travel; schedule meetings and appointments; order supplies; open mail; compose some correspondence independent to the bit by the second of the control of ly; do library research. Excellent typing skill neces ary. High school graduation and at least 2.5 years sary, right school graduation and at least 2.5 years experience also necessary. Knowledge of Italian language and/or Italian architecture a plus. 26 hrs./wk., preferably spread over 4 or 5 days a week. B79-582 (9/19)

Sr. Secretary, Technical, to 4 faculty members in the Chemistry Dept. will type correspondence, technical manuscripts, proposals and course materials; arrange travel and appointments; monitor purchasing and accounting records; per-form miscellaneous duties as necessary. Excellent technical typing, interpersonal and organizational skills and some structural drawing ability or wil-lingness to learn required, as well as ability to handle purchasing and accounting functions. At least 2.5 years applicable experience also required, 37.5 hrs./wk. B79-583 (9/19)

Sr. Secretary, Technical, to two Chemistry Dept. faculty members; will type correspondence. technical manuscripts, grant proposals and course materials; monitor accounts; arrange travel. Typing skill and at least two and a half year's experience required. B79-571 (9/19)

Sr. Secretary to 4 faculty members of the Physics Dept. will type technical reports and manuscripts, proposals; maintain budget records and files; assist with travel arrangements and miscellaneous duties. Excellent typing skill, including technical typing, and ability to assume responsibility required. At least 2.5 years applicable experience and high school graduation also required. College graduation and technical typing experience preferred. B79-575 (9/19)

Sr. Secretary, part-time, in the Clinical Research Center, will maintain protocol file; provide liaison services; coordinate appointments and maintain related records; dispense and record petty cash transactions; coordinate a seminar schedule; maintransactions, coordinate a seminar schedule; main-tain-library subscriptions; process new acquisi-tions; type correspondence, grants and reports; provide backup for receptionist; perform miscel-laneous duties. High school graduation and at least 2.5 year's applicable experience required. Good secretarial, organization and interpersonal skills also required. 20 hours/week. B79-593 (9/19)

Sr. Secretary, Technical, in the Energy Lab/Energy Model Assessment Program will type reports (some technical), manuscripts and cor-respondence; answer and screen ealls; arrange travel; maintain files; schedule appointments, meetings and seminars. Excellent typing, including technical, and interpersonal skis, command of English language and ability to set priorities necessary. At least 2.5 years applicable experience also necessary. B79-498, B79-499 (8/29)

Sr. Secretary in the Medical Dept.'s Social Work Service will schedule appointments; arrange con-ferences; provide reception support; type handwritten drafts and from machine dictation; prepare statistics; maintain files. Will also assist in matters related to development of special program and provide relief coverage support for oth secretaries. Excellent interpersonal, go-organizational and typing skills, and attention detail necessary. Secretarial experience also necessary. B79-456 (8/15)

Sr. Secretary, part-time, in the Humanities Dept. to maintain schedules and calendar for orchestra; order music; handle financial accounts; arrange logistics for recordings, concerts, tours, etc.; act as liaison between Dept. and graphics; maintain instrument room. Shorthand/speedwriting and typing required, as well as at least 2.5 year's experience. Permanent 9 month position Sept.-May. 17.5 hrs./wk. B79-462 (8/15)

Secretary to work under direction of the Assistant for Special Events, in Campus Information Services will perform general secretarial duties and assist in arrangements for conferences held at the Institute. Responsibilities include answering phones; typing correspondence; maintain files and records; schedule appointments and meetings. Will also provide backup secretarial assistance to the analytical Studies and Planning Group. Applicants must be able to work on concurrent projects, and handle detail with accuracy. Excellent typing and organization skills also required. Position requires some overtime work. 37.5 hrs./wk. B79—615

Secretary in the Dept. of Materials Science and Engineering to provide reception and secretarial support to headquarter's staff: answer phones; type forms, memos, correspondence; file; receive visitors; act as courier. Typing skill, ability to handle detail required. At least 1 year's experience also required. 37.5 hrs./wk. B79—610 (9/26)

Secretary to 2 faculty members in the Center for Cancer Research to type letters, grants and Secretary to 2 faculty members in the Center for Cancer Research to type letters, grants and manuscripts; file; answer phones, order materials; maintain a variety of records. Good typing skill, in-titative and ability to take responsibility required. At least 1 year related experience also required. Familiarity with chemical and/or biological ter-minology, use of dictaphone and MIT prodecures desired. B79—351 (9/26)

Secretary will assist 3 faculty members and research staff in the Dept. of Chemical Engineerresearch staff in the Dept. of Chemical Engineer-ing: type class materials, proposals, reports, etc.; arrange meetings; coordinate travel plans; main-tain records; interact with students and advisees of the faculty members. Good organizational, typing and interpersonal skills and ability to transcribe from dictating equipment required. High school graduation and 1 year's applicable experience also required. Technical typing skill helpful, but will train if necessary. B79—594 (9/26)

Secretary, Technical, in the Plasma Fusion Center will type and proofread reports, manuscripts and correspondence; perform reception duties; handle a variety of headquarters related tasks (mailings, schedules, reproductions, etc.). Excellent typing organization and interpersonal skills and ability to set priorities also required. At least 1 years related/direct experience also required. 37.5 hrs./wk. B79—604 (9/26)

Secretary, part-time, in Biology to type and proofread correspondence and manuscripts from proofread correspondence and manuscripts from machine dictation or written draft; answer phones, maintain files and budget records; monitor expenditures; arrange travel and meetings. Typing skill, command of English grammar and ability to hancommand of English grammar and ability to han-dle budget records; monitor expenditures; arrange travel and meetings. Typing skill, command of English grammar and ability to handle budget related activities required. 17.5 hrs./wk. B79—619 (9/26)

