Massachusetts Institute of Technology



December 12, 1979 Volume 24 Number 19

Leadership Campaign Surpasses Goal Early; Some Needs Remain to be Fully Funded The \$225 million five year Lead. have put us over the top. appeal when they are presented thus far to dedicated efforts by Corporation. He

The \$225 million five-year Leadership Campaign to marshal significant new private support for MIT has gone over the top in actual dollars raised five months ahead of schedule and the remaining time will be used to focus on needs that as yet remain unfunded.

Howard W. Johnson, chairman of the MIT Corporation and chairman of the Leadership Campaign, in a report to the MIT Corporation, announced that the Campaign had reached \$231 million.

"The broad objective has obviously been realized," Mr. Johnson said, "and for this expression of confidence and support for the Institute and its people we are grateful to literally thousands who

"But there is also unfinished business on the Campaign agenda. In these closing months, we will need to renew our collective participation, commitment and concern to bring the Campaign to the truly great and fitting conclusion it deserves.'

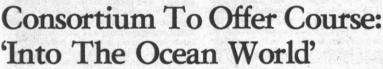
MIT President Jerome B. Wiesner, who has concentrated his personal efforts on the Leadership Campaign over the past two years, described realization of the goal five months ahead of schedule as "a remarkable achievement by a large number of people by any standards one would apply.

"Particularly gratifying to me has been the willingness of major donors to respond to the Campaign with and understand the Institute's needs for long-term private support," he said. "Now our broad objective must be to press beyond and with a fresh burst of energy complete in the time remaining the specific individual goals within the Campaign that we have set for

hundreds of volunteers throughout the world. He paid special tribute to President Wiesner; to Chancellor Paul E. Gray, who will become MIT president next July 1 when Dr. Wiesner retires; and to Dr. James R. Killian, Jr., retired Honorary Chairman of the Corporation, himself a former president and a former Chairman of the

Corporation. He also cited strong support by the Cochairmen of the Campaign: Paul F. Hellmuth, '47, retired managing partner of the law firm of Hale & Dorr of Boston; J. Kenneth Jamieson, '31, director and former chairman of Exxon Corporation, New York City; William B. Murphy of Haverford, Pa., director and former president

(Continued on page 4)



A new interuniversity, interdisciplinary marine studies course will be available to Boston area undergraduates in the spring semester.

The course, "Into the Ocean World," will introduce the many disciplines that touch on the sea: marine sciences, maritime history, marine politics and economics, marine art and literature, etc. Team taught by experts in the sciences, social sciences, humanities and art, the course is designed to highlight the sea's complexity and the far-reaching consequences of our interactions

Students will not become expert in any one aspect of marine study but will learn to interrelate the many perspectives required to understand the marine environment and to make decisions about the

No Tech Talk

Tech Talk will not be published on December 26 or January 2 because of the school vacation.

The Institute Calendar in the December 19 issue will cover the period of December 19 through January 13. Please submit calendar listings for this period before noon Friday, Dec. 14. (Do not submit IAP listings; they are to be sent to the IAP Office, Rm

Regular publication of Tech Talk will resume with the January 9 issue.

The course will be taught at the New England Aquarium on 14 consecutive Tuesdays, 5-8:30pm, beginning January 29, 1980. It will be offered for credit to advanced undergraduate students at member colleges. Enrollment is limited.

The faculty teaching "Into the Ocean World" will include Richard Astro and William Fowler of Northeastern University; Arthur Gaines of Woods Hole Oceanographic Institution, Sea Grant Office; David Kan of the Massachusetts Maritime Academy, and Susan Peterson of WHOI, with Jay Kaufman of the MIT Sea Grant Program serving as coordinator. MIT students interested in taking the course should contact Professor Richard Douglas, x3-4445.

The course is being sponsored by the Interinstitutional Marine Studies Consortium, an informal organization of Boston area institutions with faculty members interested in all areas of marine study. "Into the Ocean World" is funded through the MIT Sea Grant Program and by contributions from Consortium members.

In addition to the institutions mentioned above, cooperating institutions include: Assumption College, Bentley College, Boston University, Brandeis University, Bradford College, Bridgewater State College, Bunker Hill Community College, Curry College, Eastern Nazarene College, Emmanuel College, Endicott College, Framingham State College, Merrimack College, Pine Manor College, Quincy Junior College, Salem State College, Stonehill College, Suffolk University, Tufts University, University of Massachusetts-Boston, Wellesley College, the New England Aquarium and Thompson's Island Education Center.

Mr. Johnson attributed success



SIGNING THE COVENANT of Justice, Equity and Harmony last week was President Jerome B. Wiesner, with the MIT religious counselors looking on. From left they are: Rabbi Daniel Shevitz, Virginia Finn, associate Catholic chaplain, the Rev. Scott Paradise, Episcopal chaplain, Father Robert Moran and the Rev. Jessica Crist, Lutheran chaplain. The Covenant was conceived by a group of Boston clergymen as a means of encouraging racial harmony in the Greater Boston area. Members of the MIT community who would like to sign the Convenant may do so at a booth in Building 10 on Friday, Dec. 14. -Photo by Calvin Campbell

Irene Tayler Named First Meloy Professor

Professor Irene Tayler has been named as the first holder of the Thomas Meloy Professorship in Rhetoric at MIT.

The Meloy Professorship, intended to encourage students to gain a greater mastery in every field of their education, was established in 1978 by the Thomas Meloy Foundation. The late Mr. Meloy was the founder and president of Meloy Laboratories, now a division of Revlon.

The inauguration of the professorship and the appointment of Professor Tayler were announced Friday, Nov. 16, at the annual meeting of MIT's Council for the

MIT President Jerome B. Wies-

ner, noting that the Meloy Professorship in Rhetoric is the first named and endowed professorship at MIT associated with the work of the Council, termed the occasion a "proud moment" and "historic

President Wiesner said that Mr. Meloy "was convinced beyond a shadow of a doubt that such a professorship could do more to enrich the lives of our students and to prepare them for future leadership responsbilities than any other field of study or educational experience they could have. He knew from his own experience that it was not good enough to be good at something. One had to be able to tell somebody about it-and do it con-

President Wiesner said that Mr. Meloy, who died in January 1979 at

(Continued on page 3)

Erratum

The membership of the Corporation Joint Advisory Committee on Institute-Wide Affairs (CJAC) was incomplete as listed in last week's supplement, 1979-80 Committees of the Institute. A corrected listing for CJAC is included this week in the upper right corner of page 5. Please clip it out and paste it over the listing in the supple-

Secretary's Role, Career anagemen I opics

By MARY ENTERLINE Editor, IAP Guide

Two activities on career development will be offered primarily for secretaries, administrative assistants, and other members of the support staff as part of the Independent Activities Period this January.

The two activities, entitled "The Secretary: An Endangered Species?" and "Steps toward Managing Your Career," have been organized by the Career Development Task Group of the Working Group on Office/Clerical Issues. The Working Group, which is made up of support and administrative staff members, identifies, studies, and makes recommendations to the Institute on

issues that affect the support staff's working environment. The Task Group on Career Development has recently divided into two subgroups to determine ways for support staff members either to strengthen their roles as professional secretaries or to explore alternative career patterns.

The workshop "Steps toward Managing Your Career" will help people make self-assessments for career planning purposes. Through lectures, structured activities, and group discussions, participants will be provided with basic tools for analyzing their skills, values, and interests, developing options, managing career choices, and taking responsibility for choices they make.

The workshop will be taught by a

consultant who runs similar workshops for area companies. There will be a \$10 charge to help cover the consultant's fee. Enrollment is limited to twenty people. Although preference will be given to support staff in the case of oversubscription, the workshop is designed for people in all job categories. Interested people should contact Claire Freniere, E18-320, x3-4076, by this Friday, Dec. 14. The workshop will last the equivalent of two days; the schedule will be planned in consultation with participants.

Phillippa Bovet, the convener of the Working Group, said this workshop is being offered as a pilot program to find out whether there is interest in such programs for employees at MIT.

The other activity, "The Secretary: An Endangered Species?" is being organized by the subgroup that is looking for ways to improve the status of people choosing a secretarial career. Jinny Nathans, a library assistant for the Rotch Visual Collections and a member of this subgroup, said that in order to keep professional secretaries, the Institute must provide them with more recongition, not only in terms of tangibles such as titles, money, and responsibilities, but also intangibles, such as respect. "To me," she said, it's as bad to hear someone say, 'I'm just a secretary,' as it is to hear a faculty member or administrator say, 'I'll have my girl do it.' "

As a first step toward raising consciousness as well as building membership in the subgroup, Ms. Nathans and Barbara Peacock Coady, an administrative assistant in the Laboratory for Information and Decision Systems, have designed an activity in which participants will discuss the problems and special concerns of secretaries and then begin preparation of a short sketch illustrating some of the typical situations with which secretaries must cope. Eventually, the sketch will be videotaped for showing throughout the Institute. This activity will meet Monday through Friday, January 21-25, noon-1:30pm in the Emma Rogers Room(10-340). Participants should bring their lunches; coffee will be provided.

Ito, Dorigny Duo To Perform Here

The MIT Classical Guitar Society will sponsor a concert by Ako Ito and Henri Dorigny, a guitar duo of international reputation, on Saturday, Dec. 15, at 8pm in Room 66-110.

Tickets, \$2 MIT community/\$3 general public, are available by calling dorm x5-9620 or at the door.

The Times of London called a performance by the pair, "an unexpected pleasure...You would hardly have guessed that two instruments were involved, so close was their shared rubato and tonal shading."

Ms. Ito, born in Japan, studied with the duo Presti-Lagoya, Andres Segovia and Julian Bream. Mr. Dorigny studied with the duo Presti-Lagoya and was appointed professor of guitar at the "Conservatoire National de Musique, Nice, France.

The couple met in 1966, married, and began performing as a duo throughout France. They have toured Japan and make regular North American and European tours. Festival appearances include the Edinburgh Festival, "Festival du Namurois" (Belgium), the Carmel Bach Festival (California), and Festival of British Columbia and Orford Festival (Canada). The Duo has recorded on the SFP and RCA labels.

The MIT Classical Guitar Society raised money for this event by selling T-shirts labeled, "Musically Inclined Tool." The group will offer free guitar lessons during

Chorover at Forum

Stephan L. Chorover, professor of psychology at MIT, will speak on "Psychotechnology and the Engineering of Public Consent" at the Cambridge Forum on Wednesday, Dec. 19, at 8pm. The Cambridge Forum is held at the First Parish in Cambridge, 3 Church St., Harvard Square. It is open to the public free of charge.

Evaluations Due

Freshman evaluation forms are due today, Wednesday, Dec. 12. Instructor turn-in deadline is Wednesday, Jan. 2,

Echoes

December 5-December 11

50 Years Ago

Front wheel drives will be featured at this evening's meeting of the New England section of the Society of Automotive Engineers. This meeting will be open to those interested in this latest big development in the automotive field, and members of the MIT branch of the S.A.E. are especially invited.

40 Years Ago

How man can imitate and perhaps improve upon nature from a chemist's point of view will be the theme of the opening lecture of the annual Popular Science series. The lecture, to be presented by Dr. Robert C. Hockett of the Depart-ment of Chemistry, is entitled "Giant Molecules in the Service of Man'

25 Years Ago

Professor Andrew Gyorgy completed a series of three lectures in the field of International Relations with a talk on "The Basic Princi-ples of Soviet Foreign Policy" in the Library Lounge. His analysis of the subject consisted of five major points focusing on the activities of Russian diplomacy.

Prepared by Edward J. Halligan, Jr., Assistant Curator, Historical Collections, x34444.

INSTITUTE **NOTICES**

Club and activities planning to meet during IAP are asked to call Betsy Huntington x3-2701, by Friday noon, Jan. 4 for inclusion in the Jan. 9 issue. All standing announcements will be removed from Institute Notices until a new listing is received.

Announcements

Physical Education Classes**—Registration for IAP will be held Monday, Jan. 7 from 10:30am-12noon in the duPont Gym. Enrollment in many classes will be limited, and registration in these will be accepted on a first come, first served basis.

MIT Shakespeare Ensemble*-Backstage help of all kinds needed for spring productions: Miller's "View from the Bridge" in late Feb. and "The Comedy of Errors" in April. Call

Wives' Group**—Language conversation ex-change for those who want to learn or practice another language with an international member of the MIT community or for those who would like to get together and talk informally with those from other countries who want to practice their English. Info: Julie Roberts,

MIT Furniture Exchange**-Open Tuesdays and Thursdays, 10am-2pm at 25 Windsor St. to buy or sell used furniture. Letters given for tax ctible donations. Info: x3-4293 during hours above.

New Subject

STS 402 Innovation and Society-Spring, 1980, 1:30-3, Rm 26-210. The subject focuses on the complex interplay between major technological innovations and changing patterns of life in modern industrial society. In order to understand the origin and consequences of such innovations, the class will consider the individual and social circumstances in which they are made: the growth and dissemination of scientific knowledge; the character of social, political and economic institutions; and the expectations and responses engendered by prevailing belief systems or ideologies. Discussions will center on three specific cases of technical change. For 1980 these will be: the development and evolution of the automobile; the introduction of tape-controlled machine tools into the aircraft industry; and the problems of social control of nuclear power as illustrated by the Three Mile Island accident and its aftermath. Subject will be taught by Prof. Leon Trilling with participation of Profs. Leo Marx, Michael Meyer, David Noble, Emma Rothschild, Merritt Roe Smith and Joel Yellin. Humanities Distribution pending. Info: Program in Science, Technology and Society 20D-213, x3-4062.

Club Notes

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

MIT Duplicate Bridge Club*-Thursdays, 7pm, W20-473. All bridge players invited. Info: dam Wildavsky, d15-7687.

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

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

Folk Dance Club*—Sundays, International, all levels, 7:30-11pm, Sala de Puerto Rico; Tuesdays, Balkan, advanced, 7:30-11pm, W20-407; Wednesdays, Israeli, all levels: teaching, 7-7:30pm, dancing, 7:30-11pm, Sala de Puerto Rico. Admission: 25c donation optional Info: d15-9185.

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: 3-4343

MIT Go Club*-Meets Mondays 8pm, Rm4-145. Instruction for novices and beginners. Players

MIT Outing Club*-Office open to plan hiking, canoeing, skiing, etc., trips and equipment rental, Mondays and Thursdays 5-6pm,

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

MIT Rocket Society*-Regular meetings, club business and launch information, first Tuesday of each month, 7pm, International Student Lounge, one floor below MITRS Club

MIT Shotokan Karate Club**-Rigorous training for self-defense and physical and mental development. Black belt instruction. Practice Tuesdays and Fridays, 6-8pm, Varsity Club Lounge; Thursdays, 6-8pm, Dance Room. Beginners welcome. Info: Jim

MIT Table Tennis Club **- Meets every Monday, 8-10pm, T-Club Lounge, du Pont

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

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

Religious Activities

The Chapel is open for private meditation 7am-

MIT Baha'l Association*—Informal fireside discussions about the Baha'i faith Thursdays, 8pm, New House Rm 4-414. Everyone welcome. Info: Ramin, 494-7758, weekdays

MIT Catholic Community*—Sunday Masses: 9am, 12 noon, 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

Jewish Religious Services - Orthodox: Saturdays, 9am, Bush Rm (10-105): daily 8am, Rm 7-102. Conservative/Egalitarian: Saturdays, 9:15am, 312 Memorial Dr., base ment. Reform: Fridays, 5pm, 312 Memorial

Lutheran-Episcopal Ministry®—Inter-denominational service of Holy Communion, Wednesdays, 5:10pm, MIT Chapel. Supper follows in basement of 312 Memorial Dr

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

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

Preprofessional

Baylor College of Medicine Summer Work/Study Program**—an 8-week biphasic program combing academic segment with work experience in Texas Medical Center. on. Program seeks to increase ment of groups underrepresented in the health careers to enhance the student's preparedness to compete for admission to medical school or other health career programs. Participants pay no tuition, receive an allowance to cover living expenses and compensation for work assignments. US citizens and permanent residents currently enrolled in accredited US undergraduate colleges or universities who are genuinely interested in careers medicine are eligible to apply. Application deadline: March 31, 1980. Info: Preprofessional Office, 10-186, x3-4158.

Medical Education Develo Program**—sponsored by the Schools of Medi-cine and Dentistry at the University of North Carolina, Chapel Hill. An intensive program recreating the realities of attending medi dental school, geared for students who have been admitted to the UNC-CH school of Medicine or School of Dentistry for Fall 1980, or students who will be seniors in undergraduate colleges and postgraduates pre-paring to submit applications for admission to medical or dental school in 1981. Eight-week program, May 29-July 25, 1980. Applications, available on request, must be submitted by March 1, 1980. Info: Preprofessional Office, 10-186, x3-4158.

Medical School Familiarization Summer Program at the University of Texas**-Fourweek program, June 1-June 27, 1980, at University of Texas Medical Branch at Galveston for students who wish to experience elements of a medical education. Students must have completed 30 hours of college work to be eligible. Students accepted will be awarded stipends for the four week period. Applications must be submitted to the University of Texas Medical Branch by March 7, 1980. Info and applications, Preprofessional Office, 10-186, Root-Tilden Scholarship sponsored by New York University School of Law**—Program provides unique educational opportunity for students committed to using their professional talents in public service. The program complements the regular curriculum, offering the opportunity to observe and support the work of lawyers practicing in the interest of the public. Approximately 20 Root-Tilden Scholarships awarded annually to graduates of accredited colleges without regard to financial need in the amount of full tuition for one year, renewable upon satisfactory academic performance and full participation in program activities. Financial aid over and above tuition award may be granted on demonstration of need. Deadline for nominations, Dec. 28, 1979. To place your name in nomination see Susan Haigh Houpt, Preprofessional Office, Rm ace your name in nomination

Roswell Park Memorial Institute Summer Research Participation Program**-Science program designed for college juniors with interests in the field of biomedical disciplines. Participants will study the latest develop-ments in basic and clinical research as they relate to oncology. Program will be held from June 9-Aug. 15, 1980 at Roswell Park Memorial Institute, Buffalo, NY. Financial support may be available. Application deadline: 1980. Info and applications: Preprofessional Office, 10-186, x3-4158.

Graduate Studies

Lena Lake Forrest Fellowship and BPW Foundation Research Grant**-support research pertaining to working women. Appli-cants must be doctoral candidates or postdocs at accredited graduate institutions. Awards range from \$500-\$3,000. Applications must be postmarked by December 31, 1979. Info: Dean Jeanne Richard, The Graduate School Office, Rm 3-136, x3-4869

Bell Laboratories Graduate Research Programs for Women**—Financial support for outstanding women students pursuing fulltime doctoral studies in fields of chemistry, computer science, economics, electrical engineering, experimental human psychology, materials science, mathematics, operations research, physics and statistics. Fellowship Program provides full tuition and fees plus nd of \$525/mo for academic year, book and travel expense allowance. Program provides annual award of \$1500 which recipient may use during the academic year in any way that benefits her professional development. Fellowships and grants will be renewed on a yearly basis provided the student maintains satisfactory progress toward the doctoral degree. Application deadline: Jan. 15, 1980, supporting material, Jan 31. Two fellowships and four grants awarded annually. Appli-cations are ususally submitted during the candidate's senior year in college. Info: Dean Jeanne Richard, Graduate School Office, Rm

Fellowships for Women Graduate Students nsored by Wellesley College**

-1. AliceFreeman Palmer Fellowship for study or research abroador in US. Fellow must be 26 or younger at time of appointment and must remain unmarried thro

-2. Mary McEwen Schimke Scholarship to help financially with child care and household responsibilities. Based on scholarship and d. Candidates must be over 30 and currently pursuing graduate study in literature or ory. Stipend, \$500-\$1,000.

