Massachusetts Institute of Technology



April 23, 1975 Volume 19 Number 41

Community Service Fund Opens Drive

The 1975 campaign of the MIT Community Service Fund will be launched today (Wednesday, April 23) at a meeting of solicitors chaired by Vice President Kenneth R. Wadleigh.

"It is a most appropriate time for the drive to begin," Dr. Wadleigh said earlier, "since this is National Volunteer Week, and what the Fund does is support MIT volunteers in the community."

In fact, he said, MIT's contributions through the Fund have just recently been honored by two of the organizations it supports. Tutoring Plus selected Joe Albright, a junior in mechanical engineering, as its volunteer of the year and the Wellington-Harrington Neighborhood Stabilization Program, of which CSF-supported Just-A-Start is one component, will this week receive a national award from the National Center for Voluntary Action.

The Community Service Fund was established by the faculty and is run by a board of trustees which, itself, is composed of volunteers from MIT-students, employees, faculty, staff and representatives of the alumni and wives' organi-

The trustees have set a campaign goal of \$50,000 this year and expect allocation requests of nearly double that amount. The Fund is presently supporting eight organizations, primarily in Cambridge, with allocations ranging (Continued on page 2)



Gardeners Pat Cammarota (left) and Dominic D'Amelio care for plants that once decorated Institute corridors and offices-now recovering in the plant clinic of Physical Plant's first greenhouse.

New Greenhouse to Fight Effects of Bugs and People

By SALLY M. HAMILTON Staff Writer

The care and upkeep of the MIT grounds is, in the words of Larry Pickard, "a year-round battle against bugs and people."

Mr. Pickard, who manages the more than 128 acres that constitute MIT's green space, is also willing to try anything to save some money in the battle-be it propagating new plants or reviving flagging plants throughout Institute buildings.

Since this fall, when the offices and equipment for the grounds operation were moved from Building 19 into a refurbished one-story garage behind the fire station on Main Street, crew members have been able to go to work "growing their own" in Physical Plant's first greenhouse.

The greenhouse which encloses both nursery and clinic areas will hopefully offset some expenses associated with the constant theft of landscape shrubs as well as flowers and plants from buildings.

Gardeners Dominic D'Amelio nd Leonard McDonald and groundsperson Pat Cammarota are in charge of the indoor room, (Continued on page 8)

Demolition Debris Use By CHARLES H. BALL the study to bring together experts Staff Writer

Study to Investigate

Does demolition waste-the debris produced by the wrecker's ball-represent an untapped national resource?

The National Science Foundation thinks that it may-and has asked MIT to try to answer the question in an eight-month, \$40,000

"We can't be certain at this point just how much material, including important metals such as copper and aluminum, we are losing by our failure to reclaim them," MIT's David Gordon Wilson said, "nor what is practical from an economic and technical viewpoint. But it is clear that the potential of demolition wastes has been to a large extent neglected by industry, government and the

Dr. Wilson, professor of mechanical engineering at MIT, is principal investigator for the research project. Dr. David H. Marks and Dr. Stamatia Frondistou-Yannas, both of the Department of Civil Engineering, are also working on the project.

Wilson said the project would include a one- or two-day conference at MIT toward the end of

Policies Guide Being Revised

A draft of an updated edition of Policies and Procedures was distributed by the Vice President, Administration and Personnel, last week to department and laboratory heads, and to members of certain standing faculty committees.

This draft of Policies and Procedures, subtitled "A Guide for Academic Staff Members,' does not contain new policy, but brings together policy changes which have been made and published elsewhere since the previous edition. It also updates procedural and descriptive material about the Institute.

It has been given limited circulation for checking to minimize errors in the final document. The new edition will then be published in mid-summer for wider distribution to the faculty (Continued on page 3)

from across the country to discuss the findings and to contribute their own data.

The research will have three major objectives:

-To determine the approximate annual quantities of various categories of materials contained in buildings which are demolished in the United States.

-To identify the economic and technical factors that help to decide whether or not materials in demolition wastes will be reused.

-To study and propose technological developments that could make it economically feasible to reclaim waste materials.

In a short but intensive study carried out for NSF in 1974, Dr. Wilson said, it was found that information available on quantities (Continued on page 2)

Karen Scott Is Fort Fellow



Karen Scott

Karen A. Scott, a senior in applied mathematics at MIT from Buffalo, N.Y., has been announced the winner of MIT's distinguished Fellowship-established three years ago to encourage minority students toward graduate study at the Institute.

Ms. Scott, who is the daughter of Dr. and Mrs. Alvin L. Scott of Humboldt Parkway, Buffalo, N.Y., will be a candidate for doctoral study in the Department of

(Continued on page 2)

Sea Grant Lecture to Focus On Offshore Oil Development

and environmental impacts that would confront New England because of proposed offshore oil development on Georges Bank and the outer Continental Shelf will be discussed at MIT April 28 by an official of the North East Scotland Development Authority.

for the authority, will explain how his country dealt with and to some extent resolved the challenges created by the rapid con-

struction of facilities for extracting, processing, and transporting petroleum from the rich North Sea oil fields. The lecture by the MIT Sea Grant Program will be held in Rm. 26-100 at 3:30pm.

"Mr. Hutton's views should be especially interesting to Massachusetts citizens, businessmen, and officials in light of our area's current debates on offshore oil," said Dean A Horn Executive Officer of the Sea Grant Program.

Mr. Hutton has had 24 years (Continued on page 3)

warded Ida I

made by Jeanne E. Richard, assistant dean of the graduate school. The six regular Ida M.

Patricia L. Bjorklund, from the University of California at Berkeley and a resident of Oakland, Ca. Ms. Bjorklund spent her first two years of college at a community college in Cook County, Ill., dividing her time between school, a job as a legal secretary, and the responsibilities of single parenthood. At UCLA she taught herself essential graphics skills and worked on the board of a neighborhood design center. She is a member of the steering committee of ROMA, the architectural firm responsible for the design of San Francisco's new Sarah Cooper Grade School and Day Care Center, and as an Ida M. Green Fellow will enter the two-year program leading to a M.Arch. degree in the Department of Architecture.

Carolyn M. Gee, from the University of California at Berkeley and Fresno, Ca. Ms. Gee's research projects in high energy physics and solid state physics had their origins in a project on the fast timing of laser pulses, which she undertook voluntarily as a sophomore. She received the

Achievement Award for College Scientists from the Lawrence Laboratory at Berkeley and attended summer sessions at Fresno City College while working towards the AB degree in physics at Berkeley. Ms. Gee plans to pursue a career as a research physicist.

Marta E. Greenberg, a senior in the Department of Electrical Engineering and Computer Science at MIT, from Cleveland Heights, Ohio. A candidate for bachelor's degrees both in electrical engineering and mathematics, Ms. Greenberg is particularly

(Continued on page 3)

How northeast Scotland faced the same kind of social, economic

John Hutton, development offi-

Nine young women have been chosen to receive Ida M. Green Fellowships for graduate study at

Representing such diverse fields as architecture, civil engineering, economics, mechanical engineering, policial science, chemistry, physics, and electrical engineering, the group will include three Honorary Fellows. The outstanding qualifications of these Ida M. Green nominees merited special recognition, but their funding will come from National Science Foundation scholarships they have won.

MIT's Ida M. Green Fellow-

ships, awarded last year for the first time, are made possible by a \$1 million gift from Cecil H. and Ida M. Green of Dallas, Tex., who intended them primarily for women graduate degree candidates committed to furthering their careers at an institution polarized around science and

The awards provide \$3700 in tuition assistance for the 1975-76 academic year and a nine-month stipend of \$2700.

Announcement of this year's award recipients, two of whom will hold multiple MIT degrees at the time of their entrance, was Green Fellows are:

Music Notes

Gospel Choir to Host Musical Extravaganza

Kresge Auditorium will resound to a joyous gospel music extravaganza, sponsored by the MIT Gospel Choir, Friday, May 2, at 7:30pm.

Four outside gospel groups—both student and church affiliated choirs, along with the MIT Gospel Choir, will head up the benfit concert to raise funds for the Cape Verde Islands Relief Project. The funds will be used to send food staples to the drought-stricken Portuguese colony off the coast of Senegal.

Church choirs participating in the concert include the 50-member Massachusetts State Choir of the Church of God in Christ, and the Holy Tabernacle Choir from Boston, directed by Kenneth Greene, a 1974 graduate of the Institute. The 18-member Ebony Singers from Wesleyan University Afro-American Center in Middletown, Conn., and the Liberation

Ensemble from Quinnipiac College in Hamden, Conn., will also perform.

Traditional black hymns, spirituals and church oriented gospel music will be sung by the groups. Black gospel music is closely related to the spiritual but has a contemporary form in that it has the potential of being interpreted with various arrangements and instruments

This year's concert marks the second year in succession that the MIT Gospel Choir has organized such a jamboree concert and they hope it will become a tradition.

Tickets for the concert are \$2.50 in advance, \$3 at the door and \$1 for children under twelve years. MIT students will receive a \$.50 discount. Advance tickets can be purchased at the Technology Community Association in the Student Center, Bldg. W20-450. For reservations call 494-8770.

Sangam Program Features Indian Dance and Music

Classical Indian dances performed by dancers fluent in the ancient Bharat Natyam and Odissi styles, and a sitar recital will be the program for an Indian Classical Evening at MIT, 7pm, Saturday, April 26 in Kresge Auditorium.

Proceeds from the concert will benefit two educational service organizations aiding Indians—the Kishore Barathi and volunteers for the service of education in India. The program is sponsored by SANGAM, the Indian student organization at MIT.

Performing on the dance program is Jothi Ragavan, a leading exponent of Bharat Natyam, a style that originated in the temples

of southern India, and Frederique Marglin, who will perform traditional dances of Odissi from eastern India.

Both dancers have concertized widely in the US and in India.

A recital or raga music will be given by sitarist Peter Row, accompanied by Swaraj Bhattacharji, tabla, both on the teaching staff of Lalit Center of Indian Dance and Music, Belmont. Peter Row also is a faculty member at the New England Conservatory of Music and Brown University.

Tickets are \$2 and \$3 and are on sale in the Building 10 lobby during lunch hours. For reservations call 494-0493

Community Service Fund

(Continued from page 1) from \$20,000 for Tutoring Plus to \$2,000 for the Concord Prison Telephone Center.

According to Dr. Wadleigh, a key problem the Fund faces, particularly in economically difficult times, is raising the level of personal contributions.

"We're not asking contributors to make larger donations," he said. "What we really need is a wider

Spring Weekend Events Listed

The MIT Community is invited to MIT's 1975 Spring Weekend, featuring a concert by James Montgomery on Friday, April 25 and the showing of Gone With the Wind, Saturday, April 26.

The Montgomery concert, to be held in the Rockwell Cage beginning at 8:30pm Friday, will offer free beer and four hours of continuous dance music by Montgomery and the back-up band, Cricket Hill.

Tickets to the concert are \$3.00 and can be obtained at the TCA or Undergraduate Association Office in the Student Center. Tickets will also be available in the Student Center the night of the concert.

Gone With the Wind, originally scheduled for Friday night, was rescheduled for Saturday, April 26, to avoid conflict with the concert.

Other weekend events will include a special outdoor dining service picnic on Friday, April 25, parachute jumping exhibitions, folk dancing, unicycle riding and the Big Screw Contest.

basis of support—more contributors. Last year, only 700 people contributed. If we could double the number of contributors, at only one, two or five dollars, it would make a tremendous difference."

Since its establishment in 1968, the Fund has raised nearly \$400,000. More than 50 percent of that amount represents personal contributions from the on-campus community, special labs and alumni. The remainder came from special initiating gifts and non-recurring grants by the Institute and a few charitable trusts and foundations, as well as fund-raising activities, such as "The Trip."

Gifts to the Community Service Fund are tax deductible.

Viewing "Visual Dharma," the current exhibition in Hayden

Gallery, are architect and designer Charles Eames, left, and

photographer Ansel Adams, right. Both were on campus April 10

and 11 to participate in a review of the Institute's arts and humani-

ties programs by the Corporation Arts Visiting Committee. The

day and a half meeting, attended by nationally known designers,

collectors, architects, and museum directors, as well as by MIT

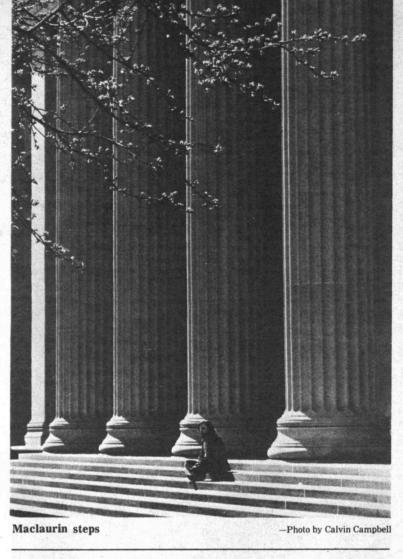
faculty and students, included presentations by various members

of the Departments of Architecture and Humanities, site visits to

campus arts facilities, and an extensive review of the new PhD

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program in Art, Architecture, and Environmental Studies.



Metal Waste Study Begins

(Continued from page 1)
of demolition was "extremely scanty."

"But the best estimate indicated that the average yearly total was between 100 and 200 million tons and that the quantities of steel, aluminum and copper in these wastes are of the order of a quarter of all the obsolete scrap of each metal presently being recovered from all other sources in the US," Wilson said.

The quantities of scrap materials of any kind now being recovered from demolition wastes is extremely small, according to Wilson, because of both economic and combined economic-technological reasons.

"With readily available ores of many materials likely to be worked out within a few decades at most," he added, "the abandonment of this very large flow of potentially valuable materials is hard to accept."

"At the very least, the collection of much better information is necessary," he said.

MIT researchers have carried out a number of programs and activities in recent years that relate to the new study, he said. These include publication of a book The Treatment and Management of Urban Solid Waste; a survey of the demolition industries; the development of laboratory-scale prototypes of solid-waste sorting systems for the Environmental Protection Agency and collaboration with NSF on a survey of policy-related research in solid-waste management.