Secretary to 3 faculty members and in the Sloan School of Management will type manuscripts and correspondence from dictaphone; edit and prepare reports; arrange meetings, appointments and travel; maintain publication records and files, Good interpersonal and typing skills, telephone manner and knowledge of English grammar necessary. At least 1 year of experience and high school graduation also necessary. B79-577 (9/19)

Secretary, part-time, in the Medical Dept.'s Environmental Medical Service will perform reception and secretarial duties: transcribe dictation type a variety of materials; assist senior secretary as necessary. Typing and excellent communication skills and ability to work well with others required. At least 1 year's related/direct experience also re-quired. 17.5 hrs./wk. B79-586 (9/19)

Secretary in Housing Office to assist in areas involving student family housing: answer student in-

quiries; maintain waiting lists; type agreements; maintain various records and perform various clerical and administrative duties related to the provision of housing services to students. Excellent communication skills and ability to work in a service oriented function required. Applicants must have at least 1 year's applicable experience in addition to general secretarial skills. B79-578 (9/19)

Secretary in the Patent and Copyright Office to work for patent attorney: type patent applications; answer phones; perform general office tasks. Excel-lent typing and at least 1 year's secretarial ex-perience required. Some shorthand helpful. B79-428 (8/15)

Secretary, temporary, to the Biology Dept.'s Registration Officer will type class notes, and other registration officer will type class notes, and other course material and correspondence; handle duties related to Biology Colloquium; assist in serving refreshments to Colloquium participants; assist with various other projects as necessary, Good typing and interpersonal skills necessary, and at least 1 year of applicable experience is also required. Temp. for approx. 6 months B79-589 (9/19)

Account Representative in the Information Proces-sing Services Office will determine production schedules and requirements and ensure internal commitments are met; coordinate and control in-put and file flow into the computer; upgrade and correct operational documentation and job streams; organize and review finished outputs; analyze and correct production problems; initiate recovery action to complete or rerun jobs and make necessary adjustments; prepare related reports. Some user contact is involved. High school graduation, plus substantial applicable experience including scheduling and operating data processing equipment necessary. MIT experience preferred. B79-572 (9/19)

Sr. Office Asst. in the Plasma Fusion Center will verify accounting statements; process invoices; maintain files and records; interact with Center's personnel and vendors regarding invoices and their payments. Good interpersonal and organizational skills, ability to set priorities and handle detail accurately required. At least 2.5 years applicable experience also required. B79—602, B79—603 (9/26)

Sr. Office Asst. in the Dept. of Nutrition and Food Science will process purchase orders, packing slips and invoices; maintain related files; verify state-ments and initiate any appropriate action; handle petty cash; interact on telephone with vendors and staff members. Typing skill and good command of English language necessary. Two and one half years applicable experience, or 2 years of college level accounting courses, also necessary. B79—600

St. Office Asst., in the Alumni Association to enter and maintain gift information or computer records; maintain files; compile statistics; answer phone inquiries; assist with other data processing functions. Applicants must be able to work ac-curately with figures. Some experience with com-puter terminals and with calculators is desirable. puter terminals B79-580 (9/19)

Office Asst. in the Comptroller's Accounting Office will audit vendor invoices; extend and discount in voices; post invoice payments; code invoice prepare order commitments; batch processed es; occasionally review vendor statements Ability to work with figues and proficiency on adding machine required. High school graduation and at least I year's applicable experience also required. B79—614 (9/26)

Office Asst. in the Comptroller's Accounting Of fice will handle cash suspense for Accounts Receivable; reconcile cash on a monthly basis; make cash adjustments; research and credit ac-counts. Will also handle correspondence; telephone counts. Will also handle correspondence, telephone inquiries, terminations, refunds and vouchers for System. Typing skill required, as well as knowledge of bookkeeping and ability to deal with public and reconcile accounts. Position requires 1 year's experience. B79—613 (9/26)

Office Asst. in the Resource Planning and Develop ment Office will complete payroll report; handle mail flow; maintain xerox machine and mailing machine; perform reception duties; answer large volume of cells; maintain lab supplies; assist in file maintenance. Occasionally will act as courier. Excellent typing, filing and organizing skills, ability handle several duties simultaneously, and facility with figures necessary. At least 1 year's applicable experience also necessary. B79-612

Office Assistant in the Comptroller's Accounting Office to type vouchers; charge and credit various projects; file; perform miscellaneous duties as necessary. Good typing and bookkeepping skills including ability to clear and reconcile accounts re quired: One year's experience also necessary. B79-423

onsole Communications Operator in Console Communications Operator in the Telecommunications Office of the Physical Plant Dept. will attend, operate and monitor FCS con-sole; follow non-emergency activities schedule; maintain communications with Work Control Center and Heat, Vent Shops and others, using a variety of communications equipment; respond to alarms and emergencies in accordance with specified procedures; perform related clerical duties; process and expedite incoming and outgoing calls. High school graduation required. English language skills and ability to react properly in an emergency also required. Related experience a plus. Applicants must be 18 years of age or older. Sat. and Sun. 12mid-7am and 3 evenings a week or Sat. and Sun. 10:15am-5:15pm, and 3 days during week. B79-597, B79-598 (9/26)

Office Asst. in the Plasma Fusion Center Office Asst. In the Plasma rusion Center will prepare student and hourly payrolls; process travel vouchers, requisitions and materials related to accounting statements; update and maintain records and files; type vouchers and correspondence. Good typing and organizational skills, ability to handle detail accurately and facility with figues necessary At least 1.5 years applicable experience also necessary. B79—606 (9/26)

Office Asst. in the Plasma Fusion Center process invoices: maintain files and records: type and proofread budget reports and correspondence interact with Center's personnel and vendors Good typing and interpersonal skills and ability to handle detail accurately necessary. At least year's applicable experience also necessary. B79-

Receptionist in the Office of the President and Chancellor to greet visitors and answer phones; receive, log and distribute mail; type speeches and correspondence. Applicants must have excellent interpersonal skill, typing ability and be able to organize own work load. 37.5 hrs./wk. B79-570