-3. M.A. Cartland Shackford Medical Fellowship for the study of medicine with a view to general practice, not psychiatry. Stipend,

-4. Harriet A. Shaw Fellowship for study and research in music and allied arts in the US or abroad. Candidates must be 26 or younger at time of appointment. Stipend, \$3,000

Applications for these fellowships must be at Wellesley by January 2, 1980. Info: Dean Jeanne Richard, Graduate School Office, Rm 3-136, x3-4869.

workshop on Interactive Telecommunica-

tion. Cameras and Television will be set up in Lobby 7 and The Student Center, so that

people in both locations can see, talk with and perform for one another. We make the

Connection, you make the Communication.

Channel 12
12-2pm CLASSIC LUNCH: "NOSFER-ATU"—The first of all Dracula movies.

Sunday, December 16

8-9pm PHYSICS 8.01 LECTURE—Recorded 12/14/79.

2-4pm CABLE VIEWER'S DEMAND

New UROP Listings

deadline: Jan. 31, 1980.

Josephine de Karman Fellowships**—approximately 18 fellowships of \$2,500 each, awarded

annually for graduate study in any discipline. Graduate students entering third year or more

of graduate study in fall 1980 are eligible. Applicants should have shown exceptional

ability and serious purpose. Special considera-tion to applicants in the humanities. Info:

Graduate School Office, 3-136. Application

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

ELORANTA SUMMER FELLOWSHIP PROGRAM

main corridor of the Institute.

A limited number of summer research fellowships for MIT undergraduates will be awarded this spring under the Eloranta Fellowship Program, intended to support summer research or study projects and associated travel. Any MIT undergraduate may apply, including seniors whose summer projects would occur after graduation. Students must submit a written proposal outlining plans for a summer project, including an indication of how the project will contribute to his/her education objectives, how the project will be carried out, support available, and a budget. Letters of recommendation should be included. Proposals for the summer of 1980 should be submitted before March 24, 1980, to Ms. Norma McGavern, UROP Office.

RESEARCH LAB OF ELECTRONICS

The Lab has opportunities for students with some experience in: 1) Hardware/Firmware; 2) software using Fortran and C under the UNIX operating system on a PDP-11/40; and 3) digital electronics in the biomedical, computer (MINI and MICRO), optical scanning, state-of-the-art color television and commu cations areas. Contact James Cyr at x3-8135.

HARVARD MEDICAL SCHOOL

A student is invited to investigate inter-computer communications systems using modems and commercially available telephone circuits; propose system hardware and software solutions; and implement the most effective system. A variety of research projects in the velopment of medical ultrasound systems will be run interactively with these computers. Direct involvement in systems software and applications programming will be available upon completion of the initial inter-connection

THE MASSACHUSETTS OFFICE OF ENERGY RESOURCES

The office wishes to conduct a survey of tly available computer programs wh model the performance of passive solar buildings. A student is invited to review these models for usefulness, accuracy, and cost, and, in conjunction with office staff, select a program or programs for in-house use. S/he would then supervise the acquisition of this program and familiarize the appropriate staff embers with its use.

The COIL Center is a computer system being developed for the use of Cambridge residents which links people with human service agen-cies in their community. Students are invited to help interview human service agencies in Cambridge to obtain data to be included in the system. Opportunities also exist for students interested in contributing to the design of an interface between public users and this body of agency information using a specially designed "touch" terminal. Contact Eileen Stephens, 13-5153, x3-3385.

VISUAL DEVELOPMENT Recent studies with kittens indicate that eye

movements are essential for development of visually controlled behavior. This lab is now studying the contribution of input from the muscles which move the eyes to visual development. One approach involves surgical sec-tioning of the ophthalmic branch of the trigeminal nerve. A student is invited to participate in all aspects of this study including the surgery's postoperative care, and visual testing. Contact Dr. Alan Hein,

CHILDREN'S HOSPITAL: Dept. of Neuro-

This lab is investigating how the biochemical composition of nerve myelin relates to its molecular architecture and to its stability and pathology. One of its approaches to this question is to build a molecular model of myelin from its isolated natural components and then to subtract one component or another and study the effect this has on the structure and stability of the model system. A student in Mechanical Engineering is invited to design, construct and test a film balance for building up asymmetric biomembranes. For credit during spring term, pay for summer.

Monday, December 17
Channel 8
1-2pm POLITICS, TELEVISION AND THE
NEWS—Sasha Norkin, WNAC; Kim Spencer, WBZ; Andy Hiller, Public Interest Vid-

2-4pm CAMBRIDGE CITY COUNCIL MEETING: RADIOACTIVE WASTE FROM HARVARD AND MIT.

Channel 12
12-2pm CLASSIC LUNCH: "THE LAST
LAUGH"—The personal tragedy of a hall
porter in a luxury hotel who grows too old
for his job and is demoted to lavatory at-

2-4pm CABLE VIEWER'S DEMAND Tuesday, December 18

1-2pm GRUNION THE GROUCH—A children's musical performed by the Loon and Heron Theatre. Video by John Barnett. 2-3pm BIOMEDICAL ENGINEERING AT MIT—Prof. Robert Mann, Dept. of Mechanical Engineering.
3-4pm THE INTERNATIONAL LASER

SCENE-Howard Rausch, Laser Focus

Channel 12
2-2pm CLASSIC LUNCH: "M"—Dg.
3-4pm THE INTERNATIONAL LASER
SCENE—Howard Rausch, Laser Focus

Channel 12
12-2pm CLASSIC LUNCH: "M"—Directed
by Fritz Lang. Peter Lorre plays a psychopathic killer in this suspense thriller.
2-4pm CABLE VIEWER'S DEMAND

TECH TALK Volume 24, Number 19 December 12, 1979

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CABLE TELEVISION SCHEDULE December 12—December 18

WEDNESDAY, DECEMBER 12 Channel 8

THE FUTURE OF TELEVISION NETWORKS—John O'Connor, T.V. Critic, NewYork Times; Steven Schever, Editor, T.V.

Key; Ed Diamond, Dept. of Political Sci-INDUSTRIAL BIOSYNTHESIS OF

METABOLITIES—Prof. Arnold Demain, Dept. of Nutrition and Food Science.

Channel 12: 12-2pm CLASSIC LUNCH: "THE BLUE AN-GEL"—Starring Marlene Dietrich. A pro-fessor of English literature falls in love with a nightclub singer.

4pm CABLE VIEWER'S DEMAND—Call

x3-7363 to request a program or movie which we have shown.

Thursday, December 13
Channel 8:
1-3pm CARNEGIE COMMISSION ON PUB-LIC BROADCASTING—Prof. Wilbur Daven-port, Commission Member, former Chair-person, Dept. of Electrical Engineering; Steven K. Bailey, Commission Member Har-vard School of Education; Michael Rice, Aspen Institute and WGBH. 4pm 6.041, 6.431 PROBLEM REVIEW TAPE

D12-Prof. Al Drake -5pm 6.041, 6.431 PROBLEM REVIEW TAPE D11—Prof. Al Drake -6pm 6.041, 6.431 PROBLEM REVIEW TAPE

D12-Prof Al Drake 6-7pm 6.041, 6.431 PROBLEM REVIEW TAPE D11—Prof. Al Drake

7-8pm 6.041, 6.431 PROBLEM REVIEW TAPE D12—Prof. Al Drake 8-9pm 6.041, 6.431 PROBLEM REVIEW TAPE D11-Prof. Al Drake

Channel 12
12-2pm CLASSIC LUNCH: "TRIUMPH OF THE WILL"—Nazi Propagandist Leni Riefenstahl's vision of the first National Socialist Convention after Hilter was in power. The film was produced by the German Propa-ganda Ministry headed by Joseph Goebbels. 2-4pm CABLE VIEWER'S DEMAND PHYSICS 8.01 LECTURE-Recorded

Friday, December 14

Channels 8 and 10
12-4pm TV TO TV—Presented by the CAVS

Page 2, Tech Talk, December 12, 1979

Irene Tayler Named First Meloy Professor In Rhetoric

(Continued from page 1)

the age of 84, "had a zest for life and a catholicity of mind and spirit that transcended ordinary people. Generations of our students will come to know and appreciate his towering example in the years to come. He was everything we would like to see in our students, a great practitioner, an innovator, a humanist, a concerned citizen."

The Thomas Meloy Foundation has made a commitment of \$1 million to fund the chair, President Wiesner announced.

During his distinguished career as a businessman and public servant, Mr. Meloy established and developed several firms that focused on research and engineering.

He received the SB from MIT in business and engineering administration in 1917 after having received the AB degree from Harvard in 1915. He was associated with MIT and Bell Laboratories during World War II, working on the development of radar systems, fire control and anti-submarine devices.

In later years he served MIT as a member of the Corporation Development Committee and the Council for the Arts. He was an active supporter of the arts and served as a member of the board of trustees and honorary producer for the Arena Stage in Washington, DC.

Family members and friends who came to MIT for the inauguration of the professorship included Mr. Meloy's wife, Claire, of Connecticut; his daughter, Mrs. Consuela Nussbaum and her two children, John and Lise Nussbaum, also of Connecticut; his son, Dr. Thomas P. Meloy, a member of the MIT Class of 1951, former director of the Engineering Division of the National Academy of Sciences and Denedum Professor at the University of West Virginia; and Mr. Meloy's longtime friend and former attorney, the current secretary of the Thomas Meloy Foundation, Henry A. Dudley.

President Wiesner said that Professor Tayler had been selected as the first holder of the Meloy Professorship because of her "reputation for scholarship" and "dedication to teaching."

"If rhetoric can be defined as the art of using either written or oral language persuasively to influence the thought or actions of readers or listeners, then Irene Tayler exemplifies the purposes envisioned in this professorship," President Wiesner said.

Professor Tayler came to MIT in 1976 as an associate professor of humanities. She currently is head of the Literature Section of the Department of Humanities. She served earlier as assistant head of the department and as a member of the key Institute-wide Committee on Educational Policy.

She received all three of her degrees from Stanford University—BA in philosophy in 1956, MA in American Literature in 1961 and PhD in English Literature in 1968.

She is a recognized authority on the work of the eighteenth and nineteenth century poets, William Blake and William Wordsworth, and has an extensive list of publications to her credit. She is presently at work on two booklength studies—a literary biography of Wordsworth and a critical-biographical inquiry into the Brontes (chiefly Charlotte and Emily) as romantic writers.

Dr. Tayler came to MIT from the City College of New York where she was a member of the CUNY doctoral faculty. Since she received her doctoral degree, she has taught or lectured at CUNY, Columbia, Yale and Johns Hopkins, and, during the summers, at the Breadloaf Graduate School of English in Middlebury, Vt.

Professor Tayler told the gathering that it is by rhetoric, the art of finding the right words, "that we clarify our values and set them to work in the world of practical matters."

In choosing to establish a chair in rhetoric, she said, Mr. Meloy was "responding to a nationwide sense that our young people must learn to think more clearly and judge more wisely than ever."

"His establishing it at MIT, she continued," suggests how much his own experience must have told him about the indissoluble connections between the witty and the practical, between knowing when something is worth doing, and knowing how to do it well.

"I am gratified that MIT is continuing and increasing its commitment to literature and the writing program, to languages and history, to all those studies that trace the primary laws of our nature and help us send down the roots from which good judgment grows."



Dr. Irene Tayler, first holder of the Thomas Meloy Professorship in Rhetoric, chats with the late Mr. Meloy's wife, Claire, at the annual meeting of MIT's Council for the Arts.

Epstein Work To Be Premiered

David Epstein, professor of music, will conduct the Concord Chorale in the premiere of his work, "The Concord Psalter," Saturday, December 14, 8pm, in the City Auditorium, Concord, NH.

"The Concord Psalter," a setting of Biblical psalms for contralto soloist, mixed chorus and five instrumentalists, was commissioned by the Chorale for its 10th anniversary concert. Contralto soloist will be Phyllis Elhady, a singer well known to Boston audiences, who has performed at Emmanuel Church and with the Boston Sym-

phony. Concord Chorale Director is Phyllis Isaacson.

Mr. Epstein was recently honored as a recipient of a 1979/80 ASCAP Award. ASCAP (American Society of Composers, Authors and Publishers) Awards are granted by a panel of distinguished authorities in music and reflect the commitment of the Society to assist and encourage writers of serious music.

Mr. Epstein will add this year's award to previous grants from ASCAP, the Fromm Foundation, the Ford and Rockefeller Foundations and Broadcast Music, Inc.



Volumes on Colombian history were presented to the Libraries last week by His Excellency Virgilio Barco, '43, second from right, Ambassador of Colombia to the United States and a member of the MIT Corporation. Suanne W. Muehlner, second from left, assistant director for public services, received the volumes with Vincent A. Fulmer, left, secretary of the Corporation, and David S. Ferriero, humanities librarian.

Photo by Calvin Campbell

Don't Pack-Just Stay In And Travel

(The following story, written by Robert Cooke of The Boston Globe, appeared in the Globe on Friday, December 7, and is reprinted here with permission.)

By ROBERT COOKE Globe Staff

The ritual is familiar. We plan exciting, expensive trips, using a hasty glance at the guidebooks and a quick look at some maps. Then we wander off and stumble around, wasting time, lost in some strange city.

But that could change. According to a research team at MIT, we'll one day sit down in front of our own computer-linked television sets, call up data on the city we've chosen, then take a quick, self-guided tour through streets and byways. For example:

• It will seem you're traveling, as if by car, down a city street. See a side street that looks interesting? Touch the turn sign on the TV screen and you turn right in. The TV, in its flat monotone voice, names the street and says you're now going east, west or whatever.

 Driving too fast? Touch the speed-control spot and your car slows down, or you can stop to look at the scenery. While driving, you can also tell the TV to give you a view out either side, or out the back window.

• See a restaurant? Touch its image on the tube. The car stops. You're shown a full-front view of the building. The TV system recites the restaurant's name and address and can show you the

 Trapped in a dead-end street?
 Touch the control spot and the car backs up. Then watch for a cross street that will get you out.

Worried about the weather?
 Ask the system to show you winter.
 Suddenly you're driving around a snow-covered town, looking at the same streets and buildings, all buried in white.

So far, however, the only place this system exists is at MIT, and the only city for which Movie Map data has been gathered is Aspen, Colo. But it's a beginning for what its developers hope will become a popular, widely used system.

This system is seen by its developers, the MIT Architecture Machine Group, as a powerful way to introduce travelers to an unfamiliar city.

It would be useful, for instance, for families who intend to move into Aspen. Instead of fumbling

Globe Editor to Speak

Who determines what goes into a metropolitan newspaper each day? How, why, where and when are the decisions made?

Jack Driscoll, managing editor of The Boston Globe, will discuss the judgments involved in the selection and play of news stories at an IAP seminar on Tuesday, Jan. 8, from 1 to 2:30pm, in Rm 10-280. The seminar is sponsored by the News Office and is open to all members of the community.

around trying to locate schools, doctors, shopping areas and other facilities, family members could take their own vicarious "tours" of the community via television, exploring side streets, looking at shops and finding the city parks.

So why Aspen?

"Aspen is bounded and isolated," said MIT research associate Andrew Lippman, "and it's about the right size for the video discs."

Because of its size, he said in an interview, the images needed to make a movie "tour" of Aspen can be conveniently stored on a few of these new television discs. Each disc, resembling a long-playing record but with no grooves, can hold up to 54,000 individual pictures.

To put this system together, Lippman said, the MIT team rigged up a special camera system consisting of four cameras mounted atop a van, and drove though all the streets of Aspen. One camera looks forward, two look off to the sides, and one looks behind.

They also took "portraits" of every building in town, and were carefull to match the winter and fall portraits exactly, except for the snow.

Lippman said there is one frame of film—or a single image—for each 10 feet their van traveled down the street, so the viewer can change his own speed of travel by changing how fast the images are displayed.

After all the streets were filmed, Lippman said, what he called "turning sequences" were filmed at each intersection. These images, among others, are stored on a separate disc, to be called up when the viewer decides to make a turn

Dreyfus Foundation Names Georgakis Teacher-Scholar

A Camille and Henry Dreyfus Teacher-Scholar Grant has been awarded to MIT and Professor Christos Georgakis of the Department of Chemical Engineering.

The grant-totaling \$35,000-is one of 14 to US academic institutions announced recently by the Camille and Henry Dreyfus Foundation. Professor Georgakis was the only chemical engineer honored. The grants are awarded for the benefit of exceptionally promising young faculty members who combine an interest and a demonstrated ability in teaching and performing imaginative research. Awardees are selected by their senior colleagues and endorsed by the administration of their institution.

Professor Georgakis joined the MIT faculty in 1975. He was the

tant Professor in 1975-76 and Edgerton Assistant Professor in 1977-79. In July 1979 he was promoted to associate professor. His field is process control. He

control. He Dr. Georgakis has initiated a research program that aims at a systematic examination of the effects that design characteristics have on process dynamics.

Dr. James Wei, head of the Department of Chemical Engineering, who nominated Professor Georgakis for the award, said Professor Georgakis' approach to dynamics and control holds the promise of "bridging the disappointing gap between the classical control theories of electrical engineers and the plant realities in chemical engineering."

Professor Georgakis, 32, was

born in Patra, Greece. He holds the baccalaureate degree from the National Technical University, Athens, and the PhD from the University of Minnesota. His strong background in applied mathematics and computation has led to models in fluidized bed combustors, catalytic crackers and LNG spill.

He has been active in department activities, serving as a graduate student advisor, as a member of the graduate admissions committee, the faculty search committee, graduate brochure and poster committee and, since 1978, as departmental seminar coordinator.

From 1975-77 he was a member of the search committee for a new head of the Department of Chemical Engineering. In 1976 he served on the Dean's Committee on an Institute-wide Undergraduate Subject on Computer Models of Physical and Engineering Systems.

Professor Georgakis is a member of the American Institute of Chemical Engineers, the American Chemical Society, the Instrument Society of America, and the Institute of Electrical and Electronic Engineers.

He has organized and chaired several symposia in the area of process dynamics and control, specifically in the 1976 annual AIChE meeting in Chicago and at the 1978 Joint Automatic Control Meeting in Philadelphia. He chaired an invited symposium on chemical reactor control at the latter meeting. Professor Georgakis is also an associate chairman of the Seventh International Symposium on Chemical Reaction Engineering to be held in Boston in 1982.

Tech Talk, December 12, 1979, Page 3



December 12 through December 30

Events of Special Interest

Pottery Sale* - Sponsored by the Student Art Association (SAA). Pots created by members of the SAA. Wed, Dec 12, 10am-5pm, Lobby 10. Info:

Carolling on Campus* — Sponsored by the Christian Community. Carolling around different MIT dormitories. Fri, Dec 14 and Sat, Dec 15, 7:30pm, meet at 312 Memorial Drive, Bldg W-2. Refreshments served after.

TV to TV* — Aldo Tambellini, media artist and fellow at the Center for Advanced Visual Studies will present a two-way video event in which spectators will have the opportunity to participate in a form of communications art. Fri, Dec 14, noon-2pm, Lobby 7, 77 Mass Ave, and the Student Center.