Karen Scott Is Fort Fellow

(Continued from page 1)
Aeronautics and Astronautics, although she was also accepted for graduate work in mathematics.

The Fort Fellowship, covering tuition and living expenses for one academic year, was established in honor of Dr. Marron William Fort, a distinguished chemist who was the first black American to receive

a doctorate from MIT in 1933.

Selected for her scholarly qualities and undergraduate record in mathematics, Ms. Scott has been one of the main coordinators of MIT's Black Student Union Tutorial Program, which has tripled in size since its founding three years ago. The program, staffed largely by MIT graduate students and upperclassmen, now serves 70 percent of all minority students at MIT and 80 percent of all black freshmen, according to Ms. Scott, herself a National Merit Scholar.

A student member of MIT's Committee on Academic Performance, Ms. Scott has worked summers as a programmer for the Honeywell Corp. in Waltham, Mass. and the Charles S. Draper Laboratory, where she worked on a project involving the sorting of vector cardiograms by the use of a mini-computer. This summer she will work as a calculus tutor for MIT's Interface Program for incoming minority students.

Ms. Scott attended the Campus School at the State University College at Buffalo for her elementary and high school education, taking courses at the college during her junior and senior years. She has three brothers, ranging in age from 25 to 12, and a sister, age 15, who would like to become a doctor.

SAS-C Satellite Ready for Launch

SAS-C, the small astronomy satellite which will study x-ray sources in space, has arrived safely at the San Marco Launch Platform three miles off the coast of Kenya. It is scheduled to be launched May 7 at 7pm EDT.

The satellite is of great interest to x-ray astronomers because its instruments will be able to map the positions of x-ray sources, and variations in the intensity of their x-ray emissions, far more precisely than has been done before. The instruments were designed and built at MIT.

MIT researchers, under the direction of Professor George W. Clark in the Department of Physics and the Center for Space Research, have primary responsibility for operating the satellite and analyzing its data.

Among the MIT scientists and engineers attending the launch will be Dr. Bruno B. Rossi, Institute Professor Emeritus and professor of physics emeritus, who first suggested searching for extrasolar x-ray sources. That suggestion led to the discovery, in 1962, of the Scorpio x-ray source, the first nonsolar x-ray source to be observed.

The spacecraft half of the satellite was built at the Applied Physics Laboratory of Johns Hopkins University. SAS-C is funded by the National Aeronautics and Space Administration.

Echoes

--- A--

50 Years Ago

Professors Warren K. Lewis and R.T. Haslam delivered talks at a social meeting sponsored by the American Chemical Society and the American Society of Mechanical Engineers in observation of National Oil and Gas Week.

Technology defeated Dartmouth's debating team with a 2-1 decision on the proposition that capital punishment be abolished.

40 Years Ago

Dr. Compton, as chairman of the Science Advisory Board of NAS, appointed scientists William Hovgaard, professor emeritus of naval design and Alfred V. deForest, professor of mechanical engineering, to a committee investigating the safety of dirigibles.

Prof. Erwin H. Schell reported that 70% of Course XV men become executives within 14 years after leaving the Institute.

25 Years Ago

Tuition hike discussed. Review of tuition increases showed the following: 1866-\$131/yr.; 1900-\$200/yr.; 1950-\$800/yr.

The Dramashop featured a cast of robots in *R.U.R.* (Rossum's Universal Robots), introduced by Dr. Norbert Wiener.

(Prepared by Ethel Newell of the MIT Historical Collections, x4444)

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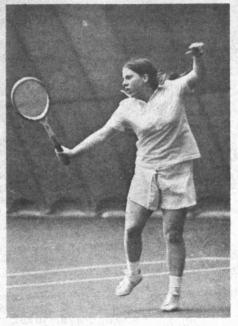
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Page 2, Tech Talk, April 23, 1975









Showing the form that has made her the No. One singles player on the MIT women's tennis team is Christine E. Vogdes, a freshman from Collingswood, N.J. Christine, who has been

playing tennis about four years, is 3-1 in her matches thus far this spring. The team's record -Photos by Calvin Campbell

This Week in Sports

Heavyweight Crew Beats Northeastern and BU

By PETER M. CLOSE Director of Sports Information

After two days of postponements because of heavy winds, MIT's heavyweight crew rowed to a four length victory over powerful Northeastern.

The undefeated Tech eight was timed in 6:48.7 over the 2000 meter Charles River course. Northeastern was clocked in 7:02.2 followed by Boston University, two lengths back on 7:09.5. The strong engineer heavies jumped off to boat length lead at the 500 meter mark and just continually increased their margin with

The race was originally slated for Saturday but strong winds and a driving rain forced the race to be postponed until Sunday. Again a too windy condition on Sunday moved the big race until 8:30am Monday morning. Despite Monday morning winds of up to twenty miles per hour, the engineers powered their way to their fourth straight win of the year.

Coach Pete Holland's Tech eight faces their biggest race of the season next Saturday when they host Harvard and Princeton in the annual Compton Cup. Harvard has been ranked the number one heavyweight crew in all the weekly crew polls.

MIT's lightweights fell to Harvard last Saturday in the annual Biglin Cup regatta. The Crimson lights were clocked in 6:50 while MIT was second 6:58 followed by Dartmouth in 6:58.9.

Track Team Defeated

Gary Wilkes (Brooklyn, N.Y.) scored thirteen points against Bowdoin College last Saturday but it wasn't good enough as MIT dropped a 99-55 decision in track. Heavy winds and rain took the edge off some of the performances but MIT did come up with six first places, two of them by Wilkes. The big co-captain won the 220 yd. dash in 23 sec., the long jump in 20 ft. 7 inches and a second place in the 100 yd. dash, 10.1 sec. Techs distancemen earned firsts in the mile, Jeff Baerman (Skokie, Ill.) 4:26.1 and the two mile, Frank Richardson (Sac City, Iowa) 9:38.6.

The 0-1 engineers host Tufts on Wed. and Worcester Polytech on Saturday.

Sports Illustrated Visit

Sports Illustrated paid a visit to the MIT campus last week with the intention of featuring the athletic department in an upcoming story. John Underwood, a senior staff writer, and Jim Drake, a photographer, spent four days interviewing and photographing MIT athletes and sports contests. SI wanted to see how the college with the most sponsored varsity intercollegiate sports operates, particularly in a time when some colleges and universities are being forced to drop sports for economic reasons. The feature should appear in a May issue of Sports Illustrated.

— Tennis Rates Posted —

The 1975-76 Indoor Tennis Season will begin on Sunday, October 26, 1975, and continue through Saturday, March 27, 1976 (twenty-two weeks).

Applications from the MIT Community for 1975-76 Seasonal Plan Playing Time may be made and confirmed in person beginning Monday, May 5, 1975, with Mr. Motroni at the Indoor Tennis Center or the outdoor courts Mondays through Fridays from 8:00am to

There will be no telephone reservations on Seasonal Plan reservations.

HOURS & RATES:

8:00am-12:00 noon 1 hour per week-\$132.00 per court Singles-\$66.00 per person, Doubles-\$33.00 per person 11/2 hours per week-\$198.00 per court Singles-\$99.00 per person, Doubles-\$49.50 per person 12:00 noon-2:00pm and 6:00pm-11:00pm 1 hour per week-\$154.00 per court Singles-\$77.00 per person, Doubles-\$38.50 per person

11/2 hours per week-\$231.00 per court Singles-\$115.50 per person, Doubles-\$57.75 per person NOTE: The hours of 2:00pm through 6:00pm are reserved for MIT

Application blanks are available at the Indoor Tennis Center, the Outdoor Courts, Equipment Rooms at duPont and Alumni Pool and from the Athletic Office, W32-109.

Sea Grant Lecture Planned

(Continued from page 1) experience in local government in England and Scotland. Before coming to NESDA in 1969, he served as County Planning Officer for West Lothian, Scotland, where

Hill to Discuss Radiation Lab

Dr. Albert G. Hill, vice president for research and professor of physics, will speak on the "Radiation Laboratory: Its Impact and Its Legacy," tomorrow at 4:15pm, in Rm. 26-100.

The Radiation Laboratory was established in 1940 to develop radar. Work at the laboratory was instrumental in the design of more than half the US war-time radar production. These radars were used in all theaters of the war, and many Radiation Laboratory members introduced the radars to personnel of the armed forces.

foundation of the Research Laboratory of Electronics.

As the war drew to a close, a Division of Basic Research was established, which later was the

the world's oil industry started in the 1850s with the mining and processing of oil shales.

NESDA is a promotional and advisory body on the investment potential of northeast Scotland, and has been much involved in establishing Aberdeen and the surrounding region as the principal United Kingdom center for offshore resources development.

"Understanding and learning from northeast Scotland and other localities' responses to offshore oil's impacts may be crucial for our own discussions over the next few years," said Mr. Horn.

Policies Guide

(Continued from page 1) and other members of the academic staff as well as to others for whom it serves as a source of policy and procedural informa-

Meanwhile, anyone wishing to refer to the document in its draft form may examine the copy in departmental or laboratory headquarters, or see a copy in the Institute Information Office or in the reference sections of the several

Baker Award **Nominations**

Nominations are still being sought for the annual Everett Moore Baker Teaching Award which is presented by a student committee to a young faculty member for excellence in undergraduate teach-

Written letters of nomination should be sent to Jean Hunter, chairperson of the Baker Memorial Committee, in Room 7-101, as soon as pos-

Hollomon Serves On NAE Panel

Dr. J. Herbert Hollomon, director of the Center for Policy Alternatives, will participate in a panel discussion on "Mechanisms for Policy Concerning Industrial Technology" at the 11th annual meeting of the National Academy of Engineering in Washington, D.C. Thursday, April 24.

Nine to Hold Green Fellowships

(Continued from page 1) interested in computer studiesthe theory and mathematics of computing and the design of computer systems. Last summer she worked at Bell Telephone Laboratories in New Jersey. Her long-range professional goals are in research at a university or in industry.

Joanne Higgins, Rochester Institute of Technology and Cheektowaga, N.Y. Ms. Higgins, admitted as a master's degree candidate in mechanical engineering at MIT, has developed several career guidance programs for prospective women engineering students while at RIT. In addition to her engineering activities, whe worked at Eastman Kodak Research Laboratories and as an interpreter for deaf students in the National Technical Institute for the Deaf at RIT. She has also won national scholarships from the American Society of Mechanical Engineers and the Society of Women Engineers.

Karla H. Karash, SB (1968), SM (1970) from MIT in civil engineering, of Waban, Mass. Since last fall Ms. Karash has worked for the Executive Office of Transportation and Construction (EOTC), where she has administered a national capital grant program for transportation for the elderly and handicapped. She has also worked for the Links Elderly Transportation Project, Engineering Computer Interna-

tional, Boston's Transportation

Planning Review, and the MBTA. As a candidate for the PhD she plans to study land use and transportation economics, and political science as it relates to transportation.

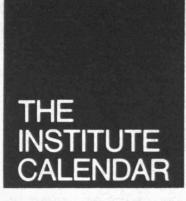
Stephanie E. Smith, Wellesley College and Atlanta, Ga. A candidate for the BA degree this June, Ms. Smith is a chemistry major with a minor in political science. She will enter MIT's PhD program in political science and specialize in science and public policy. Also admitted to Harvard Law School. she will combine her legal and social science studies in a joint MIT-Harvard Law curriculum specially aranged for her. A former participant in the MIT-Wellesley Exchange, she will concentrate on a career in government or non-profit policy research.

Recognized as Honorary Green Fellows are:

Judith A. Borsuk, from the University of Louisville, and a native of Louisville, Ky. A double major in chemistry and electrical engineering led Ms. Borsuk to research in solid state electronics. She has conducted independent study in engineering, spent a year at Hebrew University in Jerusalem, worked for the Silicon Materials Department of Texas Instruments, and is now spending this year at the Argonne National Laboratory. After completion of her doctorate in the Department of Electrical Engineering, she would like to work in the semiconductor device industry, specifically, in research and development or manufacturing aspects.

Marjorie A. Flavin, of Wellesley College and Rochester, N.Y. One of Wellesley's best economics students in recent years, Ms. Flavin hopes some day to work as a professional economist in a business or governmental organization. As a participant in Wellesley's Washington Summer Intern Program, she worked for Sen. James Buckley (R-N.Y.), and subsequently made national health insurance legislation the topic of her economics thesis. Having already distinguished herself at MIT in Professor Hal R. Varian's "Mathematical Economics" course, she will be a candidate for the PhD in the Department of Economics.

Kathleen D. McFadden, of the University of Notre Dame and Springfield, Pa. Graduating in June with an outstanding record in Notre Dame's Department of Chemistry, Ms. McFadden was admitted in 1972-a sophomore from St. Mary's College with Notre Dame's first class of women. She has spent one year in research with an organic chemist at Notre Dame, a summer in analytical research at DuPont and is now working with university biochemists. Ms. McFadden has been admitted to MIT's doctoral program in biochemistry.



April 23 through May 4

Events of Special Interest

Women Students and AMITA Dinner Meeting** – Sponsored by AWS. Women students are invited to come to dinner with MIT alumnae who have 500 woman-years of experience in all technological fields. Come get a preview of where you're headed. Wed, Apr 23, 6pm, meet in St Ctr Lobby. (Location of dinner yet to be decided). Call Diane, x0555 Dorm.

Pre-Retirement Seminars* – Sponsored by the Benefits Office. Thurs, Apr 24: Social Security – James Duby, social security administrator. 3pm, Rm 6-120. Info: x3-4271.

Corporation Joint Advisory Committee (CJAC) Meeting* - To discuss student housing with Vice President Kenneth Wadleigh. Mon, Apr 30, 7:30pm, Rm 10-105.

A Marxist Approach to American Architecture and Planning* — Manfredo Tafuri, Ford Foundation Visiting Lecturer. Architecture Seminar Series. Topics: Mon, Apr 28: Frederick Law Olmsted and the Origins of Planning in the US. Tues, Apr 29: American Regionalism from the Conservationist Movement to the New Deal. Wed, Apr 30: American Architecture in the 1920's. Thurs, May 1: American Architecture in the New Deal Age. The above all 5-7pm, Rm 3-133. Sat, May 3, Faculty Seminar: Politics, Architecture and Planning in American History. Additional participants from MIT, Harvard, & BU. 10am-4pm, Rm 3-415.

