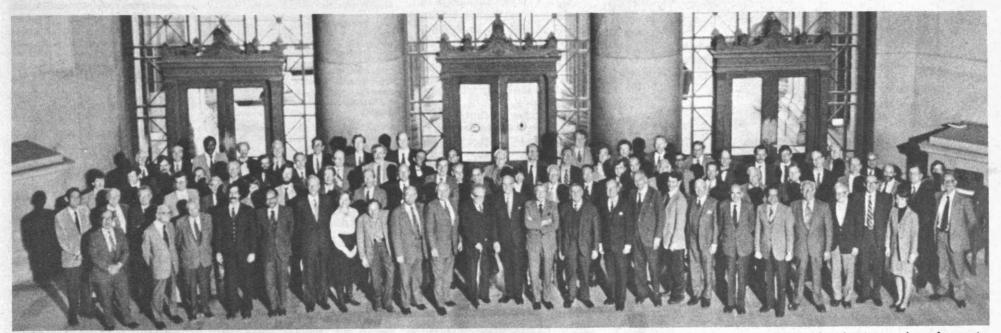




April 23, 1980 Volume 24 Number 33



MANY OF MIT'S DISTINGUISHED PROFESSORS who hold endowed chairs or appointments as Institute Professor, a rank MIT reserves for scholars of special eminence, gathered in the lobby of the Institute's main entrance for this photograph to mark successful completion of the Institute's fiveyear \$250 million Leadership Campaign. The ranks of endowed professorships at MIT have thus far been increased to a total of 108 through gifts to the Leadership Campaign. All told, the Campaign was responsible for the creation of 44 new endowed professorships and career development professorships and even though the Campaign period has come to an end the Institute hopes to receive endowments for several more chairs over the next several months. The congregation of endowed professors for the commemorative picture includes many who are among the most famous in the world in their respective fields.

-Photo by Calvin Campbell and Bill MacRoberts

MIT Leadership Campaign Reaches Record Conclusion with \$250.2 Million Raised

MIT brought its five-year Leadership Campaign for private gifts and grants to a successful conclusion on time and with contributions totalling \$250.2 million, well beyond the goal the Institute set for itself when the Campaign began in 1975.

The amount is the third largest ever raised by a college or university in a single campaign. The original goal for the MIT Campaign was \$225 million and that was reached six months ago.

Howard W. Johnson, Chairman of the MIT Corporation, the Institute's governing body, and chairman of the Leadership Campaign, said the Campaign received gifts and grants—large and small from more than 32,000 donors—alumni, friends, foundations and industrial organizations. Campaign success—on time and oversubscribed—testifies, Mr. Johnson said, "to the unrivaled generosity of the Institute's many benefactors."

Mr. Johnson, MIT President Jerome B. Wiesner and MIT Chancellor Paul E. Gray formally announced successful conclusion of the Leadership Campaign at a meeting of the MIT Alumni Council Tuesday night, April 22, in Walker Memorial. It was before this same Alumni Council on April 23, 1975, that they launched the Campaign to marshal new private resources to sustain MIT's position of leadership in science, technology and higher education in the coming decades. As they did five years ago in launching the Campaign, Mr. Johnson, President Wiesner and Chancellor Gray were to begin Wednesday (April 23) a series of meetings with alumni and friends in six major cities across the nation to bring them detailed news of the Institute's success that their help has made possible. They will meet with alumni at a dinner meeting at the Waldorf Astoria Hotel in New York City Wednesday evening, at the Philadelphia Club in Philadelphia Thursday evening, April 24, at the Chicago Club in Chicago Tuesday evening, April 29, at the Dallas Petroleum Club in Dallas Monday evening, May 5, at the Pacific Union Club in San Francisco Tuesday evening, May 6, and at a luncheon meeting for Los Angeles area alumni at the Beverly Wilshire Hotel, Beverly Hills, Calif., Wednesday, May 7.

The final total realized by the Campaign includes \$68.1 million in new endowment, \$60.7 million for facilities, and \$121.4 million for new programs and for current use.

The gifts included \$93.1 million contributed by individuals, \$80.8 million from foundations and \$74.7 million from corporations. Almost three-quarters of the gifts have already been received while the balance is in pledge form. Counted in the totals were all gifts and grants received by the Institute from private sources during the five-year Campaign period plus a nucleus fund that helped launch the drive.

Campaign donors included 55 who made gifts totalling \$1 million or more, including six whose gifts were in excess of \$5 million. Altogether, the Institute received 347 gifts of \$100,000 or more from individuals, foundations and corporations.

In their Alumni Council announcement, the three MIT officers paid special tribute to the services of six leaders who served as co-chairmen of the Campaign and whose stewardship, Mr. Johnson said, set a special example for MIT. The six are: Robert C. Gunness, Class of 1934, retired president of Standard Oil Co. of Indiana, Chicago; Paul F. Hellmuth, a leading Boston attorney; J. Kenneth Jamieson, Class of 1931, retired chairman of EXXON Corp., New York City; William Beverly Murphy, of Haverford, Pa., retired president of the Campbell Soup Co.; John S. Reed, Class of 1961, senior executive vice president of Citicorp, New York City; Edward O. Vetter, Class of 1942, former executive vice president of Texas Instruments, Inc., Dallas, and a former president of the Institute's Alumni Association.

Mr. Johnson drew special attention to the roles played by President Wiesner and Chancellor Gray. During the second half of the Campaign, President Wiesner concentrated much of his efforts on the Campaign goals, while Chancellor Gray assumed the major responsibility for the administration of the Institute.

Also speaking at the Alumni Council meeting in Cambridge was D. Reid Weedon, Jr., Class of 1941, senior vice president of Arthur D. Little, Inc., Cambridge, and a former president of the MIT Alumni Association who served as Greater Boston Area chairman for the Campaign and whose successes and support drew special tribute from Mr. Johnson.

Others singled out for special recognition were members of the MIT Corporation, the 184 members of the Corporation Development Committee composed of alumni and friends throughout the world, the several hundred alumni who made up the Campaign's Volunteer Leadership Appeal organization, and the MIT National Business Committee, headed by Richard L. Terrell, retired vice chairman of General Motors Corp., Detroit.

Expressions of gratitude also were extended to members of the Institute's Resource Development staff headed by Dr. Samuel A. Goldblith and to the MIT Alumni Association whose current president is Claude W. Brenner, Class of 1947.

Chairman Johnson, President Wiesner and Chancellor Gray reserved warm praise and appreciation for James Rhyne Killian, Jr., retired President and Chairman of the Corporation and for Professor Walter A. Rosenblith, Provost of the Institute. Dr. Killian was Chairman of the Corporation when the Corporation conducted MIT's last capital gifts campaign, the Second Century Fund in 1961-63 which was headed by John J. Wilson, Class of 1929, Member of the Corporation and longtime Secre-

40,000 Necco Wafers May Day Celebration in Killian Court

Dividend Rises

The dividend rate of the MIT Employees Federal Credit Union has been increased from six to seven per cent, effective April 1, CU President Nancy Urquhart has announced.

She said the CU board of directors authorized the higher rate as a means of encouraging new accounts and stimulating savings. The rate is higher than those paid on regular bank savings accounts and the Credit Union offers the convenience of payroll deduction and easy withdrawal. More than 40,000 candy Necco Wafers and 144 pastel-painted rubber tires will be used to create an edible "Necco Garden" as part of a May Day Celebration in Killian Court on Thursday, May 1 (rain date May 2).

The free, public festivities are scheduled to begin at noon, with the opening of the "Necco Garden;" the garden will become edible at 3pm.

As part of the celebration, MIT will hold dedication ceremonies at 2pm for a new addition to the Institute's outdoor collection. Michael Heizer's "Guennette," a 46-ton granite sculpture on extended loan from the Metropolitan Museum of Art, is being installed in Killian Court.

Sponsored by the MIT Committee on the Visual Arts, the May Day events will commemorate the beginning of spring as well as the 350th birthdays of Cambridge and Boston. Some 3,200 lemon-yellow Neccos will be used to spell out the number 350 in the garden.

Martha Schwartz, a landscape architect/artist, and Peter Walker, Chairman of the Landscape Architecture Department at Harvard University's Graduate School of Design, designed the "Necco Garden" to reflect the grandeur and formality of the Killian Court.

A team of surveyors from the firm Harry R. Feldman, Inc., will contribute their services by surveying the Killian Court area and by laying out a grid pattern on the grass. Before a group of MIT and Harvard students begin constructing the garden, the surveyors will set the four corners of the 120'X200' grid to insure that its lines are parallel with the surrounding architecture.

The use of a double-grid pattern will give the garden a resemblance to the design of French classical gardens. It will echo the Beaux Arts tradition employed by Welles Bosworth, the architect who designed the main campus. The materials used in the "Necco Garden" are intended to evoke memorles of the simple pleasures of childhood that accompany the first signs of spring. The shapes of the many-flavored Necco candies and corresponding colored tires will be in sympathy with the rose-colored circles and disc segments of Michael Heizer's "Guennette."

Necco Wafers are being donated by the New England Confectionary Company, courtesy of Mr. Domenic Antonellis, President.

Also planned for the May Day Celebration in Killian Court will be an Ultimate Frisbee Tournament, organized by the International Ultimate Frisbee Champion, David Johnson, with the assistance of the MIT Frisbee Club. Popsicles will be served. The public is invited to attend MIT's May Day and to share in the excitement. (Continued on page 8)

Galbraith To Speak

Economist John Kenneth Galbraith of Harvard will discuss the economic effects of the arms race at 7:30pm, Thursday, April 24 in Rm 10-250.

Dr. Galbraith's lecture is cosponsored by the Technology and Culture Seminar and the MIT Disarmament Study Group.



From "Centersheet," an installation and multi-media event by CAVS Fellow Mira Cantor, open to the public at CAVS (40 Mass. Ave.) April 28-May 16.

Centersheet To Open At CAVS

Mira Cantor, artist and fellow at the MIT Center for Advanced Visual Studies, will present "Centersheet", an installation and multi-media event, Monday-Friday, 9am-5pm, April 28 through May 16. The installation will feature 30

soft, life-size, figurative sculptures, stuffed with polyester wadding, painted in oil and wrapped in white sheets, wearing hats and shoes that represent various types of people and hung

Echoes

April 20-April 26, 1980

50 Years Ago

A new planet has been discovered. Its existence has long been suspected and was mathematically predicted in 1914 by the late Dr. Percival Lowell who founded the observatory in Flagstaff, Arizona, where the new planet was sighted. This is the third planet to be discovered in the past 250 years: Uranus in 1781 by Sir William Herschel, and Neptune by Leverrier and Admas in 1846. The ancients had known of six of the planets. Astronomers estimate that the new planet is 45 times as far from Earth as Earth is from the sun, and have determined that it is at least as large as Earth.

40 Years Ago

After many years of experiment, the Chemical Engineering Department is opening the new solar energy house to the public during MIT Open House next week. It has been in operation for only one week. The building is an attempt to harness the unlimited energy generated by the sun and convert it into heat for practical application. The success of the project opens up the possibility of heating buildings without using fuels such as coal, fuel oil or electricity.

from the ceiling to simulate heaven in a baroque-like configuration.

Juxtaposed with the scuptures will be five television monitors that will show videotapes depicting images of the "real world". Video artists inlcude CAVS fellows Ellen Kozak, Mandi McIntyre and Aldo Tambellini; MIT graduate stu-dents Vin Grabill, Any Inge, and Ken Kantor; and Skip Tenszar, coordinator of the MIT Cable Television System. Lighting for the installation will be directed by CAVS fellow Nishan Bichajian. A poem, "Skin," by Elizabeth Gold-ring, also a CAVS fellow, will be printed on a floor-sheet.

The public is invited to an Open House on Saturday, May 3, noon to 5pm, and to an "event" on Friday, May 16, at 8pm. Admission to the "event" will cost \$1.50 at the door. Those wishing to attend will be required to participate by donning a white sheet and creating a character image with a hat and/or mask and foot attire.

The "event" will include a performance of a choreographed dance by Glenda Medeiros, instructor at the Institute of Contemporary Dance in Cambridge; a laser projection in the image of a bird, with music, by Paul Earls, composer, laser artist and CAVS fellow; and atmospheric "fog" intended to provide a "heavenly" environment by Joan Brigham, environmental sculptor and CAVS fellow.

This project is made possible, in part, with the assistance of the Massachusetts General Hospital, which has donatated some 125 white sheets for the installation's soft sculptures

Toni Morrison To Read Here

Toni Morrison, nationally-acclaimed novelist, editor, and teacher of literature, will give a public reading of her work on Tuesday, April 29, at 7: 30pm in 10-250.

Ms. Morrison will come to MIT as guest of the Writing Program and the Literature Section of the Humanities Department. The MIT community is invited to meet Ms. Morrison, at a reception following the reading, in 14E-304.

Song of Solomon, published in 1977, won the National Book Critics Circle Award as well as the Friends of American Writers Award. Of Toni Morrison's achievement in Song of Solomon, Reynolds Price has said, "Few Americans know and can say more than she has in this wise and spacious novel."

The Bluest Eye, her first novel, was published in 1969. Her second, Sula, appeared in 1974. All of Ms. Morrison's novels have been written while she has held the position of senior editor for Random House in New York.



Announcements

Correction Cards**-must have all necessary signatures to be accepted. To avoid having to petition CAP for approval to make late change, get all signatures well before deadlines. If your advisor is unavailable, contact your undergraduate office or department headquarters. Freshmen contact the Undergraduate Aca-demic Support Office, Rm 7-103.

Student Loan Exit Interview**-Notices will be mailed to June degree candidates with loans administered by MIT. Exit interviews, mandated by HEW Office of Education, are required to maintain good standing on the degree list. Select appointment date and return completed form to E19-225 as soon as possible. Info: x3-4087.

Student Accounts**-Beginning with Summer Session the charge for use of Deferred Pay-ment Plan will be \$30. Charge for each late payment will also be \$30.

Registration material for 1980 Summer Session will be available Wednesday, April 23, at Registrar's Office, E19-335. Registration forms must be filled in and returned to the Registrat's Office by Friday, May 2.

Talbot House in Vermont**-Space is available for weekends of May 9-11 and May 30-June 1. The weekdays are also available. Info and applications: Preprofessional Ad-vising Office, 10-186, x3-4158. Nightline**—Call or drop in 7pm-7am, x3-7840, Campus Room, next to Ashdown.

Club Notes

Appropriate Technology Group⁶—Weekly meetings to discuss group activities and philosophies, Tuesdays, 12:30pm, Rm 50-302.

MIT/DL Bridge Club**-ACBL Duplicate Bridge, Tuesdays, 6pm, W20-473. Info: Arthur, x8-1414 Draper.

MIT Chinese Martial Arts (Kung-fu) Club-Wutang^{*}-Learn physical and mental discipline through practice of Chinese martial arts, Kung-fu. Combat and art approach emphasized. Praying Mantis and Tai-chi both offered. Mondays, 7-9pm; Saturdays, 11am-2pm; Student Center, 407, 491, or Sala. Beginners welcome. Info: Chen-dao Lin, d15-9640, 494-8447.

MIT Duplicate Bridge Club*—Thursdays, 7pm, W20-473. All bridge players invited. Come early if you need a partner. Admission, 25c. Info: Mark Baker, d15-7293.

MIT Chess Club*-Election of next year's officers and discussion of future policies. Saturday, April 26, 1pm, Student Center Mezzanine Lounge. Refreshments. Info: Brad, 536-9596.

MIT Folk Dance Club*-International Folk Dancing, Sundays, 7:30-11pm, Sala de Puerto Rico. Advanced Balkan, Square, and Western European Dancing, Tuesdays, 7:30-11pm, Rm W20-491. Israeli Folk Dancing, Wednesdays, 7:30-11pm, Sala de Puerto Rico. 25c donation. Info: d15-9185.

MIT Go Club*-Meets Mondays, 8pm, Rm 4-149. Instruction for novices and beginners. Players of all ranks.

Hobby Shop**-Complete facilities for woodworking, metalworking, and darkroom. Mon-Fri, 10am-6pm, Wed, 10am-9pm, W31-031. Fees, \$10/term students, \$15/term, community. Info: x3-4343.

MIT Nautical Association***-Instruction in beginning sailing, "The Shore School," three sessions: classroom, rigging, on the water. Mondays and Thursdays, 5:15pm. Info: x3-4884. Informal noontime sailing races every Tuesday and Thursday.

MIT Outing Club*-Office open for talk and equipment rental, Mondays and Thursdays, 5-6pm, W20-461.

MIT Radio Society*-Spring election meeting and talks on amateur satellite operations, and ASCII, Thursday, April 17, 9pm, Rm 4-270.

MIT Rocket Society*-Meetings for club business and launch information first Tuesday of each month, 7pm, International Student Lounge, Rm 50-220.

MIT Tae Kwon-Do Club**-Korean martial art, mainly for physical fitness and self-de-fense. Wednesdays, 7-9pm, and Saturdays, 12:30-2pm,duPont Dancing Studio. Info: Chung Sun Kang, d15-9272.

MIT Tiddlywinks Association*--Club meetings Wednesdays, 8pm, usually West Lounge, Stu-dent Center, otherwise Rm W20-407; Satur-days, 1pm, Student Center fourth floor (usually W20-407). Beginners welcome and wanted.

MIT Table Tennis Club*-Team practice, Saturdays, 2-5pm, T-Club Lounge. Club meet-ings, Mondays, 8-10pm, T-Club Lounge.

Religious Activities

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

MIT Catholic Community*-Sunday Masses: 9am, 12noon, 5pm, MIT Chapel. Weekday Masses: Tuesdays and Thursdays, 5:05pm; Fridays, 12:05pm, 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.