The Technology Wives Organization Children's Holiday Party** — Sat, Dec 15, 10am, Sala de Puerto Rico, Student Center. Featuring a visit from Santa Claus and a puppet show. Refreshments served. Admission: \$1.50 per child, parents free, 75¢ for children of T.W.O. members. For reservations call Rachel Kent 494-0137 after 6pm.

Seminars & Lectures

Wednesday, Dec 12

A New Approach Toward the Assessment of Vitamin A Nutriture* -Dr. Barbara Underwood, nutrition and food science. Clinical Research Center Seminar, 9am, Rm E17-415.

Fusion Doctoral Seminar* - Steve Piet, title to be announced, 2pm, Rm

Communications Satellites in the 1980's* - John V. Harrington, director, COMSAT Laboratories. Aeronautics and Astronautics General Seminar, 3pm, Rm 37-212.

Managing R & D for Macro-Engineering: A Few Case Studies* -Walter Morrow, director, Lincoln Laboratory. Macro-Engineering Research Group Seminar, 3-5pm, Rm 13-4101.

Opioid Neuropeptides Regulate Transsynaptically the Activity of Septal-Hippocampal Cholinergic Neurons * — L. Botticelli, Program in Neural and Endocrine Regulation Seminar, 4pm, Rm 66-168

Seminar in Nuclear Engineering: Reactor Engineering Section* - Ron Ballinger, Corrosion Fatigue of inconel-600 at High Temperatures and Pressures in Aqueous Solutions, S. Chang, title to be announced. D. Ebeling-Koening, title to be announced. 4pm, Rm NW12-222.

Small Angle X-Ray Scattering from Block Polymers* — D.G. LeGrand Polymer Physics and Engineering Branch, Corporate Research and Development, General Electric Company, Schenectady, NY. Polymer Seminar

EEG Monitoring in the Operating Room and Intensive Care Unit* -Dr. N. Chiappa, MGH/Harvard. Engineering in Medicine and Biology Seminar, 6:30pm, Rm 37-252. Coffee and doughnuts at 5:30pm. Free.

The CO₂ Problem: Does the Public Pay Attention to Impending - Nuclear Engineering Energy Assessment Group Seminar, 1-2pm, Rm 24-112.

A Correspondence Principle: Letters in the History of Theoretical Physics* — Prof. H.J. Klein, Eugene Higgins Professor of the History of Physics, Yale University. Physics Colloquium, 4pm, Rm 26-100. Tea served at 3:30pm, Rm 26-110.

Mechanical Aspects of Myopia* - Dr. Peter R. Greene, postdoctoral fellow, division of applied sciences, Harvard University. Committee on Biomedical Engineering Seminar, 4-5:30pm, Rm 37-212. Refreshments

Models for Evaluating Criminal Corrections Programs* - Prof Stephen M. Pollock, Industrial and Operations Engineering, The University of Michigan. Operations Research Center Seminar, 4pm, Rm 24-121. Coffee and cookies served after the seminar.

NU: A Personal Computer System* - Prof Stephen Ward, Computer Science and Engineering. Industrial Relations Section and Center for Information Systems Research, Sloan School of Management Seminar, 4-6pm,

Supercritical Flow in a Collapsible Tube* — Michael McClurken, Fluid Mechanics Seminar, 4pm, Rm 5-234. Refreshments at 3:50pm.

Friday, Dec 14

Thursday, Dec 13

Chemical Engineering Seminars* — Hsueh-Rong Chang, Simultaneous Boiling and Spreading of Liquefied Petroleum Gas (LPG) on Water, 2pm; Regina Shuck, Devolatilization of Coal at High Temperatures, 3pm, Rm 66-110.

Use of Memory Function in Kinetic Theory of Diffusion* - B. Hamza, Nuclear Engineering Department Seminar in Applied Radiation Physics, 3-

The Effect of Bundle Diverters on Tokamak Equilibria* - Glenn Bateman, Georgia Tech. Plasma Fusion Seminar, 3:30pm, Rm NW16-212. Refreshments at 3pm.

High Temperature Diffusive Cavitation at Grain Boundaries* - Prof James Rice, Brown University. Center for Materials Science and Engineering Colloquium, 4pm, Rm 9-150. Coffee at 3:30pm.

Messiah-Sing* — Informal, open sight-reading of the parts for chorus in Handel's Messiah. Sponsored by the Lutheran Chaplaincy, 4pm, Mezzanine Lounge, Student Center. Info: x3-2325

Global Stereopsis in Birds and Babies* — Prof Robert Fox, psychology, Vanderbilt University. Psychology Colloquium, 4:30pm, Rm E10-013. Coffee at 4:15pm.

Tuesday, Dec 18

Molecular Mechanism of a Position Effect: The Ocelliless Mutation and Chorion Gene Expression* — Dr. Allan Spradling, Department of Zoology Indiana University. Biology Colloquium, 4:30pm, Rm 6-120. Coffee served at 4pm, Vestible, 5th Floor, Bldg 56.

Wednesday, Dec 19

Endogenous Formation of Nitrite in Man* — Dr. Steven Tannenbaum, nutrition and food science. Clinical Research Center Seminar, 9am, Rm

Community Meetings

Beginning Breastfeeding* - Barbara Whitesides, PhD, member of the Nursing Mothers Council of the Boston Association for Childbirth Education and has nursed and weaned two children; also Marsha Walker, head of the Nursing Mothers Council. Prenatal and Parent Education Group Seminar. Wed, Dec 12, noon-1:30pm, 3rd Floor Conference Room, Infirmary. Call x3-1316.

Blue Cross & Blue Shield Extended Benefits Seminar** - A representative will be present for an informal seminar on how to submit claims for Extended Benefits. Wed, Dec 12, noon-2pm, Rm 10-105, Campus.

Wives' Group' — Wed, Dec 12, "Christmas Wreath Making", presented by Helen Soderstrom, 3-5pm, West Lounge, Student Center. Babysitting available in Room 473 of the Student Center. All women in the MIT com-

State of the Institute** - Sponsored by the Women's Forum, Our next President, Chancellor Paul Gray, will address the group. In addition to budgetary concerns, Dr. Gray is willing to discuss any other topics of interest, Mon, Dec 17, noon-1pm, Rm 10-105. If you have a particular question for Dr. Gray, please contact Doroty Bowe, Rm 5-119, x3-4971 or Brenda Ferriero, Rm 36, x3-4102 by Fri, Dec 7.

Weekly Exercise Class** - Taught by professional Patricia Murphy. Sponsored by the Technology Wives Organization, an hour of serious exercise. Every Monday through Dec 17, 7:30pm, 2nd Floor, Exercise Room, Du-Pont Gymnasium. \$1.50 per class, discount available for T.W.O. members. Information: Rachel Kent 494-0137 evenings.

Lobby 7 Events

Design Services Retrospective* - On view through December. Lobby 7

Social Events

Faculty Club*** — Open Monday through Friday: Luncheon served noon-2pm; Dinner served 5:30-8pm. Happy hour: Monday through Friday, 4:30-6:30pm, wide variety of drinks, \$1.05.

duate Student



Catherine and Robert Strizich will play 15th and 16th century music for two lutes in a free, public concert, Thursday, Dec. 13, at noon in the MIT Chapel. Ms. Strizich has performed with the New York Pro Musica and recorded with the Studio der Fruhen Musik. Mr. Strizich has performed in the US and Europe and recorded for EMI's Reflexe series. After three years of teaching and performing in the Boston area, the Striziches reside in California, where Mr. Strizich is completing a PhD in composition at UCSD.

Leadership Campaign Surpasses Goal Early; Some Needs Remain to be Fully Funded

(Continued from page 1)

of Campbell Soup Co.; Edwin O. Vetter, '42, of Dallas, Tex., former executive vice president of Texas Instruments, Inc.; John S. Reed, '61, senior executive vice president of Citibank, N.A., New York City, and Robert C. Gunness, '34, former vice chairman and president of Standard Oil Company (Indiana), Chicago, Ill. All, Mr. Johnson said, have put forth heavy efforts on behalf of the Campaign.

Mr. Johnson said some specific goals among original Campaign objectives have not yet been completed, including endowed profes-

sorships, a new undergraduate residence house, and funds to complete new facilities already begun, including an Athletics and Special Events Center. Moreover, he said, needs not originally included in the \$225 million Campaign goal have emerged in the four-and-a-half years since the Campaign was launched in April, 1975, including major new funds for the Institute's School of Engineering which has experienced explosive recent growth, for the Alfred P. Sloan School of Management, and for brain sciences and the creative

Adding further to the needs that

must be met in the months remaining in the Campaign, Mr. Johnson said, have been the corrosive effects of double digit inflation. In compiling Campaign goals in 1974, Mr. Johnson said an inflation factor has been included. But the actual inflation that has taken place in the intervening years has exceeded those original estimates significantly.

The \$231 million is the largest sum ever raised in an MIT gifts campaign and is one of the largest sums ever realized in a campaign by any US college or university. The \$231 million includes \$76 million from foundations, \$68 million from corporations, and \$87 million in gifts and bequests from individual alumni and friends. Of the total, \$168 million already had been received and the remainder is in pledges.

chairs. Although undergraduate and graduate student aid endowment has attracted \$12 million in support compared to a goal of \$10 million, Mr. Johnson said actual need has far outstripped the original goal and that student aid continues as an urgent priority.

A \$20 million goal for endowment for new programs in research and innovation has received \$11 million and only \$3 million has been provided toward a \$20 million goal for new general endowment.

More that \$60 million, Mr. Johnson said, has been received for specific support in individual schools, departments and centers that was not included in original Campaign goals. These are the funds, he said, which put the Leadership Campaign over the top five months early.

The Campaign organization, Mr. Johnson said, remains "vigorous and eager to complete the task." Vital to the organization, he said, is the Corporation Development Committee composed of 136 leading alumni who establish policies, plans and priorities in identifying and soliciting specific sources and who function in an advisory capacity to the Corporation itself. Continuing with equal effectiveness, he said, will be a National Business Committee composed of some 50 leaders in industry and business and headed by Richard L. Terrell, '58, retired vice chairman of the General Motors Corporation, and the Volunteer Leadership Appeal comprised of leading MIT alumni.

Mr. Johnson noted the extraordinary contribution to the Campaign made by the Institute's Industrial Liaison Program, which has resulted in corporate support of more than \$13 million. Mr. Johnson said the need for unrestricted funds has only intensified and that while he expects the goal of \$20 million to be reached-it stands at \$17 million now-he said a major effort will have to be continued to bring in additional unrestricted monies.

"The basic and fundamental purpose of our Campaign," Mr. Johnson said, "as we defined it at the start, was to help guarantee the financial stability of MIT, to maintain the Institute's present high quality of teaching and research, to enable the Institute to pioneer new fields of importance to the nation and the world, and to educate even better the superlatively qualified young men and women who will provide the essential leadership for the future."

Those objectives remain unchanged, he said, and securing the full goals of the Leadership Campaign to assure them will require continued effort by all Campaign supporters throughout the world.

"I know we shall have it," he

Poet Kunitz To Give Public Reading

Stanley Kunitz, distinguished American poet, will give a public reading of his work on Thursday, Dec. 13, at 8pm in Room 66-110.

Hosted by the Writing Program in the Department of Humanities and the MIT Council for the Arts. the event will be free and will be followed by an informal reception.

Mr. Kunitz, known as a poet, translator, essayist, critic and teacher, was awarded a Pulitzer Prize for his work, Selected

Poems. He also received critical acclaim for his most recent book, Poems of Stanley Kunitz, 1928-1978.

A member of the American Academy of Arts and Letters and currently a Chancellor of the American Academy of Poets, Mr. Kunitz served for many years as editor of the Yale Series of Younger Poets. For two years he was consultant in poetry to the Library of Congress.

Mr. Kunitz has taught poetry in many American colleges and universities, including Columbia, where he was senior professor in the graduate writing program.

Mr. Johnson pointed out that one of the most pressing needs is to complete the Campaign goal of \$100 million in new endowment, of which \$62 million has been realized and \$38 million remains to be raised. The Campaign thus far has been able to secure \$36 million to endow 38 full and career development professorships, but \$14 million more is needed to meet the Campaign objective of 50 endowed

Page 4, Tech Talk, December 12, 1979

Movies

ong Man Ferdinand ** - Department of Humanities Film Series. w/subtitles. Wed, Dec 12, 7pm, Rm E21. Free.

rong Man Ferdinand** - Department of Humanities Film Series. w/subtitles. Thurs, Dec 13, 7pm, Rm 66-110. Free.

ck Rogers in the 25th Century** - LSC Movie, Fri, Dec 14. Admission w/ MIT or Wellesley ID.

e Cheerleaders** - LSC Movie, Sat, Dec 15. Admission 75¢ w/ MIT or

Wellesley Events

perican Portraits and Landscapes in the Wellesley College College — An exhibit on view through April 6, '80, 8:30-5pm, Mon-Sat; 2-5pm nday; tours at 3pm, Jewett Arts Center, Wellesley College Museum, Weley, Mass. Free.

Music

e Black Graduate Student Association Wednesday Evening Jazz - Dec 12: The Warrior, Rm 407, Student Center, 9pm. Free.

on Hour Chapel Concert* — Robert and Catherine Strizich will perform sic for two lutes. Thurs, Dec 13. Free.

he Annual Lobby 7 Midnight Concert* — Chamber Players performing; arcus Thompson, director, program will feature Bach's "Magnificat," randenburg Concerto No. 5 and Suite No. 1. Fri, Dec 14, Free.

Concert* - Sponsored by the Classical Guitar Society. Recital by nry Dorigny and Ako Ito, a duo-guitar team of international stature, ogram will include works by Bach, Vivaldi, Albeniz, Presti, Petit and abelle. Sat, Dec 15, 8pm, Rm 66-110. Admission: \$2 w/MIT ID, \$3 general

ne Erdely Duo* — Beatrice Erdely, piano, and Stephen Erdely, violin, Il perform Sonata in E-flat Major, Op. 12, No. 3 by Beethoven, Sonata in mata in A Major by Cesar Franck, and Sonata in D Major by Leo Weiner, important Hungarian teacher and composer. Sun, Dec 16, 8pm, Rm 10-

Dance

ance Workshop: Informal Showing of Student Work* - Presented by e Drama Program. Directed by Beth Soll and Mark Ammons. Fri, Dec 14, 30pm, T-Club Lounge, DuPont Center, 120 Mass Ave. Free. Further info:

ance Workshop** - Regular meetings Technique classes, Mon & Wed, 3hatton call 253-4456.

Exhibits

rnacular/Traditional Architecture - India: A Graphic Essay* ank Shah, Vijay Yagnik will speak. Photographs accompanied by a -up and illustrations related to rural/traditional environments in India. nsored by the Rotch Library and Sangam, Club for India Affair. On view ugh Dec 15, 9am-7pm, Bldg 7, 3rd Floor Lobby. Info: x5-9563 Dorm or Margery Hall paintings* - On through Dec 21, 9am-11pm, Faculty Club, Bldg E52, Memorial Drive, 6th Floor.

The Narrative Impulse* — From the Committee on the Visual Arts. On view through Dec 23, daily 10am-4pm; Wed evening 6-9pm, Hayden Gallery, 160 Memorial Dr, Camb, Mass. For information call 253-4400.

Theodore Roszak: 1930-1955* — From the Committee on the Visual Arts. On view through Dec 31, daily 10am-4pm; Wed evenings, 6-9pm, Hayden Corridor Gallery, 160 Memorial Drv, Camb, Mass. For information call 253-

79 to 80 Photographs* — On view through Jan 23, '80, Mon-Fri, 9am-10pm; Sat. 20am-6pm; Sun, noon-8pm, Creative Photography Laboratory, 120 Mass. Ave., 3rd Floor, Camb, Mass. Information: 253-4424.

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

Max Born* - Institute Archives and Special Collections, 14N-118. Max Born, 1954 Nobel laureate in physics, visited MIT in 1925-26 to lecture on crystal dynamics and quantum theory. On display is 1927 letter from Born to MIT President Samuel Wesley Stratton, which discusses some of Born's colleagues, including J.R. Oppenheimer, Karl and Arthur Compton, James Franck, and Norbert Wiener. The letter is part of the records of the Office of the President, 1897-1932 (AC 13). On view daily.

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

Hart Nautical Museum* - Permanent exhibit of rigged merchant and naval ship models, half models of yachts and engine models. Open daily in

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 Information Center, x3-4795

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

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.

Sports

A Better Body for the New Year ** - Maggie's exercise class. Through Dec 14, noon-1pm, DuPont Athletics Center. Athletics card required, send your name, address and extension and the area you would like an exercise for on a 3x5 index card to MAGGIE, Bexley Hall, 48 Mass Ave before Dec 6. Admission: 50¢ to class to cover the cost of exercise information. Anyone under a doctor's care for any reason, must have an ok from your doctor.

Home Schedule* - Dec 12: "B" Basketball vs Harvard, 7pm. Dec 15: Indoor Track vs Alumni, 2pm.

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 Dec 19 through Dec 30 to Calendar Editor, Rm 5-113, x3-3270, before noon, Friday Dec 14.

Special Committee Appointed by the Corporation

Corporation Joint Advisory Committee on Institute-Wide Affairs (CJAC)

CJAC was established in March 1969 by vote of the Corporation as a new special committee of the Corporation. Its purpose is to associate with the Corporation a broadly representative group at the Institute to which the Corporation can turn for consideration and advice on special Institute-wide matters requiring Corporation attention, such as the long-range planning of MIT's campus, the improvement of the institutional environment, and MIT's relations with Cambridge and metropolitan Boston. CJAC provides an additional means for bringing representatives of the student body, both graduate and undergraduate, and of the faculty into regular communication with the Corporation on matters of long-range importance to the entire Institute community. CJAC also serves to acquaint the MIT community more fully with the role and work of the Corporation, but it does not in any way modify the role of the existing Corporation Visiting Committees.

Gregory Smith, Chairman (Corporation) President, Graduate Student Council* (Reynold C. Verret) Chairman of the Faculty* (Sheila E. Widnall) President, Undergraduate Association* (Jonathan O.Hakala) President, Alumni Association* (Claude W. Brenner) Judith Bostock (1980) (Faculty) Kevin D. Campbell, '80 (1980) (Undergraduate Student) Vincent S. Castellano (1980) (Corporation) Allan F. Henry (1980) (Faculty) Shirley A. Jackson (1980) (Corporation) Paul A. Lagace, G (1980) (Graduate Student) Sharon H. Lee, G (1980) (Graduate Student) Timothy Morgenthaler, '80 (1980) (Undergraduate Student) Howard L. Richardson (1980) (Corporation)

Anthony P. French (1981) (Faculty) Jean E. Jackson (1981) (Faculty) Frederick J. McGarry (1982) (Faculty) Emily V. Wade (1982) (Corporation) Martha L. Bertrand, Secretary

Erdely Duo to Perform

The Erdely Duo will give a free, public concert Sunday, Dec. 16, at 8pm, in Room 10-250.

Pianist Beatrice Erdely and violinist Stephen Erdely will perform Sonata in E Flat Major, Op. 12, No. 3 by Beethoven, Sonata in A Major by Cesar Franck, and Sonata in D Major by Leo Weiner, a Hungarian composer whose work is receiving growing attention in the US.

Leo Weiner was appointed professor of composition and chamber music at the Music Academy in Budapest in 1912 and taught there until his death in 1960. His students have included some of Hungary's most distinguished quartets and such names as Sir George Solti and Sandor Vegh.