Seminars and Lectures

Wednesday, April 23

Iran's Nuclear Options* – Anne Cahn, Harvard University Program for Science & International Affairs. Center for International Studies Seminar. 12n, Rm E53-482.

Some Unique Aspects of CO Oxidation over Supported Platinum* – James J. Carberry, University of Notre Dame. Chemical Engineering Seminar. 3pm, Rm 12-150.

Numerical Methods for Solving Nultidimensional Kinetics* – Antonio Alvim, G. Nuclear Engineering Doctoral Seminar. 3pm, Rm NW12-222.

Plasma Ion Energy Measurement by Charge-Exchange Neutral Analysis* – Donald Cook, G. Nuclear Engineering Doctoral Seminar. 3pm, Rm 38-136.

Comparisons Between Nuclear and Fossil Based Energy Systems* – David Rose, nuclear engineering. CIS Seminar. 3:15pm, Rm E53-482.

Calculus* - Dirk J. Struik, mathematics, emeritus. Mathematics Department & Concourse Forum, History of Mathematics Lecture. 3:30pm, Rm 10-105.

Optical Mixing Spectroscopy with Applications to Medical and Engineering Fields* - Toyoichi Tanaka, physics, DSR. Laser Applications Seminar. 4pm, Rm 35-225. Coffee 3:45pm.

Models for Fracture and Progressive Failure in Porous Saturated Media* – Michael Cleary, Brown University. Applied Mechanics Seminar. 4pm, Rm 5-134. Coffee 3:30pm, Rm 1-114.

Optimal Performance of Electric Utilities with Nuclear Plants* - T. Zimmerman. G. Nuclear Engineering Doctoral Seminar. 4pm, Rm NW12-222.

Reminiscences of Wolfgang Pauli* – Victor Weisskopf, Institute Professor and Professor of Physics, Emeritus. Physics Undergraduate Colloquium. 4:15pm, Rm 4-339. Social hour 5pm.

Skylab Medical Studies: Neurophysiological and Circulatory Findings* – Dr. Sherman Vinograd, director of biomedical research, NASA. Man Vehicle Laboratory Special Seminar with movie.

Agriculture Study Group: Land Tenure and Land Reforms in India*

- Deepak Kapur, G. Seminar on Foreign Students & Participation in Development, 6pm, Intl Student Lge.

Ecological Irrationality of Contemporary Institutions* – Tim Backstrom, MIT '73, Yale University Law School student. SACC Talk & Discussion, 7:30pm, Rm 4-156.

Thursday, April 24

4:30pm, Rm 37-212.

The Continental Tectosphere* – Thomas H. Jordan, geological & geophysical sciences, Princeton University. Earth & Planetary Sciences Colloquium. 2pm, Rm 54-425.

Spacial Phase Compensation for Optical Communication* - Stanley R. Robinson, G. Electrical Engineering Optics Seminar. 3pm, Rm 39-400.

Acoustic Navigation in the Ocean* - Robert Porter, Woods Hole Oceanographic Institution. Interdepartmental Acoustics Seminar. 4pm, Rm 5-134. Coffee 3:30pm, Rm 1-114.

Magneto Hydrodynamic Power Generation: Current Status and Critical Problems* – David Oliver, aero/astro. Mechanical Engineering Thermal-Fluids Seminar. 4pm, Rm 3-343.

Selected Topics in Polymer Processing* – Seymour Newman, senior staff engineer, Ford Motor Company Plastics Development Center. Mechanical Engineering Polymer Processing Seminar. 4pm, Rm 36-372. Coffee 3:45pm.

Family Constellations, Sibling Rivalry, and Scientific Revolutions: A Discussion of the Effect of Birth Order upon Revolutionary Temperment in Science** – Frank J. Sulloway, junior fellow, Society of Fellows, Harvard University. Technology Studies Seminar. 4:15pm, Rm 20D-210. Coffee 3:30pm.

Radiation Laboratory: Its Impact on Research* – Albert G. Hill, physics, Vice President for Research. RLE, Electrical Engineering & Computer Sciences, Physics Seminar. 4:15pm, Rm 26-100.

Friday, April 25

Recent Research in Critical Phenomena* – Aleksandr Voronel, physics, Tel-Aviv University, Israel. Statistical Physics Lecture. 10am, Rm 13-2143. Coffee & donuts.

Study of the Aggregation and Allosteric Control of Bovine Glutamate Dehydrogenase Using Quasi-Elastic Light Scattering Spectroscopy* — Richard J. Cohen, G. Special Joint Seminar, Physics and Harvard-MIT Health Sciences and Technology Program. 12n, Rm 4-253.

Design of an Interactive Computer System for Engineering Chemical Processes* – M. Arab-Ismaili, G. Chemical Engineering Doctoral Seminar. 2pm, Rm 10-105.

The Economic Aspects of the Establishment of a Feeder Airline Service in a Developing Country* — A.P. Ellison, senior transportation economist, Aviation Planning Services, Inc. Center for Transportation Studies Seminar. 3pm, Rm 1-236. Refreshments.

Rapid Hydrogassification/Liquifacation of Coal* – E. Suuberg, G. Chemical Engineering Doctoral Seminar. 3pm, Rm 10-105.

Food Irradiation: Status and Problems – E. Josephson, US Army Natick Laboratories. Nutrition & Food Science Seminar. 3pm, Rm 16-134.

Wind-Effects on Buildings* – J. E. Cermak, Fluid Dynamics Program; director, Fluid Dynamics & Diffusion Laboratory; Colorado State University. Mechanical Engineering Seminar. 3pm, Rm 3-133. Coffee 4pm, Rm 1-114.

Two Dimensional Solid, Liquid and Gas Detectors for Nuclear Medicine* - Richard C. Lanza. Physics Research Laboratory, MGH. Nuclear Engineering Biomedical Applications of Radiation Seminar. 3:45pm, Rm NW12-222. Coffee 3:30pm.

Dynamics of a Two Dimensional Random Alloy* - R. Birgeneau, Bell Laboratories. Physics Materials Science Colloquium. 4pm, Rm 9-150. Refreshments 3:30pm.

Magnetic Field Line Reconnection – V. M. Vasyliunas, physics. Plasma Dynamics Seminar. 4pm, Rm 36-261. Refreshments before.

Sunday, April 27

Patriarchy and Paranoia in Western Society: Sexism, Racism and Anti-Semitism — Rosemary Ruether, prominent Roman Catholic Theologian, author of several books, MIT Chaplaincy Seminar. 5:30pm, Stu Ctr Mezzanine Lge.

Monday, April 28

Nuclear Weapons Proliferation* - George W. Rathjens, political science. Nuclear Engineering ANS Student Branch Seminar. 3:30pm, Rm NW12-222. Refreshments 3:30pm.

Impacts of Offshore Oil on North East Scotland* – John Hutton, development officer, North East Scotland Development Authority. Sea Grant Program Seminar. 3:30pm, Rm 26-100.

Near and Far Field Analysis of Buoyant Surface Discharges into Shallow Waters* – Eric Adams, research asst, civil engineering. Civil Engineering & Parsons Laboratory, Water Resources & Hydrodynamics Seminar. 4pm, Rm 48-316. Coffee 3:45pm, Rm 48-410.

Applications of p-adic Constructions* - David Yun, IBM. Applied Mathematics Seminar. 4pm, Rm 2-338. Coffee 3:30pm. Rm 2-349.

Materials in the Industrial System* – Anne Carter, economics, Brandeis University. Materials Science & Engineering and Center for Policy Alternatives, Materials Policy Seminar. 4pm, Rm 9-150.

Thermalized Sputtering for Producing High Transition Temperature Nb³Ge* – Fred J. Cadieu, physics, Queens College. Francis Bitter National Magnet Laboratory Seminar. 4:15pm, 2nd fl conference rm, Bldg NW14. Refreshments 4pm.

SACC Studies on the Left Lecture & Discussion* - Phil Brown, author of Toward a Marxist Psychology. 8pm, Stu Ctr West Lge.

Tuesday, April 29

Defect Equilibration in Cobaltous Oxide** - Uma Chwodhry, G. Materials Science & Engineering, Ceramic & Glass Seminar. 9am, Rm 16-310

Inside OTA: The Congressional Office of Technology Assessment's First Year* – Harvey Brooks, Dean of Engineering, Harvard University; James Dukowitz, assistant to Dr. Wiesner and OTA advisory committee; Craig Decker, former special assistant to the director, OTA; Norman Sandler, G, OTA summer intern. CIS Seminar. 12n-2pm, E53-482.

A Psysiologically Oriented Model of Tongue Activity in Speech Production* – Joseph S. Perkell, mechanical engineering. Mechanical Engineering Systems & Design Division Seminar. 12n, Rm 3-465. Bring lunch, coffee & tea provided.

Soil Exploration Decisions* – T.H. Wu, Civil Engineering, Ohio State University. Gilbert W. Winslow Career Development Chair Seminar. 4pm, Rm 1-350. Coffee 3:45pm.

Digital Technology Impact on Flight Control Systems* – G. Robert Flynn, Boeing Company. Aero/Astro General Seminar. 4pm, Rm 35-225. Coffee 3:30pm, Rm 33-222.

The Person versus the Automaton* – Lewis Mumford, Charles Abrams Visiting Professor of Urban Studies. The Old Culture and the New Technology: Technology & Culture Seminar. 4pm, Rm 9-150.

Properties of Silicate Melts and the Nature of Silicate Liquid Immiscibility* - Paul C. Hess, geological sciences, Brown University. Earth & Planetary Sciences Colloquium. 4pm, Rm 54-425. Tea 3:30pm, Rm 54-923.

Renaissance Individualism Reconsidered* – R.M. Douglas, humalities. Humanities Crossroads Lecture. 4:30pm, Rm 4-145.

Wednesday, April 30

Measurement and Management of Interactive Computing* - Walte J. Doherty, IBM, T.J. Watson Research Center. Informatio Processing Services Seminar. 2pm, Stu Ctr West Lge. Coffe 1:30pm.

Application of Finite Element Method to Reactor Kinetic Problems* – Mike Todosow, G. Nuclear Engineering Doctors Seminar. 3pm, Rm NW12-222.

Mechanical Design for Neutron Source Modeling Study* - Ala Forbes, G. Nuclear Engineering Doctoral Seminar. 3pm, Rm 38-136

Geometry* - Dirk J. Struik, mathematics, emeritus, Mathematics Department & Concourse Forum, History of Mathematics Lecture 3:30pm, Rm 10-105.

New Developments in Laser Materials Processing* – Edward Locke, president, Locke Technology, Inc. Interdepartmental Lasseminar. 4pm, Rm 35-225. Coffee 3:45pm.

Nuclear Engineering Doctoral Seminar* - F. Abtahi & C. Breue titles to be announced. 4pm, Rm NW12-222.

French Psychoanalysis: A Sociological Perspective** - Sherr Turkel, sociology and psychology & social relations, Harvar University. Technology Studies Seminar. 4:15pm, Rm 20D-21 Coffee 3:30pm.

Skylab Medical Studies: Metabolic, Endocrine, and Hematologics Findings* – Dr. Sherman Vinograd, director of biomedical research NASA. Man Vehicle Laboratory Special Seminar. 4:30pm, Rt 37-212.

Images of Death: Dreams, Dying and the Underworld* – Dr. Jame Hillman, Jungian analyst, former director of studies, C.G. Jun Institute, Zurich. Technology & Culture Seminar. 5:15pm, R. 9-150.

Thursday, May 1

Dispersion of Automobile Exhaust Pollutants in the Vicinity of Highway* - James Fay, mechanical engineering. Mechanic Engineering Thermal-Fluids Seminar. 4pm, Rm 3-343.

A Simple Mechanical Model of Articular Cartilage* - Gordon Higginson, engineering science, University of Durham, Englan Harvard-MIT Rehabilitation Engineering Center Seminar. 4pm, R 10-105. Coffee 3:30pm.

Hot Gas in the Universe* - George Field, Harvard University Physics Colloquium. 4:15pm, Rm 26-100. Refreshments 3:45pm Rm 26-110.

Prospects for Protein Resources* - Dr. Max Milner, co-ordinato NSF-MIT Protein Resources Study, Nutrition & Food Science Seminar. 4:15pm, Rm 54-100. Coffee 4pm.

Precision Laser Spectroscopy: From Recoil to Relativity* – John I Hall, Joint Institute for Laboratory Astrophysics and Nationa Bureau of Standards, Boulder, Colo. Interdepartmental Lase Seminar. 11am, Rm 9-150.

Radiative Measurement of Temperature Profiles in Flames* – Farag, G. Chemical Engineering Doctoral Seminar. 2pm, R 10-105.

Transport Properties of the Aorta Wall* – J. Schnitzer, G. Chemic Engineering Doctoral Seminar. 3pm, Rm 10-105.

Particulate Radiation Therapy* – Michael Goitein, radiation medicine, MGH. Nuclear Engineering Biomedical Applications of Radiation Seminar. 3:45pm, Rm NW12-222. Coffee 3:30pm.

Application of Solar Energy* – Ephrain Sparrow, mechanical engineering, University of Minnesota. Mechanical Engineerin Seminar. 3pm, Rm 3-133. Coffee 4pm, Rm 1-114.

Community Meetings

AWARE Secretaries Week Activities* – All events 12n, Rm 6-12unless otherwise noted. Wed, Apr 23: Karen Nussbaum, co-found of 9-5, will speak on current developments in the field of organizin Thurs, Apr 24: Joanne Goldstein, feminist lawyer, will speak of sex discrimination suits and how unions affect them. Fri, Apr 25 information booths, 12n-1pm, in Bldg 10 Lobby, Walker and St. Ctr.

Discussion & Informal Talk* – Aleksandr Voronel, recently release Soviet scientist; physics, Tel-Aviv University, Israel. MIT Committee for Azbel, Lerner & Levich and MIT Hillel. Thurs, Apr 24, 5pm, Rt 10-105. Coffee & donuts.