CABLE TELEVISION SCHEDULE April 23-April 29

WEDNESDAY, APRIL 23

Channel 8: "ELECTRONICS IMAGES-9:30-9:45am Presented by CAVS Fellow Mit Mitropoulos

9-10pm 18.03 RECITATION-Live from Room 2-102. Students may attend or phone in their questions.

Channel 12: 12-1:40pm THE LADY VANISHES-See

Wednesday 12pm. 1:40-2pm FIRE UNDER THE SEA: THE

1:40-2pm FIRE ONDER THE SEA. THE ORIGIN OF PILLOW LAVA.
2:3pm M.I. TRIVIA—"How to be First." See Wednesday 2pm.
3:4pm COMMUNICATION AND THE ARTS
—"MIT at MIT 2.1." Environmental Psychology and Environmental Art. Mit Mitro-

Jewish Religious Services⁶-Orthodox: Fridays, Sundown, Kosher Kitchen, (50-005); Saturdays, 9am, Bush Rm (10-105); daily, Saturdays, Jain, Joseph and Goldan, Saturdays, 9:30am, 312 Memorial Dr., basement. Reform: Fridays, 5pm, 312 Memorial Dr., basement.

Lutheran-Episcopal Ministry*-Interdenominational service of Holy Communion, Wednesdays, 5:10pm, MIT Chapel.

Bible Study at Lincoln Laboratory*—Tuesdays and Thursdays, 12 noon in M Trailers, M-3-6. Fridays 7:30-8:30am, L-217. Info: A. Lescard, x181-262, E. Bayliss, x8289.

Noon Bible Study*—Every Wednesday noon, Rm 3-465. Bring lunch if you wish. Ralph Bur-gess, x3-2321. (Since 1964).

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

MIT Vedanta Society*-Meditation and discourses on the Gita by Swami Sarva-gatananda of the Ramakrishna Vedanta So-ciety of Boston. Fridays, 5:15pm, Chapel.

Preprofessional

New York University School of Medicine**-10 summer research positions for academically talented students from disadvantaged backgrounds who have completed sophomore year and who wish to study medicine. Provides clinical research experience under direction of faculty member of the School of Medicine. Student will be responsible for completion of a special project. Stipend \$1,000. Application deadline: May 15. Info and applications: Preprofessional Office, 10-186, x3-4158.

Foreign Studies

Fulbright Scholarships*-competition for grants for 1981-82 for graduate study or regrants for 1981-82 for graduate study of re-search abroad opens May 1. Applicants must be U.S. citizens at time of application, who will hold bachelor's degree before the beginning date of grant, and in most cases know lan-guage of host country. Application deadline: Sept. 29, 1980. Info: Yvonne Whitaker, Graduate School Office, Rm 3-136.

New UROP Listings

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

LANGUAGE ACQUISITION

There is an opportunity for a native speaker of English, preferably with a background in linguistics and/or psychology, to assist in experiments on syntactic development in English-speaking children who are three to twelve years of age. Pay or credit. Contact Prof. Susan Carey, E10039, x3-5768, or Yukio Otsu. 20C-128, x3-3221 Otsu, 20C-128, x3-3221.

CERAMIC PROCESSING

A student is invited to participate in ceramic processing research. The project involves handling and sintering of silicon and silicon nitride powders which were synthesized by a laser driven reaction. Juniors and Seniors (in the coming year) are preferred. Contact Dr. Roger Cannon, Rm. 12-009, x3-6472

STUDY OF ALCOHOL METABOLISM

A student is invited to participate in a project aimed at the on-line monitoring by mass-spectroscopy of alcohol metabolism in the isolated perfused rat liver. The perfusing medium is interfaced with the MS by a silicon membrane which allows diffusion of volatile compounds. The model will be used to study ways to treat methanol poisoning. Contact Prof. H. Brunengraber, 56-229, x3-6783 or Dr. J. Weaver, 20A-112, x3-4194 or 3-7420.

TELEQUIP CORPORATION-MARKET RE-SEARCH Littleton, Mass Telequip manufactures automatic coin dispensers which interface and operate with electronic cash registers. Until now, its sales have been through a network of cash register dealers who in turn sell to end users. Te invites a student(s) to do market research, and in addition, will also welcome judgmental input from the students with respect to price, product characteristics, and channels of distribution.

SAFETY ALARM DEVICE

25 Years Ago

Stan Getz, a leading modern musician in the U.S., presented a concert of modern jazz on Wednesday in Kresge Auditorium. His group, recently transformed from a quintet to a sextet with the addition of Bobby Brookmeyer on valve trombone, played before an appreciative crowd of more than 500.

Prepared by Jeanne Duperreault, MIT Historical Collections, x4444.

Gerut, Callas To Give Recital

Soprano Rosalie Gerut, with mezzo-soprano, Deborah Callas, will present a free spring recital at 4pm, Sunday, April 27, in the Emma Rogers Room, 10-340.

Ms. Gerut, who is secretary to Professor Mildred S. Dresselhaus, is known to the MIT community for singing leading roles in MIT Musical Theater Guild productions. She has also appeared in summer stock, and last spring in Bittersweet, an original musical produced in Boston.

Both Ms. Gerut and Ms. Callas have studied with Adele Babcock at the New England Conservatory of Music, and presently study with Peter Hart. Their songs will range from solos and duets from Mozart's The Marriage of Figaro to songs by Cole Porter. Their accompanist will be teacher-composer, Jeffrey Brody.

Channel 12:

12-1:40pm THE LADY VANISHES-Directed by Alfred Hitchcock. Miss Floy, a middleaged governess, vanishes from a train. The passengers quietly deny she was ever there. 1:40-2pm FIRE UNDER THE SEA: THE ORIGIN OF PILLOW LAVA. 2-3pm M.I. TRIVIA-"How to be First."

A documentary about the Institute, produced by the BBC.

by the BBC. 3-4pm SCIENCE AND TECHNOLOGY--"Energy." David J. Rose, professor of Nu-clear Engineering. 7:30-9:15pm COMMUNICATION AND THE ARTS--"The Making of Spatial Concerto." David Epstein, conductor; Hilde Somer, pi-conductor; the Mitrice Somer, pi-somer Somer ano; Henry Brant, composer; the MIT Cho-ral Society; the MIT Symphony Orchestra. Elon Goitein, Producer-director. 9:15-9:30pm A MILLION TO ONE-A physics

9:15-9:30pm A MILLION TO ONE — A physics film concerning relativity.
 9:30-10:30pm POLITICS—"Rhetoric and Journalism." Karen Klaiser, publisher of Berkley Monthly Magazine; Ed Diamond, Department of Political Science.

THURSDAY, APRIL 24

Channel 8: 9:30-9:45am ELECTRONIC IMAGES 7:30-8pm PHYSICS 8.02 LECTURE-Recorded 4/23/80.

Channel 10:

7:30-8pm MIT AT MIT 5.3-Art tape by Mit Mitropoulos, CAVS. 8-9pm MIXED MEDIA ON THE CABLE-Mit Mitropoulos, CAVS.

poulos, CAVS.

7-8pm THE PRISONER-Episode 11 of the

17-part secret agent series. 8-9pm THE PRISONER-Episode 12. 9-10pm M.I. TRIVIA-"How to be First." See Wednesday 2pm.

SUNDAY, APRIL 27

Channel 8:

7:30-8:30pm PHYSICS 8.02 LECTURE-Recorded 4/25/80.

MONDAY, APRIL 28

Channel 8: 7:30-9pm PHYSICS 8.02 HELPLINE_Call

x3-7212 and your tutor Lawrence Krauss will assist you.

TUESDAY, APRIL 29 **Channel 8:** 7:30-8:30pm PHYSICS 8.02 LECTURE-Recorded 4/28/80.

Channel 12:

12-2pm METROPOLIS-Directed by Fritz Lang. Masses of robot-like workers march to their jobs in a city of the future; from the

perspective of 1926. 2-3pm JAZZ AT THE MUDDY CHARLES-Music by "Sessions." 3-5pm COMMUNICATION AND THE ARTS

"The Making of Spatial Concerto." See Wednesday, 7:30pm.

THE LADY VANISHES-See Wednes-7-9pm

day, 12pm. 9-10pm SCIENCE AND TECHNOLOGY-"Energy." See Wednesday, 3pm.

A student is invited to design a personal bodyguard device which, when activiated by a potential victim, would draw attention and stop an attacker by emitting a piercing blast of noise. Contact Prof. Woodie Flowers, 3-453, x3-6234.

> **TECH TALK** Volume 24, Number 33 April 23, 1980

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Dreyfus Building Anniversary Observed

The tenth anniversary of the dedication of the Dreyfus Building, which houses the modern laboratories and offices of MIT's Department of Chemistry, was marked at a special dinner celebration held

Wednesday, April 16, at the Hyatt Regency, Cambridge.

About 75 persons gathered for the occasion, including some of the principal donors, academic and administrative officers of the Insti-

Psychology; JONATHAN W. VALVANO, Whitaker College of Health Sciences, Technology and Management and RUSSELL D. YANG, Department of Nutrition and Food

MIT Faculty Research Grants

sion of Health Sciences and Technol

fessor, Center for Cancer Research ROBERT V. KENYON, Assistant Professor,

sor, Department of Chemistry

puter Science

JOHN I. CLARK, Assistant Professor, Divi-

RICHARD J. COHEN, Assistant Professor,

CLARK K. COLTON, Professor, Depart-

ment of Chemical Engineering HAROLD F. HEMOND, Assistant Professor,

Department of Civil Engineering THEREZA IMANISHI-KARI, Assistant Pro-

Department of Aeronautics and Astronautics ALEXANDER M. KLIBANOV, Assistant Professor, Department of Nutrition and Food

DEREK ROWELL, Associate Professor,

artment of Electrical Engineering and Com-

EDWARD I. SOLOMON, Associate Profes-

Harvard/MIT Faculty

Research Grants

STEVEN J. BURDEN, Assistant Professo

of Anatomy, Harvard Medical School; and RICHARD O. HYNES, Associate Professor of

iology, MIT. MICHAEL F. EPSTEIN, Assistant Profes-

sor of Pediatrics, Harvard Medical School; and RICHARD J. WURTMAN, Professor of

Nutrition and Food Science, MIT. DAVID M. KURNIT, Assistant Professor of

Pediatrics, Harvard Medical School; and DAVID E. HOUSMAN, Associate Professor of

Biology, MIT. MICHAEL N. MARGOLIES, Associate Pro-

fessor of Surgery, Harvard Medical School; and MALCOLM L. GEFTER, Professor of

Biology, MIT. ALAN L. SCHWARTZ, Instructor of Hema-

tology and Oncology, Harvard Medical School; and HARVEY F. LODISH, Professor of

Biology, MIT. THOMAS P. STOSSEL, Associate Professor

of Medicine, Harvard Medical School; and EDWARD W. MERRILL, Professor of Chemi-

BU/MIT Faculty Research Grants

cal Engineering, MIT.

Department of Mechanical Engineering CAMPBELL L. SEARLE, Professor, De-

Division of Health Sciences and Technology

ogy

tute, and members of the chemistry faculty.

Seated at the head table for the dinner were Professor George H. Büchi, who is Camille Dreyfus Professor of Chemistry, and Mrs. Buchi; MIT President Dr. Jerome B. Wiesner; Dr. William L. Evers, executive director of the Camille and Henry Dreyfus Foundation; Dr. Reiner Stoll, director of the Dreyfus Foundation, and Professor James L. Kinsey, head of the Department of Chemistry, and Mrs. Kinsey. A highlight of the dinner was the

presentation of a large, bound commemorative volume, "The First Decade in the Dreyfus Building: 1970-1980," a collection of reprints of selected papers published by scientists who work in the building.

Among guests who received the volume were Dr. Evers and Dr. Stoll; Dr. S. David Bailey, chairman of the New England Section of the American Chemical Society; Dr. Richard Rein, manager of research planning and coordination, Air Products and Chemicals, Inc.; Milton Stearn, executive vice president, Kennecott Cooper Co.; Frank Tully, director of governmental, environment safety and health programs, Goodyear Tire and Rubber Co.; Charles H. Ehlers, president of Dewey & Almy Chemical Division of W.R. Grace & Co., and Dr. Andrew J. Sullivan, director, food science and technology, Campbell Soup Company

After-dinner talks were given by Dr. Wiesner and Dean Robert A. Alberty of the MIT School of Science. Institute officers who were also hosts for the event were Dr. Paul E. Gray, chancellor and president-elect of MIT, and Dr. Francis E. Low, who will be provost of MIT in Dr. Gray's administration.

Abernathy To Speak In Automotive Series

Harvard business school professor William J. Abernathy, well known for his research and writing on technological policy issues in the automotive industry, will speak at MIT Tuesday, April 29.

He will be the second speaker in the series on The Future of the Automobile arranged by the Center for Transportation Studies.

at 4pm in the Mezzanine Lounge.



Wogan Is Second to Hold Underwood-Prescott Chair

Dr. Gerald N. Wogan, head of the Department of Nutrition and Food Science, has been named Underwood-Prescott Professor of Nutrition and Food Science at MIT.

Dr. Robert A. Alberty, dean of the MIT School of Science, announced the appointment of Dr. Wogan.

Dr. Wogan succeeds Dr. Samuel A. Goldblith, who held the chair as

the first Underwood-Prescott **Professor of Food** Science from 1972 to 1978, when he was appointed MIT vice president for resource development and the principal administrative officer for MIT's \$225 million Leadership Campaign.

The professorship and the associated Underwood-Prescott Memorial Award and Lectureship are in memory of William Lyman Underwood, grandson of the founder of the Wm. Underwood Co., and Dr. Samuel Cate Prescott, the first dean of the school of science at MIT.

In one of the first industry-university partnerships, they demonstrated in 1895 that spoilage of canned foods was caused by bacteria. Together they developed time and temperature guides for thermal processing and thus established the scientific basis of the modern canning industry.

The Underwood-Prescott awards and symposia, which were established in 1963, each year honor an outstanding food scientist and bring together leaders in nutrition, food science and engineering, and toxicology from universities, industry, and government.

The professorship and awards were established through the joint efforts of MIT and the Wm. Underwood Co., which has provided support for both the chair and the lectureship

In commenting on the appointment, Dean Alberty said: "It is highly appropriate that Professor Wogan should assume the Under-

prove food safety by solving problems in microbiology, Professor Wogan has been a leader in applying the insights of the modern field of toxicology to assure the continuing safety of our food supply.'

Professor Wogan's extensive contributions in research on environmental carcinogenesis have helped to elucidate the occurrence and mechanisms of action of naturally occuring carcinogens, such as the mycotoxins.

Professor Wogan, who was elected to the National Academy of Sciences in 1977, has been a member since 1976 of the National Cancer Advisory Board, which he also serves as chairman of its Subcommittee on Environmental Carcinogenesis.

He is a member of the Science Advisory Board of the federal Environmental Protection Agency and served as chairman from 1976 to 1979 of the Toxicology Study Section of the National Institutes of Health. At MIT, Dr. Wogan also is director of the Center for Health Effects of Fossil Fuel Utilization.

Professor Wogan has served as associate editor of the journals Cancer Research and Journal of **Toxicology and Environmental** Health and is currently a member of the editorial boards of Carcinogenesis, Journal of Environmental Pathology and Toxicology, and Journal of Environmental and Applied Microbiology.

Dr. Wogan received his undergraduate degree from Juniata College, Huntington, Pa., in 1951, and the master's degree in 1953 and the PhD degree in 1957, both from the University of Illinois at Urbana.

He was assistant professor of animal physiology at Rutgers University from 1957 to 1961, when he came to MIT as research associate in food toxicology. He was appointed assistant professor of food toxicology in 1962, associate professor in 1965. and was promoted to the rank of professor in 1969.

Professor Wogan and his wife, Holly Hoenicke Wogan, and their son, Eugene, live in Belmont, Mass. Dr. and Mrs. Wogan also have a

Whitaker Health Sciences **Fund Announces Allocations** agement; SEAN D. TRUE, Department of Psychology; JONATHAN W. VALVANO,

The Whitaker Health Sciences Fund has announced the allocation of \$765,000 to support graduate students and research programs of young faculty in the biomedical sciences and engineering. Funds have been allocated for 14 fellowships and 20 research grants.

Stipends for fellowships have increased from \$11,500 to \$13,000, and research grants have increased from \$25,000 to \$30,000.

The fellowship program includes three awards allocated to students carrying on doctoral research in the Whitaker College of Health Sciences, Technology and Management. The remaining 11 have been awarded to outstanding doctoral candidates throughout the Institute

Of the faculty awards 10 were earmarked for MIT, six for the Harvard Medical School faculty who are collaborating in research with MIT faculty, and four for faculty of the Boston University School of Medicine for similar collaboration with MIT.

The number of applications for fellowships and research grants this year far exceeded those received in previous years, so that the selection committees were forced to reject excellent proposals at all three institutions.

Graduate students and faculty who will be receiving awards this year were announced earlier this month by Dean Irwin W. Sizer, President of the Whitaker Health Sciences Fund, as follows:

Whitaker Health Sciences **Fund Fellows**

RAMON A. BURNS, Department of Chemistry; MARCIA A. BUSH, Department of Electrical Engineering and Computer Science; STEVEN R. BUSSOLARI, Depart-

ment of Mechanical Engineering; ALAN F. DOWLING, Sloan School of Management.