Office Asst., Accounts Payable, in the Comptroller's Accounting Office to file invoices and journal vouchers; retrieve materials from files as requested; obtain copies of checks; process canceled checks. Applicants must be able to do numerical and alphabetical filing. B79-579 (9/19)

Office Asst. to handle large volume of mail in the Office Asst. to nande large volume of main in Admissions Office: sort, open, read and process before distributing mail; maintain a large filing system; type; answer phones and inquiries. Accurate typing skill and ability to work under occassional pressure necessary. B79-587 (9/19)

Office Asst., part-time, to handle a filing system in the Resource Planning and Development Office will maintain file 'sign-out' system; post necessary information on to cards; revise files as necessary; maintain order of files; xerox. Good typing, filing interpersonal and organizational skills and ability to handle confidential material required. At least 1 year's applicable experience also required. 16 hrs./wk. B79-588 (9/19)

Office Assistant in the Graphic Arts Service/Accounting Office will perform routine clerical duties and provide backup for receptionist. Good typing and arithmetic skill and legible handwriting re-

quired. High school graduation and 1 year's applicable experience also required. B79-592 (9/19) Office Assistant, part-time, in the Graphic Arts department will type various forms; record numerical data; separate, sort, distribute and file a variety of office forms; file; calculate unit pricing and pricing and price extensions; Excellent typing skill, ability to follow procedures, familiarity with calculators required. At least 1 year's experience and high school graduation also required. 20 hours week, 9AM-1PM. B79-590 (9/19)

Service Staff Machinist A, in the Nuclear Reactor Laboratory to set up and operate all commonly used machine tools, working closely to tolerances from blueprints, specifications, verbal instructions or sketches. Will make tools, dies, jigs and fixtures of sketches. Will make twois, dies, his and fixtures as required. May direct and train machinists of lower grade. Will work in reactor machine shop, and handling of and exposure to radioactive materials are included in position. At least 5 years are included in position. At least 5 years are included in position are required. H79.121 applicable machinist experience required. H79-121 (9/19)

Service Staff Sr. Technician Electronic in the National Magnet Laboratory to assemble, test and operate high power microwave hardware; tran-sform advanced technical concepts into designs, prototypes and experimental systems; integrate microwave hardware into thermonuclear plasma experiment; direct technicians. Graduation from a 2-year day technical school or its equivalent, and at least 5 years microwave electronics experience required. Extensive experience in micros measurements, trouble shooting, high vo power supplies also required. H78-106 (7/26) voltage

The following positions were still available at Tech Talk deadline. The date following each position is the date of the most recent Tech Talk in which the position was described.

ADMINISTRATIVE STAFF:

A77-3, Admin. Staff, Systems Programmer, In-

A71—3, Admin. Staff, Systems Frogrammer, and formation Processing Services (2/16)
A79—9, Admin. Staff, Mechanical Engineering (2/14 A79—9, Admin. Staff, Programming Analyst, Information Processing Services (5/30)
A79—43, Admin. Staff, Director of Development, Resource Planning (7/11)
A79—47, Admin. Staff, Mechanical Engineer—

Operations, Physical Plant (8/15)

A79—49, Admin. Staff, Data Base Administrator, Information Processing Services (8/15) A79—51, Admin. Staff, Systems Programmer,

A79—51, Admin. Staff, Director of Alumni Fund, Alumni Association (8/29)
A79—54, Admin. Staff, Director of Alumni Fund, Alumni Association (8/29)
A79—55, Admin. Staff, Asst. to Manager of Central Utilities Plant, Physical Plant (8/29)
A79—58, Admin. Staff, Industrial Liaison Officer Industrial Liaison Programs (9/5)

ficer, Industrial Liaison Program (9/5) A79—59, Admin. Staff, Systems Analyst, Information Processing Services (9/5) A79—60, Admin. Staff, Technical Supervisor,

Information Processing Services (9/5) A79—62, A79—63, Admin. Staff, Applications Programmer, Information Processing Services Office (9/12)

A79—64, A79—65, Admin. Staff, Systems Analyst, Information Processing Services Office (9/12)A79-66. Admin. Staff. Asst. Director of

Purchasing and Subcontract Administration, Purchasing Office (9/12) A79—67, Admin. Staff, Building Maintenance Manger (Structural), Physical Plant (9/12)

SPONSORED RESEARCH STAFF:

R77-91, Spons, Res. Staff, Sr. Accelerator Physicist, Lab for Nuclear Science (5/18) Physicist, Lao for Nuclear Science (9/18) R77—137, Spons. Res. Staff, Experimental Physicist, Bates Linear Accel. (8/31) R77—228, Spons. Res. Staff, Plasma Physicist, Res. Lab of Electronics (1/4) R78—58, Spons. Res. Staff, National Masnet

Lab (4/12) R78-93, Spons. Res. Staff, Res. Engineer, Civil

R78—93, Spons. Res. Staff, Res. Engineer, Civil Engineering (5/10) R79—102, Spons. Res. Staff, Research As-sociate, Mechanical Engineering (5/30) R78—105, Spons. Res. Staff, Temp., Lab for Nuclear Science (5/31)

R78-117, Spons. Res. Staff, Temp., Economics R78—135, Spons. Res. Staff, Research Lab for Electronics (7/26) R78-136, Spons. Res. Staff, Laboratory for

Computer Science (9/12) R78-145, Spons. Res. Staff, Electronics Engineer, Lab for Computer Science (8/16) R78-168, Spons. Res. Staff, Programmer, Center for Space Research (8/30)

R78—105, Spons. Res. Staff, Physicist, temporary, Laboratory for Nuclear Science (9/5) R78—208, Spons. Res. Staff, Postdoctoral Research, Nuclear Materials, Nuclear Reactor R78-209. Spons. Res. Staff. Postdoctoral Re earch, Nuclear Materials, Nuclear Reactor