Today's Women: TWO Discussion Group** – Former student wives who are now Matrons will discuss their experiences as student wives Thurs, Apr 24, 8pm, Stu Ctr West Lge.

Stained Glass Workshop** — Student Art Association. Fou sessions, Apr 26, 27, May 3rd & 4th, 1-4pm, Stu Ctr Rm 429. Fee \$25 students, \$30 others. Dave or Malka, x3-7019.

Women's Forum** – Meetings Mon, 12n, Rm 10-105. Tues in case of Mon holiday. Special Dinner Meeting, Sun, Apr 27, 7pm: Dr. Rosemary Ruether, author of Religion and Sexism: Images of Women in the Jewish and Christian Traditions, will speak of "Matriarchy and the Mastery of Nature." Call Claudia Liebesny x3-1595, or Connie Parvey, x3-2325, to reserve a place for the light supper (costs will be shared).

Open Marriage* – Larry & Joan Constantine, authors of Open Marriage. Technology Wives Organization Discussion Group. Thursday 1, 8pm, Stu Ctr West Lge. Refreshments.

Poetry Reading* – Michael Harper, author of "Dear John, Dear Coltrane" and "History is your Heartbeat." Humanities Department. Thurs, May 1, 8pm, Stu Ctr Mezzanine Lge. Free.

The Wives' Discussion Group** — Wed, 2:15-4pm, Stu Ctr Wes Lge. Babysitting in Stu Ctr Rm 473. Note: Wed, Apr 23, in Stu Ct Mezzanine Lge.

Men's (People?) Consciousness Group* – Sponsored by MIT SACO Discussion of men's relations with others as people. Tues, 5pm, Rr 50-361.

Wellesley Events

Photography within the Humanities* — Exhibition of 100 photographs chosen by the participants, accompanied by daily lecture by one of the photographers or a critic. Exhibit thru Fri, Apr 25, Mon-Fri 8:30am-5pm; Sat 8:30am-12n & 1-5pm; Sun 2-5pm; Wellesley College Museum, Jewett Arts Center. Lectures, 8pm: Wed, Apr 23: Irving Penn, Vogue photographer. 112E Pendleton Hall. Fri, Apr 25: Robert Coles, author; psychiatry, Harvard. Jewett Auditorium. Free.

Social Events

James Montogomery Blues Band/Beer Blast – Fri, Apr 25, 8:30pm, Rockwell Cage. All the free beer you can drink. Admission \$3, college ID required.

Ad-Hoc Over 30's Singles Chowder and Marching Society — Lunctime meeting in Stu Ctr East Lge (small dining room off Lobdell), Fri, 12:30-1:30pm. New members always invited. Look for the table with the red balloon, Erica, x3-2117 or Marty, x8-1206 Draper.

24 Hour Coffeehouse* - Enjoy relaxing conversation, piano playing games, inexpensive food, candy & drinks. Open 24 hours per day, 7 days per week, Stu Ctr 2nd fl lge.

Movies

The General; The Odd Couple* - Humanities Film. Wed, Apr 23, 7:30pm, Rm 10-250. Free,

8½* - Humanities Film. Wed, Apr 23, 8pm, Rm 26-100. Free.

Cavitation* - Fluid Mechanics Film. Thurs, Apr 24, 4pm, Rm 33-319. Free.

Exploiting the Oceans* - Barker Engineering Film. Thurs, Apr 24, 5pm, Rm 10-500. Free, coffee served.

Exploiting the Oceans* - Barker Engineering Film. Fri, Apr 25, 12n, Rm 10-500. Free, coffee served.

1001 Danish Delights** - LSC. Fri, Apr 25, 4, 6:30, 9 & 11pm, Kresge. Admission \$.50, ID required.

I Vitelloni (Fellini) - Film Society, Fri, Apr 25, 7:30 & 9:30pm, Rm 6-120, Admission \$1.

The Selling of the Pentagon/Red Nightmare - SCC MidNite Movie. Fri, Apr 25, 12m, Sala. Admission free w/college ID.

Gone with the Wind** - LSC. Sat, Apr 26, 4 & 9 pm, Rm 26-100. Admission \$.50, ID required.

The Pink Panther** - LSC. Sun, Apr 27, 6:30 & 9pm, Rm 26-100. Admission \$.50, ID required.

Waves in Fluids; Generation and Propagation of Sound* - Fluid Mechanics Film. Mon, Apr 28, 4pm, Rm 33-319. Free.

Story of Chinese Art; Chinese Jade Carving; The Beautiful Bait – A Peking Opera; Chinese Folkdance; A Glimpse of Taiwan* – CSC Movies. Mon, Apr 28, 8pm (lasts 2 hrs), Rm 9-150. Free; English narration.

David Holtzman's Diary (McBride); Brandy in the Wilderness (Kaye)* - Film Section. Tues, Apr 29, 7pm, Rm E21-010. Free.

The Turtle People; Tepotzlan; Tepotzlan in Transition* Humanities Films. Tues, Apr 29, 7:30pm, Rm E21-010. Free.

David Holtzman's Diary (McBride); Brandy in the Wilderness (Kaye)* – Film Section. Wed, Apr 30, 7pm, Rm E21-010. Free.

The Sorrow and the Pity* - Humanities Film. Wed, Apr 30, 7pm,

Waves in Fluids; Generation and Propagation of Sound* - Fluid Mechanics Film. Thurs, May 1, 4pm, Rm 33-319. Free.

Media Means Mass Control?* - Barker Library Film. Thurs, May 1, 5pm, Rm 10-500. Free, coffee served.

Media Means Mass Control?* - Barker Library, Film. Fri, May 2, 12n, Rm 10-500. Free, coffee served.

Sleuth** - LSC. Fri, May 2, 7 & 10pm, Rm 26-100. Admission \$.50, ID required.

Magical Death* - Humanities Film. Fri, May 2, 7:30pm, Rm 14N-0615. Free.

La Strada (Fellini) – Film Society. Fri, May 2, 7:30 & 9:30pm, Rm 6-120. Admission \$1.

Take the Money and Run - SCC MidNite Movie. Fri, May 2, 12m,

Sala. Free admission w/college ID.

Fantastic Planet** - LSC. Sat, May 3, 7 & 9:30pm, Rm 26-100.

Admission \$.50, ID required.

Casino Royale** – LSC. Sun, May 4, 6:30 & 9pm, Rm 26-100. Admission \$.50, ID required.

Lobby 7 Events

Rm 10-250, Free.

Central Maine Power Music Company* - Wed, Apr 23, 12n. Free.

MIT Logarhythms & Wellesley Tupelos* - Fri, Apr 25, 12:15am (after James Montogmery concert/beer blast). Free.

Ken Quat Group* - Wed, Apr 30, 12n. Free.

Kate Dunlap and Adrian Horner* - Sopranos, accompanied by Herman Weiss, piano, and Robert Sullivan, lute. Thurs, May 1, 12n. Free.

Music

MIT Chamber Music Society Concert* - Wed, 5:15pm, Music Library, Free.

Indian Classical Evening* – Sponsored by Sangam, featuring Jothi Raghavan in Bharata Natyam; Peter Row, sitar, with Swarai Bhattacharji, tabla; Odissi dance by Frederique Marglin. Sat, Apr 26, 7pm, Kresge. Admission \$3 & \$2. Info & tickets: 494-0493 or 894-6537.

New England Fine Arts Trio** - Consisting of piano, violin and cello. Sponsored by LSC. Sun, Apr 27, 2pm, Kresge. Free, ID required.

Zamir Chorale Group* – Sponsored by Hillel. Boston Chorale group specializing in Hebrew & Israeli music. Sun, Apr 27, 8pm, Kresge. Admission: \$3, \$4 & \$5. Reservations: 266-7664.

Noon Hour Chapel Concert* - April Showers, flute, and Louis Arnold, guitar. Thurs, May 1, 12n, Chapel. Free.

Music Library Concert* - Jack Reilly, student, pianist. Including Berg's Soñata. Fri, May 2, 5:15pm. Music Library.

Gospel Choir Extravaganza* — The MIT Gospel Choir will be joined by 4 other student or church affiliated choirs in a benefit concert for the Cape Verde Islands Relief Project on Fri, May 2, 7:30pm, Kresge. Tickets: \$2.50 in advance; \$3 at door; \$1 children under 12; \$.50 MIT student discount. Available at TCA, Stu Ctr Rm 450. Reservations: 494-8770.

MIT Concert Band Spring Concert* — Directed by John Corley. Concert of contemporary music and a ballet with the apprentice dancers of the Boston Ballet. Sat, May 3, 8:30pm, Kresge. Free.

Concert* - MIT Glee Club and Wellesley College Choir. Sun, May 4, 3pm, Kresge. Free.

Theatre and Shows

Twelfth Night* - Shakespeare Ensemble production. Wed, Apr 23, (Shakespeare's Birthday), 8pm, Sala. Admission: \$3.50 (champagne will be served). \$1 off with MIT or Wellesley student ID.

Dramashop One-Act Plays* – A Phoenix Too Frequent, by Christopher Fry and The Physicist, by F. Durrenmatt. Thurs, May 1-Sat, May 3, 8:30pm, Kresge Little Theatre. Admission \$.50.

Dance

Folkdancing — International: Sun, 7:30-11pm, Sala. Balkan: Tues, 7:30-11pm, Stu Ctr Rm 491. Israeli: Thurs, 7:30-11pm, Sala. Noon dancing: Fri, 12n-1:30pm, Kresge Oval in good weather, otherwise Bldg 7 Lobby. Learn & practice more difficult dances Fri, 1:30-3 or 4pm, Stu Ctr 491.

Scottish Country Dancing* - Wed, 8pm, Rm 3-343. Free. Info: Yuval Peduel, x3-7860.

Exhibitions

Photographs by Bob Lyon* - Former special student at the Creative Photography Gallery. Thru Thurs, Apr 24, Lounge, Creative Photography Laboratory, Bldg W31.

Boston Celebrations: Part I* – Scale models, drawings & conceptual pieces for temporary visual celebrations on specific Boston sites, by fellows at CAVS. Thru Fri, Apr 25, CAVS.

MITV Hack Show* - Second MITV News hack show. Fri, Apr 25, 9am-5pm, Bldg 10 Lobby.

Geo-Astral Formulations 1969-1972* - Lowry Burgess, CAVS fellow. Weekdays during April 9am-5pm, Center for Advanced Visual Studies (Bldg W11). Free.

Faculty Club Exhibit* - Water color and oil paintings by Nancy Begin. Thurs, Apr 3-Wed, Apr 30, Faculty Club. Free.

Kinetic and Mural Sculpture* - Robin Parkinson. Center for Advanced Visual Studies. 9am-5pm, Wed-Fri only, Apr 11-Apr 30, Bldg W11. Free.

Drawings: Andrew Tavarelli* - Fri, Apr 4-Sun, May 4, Hayden Corridor Gallery. Open daily, Free.

Visual Dharma* - The Buddhist art of Tibet. Sponsored by the Committee on the Visual Arts. Fri, Apr 4-Wed, May 7, daily 10am-4pm, Tues 6-9pm; Hayden Gallery.

Creative Photography Gallery* - Photographs by Harry Callahan. Fri, Apr 25-Fri, May 16, 10am-6pm, Bldg W31. Free.

Paintings by Esther Felix* – Exhibited in the Faculty Club during May, Free.

Music Library Exhibit* - Postage stamps designed with musical subjects from various countries.

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

MIT Historical Collection* - Permanent exhibition, open Mon-Fri, 9am-5pm, Bldg N52, 2nd floor.

Photographs* - Showing the original 19th century MIT buildings in downtown Boston and step-by-step views of construction in Cambridge. Bldg 4 Corridor.

Athletics

Home Schedule* -Wednesday, April 23 - Outdoor Track. Tufts, 3pm, duPont Oval. JV/F Lacrosse. LaSalle Academy, 4pm, Briggs Field. Thursday, April 24 - V Lacrosse. New Hampshire, 4pm, Briggs Field. Friday, April 25 - V Golf. Bates, Lowell Tech, Bowdoin. 12:30pm, Braenburn Cntry Club. Saturday, April 26 -Hvy Crew. Compton Cup (Harvard, Princeton), F-11am, JV-11:30pm, V-12n, Charles River. Outdoor Track. WPI, 12:30pm, duPont Oval. F&V Tennis. Trinity, 2pm, duPont courts. Saturday, April 26 & Sunday, April 27 - W Sailing. Gerry Reed Trophy, 9:30am, Charles River. Monday, April 28 - JV/F Baseball. Northeastern, 4pm, Briggs Field, Tuesday, April 29 - V Baseball. Northeastern, 4pm, Briggs Field. W Tennis. Boston State, 4pm, duPont courts. Wednesday, April 30 - V Lacrosse, Harvard, 4pm, Briggs Field. F Tennis. St. George's School, 4pm, duPont courts. F Lt Crew. Tabor Academy, 4:30pm, Charles River. JV/F Baseball. New Preparatory School, 3pm, Briggs Field. W Tennis. Radcliffe, 4pm, duPont courts. Thursday, May 1 - Outdoor Track. Coast Guard, 3pm, duPont Oval. V Baseball. Suffolk, 4pm, Briggs Field. Friday, May 2 - W Softball. Emerson, 4pm, Briggs Field. Saturday, May 3 - V "B" Tennis. Phillips, 2pm, duPont courts.

Summer Softball Umpires - Persons wishing to umpire in the summer fast-pitch softball league (June 9-Aug 15) should sit in on

Employment Q&A

By CLAUDIA LIEBESNY Office of Personnel Services

In the AWARE Newsletter (#6) the following statement is made: "In contrast to unionized workers, non-unionized workers have no real job security—employers may fire or lay them off for almost any reason and are not required to pay severance fees or to rehire them for new job openings." What is MIT's policy in regard to laying off employees?

MIT requires that a regular biweekly employee be given 60 days written notice of layoff. Persons on layoff receive a copy of the current job list mailed to their home and every attempt is made to place them in another job.