THOMAS HOLTON, Department of Elec-trical Engineering and Computer Science; KIMBERLEE J. KEARFOTT, Department of Nuclear Engineering; DOUGLAS KOSH-LAND, Department of Biology. LAURANT LAMARRE, Department of

Materials Science and Engineering; JUAN A. MENJIVAR, Department of Nutrition and Food Science; ANTHONY J. PATRIARCO, Whitaker College of Health Sciences, Technology and Management. NEAL A. SCOTT, Whitaker College of

Health Sciences, Technology and Man-

Pathology and Microbiology, BU School of Medicine; and RANJIT K. CHANDRA, Professor of Nutritional Immunology, MIT. HERBERT Z. KUPCHIK, Assistant Profes sor of Microbiology, BU School of Medicine; and ROBERT S. LANGER, JR., Assistant Prossor of Nutrition and Food Science, MIT. KENNETH J. ROTHSCHILD, Assistant Pro

fessor of Physiology, BU School of Medicine; and ALEXANDER RICH, Professor of Bio physics, MIT

WAYNE A. GONNERMAN, Assistant Professor of Biochemistry, BU School of Medi-cine; and VERNON R. YOUNG, Professor of Nutritional Biochemistry, MIT. VINAY KUMAR, Associate Professor of

Professor Abernathy will speak



FOUR MIT CAMPUS PATROL OFFICERS were credited with outstanding police work early last Saturday in the apprehension of one of two men wanted in connection with assault and armed robbery at a Harvard Business School dormitory. Shown (left to right) are officers Leo A. Sacco, Jr., 26, of Medford, Brent Nelson, 33, of Waltham, and James Word, 30, of Lowell. Off duty at the time of the picture was the fourth officer, Paul Healey, 33, of Waltham. About 2am Saturday Cambridge police broadcast an urgent pick up order for two men believed to have just fled the Business School. A passerby had noted their license number. Minutes later, MIT Officers Sacco and Nelson in one patrol car and

Healey and Word in another spotted the car headed west on Memorial Dr. near Massachusetts Ave. and gave chase. The fugitive car reached speeds of 80 miles an hour before skidding and crashing into a guardrail on the Brookline Ave. overpass at the Cambridge end of the Boston University bridge. The MIT officers arrested one occupant at the crash scene. The second fled on foot, pursued by Nelson and Healey. He disappeared behind a nearby supermarket. The arrested man was turned over the Boston police and was being held in lieu of \$50,000 bond following arraignment later Saturday in Brighton district court on a variety of criminal charges. -MIT Photo by Calvin Campbell wood-Prescott chair at this time. Just as Mr. Underwood and Dr. Prescott in their day sought to im-

daughter, Christine, who is a junior at Swarthmore College.

Shakespeare Ensemble Announces **Upcoming Performance Schedule**

The Shakespeare Ensemble, Murray Biggs, director, will present The Comedy of Errors, a merry romp of mistaken identities, in the Sala de Puerto Rico, MIT Student Center, April 24-29 at 8pm.

Shakespeare took the basic plot for the play from the Roman playwright Plautus, but made it his own by increasing the confusion of its characters. He introduced two pairs of identical twins, each pair sharing the same name.

Jonathan Ivester, an MIT alumnus, will direct the production. Set design is by junior Louis Miller; costume design is by MIT employee Barbara Wengrovius. The actors in the Shakespeare Ensemble are all MIT or Wellesley students.

To make reservations, call x3-

2903. Tickets will be held at the door until 7:40 each evening. Tickets for Friday and Saturday evenings will be \$4.50 each, \$3.50 with student ID. and groups of 10 or more receive an additional discount of 50¢ per ticket. Tickets for weeknights are \$2.50.

On May 30 and 31, the Shakespeare Ensemble will revive its production of Arthur Miller's A View from the Bridge in Huntington Hall (Rm 10-250). Performances will be at 8pm. Tickets are \$3.50, \$2.50 with student ID, and groups of 10 or more will receive a discount of 50¢ per ticket. For reservations, call x3-2903.

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April 23 through May 4

Events of Special Interest

The James R. Killian Jr. Faculty Achievement Award Lecture* — Continuity and Metanois, will be the topic in the last of three lectures given by David J. Rose, Professor Nuclear Engineering. Thurs, Apr 24, 4pm, Rm 10-250.

Libraries Spring Book Sale* — Wed, May 7, 10am-4pm, Hayden Library Courtyard, Building 14, new & used books, & more, bargain prices. Rain location: Boston Stein Club Map Room, Science Library, Rm 14S-100.

Seminars & Lectures

Wednesday, April 23

Clinical Use of Fat Emulsions* — Dr. William Steffe, director, Clinical Nutrition Unit, Boston University School of Medicine. Clinical Research Center Seminar, 9am, Rm E17-415.

Division for Study and Research in Education Seminar[•] - Sam Osherson, will speak, noon-2pm, Rm 20C-117.

Improved Unranium Ore Utilization Via Advanced PWR Core Design* — Joseph Sefcik, Seminar in nuclear Engineering - Reactor Physics, 2-3pm, Rm NW12-222.

One the Cauchy Problem for Harmonic Maps from the Two-Dimensional Space-Time to Complete Reimannian Manifolds^{*} — Prof Chao-Hao Gu, Institute of Theoretical Physics, State University of New York at Stony Brook, Long Island, New York. A special Applied Mathematics Colloquium in joint with A Special Practical Differential Equations Seminar, 3pm, Rm 2-142. Refreshments at 4pm, Rm 2-349.

Seminar in Nuclear Engineering-Reactor Engineering Section* - R. Sawdye, What is a Turbulence Model? A. Schor, Multidimensional Analysis of Sodium Boiling, 3-4pm, Rm NW12-222.

Probabilistic Methods in Soil Mechanics...Recent Developments* – **M. Hasofer**, Prof of Civil Engineering, University of New South Wales, Australia. Civil Engineering Systems Methodology Group Seminar, 3:30-4:30pm, Rm 1-114. Refreshments served.

Picosecond Optical Pulses: Theory (?) and Practice* — Erich Ippen, Electrical Engineering and Computer Science Optics Seminar, 4pm, Rm 36-428.

The Rise and Decline of Development Economics^{*} — Albert Hirschman, Institute for Advanced Study, Princeton, New Jersey. Commentator: Richard S. Eckaus. Program in Science, Technology, and Society Colloquium, 4pm, Rm 10-105.

RS CVn Systems: An Extreme Case of Normal Stellar Activity* – Fred Walter, University of California at Berkeley. Special Astrophysics Colloquium, 4pm, Rm 37-696.

Techniques and Application of Cinematography in Research and Education^{*} — Dr. H.K. Galle, Director, Institut fur den Wissenschaftlichen Film, Gottingen. Special Biology Colloquium, 4pm, Rm 4-370. Lecture illustrated with segments of films from several areas. Info: x3-5129.

Control of Gamma Rays Using Laser Techniques* — **Prof Michael Feld,** Undergraduate Physics Colloquium, 4:15pm, Rm 3-348. Social hour follows.

India: Reemergence of Indira - What Next?* - Prof Hari Sharma, sociology, Simon Frazer University, Vancouver, B.C. Sangam Seminar, 7pm, Rm 9-150.

Hope is Not a Method^{*} – Drs. Biller and Clard, Medical Department. Women's Independent Living Group Seminar, lecture on female physiology and birth control, 7pm, 355 Mass Ave, Cambridge, Mass. Refreshments served.

Logic and God^{*} — The philosophical approaches to the God question three modern writers, Louis Dupre, Bernard Lonergan, and Langdon Gilkey, second of three sessions, presented by Rev. Ron Chochol, Ph.D. Philosophy, University of Toronto. Sponsored by the Tech Catholic Community, 8pm, Rm 8-105.

Thursday, April 24

Needs." Carmen Deere, economics, U. Mass/Amherst, "Nicaragua: Agricultural Reform." Jose Luis Medal, Counselor for Economic Affairs, Permanent Mission of Nicaragua to the U.N., "Nicaragua: Economics and Technology." Sponsored by Foreign Languages and Literatures; Anthropology/Archeology Program and the Boston Nicaragua Solidarity Committee, 7-9:30pm, Rm 4-270.

The Economic Effects of the Arms Race* — Dr. John Kenneth Galbraith, Professor Emeritus of Economics, Harvard University. Disarmament Study Group and Technology and Culture Seminar, 7:30-9pm, Rm 10-250.

Friday, April 25

The Cultural Experience of Industrialization, with Special Attention to Southeast Asia and Southeast USA* — James L. Peacock, Professor and Chairman Department of Anthropology, University of North Carolina at Chapel Hill. The Anthropology-Archaeology Program and the Program in Science, Technology, and Society Joint Lecture Series on the Cultural Experience of Industrialization, noon, Rm 20D-205.

The Various Adhesive Wear Regimes and the Factors Which Govern the Transitions between them* — Sankar Narayan Sankaran, Doctoral Thesis Presentation, Department of Mechanical Engineering Seminar, 1pm, Rm 33-419.

Chemical Engineering Seminars^{*} — Chris Schwier, Crazing in Heterogeneous Polymers, 2pm. Jose Torradas, Morphology/Properties Relationship in Some Rubbery Diplock Copolymers, 3pm. Rm 66-110.

Fatigue Life Prediction Methods* — Jodean Morrow, Professor of Theoretical and Applied Mechanics, University of Illinois at Urbana. Mechanical Engineering Seminar, 3pm, Rm 1-133. Coffee at 4pm, Rm 1-114.

The Need, the Appeal and the Future for Naval Architects and Marine Engineers* — Lester Rosenblatt, M. Rosenblatt & Sons, Inc. Survey 5' Ocean Engineering Seminar, 3-4pm, Rm 3-370.

Prospects for Soviet-American Relations* — **Dr. Marshall Shulman,** Special Advisor on Soviet Affairs to the U.S. Secretary of State. Technology and International Security Seminar, 3:30-5pm, Rm E38-762, 292 Main Street, Kendall Street, Kendall Square. Nuclear Reactor Regulation* — Joseph Hendrie, Commissioner, Nuclear Regulatory Commission. American Nuclear Society, Student Branch Seminar 3:30pm, Rm 9-150.

The Antrhopology of Airline Management* — William Swan, Senior Analyst, Ops. Res., American Airlines. Center for Advanced Engineering Study/Flight Transportation Laboratory Seminar, 4pm, Rm 9-450. Free.

Dynamic Recrystallization in Single Crystals - Enforced Nucleation or Impeded Growth?* – Dr. Gunter Gottstein, Materials Science Division Argonne National Laboratory on leave from Inst. Allgemeine Metallkunde, Metallphysik, Technical University Aachen, Germany. Special Joint Seminar, Department of Mechanical Engineering, and Materials Science and Engineering, 4pm, Rm 3-133.

The Early History of Women's Movement* — **Patricia Hanratty**, Professor of Political Science, Holy Cross College. Sponsored by Emily Tsutsumi, Coordinator for Women Student Interests lecture followed by question and answer session and refreshments, 4-6pm, Rm 3-310. Refreshments served

Magnetism and Interstellar Grains* — Prof Edward M. Purcell, Harvard University. Francis Bitter National Magnet Laboratory Spring Colloquium Series, 4pm, Rm NW14-2209. Tea at 3:30pm.

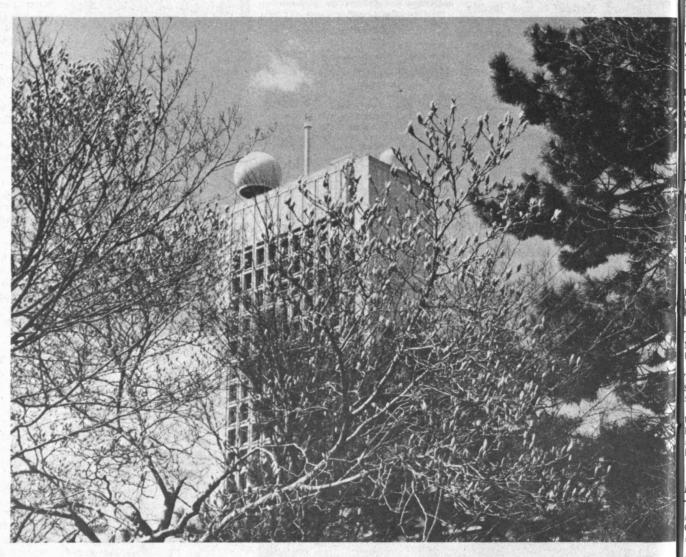
Medical School Applicants for 1981* — Discussion of Application Process Preprofessional Advising and Education Office Seminar, 4pm, Rm 4-153.

Nutrition, Politics, and Public Health* — Dr. Sanford A. Miller, director, Bureau of Food, FDA. International Food and Nutrition Policy Seminar, 4-5:30pm, Rm 16-310.

Resonant Growth of Three-Dimensional Disturbances in Shear Flows* — Dr. Hakan Gustavsson, aeronautics and astronautics. Applied Mathematics Colloquium, 4pm, Rm 2-338. Refreshments at 3:30pm, Rm 2-349.

Water Resources and Environmental Engineering Seminar* — Dr John Schaake, will speak, 4-5pm, Rm 48-316. Coffee at 3:45pm, Rm 48-410.

Sexual Ethics - Past, Present and Future* — Rabbi David Feldman author of *Birth Control and Jewish Law*. Sponsored by the MIT Hillel. Spar row Memorial Lecture, 8pm, Rm 37-252. Information: x3-2982.



Carbon Dioxide Measurements in Medicine: Why and How?* – Richard J. Johns, MD, visiting scientist, MIT; director, Biomedical Engineering, the Johns Hopkins University. Colloquium - Center for Materials Science and Engineering, 4pm, Rm 9-150. Coffee at 3:30pm.

Some Advances in Basic Taste Chemistry* — Dr. Gordon S. Birch, The University of Reading, National College of Food Technology. Applied Microbiology Group Seminar, 4pm, Rm 16-134.

The Relation Between Perception and Eye Movements* — Prof Arien Mack psychology, New School for Social Research, New York City. Psychology Colloquium, 4:30pm, Rm E10-013. Coffee at 4:15pm.

Tuesday, April 29

Laser Spectroscopy of Unstable Nuclei* — Daniel E. Murnick, Bel Laboratories. Seminar on Modern Optics and Spectroscopy, Regional Lase Center, MIT Spectroscopy Laboratory and Research Laboratory of Electronics, 11am-noon, Rm 37-252. Coffee served at 10:30am.

Japan's Changing Foreign Policy* — Dr. Seizaburo Sato, Professor of International Policy, University of Tokyo. Center for International Studies. Seminar, 2:30-4pm, Rm E38-762.

On the Mechanism of Low Mach-Number Flow Noise* – Dr. Frank Obermeier, Max-Planck-Institut fur Stromungsforschung, Gottingen

Difference-Frequency Generation of Tunable Near IR Radiation* — Jim Harrison, will speak. Fluid Mechanics Seminar, 4pm, Rm 5-134. Refreshments available at 3:50pm.

Dynamic Network Flows* — **Prof James B. Orlin**, Sloan School of Management. Operations Research Center Seminar, 4pm, Rm 24-121. Coffee and cookies after the seminar.

The Fundamental Things Go By: A Search for New Particles and Their Interaction* — Prof James Branson, Physics Colloquium, 4pm, Rm 26-100. Tea served at 3:30pm, Rm 26-110.

Geothermal Energy^{*} — **Prof Paul Kruger**, Civil Engineering, Stanford University. Colloquia of Physical Problems in Civil Engineering, sponsored by the Physical Systems Group, Civil Engineering, 4-5pm, Rm 48-316.

Law Applicants for 1981[•] — Discussion of Application Process. Preprofessional Advising and Education Office Seminar, 4pm, Rm 4-153.

Lineshapes and Beyond* - Michael D. Fayer, Stanford University. Arthur D. Little Lectures in Physical Chemistry, 4pm, Rm 4-370.

Motor Control - A Re-examination of Feedback* — Dr. Lloyd D. Partridge, physiol. & Biophys., College of Medicine, University of Tenn., Memphis, Tenn. Committee on Biomedical Engineering Seminar, 4-5:30pm, Rm 16-134. Refreshments served.

Focus on Nicaragua and Central America[•] – Stephen Kinzer, journalist, "Social and Political Context of Central American." Larry Simons, OXFAM International, "Nicaragua: Health and Nutritional

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Sunday, April 27

Personal Reflections: From Anti-Nazi Resistance to Pro-Israel Activities – Rev. John Gravel, leader of the EXODUS ship and WWII Resistance hero. Sponsored by the MIT Hillel, 8pm, Rm 10-105. Information call x3-2982.

Monday, April 28

Where Does the Palestine Issue Go From Here?* — Ernest Evans, Brookings Institution, Washington. Center for International Studies Seminar, noon-2pm, Rm E38-762. Bring your lunch.

Textile Material - Process Interactions in False-Twist Texturing* — Stanley Backer, Professor of Mechanical Engineering. Informal Mechanics and Materials Seminar, twenty-five minute presentation with time left for discussion of those and other mechanics topics, 1-2pm, Rm 1-114. Bring your lunch. Coffee served.

Environmental Impacts of Synthetic Fuel Production* – Dr. Steven Reznek, Deputy Assistant Administrator, E.P.A., Synthetic Fuel Production Course, 3pm, Rn 3-270.

Low Energy Method to Separate Hezane from Polybutadiene* — Timothy Gutowski, research assistant, mechanical engineering. Laboratory for Manufacturing and Productivity Seminar, 3pm, Rm 35-520.

Ride Comfort Improvements in Rail Vehicles via Air Springs with Orifice Damping* — B. Murray, Mechanical Engineering Department, Vehicle Dynamics Laboratory Seminar Series, 3-4pm, Rm 1-114. FRG. Seminar at 3pm, Rm 3-133.

Effects of Altered Gravity on a Human Vertibulo-Spinal Reflex^{*} – Douglas Watt, M.D., Ph.D., assistant professor, physiology, Aviation Medical Research Unit, McGill University. Whitaker College of Health Sciences, Technology and Management, 4pm, Rm 16-134.

An Office Specification Language* — Jay Junin, Laboratory for Computer Science. Office Automation Seminar, 4-5:30pm, Rm E52-461.