Mr. Weiner was awarded many prizes for his compositions, including the Elizabeth Coolidge Prize in 1922. In 1964, a competition for chamber music was established in his name. It is held yearly in different parts of the world; this year it will be held at Indiana University in Bloomington.

Stephen Erdely, one of the many musicians of Hungarian birth to study with Mr. Weiner, is head of the Music Section at MIT. He has toured in recitals throughout Western Europe and recorded for radio stations in Paris, Zurich, Franfort, Baden-Baden and Stuttgart. Before joining the MIT faculty, he was a member of the Cleveland Orchestra.

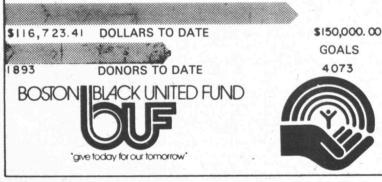
Mrs. Erdely teaches at Brandeis University. She has appeared as soloist with the Chicago, Cleveland and Grant Park Symphony Orchestras, on WQXR Radio and with numerous university and com-munity orchestras, including the MIT Symphony Orchestra.

The Erdelys have received broad critical acclaim for their performances of classical and contemporary music.

Exam Time Reminder

As examination time approaches, the Committee on Educational Policy would appreciate the cooperation of the teaching staff in observing the faculty regulation regarding reading period and examination schedules. This regulation reads as follows: "...For each subject in which a final examination is given during the prescribed period, no written examinations shall be given during the seven days preceding the examination period. For each subject in which no final examination is given during the prescribed period, no more than one written examination of not more than one hour (one class period in the case of laboratory or design subjects) shall be given during the seven days preceding the examination period.

No assignment, term paper, or oral presentation for any subject shall fall due after the last day of class exercises for that subject."



Dawson Hopes to Found AISES Chapter At MIT

university chapters of the American Indian Science and Engineering Society-AISES (pronounced aces)-is being headed by an engineer from the Charles Stark Draper Laboratory.

Thomas F. Dawson, a member of the Cherokee tribe, says the society's major emphasis is to encourage the recruitment and training of American Indians in science and engineering so that they may be able to play meaningful roles in today's technological

Mr. Dawson, who has been at Draper since 1975, believes there are 10 American Indians studying at MIT. Those interested in the society-membership is open to non-Indians-should contact Mr. Dawson at Draper x8-4722.

"It's really a two-way street," Mr. Dawson was quoted in a recent

adimit and em

A nationwide drive to establish issue of D-Notes, the Draper Lab newsletter. "We need to increase the number of Indian scientists and engineers working directly in these fields, while at the same time, we must provide the Indian community with practical applications of science and technology in the development and management of their lands and resources."

Mr. Dawson is also active with the Council of Energy Resource Tribes (CERT), a nonprofit organization representating 25 American Indian tribes owning a large share of the West's energy resources. Last week he was at a CERT conference in Phoenix, Ariz. The Department of Energy announced at the conference that \$24 million in grants and loan guarantees would be made available during the next year to help Indian tribes develop their energy re-

SAA To Offer IAP Courses

The MIT Student Art Association (SAA) is offering a full range of courses during IAP this January.

Life drawing, clay work and photography are offered in both class and non-class settings. Courses in ceramics, kiln building, calligraphy, chinese brush painting and stained glass, and darkroom work with black and white and color will be available to all members of the MIT community for fees ranging from \$10 to \$20.

Most IAP courses will run for four sessions, beginning January 7. Fees include most materials. Studios are open to registrants twenty-four hours a day. Registration for SAA IAP classes began Monday, Dec. 3, and will remain open throughout December from 1-5pm daily in Rm 429, Student Center, until the classes are filled.

Mr. Dawson holds the BS in electrical engineering from Virginia Polytechnic Institute. He was an aircraft flight test engineer before joining MIT's Laboratory for Nuclear Science in 1963. While part of the MIT Center for Space Research he was involved with the Mariner, Pioneer and Explorer space programs and also with the Small Astronomy Satellite program. He lives in Millis.

Tech Talk, December 12, 1979, Page 5



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

For Sale, Etc.

Snows, pr Gdyear 7.35-14 B78-14, studded 60° tread, \$10 ea; pr Continental 185/70-13 hydrophilic 60° tread, \$15 ea. Doug x8-3156 Draper.

Henken down hill leather bucket ski boots, fits M

Royal Copenhagen X-mas plate '75 org box, \$25; 2 panel drs. 6.5°H; 20° &30°W, \$10 & \$15; tble hockey game, \$5; Magnavox TV game, \$15; racoon fur hat, nw \$25; white cab w/slide drs, suitable for hifi, \$30; downhill boots, sz 7 & 8, \$10. x3-6085.

Xmas trees, cut you own, Rt. 119 to NH line, then 2nd rd on rt, (Wood Ave). Nottingham, Rindge NH (603) 899-6646.

2 typewriters, elect & vv port w/cases: Livetti "Lettera 36"; "Coronet Auto, 12", reasonbl offer aft 6pm (603) 880-7222.

19" Admiral color TV, 5 yrs old, works OK, rabbit ear ant incl, \$150 or best. Marilyn x5724 Lincl.

Gulbransen elect organ, console, 2 mans & pedals, fair cond, \$100. 926-5784.

Brnd nw full sofa & match chr, grey crush velvet, \$300 or best. Debbie x3-1848.

Stl rad 165-16 tires; pr Mich; 2 Sears; 2 VW whls, \$60; nw bttry for Bug, \$25. Luckey x3-7707.

Dulex Whirlpool B, nw, \$50; 2 lg suit cases, lk nw \$25; VW Custom bumper guards, nw, 4 for \$15; Mink stole, \$75; grey kidskin fur coat, sz 14, \$100; man-made fur coat, sz 14, \$30. 284-6226.

Clairol 200 roller hairsetter, \$5, B&W Zenith TV, \$5; German brass anniversary clock, \$15 Franciscanware dishes, service for 6 + mny pcs, usd, \$10; knee-high br suede sheepskin-lined boots, W 71/2 M, \$15. Anita 492-4751 aft 6pm

Sun lamp, tble mod, Westinghse, adj, \$10. Helen

Moving mst sell: sofa, \$120; rocker/recliner, \$120; Sears elect fan, \$40; 9x9 umbrella tent; \$50; lg Coleman cooler, \$15; Coleman 2 burner stove, \$15; Coleman Kerosene lamp, \$15; wood bk case, \$10; 2 vaporizers, cheap. Call x3-7798 or 648-2406 before

For the gal who has everything: handmade shell & jeweled boxes & handbags, retail \$35-up, sell for \$15-up, all types shown by appointment. Call eves

Camera Mamiya 500 DLT, perfect cond, \$150/w

2 prs usd snows, 155x13, \$25 ea pr. Mike x3-6642. Kenwood KA-3500 Int Amp, 40 watts/ch, fll features, 2 yrs old, \$90. Call Tom x3-6598 lv msg.

White gas stove w/htr, oven nds minor repair, \$30.

Pr 12" 2-way spkrs, Ultralinear 25's, \$80 or best; Motorola 19" B&W port TV, \$40. 862-6222x196 days of aft 6, 494-8127.

Exc qual contemp couch, 96"Lx36" high, brwn

black & white plaid, nrly nw, \$200. John x3-7092. Color TV 23" Magnavox console; swivel base, nds work on color. 547-7030.

Upholstered Fr Provincial chr, \$25. 924-6875 aft

Old Magic Chef gas range, \$50 or best. x3-4791. Compact GE stereo gd cond, gd sound, \$50; carved wd bed frme & top matt, \$25; misc W clothes & leather coat sz 5-9, \$1-7. Lee 354-6740 eves.

Brnd nw sew mach, zig-zag, stl in box, \$225 or best; qu sz box sprng & matt, \$75; 30 gal fish tank w/stand, \$60; 2 GE record players; walnut formica DR tble & 4 chrs. Dorothy x8-3591 Draper.

Cakes! Have one decorated & personally delivered anywhere at MIT, many flavors, szes, great for birthdays. Call Helen x5-6615 Dorm.

W ski park down filled w/detachable hood, lt green made by Holubar, vy gd cond, \$25. R. Lanza 2399 or 868-6812.

15" Zenith TV, B&W, nds horz fix, \$20. Mike x3-

rad tires 185 - 80mtd dynamically balanced, 3 only wk old, \$125/set, x3-

Persian Quilim Carpet 8x3' \$275; water matt & liner, \$40; refinish wood floors, ½ prc on Fabulon finish, Pryme 2 gals fl finish, reg \$18.95/gal - for you \$9/gal. x3-4510 or 661-2611, lv msg.

170cm wood skis w/bindings, exc cond, \$20; also anted: ski rack for station wg. Larry x8-4009

Stereo AM/FM radio, 2 spkrs & record cab, \$100 Angela x3-4303

Copper enameling supplies: copper, enamel, etc. \$10; Remington hot comb case, \$5; Royal port typewrtr, \$15; "My Double" dress form, petite, nvr usd, \$20; two-slice toaster, \$5; old adding mach. \$15; drapery rod, left draw, \$5. x3-3952.

Lowray fil console organ, linch wood, delux mod T50-25, exc cond, \$2500, 665-9685.

Wood tble, \$40; tw matts, as nw, \$20 ea. '73 Ford Country Squire Wg, vy gd eng, gd bdy, radio, A/C, \$600. Call 625-8390 aft 5pm.

XC skis & boots, Fischer Europa Glass 205cm w/Troll bindings, \$45; Alfa 1010 sz 45, \$35. Bill 494

Handmade Albrecht Durer angel quilt in Trapunto puff 2 tie quilt, unbleached muslin & flannel, white cotton, 8½x6°, \$150 or best, photo of quilt avail. Call Julie x3-7791 or 424-1253.

Set of Encycl Americana, brnd nw, mst sell, paid \$800, sell for \$550. Debbie x3-6841.

Square grand piano, ask pre \$1200 or best. Mary Lost and Found

Pr A78-13, stl rad Mich, usd 1 yr, best. x5876 Lincl. Free working refrig, you pick-up. Jane x3-7092. H78-14 snows, pr studded; pr Ply rims, vy gd cond. \$90. x3-8155.

Rare lg blooming indr plants, vy cheap, 4' to 1, \$5 to \$1. Calvin x3-6489.

Spare rims, fit Vega or sim GM cars, \$12/pr. Eric

Pr G78-15; GL belt poly Delta bias white side walls, reg tires, Dyn balance on GM rims, 1000 mi ago, cost over \$100, \$65 or best. Don x3-2273.

Strolee Wee child's car seat, as new, \$30 or best.

Ski Doo snowmobile suit, M sz lg, great cond, worn little, \$65. Barbara x3-7792 low taking orders for handcrafted doll houses, dia

12x42x24" w/6 rms, B & attic, finishing incl: wall papered rms, exterior siding, finished floors & more, \$260. Kathy x3-5606 or 646-9004 aft 6pm.

Toro snowblower 24" #526 self prop, \$275 or best; upright piano fair cond, \$200 or best, u-move from garage; shop vacuum on whls, \$25. Dave Michael

Read & watch TV in comfort in brown metal bed head & water 1 v in coming in brown metal loca, head & knees could be raised by hand operated cranks, \$50; vy lg walnut bureau, white, \$50; antique sm rocker w/mwly caned seat & back, \$50; Hover port dryer, nw \$150, now \$75 or best; nw beautiful Mexican hand woven wool rug 10x15'. \$1000 or best, 484-3017.

W brown down parka, sz 12, worn once, lk nw, dble zipper, insd pockets, \$35. x3-4328 during days or 924-7239 eves & wkends.

14" Ford rims, \$10 pr. x3-6021.

Whis for snows, 1 15" for GM std cars or light trucks, 1 15" for Ford or Chrysler st cars, \$6.50 ea. x3-3403.

SWTP PR40 Alphanumeric printer, flly essembled, \$100 or best. John x3-7787.

Desk, \$85; sngl loft bed, \$40; chr, \$7; all offers considered. Will 494-9213 or x3-2281.

Sears 1412' fiberglass boat w/trailer, 9.5 hp motor & mny access; sacrifice for \$800; several old TVs. some can be repaired, others gd for parts; 3 bikes, nd repair, some spare bike parts, Ig assort of ceramics, fired, nd painting and refiring; 1x2' styrofoam ceiling blcks, enough for lg rm, prc nego except for boat, 646-2646 5-8pm

Pr 14x5.5 rims, \$25. Norm x8-1637 Draper.

Rentwich Canadian leather dark gr ladies briefcase, nvr usd, from London Harness, \$75; Braun vegetable-fruit juicer, usd once \$35; 8-band solid state radio, including swl & swg. 1 aerial needes, \$45; meat brinder & salad maker, \$5. Jessie x3-

Skates blck leather figure, vy gd cond, szs 12, 1½ & 3, \$10 per pr. x3-6148.

Vehicles

'68 Ford LTD for sale, \$500 or best; gd run car, reblt eng, nw starter, nw tires, snows, nw bttry & muffler. Nancy x3-4690.

'70 Pontiac Catalina, 1 owner, vy gd cond, no bdy rust, snos w/whls, \$600; girls Riedell fig skates, sz 4' z, lk nw. \$25; Henke ski boots, sz 6, \$10. Barbara

'70 Pontiac Lemans Sports, 70K, PS, nw radiator & nw manuel brks, \$490. Chen-dao Lin x5-9640 or 494-8447.

'73 Dodge Dart 6 cyl, snows, on extra whls, 96K driven by elderly prof & wife, \$950 or best. x3-7281. '73 Fiat 850 Spyder, nw roof, 5 gd rads, mny nw

parts, 80K, \$600 or best. Lloyd x3-7558.

'73 Pinto Hatchback, vy gd cond, nw tires, rust removed, low gas mlg. \$1000. Call 648-1794.

'74 Pinto Wg, gd cond, 1 owner, 4 spd, fac air, pr mntd snows (4 4 nw stl btd rads, \$1350. Aram x184

'75 Audi Fox wg, 1 owner, 4 dr, 4 spd, sunrf, AM/FM, csstt deck, recent radials & mntd snows; 65K in exc cond, all dealer serv records, 25-30 mpg, ask \$3000. x3-2363 or (603) 880-7222 aft 6pm.

'77 Chevy Nova 17K mi, perf cond, xtras, white w/beaut cloth seats, \$4700 or best. x3-2446 or 862-6910.

'77 Datsun 280Z, exc cond, \$5300, complete maint ords, 254-4874 eves

'77 Datsun B210, 32 mpg, 4 spkr stereo csstt, exc cond, \$3300 or best. Chua x3-1969 or 547-7329.

'78 Dodge Diplomat, 225 slant 6, A/C, vnyl top, AM/FM, PS & PB, 20K, super cond, well maintained, ask \$3500. Call x3-2772.

Housing

Back Bay, 1 BR apt unfurn sublet, avail Jan 26 Aug 31 '80, vy convenient to MIT, eat-in K, lg L/DR, working fp sunny exc cond, \$385/mo w/ht & hw. Al x3-8137 or 536-7538 eves.

Nice furn studio w/loft Beacon St. in Back Bay, 15 min walk to MIT; avail Dec 20, \$295/mo incl all util. Heriberto 267-4521 or x3-5706.

Chelmsford 3 BR Calif ranch on 12 acre, 1 fl & 2 12 B. eat in K. LR. DR, fam rm w/fp garage, well in as ht & hot water, mny extras, move in cond, \$65,500. x7689 Linel.

Cambport 3-4 BR flat, \$650/mo, avail Jan 1. 354-4623 kp try

Sublet Eastgate, I BR, furn, from Dec 21-Jan 8. Sublet apt, Eastgate, lg 2 BR apt, completely furn cls to Kend Sq. Subway Station, avail from Dec 22 '79 to Jan 14 '80. x3-2087 or 494-8784

Sublet, rm in Tang Hall, avail from Dec 21 '79 to Jan 31 '80. Rajen x3-5195 or 494-8993 eves ly msg ! B!! p! avail Dec 24- Jan 14 494-9013 eves.

Hse for sale, Norwell, 7-rm Capte, fp, nw K, 3 or 4 BR, exc cond, nice yard, avail for immed occup. low 50's. Helen x3-2288.

No. Conway (Eidelweiss) NH, lovely chalet, 2 BR slps 6-8, ww. frpl comp furn. \$1750 (a util for ski season, or \$700/mo incl utils, frwood & ploughed dryway icld. Barbara x3-6151.

Ski chalet, midway betw Wildcat/Cannon slps 14 K. DR. & sauna, avail for wkends, Jan-Apr. min group 14 at \$8 ea night. Bud 846-0511.

White Mtn ski rental, 3 BR chalet w/fp, 20 min to way, \$165/wk. Steve x5584 Lincl.

1 BR apt in Somerville to sublet, \$265/mo incls ht A/C, d/w, disposal, cls to T, avail Dec 21. Peter 625-7808 or x3-5735.

Somerville Winter Hill, 6 lg rms, nr T & shops, htd no pets, \$350/mo. Marion x3-5202.

Quechee VT, lg architect design ski lodge. 4 BR. 2 B. LR, fam rm w/frplc, deck, glassed in porch, mtn view, prv ski area w/2700' chr. 1200' T-bar, club hse w/indr pool, squash & more, thru X-mas, avail Dec 17-24 & some weekends. Call x3-5004 or

Lost: Coop diary Fri, Nov 30, Student Center. Pls call Nikhil 864-6124 anytime.

Found: Vassar St, sidewalk nr West Gar, W glove brown. Bob D. or Marsha x3-2701.

Wanted

Sublet or short-term rental to June or Sept wanted in Camb, Belmont or Bos for visiting faculty couple, 2 BR, 1 B & study, or hee preferred, willing to take care of plants, pets, etc, references avail. Jes sie x3-8067

Rd wntd wkdays Ten Hills or Mystic Ave areas Somerville, wl shr expenses, Barbara x3-3852

Person for infant child care at home in Winthrop approx 3 days/wk. Prof Larsen x3-3604 or 846-3824.

Looking for rider to NYC Queens, ly Fri 12/21. return Wed, 12/26, \$10 1-way, \$15 round trip Geisler x3-3975

Reliable pro W wishes to hsesit, 2 wks min, Dec 15-Jan 31, wl care for pets. x3-3405.

Iranian Jews who might be interested in speaking w/small Temple group. Lee x3-1782.

Wanted: books by H.W. Tilman. Barry 864-4253. Wanted: knitter to repair sweater, wl pay. Cynthia

Driving lessons & pract needed, your car, wl pay. Camb area. Dorothy x3-3604.

Wntd pr Symphony tickets Dec 22, 23 or 25. Lee Linsky x3-1782.

Pr usd '77 Datsun 810 rims, sz 165-14. x8-4300 Draper.

Seeking usd port FM radio w/gd reception of classical stations, cheap, pls call or write Bill Kalt Rm NW 16-249 x3-8449.

Would lk a ride from Saugus to & from MIT, arrive 8:30 or 9am, lv 5 or 5:30pm. Pls call x3-4962.

WI pay cash for broken H/P calculators, those that do not work, \$5-20, depending on mod. Brian Armstrong 494-0413 or lv msg at Burton Desk x3-

Ski rack for sta wg. Dick x8-4011 Draper.

Nd ride Newton Ct area, Chestnut Hill, hrs flex, wl pay. Rachel x3-2584.

Rad 155x13 steel or fabric belted tires, x3-1817. Rd Saugus to MIT round trip, 9-5. x3-4962.