K/8—217, Spons. Res. Staff, Research Associate, Civil Engineering (10/18)
R/8—228, Spons. Res. Staff, Research Engineer, temporary, Energy Lab (10/18)
R/8—246, Spons. Res. Staff, Systems Programmer, Lab for Computer Science (11/1)

mer, Lab for Computer Science (11/1) R78—279, Spons. Res. Staff, Electron Microscopy Engineer, Material Science and Engineering (12/13) R78—285, Spons. Res. Staff, Accelerator Physicist, Lab for Nuclear Science (12/13)

R78—286, Spons, Res. Staff, Systems Programmer, Lab for Computer Science (12/13)
R78—306, 307,308 Spons, Res. Staff, Laboratory for Information and Decision Systems (1/10)
R78—311, 312, Spons, Res. Staff, Lab for Com-

puter Science (1/10) Res. Staff. R79-11 Spons Postdoctora

Research, Center for Theoretical Physics (1/17) R79—21, Spons. Res. Staff, Research Scientist, Energy Lab (1/24) -22, Spons. Res. Staff, Lab for Nuclear Science (2/7)

R79—24, Spons. Res. Staff, Research Associate, Heterocyclic Chemist, Chemistry (3/7) R79—27, 28,29, Spons. Res. Staff, Transporta-tion Systems, Center for Transportation Studies

R/9—38, Spons. Res. Staff, Policy Analyst, Energy Laboratory (2/28.) R79—43, Spons. Res. Staff, Laboratory for Nuclear Science (2/16) R79—55, Spons. Res. Staff, Research Scien-

tist/Engineer, Energy Lab (5/2) R79—75, R79—76, Spons. Res. Staff, Research Engineer/Design Engineer, Energy Laboratory

-105, Spons. Res. Staff, Research Associate, Meteorology Dept. (5/2) R79—106, R79—107, Spons. Res. Staff, Experimental Plasma Physicist, National Magnet Laboratory (5/9)

R79-117, Spons. Res. Staff, Research As-ciate, Earth and PlanetaryvSciences (5/16) R79-125, Spons. Res. Staff, Counselor, Upward Bound Program (6/6) R79—129, Spons. Res. Staff, Experimental Plasma Physicist, National Magnet Laboratory

R79-131, Spons. Res. Staff, Electrical Engineer, temporary, Center for Materials Science

leering (6/6) 35, Spons. Res. Staff, Microwave Research Laboratory of Electronics R79-147, Spons. Res. Staff, Research As-

and Engineering (6/6)

sociate, Architecture Dept. (6/27)

R79—150, Spons. Res. Staff, Laboratory for Nuclear Science (7/11) R79—155, Spons. Res. Staff, Laboratory for

Nuclear Science (1/11) R79—155, Spons. Res. Staff, Laboratory for Nuclear Science (7/11) R79—156, Spons. Res. Staff, Project Specialist, Center for Space Research (7/11) R79—157, Spons. Res. Staff, Technical Asst., Chemistry (7/11)

Chemistry (7/11)
R79—160, Spons. Res. Staff, Research
Specialist, Earth & Planetary Sciences (7/11)
R79—170, Spons. Res. Staff, Research
Specialist/Technical Asst., Biomechanics and
Human Rehabilitation Laboratory, Mechanical

ering (8/15) R79-171, Spons. Res. Staff, Research Specialist/Technical Asst., temporary, Mechanical

Engineering (8/15)

Engineering (8/15)
R79—172. Spons. Res. Staff, Research Specialist/Technical Assistant, temporary, Mechanical Engineering (8/15)
R79—176, Spons. Res. Staff, Research Engineer, Electronic, Haystack Observatory (8/15)
R79—177, Spons. Res. Staff, Programmer, Earth & Planetary Sciences (8/15)
R79—179, Spons. Res. Staff, Electric Utility Systems, Programmer/Analyst, Energy Laboratory (8/15)

R79-180, Spons. Res. Staff, Design Engineer,

R79—180, Spons. Res. Staff, Design Engineer, National Magnet Laboratory (8/25)
R79—183, Spons. Res. Staff, Mechanical Design Engineer, National Magnet Laboratory (8/29)
R79—186, Spons. Res. Staff, Research Associate, Earth and Planetary Sciences (8/29)
R79—187, Spons. Res. Staff, Research Dietician, part—time, Clinical Research Center (8/29)
R79—189, Spons. Res. Staff, Tachnical Asst.

part—time, Clinical Research Center (o/23) R79—189, Spons. Res. Staff, Technical Asst., Nutrition and Food Science Dept. (8/29) R79—192, Spons. Res.; Staff, Electronics Engineer, Lab for Nuclear Science (8/29) R79—193, R79—194, Spons. Res. Staff, Postdoctoral Associate, temporary, Laboratory for Nuclear

toral Associate, temporary, Laboratory for Nuclear Science (8/29) R79—196, Spons. Res. Staff, Lab for Computer Science (8/29)

Science (8/29)
R79—201, Spons. Res. Staff, Technical Asst.,
Biology Dept. (8/29)
R79—204, Spons. Res. Staff, temporary,
Research Laboratory of Electronics (8/29)
R79—206, Spons. Res. Staff, Computer Systems
Engineer, Meteorology Dept. (8/29)
R79—207, Spons. Res. Staff, Chemist, Nuclear
Reactor, Let (8/29)

R/9—207, Spons. Res. Staff, Chemist, Nuclear Reactor Lab (8/29) R79—209, Spons. Res. Staff, Center for Space Research (8/29) R79—210, Spons. Res. Staff, Postdoctoral As-sociate, Lab for Nuclear Science (8/29)

sociate, Lao for Nuclear Science (8/29)
R79—211, Spons. Res. Staff, Research Scientist,
Nuclear Engineering (8/29)
R79—212, Spons. Res. Staff, Staff Scientist,
National Magnet Laboratory (9/5)
R79—213, Spons. Res. Staff, Plasma Physics Ex-