Current contractual agreements covering hourly personnel at MIT provide for minimum layoff notice periods of 4-8 weeks, variously. As in the case of all other Institute personnel, there are no provisions for severance payments. In general, these Agreements contain provisions governing layoff and reemployment in which seniority is one of several factors. While on notice of layoff, every effort is made to find a suitable position for the person, and these efforts are continued beyond termination for hourly employees as well as those in other categories.

What is the maximum salary allowed at MIT for staff administrative assistants?

Under current salary administration policy, there are no specifically defined salary ranges for members of the administrative staff, including administrative assistants. The Institute has been working towards the development of a classification study which proposes to create salary ranges for administrative positions according to levels of responsibility.

Is it Institute policy that the Personnel Office must inform the present supervisor of a biweekly employee when an interview is arranged for the employee for another position in the Institute? If so, does the same policy hold with regard to Staff?

When an employee (including staff members) comes to the Personnel Office to inquire about the possibility of a lateral or promotional transfer, no contact is made with the individual's supervisor or any other person. Career discussions are confidential.

However, at the time when a person first asks to have her/his resume sent out or an interview arranged for another position at MIT, we explain that it is Institute policy that the person inform her/his supervisor of their interest in making a change. We feel that the desire for a new work situation or promotional opportunity should be dealt with openly-that such decisions should be supported within the Institute community as valid and beneficial to individual development. In our experience, more often than not, secrecy causes misunderstandings where they would not have arisen had a frank discussion taken place. In addition, secrecy carries the implication that the transfer process is not a valid and respected means of mobility which is beneficial both to individuals and the Institute as a whole.

What makes a tax sheltered annuity plan different from a payroll deduction savings plan?

The amount of the deduction from your salary for the tax sheltered annuity is not included in your Federal taxable income for the year. Thus, you pay Federal Income tax only on your salary less your contributions. In addition, earnings on your contributions accumulate free of tax.

But aren't these contributions and interest taxed later? If so, what is the advantage?

Yes, when you withdraw amounts, they are taxed at ordinary income rates in the year received. However, since you control the timing of your withdrawal(s), you can time them to coincide with periods of otherwise low income. For example, after retirement, your income may be lower and your deductions greater, making that a good time to receive your tax deferred annuity.

officiating course Tues & Thurs, 12n, duPont conference rm; or 1pm, duPont T-Club Lge. Course now in progress. Info: Sam Benichasa, x8-3686 or x8-3661 Draper.

Rugby Football Club Practices** - Tues & Thurs, 5pm, Briggs Field. Full medical insurance necessary. Info x3-6221.

Women's Athletic Council* — Meetings 1st & 3rd Tues of each month, 7:30pm, duPont conference rm. Info: Mary Lou Sayles, director of women's athletics. x3-4910.

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 April 30 through May 11 to the Calendar Editor, Room 5-111, Ext. 3-3279, before noon Friday, April 25.

CLASSIFIED ADS

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. Only Institute extensions may be listed. Members of the community who have no extensions may submit ads by coming in person to the Tech Talk office, Room 5-111, and presenting Institute identification. Ads may be telephoned to Ext. 3-3270 or mailed to room 5-105. Please submit all ads before noon, Friday, April 25.

For Sale, Etc.

Cannon Pocketronik II, elec thermal print mach, b nw, \$100; cordless elec screwdrivers, Disston, nw, \$16; Penske timing lites, \$20; Dwell tachometer, \$30, last chance. Don, x8-3337 Draper.

Sm curved bge couch, reuphol last yr, \$40; tall bureau, lots drwr space, \$20; antique well made oak bureau, \$45. Bob, x3-5712.

Compl photo darkrm, wi sell sep; Kelsey print press w/type, etc; twin-16 stereo spkr sys; (2) 13" tires. Ben Dores, x8-2818 Draper.

M 3 spd Phillips bike, gd cond, \$30. x3-4988.

Wstghse counter-top range, used, \$25 or best. Earl, x8-1566 Draper.

Hallicrafters SR-2000, 2KW, 5 band ham transceiver, best. x8-3328 Draper.

Bahama proof sets, 9 coin/set, encased in Capitol Plastic's holder, presentation case, '69, '70, '71, all 3/\$155. Bill, x8-4442 Draper.

Healthways 2 hose, gd cond, \$30; 1/8", x lg, exc cond, short slv Sea Suit, blk w/blu seam tape, \$25; & hooded chicken vest, \$18. Mark, x0449 Dorm.

Tires, 2 gd ww, 5.60x15, mtd VW whls, \$20. Larry, x3-4749.

Wallabees, f sz 8½M, worn 3 X, \$20. Richard, x8133 Dorm, evgs.

Lg fan on stand, exc cond, \$20. Linda, x3-1671.

PA sys w/2 columns, 150 W Bogen amp, ask \$250. Andy, 547-8299.

Beseler 23C enlarger w/50mm El Nikor

& 80 mm Componer lenses & boards, 3 carriers, easel, focuser, etc, all exc, \$175, x3-7825

Dynaco SCA amp, best over \$50; Lambda power supplies, some nw, 20% off list. x3-3162, lve msg box 3250.

Sony HP-188 stereo, \$80; 10 spd racing bike, \$45; Norge 6000 BTU AC, \$80. Fumi, 661-8047, evgs.

Over 60 AH/SPI wargames, gd-exc cond, pces mtd, ea game boxed, about \$5/ea. Titles/pr or in info, Mike Melendez, x8549 Dorm, aft 5 wkdys.

Liting fixtures: from '20's, 5 branch brass chandelier + asst ceiling fixtures, "demi-antique," \$10/all. Call, \$10/all, Call, 484-0802, aft 1pm.

Above ground pool, 24x12, 2 sundecks, fltr, pkg deal, nds nw liner, \$300. x3-1467.

Sgl bed, box spr, 2 matt, all \$10; 19"

Vox 12 str guitar, exc cond, wah-wah, fuzz box, treble booster, repeater, E-tuner, case, \$250 or best. Michael,

Gdyr A/T 4.00x18 mtrcycl tire, b nw, \$30. x9311 Dorm.

Hammond M102 spinet organ, exc cond, tone whl generator, drawbars, 5 yrs, lks & sounds like nw, \$1,050. Glenn, x8-1505 Draper.

Telescope refractor on tripod, 233 power, 3 lenses, sun-moon filtr, \$55. Jon, x8-4429 Draper.

Fisher alum mtl skis, 210 cm, \$210; GE frypan, \$10; History of 2nd WW, W. Churchill, 6 vol, \$12. Mark, 868-4890.

F 3 spd bike incl hvy duty lock, chn, key, toddler seat, orign \$80, used 3X, \$50. Call, 899-7135.

M 26" 3 spd midweight Schwinn bike, \$20; 2 ww snows used 1 seas, E78x14,

734-5392, evgs. KLH mdl 16 amp, 35 W/ch, \$50; nw

AR-6 spkr, \$50. John, 787-4666, aft 6pm.

plants, \$10. Martha, x3-5124.

self-contained chem toilet, \$65; crib, \$15; bathinet, \$3; X mas decorations, \$5. Bob, x8-4587 Draper.

Danish sofa, \$20; 2 whls w/tires from '68 Mustang, \$5/ea. Herman, x5800 Linc.

Peugot PX-10E racing bike, 221/2" frame, 4 tubular tires (2 b nw Wolber spec corsas), weighs 21-22 lbs, nw

Bell & Howell 16mm projectors, 2 v old, 1 silent, best. Tony, x3-5717.

Cotton thermal blnkts, 2, \$5/ea; wraparound matt pad, \$1.50; f clogs, sz 8B, \$3-\$5/pr. Helen, x3-7690.

Eisentraut custom bike, 65 cm, campy, \$750. Dave, x3-1637.

frames, \$25/ea; 6000 BTU AC, \$50. Ken, x3-5084.

now \$500. Alan Katz, x3-3161, lve msg.

Maytag apt sz dryer, used 6 mos; Hoover washer, gd cond; \$95/both. Caroline, x3-2056.

10x12 shag rug, exc cond, best. Mary, 266-3782.

Simplex Prestige fr & rear deraillieurs, \$15/set; amfm VW car radio, \$30; Vivitar 110 elec flash unit, perf cond, \$40. x8984 Dorm.

wares, nw & used clothes, bric-a-brac, jewelry, some antiques, 17 Burbank Medford (Lawrence Est area), 4/27, 10am-3pm.

Chevy rims, used 6 mos, exc cond, best. Joan, x7002 Linc.

F dresses, used 7-9, best; also wht wntr coat. Ava, x3-6216.

Hrdly used PE 3012 trntbl w/Empire 999 AE/X-II crtrdg, dust cvr; yr old Sony's best afmf compact stereo cassette; slide proj. Call, 776-5100.

net. x3-2101.

Dbl sz waterbed w/frame, htr, exc cond, \$75 or best. Tom, x8643 Dorm.

Fieldcrest Marimekko, \$7/ea. x3-4101.

Nw, nvr used, Schick fleximatic elec shaver, cost \$30, ask \$20. Evelyn, x3-4526.

Old brass plated dbl bed hdbrd, fair

A78x13 Dynaglas snows, 3 mos, \$30; McGraw-Hill physics hndbk, \$20; MIT math set, 3 books, \$5. Capers, x3-5333.

w/trailer, no sails, \$900. x3-7282.

Pr 6.00x12 rims for Toyota, Datsun,

Beaut Mouton Lamb coat, sz 12, must

Kitchen Aid port dishwash, sgl cyc mdl, seldom used, v gd cond, \$100.

Chris, x3-6750.

Dave, x3-5121.

Banjo, Fender Allegro series, '67, 5 str, resonater & hard case, \$200. James, 864-8875, aft 7pm.

metal grates both ends. Sally, 547-8557, evgs best.

Heath SB-301 amateur rcvr, exc, \$200 or best; Aurora AFX car racing set, b nw, lg, best; Judsen elec ignition, \$10. Neil, 965-0967.

Marantz mdl 8 amp, \$175; Concord DBA-10 dolby, \$75; Akai 4 chnl solenoid controlled deck, \$450; or

best. Peter Santeusanio, 494-0060.

AR stereo rcvr w/8 trk tape player & Soundsign (BSR) trntbl, w/xtras, have mtch wd cabinets, lk nw, \$125 both. Ralph, x8280 Dorm.

cond, gd for fam rm or sum home, \$75; qn sz box spr, v gd cond, \$10. Louise, x3-7131. Scott stereo rcvr, \$90; Herald stereo

Magnavox b&w 19" console TV, v gd

rcvr, \$60; Concord Stereo cassette rcrdr, \$35; deep freeze, nego; Scott stereo amp, \$40. Ernie, x9610 Dorm. Couch; sofabed; bureaus; chest drwrs;

tbl w/4 mtch chrs; cocktail tbl; pole lamp; much more, exc cond. Call, 776-5100, evgs.

Strobe w/spare tube, trigger coil, \$10; Sansui AU-101, 15/15 WRMS, \$75. Neil, 267-2199, lve msg.

Vehicles

'63 Valiant, passes Mass insp, \$200 or best. x9801 Dorm, lve msg.

'65 Mustang, best. Jose, x3-51-09, Rm 16-241.

'66 Pontiac Bonne conv, p st & br, amfm, more, nw tires, reliable tranps, \$300. Rich, 494-9820.

'67 Buick sportwgn, 8 psgr, air adjust shocks, 2 xtra whls, eng gd, some rust, \$500. O'Neal, x3-4301. '68 Chevelle Malibu, gold w/blk vinyl

roof, nw tires, exh, batt, brakes, plugs, etc, \$500. Bille, x7749 Linc. '68 Ply Valiant, slant 6 cyl, gd cond, gd mileage, 122 K, \$375 or best. x3-7406.

'68 Chevelle Malibu conv, 98 K but has nw brakes, exh, carb, water pump, valve job, cylinder head, batt, ignition wires, points, plugs, etc, best. Eric, 247-0732, evgs.

'68 Merc Montego 302 MX, 4 dr, auto, p st & br, gd cond, \$290. Joe Robichaud, x7124 Linc.

'69 red Opel Rally Kadett, low miles, runs well, gd int & body, nw br, reblt carb, snows, radio, \$950 or best. Call, 661-3197.

'69 Chevy Kingswd wgn, exc mech cond, fair body, auto, p st & br, amfm, roof rack, snows, \$550 or best. Call, 494-0368, evgs.

'70 Dodge Challenger, p st & br, ac, 45K, exc cond, \$1,400. Dr. Schneider, 522-6700, days.

'70 AMC Hornet, auto, 70 K, v gd cond, \$900 or best. Noud, x3-5547.

'71 Ford Maverick, 4 dr, 35 K, nw brakes, exh, shocks, gd cond, \$1,600. Ned, x181-56-204 Millstone.

'71 red Datsun 510, 4 dr sed, 38 K.

auto, radio exc cond, \$1,495. David, x3-3106. '71 VW superbeetle, 45 K, amfm, 4

spd, sunrf, v gd cond, \$1,500. Call, 266-7797.

'72 Nova SS 350, 8 cyl, ac, 4 nw tires, 2 snows, wht w/blk vinyl rf, exc cond, \$1,900. x8-4419 Draper.

'72 Ford camper, slps 4, comp K, ac, perf cond, \$3,900. x3-3323, evgs.

'73 Cutlass S, vista roof, swivel seats, 4 spd fl shift, exc cond, lvg cntry, best. Call, 254-3059.

'73 Volvo 142 EO, 16 K, exc cond, perf body, 4 spd, overdrive, sunrf, \$4,000 or best. x3-3375.

'73 Yamaha Enduro, 175 cc universals, 65-70 mpg in city, gd street or dirt, exc in city, \$450. Abbie, x3-3494.

'74 Yamaha RD350, twin road bike, 6 spds, disc br, 7 port induction, reed valve carbs, w/chn, 21 qts oil, hlmt, nanual, \$990, x3-7

Honda 305 dream, gd cond, xtras, \$300. Clif, 783-3560.

Housing

Acton, 4 BR colonial avail 7/1 for 2 yrs, \$400. Alan, x5710 Linc.