Port children's playpen, any cond, for sm animal. x3-4791 days or 524-4783 eves aft 6pm.

Roommates

M or F nonsmoker to shr w/couple 1st fl of 2 fam he in Belmont, DR, fp LR, sunrm, washer & dryer, dishwasher. Ig yard, cls to T, neat quiet person 26+, \$170/mo + ht & util. Karen or Eliot 484-6869

2 M rmmates to shr 3 BR hme, Bedford-Billerica, fp. non-smoker over 22, M prefer, \$180/mo + util. x8200 Lincl.

Allston quiet F 25+ to shr lg hse w/2 F, yd frpl, no pets or smkrs. \$161/mo incl ht & util - Jan 1. Call 787-1852. Kp trying pl. 2 rmmates wntd to shr 4 BR hse, Medford-Malden

line, prv BR, lg LR, DR, K, fp, wash & dryer, now occupied by 2 M postdocs, \$150/mo + utils ea. G. Succi x3-4923 lv msg. M rmmate 22+ for Essex St. Cent Sq. \$140 + utils.

no smoking, no pets, renovated sunny, quiet apt. Matthew x5364 Lincl. Rmmate wntd, mature, quiet, neat, non-smoke, M rmmate to shr w/1 other M, lg, bright, 6 rm apt in No. Camb, \$150/mo + utils. Bill x3-7133 10:30-2:30pm or 491-0905 eves.

F rmmate 28+ to shr beaut Bel hse w/2 F, pool, fp, nr T, free park, no pets, \$167/mo + util, Marilyn x3-1659 or 489-3673 eves.

Miscellaneous

Flute lessons w/experienced teacher, pro trained at I.U & Vienna on campus. 492-7034.

Anyone interested in forming a pocket billiards (pool) club. Pls contact Jay Roth x5-7507 Dorm, all levels of players are welcome, w/opprt for lessons. tournaments & fun.

WI do gen, tech & thesis typing, IBM Correct Select. 11 yrs exp. x3-6695 8am-1pm.

Wl do gen, thesis, tech, typing, fast & accurate, IBM Correct Select. x7705 Lincl.

Pro typing IBM Select. 10 yrs exp, papers thesis etc. Call x3-4965 WI type thesis, ms, tech, fast & accur, IBM Correct Select. Call Debbie x3-1848.

Wl do gen & tech typing IBM Correct, fast & accur.

Experienced typist to type papers, thesis, stat.

tech incl. Anne x3-2674. Voice workshop, learn to sing or brush up on your technique, group or prv lessons, all styles, suppor-tive, relaxed setting, free initial consultation, for info pls call 643-5791.

Surplus Property

The following MIT Surplus Property is available for transfer through the Office of Facilities Management Systems. Please contact Dorothy Cavignano, Ext. 3-2776 citing property case

Case #497, Welded Steel computer flooring, vinal Case #497. Welded Steel computer Hooring, vinal covered, raised 6" high, about 500 square feet. Case #498. Small stark milling machine, stark Tod Co., 16" x 5" table, 8" table travel. Case#499. Rivet tool room lathe, collet type w/collets 1/32" to 1", 8" sw-ing x 16" cc. Case#500. Rivet Bench lathe in good rng x 16 cc. Case#300, Kivet Bench lather in good condition, model 957-1004-5C. serial 60-422. 8" sw-ing, 16" cc. Case #501, Hendy tool room lathe, 10" swing, 18" cc, serial 31412. Case #502, Van Norma #12 milling machine, vertical & horixontal 8" x 38" table, 20" travel. Case #503, Brown and Sharpe table, 20" travel. Case #503, Brown and Sharpe Cylindrical grinder #1, serial 4663, 10" swing, 20" cc., 10" grinding wheel. Case #504, Lincoln arc welder, motor generator type, DC arc, 62 Amps, serial 118597, model SAE300. Case #505, 10" Circular wood saw, table type, Delta unisaw. Tilitim Arbor, 36" x 27" table, Case #506, DeWalt radial arm saw, 10" blade, 12" wide cut. (black & decker), model 8151, serial 47443. Case #507, Shaper, American, 16" heavy duty, Mfg, American tool works, Case #508, Lathe, Gap., 36" swing, 6' bed, Mfg, Rahn Larmon, serial AG 292. Case #509, Planer, 8' bed, Putnam Mach, Co., serial 731, 22"

saw, Delta, S/N 48-9415. Case #190. Bridge, impedance. Case #191. Bridge, Impedance. Case #192. Bridge, model 1603./. S/N 565. Case #193. Bridge, model 1601.-A, S/N 487. Case #194. Bridge. S/N 1800, model 916A. Case #195, Bridge R.F., S/N 1730, model 916A. Case #196, Cabinet, 2 door, 72" high. Case #197, Calculator. Case #198 Calculator. Case #199, Calculator, model TR-10F S/N 591696. Case #200, Calculator, model TR-10F S/N 595262. Case #201, Calculator, model TR-10F S/N 635050. Case #202, Calculator, model 10-EFA S/N 635050. Case #202, Calculator, model 10-EFA, S/N 538530. Case #203, Calculator, model 10-EFA, S/N 384035. Case #204. Calculator, Fridon, model 132, S/N 3145. Case #205, Calculator, electronic model 360E, S/N 360095. Case #206, Calculator. Marchant. Case #207. Calculator, Monroe: Case #208, Calculator, Desk. Case #209, Camera. Case #210, Camera oscillograph, model 297. S/N 804-12322. Case #211, Capacitor checker. Case #212, Card programmer, model CP-2M, S/N 485966. Case #213. Chart recorder, T1, S/N 2504. Case #214. Contact printer. Case #215, Converter, S/N 512, model 5256. Case #216, Converter, S/N 576 model 5258. Case #217. Converter S/N 855 model 2426, model 525C. Case #216, Converter, S/N 5716, model 525B. Case #217, Converter S/N 855 model 525C. Case #218, Converter, S/N 7318, model 525A. Case #219, Converter, S/N 847, model 525A. Case #219, Converter, S/N 847, model 525C. Case #220, Counter, Eput, Berkley. Case #221, Counter, model 524-B, S/N 3596. Case #222, Counter, S/N 3855, model 524C. Case #223, Decade resistance superior. Case #224, Decade resistance superior. Case #226, Decade, resistance, model 1432P, S/N 15009. Case #226, Decade, resistance, model 1432-A S/N 18218. Case #227. Decade, resistance, Case A S/N 18218. Case #227. Decade, resistance, Case A, S/N 18218. Case #227, Decade, resistance. Case #228, Decade, resistance. Case #239, Decade, resistance. Case #230, Decade, resistance. Case #231, Decade, resistance. Case #231, Decade, resistance. Case #232, Decade, resistance. Case #235, Decade, resistance. Case #236, Decade, resistance, GR. Case #236, Decade, resistance, GR. Case #236, Decade, resistance, GR. Case #237, Detector, model 417-A, S/N 1213. Case #238, Detector, model 417-A, S/N 1682. Case #239, Detector, square-law. Case #240, Dictaphone, model TC-5/12, S/N 452466. Case #241. Digital printer, model SCI-A-MX. Case #242, Duplicator racket standard w/stand. Case #243. A, S/N 18218. Case #227, Decade, resistance. Case "241. Digital printer, model SCI-A-MX. Case #242. Duplicator racket standard w/stand. Case #242. Duplicator racket standard w/stand. Case #242. Electronic counter, model 524-B, S/N 3632. Case #244. Electroscope, model XD-793831-1, S/N 22. Case #245. Electroscope. Case #246. Engraver, electric. Case #247. Filter, bandpass, Kronhite. Case #248, Frequency converter, model 525-B, S/N 2158. Case #250, Frequency converter, model 525-B, S/N 2158. Case #250, Frequency converter, model 525-B, S/N 2158. Case #250. Frequency generator, HP, model 202A. Case #251, Frequency meter, S/N 1025, model 620A. Case #252, Frequency meter, model F14-6R, s/N 276. Case #254, Frequency multiplier, model FM-4A, S/N 135. Case #255, Function generator, S/N 4325, model 202-A. Case #256, Furnace, electric, model F0-104, S/N 51624. Case #257, Galvanometer, S/N 1067303. Case #258, Galvanometer, type 242G9. Case #259, Galvanometer, type 242G9. Case #259, Galvanometer, type 242G9. Case #259, Galvanometer, type 242G9. Case #256, Autovac, model 3294-O. S/N 387. Case #261, Gauge, dead-weight. Case #262, Gauge, pressure, 0-5000, Heisse. Case #263, General, signal, GR. Case #264, Generator, model 180, S/N 412. Case #265, Generator, model 202-A, S/N 5125. Case #266, Generator, model Generator, model 202-A, S/N 5125. Case #266, Generator, pulse. Case #267, Generator, square-wave. Case #268, Generator, signal. Case #269, Generator, pulse W. PS. Case #270, Generator, sweep. Case #271, Generator, pulse, GR. Case #272, Generator, pulse, GR. Case #273, Generator, signal, Jackson. Case #274, Generator, signal, model 1021A. Case #275, Glotube scaler, model 1021A, 172, Case #276, Glotube scaler, model 1021A, 172, Case #276, Glotube scaler, model 1021A, Case #276, Glotu signal, Jackson. Case #274, Generator, signal, model 1021A. Case #275, Glotube scaler, model 1301, S/N 372. Case #276, Glotube scaler, model 1301, S/N 457. Case #276, Glotube scaler, model 1301, S/N 457. Case #277, Gradiometer, model 706562. Case #278, Graph meter, spindle type. Case #279, Grinder & pestle. Case #280, IM bin. model 29-1, S/N 50D5227. Case #281, Impedance bridge. S/N 7627, model 650A. Case #282, Indicator, model 415-B. S/N 3839. Case #283, Indicator, model 415-B. S/N 3839. Case #284, Item counter, model 16-1, S/N 0040. Case #283, Inear Amplifier, model 348A, S/N 761-948-3. Case #286, Memory- unit, model no-180M, S/N 64-129. Case #287, Meter output, Daven. Case #288, Meter-volt. Case #289, meter, amp. Case #292, Meter, amp. Case #292, Meter, amp. Case #292, Meter, amp. Case #292, Meter, amp. Case #294, Meter, model 130, S/N 113. Case #296, Meter, Case #293, Meter, decibel, Balantine. Case #294, Meter, milliwatt, H.P. Case #293, Meter, milliwatt, H.P. Case #293, Meter, wolt, Case #300, Meter, volt. Case #304, Meter, volt. Case #303, Meter, volt. Case #308, Meter, volt. Case #308, Meter, volt. Case #308, Meter, volt. Case #309, Meter, volt. Case #308, Meter, volt. Case #309, Meter, volt. Case #308, Meter, volt. Case #309, Meter, volt. Case #309, Meter, volt. Case #309, Meter, volt. Case #311, Meter, volt. Ballantine. Case #311, Meter, volt. Ballantine. Case #311, Meter, volt. Ballantine. Case #315, Meter, volt. Ballantine. Case #316, Meter, vVTVM. RCA. Case #328, Meter, VTVM. RCA. Case #329, Meter, VTVM. RCA. Case #320, Meter, volt. Case # 1301, S/N 372, Case #276, Glotube scaler, model WV-84C, S/N 5519. Case #335, Micrometer, model WV-84C, S/N 5551. Case #336, Microvolter, model 546-G, S/N 4332. Case #337, Microwave Rec-trans, model 60422. Case #338, Mixer amplifier, model 30-17, S/N 76105. Case #339, Mixer amplifier, model 30-17, S/N 76105. Case #330, Mixer amplifier, model 30-17, S/N 76105. Case #340, Mixer ovie projector, 16mm sound. Case #340 ultimeter. Case #341, Multimeter, type ME G/U. Case #342. Oscillator, beat frequency, model G/U. Case #342, Oscillator, beat frequency, model 1304A. Case #343, Oscillator, beat frequency, model 1304A. Case #344, Oscillator, model 650-A. S/N 5801. Case #345, Oscillator, 40-250 MH. Case #346, Oscillator, audio. Case #347. Oscillator, audio. Case #347. Oscillator, audio. H.P. Case #350. Oscillator, audio. H.P. Case #351. Oscillograph. Case #352. Oscilloscope, model 513-D. S/N 11311. Case #353. Oscilloscope, model 120-A. S/N 1353. Case #355. Oscilloscope, model 120-A. S/N 1353. Case #355, Oscilloscope, model 120-A, S/N 1160. Case #356, Oscilloscope, model 350. Case #357, Oscilloscope, model 401. Case #358, Oscil-\$\langle N \text{1700}\$. Case \$\text{#350}\$, Oscilloscope, model \$401\$. Case \$\text{#358}\$, Oscilloscope, model \$408-B\$, \$S/N 244\$. Case \$\text{#359}\$, Oscilloscope, model \$403\$. \$S/N 282\$. Case \$\text{#360}\$, Oscilloscope, model \$403\$. \$S/N 282\$. Case \$\text{#360}\$, Oscilloscope, model \$403\$. \$S/N 282\$. Case \$\text{#361}\$, Oscilloscope, model \$403\$. \$S/N 282\$. Case \$\text{#361}\$, Oscilloscope, model \$400\$. \$S/N 39722-W. Case \$\text{#361}\$. nscope, model 460, S/N 39722-W, Case #361, Oscilloscope, model 460, S/N 39273-W, Case #362, Oscilloscope, model 460, S/N 39562-W, Case #363, Oscilloscope, model 460, S/N 39233-W, Case #364, Oscilloscope, model 581, S/N 2023 Oscilloscope, dual-beam. Case #366, Oscilloscope Oscilloscope, dual-neam. Case #300, Oscilloscope. Case #367, Oscilloscope. Case #368, Oscilloscope. Case #368, Oscilloscope. Case #370, Oscilloscope, EICO. Case #371, Panalyser, model SB-3B. Case #372, Pen, electric, model 2. Case #373, Phase unit. S/N 264, model 525D. Case #374. Photocopier, Case #375, Plug-in amplifier, wide-band, Case #376, Plug-in unit, Tek, type, B. S/N 013784, Case #377, Potentiometer, model R2, S/N 1027623, Case #378, Potentiometer, S/N 639126. Case #379, Potentiometer, S/N 48490, Case #380, Potentiometer. Case #381, Potentiometer. Rubicon. Case #382, Potentiometer. Case #383, Potentiometer. Case #384, Power supply, model R-

wide table, 22' height, 2 cutting heads. Case #167, Adding machine, model 49, S/N 1692305. Case #168, Adding machine, model 940X, S/N 1677255. Case #169, Adding machine. Case #171, Adding machine. Case #171, Adding machine. Case #171, Adding machine. Case #172, Adding machine.

machine. Case #171, Adding machine. Case #172, Adding machine. Case #173, Amplifier, S/N 06222, model 240-353-2. Case #174, Amplifier, S/N 5338. model 460-AR. Case #175, Amplifier, S/N 5160, model 450-A. Case #176, Amplifier, audio. Case #177, Amplifier, DC. Case #178, Amplifier, decade. Case #179, Amplifier, dual., audio, McIntosh. Case #180. Amplifier, audio, precision. Case #181. Amplifier, wide band, Sanborn. Case #182. Amplifier, audio, Lafayette. Case #183, Amplifier, Offiver, w/Crown tape recorder. Case #184. Analyzer. Case #185, Analyzer. Case #186. Analyser, S/N 2052, model 302A. Case #187, Audio scillator, S/N 397, model 403A. Case #188, Gauge

oscillator, S/N 397, model 403A. Case #188, Gauge

autovac, model 3294-B, S/N 1426. Case #189, Band

300. Case #386. Power supply S/N 0359, model 716. A. Case #387. Power supply, S/N 0332, model 716. A. Case #388, Power supply, model C-881-M. S/N 33963. Case #389, Power supply, model LA10000-03 AM. S/N 1366. Case #390, Power supply, model 715-A, S/N 1829. Case #391, Power supply, model 13-A. S/N 1629. Case #391, Power supply, model 29-M. S/N 1629. Case #393, Power supply, model 715A. S/N 1820. Case #393, Power supply, model 715-A. S/N 1777. Case #394, Power supply, model 712-B. S/N 2771. Case #395, Power supply, model 32-M. S/N A-3693. Case #396, Power supply, model 32-M, S/N A-3093, Case #397, Power supply, model 202, S/N 2038. Case #398, Power supply, model 202, S/N 2038. Case #398, Power supply, model TVN-11, S/N 614. Case #399, Power supply, model C+481M, S/N 41464. Case #400, Power supply. Case #401, Power supply. Case #402, Power supply. Case #405, Power supply. Case #406, Power supply. Case #406, Power supply. Case #403. Power supply. Case #404. Power supply. Case #405. Power supply. dual. Case #406. Power supply. dual. Case #406. Power supply. dual. Case #407. Power supply. Case #408. Power supply. Lase #409. Power supply. Case #410. Power supply. Case #411. Power supply. Case #411. Power supply. Case #411. Power supply. Case #414. Power supply. Case #414. Power supply. Kepco. Case #415. Power supply. dual. Philbrick. Case #416. Power supply. Lambda. Case #417. Power supply, high voltage. Lambda. Case #417. Power supply, kepco. Case #419. Power supply. KEPCO21. Case #420. Power supply. H.P. Case #421, Pressure vessel, tanks, and tubes. Case #422. Printer. Case #423. Printer. Case #424. Projector, S/N B03075, model 126-TR. Case #424. Projector, S/N B03075, model 126-TR. Case #426. Pulse generator, model 404. S/N 818. Case #427. Pulse generator, model 404. S/N 818. Case #427. Pulse generator, model 404. S/N 818. Case #428. Pulse generator, model 212-A. S/N 7070. #427. Pulse generator, model 404, S/N 818. Case #428. Pulse generator, model 212-A, S/N 7070. Case #429. Pulse generator, model 503. Case #430. Pump plate. Case #431. Q meter. Case #432. Q meter. S/N 4565. model 260-A. Case #433. Rack. 19" wide. Case #434, Radio frequency head, model 2051-A, S/N 265. Case #435, Radio frequency head, model 25C1, S/N c-49. Case #436, Read-cut power translator, model 52-24, S/N 86107. Case #437, Receiver, all-band. Case #438, Recorder/printer, model 1021A. Case #439, Recorder, digital, model 560A. Case #440. Recorder, model 6-11A. S/N 5578. Case #442. Recorder, model 6-11A. S/N 5578. Case #442. Recorder, model 6-10A. S/N 122. Case #444. Recorder, model 6-10A. S/N 123. Case #444. Recorder, model 6-10A. S/N 124. Case #445. Regulator, S/N 8626, model 1000S. Case #445. Regulator, oxygen. Case #447, Regulator, oxygen. Case #447, Regulator, oxygen. Case #448, Roda mode, model 6-224. S/N 86308. Case #449, Roda mode, model 600-24, S/N 86308. Case #449, Roda mode, model 600- S/N 86308. Case #449. Roda mode, model 600 Case #450, Scale. Case #451, Scaler, 6-decade nonpreset, model 49-28, S/N 55C52. Case #452, Scaler, 6-decade nonpreset, model 49-28, S/N 55C52. Case #453, Scaler, 6-decade nonpreset, model 49-28, S/N 55C52. Case #454, Scaler, 6-decade nonpreset, model 49-28, S/N 55C52. Case #455, Scaler, 7-decade, model 27103, S/N 69. Case #456, Scaler, 7-decade, model 27103, S/N 70. Case #457, Scaler, 7-decade, model 27103, S/N 71. Case #458, Scopemobile. Case #459, Shelves, computer card sorting, 2. Case #460, Shelves, grey metal, 3-#490, Snetves, computer card sorting, 2. Case #460, Shelves, grey metal, 3-6. Case #461, Spectrum analyzer, model SA-25, S/N 639. Case #462. Square Wave Generator, model 211-A, S/N 2001. Case #463, Square wave generator, model 43-A, S/N 245. Case #464, Stand generator, model 43-A, S/N 245. Case #464, Stand for centrifuge. Case #465, Stereoscope. Case #465, Sweep drive, model 1750-A, S/N 317. Case #467, Switch, model 330, S/N 1127. Case #469, Switch, model 330, S/N 1127. Case #469, Switch, model 330, S/N 1113. Case #470, Tape deck, Crown, rack mounted. Case #471, Tape perferator, model 44-15, S/N 352-1029. Case #472, Tape winder. Case #473. Terminal, teletype 350. Case #474. Terminal. teltype. Case #475, Test receiver, airborne, model 30MC. Case #476, Test receiver, airborne, model 30MC. Case #476, Test receiver, airborne, model 30MC. Timer, preset, model 27101, S/N 88. Case #478. Timer, preset, model 27101, S/N 91. Case #470, Torm terer 11, S/N MCT-2. Case #481. Traveling wave table amphifier, model 490-B, S/N 23. Case #482, Tubes, (10) photomultiplier. RCA cat no. 2064B. Case #483, Tuning unit, model 1021. Case #484. Ultrasonic cleaner, model SG-2, S/N cat no. 2064B. Case #483, Tuning unit, model 1021. Case #484. Ultrasonic cleaner, model SG-2, S/N 267A. Case #485, Vectorlyzer, model 202-A, S/N A-1102-A. Case #486, Voltage divider, Daven. Case #487. Voltage source, GR. Case #488. Voltmeter, model 91-C, S/N 610. Case #489, Voltmeter, model 905-A, S/N 1728. Case #490, Voltmeter, digitat. Case #491, Voltage divider, Daven. Case #492. Wattmeter, model 67, S/N 96. Case #493, Wave analyzer, model 300-A, S/N 1497. Case #494, Wave indicator, model 415-B, S/N 8460. Case #495, Meter milliamp. Weston. Meter milliamp, Weston. The following items are available for

sealed bid basis only. Please submit bids to Mr. Wendell A. Derry, O.F.M.S. Institute Property Officer, E19-429. Sealed bids will be opened on December 28, 1979 in Room E19-429. MIT reserves the right to reject any and all bids.