R79—213, Spons. Res. Staff, Plasma Physics Experimentalist, Plasma Fusion Center (9/5) R79—215, Spons. Res. Staff, Research Associate, Energy Laboratory (9/5) R79—216, Spons. Res. Staff, Technical Asst., Dept. of Nutrition and Food Science (9/5) R79—219, Spons. Res. Staff, Electrical Engineer, National Magnet Laboratory (9/5) R79—222, Spons. Res. Staff, Technical Writer, Energy Laboratory (9/5) R79—223, Spons. Res. Staff, Center for Transportation Studies, (9/5)

R79-224, Spons. Res. Staff, Programmer, R79—224, Spons. Res. Staff, Programmer, Center for Space Research (9/5) R79—225, Spons. Res. Staff, Research Associate, Materials Science and Engineering (9/5) R79—227, Spons. Res. Staff, Programmer, Meteorology Dept. (9/12) R79—228, Spons. Res. Staff, Research Associate, Division for Study and Research in Education (9/4).

sportation Studies, (9/5)

on (9/12) R79—229, Spons. Res. Staff, Technical Systems

K79—229, Spons. Res. Staff, Lechnical Systems Programmer/Analyst, Energy Laboratory (9/12) R79—332, Spons. Res. Staff, Oil Market Analyst, part—time, Energy Lab (9/19) R79—235, Spons. Res. Staff, Research Specialist, Materials Science and Engineering

ACADEMIC:

C78—17, Acad. Staff, Research Associate (7/12) C79—7, Academic Staff, Associate Director of Libraries (5/9)

C79-15, Academic Staff, Technical Manager, Department of Aeronautics and Astronautics

C79—16, Academic Staff, Postdoctoral Associate, Nutrition and Food Science (7/11) C79—17, Academic Staff, Asst. Librarian, Rotch Library (7/26) C79-20, Academic Staff, Assistant Director, Sloan School, Center for Information Systems

Research (8/29)
C79—21, Academic Staff, Librarian Document

tation Specialist, Rotch Library (9/5) Academic Staff, Radiation Protec-C19—25, Academic Staff, Radiation Protection Office, Medical Dept. (9/5)
C79—24, Academic Staff, Asst. Librarian, Rotch Library (9/12)

EXEMPT: E79-20, Exempt, Shift Supervisor, Physical

R79—24, Exempt, Engineering Asst., National Magnet Laboratory (8/15) E79-25, Exempt, Engineering Asst., National Magnet Lab (8/29)

E79-26, Exempt, Supervisor, Food Service E79-28, Exempt, Asst. Auditor, Audit Division

SUPPORT STAFF.

B79-167, Secretary, Medical Dept. (4/11) B79-179, Sr. Secretary, Material Science and Engineering (4/18)

Engineering (4/18)
B79—185, Secretary, Energy Lab (4/25)
B79—188, Accounting Assistant, Comptrollers
Accounting Office (4/25)
B79—210, Sr. Secretary, Earth & Planetary
Sciences (5/9)

B79-214, Secretary, National Magnet

aboratory(5/9) B79—234, Administrative Assistant, Center for International Studies (5/30) B79—255, Secretary/Receptionist, Graphic Arts

B79-261, Sr. Secretary, Physical Plant (6/6) B79-280, Secretary, Research Laboratory of

B79-293, Sr. Secretary, Sloan School of Management (8/291)

Management (8/291)
B79-303, Sr. Secretary, MIT Press (6/27)
B79-306, Sr. Secretary, Humanities
Dept./Center for Materials Research in Archaeology and Ethnology (9/5) B79—320, Secretary, Electrical Engineering and

Computer Science (7/11) B79-321, Sr. Secretary, Mechanical Engineering (7/11) B79—331, Secretary, Laboratory for Information

and Decision Systems (7/11) B79—350, Sr. Secretary, Treasurers Office (7/25) B79—357, Sr. Secretary, Physical Plant (7/25) B79—364, Sr. Secretary, Mechanical Engineer-

B79-368, Sr. Secretary, Physical Plant (7/25) B79-373, Sr. Office Asst., Artificial Intelligence Laboratory (7/25)

B79—387, Project Documentor, Information
Processing Systems Office (9/5)

B79—391, Library Asst., part—time, Center for

Policy Alternatives (8/15) B79-395, Sr. Secretary, Nuclear Engineering Dept. (8/15)

B79—409, Admin. Secretary, Nuclear Engineering Dept. (8/29)

ing Dept. (8/29)
B79-413, Secretary, Military Science (8/29)
B79-417, Secretary, Center for Theoretical
Physics/Physics Dept. (8/29)
B79-421, Office Asst., Registrars Office (8/29)
B79-423, Office Asst., Comptroller's Accounting Office (8/29)

B798426, Sr. Secretary, MIT Press (8/29) B79—428, Secretary, Patent and Copyright Ofce (8/29)
B79-436, Reactor Operator, Nuclear Reactor

Lab (8/29)

B79-448, Sr. Secretary, Chemical Engineering Dept. (8/29) B79—456, Sr. Secretary, Medical Dept.,'s Social

Work Service (8/29)
B79-462, Sr. Secretary, part—time,
Humanities Dept. (8/29)
B79-463, Sr. Secretary, Sloan School of

Management/Systems Dynamics Group (8/29) B79-466, Admin. Asst., Earth and Planetary Sciences Dept. (8/29) B79-469, Sr. Secretary, School of Humanities

(8/29)
B79—472, Secretary, Student Assistance Services, Dean of Student Affairs (8/29)
Library Asst., part—time, Rotch B79-474, Library Asst., part-time, Rotch

B79—479, Office Asst., Medical Dept. (9/5) B79—481, Office Asst., Admissions Office (9/5) B79—488, B79—489, Secretary, Chemical Engineering Dept. (9/5) B79-494, Sr. Office Asst., Treasurer's Office

Library (9/5)

(9/5)B79-496, Sr. Secretary, Office of Minority Education (9/12)

B79-498, B79-499, Sr. Secretary, Technical, B19-390, B19-393, 57. Secretary, Technical, Energy Laboratory (9/5) B79-500, Admin. Asst., Energy Laboratory (9/5) B79-501, Sr. Secretary, Technical, Mathematics Dept. (9/5) B79-503, Admin. Asst., Meteorology Dept.