Belmont, 2 fam hse, rm in bsmnt, 4 rms 1st fl, 6 rms 2nd & 3rd, exc cond, nr bus, conv loc in qt street, nice nbrhd, gd income. Call, 484-8644.

Bos, sum sub, 2 BR, LR, K, spacious, crnr Marlborough & Mass Ave, \$285. Call, 536-8920, evgs.

Bos, Kenmore Sq, sub 5/25-8/22, 2 rm apt + K & B, \$220 nego. Don or Ernie, 267-2199.

Bri, 3 BR, unfurn, 2 porches, 20 min Cent Sq by T, sub 7/1 w/Sept opt, \$175 incl ht. Cooper, x3-1609.

Bklne, sub 5/15 or 6/1 w/Sept opt, attractive spac 3 BR apt nr T, ww, frpl, \$390. Nancy, x3-3135.

Camb, sum sub, lux apt, BR 1½B, ac, dw, Indry, sundeck, 5 min MIT, \$245 nego. Call, 661-0032. Camb, sub June-Aug or portion, 2 BR, study, nice yd, nr H Sq, \$280. Call, 354-3976.

Camb, Brattle St, condo for sale, 6 rms, 12,000 sq ft, sunny w/view, ww, nwly remodeled K & B, \$45,000.

Camb, sum sub w/Sept opt, 2 lg BR, LR, K, ac, dishwash, \$319 incl util. Call, 491-0183, evgs.

Camb, 3 blks MIT, 2 BR apt avail 6/1-9/1, MIT affil, \$230 incl util. Alex, x3-3678.

Camb, Random Hall BR apt, sub 5/1-8/31, 5 min MIT, unfurn, priv K & B, \$190. Juan Manzano, Apt 127, 282 Mass Ave. aft 5pm.

Camb, nr H Sq, 2 BR furn, exc cond, Indry in bldg, sub 6/1-8/31, \$220 + elec & pkg, Pat, x3-5483.

Camb, 31/2 rms, 1 prsn or cpl, \$117 + util. x3-7126.

Cambport, 2 BR apt 1st fl 2 fam hse, \$170. Carolyn, x3-7101.

no chldrn, nr T, \$125. John, x8-4475 Draper.

Lex, frpl LR, DR, mod K, den, 3 BR, 2 full B, 2 car garage, bsmnt, encl patio, nice loc. Call, 862-7511.

rent July-Aug, secluded, 4 BR contemp, lg K, fam rm, 2½ B, wded acre, local pool mbrship avail, no pets, \$500 incl util. Larry, x3-7810.

Nwtn, sub 6/1 or 7/1 w/opt, priv rm in 3 rm apt in hse, share w/grad stu, blk to lake, T, 15-20 min MIT by car, beaut nbrhd, \$85. Call, 965-5277, or lve note Rm 2-382.

W Nwtn Hill, Victorian hse w/opt 3rd fl apt, 3 BR (2nd fl), LR, lib, DR, K, lg lot, sm 54% takeover mortgage avail. Richard Eckaus, x3-3367.

Som, sub 2 BR apt 6/1 w/opt, ww, ac, balc, d&d, Indry facil in bldg, nr T, free off-st pkg, chldrn ok, MIT affil, \$260 incl ht. David, x3-7711.

W Som, spac 5 rm apt, nwly renovated 1st fl 2 fam hse, \$210 + ht. John, x327

Indry in hse, avail 6/1 w/opt, \$305 + util. Call, 235-2492, bef 10pm.

Weston, contemp furn hse, 3 lg BR, 2

Lake Winnepesaukee, 3 BR chalet, tennis, recreational facil, \$185/wk. x8-4415 Draper. Rangely, Me, nw lux 3 BR contemp on

swim, hike, fish, canoe incl w/rent. x8-2577 Draper. Eidelweis chalet, 3 BR, 1½ B, all elec, beach, tennis, Conway, beaut view, avail June-Aug. Frankel, x3-6824.

Siamese kittens, \$15. x3-4913.

Siamese kitten 6 wks, m, cute, free.

Lost: blk wire rim m glasses, Sat nite btwn DU & east campus. x0442 Dorm, or turn in to lost & found.

Found: Elgin f gold watch, nr Ames St. Cheryl, x0562 Dorm.

Found: f leath lined mittens, Rm

Wanted

Bassoon for yng musician, x3-3933,

Gas stove & washing mach, reas. Jane,

Work in morn in home as babysitter, clning, prepare dinners, refs. Call, 427-2110, morns.

Rio? Nd someone to hand-carry sm

fragile pkg to friends in Rio. Sandy,

Tennis partner for wknds, begintermed. Don, x3-4675.

married cpl during May, pref if cats allowed, greater Bos area pref.

BR or stu apt, East or Westgate, from 7/1. Sharat, x3-7027.

Mature prof cpl (architect, tchr) wl look after your home while you're away, avail immed, exc refs, nonsmokers, wl do chores. Call, 969-3399,

Chance to have priv qrtrs in seaside Vic hse, easy commute Bos, cpl or indiv, in exch for babysitting, lite hsekeeping, odd jobs, sum or longer. Mrs. Jacobs, x3-1385.

M & f 3 spd bike. Linda. x 3-4669.

Bike, m 5 or 10 spd. Neville, x3-2334.

Sofa bed, dbl sz, or dbl sz folding bed. Amparo, x3-5358.

Roommates

F rmmate for mod 2 BR apt, Lawrence-Andover line, 30 min drive MIT, \$98 incl ht. Jane, x3-6289.

Responsible m or f for Cambport hse w/3 m grad stus, own BR, K, LR, guest rm, prchs, easy pkg, 5 min bike MIT, nr lndry & S&S, avail now, no smokers pls, \$75 & util. Call, 491-1364.

F, 2, desire 3rd to share 3 BR apt, 10 min H Sq, avail immed, \$90 + util. Carol, x3-4710.

M 3rd, 21 or over, Som nr Tufts & T, avail immed, \$80 & util. Jim, x3-5808. M for furn Wtrtown apt, frpl, garage,

nr T, avail now, \$125 + util. Kent, x3-3902. F rmmate, 23+, working, share 10 rm hse w/4 f, own rm, piano, pkg, yard,

Gd Indlord, conv loc, 1 or 2 people nded for sum sub w/opt, own rm in 4 BR, lg K, nr Cent Sq, MIT affil, \$105 incl ht. Call, 492-2085, 6-10pm.

Rm in 3 BR Tang apt, transfer or sub for sum, w/or w/out furn, 22nd fl. Peter, x3-5483.

Carpools

WI take riders, Arl, W Som, to Draper MIT, 7:30-4:30. Bill, x8-3546 Draper.

evgs.

Ride, Lex-Bedford line, rt 4/225, 8:30-5 daily, wl share exp. Maureen,

Exper secty wl type theses, reports, papers, etc, IBM Selec, fast & accurate. x3-3761.

exper for DSRE, call, Dave, 494-9833.

WI do manu, gen or tech typing, IBM Selec. x 3-1713.

Staffers nded to help produce HoTo-GAMIT, valuable guide to MIT & Bos

Wake-up service, reas monthly rates. Dee, x3-2376.

Babysitting &/or hsecleaning. Call, 494-8785. WI type term papers, manu, correcting selectric. Phyllis, x3-4237.

POSITIONS AVAILABI

Duplicate lists are posted each Tuesday preceding Tech Talk publication date on the women's kiosk in Building 7, outside the Office of Minority Affairs, 10-211, and in the personnel office, E19-239, on the day of Tech Talk publication, Personnel interviewers will refer any qualified applicants on all biweekly jobs Grades I-IV as soon as

Page 6, Tech Talk, April 23, 1975

1mtd, \$35. Jack, 494-0449, evgs. Nylon 5x7 tent, perf cond, \$12. Bill,

Old RCA AC, working cond, sm, for 1 rm, \$50. David Stevens, x8-1565

Old wrought iron plant stand, holds 5

Sm study, \$6; 4 drwr dresser, \$10; port

Wd easy chrs w/cshns, 2, \$20/ea;

Wool carpet, 15x13, exc cond, 2 yrs, ask \$75. Call, 547-3415.

\$280. Call, 868-8873.

Jensen spkr sys, 2, \$25/ea; mpl bed

Braun TG-1000 tape deck, nw \$800,

Sofa & chr, \$25; baby hichr, \$10;

Comb garage & rummage sale, hse-

Gdyr Douglas A60x13 tires, 2, 5 lug

Ping pong tbl, 4 paddles, 2 sets balls,

Gas stove, apt sz, 5 mos, \$75. x3-3395.

Twn sz bdsprds, 2 Morning pattern

Snows, 13", used 1 seas, \$30. Lucy, x3-3101.

cond, make offer. Donna, x3-4271. Dbl bed frame, wd hdbrd, \$25;

Sailboat, 16' Rebel class, fbrglas,

sell, best. Call, 262-6153, aft 6pm.

Box spr, 4; 2 mat; 2 beds; bureau.

Animal transp box, wd, approx 20 lbs, blt-in swing-out food/water dish, outer dimensions 18" W, 24½" L, 19"H,

Everett, 4 rm apt avail 6/1, mod K &

Lex, Turning Mill area, furn hse for

Wellesley, 1st fl 3 fam hse, 6 rms, eat-in K, pntry, gd nbrhd, lg yd, pkg, nr bus, rte 9, 128 & tnpk, free use

frpl, study, sunprch, 25 min MIT, avail yr lse beg 7/1, \$590 + util. x3-5094.

huge lake, superb view, mtn wldrness,

Animals

Cindy, x3-4851. Lost and Found

5-133. x3-2796.

Port cassette tape rcrdr. Lee, x3-6630.

Brass & wdwind players for participation in perf of orig contempt light jazz, Aug 2. John, x3-2424.

Hiking companion(s) for Switz, sum 75 Mark B. x3-4978.

BR furn apt w/K & B for visiting

Backpack & frame. x8520 Dorm, kp

washer, gd lndlord, \$87.50 + util. x3-1669.

Avail 5/1 want f to share roomy 2nd fl apt in Arl hse w/2 others, own furn rm, nr T & Mass Ave, pref grad stu or working, \$100 + util. Diane, x3-1473.

Want ride MIT-Newton Ctr, 2-2:30 every or any day. Barbara, 527-7205,

x3-1863.

Miscellaneous Wl do typing. Jean, x3-2395.

Nd a couple of dollars? Got an hr? If interested in being subject for psych

Going to Europe? Nd to Irn Fr? Laurie, x3-1814.

area. TCA, x3-4885, to sign up.

Port elec space heater. Call, 484-7275.

possible after their receipt in Person-Persons who are not MIT employees should call the Personnel Office on extension 3-4251.

This list includes all non-academic jobs currently available on the MIT campus.

Employee	25	at	the		Ins	stitu	te s	should
continue	to	co	nta	ct	ti	heir	Per.	sonne
Officers								is fo
which the	y f	eel	they	9	иа	lify.		

Dick Higham	3-42/8
Pat Williams	3-1594
(secretary - Dixie Chin)	
Virginia Bishop	3-1591
Mike Parr	3-4266
Philip Knight	3-4267

 Sally Hansen
 3-4275

 Jack Newcomb
 3-4269

 Evelyn Perez
 3-2928

 (secretary – Mary Ann Foti)

(secretary - Joy Dukowitz)

Ken Hewitt 3-6512 Carolyn Scheer 3-6711 (secretary – Ellen Schena)

Admin. Staff, Sr. Staff Acct. in Energy Lab will assist in all Institute and agency related accounting functions of Lab: develop, implement and monitor contract and general budgets; maintain liaison with Accounting Office and Office of Sponsored Programs; schedule and supervise work of supporting personnel; may assist in initiation and operation of on-line computer accounting system. Extensive experience with MIT accounting, budgeting and contracting policies required. Please submit resume. A75-28 (4/23).

Admin. Staff, director, Development Office will have overall responsibility for MIT's central development services; supervise a support staff of 15 people and report to Director of Resource Planning. Minimum of 5 years professional fund-raising experience is required, preferably in university environment, with emphasis on top-level support functions including prospect identification, evaluation, research, funding strategy development, proposal writing. Demonstrated ability to direct a staff also necessary. (MIT has recently launched a \$225 million, 5 year capital campaign.) A75-27 (4/23).

DSR Staff, Tech. Asst., in Center for Cancer Research will perform research on mouse leukemia virus, including sterile culture of cells, purification of virus and biochemical isolations. Bachelor's degree in chemistry or biology required. Laboratory experience desirable. D75-78 (4/23).

Admin. Staff, temporary, Asst. to Director, Educational Council will provide support in absence of Director to over 1,000 alumni volunteers who recruit and interview potential MIT undergraduates. Duties include extensive written correspondence, some travel, coordination of all Council functions. MIT experience, Bachelor's degree (preferably MIT), or equivalent, communication skill required. Knowledge of admissions, alumni, or student related offices helpful. Temporary through 6/30/76, A75-24 (4/16).

Admin. Staff, Associate Director/ Regional Director Alumni Fund will be responsible for all Alumni Fund and Alumni Assn. programs in metropolitan NYC area: manage NY regional office. Position requires interaction with alumni and corporation executives, MIT faculty and administration, extensive travel to or residence in NYC as well as some other travel. MIT degree or extensive knowledge of the Institute is also necessary. A75-23 (4/16).

DSR Staff Admin. Staff Programming Analyst, Sloan School for E. Campus computer facility: provide programming assistance and other advisory services to users; coordinate student consultants; will have responsibility for implementation, maintenance and documentation of information, administration and pedagogical systems. Knowledge of PL and IBM/OS/370 JCL, Bachelor's degree and 2-3 yrs. programming experience, or equivalent, oral and written communication skill required. Knowledge of FORTRAN, Basic statistical packages, and time-sharing systems desirable. A75-22 (4/16).

DSR Staff, Electrical Engineer, in Lab for Nuclear Science will work on operation and modification of Bates Linear Accelerator rf system. Minimum of 5 years experience in design and operation of high power microwave transmitter systems is required. Experience with digital systems and computer control systems helpful. Flexible work schedule required to accommodate round-the-clock operation. D75-70 (4/16).