Case #140, Gamma counter, nuclear-Chicago, Case #140, Gamma counter, nuclear-Cincago model 1085, 7 years old. Case #511, One lot scrap iron, about one ton, includes-few items of damaged equipment. Case #144, One Collator, electric, semi-autmatic, 24 station, 8 years old. Case #159, Audiograph transcriber, serial 50192. Case #135A. Furnace, high frequency, with motor, generator and controls. Case #167, Super Chief offset press. 30", model DL, serial S3138.

POSITIONS AVAILABLE

available on the MIT campus. Duplicate lists are posted on the Women's Kiosk in Building 7, outposted in the women's Roose of Bullating, 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).

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

ons who are NOT MIT employees the Personnel Office on extension 3-4251

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

Dick Higham	3-427
Pat Williams	3-159
Susan Lester	3-159
Appointments: Tertia Perkins	3-427
Virginia Bishop	3-159
Richard Cerrato	3-126
Ken Hewitt	3-426
Appointments: Marsha Gens	3-426
Sally Hansen	3-427
Laurence Milan	3-292
Kathleen Rick	3-126
Associates and Product Promot	9 107

Admin. Staff. Area Coordinator/Systems Analyst in Administrative Computing Services to analyze user information systems problems and develop solutions and be responsible for external design and implementation of computer systems in an assigned area of responsibility. Duties include documentation, run scheduling, manual development or updating functional supervision of systems analyst, and applications programming. A

Bachelor's degree and or equivalent and systems analysis experience required. A79-93, A79-94 (12/12)

Admin. Staff, Asst. Director, in the Student Financial Aid Office to be responsible for student employment office; maintain referral system; develop on-campus job opportunities; supervise staff. Will also assist in administering College Work Study Program including financial record keeping and reporting, and assist in all other activities of the Office as necessary: need analyses, student/parent contact, and general policy development. A Bachelor's degree, knowledge of financial reporting systems, ability to interact effinancial reporting systems, ability to interact ef-fectively with others and demonstrated written and oral communications skill required. A79-95

Admin. Staff, Technical Writer, in Information Processing Services to prepare and publish documentation for user of IBM (VM/370) and Honeywell (Multics) systems; write and edit other computer documentation. May also teach and consult on computer based word processing. A Bachelor's degree or equivalent, strong writing skill and knowledge of computers required. Technical and knowledge of computers required. Technical writing and/or progamming experience preferred. A79-96 (12/12)

Admin. Staff, Building Maintenance Manage Admin. Staff, Building Maintenance Manager (Structural), will be responsible for all exterior building maintenance for the Physical Plant Dept.: manage contract maintenance programs as well as substantial volume of deferred maintenance; prepare estimates, specifications and budgets; supervise maintenance work. Will and oudgets, supervise maintenance work. An also be responsible for operation of several maintenance shops. Bachelor's degree in civil or construction engineering necessary. Five years' experience in building maintenance or construction also necessary. A79-67 (12/12)

Admin. Staff, Industrial Liaison Officer, will provide interface between MIT and assigned member firms of the Industrial Liaison Program. Responsibilities include liaison activities among Responsibilities include aliason activities among faculty, staff and member companies representatives; soliciting new member companies. Indepth knowledge of Institute, excellent interpersonal skills and willingness to travel extensively necessary. Bachelor's and Master's degrees (one degree in electrical engineering and computer science materials science and engineering or mechanical engineering, and one MIT degree preferred) and at least 2 years industrial experience also necessary. A79-74 (12/12)

A79-74 (12/12)

Admin. Staff, Administrative Officer, in the Spectroscopy Laboratory will be in charge of operations of the MIT Regional Laser Center and other Spectroscopy Lab programs. Duties include: overseeing contracts, budgets and purchasing, and coordinating technical reports for programs and projects; interacting with MIT administration in fiscal and management areas; interfacing with other groups regarding facility usage; assisting in organizing seminars and meetings; supervising support staff and providing technical support to the operation of the facility. Bachelor's degree or equivalent in technical or scientific discipline, and 3 years of administrative experience, with strong 3 years of administrative experience, with strong technical background required. Experience with optics, electronics and mechanical design in highly

Admin. Staff, Systems Programmer, in Informa Admin. Staff, Systems Programmer, in Information Processing Services to work in the Multics RDMS Support Group. Will be involved in the development of a new version of RDMS and in the rewriting of use applications to use the new RDMS. Will also work in other areas of Multics system support and use consulting. Must be proficient in systems programming with PL/1 and have experience on time-sharing systems. Previous experience in Multics, database or use consulting preferred. A Bachelor's degree or equivalent combination of education and related experience is required. A79-91 (12/5) quired. A79-91 (12/5)

Academic Staff, Nurse Practitioner/Physician's Assistant, in Medical Department. Duties include treatment for episodic illness, preventive health care activities and initiation of screening and care activities and initiation of screening and diagnostic evaluation of patients. Must be Mass. Registered Nurse who has completed an Adult or registered varies who has completed an Adult of Family Nurse Practitioner Program or be a Mass. Certified Physician Assistant. Minimum of 2 years' clinical experience required, preferably in ambulatory care and/or emergency room. Flexibility to work some weekends/holidays required. C79-35 (12/5)

Admin. Staff, Systems Programmer, in Informa-tion Processing Services will assist in system changes; bring up new releases of the operating systems and program products; document programs and procedures; analyze system problems; assist users with technical problems and devise solutions. Bachelor's degree, or equivalent, necessary. At least 1 year's applicable experience, including experience with the 360/370 Assembler including experience with the 360/370 Assembler Language (BAL) and 1 other higher level language Language (BAL) and 1 other manie. (Fortran, PL/1 or Cobol) also neces

Spons. Res. Staff, Technical Asst., in Nutrition and Food Science Toxicology Laboratory to perform bacterial assays for the detection of mutagenic compounds; prepare necessary solutions, and assume general laboratory responsibilities. Requires Bachelor's degree in biology or composition of the Prop. 255 (1912) chemistry. 40 hrs. R79-352 (12/12)

Spons. Res. Staff, Reserch Specialist/Software Systems, at NEROC Haystack Observatory to develop, maintain and improve software systems supporting real-time control, data processing and data recording portions of a sophisticated long-range, high-resolution radar system. System incorporates minicomputers, array processors special purpose digital equipment. Requires B.S. in engineering or physics with strong math background; two or more years' related experience, particularly in cooperation with other software and engineering personnel. R79-353 (12/12)

Spons. Res. Staff, in the Laboratory for Nuclear Science Accelerator Physics Collaborative/PEPR group. Will collaborate in research program involvents in hadron interactions at FermiLab. PhD in high energy experimental physics and at least 2 years experience in elementary parti-cle research. (Experience may include thesis records.) A79-359 (12/12)

Spons. Res. Staff, Research Engineer, in the Energy Lab to test and develop further an adcomputing system for simulation and design of synthetic fuel processes (Project ASPEN). Will design and implement FORTRAN Programs; test and develop computer models of fuel systems; documentation; user training and direction of students. Advanced degree in Chem. Eng. and I year's experience in process simulation or a Bachelor's degree and equivalent experience required, as well as a solid background in process modeling, design, and applied thermodynamics. FORTRAN programming skill also necessary. R79-360 (12/12)

Spons. Res. Staff, Educational Coordinator, in the Provost Office's Upward Bound Program to supervise curriculum development teacher performance; evaluate program effectiveness on an ongoing basis; assist in job development activities; establish and maintain contacts with high school teachers and counselors. A Master's or Bachelor's degree and 2 years, related residence at Wellesley. degree and 2 years' related residence at Wellesley College during summer program. Selected applicant must have driver's license. R79-361. (12/12)

Spons. Res. Staff, Technical Asst., in Biology Dept. to assist in biological experiments on the structure of chicken and mouse hemoglobin genes structure of chicken and mouse nemoglobin genes from embryos and from adults. Involves prepara-tion and analysis of DNA using microbiological techniques and radioactive tracer studies. B.A. on B.S. in chemistry, biology and/or microbiology es-sential. One year's full-time lab experience in microbiology also important. R79-362 (12/12) m adults. Involves prep

Spons. Res. Staff, in Mechanical Engineering to develop and supervise computer and graphic display facilities in Man Machine Systems Laboratory; develop software for vector and roster graphic display systems and interfacing of man-interactive devices in conjunction with research on undersea robotics, aircraft piloting and traffic control, multi-attribute data base searching and deci-sion making. Will initiate and execute relevant sion making. Will initiate and execute relevan research and supervise other laboratory staff of related projects. PDP systems experience desirable. R79-363 (12/12)

Spons. Res. Staff, Research Analyst/Programmer to work in Sloan Center for Computational Research in Education Management Systems on an interuniversity research project studying statistical methods for evaluating model reliability, where a model may be a single sion equation or a system of equations. Mucl research is carried out in the interactive m uations. Much of the research is carried out in the interactive modeling system called TROLL. Knowledge of FORTRAN required; experience with IBM Assembler, AED, VM/370, and TROLL desirable. Knowledge of statistics or econometries desirable. R79-364 (12/12)

Res. Staff, Tech. Assistant, in Biology Dept. to serve as experienced tissue culture techn cian, responsible for ordering and stocking all tis-sue culture supplies; supervising lab helper in routine procedures; perform experiments with supervision involving somatic cell hybridization analysis of mouse teratocarcinoma differentiation in vitro and in vivo; and maintain experiment and storage notebooks. Requires bachelor's degree in biology, microbiology or related field and 1-2 years' animal cell culture experience. Experience in karyology preferred. R79-365 (12/12)

Spons. Res. Staff, Computer Programmer, in Energy Lab to maintain Fluidized Bed Combustor Data Base System and develop applications program. Will work with other in resolving problems of application. Requires strong background in chemical engineering, mechanical engineering or chemistry; with reasonable familiarity with computer systems. Must have good organizational and supervisory capabilities and ability to handle large amount of experimental data. 40 hrs. R79-366 (12/12)

Spons. Res. Staff. Energy Laboratory, requires chemical engineer to assume responsibility for selection and accuracy of data being incorporated into Fluidized Bed Combustor Data Base System. Will supervise input of data and, working with others in group, will resolve problems of application. Requires B.S. or M.S. degree in chemical engineering with reasonable capability in computer programming. Must have good organizational and supervisory skills; and ability to handle large amount of experimental data. 40 hrs. R79-367 (12/12)

Spons. Res. Staff, Research Assoc., in Energy Laboratory will be responsible for management of a research and modeling program on the relation between energy market and the macroeconomy. Must demonstrate through training and work experience exceptional competence in macro- and microeconomics (both theory and applied), energy economics, and econometrics. PhD in economics and related research experience necession demonstrated competence in project main an academic setting. R79-368 (12/12)

Sponsored Research Staff, Assistant to vatory Director, Haystack Observatory, Millstone, to represent and assist director on matters of administrative and technical/administrative nature within the Observatory as well as in contacts externally. Bachelor's degree plus 5 years' related experience at professional or managerial level, including some budgetary experience, or 10 years' experience, 5 of which have been at professional or managerial level, including substantial budgetary experience required. Special qualifications are ex cellent ability in report writing and oral presentation; and demonstrated maturity of management judgement and leadership skills. Knowledge of MIT and/or Lincoln Laboratory desirable. R79-349

Sponsored Research Staff, to perform laboratory research on mouse leukemia virus in Center for Cancer Research involving sterile culture of cells, virus purification and biochemical isolations. Techniques include nucleic acid hybridization, RNA purification, virus purification, gel electrophoresis of proteins and nucleic acids. Bachelor's or Master's degree in Biology, strong background in biochemistry and molecular biology required, as is experience in laboratory biochemical techniques. R79-350 (12/5)

Library Assistant, Interlibrary Loans, in Humanities Library to process mail and OCLC re-quests; coordinate borrowing and returning of items from MIT libraries and departments; handle filing, correspondence and billing; compile monthly statistics; coordinate work flow of student messengers for retrieval and mailing of materials, participate in Reference/Information Service with answering inquiries on card catalogue holding basic reference questions and other referrals. Schedules information desk. Requires 2.5 years applicable experience, good clerical skills and accurate typing ability. Good communication, organizational and interpersonal skills, and ability to most deadlines also processor. Non-smyling of to meet deadlines also necessary. Non-smoking of fice. B79=780 (12/5)

Admin. Secretary to the Director of Resource Development will organize and coordinate ac-tivites supporting all types of fund raising; interact with a wide variety of administrative, academic and outside corporate contacts; handle phone and in-person inquiries; type correspondence, reports and memoranda, mostly from rough draft, and handle its reproduction and distribution; schedule meetings and travel; and provide secretarial support to other staff members on occasion. Position requires good organizational and effectie interpersonal skills; excellent typing ability; a sense of humor; and willingness to work in a busy office. Requires demonstrated secretarial experience. B79-788 (12/12)

Admin. Staff Assistant, to Assoc. Director of the Research Laboratory of Electronics. Will be responsible for the secretarial/administrative functions of RLE's Natural Language Group: operate on-line with DEC 20 computer to produce and edit technical documents, conference presentations and research proposals, etc. Requires excellent secretarial skills and willingness to learn computer editing as well as 4.5 years' applicable experience 40 hrs./wk. B79-796 (12/12)

Admin. Secretary to the Director of the Nuclear Reactor Laboratory to type letters, technical reports; arrange meetings and travel; coordinate and supervise work of other support staff; prepare reports for publication. At least 4.5 years' applicable experience, ability to deal effectively with others and to organize priorities required. 40 hrs./wk. B79-696 (10/31)

Admin. Secretary to director of MIT Alumni Fund will perform secretarial and support duties for several programs; arrange luncheon meetings; one inquiries and correspondence; assist answer phone telethon, and assist Fund research pro-jects. Some overtime may be required. Excellent typing and shorthand skills, ability to set priorities, good interpersonal skills and 4.5 years of directly related experience required. Applicant should be willing to be trained on word processor. B79-769 (12/5)

Secretary, in the Economics Dept. will deal with student inquiries on admissions and general departmental operations; answer phones; sort mail; type course materials, manuscripts and cor-respondence; file; and assist with admissions and general department work when time allows. Requires excellent typing skill as well as experience with technical typing; ability to coordinate work with student inquiries and other interruptions, and 2.5 years' applicable experience. B79-777 (12/5)

Sr. Secretary in Psychology Department's academic and financial offices to serve as receptionist and perform secretarial and clerical duties.