B79-505, Sr. Secretary, Mechanical Engineer

ing (9/5)
B79—508, Sr. Secretary, Admissions Office (9/5)
B79—511, Library Asst., Libraries Catalogue Dept. (9/5) B79—516, Secretary, temporary, Career Planning and Placement. (9/5)

B79-518, Sr. Secretary, Admissions Office (9/5) B79-519, Sr. Secretary, Editorial, MIT Press (9/5)

B79-530, Secretary, Sloan School of Manage ment (9/12) B79-531, Secretary, part-time, Sloan School

of Management (9/12)

of Management (9/12) B79-535, B79-538, Technical Asst., part— time, Psychology Dept. (9/12) B79-536, Sr. Secretary, Purchasing and Stores

Dept. (9/12)

Dept. (9/12)

B79-537, Secretary, Technical, National

Magnet Laboratory (9/12)

Corretary Personnel Dept./Benefits B79—542, Secretary, Personnel Dept./Benefits Section (9/12)

B79-544, Sr. Secretary, Office of the Dean for School fo Science (9/19)

B79-548, Clerical Asst., part-time, Medical

B79—548, Clerical Asst., part—time, Medical Dept. (9/12)
B79—552, Secretary, National Magnet Laboratory (9/12)
B79—554, Sr. Secretary, Technical (word processing), School of Engineering (9/12)
B79—555, Sr. Secretary, Educational Video Resources (9/12)
B79—556, Admin. Secretary, Editorial, Dept. of Nutrition and Food Science (9/12)
B79—558, Sr. Secretary, Nutrition and Food Science (9/19)

Science (9/19) B79—559, 1 B79—559, Library Asst., part—time, Barker Engineering Library (9/19) B79—564, B79—565, Secretary, Ocian Engineer-

B79-563, Office Asst., Information Processing Services (9/19) B79—567, Secretary, part—time, President's Office (9/19)

SERVICE STAFF:

ing (9/19)

H78-106, Service Staff, Sr. Technician Electronic), National Magnet Lab (8/16) H78-184, Service Staff, Technician A, Lab for

Nuclear Science (12/6) H79-33, Service Staff, Technician A (Electronic), Chemistry (4/11) H79-85, Service Staff, Counter Person, Food Service (6/27) H79-96, Service Staff, Cook, Endicott House

(7/11)

(7/11)
H79—115, Service Staff, Technician B (Electronic), Laboratory of Nuclear Science (9/5)
H79—118, Service Staff, Technician B (Electronic), Architecture Dept. (9/5)
H79—122, Service Staff, Sr. Stock Clerk, Research Laboratory of Electronics (9/5)
H79—123, Service Staff, Technician B, Materials Science and Engineering (9/12)
H79—126, Service Staff, Technician A, National Magnet Lab (9/19)
H79—129, Service Staff, Machinist A, Nuclear

H79-129, Service Staff, Machinist A. Nuclear

H79—129, Service Staff, Machinist A, Nuclear Reactor Laboratory (8/29) H79—139, Service Staff, Lab. Asst., National Magnet Laboratory (9/19) H79—134, Service Staff, Technician A (EM), Chemistry Dept. (9/5) H79—137. Service Staff, Swimming Pool Atten-

dent, Physical Plant Dept. (9/12)

B79-408

B79-219

B79-432

B79-551

B79 486

B79-550

B79-253

B79-566

B79-451

B79-492

Sr. Secretary

The following positions have been FILLED since the last issue of  $Tech\ Talk$ : Office Asst. B79-520 B79-522 Sr. Secretary (canceled)

B79—490 H79—127 Secretary Service Staff B79—528 B79—526 Admin. Secretary Admin. Secretary Admin. Secretary Admin. Secretary Accounting Asst. B79-504 B79-581 Secretary B79-414 Secretary Sr. Staff Asst B79-527 Sr. Secretary Spons. Res. Staff Clerical Asst. B79-464 R79—237 B79—506 H79—115 Service Staff Office Asst. B79-465 B79-453 Secretary B79-507 Clerical Asst B79-355 Sr. Secretary Library Asst. Spons. Res. Staff B79-510 R79-10 Office Asst. Clerical Asst B79-343 Keypunch Operator Office Asst. Admin. Secretary B79-432 Secretary B79-265 Secretary Office Asst. Secretary

Sr. Secretary

Sr. Secretary

Library Asst.

Sr. Secretary Spons. Res. Staff Sr. Office Asst. Office Asst.

Secretary

Secretary

Clerical Asst Sr. Secretary Sr. Secretary

Secretary Secretary Library Asst. Jr. Programmer

The following positions are on HOLD pending

further decision: Receptionist R79-182 Spons. Res. Staff Admin. Staff Library Asst. Spons. Res. Staff H79—145 Service Staff A79-36 B79-485 R79—221 H79—140

Tech Talk, September 26, 1979, Page 7

IAP '80 To Feature Energy

(Continued from page 1)

that the crisis will be more acute than ever before this January. Because MIT represents an amazing consolidation of expertise on the subject, it seems appropriate to use IAP to let everyone within the MIT community have access to this expertise and to encourage dialogue that will improve the general understanding of the problem and what can be done about it.'