DSR Staff, Technical Asst, in Cell Culture Center will perform techniques relating to virus concentration and purification including continuous flow ultracentrifugation. Bachelor's degree required. Some experience in cell culture or virus purification preferred D75-74 (4/16).

DSR Staff, Technical Asst. in Cell Culture Center will work on mass production of animal cells and viruses including growth of a variety of cell types in both suspension and monolayer cultures. Bachelor's degree required. Some cell culture or virus purification experience preferred. D75-75 (4/16).

Admin. Staff, Asst. Director of Personnel Services will assist Director in administration of all areas of non-

academic employment policy and practices including the provision of service to departments and employees through Personnel Officers and Personnel Information functions. Person will act in Director's absence. Bachelor's degree, or equivalent combination of education and experience, specifically in personnel or related administration, human relations skill, ability to develop and apply personnel policy and to supervise a wide span of activities requiring extensive daily schedule are necessary. MIT experience and familiarity with its personnel practices preferred. Please submit resume. A75-21 (4/9).

DSR Staff, part-time, in Center for Advanced Engineering Study will conduct research to evaluate nature and usage of cable TV system. Familiarity with questionnaire design and interviewing techniques required. Masters degree in social science or related field or equivalent experience required. 15-20 hrs/wk. Position in for 7/1/75 through 6/30/76. D75-67 (4/9).

Admin. Staff, Applications Coordinator, in Office of Facilities Management Systems (Planning Office) will develop contact and provide application support for non-Institute users of computerized space accounting system (INSITE); assist in formal education programs given by Office. Familiarity with business systems, facilities management and related computer applications, experience in preparation and delivery of technical presentations, Bachelor's degree or equivalent required. MBA, familiarity with education and health-care administration desirable. Travel is required. A75-20 (4/9).

Admin. Staff, Sr. Applications Programmer, in Office of Administrative Information Systems will assist in development of new and modified programs: program, test, debug; establish file requirements and processing techniques for new systems design; contribute to development of programming and documentation standards program. 3 yrs experience with COBOL or PL/1, knowledge of BAL and financial applications required. Knowledge of 1401 Autocoder preferred. A75-19 (4/2).

DSR Staff in Center for Cancer Research will condust laboratory research on molecular biology of polio virus: make solutions, assay viruses, prepare infected cells; also order supplies and oversee equipment maintenance. Bachelor's degree in Biology or Biochemistry required. Chemistry, Biochemistry or Microbiology experience helpful. D75-62 (4/2).

DSR Staff, temporary in Artificial Intelligence Lab will participate in the design of new learning environments for children and in development of learning theory; design and build equipment; write descriptive material, teach. EE or Physics degree; knowledge of electronics, computers; machine shop experience, ability to design and build prototype control and sensing circuits required. Temporary through 9/30/75. D75-56 (3/26).

DSR Staff in Lab for Nuclear Science (Linear Accelerator Lab, Middleton, MA.) will provide instrumentation development, operation and data handling support for research group in electron scattering and other programs. Strong EE or Physics background at BS level, or equivalent, minimum 5 yrs experience in nuclear instrumentation including Scintillation, Solid State and Multi-wire Proportional Counters, Nanosecond digital and Analogue Electronics, CAMAC required, PDP 11/45 experience helpful. D75-55 (3/26).

Admin. Staff, Area Coordinator, Office of Administrative Information Systems will analyze and resolve problems of an assigned area of operating business system: develop modification specifications for present systems; schedule and control tasks to meet deadlines; direct and coordinate work systems analysts, programmers as required. Oversee testing of changed programs, act as client liaison and as applications programmer as required. Applicants should have business and administrative experience, analytical ability and knowledge of programming. A75-15

Admin. Staff, District Officer, in Resource Development will coordinate volunteer solicitors in major geographic areas. Out of town travel necessary 50% of the time. Familiarity with MIT required for effective representation as well as poise and ease in dealing with people, demonstrated initiative and ability to work independently, good oral and written communication skill. A75-16 (3/26), A75-25, A75-26 (4/16).

Admin. Staff in Joint Center for Urban Studies will conduct research on real estate economics for study and model development of neighborhood evolution and decline. Ph.D., or equivalent, familarity with operations of participants in real estate sector of economy (bankers, insurers, builders, etc.), computer programming ability (preferably FORTRAN IV), experience in data gathering and analysis of real estate sector, willingness to assume design

and implementation of a component of

the overall project required. Position will terminate December 31, 1976. D75-52 (3/12).

DSR Staff, part-time, Tech. Asst., in Arteriosclerosis Center will process plasmas for cholesterol, triglyceride and lipoprotein quantitation procedures; run and maintain Technicon Auto Analyzer I: maintain patient records and run ultracentrifuge. Clinical chemistry and hematology background, ability to work with minimum supervision; previous lab experience desirable. 20 hr/wk. D75-50 (3/12).

Admin. Staff. Director, Office of Administrative Information Systems/ Assistant Director, Information Processing Services will have overall responsibility for operation of 70-employee office which provides information systems services to MIT administrative offices: oversee the delivery of timely, accurate reports to clients; interact with client offices on the development, implementation and design of new systems. Ability to identify and resolve problems in service environment, demonstrated skill in management of medium-sized organization required. Familiarity with MIT administrative environment and understanding of computer and information systems desirable, Please submit resume. A75-13 (3/5).

DSR Staff, Economist/Econometrician in Energy Lab will participate in projects on development and application of models of domestic and international energy production and utilization: develop and apply econo-metric procedures to estimate parameters of simultaneous equation energy models; assist in model formulation and development of energy data and accounts in US and other industrialized countries, supervise junior staff and students, perform related duties as required. Ph.D. Economics, specifically mathematical economics and econometrics, experience in application of functional specifications, such as translog and generalize leontief, familiarity with economic accounts of at least one foreign industrialized country required. D75-48 (3/5).

DSR Staff, temporary in Project MAC Planner Group will write and implement programs in PLASMA and LISP. Experience in these languages required. Position runs Sept.-Dec. 1975. S75-1 (2/26).

DSR Staff, Electrical Engineer, in National Magnet Lab, will perform daily operation of Low Field Lab: maintain sensitive magnetic detectors and display equipment, design and construct new equipment, perform human body measurements. Laboratory-oriented person withknowledge of low frequency electronics, and experience with magnetics and cryogenics is desirable. Candidate should be able to work with hospital patients and to do occasional evening and weekend work. 50 hr/wk. D75-7 (1/22).

DSR Staff, Biophysicist, in National Magnet Lab will supervise day-to-day magnetic fields produced by the human body are measured, perform specific lab measurements, design lab equipment. Experience with low-frequency electronics, magnetics, heart and lung physiology required. Must be available for occasional evening and weekend work. 40 hr/wk. D75-8 (1/22).

Admin. Staff, Sr. Consultant Trainer, in Office of Personnel Development will have responsibility for planning, design and follow-up services related to training workshops, organization development; perform professional, management and support tasks as a participating team member. Must be knowltion development, career development, adult education, process-oriented group work with adults, and applied social science survey research. Applicants will present 1-2 hour training activity, including written proposal and for staff evaluation. Report, proposal and process documentation writing skill. Master's degree in behavioral science plus facilitation experience required. Knowledge of MIT. academic institutions helpful, A75-1

DSR Staff, in Joint Center for Urban Studies will be principal researcher on development of computer-based manpower information system for construction industry, ability to supervise program development and operational system required. 74-1484-R (1/8).

Subcontract Administrator, Assistant Director in Office of Sponsored Programs will work with project personned in negotiating complex subcontracts; prepare Requests for Bids; review quotations; arrange for preaudit of proposed costs and negotiation of active awards. Bachelor's degree in Business Administration or equivalent combination of education and experience, subcontracting experience in government agency or university environment, knowledge of procurement regulations of government agencies required. 74-1403-R (11/27).

DSR Staff, at the National Magnet Laboratory will work on the Alcator thermonuclear experiment. Conceive, design, and carry out plasma diagnostic experiments using neturon, X-ray, optical, electrical, magnetic and microanalysis and assessment of data. Ph.D. in plasma physics or related area required. Familiarity with tokamak devices desirable. 75-1512-A (1/8).

DSR Staff, in the Energy Lab must have minimum of 5 yrs experience in defining, securing, organizing and supervising research in heat transfer related to energy production and utilization. Familiarity with MIT; experience in supervising student theses, research and staff; Ph.D. in Mechanical Engineering required. 74-359-A (5/1).

DSR Staff, Engineer, in the Energy Lab will do experimental research in stratified charge internal combustion engines: design, construct and maintain experimental facilities and conduct basic experiments and data analysis with single cylinder test engine and rapid compression machine. BS in Mechanical or Aeronautic Engineering, some practical experience with mechanical systems and workshop practice required. D75-30 (2/29).

DSR Staff, Programmer in Clinical Decision Making Group, Project MAC will supervise construction and clinical testing of computer system to advise physicians regarding the administration of digitalis. Familiarity with pharmacokinetics of digitalis and its clinical administration, general and medical knowledge including cardiovascular physicology, thorough knowledge of LISP 1.5 and ITS operating system required. D75-19 (2/5).

Technical Assistant, Acad. Staff, in Nutrition and Food Science, will perform specialized and routine chemical analyses on body fluids; operate and maintain mass spectrometer, Bechman automated amino acid analyzer; assist in new methodology development; occasionally supervise other lab personnel. BS, chemistry, biology or medical technology and minimum 2 years experience in clinical chemistry required. C75-4 (2/5).

Exempt, Dormitory Mngr, in Campus Housing will have responsibility for overall functioning of housing unit including supervision of staff and support personnel, assisting in establishment and monitoring of operational budgets, planning of long-range house-keeping and maintenance programs. High school graduate, or equivalent, 3 yrs experience in employee evaluation and supervision, basic knowledge of accounting procedures, experience in large building housekeeping required. E75-11 (4/23).

Admin. Asst., Exempt, in Aeronautics and Astronautics will coordinate repair, maintenance and replacement of experimental equipment, organize and manage funds for repair and maintenance of workshop equipment in several dept. locations; assist in laboratory organization; coordinate space allocations, plan and oversee space renovation. Engineering background, preferably plant engineering, knowledge of MIT operations, administrative skill required. Familiarity with OSHA regulations also necessary. E75-10 (4/9).

In-Patient Staff Nurse, Exempt in Infirmary will do bedside nursing and may assist with emergency and first aid treatment. Mass. licensed RN with 2 yrs experience in medical/surgical nursing required. First-aid or emergency clinic experience desirable. Must be able to work all shifts and weekends on rotating basis. (40 hours) E75-5 (3/5).

Clinic Nurse, Exempt, in Emergency Clinic will evaluate and treat patients, administer first aid and admit patients as necessary. Mass. licensed RN with 2 yrs clinic experience, preferably in emergency room, required. Expertise in physical assessment desirable. Must be able to work permanent evenings (4pm-12am) and rotate all weekend shifts (40 hrs). E75-6 (3/5).

Engineering Assistant, Exempt in the National Magnet Laboratory will set up experiments and take measurements of magnetic fields produced by humans and animals. Will work with hospital medical groups. Experience in biomedical research. Strong experience in low frequency electronics; knowledge of magnetics and cryogenics required, Flexible schedule necessary for occasional evening or weekend work. 74-1033-R (8/28).

Tech. Asst. IV part-time, in Psychology Dept. neurophysiology lab will be involved in mammal motor control and coordination research. Primary duty is care, feeding and training of animals; will also manufacture testing equipment, assist in laboratory procedures, in data analysis and in general upkeep of lab. Familiarity with elementary electronics and digital logic helpful. High school graduate, or equivalent required. 30 hr/wk. B75-79 (3/5).

Secretary V to Director and other professional staff, Planning Office: compose correspondence independently and from verbal instruction; organize meeting agenda; edit manuscripts including verification of content through varied source; errange luncheon, dinner meetings without supervision; manage busy appointment schedule; assist other secretaries in routine office duties. High school graduate plus

5 years secretarial experience or equivalent combination of education and experience, ability to use dictating equipment and to work without supervision required, B75-141 (4/9).

Admin, Asst. V in Lab for Nuclear Science will handle secretarial and administrative duties for 40-member research group: type technical material, reports; arrange travel; maintain files; proofread articles for publication. Position requires travel overseas and to other US facilities (NY, Illinois) for varying durations. Applicants should be able to speak and write German or French fluently. B75-112 (3/26).

Secretary V in Resource Development will take and transcribe dictation; maintain busy calendar; schedule meetings; make travel arrangements, maintain files, supervise part-time secretary; independently organize and carry out varied projects including research of topics. Minimum of 2 years experience, shorthand, organization skill required. College training desirable. B75-114 (3/26).

Secretary IV in Biology, will work with faculty and research group: perform standard secretarial duties including typing scientific manuscripts and course material, monitoring accounts; order supplies; act as liaison with other groups and departments. Typing, organization skill and ability to use dictation equipment required. Shorthand helpful. B75-161 (4/23).

Secretary IV in the Energy Lab will work with students and staff of Energy Information Group: perform general secretarial duties which include correspondence and technical typing, maintaining files, travel arrangements and monitoring of sponsored research accounts. Ability to work independently required. Secretarial school training and MIT experience desirable. B75-157 (4/23).

Secretary IV to Civil Engineering faculty members will perform varied duties relating to teaching and research activities including typing of general and technical material, answering some correspondence independently; preparation of material for publication; arranging symposia; will also be trained to type on computer terminal, and have responsibility for operation of Documents Center. Excellent typing, ability to set priorities required. Knowledge of Institute procedures helpful. 40 hr wk. B75-162 (4/23).

Secretary IV-V in Harvard-MIT Program in Health Sciences and Technology will handle varied office duties; type correspondence, proposals; organize symposia and seminars; prepare budgets; administer contracts. Experience in budget and contract maintenance, high level of secretarial and organizational skills required. Nonsmoking office. B75-125 (4/2).