Industrial Pollution and the Global Environment: The CO2 Debate* David Rose, The Debate over the Future Seminar, 4-6pm, Rm 4-149.

Nonlinear Versus Linear Statistical Weather Prediction* — Edward N Lorenz, meteorology. Statistics Seminar, 4pm, Rm 2-338. Refreshments a 3:30pm, Rm 2-349.

Transient Grating Experiments* — **Mechael D. Fayer**, Stanford University. Arthur D. Little Lectures in Physical Chemistry, 4pm, Rm.4-370.

Scaling Limits of NMOS VLSI Circuits* — K. Nirmal Ratnakumar Stanford Electronics Labs and Xerox PARC. I.C. Seminar, 4pm, Rm 16-310

Measurements of Aerodynamic Damping in a Transonic Compressor — E. Crawley, aeronautics and astronautics. Gas Turbine and Plasm Dynamics Laboratory, Aeronautics and Astronautics Weekly Seminar 4:15pm, Rm 31-161. Refreshments at 4pm.

The Universe at Faint Magnitudes: Stellar Images* — **Prof John** N **Bahcall,** The Institute for Advanced Study. Astrophysics Colloquium 4:15pm, Rm 37-252. Coffee at 3:45pm.

Arrangement and Function of Membrane Transport Proteins* – Dr-Guido Guidotti, Biological Laboratories, Harvard University, Biology Colloquium, 4:30pm, Rm 6-120. Coffee at 4pm, Vestibule, 5th Fl, Bldg 56. Technology and Culture Seminar* - Victor Weisskopf, Institute Profesr Emeritus, 4:30pm, Rm 9-150,

The Artists Speak* - Presentation by C.A.V.S. fellow, Yvonne Rainer, pm, Film/Video Section, Bldg E21.

Wednesday, April 30

Division for Study and Research in Education Seminar* - Edwina Rissland, noon-2pm, Rm 20C-117.

Family Eating* - Judith Wurtman, Nutrition and Food Science, will peak. Prenatal and Parent Education Group Meeting, noon, 3rd floor, onference Room, Infirmary, Bldg W5. Info: 253-1316.

Advanced Physical and Numerical Modeling of Nonisothermal Turbulent Flow* — S. Chang, Seminar in Nuclear Engineering - Reactor Engineering Section, 3-4:30pm, Rm NW12-222.

orrosion Fatigue in Nickel Base Alloys for Nuclear Steam Generator Applications* - R. Ballinger, Seminar in Nuclear Engineering - Reactor ingineering Section, 3-4:30pm, Rm NW12-222.

Detection of Flaws in Polymeric Materials* - MingTse, research assisant, mechanical engineering. Laboratory for Manufacturing and Producivity Seminar, 3pm, Rm 35-520.

Materials Processing in Space* - Dr. John Carruthers, NASA Headuarters, Washington, DC. Aeronautics and Astronautics General Seminar, om, Rm 37-212.

Seminar in Nuclear Engineering - Reactor Engineering Section* — S. Chang, Advanced Physical and Numerical Modeling of Nonisothermal Turbulent Flow. R. Ballinger, Corrosion Fatigue in Nickel Base Alloys for Nuclear Steam Generator Applications, 3-4:30pm, Rm NW12-222.

The Bridge on the River Kwai - The Transformations of Reality in the Novel and the Movie^{*} — Ian Watt, author of *The Rise of the Novel* and *Conrad in the Nineteenth Century*, Professor of Humanities, Stanford University. Literature Section of the Department of Humanities and The rogram in Science, Technology, and Society Colloquium, 4pm, Rm 4-149.

New Results in Tunable IR Lasers* — Aram Mooradian, Lincoln Laboratory. Electrical Engineering and Computer Science Optics Seminar, pm, Rm 36-428

Wednesday Afternoon Creative Photography Laboratory Lecture Series "Mind Over Matter"* — Peter Hujar, will speak, 4:30pm, 120 Mass Ave., 3rd floor, DuPont Gymnasium, Camb, Mass.

ogic and Good* - The philosophical approaches to the Good guestion in nree modern writers, Louise Dupre, Bernard Lonergan, and Langdon ilkey, last of three sessions, presented by Rev. Ron Chochol, Ph. D. hilosophy, University of Toronto. Sponsored by the Tech Catholic Comnunity, 8pm, Rm 8-105.

Thursday, May 1

Current Research Activites at the Texas Instruments Materials Science Laboratory* - D.W. Shaw, director of research, Texas Instruments, Dalas, 3pm, Rm 8-205, Info: x3-5301.

Dynamic Soil Modelling* - Prof O.C. Zienkiewicz, University of Wates, wansea, United Kingdom. Colloquia on Physical Problems in Civil Engineering, sponsored by the Physical Systems Group, Civil Engineeri .g, -5pm, Rm 48-316.

Impedance Control in Natural Movement * — Dr. Neville Hogan, assis ant professor, mechanical engineering. Committee on Biomedical Engineering Seminar, 4-5:30pm, Rm 16-134. Refreshments served.

Cechniques for Combined High Performance Liquid Chromatography -Mass Spectrometry* - Prof Paul Vouros, chemistry, Northeastern iniverstiy. Analytical Chemistry Seminar, 4pm, Rm 8-105.

Transient Condensation in a Vertical Pipe Discharing Steam into a Subcooled Water Pool* — Bill Anderson, will speak. Fluid Mechanics Seminar, 4pm, Rm 5-134. Refreshments at 3:50pm.

Universal Graphs* - Dr. Ronald L. Graham, Bell Laboratories, Murray Hill, New Jersey. Joint Seminar between the Operations Research Center and the Department of Mathematics Applied Mathematics Group, 4pm, Rm 24-121. Coffee and doughnuts served after the seminar.

Friday, May 2

Aerial Acquisition of Images and Digital Processing* - Prof Moshe Orn, Stanford University, visiting professor from Technion, Israel. Aeronautics and Astronautics General Seminar, 3pm, Rm 37-187.

Chemical Engineering Seminars* - Simon P. Hanson, The Evolution and Conversion of Fuel Nitrogen from Derived Liquid Fuels, 2pm. Howard J. Herzog, Crystalization and Secondary Nucleation, 3pm, Rm 66-110.

Design, Construction and Operation of a North Sea Crane Vessel* -Dr. F.C. Michelson, Heerema Engineering Service. Survey of Ocean Engineering Seminar, 3-4pm, Rm 3-446.

Enzymatic Amplification and Control in Chemical Reaction Networks* — Prof Hank Paynter, mechanical engineering. Mechanical Engineering Seminar, 3pm, Rm 3-133. Coffee in 4pm, Rm 1-114.



Social Events

Chess Party* - Sponsored by the MIT Chess Club. Speed Chess Tournament, problem solving competition, and Bug House Tournament. Sat, Apr 26, 1pm, Mezzanine Lounge, Student Center. Admission: \$4. Info: 536-9596.

Prime Rib Night*** - Baked potato, salad bar, lemon mousse, glass of wine. \$9.25 plus tax. Wed, Apr 30, Faculty Club, for reservations call x3-

Faculty Club*** - Open Monday through Friday: Luncheon served noon-2pm; Dinner served 5:30-8pm. Happy Hour: Monday through Thursday, 4:30-6:30pm, wide variety of drinks \$1.25.

Movies

PRIMATE* - Frederick Wiseman's film. Wed, Apr 23, 3pm, Rm 66-144.

Robert Frank Present Three Personal Films* - "Life Dances On," 'About Me" and "Conversations in Vermont." Thurs, Apr 24, 7:30pm, Film/Video Section, Building E21 ground floor.

Annie Hall* — LSC Movie. Fri, Apr 25, 6, 8:30 & 11pm, Rm 26-100; 9:30pm, 10-250. Admission: 75¢ w/MIT or Wellesley ID.

Firebird** - Department of Humanities Film Series. Fri, Apr 25, 7:30pm, Rm 14N-0615, Free.

The 39 Steps** - LSC Classic Film Series. Fri, Apr 25, 7:30pm, Rm 10-250.

Hair** - LSC Movie. Sat, Apr 26, 6, 9, midnight, Rm 26-100. Admission: 5c w/MIT or Wellesley ID.

Support Your Local Sheriff** - LSC Movie. Sun, Apr 27, 6:30 & 9pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

Monday Night Screenings* - Sponsored by the Film/Video Section. Ed Pincus: A Film Diary, a 5 year autobiographical work in progress. Mon, Apr 28, 7pm, Bldg E21.

The Hunchback of Notre Dame** - LSC Classic Film Series. Fri, May 2, 7:30pm, Rm 10-250.

Dracula** - LSC Movie. Fri, May 2, 6, 9, & midnight, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

The In-Laws* - LSC Movie. Sat, May 3, 7 & 9:30pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

The Producers* - LSC Movie. Sun, May 4, 6:30 & 9pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

Music

Noon Hour Chapel Concert* - Peter Lehman, lute program will include works by John Dowland, Denis Gaultier and S.L. Weiss. Thurs, Apr 24,

The Wednesday Evenings Jazz Sereis* - William Heagy Quartet Musicians. Sponsored by the Black Graduate Student Association in cooperation with the Graduate Student Council. A Series of informal concerts featuring local jazz artists. Wed, Apr 30, 8pm, Muddy Charles Pub, Walker Building. Donation requested. Refreshments available.

Noon Hour Chapel Concert* - Early Music Society, Tim Aarset director,

Dance

Two Performances of Student Works* - Directed by Beth Soll. Presented by the Dance Workshop. Sat, Apr 26 and Sun, Apr 27, 8pm, Walker Gymnasium, 142 Memorial Drv, Camb. Free. Info: x3-2908.

Styling of Cha-Cha Workshop* - Sponsored by the Ballroom Dance Club. Improve your style in Cha-Cha. Sun, Apr 27, 1-2:30pm, Burton Dining Hall. Admission: 75¢. Info: Haroon 536-1300 or Nancy x5-8291 Dorm.

Foxtrot II* - Sponsored by the Ballroom Dance Club. Learn new foxtrot steps. Sun Apr 27, 3-5pm, Burton Dining Hall. Admission: 75¢. Info: Haroon 536-1300 or Nancy x5-8291 Dorm.

Hatha Yoga* - Spring classes begin Mon, Apr 28: intermediate 5:45pm; beginners 7:15pm, Rm 10-340. Information call I. Turchinetz 862-2613.

Dance Workshop Regular Meetings** - Technique class Mon & Wed, 3-5pm, Composition/Improvisation class, Thurs, 1-3pm, T-Club Lounge, Du-Pont Center. Information x3-2908.

Sports

Home Schedule* - Apr 23: Baseball vsSuffolk, 3pm, Lacrosse vs Nichols, 3pm; M Tennis vs Clark, 3pm.Apr 24: W Softball vs Emmanuel, 3:30pm. Apr 25: Baseball vsBoston State, 3pm; Lacrosse vs Springfield, 3pm. Apr 26: Lightweight Crew vs Cornell, Columbia; W Softball vs Nichols, 1pm.Apr 28: Baseball vs Brandeis, 3pm; M Tennis vs Alumni, 3pm. Apr 29:W Softball vs SE Mass, 3:30pm. Apr 30: Lacrosse vs Westfield State,3pm. May 3: Baseball vs W.P.I. 1pm; Heavyweight Crew vs Dartmouth, Wisconsin, 10:15am; Track vs Tufts, 12:30pm. May 3-4: M Sailing, NEISA Dinghy Championships, 11:30am. May 6: W Softball vs A.I.C.; 3:30pm. May 10: Track, New England Division III Championships, 3:30pm.

Exhibits

"41°36' North Latitude , 73°54' West Longitude'"* -- Exhibition of drawings and photographs by CAVS fellow Ellen Kozark and Victory Young, will be on public display through Apr 25, Mon-Fri, 9am-5pm, CAVS, 40 Mass Ave., Camb.

Centersheet* — From the Center for Advanced Vsual Studies. Installation and multi-media event by CAVS fellow Mira Cantor. On view Apr 28 through May 16, Mon-Fri, 9am-5pm, Center for Advanced Visual Studeis, 40 Mass Ave., Camb, Mass. Info: 253-4415.

The Automotive Image* - From the Creative Photography Laboratory. On view Mon-Fri, 9am-10pm; Sat, 10am-6pm; Sun noon-8pm, through May 7, 120 Mass Ave, 3rd Floor, Cambridge, Mass.

Andrew Tavarelli: Recent Pastels* - On view daily through May 11, Hayden Corridor Gallery, 160 Memorial Drv, Camb, Mass

Generations: The Story of Building 20* - From the Compton Gallery Committee. On view Mon-Fri, 10am-5pm; Weekends, 1-5pm, through June 13, Margaret Hutchinson Compton Gallery, Rm 10-150.

Richard Serra and Mel Bochner* - On view through May 11, daily 10am-4pm; Wed evening 6-9pm, Hayden Gallery.

Historical Collections Permanent Collections* - Exhibitions include an tique globes; The Ellsworth A. Wente Collection of motors and meters; rare instruments including compasses, sundials and other measuring devices from the 17th and 18th centuries; Early Alumnae and several exhibits of memorabilia and photographs honoring prominent graduates of the Institute. On view Mon-Fri, 9am-5pm, 265 Mass Ave, 2nd Fl, Camb, Mass. Information: 253-4444.

Hart Nautical Museum* - Permanent exhibit of rigged merchant and

Community Meetings

Wives' Group:** — Wed, Apr 23, "Evaluating Yourself, Your Goals, and Your Future," Libby Fennel, Executive Director, National Alliance of Professional and Executive Women's Networks, 3-5pm, Rm 407, Student Center, Babysitting available in Room 473 of the Student Center. All women in the MIT Community welcome.

Soaring Association Club Meeting * - Thurs, Apr 24, 7:30pm, Rm 491, Student Center. Refreshments served. Free.

Medical Advisory Board Meeting** - Tues. Apr 29, noon, 3rd Floor onference Room, Infirmary Bldg. W5. The Committee on Privacy will speak t attend. speak to the Board. Please call the secretary at x3-1316 if you would like to

Wives' Group* — Wed, Apr. 30, "What is Public relations", barly Arnold and Co., Mezzanine Lounge of the Student Center. Babysitting available in Room 473 of the Student Center. All women in the MIT com-Wives' Group* - Wed, Apr. 30, "What is Public Relations", Sally Jackson,

Alcohol Support Group** - Sponsored by the Personal Assistance Program, Medical Department. A self-help support group for persons con-cerned about the effects of excessive alcohol use on their lives. For place, ime and day of the week, contact Ron Fleming x3-4911. Coffee and doughnuts served.

Weekly Exercise Classes* - Taught by professional Patricia Murphy. sponsored by the Technology Wives Organization. An hour of serious exerise. Monday evenings through May 16, 7:30-8:30pm, 2nd floor, Exercise Room, DuPont Gymnasium, Admission: \$1.50 per class, discount for F.W.O. members. Information call: Rachel Kent 494-0137.

Thurs, May 1. Free.

Lingh

Concert Band Performance* - John Corley director. Program will feature student Jinsoon Moon in Losh Piano Concerto; premiere performance of "Only for Now," by Stephen Melillo; and Hindemith Symphony. Sat, May 3, 8pm, Walker Memorial Hall, 142 Memorial Dr., Camb. Free.

Choral Society Performance* - John Oliver conductor, Program will feature Bach's St. Matthew Passion. Sun, May 4, 3pm, Sacred Heart Church, Sixth St., Cambridge, For ticket information call 253-2906.

Iheater

The Comedy of Errors* — Presented by the Shakespeare Ensemble. Apr 24, 25, 26, 27, 28, 29, 8pm, Sala de Puerto Rico, Student Center. Ticket reservations held at the door until 7:40pm each evening and may be made by calling 253-2903. Fri & Sat \$4.50; students, \$3.50; further discounts for groups of 10 or more 50 ¢ per ticket; other nights \$2.50. Groups of 10 or more 50 c off per ticket; other nights \$2.50.

H.M.S. Pinafore* - By the Community Players. Gilbert and Sullivan's comic opera. May 1,2,3,4 and 8,9,10,11, 8pm, Thurs, Fri, Sat; 2:30pm, Sundays. Tickets \$2.50 (\$2 w/MIT ID). Information: x3-5716.

Man and Superman* - From the Drama Program. Robert Scanlan, director. Three-act version of George Bernard Shaw's, complete with the "Don Juan in Hell' scene. May 2, 3, 8, 9, 10 at 8pm; May 4 at 2pm, Hasty Pudding Theater, 12 Holyoke Street, Camb. Tickets \$3.50 w/student I.D., \$3.00. For reservations call x3-4720.

Performance Workshop* - Two evenings of student written and performed one-act plays and vignettes - products of Prof. Gurney's playwriting class-cabaret atmosphere. May 1 and May 8, 7pm, Mezzanine Lounge, Student Center. Free.

naval ship models, half models of yachts and engine models. Open daily in Bldg 5, 1st floor.

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

New Records* - Music Library, Rm 14E-109. Exhibit of record jackets of recent Library purchases.

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 Informa tion Center, x3-4795.

MIT Historical Collections* - Vannevar Bush, '16, Bldg 4 corridor. The New Technology Exhibit, 2nd floor balcony of Lobby 7. Solar Energy, Bldg 8, main corridor. Samuel Cote Prescott, 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 Chemistry, Bldg 6.

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 field.

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

***Open to members only

Send notices for Wednesday, April 30 through Sunday, May 11 to Calendar Editor Rm 5-113, x3-3270, before noon, Friday, May 2.

'70 Ply Fury wg, gd util, exc run cond, \$300. Earle x8-1130 Draper. '70 Ply 4 dr, auto trans, solid bdy, no rust, economical slant 6, cyl eng, 20 mpg, \$625 or best, mst sell. Dick x3-4260.

CLASSIFIED

Royal port typewrtr, carry case, \$33. Call x9890 Dorm.