He added that in keeping with the spirit of IAP this exchange of information should also include practical, nonacademic topics such as wood stoves, thermal window shades, or winter bicycle

"It is clear that knowledge about conservation is becoming of increasing value as the payback time becomes shorter and short-Professor Flowers said. "Nearly everyone knows someone who knows ways to save energy that are not related to their MIT functions. We should help each other learn to cope with the changes in our lifestyles."

Luncheon meetings this week for IAP coordinators for departments, centers and laboratories formally mark the beginning of organizing for IAP '80. At the meetings, Professor Flowers is asking coordinators to make special efforts to locate people who can help others understand or adapt to the energy crisis. For example, he suggested that people in his own department who are experts on human comfort might volunteer to meet with people who knit sweaters or make clothes, or that futurists from different disciplines might get together to predict what life will be like in 1990.

Several groups of faculty are already discussing major offerings on energy issues. Albert G. Hill, professor of physics emeritus, and Jerrold R. Zacharias, Institute Professor Emeritus, have assembled a group of technologists, economists, writers and media

people to address the issue, "Energy-What Is the Problem?" and they have offered to give a seminar or symposium on that topic during IAP.

In convening the group this summer, Professors Hill and Zacharias observed, "Ever since the Arab oil embargo of 1973, Americans have been drenched in information about energy-some of it correct but not easily trusted, some of it seemingly trustworthy but incorrect, and all of it complex, piecemeal, confusing and in no way complete. No agency, no foundation, no university, and none of the media have prepared a firstclass, generally understandable presentation to enable the various branches of the government, the voting public, the consumers and the producers of energy to see a possible coherent program and to argue about it sensibly.

Therefore, the group has taken as its primary purpose "to acquaint interested members of the community with the overwhelming magnitude of the problem, with our own doubts, concerns and personal disagreements; and, with the grace of good fortune, to arrive mutually at a point where we are better able to cope with the flood of information, most of which is, at best, misleading.'

The Energy Laboratory will also offer a larger program this IAP, according to David C. White, Director of the Laboratory and Ford-Professor of Engineering, who said that researchers in the Energy Lab could discuss many topics, including: coal utilization, coal combustion and the health effects of emissions, auto transportation and emissions, the impact of rising energy prices on the macroeconomy, and selected topics on the emerging technologies and probable costs of energy derived from both renewable and non-renewable resources.

Professor White said he was going to propose that key members of the laboratory meet with interested undergraduates to arrange opportunities for them to work on research projects over IAP. In addition, he said he would like to see more philosophical discussions of the energy problem.

"Everyone has a definition of what the energy problem is," he said. "Mine is that our society is undergoing a painful adjustment to changing energy resources with costs increasing in real terms. This leads to a need to change the inplace capital stock of an industrialized society built on a base of cheap resources to one based on more expensive, hard-to-extract resources including those which are renewable."

"One result is the ongoing debate on the optimal rate at which the conversion should occur and what policy instruments should be used to aid the change." Discussion in this vein is going on "in every government in the world," according to Professor White, and he would like to see "thoughtful presentations of these issues" during IAP.

To facilitate scheduling and publicity for these and other energy activities, the IAP Policy Committee and the IAP Administrative Committee have instituted a few special procedures for IAP '80. Elizabeth C. Bradley, administrative assistant in the Schedules Office, will keep a master schedule of energy activities to help prevent conflicts. Energy-related activities will also be designated in the IAP Guides with a special "energygauge" logo and will be listed in an IAP Energy Calendar.

Professor Flowers sees the emphasis on energy as adding a new dimension to IAP, but he stressed that it is not a change in the basic concept of IAP-people are still free to organize and participate in activities on any topics they wish.



Customers mingled with the sculpture in Hayden Courtyard last week at the Libraries' first outdoor book sale. Proceeds from the very successful event will be used for acquisition of library materials. -Photo by Calvin Campbell

## Wilson Article Explores **Human-Powered Transport**

bicycles when they live in a country where more than half the trips people take are less than five

David Gordon Wilson, professor of mechanical engineering at MIT, offers some answers to that question in an article on the future of human-powered transportation in the United States in the October issue of Technology Review, the national jornal of technology and

Although Professor Wilson favors his semi-recumbent bicycle over the traditional design, he finds today's multi-speed bicycle 'a miracle of lightness, efficiency and convenience." But its popularity has been kept low by several

The competition. The auto of-

heavily subsidized, making the "perceived cost of automobile travel erroneously low. Real costs are enormous.'

-Hostile highways. Originally paved in response to the lobbying of bicyclists in the 1890s, highways now offer little assistance to human-powered vehicles. Trash, drain covers and deep sand are strewn at the extreme right of the Opening doors of parked cars are

Professor Wilson does not advocate separate bicycle paths because they are "too expensive for urban areas, never wide enough, and usually shared by

"The best answer...is a half lane to the right of the automobile travel lanes on regular roads. In many places such a half lane can be provided at little cost by reducing existing extra-wide lanes to a narrower standard width."

In what he calls an Englishman's 'nostalgic look back," Professor Wilson recalls in Technology Review the town of Loughborough in Leicestershire where he did a two-year postgraduate apprena manufactur after being graduated from Birmingham University in 1948.

"I often think back to the pattern of life in that town, a pattern largely shaped by the available transportation, and wonder if my reveries provide a vision of the future, or whether in fact I am istence through rose-colored, retrospective glasses. Judge for

"The town's population was

"The firm employed about 5,000 people, and had a parking lot, never full, for about 20 cars. There were, however, well-patronized covered racks for 2,000 bicycles and shelters for about 10 motorcycles. The remainder of the work force came either by bus or

"Travel was unrushed and con-

## Why don't more Americans ride yourself.

27,000...I was five to six minutes away from work by bicycle. The plant was confined on the far side of town by a railroad embankment, beyond which were green meadows...I used to eat my lunch sandwiches in a meadow while gently fighting off the loving attention of a group of friendly calves.

venient. A modest traffic jam formed at quitting time and lasted perhaps for five to ten minutes, but never remember being held up for more than a minute or so... remember one of the most pleasant features of so much walking and bicycle transportation was that one was constantly calling out or waving greetings to friends. This is surely a vital part of the human condition, which the automobile has removed from our lives and replaced with the potential for hostility towards other depersonalized beings encased in their own metallic mammoths...