Will answer phones and in-person inquiries; as-sume responsibility for petty cash disbursement and maintenance; type stencils for and coordinate and maintenance; type stenies for and covernance weekly mailings; open and distribute mail, and other tasks as assigned. Must possess good typing and interpersonal skills, and ability to use numbers accurately and with ease. Requires 2.5 years applicable experience. B79-782 (12/5)

Admin. Assistant in the Office of the Dean for Student Affairs assigned full time to the Graduate Student Council. Provide secretarial and ad-ministrative support to the GSC officers and committees (Executive, Activities, Academic Projects and Policy, Housing and Community Affairs), the Muddy Charles Board of Governors, graduate student orientation and other established or ad hoc activities of the GSC. Serve as liaison with academic departments and administrative offices and CSC estimated academic servers of the GSC. on all GSC matters and provide general informa tion andother support services to graduate students. Administrative and secretarial skills and ability to communicate effectively with many people required. Prior working experience and knowledge of MIT desirable. B79-774 (12/5)

Sr. Staff Assistant, Research Laboratory of Electronics, will perform secretarial and clerical duties for one or more faculty members. Will be responsible for office; take, transcribe and type technical dictation; setup manuscripts and statistical tables from rough draft; edit and proofread various materials for proper format, grammar and accuracy; handle appointments and travel arrangements; compose routine cor-respondence, and other duties as required. Excellent typing skills and 2.5 years' related experience required. Some dictation skill preferred. B79-770

Sr. Secretary in Materials Science and Engineering Department to answer phones; type cor-respondence, manuscripts and proposals; maintain accounts; initiate purchasing requisitions; and set up and maintain files. Requires 2.5 years ap-plicable experience or combination of experience and education very good (60 wpm) typing skills and organizational ability, and good command of English, B79-787 (12/12)

Sr. Secretary Editorial in Alumni As fice will perform general secretarial duties in an editorial office, handle mail, telephone inquiries and correspondence; and provide assistance to Production Manager, i.e. handling proofs, collating corrections and paste-up. Requires good sense of English usage: typical office skills, including typing; interest (and possible experience) in printing production processes. B79-797 (12/12)

Sr. Secretary, to Technical Director of the Biomedical Engineering Center and Administrative Officer of the Health Sciences and Technology Division. Will type, proofread, and handle distribution of technical reports, proposals, manuscripts, class materials and correspondence from rough draft, shorthand and/or dictation; compose correspondence: maintain lab equipment. pose correspondence: maintain lab equipment. pose correspondence, mandam no equipments supplies and catalog files; answer telephone inquiries; conduct library research; coordinate monthly accounting reviews of contract and budget information; prepare and authorize cash and travel vouchers; and other clerical and secretarial duties as assigned. B79-789 (12/12)

Sr. Secretary to a research group in Aeronautics and Astronautics. Will type reports, manuscripts, proposals and class material which includes technical content; arrange travel and meetings, answer phones and maintain files. 2.5 years' ap-plicable experience including technical typing ex-perience required. B79-793 (12/12)

Sr. Secretary-Technical, part-time, in the Laboratory for Computer Science to type and proofread highly technical material using a computer terminal/word processor. Position requires called knowledge of math awayeds and there solid knowledge of math symbols and solid knowledge of materials, as well as editing skills and familiarity with computerized editors, formatting programs and Xerox Graphic Printer. Position will be full-time for first 6-8 weeks, and 21 hrs. per week thereafter. B79-784

Sr. Secretary, part-time, in Humanities Foreign Language and Literature headquarters to perform varied duties: answer phone, provide information to caller and visitors; type correspondence and per-form other duties as necessary. Excellent typing required, 21 hrs/wk, B79-792 (12/12)

Sr. Secretary, temp., to the Associated Dean for the Masters Program and Accelerated Masters Program and Accelerated Masters Program are recreated duties; schedule field trips, committee meetings and provide clerical assistance to graduate admissions process. Excellent typing, 2.5 years' aplicable experience and interpersonal skills required. Temporary through 3/1/80. B79-794 (12/12)

Sr. Secretary, part-time, in Psychology Dept. to provide secretarial/clerical support in neuroanatomical laboratory; type scientific papers, grant applications and correspondence; answer phones; handle special mailings; run errands; and perform other duties as assigned. Requires flexibility, ability to work independently, good to excellent typing skills, and 2.5 years of applicable experience. 20 hrs./wk. 1-5pm. B79-778 (12/5)

Sr. Secretary, temporary in the Program in Science, Technology and Society will perform editing, research and secretarial duties for faculty member writing and doing research on relations between science and law in environmental contents of the secretary and water quite and valence. troversies over air and water quality and nuclear power. Will type, prepare, and proofread book manuscript; solicit information from federal and state regulatory agencies and federal courts; main-tain files; prepare correspondence; transcribe reports; schedule appointments and travel arrangements; prepare class materials and perform other general secretarial duties. Six-month posi other general secretarial duties. Six-month posi-tion, Jan 1 - June 30, 1980. Excellent organizational skills and typing essential; editing and dictaphone experience desirable. At least 2.5 years applicable experience required; college degree preferred. 40 hrs./wk. B79-781 (12/5)

Sr. Scretary to Mechanical Engineering faculty members to type correspondence; arrange travel and coffee seminars and handle other general secretarial duties. Excellent typing, familiarity with basic bookkeeping procedures, shorthand and/or speedwriting skills required. Formal secretarial training and/or equivalent experience also necessary. B79-364

Sr. Secretary in Mechanical Engineering Dept. to compose and/or type (from machine dictation or verbal instructions) correspondence; maintain records and files; assist with reports, catalogues records and these; assist with reports, catalogues and special projects. Excellent typing organizational, and interpersonal skills, command of English language and ability to set priorities required. Ability to handle confidential matters with discretion, tact and resourcefulness also required.

Sr. Secretary in Chemical Engineering Dept. to perform secretarial duties for two faculty members and research staff, providing support for both academic and research responsibilities. Duties include typing classroom materials, proposals, reports, etc.; arranging meetings and travel plans; maintaining records; interacting with students and advisees. Excellent typing, organizational and interpersonal skills plus 2.5 years' experience or com bination of education and experience required. Should be able to transcribe from dictating equipment and have technical typing skills or be willing to learn. B79-776 (12/5)

Secretary, part-time, in Earth and Planetary s to work with a group of oceanography and their staff and students. Will type scientific manuscripts and correspondence; answer phones; order supplies; handle mailings, and assist with other general office duties. Excellent typing, some knowledge of technical typing required, as well as 2.5 years' applicable experience. 20 hrs./wk. B79-783 (12/12) Secretary, part-time, in Energy Lab will perform secretarial duties three days per week for Associate Director for Energy Management and Economics, including typing technical reports and correspondence; filing; preparing travel vouchers; arranging travel; and other secretarial support as needed. Requires good typing (technical) and secretarial skills demonstrated by 2-3 years experience; ability to adjust to changing work assignment. perience: ability to adjust to changing work assign nents and priorities; and ability to work effective with full-time secretarial staff. 21 hrs./wk. B79-

Secretary to serve as Registration Coordinator in Center for Advanced Engineering Study. Will respond to all communications regarding CAES con-ferences, workshops and seminars; process registrations and inquiries; keep conversion charts on rate-of-response and direct mail programs; prepare lists of attendees; troubleshoot prepare lists of attendees, troublessor for attendees; and perform some typing and filing, including some work on word processor. Position requires excellent interpersonal and organizational skills, plus some word processing experience and secretarial skills. Fluency in 2nd language (French or Spanish) preferred. 40 hrs./wk. B79-779 (12/5)

Tech. Assistant to perform variety of duties associated with maintenance of UNIX system (software on the PDP-11/70) for MIT's Laboratory for Computer Science. Duties include development of new software drivers, supervision of the hardware laboratory, stock room, ordering supplies and construction of electronic prototypes. Requires knowledge of PDP-11 assembly language, BCPL, etc.; Familiarity with digital and analog circuits and ability to wire wrap equipment also necessary 35-40 hrs./wk. B79-790 (12/12)

Tech. Assistant (Data Collector) in the Property Office within the Office of Facilities Managemen Systems will initiate property data form for all equipment using pertinent information from purchasing and accounting documents. Will locate new property at MIT; determine classification as equipment or supplies; input data into property computer system, and act as data base manager computer system, and act as data oase manager. Some supervision of temporary and part-time staff also required. An Associate's degree or equivalent combination of education and experience is necessary. Some experience in property management desirable, as is ability to handle large amounts of detailed information accurately. B79-795 (12/12)

Technical Asst., part-time, in Biology Dept.'s research laboratory will prepare cell culture media; perform some cell care; prepare chemical solutions for lab use; maintain stock supplies of chemicals and other materials and assist in general experimental work. Chemistry background useful but not essential. High school graduation with 1-2 years college preferred, as is skill in basic years college preferred, as is skill mathematics. 20 hrs./wk. B79-773 (12/5)

Sr. Office Assistant, Accounts Payroll Assistant in the Plasma Fusion Center, to verify accounting statements; process invoices; maintain files and records; contact vendors regarding invoices and payment. 2.5 years' applicable experience, excellent interpersonal and organizational skills required. B79-785 (12/12)

Office Asst., Payroll Office in Comptroller's Accounting Office, will answer employee's general questions at counter; review hourly time cards for accuracy for inputting to the computer; manually compute payments for time cards submitted late; coordinate weekly mailing of time cards; process incoming mail; filing; and other duties as assign Requires excellent communication skills. B79

Office Asst., part-time, in Graphic Arts Service to type various forms with accuracy from typed and hand written drafts; record data; organize and file forms and data cards; and calculate unit pricing and price extensions. Accurate typing and data recording skills, knowledge of office calculator, high school graduation or equivalent and one year experience required, 20 hrs./wk. B79-771 (12/5)

Office Asst., part-time, in the Dept. of Nutrition and Food Science will perform duties associated with preparation of research proposals; maintain perform accounting functions; update per thes; perform accounting functions; update personnel records; handle space inventory; act as messenger; perform miscellaneous related duties. Excellent typing skill and ability to organize work necessary. At least 1 year's applicable experience also required. 20 hrs./wk., flexible schedule B79-721 (12/12)

Office Asst. in the Registrar's Office will perform reception duties for the records section; answer calls and inquiries; type correspondence; maintain files. Good typing and interpersonal skills re-quired, as well as willingness to work with stu-dents, patience and ability to handle detailed work. At least 1 war of obligable arrange as the work. At least 1 year of applicable experience also required. B79-653 (12/12)

Service Staff, Technician A (Electro-mechanic) to work in Research Laboratory of Electronics in in-itial construction of protective enclosures; as-sembly of equipment components; interconnection of cables; testing and troubleshooting of complete system and in the operation and maintenance of the facility during an experiment. Requires graduation from a 2-year technical school or equivalent and 2 years applicable experience in electronic field, with some experience in microwave field valuable. 40 hrs. H79-200 (12/12)

Service Staff, Electromechanical Technician A, in Aerophysics Laboratory to conduct electrical cir-cuits, and mechanical test devices; and perform disassembly and maintenance of various mechanical and electrical systems; and work with research staff, faculty and students in set-up and construction duties. Requires knowledge of soldering and wire tap.technology of electronic constructions, and familiarity with standard mechanical and plumbing hardware. Graduation from a 2 year day to physical school of the control of the day technical school, or equivalent and at least 2 years' applicable experience also necessary. 40 hrs. H79-201 (12/12)

Service Staff, Technician A (E-M), (Jr. Control Room Operator), in the National operate 5,000 kw motor-generator sets and attendant equipment. Will start up, effect control and surveillance during operation and shutdown and secure generator and equipment such as switchgear, pumps, compressors, heat exchangers, hydraulic systems, distillation equipment, water purification equipment, chemical injection equip-ment for river water treatment and vacuum systems. Will also set up "mode of command" of operation, set up and breakdown magnets in cells, supervise research technicians in use of equipment. and operate complex, high-gain, fast-response closed loop feedback control system. Graduation from 2-year day technical school or its equivalent and a minimum of 2 years applicable experience required. Some background in electronic circuitry and understanding of large machinery desirable. 3-11pm. H79-197 (12/12)

Service Staff, Engineer, Third Class, with ex perience on high pressure boilers, oil and gas fired, with automatic combustion controls to work all shifts and perform all types of work to sustain self-sufficiency of the Power Plant. Must be familiar with turbine driven auxiliaries; A.C. and D.C. generation; switchboard and feed ware control with some experience on turbine driven refrigeration equipment desirable. Also requires Mass 3rd Class Stationary Engineer's license or higher grade. H79

Hourly Sr. Technician Electronic in the National Magnet Laboratory to assemble, test and operate high power microwave hardware; transform ad-vanced technical concepts into designs, prototypes and experimental systems; integrate microwave hardware into thermonuclear plasma experiment; direct technicians. Graduation from a 2-year day technical school or its equivalent experience required. Extensive expereince in microwave measurements, trouble shooting, high voltage power supplies also required. H78-106.(12/5) The following positions were still available at Tech Talk deadline. The date following each position is the date of the most recent Tech Talk in which the position was described.

ADMINISTRATIVE STAFF:

A77-3, Admin. Staff, Systems Programmer, Information Processing Services (2/16)
A78-84, Admin. Staff, Operations Manager,

Food Service (11/14) A79-9, Admin. Staff, Mechanical Engineering

A79-47, Admin. Staff, Mechanical Engineer-Operations, Physical Plant (8l/15) A79-53, Admin. Staff, Asst. Editor, Technology Review (81/29)

Review (81/29)
A79-55, Admin. Staff, Asst. to Manager to Central Utilities Plant, Physical Plant (8/29)
A79-59, Admin. Staff, Systems Analyst, Information Processing Services (9/5)
A79-62, A79-63, Admin. Staff, Applications Programmer, Information Processing Services Office (9/12)

fice (9/12) A79-71, Admin. Staff, Associate Director, Hous

ing and Food Service (10/10)
A79-73, Admin. Staff, Programmer Analyst, In-

formation Processing Office (10/17)
A79-77, Admin. Staff, Administrative Officer, Provost's Office/Technology Adaptation Program

A79-81, Admin. Staff, Applications Programmer, Information Processing Services Office (11/7) A79-82, Admin. Staff, Subcontract Administrator, Purchasing and Stores (11/7) A79-84, Admin. Staff, Coordinator of

Dining/Residence Programs, Office of the Dean for Student Affairs (1/7) A79-85, Admin. Staff, Systems Programmer, In-

formation Processing Services (12/5)

SPONSORED RESEARCH STAFF:

SPUNSORED RESEARCH STAFF:
R77-91, Spons. Res. Staff, Sr. Accelerator
Physicist, Lab for Nuclear Science (5/18)
R77-137, Spons. Res. Staff, Experimental
Physicist, Bates Linear Accel. (8/31)
R77-228, Spons. Res. Staff, Plasma Physicist,

Lab of Electronics (1/4) R78-93, Spons. Res. Staff, Res. Engineer, Civil

K78-93, Spons. Res. Staff, Research Associate, Mr8-102, Spons. Res. Staff, Research Associate, Mechanical Engineering (5/30)
R78-105, Spons. Res. Staff, Temp., Lab for Nuclear Science (5/31)

R78-135, Spons. Res. Staff, Research Lab of lectronics (7/26) R78-136, Spons. Res. Staff, Laboratory for Com-

R78-136, Spons. Res. Staff, Laboratory for Computer Science (9/12)
R78-145, Spons. Res. Staff, Electronics Engineer, Lab for Computer Science (8/16)
R78-168, Spons. Res. Staff, Programmer, Center for Space Research (8/30)
R78-105, Spons. Res. Staff, Physicist, temporary, Laboratory for Nuclear Science (9/5)
R78-208, Spons. Res. Staff, Postdoctoral Research, Nuclear Materials, Nuclear Reactor (9/27)

R78-209, Spons. Res. Staff, Postdoctoral Research, Nuclear Materials, Nuclear Reactor

R78-217, Spons. Res. Staff, Research Associate. Civil Engineering (10/18)
R78-228, Spons. Res. Staff, Research Engin78285, Spons. Res. Staff, Accelerator Physicist, Lab

for Nuclear Science (10/18)

R78-246, Spons. Res. Staff, Systems Programmer, Lab for Computer Science (11/1)
R78-276, Spons. Res. Staff, Electron Microscopist, Center for Materials Science and Engineerig (11/28)

Engineerig (11/28)
R78-285, Spons. Res. Staff, Accelerator
Physicist, Lab for Nuclear Science (12/13)
R78-286, Spons. Res. Staff, Systems Programmer, La for Computer Science (12/13)
R78-306, 307, 308, Spons. Res. Staff, Laboratory
for Information and Decision Systems (1/10)

R78-311, 312, Spons. Res. Staff, Lab for Computer Science (1/10)

R79-21, Spons. Res. Staff, Research Scientist, Energy Lab (1/24) R79-24, Spons. Res. Staff, Research Associate, Heterocyclic Chemist, Chemistry (3/7)

R79-27, 28, 29, Spons. Res. Staff, Transportation Systems, Center for Transportation Studies (2/14) R79-38, Spons. Res. Staff, Policy Analyst, Energy Laboratory (2/28) R79-105, Spons. Res. Staff, Research Associate,

R79-105, Spons. Res. Staff, Research Re

Engineering (6/6) R79-135, Spons. Res. Staff, Microwave

R/9-135, Spons. Res. Staff, Microwave Engineer, Research Laboratory of Electronics (6/6) R79-147, Spons. Res. Staff, Research Associate, Architecture Dept. (6/27) R79-150, Spons. Res. Staff, Laboratory for Nuclear Science (7/11)

Res. Staff, Laboratory for R79-155, Spons

r(19-150, Spons. Res. Staff, Laboratory for Nuclear Science (7/11) R79-156, Spons. Res. Staff, Project Specialist, Center for Space Research (7/11) R79-157, Spons. Res. Staff, Technical Asst., Chemistry (7/11) R79-170, Spons. Res. Staff, Research

R79-170, Spons. Res. Staff, Research pecialist/Technical Asst., Biomechanics and luman Rehabilitation Laboratory, Mechanical

Engineering (8/15)

Spons. Res. Staff. Research Specialist/Technical Asst., temporary, Mecha Engineering (8/15)

R79-172, Spons. Res. Staff, Research Specialist/Technical Asst., temporary, Mechanical

Specialist/Technical Asst., temporary, Mechanical Engineering (8/15) R79-176, Spons. Res. Staff, Research Engineer, Electronic, Haystack Observatory (8/15) R79-179, Spons. Res. Staff, Electric Utility Systems, Programmer/Analyst, Energy Laboratory

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

Plasma Fusion Center (8/15) R79-182, Spons. Res. Staff, Research Specialist, part-time, Cell Culture Center (11/14) R79-186, Spons. Res. Staff, Research Associate, Earth and Planetary Sciences (8/29)

Res Staff Electro R79-192, Spons. Res. Staff, Electronics Engineer, Lab for Nuclear Science (8/29) R79-196, Spons. Res. Staff, Lab for Computer Science (8/29)

R79-209, Spons. Res. Staff. Center for Space

Research (8/29) R79-210, Spons. Res. Staff, Postdoctoral Associate, Lab for Nuclear Science (8/29) R79-212, Spons. Res. Staff, Staff Scientist, National Magnet Laboratory (9/5)

R79-213, Spons. Res. Staff, Plasma Physics Ex-

perimentalist, Plasma Fusion Center (9/5) R79-215, Spons. Res. Staff, Research Associate, Energy Laboratory (9/5) R79-219, Spons. Res. Staff, Electrical Engineer,

Plasma Fusion Center (9/5)

Plasma Fusion Center (9/5)
R79-222, Spons. Res. Staff, Technical Writer,
Energy Laboratory (9/5)
R79-225, Spons. Res. Staff, Research Associate,
Materials Science and Engineering (9/5)
R79-227, Spons. Res. Staff, Programmer,
Meteorology Dept. (9/12)
R79-228, Spons. Res. Staff, Research Associate,
Division for Study and Research in Education
(9/12)
R79-229 Spons. Res. Staff, Tachini Communication

R79-229, Spons. Res. Staff, Technical Systems R79-229, Spons. Res. Staff, 1ecnnical Systems Programmer/Analyst, Energy Laboratory (9/12) R79-232, Spons. Res. Staff, Oil Market Analyst, part-time, Energy Lab (9/19) R79-250, Spons. Res. Staff, Sr. Shift Supervisor, Nuclear Reactor Laboratory (10/3)

R79-266, Spons. Res. Staff, Systems Designer/ Computer Programmer, Architecture Machine

(10/10) Group (10/10) R79-267, Spons. Res. Staff, Computer Systems Programmer, Architecture Machine Group (10/10) R79-271, Spons. Res. Staff, Scientific Program-

mer, Meteorology Dept. (10/24)

Tech Talk, December 12, 1979, Page 7

R79-280, Spons. Res. Staff, Group Leader, Plasma Fusion Center (10/17) R79-281, Spons. Res. Staff, Programmer, Materials Science and Engineering (10/17) R79-282, Spons. Res. Staff, Materials Science and Engineering (10/17) R79-287, Spons. Res. Staff, Research Scientist, Energy Laboratory (10/17)

R79-287, Spons. Res. Staff, Research Scientist, Energy Laboratory (19/17)
R79-288, Spons. Res. Staff, Technical Asst., Harvard-MIT Division of Health Sciences and Technology (10/24)
R79-293, Spons. Res. Staff, Research Specialist, Cell Culture Center (10/24)
R79-297, Spons. Res. Staff, NMR Spectroscopist, National Magnet Laboratory (10/31)

(10/31)
R79-300, Spons. Res. Staff, Experimental
Physicist or Electromechanical Engineer, National
Magnet Laboratory (10/31)
R79-301, Spons. Res. Staff, Biophysicist,
Electrophysiologist, National Magnet Laboratory

R79-302, Spons. Res. Staff, Research Metal-lurgist, Materials Scientist, National Magnet