Brnd nw One Step Polaroid camera w/Quick light, \$30 set; cost new \$50. Don x8-3391 Draper or 5158 aft 5pm.

DR set, tble & 5 chrs, gd cond, \$115. Call x3-7133

3 rad tires, sz A70-13, \$30 ea, w/rims, \$35. Donna

Hand crocheted shawls & sweaters, \$12; Polaroid Zip camera, \$10; Conair nail groomer, \$7; brnd nw ladies Sunbeam shaver, \$12; Seiko AM/FM tran-sistor radio, \$10. Call x8-1766 Draper.

Kimball piano, artist console, exc cond, \$1695. Call x3-7731 or 648-1413 aft 6pm.

Antique pocket watches from 1860's to 1920's, M &

W styles, gold & silver cases, assorted sizes, \$65 to \$500, all in superb cond, for sale by collector, great graduation & anniversary gifts. Jeff 277-6249.

Power supplies, DEC mod 728, 10-15-25 volt dc, 5

2 rugged extra long tw beds w/matts, qu sz foam rubber matt for convert sleeper, nw. Chick x8-3705

Nrly nw hideabed sofa, br plaid, best. x8-1811 Draper.

3 wood bar stools w/backs, \$15 ea, 3 for \$40. Michael x3-5668.

W bike green Raleigh bike, nw cond, \$95, Call x74-

Beaut matched pr of hand woven oriental rugs, 228

knots per square inch 4x6' ea, mst sell, prefer to sell a pr, \$1400/single \$750. 494-9825.

Auto tire & rim, Goodyr steel bltd rads, white wall sz DR 78-14, only 15K but vy worn, \$30 or best for both. Brad x3-6006 or 494-9147.

Warm morning gas trash incenerator, best. Tony

Furn cheap cleanbed, bureaus, cabs, chrs: folding, director, K, ladder, carpets, lamps, spice rack, shelving, buy all & I'll throw in a free couch. Deborah x3-4063.

Acoustic guitar Takamine F360S w/hard case,

Heath kit AR-15 stereo recvr, 50 watts per channel,

Coke machine, \$350 or best. Call x5-9229 Dorm or

Trailer hitch for '68-'72 VW, nw \$20. Lucky x3-7707.

Hospital bed, exc cond, w/side, head, feel & bed, crankup & down, \$100 or best. Call x3-3771.

Antique Apple tree ladders 22', \$16. Call x7124 Lincl.

Stretch prints, blue & green, \$5 ea; elect knife, elect water kettle elect curling iron, \$5 ea; Colom-bian wall hanging, orange/yellow, black, \$12.50; gr/black vnyl travel bag, \$7 Emerson AM/FM table

Pentax Spotmatic w/org Pentax Takumar lenses: f1.8/55mm, f3.5/28mm, f4.0/150 mint cond, \$450. Call Juerg x3-8402.

Dine thle w/sm drawer, both sides fold down, 38x4-

Dine tole wish drawer, ooth sides told down, ook-4" when open, dark stain, \$40; old 4 drawer dresser w/frmd mirror, \$30; unfinished pine 4 drawer dress-sers, one drawer slightly chipped, \$25; 6x9 1" shag

rug, brick red/olive gr/mustard, \$30; dining chrs, nite tble, magazine rack, K cab, \$3 ea. Call x3-

Antique Colonial, 10 rms, 21/2B, pro or in-law suite

potential, rural but conv So Shore loc, many authentic & unique features, \$80's. Call (1) 826-

Beer bottle collection more than 200 different,

Shoe shelves can also be usd for books, gd cond, \$8.

Piano, Chickering square grand, collector's item

heavily and ornately carved legs, etc, exc cond, ask \$1495. Mary x8316 Lincl.

Beaut 4' leaf design wall decorators item, \$50; 2 prs

Derriere jeans, sz 5. worn once, \$10 ee; black Atavio traviss rod, ext to 130 \$20; 2 brown med style traviss rods, \$10. Call 933-2741.

Leica & Exakta camera equip. Call x3-2923.

domestic & foreign, best. 391-3112 eves

Child tricycle, line nw, \$15. Call 494-0073.

classic, exc cond, \$200 or best. Call Ed x8-4432

picks & capo \$224. Bob x8-1442 Draper.

Draper or 237-4865 eves.

radio, \$120. Evelyn x3-6512.

4224

4010 eves.

Laurie x3-4698.

lv msg x3-1461

\$200+, \$20 ea. Call 482-8888 eves

ADS

X3-3270

For Sale, Etc.

or 491-0505.

Draper or 774-2045.

47 Lincl

x3-6870

'72 Chevy Kingswood stat wg, 68K, \$750 or best. Call 876-2122.

'72 Chevy station wg, exc shape, inside & out, A/C, PS & PB, \$875. Call x3-5584 or x3-5589.

72 Honda CB500, exc cond, nw top end, pull back handle bars, step up slat w/shocks, lay back, custom handpainted tank, \$1100 or best. Call x7454 Lincl.

'72 Mercury Montego, 2 dr, \$200. Call Carol x3-4765.

'72 VW Bug, gd cond, auto trans, low mlg, \$1150 or best. Lynn x7881 Lincl.

'73 Alfa-Romeo 4 dr, 60K, gd mech, cond, 25 mpg, Mich XAS, nw clutch has bdy rust, best over \$1500. Jeff x8-4050 Draper.

'73 Chevy Malibu, 4 dr, PS & PB, A/C, vy wel kept, nw tires, bttry, brks, etc, best. Call 661-6063. '73 Chevy Malibu, PS & PB, auto, A/C, AM/FM tapes, \$1400. 324-1966.

73 Dodge Dart, slant 6, stand, 75K, gd cond, 20 mpg, ask \$1250. Chris 744-5765 Salem Mass anytime.

74 AMC Hornet Sportabout wg, gd mpg, runs well, interior looks nw, 6 cyl, stand trans, jst tuned up, best over \$1300. Perry Justesen 494-9246 or x5-8209 Dorm. 74 Black Grand Torino Elite, PS & PB, A/C,

AM/FM, power windows, lux inter, gd cond, runs great, \$1400. Susan x3-5228.

'74 Fiat Spyder, convert, 71K, AM/FM rads vy gd cond, \$2500 or best. Call 648-5235 eves. '75 Dodge Colt, 65K, exc cond, Calif car, stored for winter, no rust, \$2250. Jeff x3-5401 or 623-7577.

'76 Catallic Coup Deville, D'Elegent inter, slide glass astro roof, & every other factory offer. Hank x7689 Lincl.

'76 Fiat Spyder 124 convertable, 5 spd, reg gas, 51K, \$4000. Terry x3-5788.

76 blue MG Midget, 34K, AM/FM csstt, \$3000 firm. 963-7741 aft 6pm.

'76 Volari prem wg, dark gr, vinyl siding exc cond, gd economic 6 cyl, 39K, 5 rads & studded snows. Kim x3-7330 Lincl.

'77 Subaru 4WD, stat wag, white, 41K, exc cond, \$3500 or best. J. Orlen x3-1973.

'79 Chevy Malibu, station wg, 6 cyl, auto, A/C, flly equip, exc cond, \$4900. Call x3-1555.

'79 Coleman Brandywine tent trailer, slps 6, ice chest, 3 burner stove sink, priv curtains, bumper w/bike rack, spare tire & cover, usd 6 wkends, mint cond, \$2700 or best. Richard Calvani 531-8458 aft 6 or x7453 Lincl

Housing

Sublet 1 BR furn apt, Apr 30-May 14, 10 min walk from MIT, 491-6874

Brkline sublet, May 10-June 15, furn 2 BR, mod, \$500/mo + refundable deposit. Call x3-7128 or 277-2193 eves.

Sublet apt Camb, May 4, 2 or 3 mos, 2BR, furn, Call 864-4064.

1 BR apt w/beaut view, Cleveland Circle at Reservoir, wash/dryer, dish wash refrig, swimming pool avail aft June, \$465/mo incl ht & elect. Chris x3-3603.

Lg 1 BR apt, furn, 2 blocks from T, cls to Coolidge Corner, Brkline quiet env, parking, easy walk to shops, public tennis crts, avail June 1, \$275/mth, h tincl. Mr. Reisner 566-4262.

Camb, 1BR studio apt, complete renov all util incl, \$300/mo. Call x3-6337 before 3pm, M-F or 661-8679 aft 3pm.

Camb, sunny, quiet summer sublet w/Sept opt, furn, 2 BR, LR, K, B, 5 min walk from Harv Sq, \$218/mo. Call Josh Epstein x3-8088.

Nantucket Madaket, 3 BR deluxe condo, ocean view tennis crts, inlet pool, 5/31-6/14, \$395/wk, or \$750/2 wks. Call 924-0264.

Camb/Somerville line, between Inman and Union Squares 8 rm twhse attached, 3 floors + basement, no central heating, nds work, recently occupied, \$29K. Call K. May 492-4759 aft 6pm or wkends.

Summer sublet, 1 BR E Bos, harbor view, sundeck, safe, quiet, June 15-Sept 10, or less, \$150/mo util incl. Call x3-6681 or 569-2045.

Vacation home on Cape Cod, for summer rental, 4 **BR** deck few mi fro m Nauset beach, 2 mi from ther beaches, quiet rd, lg lot, \$300 per wk. Call x3-1316.

Hse for sale, 3 BR, 2B, fp, 3/4 acre 1 car garage, Lex, \$85500. Call 861-7068.

Westgate efficiency apt for sublet summer. Call 494-8197

Chincoteague Island, VA, unique holiday opp tunity, converted clam box on water's edge, crab & clam lovers, rustic but comfortable, flly furn, slps 6. \$225/wk. Call 734-9187.

Lake Winnepesaukee, scenic Wolfeboro, NH, waterfront Yacht Club apt, docks, sail boats, winning, tennis, linen & rm cleaning provided, walk to shopping, wk of July 20-27 avail for rental. Bob x3-2748. Camb/Somerville line, sublet, 2 BR apt, June, Wish to trade Audi, BMW, Mercedes repairs for flight instruction. Call before 8am. Alan x8-1231 Draper.

Sublet wanted, start May 1 BR or housesitting, will care for plants Call 782-2255 x121. ints and animals, exc reference

High school student seeking meaningful summer employment/activity relating to computers. I can program in FORTRAN, BASIC, TI programmable calculators and other languages. Call David 232-2993 evenings.

Experienced hsesitter avail for hsesitting in Bos . Call x5-8332 or x5-3261 Dorm

Wizard, semi-rowdy, band of adventurous se a wizard, experience helpful but not required, must supply own equipment caanot guarantee monetary award, only an opportunity to walk t glory road. Interested should call x3-1411. to walk the

1 or 2 students to drive car to Atlanta, Georgia at end of term wish to complete arrangement by Apr 30. Geo Mayo x8-4408 Draper.

Nantucket, 2 consecutive wk hse rental for June, July or Aug time flexible. David Marks x3-1992.

Wanted 2 BR apt for summer sublet, pref on campus. Amar x3-6629 or 494-8696.

House exchange, we need a hse or apt in Camb area for the coming academic yr in exchange for our 1g mod Central Vt farmhse on 130 acres at the nd of a town rd, pond, views, wood/oil ht, nr skiing, etc. Ed Pincus x3-1606 or (802) 485-8428.

Roommates

F rmmate with to share sunny 2-bdrm mod apt 20 mins walk from MIT. Call eves: 876-0159. 1BR to shr in 3 BR apt w/2 MIT grad students, 10 mins MIT. x3-6613 or 661-0809 eves.

Allston, shr beaut spac apt w/1 other person, quiet residential area, walk to shopping 10 min busride to Central Sq, \$140/mo + util. 782-7888.

Foreign student willing to pay up to \$300/mo to shr 2 BR apt. Call x3-4101 or 277-7870.

1 F non-smoking rmmate wntd for 4 BR apt in Brkline, cls to MIT & T, nice neighborhd, \$120/mo start from June or July. Call 232- 0127.

Miscellaneous

WI move house & apt furniture, reliable mover. Joe x3-2100

Expert MIT typist, 10 yrs experience. Call 367-

WI type thesis, etc, preferably non-tech, IBM Select, reasonable rates. Call Jane x3-4601.

Flute lessons w/experienced teacher/performer, pro trained at Indiana U, Tanglewood & Vienna Music Academy. Call 492-7034.

Pro secretary willing to do typing in own home on Smith Corona elect, fast, clean, accurate typing, all work proofread, all text either handwritten or typed incl footnotes & bibliography, \$1.25/finished pg, extra charge for rust service or to use out paper. Call Mary beth until 4pm, 482-1750 or aft 6, 846-

Enjoy your piano: Spring special, standard piano tuning, \$25. Christopher Sikes 864-8166.

We cook for you exquisitely, fine gourmet catering for any of your special events, waitress service avail. (1) 443-9671.

Wl type, IBM Self Correct, vy fast, vy experienced. Annette x3-5202.

Typing - all kinds - correcting Selectric, fast and reasonable, also editing. x3-7758 Sherry.

Surplus Property

The following MIT Excess Property is available for transfer through the Office of Facilities Manage-ment Systems. Please contact Wendell A. Derry, x3-2776, citing property case number:

Distance meter, model DM100 mfg. Wayne Kerr, ser. 102 Paper tape dispenser

Chart recording thermometer: 100-200 F, Leeds & Harthney, Micro Max Recorder. Leeds & Northrup Galvanometer, Cat. #2430C.

Jaeds & Northup Galvanometer, Cat. #2450C, serial 1142820, equip. # 850-16445 Tachometer head, model 506A, H-P Pulse generator, H-P, model 212A, serial 419-06290, equip. #8247-5 Power supply, H-P, model 712A, equip. #7131-385 Power supply, mfg. Anders Products Co., model 7182515

TR2515 ow frequency generator, H-P 202B, equip. #387-971

Discharge vacuum gauge and controller, cat

Discharge vacuum gauge and controller car 994183, Cenco, equip. 99179-27 Flame control unit, mfg by Combustor Control Corp., model 1000, type 26545 Chart recorder, A Pen, A channel, in wood cabinet Untrasonic generator, General Ultrasonics Co., 954100, 2000 (2000)

erial 261, model 400, equip. #2-25112 20wer supply regulate, model RPS-1, serial 1,

Power supply, regulate, model RPS-1, serial 1, mfg.Electro-Mechanical Instrument Co. Digital printer, Beckman #1454, serial 60248, AB run. Densometer, mfg. by w& L Gurley Co. serial

442643 unbalanced, Leeds & Northrup, KS Potentiometer pyrometer, Brown Instrument Co., model 156N 63P48, serial +116156. Micro flash unit, G. R. type 15300A, serial #320. Hand hold spot.welder, ideal model 6C, serial #12-

03A.

03A. Servamplifier, model 610, mfg. by American Measurement & Control Co. AC animeter, Weston model #155, serial ½493591. Four gavanometer, Rubicon, cat. #3402H, ser. #27438, sensitivity .013 A/mm with lighted Scales ser. 29612.

4 pen milliamp meter, recording, mfg. Curtis Wright, model 83. P.H. meter. Beckman, model H-2, serial #28444. Dual power amplifier Triplett, model ADC-11, Ser.

#11 & X, with type RPS-4, power supply, ser. #2 Audio frequency motor, Heathkit, 0-100KC. Oscilloscope, H.P., model 130B, serial §946-03348. Leeds & Northrup Micromax, chart recorder 0-5 millivots, single pen. Leeds & Northrup, resistance bridge, cat. #4725,

Leeds & Northrup, resistance bridge, cat. #4725, ser. #1003917, equip. #387-1287. Regulated power supply, Electro-Mechanical Instrument Co., type RPS, serial #4. Timing unit, Minn Reg Co., ser. #430 Oscilloscope, H-P, serial #008-03642, model 150A w/model 152B, dual trace amplifier. Calculator, Victor, series 1500, serial #04910, Superconducting magnet, not in operating order. Phasalber System (19 bit encoder): a, 1 7' rack electronic equipment b, 3 19 bit encoder c. 3 preamp

3 preamp 1 set cables

1BM card punch model 026 3300 computer support equipment a. controller data controller b. control display unit Honeywell 3+C cards racks and power supply Two power supplies All of above - Case #568.

POSITIONS

This list includes all non-academic jobs currently available on the MIT campus. Duplicate lists are posted on the Women's Kiosk in Building 7, out-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).

AVAILABLE

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 Oficerse Representitaves to ap-ply for positions for which they feel they qualify.