"New designs and supportive enthusiasm for human-powered transportation could restore a missing and very necessary human component to life in the US.," Professor Wilson concludes.

miles long?

society edited at MIT.

factors, he says. These include:

fers versatility, robustness, speed and comfort, he says.

-Economics. Auto travel is

road, where bicyclists must travel. another hazard.

pedestrians and parked trucks.

remembering an idealized ex-

**Obituaries** 

Robert O. Brown, a police sergeant at the Campus Patrol from 1962 until his retirement in 1976, died following a heart attack on September 19. He was 62.

Robert O. Brown

Born in Roxbury, Mr. Brown has lived in Lynn for 57 years. He was graduated from Lynn English High School in 1939, and was a veteran of World War II and the Korean con-

In addition, Mr. Brown worked with underpriviledged youths in the Cambridge area. He was the past president of Community Brotherhood of Lynn, and former member of Masons Prince Hall, Boston; the Army Reserves and St. Albans Episcopal Church, Lynn.

He leaves his wife, Charlotte (Krause); a son, Robert J. Brown of Hillcrest Heights, Md.; a daughter, Charlotte Brown of Lynn; two brothers, William Brown of Norristown, Pa. and E. Carlton Brown of Lynn; and two sisters, Althea Flamer and Phyllis Hector, both of Lynn.

#### Mary Finlay

Word has been received that Mary Finlay, 89, of Newton, a clerk in the Research Fiscal Office from 1942 until her retirement in 1955, died July 10.

## Kresge Closed for Roof Repairs to live without Kresge for the

Because the full extent of the damage is not yet known, Ammann and Whitney recommended closing the building until further studies are completed and necessary repairs made. A full assessment has not yet been completed on the western abutment and no field investigation has been done on the front two abutments.

Kresge's roof has always posed problems because of its unique construction. As Mr. Dickson said at Monday's meeting, "The roof is the building."

The roof is one-eighth of a sphere with the major part of the load supported at the three abutments.

Basis of the roof is a concrete shell, 3½ inches thick—relatively thinner than the shell of an egg. On top of the shell are an asphalt fabric, two inches of rigid fiberglass, a felt membrane, a twoinch layer of cinder concrete and the 1/8-inch-thick lead sheets.

The lead cover was installed in 1963 when an earlier lightweight concrete and acrylic cap proved too fragile to stand up to New England temperature and weather conditions. Movement of the lead skin, however, has permitted water seepage into the underlying insulation.

At Monday's meeting, Mr. Dickson outlined the steps that are now being carried out to correct the present problems with Kresge.

Already in place, as of Monday, he said, are monitors that will record movements in the structural shell on a day-to-day basis.

Next will come installation of shoring posts in the three window arches to provide additional temporary support to the roof. Once the posts are in place, unloading of the roof will begin, Mr. Dickson said.

It is essential during the unloading process that the loads on the three buttresses remain in balance while the lead skin and the underlying materials are removed. As this is accomplished, a temporary waterproof membrane will be applied to the original shell to protect it against the winter weather.

After the roof has been unloaded down to the shell, work on repairing the abutments will be done, when they are carrying the least load possible. Finally, a new roofing system will be installed.

Meanwhile, it seems apparent that the MIT community will have

At Monday's meeting of the user's group, there was an atmosphere of cooperation, but also concern as to how the campus will function for the year without its major public arena. Over the next ten days, persons responsible for scheduling major campus events will be working very hard to find suitable campus alternatives for previously scheduled events. Once that is completed, they will go to

whole coming year, as opposed to

most of the second term, as was

work on the even harder task of finding regular meeting/rehearsal space for dozens of MIT performing groups.

expected.

## Canadian Leader To Address **Alumni Officers Conference**

(Continued from page 1) of MIT alumni to speak out on public issues.

Mr. MacEachen, a member of the MIT Corporation and of the Class of 1953, will discuss the importance of technological development in a democratic society.

A native of Inverness, Nova Scotia, Mr. MacEachen, 58, has been a professor of economics at St. Francis Xavier University and was head of the Department of Social Sciences there from 1948-51. He was a member of Parliament for Inverness-Richmond from 1953-57 and again from 1962-68. He has represented Cape Breton Highlands-Canso in Parliament since 1968. He has also served Canada as minister of labor, minister of national health and welfare, and minister of man-

power and immigration. Later in the day, starting at 2:30pm, three MIT professors will brief the alumni on the latest developments in elementary particle

physics, biomedical engineering

and China policy.

The professors, who will speak in Rm 10-250, are:

Francis E. Low, Karl Taylor Compton Professor of Physics and director of the Laboratory for Nuclear Science. He will discuss "Elementary Particles," an area in which his research and teaching have won him international recognition.

Edward W. Merrill, Carbon P. Dubbs Professor of Chemical Engineering, who will discuss "Biomedical Engineering Reconsidered." Professor Merrill is a leader in the application of chemical engineering to medicine.

Lucian W. Pye, Ford International Professor of Political Science, whose subject will be "Policy Problems of China's Leaders." Professor Pye, vice president of the National Committee on US-China Relations, is one of the nation's leading authorities on the politics of Asian countries, particularly the Peoples' Republic

#### Kindergarten **Openings**

The Technology Children's Center kindergarten-extended day program, now in it second year, has two openings for children of appropriate age. The program operates 8am -5:30 daily, September through June, and emphasizes the total development of the individual child.

For information, call x3-5907 or x3-1592, or visit the Child Care Office, Rm 4-144, or the Center at Eastgate.