Ingist, Materials Scientist, Antional Progress Laboratory (10/31)
R79-304, Spons. Res. Staff, Research Associate, Dept. of Civil Engineering (10/31)
R79-305, Spons. Res. Staff, Research Chemist, Nuclear Reactor Laboratory (10/31)
R79-306, Spons. Res. Staff, Postdoctoral Associate, Nuclear Reactor Laboratory (10/31)
P79-307 Spons. Res. Staff, Laboratory Super-

R79-307, Spons. Res. Staff, Laboratory Super-isor, Center for Materials Science and Engineer

ring (10/31)
R79-309, Spons. Res. Staff, Solid State
Spectroscopist, National Magnet Laboratory

Spectroscopist. National Magnet Laboratory (10/31)
R79-312, Spons. Res. Staff, Technical Asst., Nutrition and Food Science (11/7)
R79-316, Spons. Res. Staff, Research Specialist, temporary, Center for Policy Alternatives (11/7)
R79-318, Spons. Res. Staff, Technical Asst., Nutrition and Food Science Dept. (11/7)
R79-319, Spons. Res. Staff, Project Coordinator, Laboratory of Architecture and Planning (11/7)
R79-323, Spons. Res. Staff, Technical Asst., Dept. of Nutrition and Food Science (11/48)
R79-325, Spons. Res. Staff, Tech. Asst., Dept of Nutrition and Food Science (11/28)
R79-326, Spons. Res. Staff, Programmer, temporary, Plasma Fusion Center (11/28)
R79-327, Spons. Res. Staff, Programmer, temporary, Plasma Fusion Center (11/28)
R79-329, Spons. Res. Staff, Research Scientist, Artificial Intelligence Lab (12/5)
R79-330, Spons. Res. Staff, Res. Scientist, Artificial Intelligence Lab (12/5)
R79-331, Spons. Res. Staff, Res. Scientist, Artificial Intelligence Lab (12/5)
R79-332, Spons. Res. Staff, Res. Scientist, Artificial Intelligence Lab (12/5)
R79-338, Spons. Res. Staff, Research Scientist, Lab for Computer Science (12/5)
R79-337, Spons. Res. Staff, NEROC Haystack Observatory (12/L5)
R79-338, Spons. Res. Staff, Tech. Asst., Biology

R79-337, Spons. Res. Staff, NEROC Haystack Observatory (12/L5) R79-338, Spons. Res. Staff, Tech. Asst., Biology Dept. (12/5) R79-339, Spons. Res. Staff, Magnet Design Engineer, National Magnet Lab (12/5) R79-340, Spons. Res. Staff, NMR Spectroscopist, National Magnet Lab (12/5) R79-341, Spons. Res, Staff, Research Assoc., Dept. of Earth and Planetary Sciences (12/5) R79-342, Spons. Res. Staff, Res. Associate, Center for Trans. Studies in Freight Demand Analysis (12/5)

Center for Trans. Studies in Freight Demand Analysis (12/5) R79-345, Spons. Res. Staff, Tech. Asst., Center for Cancer Res. (12/5) R79-346, Spons. Res. Staff, Operations/Research Engineer, Aeronautics and Astronautics Aerophysics Lab (12/5)

ACADEMIC:

C79-21, Academic Staff, Librarian Documenta-tion Specialist, Rotch Library (9/5) C79-23, Academic Staff, Radiation Protection

C79-23, Academic Staff, Radiation Protection Office, Medical Dept. (9/5) C79-24, Academic Staff, Asst. Librarian, Rotch

Library (9/12)
C79-28, Academic Staff, Manager of Masters
Program, Sloan School of Management (10/17)
C79-29, Academic Staff, Inpatient Nurse,

Medical (10/17)

Medical (10/17)
C79-30, Academic Staff, Nurse Practitioner/Physician Asst., Lincoln Laboratory's Medical Clinic (10/24)
C79-31, Academic Staff, Inpatient Nurse. Medical Dept. (11/14)
C79-32, Academic Staff, Nurse Practitioner/Physician Assistant, Medical Dept. (12/5)
C79-33, Admin. Staff, Sr. Applications Programmer, Electrical Engineering and Computer Science Dept. (12/5)

C79-34, Admin. Staff, Operations Manager. Electrical Engineering and Computer Science Dept. (12/5)

EXEMPT:

E79-20, Exempt, Shift Supervisor, Physical Plant (7/11)

Plant (7/11) E79-24, Exempt, Engineering Asst., National Magnet Laboratory (L8/15) E79-26, Exempt, Supervisor, Food Service (9/5) E79-34, Exempt, Facility Manager, Food Service

(10/10)
E79-36, Exempt, Registered Nurse, part-time.
Clinical Research Center (10/17)
E79-46, Exempt, Animal Laboratory Specialist, temporary, Center for Cancer Research (11/14)
E79-48, Exempt, Engineering Asst., Materials
Science and Engineering Foundry, (12/5)
E79-50, Exempt, Engineering Assistant,
Aerophysics Lab. (12/5)

SUPPORT STAFF:

SUPPORT STAFF:
B79-167, Secretary, Medical Dept. (4/11)
B79-214, Secretary, National Magnet
Laboratory (5/9)
B79-321, Secretary, Mechanical Engineering

B79-331, Secretary, Laboratory for Information and Decision Systems (7/11)
B79-364, Sr. Secretary, Mechanical Engineering

B79-387, Project Documentor, Information

B79-421. Office Asst., Registrar's Office (8/29) B79-436, Reactor Operator, Nuclear Reactor Lab

B79-481, Office Asst., Admissions Office (9/5) B79-494, Office Asst., Admissions Office (9/5) B79-488, B79-489, Secretary, Chemical Engineering Dept. (9/5) B79-494, Sr. Office Asst., Treasurer's Office (9/5) B79-496, Secretary, Office of Minority Educa-

tion (9/12) B79-552, Secretary, National Magnet

Laboratory (9/12)
B79-571, Sr. Secretary-Technical, Chemistry
Dept. (9/26)
B79-572, Account Representative, Information

rocessing Services Office (9/26) B79-579, Office Asst., Comptroller's Accounting

Office (9/26) B79-583, Sr. Secretary-Technical, Chemistry Dept. (9/26) B79-584, Sr. Secretary, Center for Materials

B79-584, Sr. Secretary, Center for Materials Processing (10/3)
B79-587, Office Asst., Admissions Office (9/26)
B79-592, Office Asst., Graphic Arts Dept. (9/26)
B79-601, Sr. Secretary, Nuclear Reactor Laboratory (10/3)
B79-615, Secretary, Campus Information (10/3)
B79-620, Sr. Secretary, MIT Leadership Campaign District Office (10/10)

B79-624, Jr. Programmer, Laboratory for Com-

puter Science (10/10)
B79-625, Secretary, part-time, Dept of
Mechanical Engineering (10/10)
B79-639, Sr. Secretary, Vice President for Finan-

cial Affairs (10/10) B79-641, Admin. Secretary, Planning Office

Chamber Players To Present Sixth Midnight Concert

Music of J.S. Bach, including the Magnificat for chorus and orchestra, will be performed in the Sixth Annual Midnight Concert of the MIT Chamber Players, Friday, December 14, in Lobby 7.

The Chamber Players, under the direction of Marcus Thompson, associate professor of music, will perform the free concert under spotlights in the darkened main lobby of MIT. The public is encouraged to bring blankets for seating.

The first half of the program will include Orchestra Suite No. 1 in C Major and Brandenburg Concerto No. 5 in D Major.

Solo performers in the Brandenburg Concerto will be violinist Tim Morgenthaler, '80, flutist Jonathan Friedman, '83, and harpsichordist Mark Kroll, professor of music at Boston University.

Following intermission, soloists Andrea Bradford, soprano, Jeffrey Gall, alto, Karl-Dan Sorensen, tenor, and Robert Honeysucker, bass, will join the Chamber Players. Chamber Music Society and a chorus composed of MIT Choral Society members in presenting the Magnificat.

The text of the work is based on a poem from the Gospel of St. Luke, in which the Virgin Mary expresses her joy at being chosen to bear the Messiah. This text presents God as a socially conscious, infinitely just Being, who feeds the hungry and ultimately gives influence to the powerless.

The audience is invited to a reception immediately following the concert.

Santa Claus to Visit Children's Party

Santa Claus will be guest of honor at a party for MIT children Saturday, Dec. 15, 10am-noon, in the Sala de Puerto Rico sponsored by the Technology Wives Organization (TWO).

Children will also be treated to a show by professional puppeteers and traditional holiday goodies. Admission is 75c for children of TWO members and \$1.50 for others. Please call Rachel Kent, 494-0137 evenings, for further information and reservations.

B79-644, Sr. Secretary, Center for Policy Alternatives (10/24) B79-674, Secretary, Dept. of Ocean Engineering

B79-683, Sr. ;Staff Asst., technical, Research

Laboratory of Electronics (10/31)
B79-685, Sr. Office Asst., Comptroller's Accounting Office (10/31) B79-691, Library Asst., Humanities Library

B79-693, Secretary, Student Financial Aid Of-B 19-031, B79-697, Sr. Secretary, Libraries Archives (11/7) B79-699, Secretary/Receptionist, Graphic Arts

B79-703, Sr. Office Asst., Industrial Liaison Of-

fice (11/7) B79-705, Sr. Secretary, Center for Policy Alter-

B79-711, Sr. Secretary, Admissions (11/14) B79-713, Office Asst., Alumni Association (11/14) B79-716, Sr. Secretary, Purchasing and Stores

(11/14) B79-719, Office Asst., Purchasing and Stores

Dept. (11/14) B79-722, Computer Operator, Center for Space Research (11/28) B79-724, Sr. Office Asst., Resource Planning and

ment (11/28) B79-728, Secretary, Chemical Eng. Dept. (11/28)

B79-729, Computer Operator, Information Processing Services (11/28) B79-730, Sr. Secretary, Energy Lab (11/28) B79-733, Office Asst., part-time, Medical Dept.

B79-735, Secretary, part-time, Meteorology Dept. (11/28) B79-737, Library Asst., Libraries Catalog Dept.

(11/28) B79-738, Library Asst., Library/Collection Dev.

B79-739, Sr. Secretary, Mathematics Dept.

2/5) B79-742, Secretary, Center for Transportation Study (11/28) B79-743, Account Rep., Information Processing

Services (12/5)
B79-745, Office Asst., Housing Office (12/5)
B79-746, Accounting Asst., Comptroller's Accounting Office. (12/5)

B79-749, Sr. Office Asst., Student Accounts Of-11ce (12/5) B79-751, Sr. Staff Asst., Research Lab of Electronics (12/5) B79-752, Secretary, Center for Cancer Research

12/5)
B79-753, Secretary, Sloan School (12/5)
B79-754, Sr. Office Asst. (Data Clerk), Center for the Space Research (12/5)
B79-756, Library Assistant, Barker Engineering

Library (12/5) B79-758, Library Assistant, Libraries' Catalogue

B79-758, Library Assistant, and Britime, Rotch Library (12/5). B79-759, Library Assistant, part-time, Rotch Library (12/5). B79-760, Sr. Secretary, Prog. in Science, Technology and Society (12/5). B79-762. Secretary, Quarter Century Club.

B79-765, Secretary, part-time, Biology Dept.

B79-768, Sr. ;Staff Assistant, Office of the Chairman of the Corporation (12/5) B79-761, Sr. Secretary, Civil Engineering Dept.

B79-766, Sr. Secretary, Economics Dept. (12/5) B79-767, Sr. Secretary, Medical Dept. (12/5)

SERVICE STAFF:

H79-179, Service Staff, Machinist B, Nuclear

H79-182, Service Staff, Sr. Technician (Electronic), Laboratory for Nuclear Science

H79-183, Service Staff, Technician A (Electronic), Energy Laboratory (11/28) H79-188, Service Staff, Machinist B, Nuclear Reactor Lab. (12/5)

The following positions have been FILLED since the last issue of *Tech Talk*: R79-216 Spons. Res. Staff (cancelled)

Sr. Secretary B79-725 Sr. Office Asst. Secretary, part-time Secretary, Tech. Spons. Res. Staff H79-158 Service Staff Spons. Res. Staff R79-343 Sr. Secretary Secretary
Secretary
Sr. Office Asst.
Tech A (cancelled) H79-152 B79-678 Sr. Staff Asst. Spons. Res. Staff Library Asst. Secretary Sr. Secretary Console Comp. Operator B79-598 Edit. Assistant (cancelled) Admin. Staff Office Asst. Tech. Assistant B79-656 Secretary

The following positions are on HOLD pending further decision: Spons, Res. Staff R79-125 Sr. Research Asst

Library Asst.



"Voyage 1969," ink on paper, by Mary Frank, on exhibit in Hayden Gallery's ongoing show, "The Narrative Impulse," through December 23. In conjunction with the show, Susan Sidlauskas, assistant curator of the MIT Committee on the Visual Arts, will give an informal talk in the gallery today (Dec. 12) at noon and at 6pm. The talk will explore the aspects of "story-telling" which runs through the

work of the four artists featured: Michael Mazur, Robert Birmelin, Irving Petlin and Mary Frank. Ms. Sidlauskas will give attention to the personal and professional relationships among the four, which give this exhibition a special insight into the creative process of the artist. "The Narrative Impulse" was guest curated by Mr. Mazur.

-Photo courtesy Zabriskie Gallery

Fencing Teams Are Off To Flying Start

If you see MIT fencing coach Eric Sollee smiling a lot these days, you can probably figure out why. His highly-regarded men's team is off to a flying start this season with a perfect 4-0 record heading into the Christmas break.

The Engineers have beaten such fine schools as Harvard (16-11), Brooklyn (20-7), St. John's (15-12), and Yale (15-12) in the early going. One reason for MIT's success is its wealth of experienced fencers. According to Sollee, most teams are

happy to boast one fencer with an international ranking; MIT, however, features seven fencers with that coveted rating.

They are senior John Rodrigues (ninth in last year's NCAA championships) and junior Geoff Pingree in epee, senior captain George Gonzales-Rivas and freshman Dave Weinstein in sabre, and junior Jim Freidah, sophomore Eric DeBeus, and freshman Oscar Estell in foil.

When Weinstein suffered shin

Resources, as well as documented

with portapak cameras by Mr.

Using the two-way cable that

exists as part of the MIT Cable

TV to TV' Communications Event to Enlist Community personnel of the Educational Video

Tambellini's students.

Aldo Tambellini, media and communication artist and fellow at the Center for Advanced Visual Studies, will present "TV to TV," a two-way video event in which spectators will have the opportunity to participate in a form of communications art.

Part of a workshop in Interactive Visual Tele-Communication given by Mr. Tambellini at CAVS, "TV to TV" will be held concurrently in the lobby of Building 7 and in the MIT Student Center, where television monitors and cameras will be set up for active, two-way communication from noon to 3pm, Friday, Dec. 14.

The event will be recorded on videotape in the experimental television studio in Building 9, by

SERVICE STAFF:
H79-33, Service Staff, Technician A
(Electronic), Chemistry (4/11)
H79-118, Service Staff, Technician B
(Electronic), Architecture Dept. (9/5)
H79-121, Service Staff, Machinist A, Nuclear
Reactor Laboratory (L9/26)
H79-126, Service Staff, Technician A, National
Magnet Lab (9/19)

Magnet Lab (9/19)
H79-129, Service Staff, Machinist A, Nuclear
Reactor Laboratory (8/29)
H79-134, Service Staff, Technician A (EM).

H.9-1.34, Service Staff, Technician A (E.W). Chemistry Dept. (9/5)
H.79-1.37, Service Staff, Swimming Pool Attendent, Physical Plant Dept. (9/12)
H.79-1.59, Service Staff, Electrician, Physical Plant (10/31)

H79-181, Service Staff, Technician B (Electronic), Laboratory for Nuclear Science

System, this event will serve as an opportunity for individuals to express themselves through electronic media, using imagery and topical matter of their choice. The entire MIT community is invited and encouraged to participate. Mr. Tambellini described the

event as one in which "we make the connection, you make the communication." He would like people to bring photographs and other visual information that can help to make communication more interesting and/or provocative. Participants should select topics of social or political commentary, using photographs from newspapers and magazines.

Interactive, improvisational dance will also be featured at both video locations.

"I am trying to demystify these ystems," Mr. Tambellini exsystems," Mr. Tambellini explained, "and to reveal their creative potential. I am concerned with individual interpretation of images because our way of perceiving reality has become totally the interpretation of media images.

"The world of media," Mr. Tam-bellini continued, "is fast becoming a world of its own, with interactive systems that interface with computers and electronic energy. Artists approach these new technologies differently than they would art objects. . . the communication itself becomes the art."

"TV to TV" will be the first of a series of events out of a larger concept being coordinated by Mr. Tambellini. "Communicationsphere is a wide-range communications group being organized and coordinated by the artist. His intention is to estabish a network that would allow the exchange through distance between artists, engineers, political and computer scientists and sociologists who are concerned with the impact of technology on society.

Recently Mr. Tambellini received a grant from the Council for the Arts at MIT to support a live, interactive media event in March that will connect artists at MIT, the Direct Media Association in Vancouver, British Columbia, and Tsukula University, Japan, by means of slow-scan video and satellite.

For more information on "TV to TV" or other aspects of Mr. Tambellini's work, call x3-6849.

splints earlier this year, Frediah moved from his number two spot in foil to sabre where he has performed well. It's this kind of versatility which makes Sollee say this may be his best team ever.

"This team has the greatest overall strength of any team we've ever had," he notes. "We'll be favored to win the New Englands and should be among the top three at the IFA (Intercollegiate Fencing Association) championships later this season."

Sollee's team faces a big test next month when they fence Navy, Clemson, North Carolina, Duke, and Johns Hopkins on the road. "It's a busy season and our toughest dual-meet schedule ever, but we like the competition," he adds.

His women's fencing team, meanwhile, has done well in winning three of four matches. Captain Julia Shimaoka and Marian Stein, both seniors, and juniors Linda Plano and Nancy Robinson have led Tech to wins over Tufts, Harvard-a big 11-5 decision—and Brooklyn. Yale handed the Engineers their lone defeat last weekend.

Dr. C.H. Norris

Dr. Charles Head Norris, Jr., former professor and executive officer in the Department of Civil Engineering, died Tuesday, Dec. 4, at his home in San Diego, Calif. He

A noted expert in theoretical structural analysis, Professor Norris was a consultant for many years to the US Army and Air Force. He was author or co-author of several books on structural analysis and experimental stress and contributed articles to

technical journals. He was a 1931 graduate of the University of Washington in Seattle and received the SM (1932) and PhD (1942) degrees from MIT. He was a member of the faculty until his resignation in 1962 as professor, head of the structural engineering division and executive

officer of the department. In 1962 Professor Norris returned to the University of Washington as chairman and professor of civil engineering became dean of engineering there in 1965, a position he held until his

retirement in 1973. Dr. Norris is survived by his widow, Martha M. (White) and two sons, Charles Head, III, and John Matthew Norris.

Donald L. Miller

Word has been received that Donald L. Miller, a dormitory maintenance mechanic from 1947 until his retirement in 1974, died December 1. He was 68 years old.

Mr. Miller, who lived in South Dennis, is survived by his wife, Alice.

Calvin L. Speer

Calvin L. Speer, a custodian at the Lincoln Laboratory since 1966, died December 6, at the age of 53.

Mr. Speer, who lived in Lexington, is survived by his wife, Patricia M. (Creed) Speer; a daughter, Donna L. Speer; a son, Thomas E. Speer.