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
	A State of the state of
Sally Hansen	3-4275
Ann Perkins	3-6511
Kathleen Rick	3-4269
Appointments: Etsuko Kumai	3-4274

Administrative and

Academic Staff

Admin. Staff, Production Manager, Design Ser-vices, will be responsible for the production phase of projects undertaken by designers in the office, which designs and produces over 400 publications of all kinds for clients throughout the Institute. Specific duties include: researching printing alter-natives; developing printing schedules; marking copy; laying out publications instructing and coordinating typesetters, printers and other vendors; ensuring that the work is produced within specified financial and time constraints. Considerable ex-perience in production aspects of publishing re-quired. Strong emphasis on organizational skills. A Bachelor's degree or equivalent combination education and experience is also required. A80-21

Academic Staff, Postdoctoral Associate, Nutrition and Food Science, will work with research program centering on interfacing a MS with a liver perfusion apparatus to study on-line the metabolism of volatilizable substrates and drugs. Requires PhD; candidate should have surgical skills and some ex-perience with metabolite assays. C80-6

Admin. Staff, Applications Programmer, Informa-tion Processing Services Operation/Administrative Computing Services, to translate external program specifications into computer programs. Duties and responsibilities include: Preparing program logic diagrams and data flow; assisting users; and programming, testing and debugging programs. Requires an Associate's degree and experience in computer programming. A80-10

plications of nuclear radiation fields to problems in the life sciences (i.e. nuclear medicine, nutrition, radiation biology or medical engineering). Ability to develop and lead research in one or more of the above areas required. Postdoctoral experien preferred, R80-122.

preferred. R80-122. Spons. Res. Staff, Technical Assistant, Dept. of Nutrition and Food Science, to be responsible for the routine operation of a laboratory for trace mineral analysis. Duties will involve the analysis of food and biological material for trace elements us-ing atomic absorption spectrophotometry, methodology development, maintenance of equip-ment, and training of other personnel in the use of the equipment. Requirements include a college degree, preferably in chemistry, and a minimum of one year's experience in trace mineral analysis us-ing atomic absorption techniques. R80-119

Spons. Res. Staff, Mechanical Engineer, Francis Spins, Res. Staff, Mechanical Engineer, Frances Bitter National Magnet Laboratory, will par-ticipate in large-scale experiments with supercon-ducting magnets; carry out quality assurance testing of superconductors; formulate, design, and execute experiments related to superconducting magnet technology. B.S. or equivalent in mechanical engineering required. One or more year's experience in cryogenic engineering or related field desirable. R80-118

Spons. Res. Staff, Technical Assistant, Biology Spons. Res. Staff, Technical Assistant, Biology Dept., will serve as Laboratory Coordinator for large biology student-laboratory course. Applicant should have good background in biology and biochemistry. Will be responsible for the smooth operation of the laboratory which involves purchasing and preparation of materials; testing of experimental procedures; assisting in coordination of teaching assistant, and serving essentially in the capacity of a senior teaching assistant. Requires B.S. or M.S. in biology or biochemistry. R80-116

Sponsored Research Staff, Research Scientist, Computation Structures Group of Lab for Com-puter Science to work with members of the group to develop hardware and software realizations of practical data flow computer systems and evaluate prospective applications; document and report the research; and prepare support proposals. Position requires extensive background in computer science—ideally in hardware and software concepts and practice—and excellent communication skills. Ph.D. in computer science also required. R79-336

Exempt

Exempt. Administrative Assistant. (Loan Collection). Student Loan Office, will be responsible for the full collection effort of a portion of the loan delinquincy file. Excellent written and oral skills are required to communicate with borrowers by are required to communicate with borrowers by phone, letter and in-person to resolve problems and delinquencies. Will conduct exit interviews with terminating students to explain terms, rights and obligations of the loans. Bookkeeping and/or accounting skills are necessary to understand, es-tablish and adjust complex loan repayment terms. Loan collection exprience desired. 35 hrs./wk., with flexibility in schedule, i.e., evenings and/or Saturdays. E80-18

Exempt, Chef Manager, Food Service, will

Exempt. Chef Manager, Food Service, will develop, organize and assist in the performance of all responsibilities required in the operation of a MIT Residence Food Service Unit. In addition, this unit will perform all the duties associated with a test kitchen for the Dept. Individual will ad-

minister all procedures required for a single unit

minister all procedures required for a single unit daily operation; develop and prepare menu selec-tions for the special diet and light eater; ad-minister seminars and training programs; direct and coordinate preparation of menu and recipe for-mulation; research, organize and publish related food service information as assigned. Requires Bachelor's degree or equivalent combination of education and experience or a degree in Culinary Arts Training. Strong merchandising background, organizational ability, initiative and experience in food testing and recipe formulation helpful. E80-17

Library Assistant, (Section Head, Circulation), Rotch Library of Architecture and Planning, will be responsible, under the Associate Librarian, for all operations of the Circulation Section. In-dividual will train, direct and schedule work of 3 circulation assistants and supervise student desk and stacking assistants; oversee processing and maintenance of reserves collection; provide infor-mation service for library users; participate in cir-culation desk activities such as charging and dis-charging materials, searching items reported miss-

charging materials, searching items reported miss ing, preparing overdue notices, etc., and assists with other projects. Minimum of 4.5 years direct/related experience necessary. Post high school education can count toward experience.

Also requires patience, tact and firmness in dealing

with library users. Some typing also required. B80

Library Assistant, Plasma Fusion Center, will help

Lordry Assistant, Plasma rousin custon concer, will help to develop and maintain a reading room for the Center. Will perform filing, searches, cataloging and technical services processing (with text editing system); provide information and reference ser-vices to users; help establish and interpret policies;

vices to users; help establish and interpret policies; initiate correspondence with publishers and ven-dors; coordinate reports dissemination and per-form special projects as assigned. Secretarial duties include handling mail, telephones, typing and occasional technical typing assignments. Re-quires at least 2.5 years' direct/related experience in library work, and typing skill. Technical typing experience desirable. Individual should have good interpresental kills and he shle to set priorities and

work with minimal supervision. Prefer at least 2 years of college. B80-188

Admin. Secretary, in the Division of Laboratory Animal Medicine to provide secretarial support to Director of Diagnostic Laboratory and to Clinical

Veterinarian: monitor documentation required for

Secretary/Staff Assistant

Library Support Staff

205

Mark Ten CD electronic ign factory \$25. Alex x8-1583 Draper.

Free Afghanistan bumper stickers & buttons. Call x3-1960 or Rm E10-037

W 3 spd Raleigh Colt bike, exc cond, \$60. 332-9617.

Underwood elect typewrtr hvy, gd cond, clean, ask \$125. Louie x7533 Lincl.

Sears "free spirit W bikes, 10 spd, exc cond, \$60. Call x3-4776 Tues/Thurs 11-noon.

Fiberglass bltd tire A78-13 white wall, \$14, lk nw Jack x8-3235 Draper.

Upright piano, Kohlerg Campbell mah, best cond, jst tuned, beaut sound, \$545. Call x3- 2342, or 646-5928 ask for Erika.

Quality 75" sofa, \$85: beaut baby crib, \$25: sm K tble, \$5 other hsehold & K items. Call x3-1434 or 494-8642 anytime.

Home heating oil, 200 gals, converting to gas, cash & carry, prc nego. x3-5743 or 483-4294 eves Ricky.

Vehicles

'69 Ply Fury 3, eng exc, bdy fair, runs well, low mpg, \$175. Koby x3-5033.

'70 Maverick, 6 cyl economical/dependable, vy gd run cond, AM/FM, snows, nw brks & trans, 75M, \$650. Joe x3-8217.

Page 6, Tech Talk, April 23, 1980

Beacon hill apt for rent, avail end of May to Sept, flly furn, 1 BR lg K, ww carpeting, quiet, nice neighborhood, 5 min to T & shops, \$335/mo incl ht & water. Call 723-9856 aft 5pm.

Animals

Free to gd home 2 yr old spayed hsecat, affec, nds more stable homelife. Tam x3-4855 or 254-7489 eves

Free grey kitten F, 6 wks old, affectionate, adorable. Helen x3-2710.

Lost and Found

Lost: W blue run shoes sz $6^{1/2}$ -7, if found. Stephanie x3-2916.

Wanted

Anyone moving to Berkeley in May who could bring another half-truck load? I will be in Cambridge to load it, but will fly back. Write Maia Ramsey, 3101 Deakin, Berkeley, CA49705 and send me your phone + (Even a couple ungainly items like a bicycle would help.)

Attenuator, unbalanced, Leeds & Northrup, RS-9534-L4, 75r, serial #1756786. Two table tops, wood. Atcotronic balance-TROL, type 1447B, serial

R9962. R9963, mfg. by Automatic Temperature Control Co. Inc. Scope camera, H-P, model 196A, serial 332-02912,

w/case. Multiplier, Weston Elec. Instrument Corp., type

21. model 310, serial #3760

21. model 303 serial #7700 Recording oscillograph, Honeywell, model 906A, serial 9-6287 equip. +7401-5 MIT. Relay control component, Philbrick SK5-R Galvanometer, type 341, Rubicon, Serial #58748, 001M/mm

eter, type 3400H, Rubicon, serial #11080, Galva 2.8 un/mm. Ammeter, -150, American Instrument co., type 4,

serial #5204

serial #5204 Allid kymograph, Phipps & Bird Inc, gear bos. Densichron, W.M. Welch Co., serial A1569. Constant voltage transformer, Sola, serial #90503, cat. #30608.

Two constant voltage transformers, Sola, cat. #300, serial 35398, 115 volts, 1 Amp., input 95-125 volts. Two chart recorders, Leeds & Northrup, Micromay, 0-16 millivolts.

Potentionmeter pyrometer, Brown Instrument Co., model 153301.

model 153301. AC Amp meter, Weston, model 155, serial 25005. Circuit breaker, 225 Amps, 3 po.e. Constant voltage Transformer, Sola output, 115V, 1.2 Amp, 95-130V input. type CVN. Dual power amplifier, type ADC-11, serial 1 & 7, Triplett with power supply, type RP-S, serial #4. Crystal controlled microvolt generator, Hickok, model 19XD, 60 MC to 225KC in 7 ranges. Low level amplifier, Sanborn, with power supply. Constant voltage transformer, mfg. Sola, cat. Constant voltage transformer, mfg. 3004, 115V, 4:30Amps, serial B19620, 95volts to

Potentiometer, Foxbore, recording 1 pen. Recording meter, mfg. Thwing-Albert.

Sponsored Research Staff

Spons. Res. Staff, Technical Assistant (Cell Biology), Biology Dept., requires experience in the use of the polarization microscope. Knowledge of cell culture and cell handling techniques also essential. Individual should have experience in the sential, individual should have experience in the use of radioisotopes and radioautography as well as training in general biochemistry. Some experience in the area of photography and cinemicrography also helpful. Also requires B.S. in biology or related field, R80-127

Spons. Res. Staff, Electronic Engineer, NEROC Haystack Observatory, will design and develop electronic equipment for radiometric and very-long-baseline interferometric (VLBI) measure-ments for radio astronomy and geodetic applica-tions. Requires B.S. in electrical engineering or physics. M.S. or equivalent desirable but not man-datory. Should be familiar with the design of microwave circuits involving wavesnide and asdatory. Should be familiar with the design of microwave circuits involving waveguide and as-sociated components; theory of amplifiers, mixers, modulation and noise, etc.; principles of solid state and digital circuit design. Two to five years' rele-vant experience desirable, but recent graduate with applicable hardware experience during or before school may be considered. Interest in astronomy and ability to work with others desirable, R80-126

Spons. Res. Staff, Research Scientist (Theoretical), in the Plasma Fusion Center to con-duct research related to the physics of intense charged-particle beams including intense microwave generation and the equilibrium and stability of properties of beam-plasma systems and field-reversed configurations. Position requires a PhD in physics and background in intense charged particle beams. R80-125

Spons. Res. Staff, Research Scientist/Engineer, in the Nuclear Reor laboratory to do research on ap-

research projects; transcribe pathology reports; compile documentation for special billing procedures, as well as for payroll and accounting procedures, as well as for payroll and accounting processes; perform a variety of other general office duties. High school graduation, or equivalent, ex-cellent typing skill and at least 4.5 years' ap-plicable experience required. B80-205

Sr. Secretary, Humanities, will perform general secretarial duties as required by the Foreign Languages and Literatures Section. Individual should be flexible and able to share duties as a member of support staff team for section. Requires excellent typing skill, basic reading knowledge of Common under Encept, formiliarity with office German and/or French: familiarity with office machines, pleasant telephone manner, and ability to work in an active environment. Also requires 2.5 years' education/experience with secretarial ex-perience preferred. B80-209

Sr. Secretary, Office of Planned Giving and Legal Affairs/Resource Development, will provide Affairs/Resource Development, will provide secretarial support to a professional staff involved in support of the Institute's development program. Individual will type correspondence with legal for-mality from dictation, written copy and tape recordings: handle and make telephone calls to donors, law offices, bank trust officers, and others; maintain office calendar; arrange travel; maintain maintain once calendar, arrange travel, maintain donor and trust files; prepare formal presentation relating to effects of gifts in trust, and assist in preparation of monthly reports and annual reports. Knowledge of MIT helpful. Must be excellent typist, well-organized and able to work well with others. B80-207

Sr. Secretary, Sloan School of Management, will provide secretarial support to one faculty member provide secretarial support to one faculty member in economics area. Responsibilities include: screening telephone calls, typing papers and am-nuscripts (including some technical typing), memos and correspondence; ordering materials and supplies for the area. Pleasant, congenial working environment. Requires excellent typing m machine dictation and technical typing skill skill desirable. B80-206

Sr. Staff Assistant, to Assistant Director of the Center for Policy Alternatives. Position involves working with team of research staff on projects related to environmental/occupational health policy and regulation, and on teaching in technology and law. Will handle general secretarial duties; monitor monthly accounting statements; type manuscripts, course materials, and Congre-imed testimore: censuic measure herement files type manuscripts, course materials, and Congres-sional testimony; organize research proposal files. Excellent typing and shorthand or speedwriting re-quired. Good organizational skills, the ability to set priorities and work independently also neces-sary. Interest in subject matter important. Non-smoking office. Also requires a minimum of 2.5 years of experience or combination of education and experience. 40 hrs/wk. B80-203

Sr. Secretary (Technical), to two faculty members, Chemistry Dept., to type correspondence, technical manuscripts, grant proposals and course materials; arrange appointments and travel; monitor research accounts. Technical typing skill; experience with transcription equipment required B80-202

Sr. Secretary (temporary, part-time), Alumni As-sociation, to provide secretarial support for alumni relations programs; type correspondence and reports; arrange committee meetings and maintain files. May also provide support for reunions and Technology Day activities. Good interpersonal skills, excellent typing, command of English gram-mar, as well as at least 2.5 years' applicable ex-perience required. 20 hrs/wk. temporary for 6 months. B80-201

Sr. Secretary, Chemical Engineering, will assist So, Sectorary, Olemetar Ingineering, with asso-active faculty members and research staff in their academic and research responsibilities working in a dynamic environment. Duties will include typing materials for classes, manuscripts, proposals, etc.; composing letters and other correspondence; composing letters and other correspondence; organizing and maintain files and professional library of faculty members; handling telephone in norary of faculty memoers, nanoning telephone in-quiries; monitoring financial accounts and records; arranging meetings and coordinating travel plans; carrying out occasional library research, and in-teracting with students, advisees and staff. Will perform other clerical and administrative duties as periorm other ciercia and ministrative duties as required. Excellent typing skill and ability to transcribe from dictation equipment required. In-dividual should have good interpersonal and organizational skills, and be able to work in-dependently. Experience with shorthand, word processing and technical typing desirable. B80-199

Sr. Secretary, Radioactivity Center (Medical Dept.), will have considerable phone interaction with, primarily, elderly female subjects for a with, primarily, elderly female subjects for a medical research project, involving follow-up search and contact techniques for unlocated persons exposed to radium, and encouraging their participation in the studies at MIT. Will prepare lists of patients, maintain list of responses, periodically encourage participation through phone contact, arrange travel and escort patients to scheduled campus appointments; answer and screen phone calls; type memos and other materials from handwritten and dictated drafts; and assist with other clerical and accounting duties as needed. Requires good interpersonal skills; and assist with other clerical and accounting duties as needed. Requires good interpersonal skills; ability to handle details accurately; excelent secretarial and communication skills as well as command of English usage and grammar. Secretarial school training preferred with ex-perience. Non-smoking office. (37.5 hrs./wk). B80-198

Staff Assistant, Research Laboratory of Electronics, will perform secretarial and clerical duties for one or more professors. Individual will be responsible for office; take and transcribe difficult dictation including some specialized terminology; type technical manuscripts and statistical tables and charts involving the responsibility for accuracy of the material; and set up manuscripts from rough data absolute forther professors formate nume data, checking footnotes, references, format, punc tuation, etc. Will also arrange travel, distribute mail, and answer correspondence. Requires excel-lent typing skills and familiarity with some method of taking dictation. B80-197

Sr. Staff Assistant will provide a variety of secretarial and administrative support services for two senior Nuclear Engineering faculty members working in the area of national and international energy policy. This effort includes investigations of the environmental, economic and political aspects of energy policy, as well as the technological issues. Must be capable of effective personal interaction with contacts at the highest levels of government (both foreign and domestic), industry and the non-profit sector. Ability to assume responsibility and make independent judgments is a necessary qualitification. Experience with dictaphone and a highly developed command of English grammar is also required, as is at least 2.5 years of applicable experience. Technical typing and college study preferred. This is a non-smoking office. B80-196

Staff Assistant, System Dynamics Group oan School of Management), will assist in routine administrative, accounting and miscel-laneous matters. Will verify detail on monthly accounting statements, will very detail on monthly ac-counting statements, file, prepare and distribute System Dynamics Newsletter, assist faculty member with summer session, direct Group visitors and other inquiries appropriately, main-tain Group library publications, and perform some unice environments. Decuine ability of handle typing assignments. Requires ability of handle figures, good interpersonal and organizational skills, attention to detail and follow-through, and typing skill. MIT experience valuable. B80-194

Sr. Secretary, will work in the office of the director of the Center for Materials Research in Archaeology and Ethnology (Provos's Office). The majority of the work will be generated by CMRAE director and several faculty members. The remain director and several faculty members. The remain-ing portion of the work will be for the Cambridge Humanities Seminar, which involves typing and mailing texts of seminar papers every 2 weeks, large photocopying assignments and keeping ac-counts. CMRAE work involves typing director's correspondence, course syllabis and reading lists and research proposals; some tape transcribing; fil-ing; account keeping; arranging meetings; and coordinating Center activities through director's office. Requires excellent typing, filing and and manuscripts, answer telephone and make limited library searches for information. Requires high school graduation or equivalent and 2.5 years' direct/related experience. Must type at least 50 wpm and be willing to learn technical typing in order to meet manuscript demands. Should also be willing to learn computer editing and be available to perform weekend and evening overtime work as required expecially for conferences 40 br/ark red, especially for conferences. 40 hrs/wk. B80-185

Secretary-Technical, Plasma Fusion Center, Sr. Secretary-Technical, Plasma Fusion Center, will handle technical and correspondence typing, travel, telephones and other secretarial duties for three small fusion research groups. This new posi-tion will provide challenge and diversity in the in-itiation of procedures and special projects. May also assist with computer data entry. Individual should have excellent typing and interpersonal skills, and ability to set priorities, manage workloads and work independently. Technical typ-ing experience desirable, but not required. B80-187

Secretary-Technical (part-time), to serve as General Headquarters secretary at the Operations Research Center, Will answer phones, take mes-sages, maintain files, type technical and non-technical manuscripts, letters and memos for a number of Center faculty and staff members. Re-quires ability to work independently and technical typing skill. 17.5 hrs./wk. (Hours: 9am-12:30pm.) B80-195

Office Assistant

Sr. Office Assistant, in the Medical Department's Information Processing Service. Will keypunch, verify, audit, edit and batch data. Key-punching and verifying experience is required; ability to work with minimal supervision also necessary. PSR. 204 B80-204

Sr. Office Assistant, Plasma Fusion Center, will Sr. Office Assistant, Plasma Fusion Center, will work primarily with accounts payable. Will process invoices for payment for a large volume of research expenditures; log in purchase orders, match receiv-ing reports and invoices with appropriate purchase orders; problem solving re: mismatches, vendor mistakes, and a variety of other problems. Re-quires ability to use calculator, neat handwriting, and good interpersonal skills. Should also handle detail accurately. Also requires a minimum of 2.5 years' experience or combination of education and experience. B80-186

Office Assistant, Registrar, will work in the graduation section, preparing diplomas and graduation booklets, plus associated office work. Individual should be available for overtime work during peak periods (month of May). Requires nglish grammar and spelling, accurate typ-fice experience or some college training ing. Office experi desirable. B79-755

Office Assistant, Comptroller's Accounting Office, Office Assistant, Comptroller's Accounting Office, will review and prepare time sheets for data proces-sing input; log file maintenance changes; post payroll audit of time sheets and input with par-ticular attention to Personnel policies; research employees and departmental inquiries relative to pay descrepanices, payroll procedures and general information; manually review and computer pay adjustments, master file changes and special checks; and complete wage and other miscellaneou clerical functions. Rewires ability to communicate clerical functions. Requires ability to communicate effectively, and ability to work independently as well as closely with others. B80-192

Service Staff

Service Staff, Heat and Vent Mechanic, in Physical Plant. Position requires broad experience in building heating ventilating and air conditionin outcome nearing ventuating and air conductor-ing operations. Specific experience in operation of steam heating systems, HVAC controls, boilers and refrigeration systems and hands-on experience in repair replacement and adjustment of their operating components also necessary. High school graduation, or equivalent, plus 5 years' experience in operation/maintenance of building HVAC systems required but formal training may the subsystems required, but formal training may b stituted for a portion of experience. H80-91

Service Staff, Stock Clerk, Electrical Engineering and Computer Science, will unpack incoming goods; inspect goods for quality and quantity; repackage goods; store goods on storage shelves and in storage rooms; keep storage and work areas neat and clean; deliver goods over the counter on requisitions; check requisitions for proper descrip-ion of iteme, dismane alectronic instruments and tion of items; dispense electronic instruments and components; inventory all laboratory equipment and parts; and set up and maintain academic teaching laboratory stations. Knowledge of electronic stock desirable, but not necessary. 40 hrs./wk. H80-90

Service Staff, Sr. Technician-Mechanical As-sembler (temporary 9-11 months), Plasma Fusion Center. Individual will be responsible for the whechanical assembly of electronic components and subsystems for a large microwave plasma heating system. Machine operating skills required, as is ex-perience in soft and hard soldering, pipe fitting and gear train assembly. Must be able to work effec-tively with verbal instruction and minimal supervision. A minimum of 5 years' working experien in the areas described, plus graduation from a to year day technical school are required. H80-63

Service Staff, Technician A, Mechanical Engineer Service Staff, Technician A, Mechanical Engineer-ing Dept., will assist in laboratory, research or analytical work under direction or supervision of scientific personnel. Operates highly technical ex-perimental apparatus; has demonstrated con-siderable skill and good performance in the par-ticular field of acitivity; will assist and/or par-ticipate in various research projects through in-teractions with students; conduct mechanical properties testing, and maintain laboratory equip-ment. Graduation from a two vear day technical ment. Graduation from a two year day technical school or its equivalent and a minimum of years' applicable experience required. H80-65 m of two

The following positions were still available at Tech Talk deadling Complete descriptions of the el Office, (E19-239), and at locations listed at the beginning of Positions Available section.

- Science R79-225, Spons. Res. Staff, Research Associate, Materials Science and Engineering R79-250, Spons. Res. Staff, Sr. Shift Supervisor,
- R19-200, Spons. Res. Staff, Research Specialist, Nuclear Reactor Laboratory R79-316, Spons. Res. Staff, Research Specialist, temporary, Center for Policy Alternatives R79-329, Spons. Res. Staff, Research Scientist, Artificial Intelligence Lab. DED 900 Comp. Dam. Staff. Res. Scientist, Ap.
- R79-330, Spons. Res. Staff, Res. Scientist, Ar-tificial Intelligence Lab. R79-331, Spons. Res. Staff, Artificial Intel-ligence Lab. R79-332, Spons. Res. Staff, Res. Scientist, Ar-
- tificial Intelligence Lab.
- R79-336, Spons. Res. Staff, Research Scientist,
- Lab for Computer Science. R79-342, Spons. Res. Staff, Res. Associate, Center for Trans. Studies in Freight Demand Analysis. R79-346, Spons. Res. Staff, Operations/Research
- Engineer, Aeronautics and Astronautics Aerophysics Lab. R79-363, Spons. Res. Staff, Mechanical
- Engineering R79-365, Spons. Res. Staff, Tech. Assistant,
- Biology Dept. R79-381, Spons. Res. Staff, Tech. Assistant,
- Riology R79-388, Spons. Res. Staff, Res. Engineer, Elec. Engin. and Computer Sci. Dept. R80-5, Spons. Res. Staff, Res. Scientist, Plasma Fusion Ctr.
- R80-6, Spons. Res. Staff, Res. Scientist, Plasma on Ctr
- usion Ctr. R80-8, Spons. Res. Staff, Res. Scientist, Plasma usion Ctr. R80-9, Spons. Res. Staff, Res. Engineer, Elec.
- Power Systems Lab R80-11, Spons. Res. Staff, Res. Lab of
- Electro
- Electronics R80-13, Spons. Res. Staff, Experimental Solid State Physicist (postdoctoral) R80-22, R80-23, Spons. Res. Staff, Postdoctoral Associates, Lab for Nuclear Science. R80-28, Spons. Res. Staff, Res. Specialist, Hardware Design, Psychology Dept. R80-39, Spons. Res. Staff, Mechanical Engineer-ing Dent
- ing Dept. R80-40, Spons. Res. Staff, Planning and Research Associate, part-time, Lab of Arch. and Plannin
- Planning R80-43, Spons. Res. Staff, Postdoctoral As-sociate, Lab for Nuclear Sciences R80-45, Spons. Res. Staff, Business Manager, R80-45, Spons. R80-45
- R80-45, Spons. Res. Staff, Business Manager, Harvard-MIT Div. of Health Sciences and
- echnology R80-49, Spons. Res. Staff, Radio stronomer/Research Scientist, NEROC Haystack Astron
- Observatory R80-51, Spons. Res. Staff, Research Scien-tist/Engineer, NEROC Haystack Observatory

- tist/Engineer, NEROC Haystack Observatory R80-57, Spons. Res. Staff, Software Engineer, Laboratory for Computer Science R80-58, Spons. Res. Staff, Research Engineer, Haystack Observatory R80-67, Spons. Res. Staff, Research Scientist Experimental, Plasma Fusion Center R80-69, Spons. Res. Staff, Design Engineer-Superconducting Magnets, Plasma Fusion Center R80-73, Spons. Res. Staff, Research Scientist, Civil Engineering
- Civil Engineering R80-74, Spons. Res. Staff, Research Associate,
- Rot-14, Spons. Res. Staff, Research Associate, Materials Science & Engineering R80-79, Spons. Res. Staff, Research Associate, Nutr. & Food Science. R80-80, Spons. Res. Staff, Res. Specialist, Earth

- Rob-ot, Spons. Res. Juni, two operation, Latent & Planetary Sci.
 Rs0-82, Spons. Res. Staff, Programmer, Haystack Observatory Rs0-84, Spons. Res. Staff, Biology Dept. Rs0-86, Spons. Res. Staff, Research Metal-lurgist, National Magnet Lab Res. Staff, Cellular and

- lurgist, National Magnet Lab R80-87, Spons. Res. Staff, Cellular and Molecular Biologist, National Magnet Lab R80-88, Spons. Res. Staff, Magnet Design Engineer, National Magnet Lab R80-90, Spons. Res. Staff, Research Scientist (Electronics Engineer), Haystack Observatory R80-91, Spons. Res. Staff, Research Associate, Center for Space Research R80-93, Spons. Res. Staff, Research Associate, Sloan School of Management's CISR R80-95, Spons. Res. Staff, Earth and Planetary Sciences Dept.

 - Sciences Dept. R80-96, Spons. Res. Staff, Center for Cancer
 - Research
 - R80-97, Spons. Res. Staff, Logic Designer (temp), Plasma Fusion Center R80-98, Spons. Res. Staff, Mechanical Designer-
 - /Supervisor (temp.), Plasma Fusion Center R80-101, Spons. Res. Staff, Center for Cancer R
 - R80-102, Spons. Res. Staff, Programmer, Sloan School
 - R80-103, Spons. Res. Staff, Research Associate, Sloan School

 - Sloan School R80-105, Spons. Res. Staff, NMR Spectrosoc-pist, National Magnet Lab R80-109, Spons. Res. Staff, Engineer/Program-mer, Health Sciences and Technology R80-111, Spons. Res. Staff, Technical Specialist, Earth and Plantary Sciences R80-115, Spons. Res. Staff, Clinical Research Center
 - Center
- ACADEMIC:
- C79-21, Academic Staff, Radiation Protection Office, Medical Dept. C79-33, Academic Staff, Sr. Applications Programmer, Electrical Engineering and Com-
- puter Science Dept. C79-35, Academic Staff, Nurse Prac-titioner/Physician Asst. C80-2, Academic Staff, Postdoctoral Associate,
- Biology Dept. C80-3, Academic Staff, Manager, Management of Technology Program

RESEARCH STAFF: R78-307, 308, Spons. Res. Staff, Laboratory for Information and Decision Systems R79-196, Spons. Res. Staff, Research Associate, Architecture Dept. R79-196, Spons. Res. Staff, Lab for Computer Science Of NSF 1980 Fellowships

minority graduate fellowships.

for their undergraduate work.

graduate training at MIT.

Of the 460, 59 have selected MIT

for their graduate studies, in-

cluding the six who attended MIT

Of the 48 receiving new minority

graduate fellowships, seven have

selected MIT, including the two

who have received their under-

The NSF fellows this year were

selected from more than 3,300

students in nationwide competition. The fellowships provide

an annual stipend of \$4,320 plus an

allowance of \$3,400 toward tuition

and fees. The fellowships are

awarded for three years and may

The 66 new NSF fellows who will

begin their graduate studies at

MIT this Fall will bring to 163 the

total number of NSF Fellows who

will be enrolled at the Institute for

next year. These include 42 gradu-

ate fellowship holders and four

minority graduate fellowship hold-

ers who will be in the second year

of their studies. Another 51 NSF

fellows will be in their third year at

MIT. There are no NSF minority graduate fellows in the third year;

Of the 66 new NSF fellows who

will begin their studies this year at

MIT, the five who have done their

undergraduate work at MIT are:

Charles A. Freeman of Concord,

Calif., electronics engineering;

Peter H. Hochschild of El Cerrito,

Calif., mathematics; Steven K.

Ladd of Titusville, Fla., electrical

engineering; Daniel V. D'Eramo

of Aliquippa, Pa., mathematics:

Miller S. Puckette of Sewanee.

Tenn., mathematics; and Finley R. Shapiro of Narberth, Pa., elec-

trical engineering. The two new

NSF minority graduate fellows

whose undergraduate work was

done at MIT and who will pursue

their graduate studies at MIT are

Janice M. Antoine of Shaker

Heights, Ohio, chemical engineer-

ing; and Orlando T. Jett of Wick-

who will do graduate work else-

where are: Bruce Allen of Way-

land, Mass., who will study

theoretical physics at Cambridge

University, England; Richard L. Edwards of Ann Arbor, Mich.,

geology at the University of Michi-

gan; Jean Hunter of Yonkers, NY,

chemical engineering at Columbia

University; Gail E. Kaiser of

Pittsburgh, Pa., mathematics at

Carnegie-Mellon University; Don-

ald P. Monroe of Woodland Hills,

Calif, physical chemistry at the

University of Illinois; Barry

Nalebuff of Newton Centre, Mass.,

economics at Harvard University:

Michael H. Prager of Saunder-

stown, RI, bio-oceanography at

the University of Rhode Island;

Clifton W. Ragsdale of Cambridge,

Mass., medical science at Harvard

Medical School; Thatcher W. Root

of Bloomfield Hills, Mich.,

chemical engineering at the

University of Minneapolis; and

Gene Y. Suh of Johnson City, Tenn,

mechanical engineering at

Mr. Allen is also winner of a

Stanford University.

The ten NSF fellows from MIT

liffe, Ohio, chemical engineering.

the program began in 1979.

be used over a five year period.

Sixty-six, or 13 per cent, of the 508 persons nationwide who have just been awarded new National Science Foundation Graduate Fellowships and new Minority Graduate Fellowships beginning with the 1980-81 academic year, have selected MIT as the university where they will undertake their graduate studies.

The number makes MIT the most popular choice nationally among this year's recipients of new NSF fellowships.

Eighteen of this year's 508 recipients have or soon will receive their bachelors degrees from MIT. They include six recipients of graduate fellowships and two recipients of minority graduate fellowships who will do their graduate work at the Institute and nine recipients of graduate fellowships who plan to do their graduate work elsewhere.

All told, NSF in Washington, D.C., has awarded 460 new graduate fellowships and 48 new

- B80-53, Secretary, Dept. of Materials Sciences and Engineering-
- B80-54, Computer Operator, IPSO B80-65, Sr. Secretary, Mechanical Engineering
- Dept. B80-67, Data Entry Operator, IPSO B80.76, Admin. Secretary, Dept. of Materials Sciences and Engineering B80-89, Sr. Secretary, Provost's Office B80-89, Sr. Secretary, Provost's Office

- B80-94, Admin. Assistant (temporary 9 onthe), Plasma Fusion Center B80-96, Sr. Secretary, Political Science Dept. B80-104, Sr. Secretary, Clinical Research Center B80-108, Sr. Staff Assistant, Nuclear Engineer-
- B80-106, Sr. Secretary, technical, (part-time), B80-116, Sr. Secretary, technical, (part-time), Operations Research Center B80-121, Sr. Secretary, Nutrition & Food
- B80-123, Sr. Secretary/Receptionist, Student
- Financial Aid B80-126, Sr. Secretary, Biology Dept. B80-127, Sr. Secretary, Civil Engineering Dept. B80-139, Secretary, Sloan School
- B80-140, Sr. Secretary, Biology Dept. B80-141, Sr. Staff Assistant, Dept. of Nuclear
- Er
- ngineering B80-143, Admin. Secretary, Chemical Engineering Dept. B80-145, Admin. Secretary, Mechanical
- Engineering B80-150, Office Assistant, Comptroller's Ac-
- B80-150, Office Assistant, Comptroller's Ac-ounting Office
 B80-152, Office Assistant, Purchasing
 B80-153, Office Assistant, Records
 B80-154, Clerical Assistant, OSP B80-155, Sr. Secretary, Ctr for Internationl

& Chancellor

tion Development

Mechanical)

Lał

ADMIN

Waiter/V

H80-76

R80-81 R80-30

R79-314

B80-175

B79-821

B80-164

- Studies B80-56, Admin. Secretary, Res. Development B80-157, Sr. Secretary, Architecture Machine
- Group B80-158, Office Assistant, CAO

B80-159, Admin. Secretary, Office of President

Chancellor B80-160, Sr. Office Assistant, Food Service B80-161, Admin. Assistant, Food Service B80-162, Secretary, Lab for Computer Science B80-163, Admin. Scretary, Physical Plant B80-166, Admin. Assistant, Mechanical Eng.

B80-167, Sr. Secretary, Mechanical Engineering B80-168, Sr. Secretary, Earth and Planetary

Sciences B80-171, Sr. Staff Assistant, Center for Policy

B80-172, Sr. Office Assistant, MIT Press B80-174, Sr. Office Assistant, Admissions B80-176, Sr. Staff Assistant, Libraries, Collec-

B80-179, Sr. Editorial Assistant, part-time.

B80-180, Sr. Secretary, Physics Dept.
 B80-181, Sr. Secretary, Dept. of Civil Engineer-

ing B80-184, Word Processing Operator, Energy Lab

SERVICE STAFF: H78-106, Hourly Sr. Technician Electronic National Magnet Lab

National Magnet Lab H79-33, Service Staff, Technician A (Electronic), Chemistry H79-181, Service Staff, Technician B (Electronic), Laboratory for Nuclear Science H79-200, Service Staff, Technician A (Electro-Markaria)

H79-222, Service Staff, Technician (E-M),

H80-25, Service Staff, Drafter, (Mech.) Energy

H80-37, Service Staff, Designer (Drafter), Francis Bitter National Magnet Lab. H80-41, Service Staff, Second Class Engineer, Physical Plant

H80-5, Service Staff, Sr. Technician, E-M, H80-5, Service Staff, Sr. Technician, E-M, temp., Plasma Fusion Center

office. Requires excellent typing, filing and organizational skills. Attention to detail impor-tant. Should be able to adapt to variably heavy schedule. B80-193

Sr. Secretary will work in the Electrical Engineering and Computer Science Department's Graduate Office. Individual will keep records on depart-ment's graduate students in an on-line computer system: maintain a graduate list of students and coordinate thesis proposals with faculty thesis supervisors; keep records of all student grades, etc.; and gather data for various department and institute reports. Requires initiative and ability to work with general supervision, accuracy in typing and record keeping, and willingness to learn the use of an interactive computer system. Also re-quires a minimum of 2.5 years' experience or com-bination of education and experience. B80-190

Sr. Secretary, Nutrition and Food Science, will provide for International Food and Nutrition Program (Fellows Program). Will process applica-tions, prepare some independent correspondence, arrange fellows travel from foreign home, handle visa problems and housing; and prepare cor-respondence with National University in Tokyo. Will also make administrative arrangements con-cerning tuitions, salary and medical coverage and provide secretarial support for research, teaching and professional activities for one faculty person. provide Requires excellent typing, dictaphone experience and good organizational skill. Interpersonal skill, especially in dealing with fellows who are from developing countries, is essential. 40 hrs./wk. B80-to 189

Sr. Secretary, Francis Bitter National Magnet Lab, will type and proofread reports, manuscripts correspondence from rough draft, dictaphone and shorthand; maintain reports and correspondence files; assist in conference preparations, mailing, registration, proceedings publications, budget/accounting records; reproduce and distribute reports ADMINISTRATIVE STAFF

ADMINISTRATIVE STAFF A77-3, Admin. Staff, Systems Programmer, In-formation Processing Services A79-53, Admin. Staff, Asst. Editor, Technology

Re

A79-55, Admin. Staff, Asst. to Manager of entral Utilities Plant, Physical Plant A79-59, Admin. Staff, Systems Analyst, Infor-Cr

mation Processing Services

A79-81, Admin. Staff, Applications Program-

Mer, Information Processing Services Office A79-93, Admin. Staff, Area Coordinator-/Systems Analyst. A79-94, Admin. Staff, Area Coordinator-

/Systems Analyst.

A79-97, Admin. Staff, Acquisitions Editor, MIT Pr

Press A80-1, Admin. Staff, Senior Systems Analyst, Information Processing Systems Office A80-2, Admin. Staff, Programming Analyst,

IPSO

A80-4, Admin. Staff, Sr. Systems Programmer, IPSO

A80-9, Admin. Staff, Patent Attorney, Patent,

A80-9, Admin. Staff, Fatent Atomiey, Latent, Copyright & Licensing Office A80-10, Admin. Staff, Applications Program-mer, IPSO/Admin. Staff, Personnel Officer, Office A80-11, Admin. Staff, Personnel Officer, Office of Personnel Services A80-13, Admin. Staff, Assistant Director of

Financial Aid

A80-15, Admin. Staff, Administrator, Biology

Dept. A80-16, Admin. Staff, Assistant Director of Cor-

porate Relations, Resource Development Office A80-17, Admin. Staff, Industrial Liaison Officer, Industrial Liaison Program A80-19, Personnel Representative, Office of Per-

sonnel Services

E79-20, Exempt, Shift Supervisor, Physical Plant

E79-26, Exempt, Supervisor, Food Service E79-48, Exempt, Engineering Ast., Materials Science and Engineering Foundry. E79-53, Exempt, Operations Mgr., Center for

Space Research

E80-1, Exempt, Engineering Assistant, Ctr. for Materials Res. E80-2, Exempt, Auditor, Comptroller's Ac-

counting Office

E80-5, Exempt, Assistant Manager, Food E80-10, Exempt, Food Production Supervisor,

Food Service E80-12, Exempt, Engineering Assistant, Haystack Observatory E80-13, Exempt, Assistant in Com-E80-15, Exempt, Engineering Assistant, Center for Materials Science and Engineering

	B/9-821
SUPPORT STAFF:	R79-179
B79-624, Jr. Programmer, Laboratory for Com-	H79-137
puter Sci.	B80-146
B79-755, Office Asst., Registrar's Office.	E80-7
B79-767, Sr. Secretary, Medical Dept.	A80-20
B79-771, Office Asst., part-time, Graphic Arts	R79-78
Service	R79-228
B79-801, Sr. Secretary, Chemical Engineering	B79-716
Dept.	B80-119
B79-803, Admin. Secretary-Editorial, National	R80-46
Magnet Lab	B80-182
B79-823, Secretary, part-time, Nutr, & Food	H80-72
Services	H80-58
B80-5, Secretary/Receptionist, ILO	R79-157
B80-15, Service Assistant, Sloan School	B80-177
B80-20, Staff Assistant, Dept. of Aero & Astro.	
B80-27 Library Assistant Rotch Library	

B80-27, Library Assistant, Rotch Library B80-43, Sr. Secretary, part-time, Architecture B80-48, Secretary, Center for Policy Alternatives B80-49, Sr. Secretary, Dept. of Materials Science and Engineering

H80-57, Service Staff, Sr. Detailer/Graphics, H80-61, Service Staff, Design Drafter, Plasma

H80-62, Service Staff, Technician A (Mechanical), Mechanical Engineering Dept. H80-71, Service Staff, Technician A (Electronic), National Magnet Lab

e following positions were still available at Tech Talk deadline. Complete descriptions of these jobs and other available positions are posted in the Per-sonnel Office (E19-239), and at locations listed at the beginning of Positions Available section.

ISTRATIV	Service	Staff.
Waitress	Gertree	, oran,
	Spons, Res. Staf	Ť
	Spons, Res. Staf	
	Spons, Res. Staf	
	Sr. Secretary (ca	
	Accounting Assi	
	Spons. Res. Staf	Ϋ́
	Service Staff (ca	incelled)
	Sr. Staff Assista	nt
	Exempt (cancel	led)
	Admin. Staff (cr	ancelled)
	Spons. Res. Stat	ff
	Spons. Res. Stat	ff (cancelled)
	Sr. Secretary	
	Secretary (canc	
	Spons. Res. Sta	
	Office Assistant	(cancelled)
	Service Staff	
	Service Staff	
	Spons. Res. Sta	tf (cancelled)
	 Sr. Secretary 	

The following positions are on HOLD pending final decision:

> Library Assistant Spons. Res. Staff

Marshall Scholarship England. He plans to defer his NSF fellowship for two years. Mr. Nalebuff has a Rhodes Scholarship for study at Oxford University, England, as well as the NSF fellowship.

Lutist to Perform

Peter Lehman will present a program of music for the lute on Thursday, April 24, at noon in the MIT Chapel.

The program will include music by John Dowland, Denis Gaultier, Ennemond Gaultier and Silvius Leopold Weiss.

Mr. Lehman received the master's degree in performance of early music from the New England Conservatory of Music and studied with Eugen Dombois at the Scola Cantorum in Basel, Switzerland. He has performed solo recitals at the New England Conservatory, Ithaca College and the New Haven Neighborhood Music School.

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MIT Leadership Campaign Reaches Record Conclusion with \$250.2 Million Raised.

(Continued from page 1)

tary of the Corporation. The SCF also surpassed its goal by a wide margin.

Success of the Leadership Campaign, the three officers said, will have a significant impact on the future health of the Institute.

"Throughout the Campaign," President Wiesner said, "we have spoken of a world in which our rapidly developing technological society faces many new, complex and often frightening problems-problems which must be fully understood and addressed if we

hope to continue to advance our economic system and standard of living, protect our environment, and spur technological and social development.

"One of the central goals of this Campaign has been to promote MIT's efforts to use systematically science and engineering to provide new insights and help us to understand better and solve many of these problems. Though much remains to be done, we have made important headway during these five years.

Chancellor Gray, who will become MIT's 14th President next

July 1 following the retirement of Dr. Wiesner from that post, said success of the Campaign is cause for great pride in the Institute by MIT faculty, staff, students, employees and alumni everywhere.

Chancellor Gray noted that according to many observers, the coming decade of the 1980s is not expected to be "the best of times for higher education, for science and technology or for basic research.

"They are the only times we have, however, and we can use them, in the traditions of MIT, to pursue quality and innovation and to make bold moves that will ensure 'world space' for the Institute in the future," he said. Success of the Leadership Cam-

paign, Chancellor Gray said, provides MIT with important strength to meet these objectives in the coming decade.

"The Campaign success is a splendid dowry for a new president." he said.

However, all three Institute officials said they will be cautioning alumni that Institute jubilation with Campaign success, while merited, should, nevertheless, be tempered somewhat for two reasons

First, not all Campaign objectives were fully met. Additional endowment funds, especially for professorships and student aid, remain a high priority. Still to be fully funded are a new student residence and a new athletics and special events center, facilities for the Sloan School of Management, and other important facilities.

Second, they said, the economic climate of the nation has changed markedly since the Campaign goals were set in 1975. During the five years the Campaign has been conducted against a background of 1975 goals, the nation has been strained economically by soaring inflation, astronomical increases. in the cost of energy, and sharply rising interest rates. These factors also will make strong demands on the Institute's resource development effort, they said.

'The rapidity and pervasiveness of the changes experienced in this brief period have imposed demanding new burdens on private higher education, and for this reason the success of the Leadership Campaign is all the more encouraging," Mr. Johnson said. "Even during a time of great national uncertainty, the Institute has succeeded in broadening its financial resources, to strengthen us for the many new challenges that lie ahead.'

One particularly significant result of the Campaign, Mr. Johnson said, was support provided for new endowed professorships and for student aid

Through the Campaign, specific gifts were made to endow 44 new Professorships and Career Development Professorships (the latter to support younger faculty members). Several more Professorships are expected to be completed this year. The endowments already completed, Mr. Johnson said, bring to 108 the number of endowed chairs and career development chairs now available to the Institute. The increase is 63 percent in senior Professorships and 92 percent in Career Development Professorships.

By the same token, Mr. Johnson said, MIT's urgent need for endowed funds for student aid was oversubscribed based on the initial goal. All told, endowment to provide future student aid reached \$13.6 million, compared to an original objective of \$10 million.

"However, difficult economic conditions made the initial goal more difficult to reach and, in some senses, inadequate because of inflation," Mr. Johnson said. "While we are pleased to have exceeded the initial figure, these inflationary pressures make it essential that we push even harder to secure the additional student aid that is so desperately needed."

Morse Resigns

From AIP Board

Dr. Philip Morse, professor of physics emeritus at MIT, has resigned as chairman of the Governing Board of the American Institute of Physics, a position he has held for the past five years. He will be succeeded by Dr. Norman F. Ramsey, Higgins Professor of Physics at Harvard University.

Community Service Fund Campaign Seeks \$50,000

The annual campaign for the MIT Community Service Fund (CSF) will begin today (Wednesday, April 23) as solicitors fan out across the Institute to enlist support of MIT's volunteers in the community.

Howard W. Johnson, chairman of the MIT Corporation, will give opening remarks at a solicitors' meeting in the Bush Room at 11am. Several representatives from CSF-supported agencies will make brief presentations about their services.

Now 12 years old, the Community Service Fund is viewed by many as MIT's own mini United Way. It funds projects, social and educational, in which MIT people, both students and employees, reach out to help the community. Chief aim of CSF is to strengthen mutual understanding and cooperation between MIT and the community.

The goal for this year's drive is \$50,000, most of which must be raised through personal contributions from members of the community. Over the years, CSF has been fortunate in raising some money in gifts and non-recurring grants from charitable trusts and foundations, but the major portion of its support has always come from individual contributions.

Most of the programs supported are relatively small and Cambridge based, such as Tutoring Plus, the Cambridge Multicultural Arts Center, the MIT-NCAA Volunteers for Youth program, Just-A-Start and The Group School. CSF Funding is critical for some of the programs and for others it provides room for growth or experimentation that would not be possible otherwise.

In addition, some funds are set aside each year to be used for small grants to organizations or individuals for activities that suddenly arise, such as painting or fix-up projects.

CSF is governed by a volunteer board of trustees made up of representatives of all segments of the MIT community. The trustees meet monthly to review progress of the various programs and to allocate funds to new proposals.

Community Invited to Wiesner Reception

A community-wide reception honoring Dr. and Mrs. Jerome B. Wiesner will be held Tuesday, May 20, 4:30-6:30pm in Morss Hall of Walker Memorial. Dr. Wiesner will retire as president of MIT on June 30.

The reception is one of a series of events being planned by an ad hoc faculty committee in recognition of the Wiesners' long dedication and service to the Institute. Professor Sheila E. Widnall, chairman of the faculty, will preside at a brief ceremony of tribute to the Wiesners at 5:10pm. Speakers will be Howard W. Johnson, former president and now chairman of the MIT Corporation, and James R. Killian, Jr., also former president, former chairman and honorary chairman of the Corporation and now life member emeritus of the Corporation. Dr. Wiesner will respond to their remarks.

Music for the reception will be provided by the Intermission Trio, composed of Professor Roy Lam-son, clarinet, Professor Warren Rohsenow, piano, and Eliot W. Goldstein, a graduate student, on drums. Another trio consists of Professor Harold E. Edgerton, guitar, Professor Truman Gray, clarinet, and John E. Ward of the Laboratory for Information and Decision Systems, on banjo.

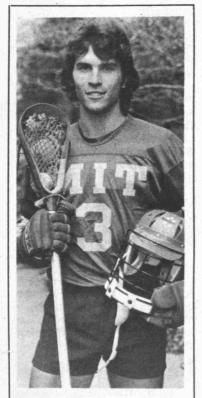
The reception will follow the annual meeting of the faculty which will be moved from its customary Wednesday schedule in order to accommodate a daylong colloquium in Dr. Wiesner's honor on Wednesday, May 21. Speakers at the colloquium will present papers on topics selected because of their special interest to Dr. Wiesner.

The two-day celebration of the Wiesner years will conclude with a faculty banquet Wednesday, May 21, in duPont Gymnasium.

Tennis: Lights To Return; Indoor Reservations Open

Night tennis returns to the du Pont Courts starting Monday, May 5. The lights, provided as a gift from Harold Brown '47, will be on daily from 8 to 11pm.

Court fees are \$2 per hour (\$1 per singles player and \$.50 per doubles player) and each player must have



a current MIT Athletic Card. Guests of cardholders will be charged \$1.50 in addition to the hourly fee.

Court reservations may be made by calling x3-2912 or x3-1451, or in person at the Tennis Shack between 10am and 11pm. All court fees must be paid 24 hours in advance at the Tennis Shack. In case of rain, court time may be rescheduled. For further information, contact Jack Barry, assistant director of athletics, x3-4498.

The 1980-81 Indoor Tennis Season will begin on Tuesday, Oct. 28, 1980, and continue through Mon-Mar. 30, 1981 (22 weeks). day, Applications from the MIT Community for seasonal playing time may be made and confirmed in person with Mr. Hank Motroni at the Indoor Tennis Center, Monday through Friday, from 8am to 4pm beginning Monday, May 19. No telephone reservations will be accepted.

HOURS & RATES sam - Noon @ \$6.00 per hour

'Greenspeak' to Invite All Boston to Open House

The entire Boston community is invited to watch MIT students make a building "talk." On May 1, from 8: 15pm to 10: 00pm the tallest building on the MIT campus, the Green Building, will appear to speak, inviting everyone to the MIT Open House scheduled for May 3.

"Operation Greenspeak" is accomplished by turning lights on and off in a coordinated pattern. The lights in the windows form letters which in turn form messages. These messages have ranged in the past from serious to the whimsical statement, "I want a cookie."

The messages will be clearly visible from the south side of the river. cized by local radio and television stations.

"Operation Greenspeak" is run by members of the Alpha Phi **Omega National Service Fraterni**ty, who are also sponsoring Open House. This year "Greenspeak" is being directed by Doug Pape and Joe Kesselman. They are still looking for volunteers to help assure success. To volunteer call the Open

People in the Prudential or Hancock observatories should have a spectacular view. In past years, "Operation Greenspeak" has been publi-House, x3-2475.

TOP SCORER-Senior Phil Macnell of Pasadena, Calif., is the leading scorer on the MIT lacrosse team through five games, with 21 goals and three assists for 24 points. The 5-11 midfielder needs only 11 points to become the second all-time leading scorer in MIT lacrosse history. The Engineers host Nichols today (April 23) at 3pm in Steinbrenner Stadium.

-Photo by Ken Cerino

1 hour per week - \$132.00 per court Singles - \$66.00 per person. Doubles - \$33.00 per person 11/2 hours per week - \$198.00 per court Singles - \$99.00 per person. Doubles - \$49.50 per person Noon - 2pm @ \$8.00 per hour 1 hour per week - \$176.00 per court Singles - \$88.00 per person.

Doubles - \$44.00 per person 11/2 hours per week - \$264.00 per court

Singles - \$132.00 per person. Doubles - \$66.00 per person

6pm - 11pm @ \$9.00 per hour 1 hour per week - \$198.00 per court Singles - \$99.00 per person. Doubles \$49.50 per person

NOTE: The hours from 2pm to 6pm are reserved for MIT students. Applications blanks are available at the Indoor Tennis Center, the Outdoor Courts, du Pont Equipment Rooms, Alumni Pool, and the Athletic Office (W32-117).



Newly elected officers of the MIT Employees' Federal Credit Union met last Friday at Walker Memorial. They are (left to right) Domenic DeMartino, secretary, Nancy Urquhart, president, Angelo Larraga, vice president, and Philip Keohan, treasurer. Other board members of the Credit Union are Herbert J. Arbo, Salvatore Lauricello, Henry J. Leonard, Joseph R. Cullinan, and Philip L. Philips.

-Photo by Calvin Campbell

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