Secretary IV to Administrative Officer in Civil Engineering will respond independently to inquiries on behalf of the AO; prepare and maintain several payrolls including allocations to various accounts; advise secretarial personnel of procedures, and maintain confidential records. Good typing skills and ability to deal with figures required. Must be able to interact with departmental personnel and students. Knowledge of MIT procedures helpful. B75-145 (4/16).

Secretary IV in Medical Department, Psychiatry Service, will work for two full-time psychiatrists and share secretarial work with other secretaries for part-time psychiatric staff. The position requires answering telephones, scheduling appointments, arranging meetings, transcribing case histories, typing papers, making all travel arrangements and maintaining files. Experienced secretary, maturity and ability to work under pressure required. 37½ hr work. B75-1.47 (4/16).

Secretary IV to Nutrition and Food Science faculty member involved in research on malnutrition, learning and behavior will perform standard secretarial duties including shorthand, typing, filing, machine dictation. Secretarial school training or equivalent experience required. Knowledge of medical/biological terminology helpful. B75-152 (4/16).

Secretary IV to faculty member and research staff in Urban Studies and Planning will perform varied secretarial duties including technical typing, editing; maintain expense records on accounts; maintain computer lists by keypunching. May do occasional library research and contract administration. Technical typing skill, keypunch ability (or willingness to learn) required. Shorthand skill preferred. Economics background helpful. Nonsmoking office. B75-130 (4/2).

Secretary IV to faculty members in labor management section of Sloan School will assist in all matters relating to operation of the section: schedule and publicize seminars and conferences; publication distribution; mainte-

(Continued on page 8)

Positions Available

(Continued from page 7)

nance of section contribution and alumni records; perform other varied duties relating to research programs. Discretion, ability to work independently and to interact effectively with all members of working group, excellent secretarial skills, including shorthand and machine transcription re-MIT experience desirable. B75-138 (4/9).

Secretary IV to Associate Director, Systems Dynamics Group: type and edit correspondence, manuscripts from handwritten and machine dictation; maintain files; arrange travel and appointments; research subjects as required. Excellent typing, organiza-tion skill, command of English grammar and minimum of 2 yrs secretarial experience required. Shorthand/ speedwriting helpful. B75-121 (3/26).

Secretary III-IV to two Civil Engineering faculty members will type correspondence and technical answer phones; maintain files and supplies; make travel arrangements. Technical typing skill preferred. B75-155 (4/23).

Secretary III-IV to a Center for Space Research program manager and other members of research group will type correspondence and technical material, answer phones, make travel arrangements; maintain files and supplies; assist other secretaries as required. Secretarial school or junior college training, or equivalent, required. Technical typing experience also necessary. B75-140 (4/9).

Secretary III, temporary, in Lab of Architecture and Planning will work with architectural education research group: perform general secretarial duties including typing correspondence and reports; establish and maintain files; schedule appointments, arrange travel; sort and file mail. Accurate typing required. Temp. to Jan., 1976. B75-158 (4/23).

Secretary III, part-time, in Sloan School will assist research group involved in computer projects: perform standard secretarial duties including typing technical material, answering phones, handle payroll procedures, arrange travel and meetings. Good typing skill required. Approx. 16-20 hrs/wk. B75-148 (4/16).

Secretary III to the Superintendent for Engineering and Construction in Physi-Plant will perform general secretarial duties: handle general telephone inquiries; schedule meetings; maintain correspondence files; type blueprint specifications and project reports. Will also type for members of the Engineering and Construction group. Excellent shorthand, typing skills, ability to work independently and previous ofexperience required. B74-139 (4/9).

Secretary III support of group secretary. Will handle various secretarial duties, including typing of technical papers and correspondence, answering telephones, acting as receptionist, filing, etc. Some typing on IBM Mag-Card and computer terminals, though previous experience not necessary. Good secretarial skills, high school training with at least one year of secretarial experience, or secretarial school graduate of a one or two-year cource. Dorothy Petrovich, x7305

Library Asst. IV in Institute Archives will process theses and monographs, perform bibliographic research general reference maintain files. Accurate typing, organization and memory skills, ability to without supervision required. College background and library experience preferred. B75-156 (4/23).

Lib. Gen. Asst. III-IV part-time in Earth and Planetary Sciences will levelop and maintain of filing systems for publications and other library materials: trace lost items; monitor condition of materials. Position is normally for 1 day per week, but flexibility to work full-time for 2-3 week intervals to complete special projects required. B75-131 (4/9).

Lib. Gen. Asst. III part-time, will have responsibility for circulation/reserves desk 2 evenings per week, and handle other varied library duties in daytime hours (process reserve materials, file, correct catalogue cards, etc.). Ability to handle demands and pressure at public desk, typing skill required. Library experience desirable. 18 hrs/wk: 2 evening, 5:30-11pm, plus 7 add. daytime hours to be arranged. B74-127 (4/2).

Sr. Clerk IV-V, Accounting Assistant in Sponsored Accounting Section, Comptrollers Office, will tabulate sponsored project research expenditures and cash flow; collect forecast data; maintain daily balances; prepare monthly billings and fiscal reports. General business background plus 2-4 yrs accounting

experience required. Typing skill desirable. B75-99 (3/12).

Sr. Clerk IV in Mathematics Undergraduate Office will have responsibility for maintenance of accurate records of information to faculty and students, typing technical and general material; handle class scheduling, telephone and reception duties. Organization skill, ability to work as a group member required. Non-smoking office. B75-149 (4/16).

Sr. Clerk III-IV in Office of Administrative Information Systems will type data processing documents and memoranda involving specialized terminology from rough copy, perform general clerical duties as required, and maintain documentation library files and records for programmer references. Excellent typing skills and ability to work independently required. Data processing experience helpful. B75-146

Clerk-Typist II in Admissions Office to open and sort large volume of mail; file; type and answer phones. Ability to read quickly and accurately, good memory skills, some office experience necessary. Position requires considerable amount of standing at files. B75-143 (4/9).

Tech. Typist II-III in Comptrollers Acctg. Office, Transfer Voucher Section, will type various accounting and other reports, use adding and mimeo-graph machines. Typing skill and ability to operate above equipment required. B75-94 (3/12).

Technical Typist III, part-time in Chemical Engineering will type reports, manuscripts, proposals from rough drafts and with use of word-processing equipment. Excellent typing, organization and grammatical skill, technical typing (or willingness to learn), neces-Work will be coordinated by secretarial supervisor. Morning segment of job-sharing position. 15-20 hrs/wk.

Nurses' Aide III, biweekly, in Medical Department will assist nurses and physicians in delivery of patient care: maintain supplies, stock examining rooms, clean and autoclave instruments and equipment; provide assistance to physicians and nurses in medical procedures; may schedule appointments and assist with clerical recordkeeping. Previous experience as an aide preferred. B75-154 (4/16).

Messenger II, in Comptrollers Acctg. Office will sort and deliver mail to accounting and payroll offices, and make two daily delivery trips to other campus locations; perform other messenger duties as required. A dependable individual is required. B75-160 (4/23).

Detailer, hourly, temporary in Center for Space Research, Lab for Space Experiments, will perform detailing of mechanical units from layout drawings; assemble components to illustrate relationships and functions; will also do block diagrams, schematics and some printed circuit layouts. Two-year technical school graduate, or equivalent, plus minimum two-years applicable experience required. hr/wk. Temporary for 3-4 mos. H75-46

Technician A in Energy Lab will assist in materials testing, construction and operation of coal conversion test facility. Position requires ability to construct test specimens and models, perform analyses of samples from test rig, including corrosion, stress rupture, x-ray diffraction and interpretation, metallography, fabricate ceramic parts by sintering, hot pressing, flame spraying and raw material preparation. 8-12 yrs experience as technician desirable. 40 hr wk, 8am-4:30pm. Occasional night work. H75-34 (4/2).

Tech A (E-M), for the Radioactivity Center will assist in laboratory, research or analytical work; operate technical experimental apparatus. Maintain electronic equipment associated with controlled low-background facility, breath radon, thoron equipment. Troubleshoot nuclear pulse instrumentation, construct, wire, per-form routine tasks associated with measurement of subjects and administration of laboratory, Strong back-ground in pulse and digital circuits; experience in use of oscilloscopes and test instruments required. 74-922-R (12/18).

The following positions have been FILLED since the last issue of Tech

Talk:	
74-1318-A	DSR Staff
B75-100	Sr. Clerk IV
B7-117	Secretary III
74-1428-A	DSR Staff
D75-57	DSR Staff
B75-122	Secretary III
75-142	Secretary IV-V
74-1358-R	Admin. Staff

The following positions are on HOLD

Sr. Detailer H75-43 Clerk-Typ. III B75-126 Secretary V B75-98 B75-137 **DSR Staff** D75-69 D75-58 **DSR Staff** D75-65 E75-8 Exempt

New Greenhouse Includes Plant Clinic

(Continued from page 1) which is fitted with overhead grow

In a nursery area, the gardeners are rooting about 200 pachysandra cuttings to be planted outdoors later this season. There are also several Norfolk pines (Araucaria excelsa) and a series of tuberous begonias, dormant up until a month ago, that are sprouting again under the lights. Now that there is a greenhouse there is an easy means to rejuvenate the plants annually, rather than throw them away.

spent a cent. So, instead of buying

plants, we hope to use this area as a recycling center for the plants we have."

On the other side of the room there are four tiers of platforms arranged with plants in all stages of recovery-a plant clinic. The pots are filled with "resting" poinsettias (Euphorbia pulcherrima), spider plants (Chlorophytum elatum)-once located in Building 13-ferns from the Building 18 planters, and a now vital "fig" (Ficus benjamina) that arrived leafless from Walker Memorial.

There are also assorted Dracaena, palms, an avocado plant someone asked to have revived, a spathiphyllium with a white bloom and two tree philodendrons (Philodendron bipinnatifium).

working on a Diefenbachia tree and an India Rubber tree (Ficus elastica) to obtain air layer cuttings. This entails cutting a notch in a large plant stem, covering the exposed area with hormones, tying a cellophane bag filled with sphagnum moss around the notch and keeping it moist. When the bag fills with roots from the cutting, the stem can be severed from the mother plant and replanted.

technique also will be used for propagating rhododendrons for planting in Killian Court and elsewhere around the Institute. "Rhododendrons cost \$35 each and the way the bushes are succumbing to a large-scale blight of borers, it may be the only way we can keep up with the problem of replacing them."

Burlington

Resource Recovery From Wastes-A project on the recovery of nonferrous metals will involve testing and modifying existing equipment which uses electromagnetic forces to separate non-ferrous metals from mixed solid waste or auto scrap. The project will have

ity), and user acceptance. Pay available.

Cambridge Collaborative is studying new application of continuum mechanics to the measurement of pulmonary function in infants and adults. The aim is to develop new non-invasive measures of pulmonary function which will yeild information that has been inaccessible with conventional techniques. Opportunities are available for undergraduates to study fluid flow and propagation in the upper airways, respiratory mechanics, and physiology, mechanical design of devices to couple external instrumentation to the airways of adults and infants, data acquisition and processing systems, and development of a clinical protocol for data acquisition from infants. Credit only during spring term with funding possibly available for summer and

Veterans Administration W. Roxbury, MA

The Research Director of the Massachusetts Chapter of the Association of Paralyzed Veterans of America would like to talk with an undergraduate student who would like to become involved in a study of how wheelchair design and construction materials can be modified. The research director, a quadraplegic himself, wants to reduce the weight of a chair while maintaining strength at stress points. The research would include an analysis of what disabled persons don't like about present designs and a modification of materials and design to lighten a chair. Credit available, funding a possibility.

MIT Club Notes

Thurs, May 1, 5pm, Rm 7-403. Agenda includes business, new members, speakers. All are

A'nanda Ma'ga*-Meditation classes Tues, 1:30-3:30pm, Stu Ctr Rm 407 and 8-10pm, Rm 36-153; Wed, 10am-12n, Stu Ctr 407.

be very active this term, with regular workshops, lessons & dances. For specific info watch for signs, or call Pete "Twinkle-Toes" Travis, 536-1300.

Bridge Club*-ACBL Duplicate Bridge. Open pairs Tues & Thurs, 7pm, Stu Ctr Rm 473. Jeff,

MIT/DL Bridge Club**-ACBL Duplicate Bridge. Tues, 6pm, Stu Ctr Mezzanine Lge.

MIT Exotic Fish Society*-Meeting Thurs, Apr 24, 7:30pm, Stu Ctr Rm 002. New members

Goiu Karate Club*-Mon, Wed, Fri 7pm, Stu Ctr Rm 491. Beginners welcome.

needed. Rehearsals are Sun, 4-6pm, Stu Ctr Rm 407. Those interested are encouraged to attend.

MIT Guild of Bell Ringers**-Change ringing done on tower and handbells; tune ringing on handbells. Change ringing Tues, 7pm, Church of the Advent, Bos; Thurs, 6:30pm, Senior Hse (crafts, 1st fl); tune ringing Sun, 7pm, Senior Hse. Info: Ruth Cross, x0669 Dorm.

Hobby Shop**-Mon-Fri, 10am-6pm, Rm W31-031. Fees: \$10/term for students, \$15/ term for community. Info, x3-4343.

MIT Karate Club**-Shotokan style. Classes Mon. Wed. 8-10pm, duPont Wrestling Rm; Fri,

MIT Kung Fu Club*-Instruction in the art of

MIT Numismatic Society*-Wed, 7pm, Theta

MIT Outing Club*-Mon & Thurs, 5-6pm, Stu Ctr Rm 461.

MIT Scuba Club**-Election of next year's officers Thurs, Apr 24, 8pm, Rm 20E-017. Sign up for boat dive at meeting or pool. Compressor hours: 4-6pm, Mon & Fri.

and discounts on merchandise to members plus gaming and periodical library. Info: Steve Simmons, x8265 Dorm or Gary Brennan,

Student Homophile League*-Meetings 1st & 3rd Sun of the month, 4pm, Rm 1-132, Info. talk, help in coming out, call Tom at the Hotline, x3-5440. Come on out-the water's fine!

vanced classes. Tues, Thurs, 5-7pm, Stu Ctr

Tau Beta Pi***-National Engineering Honor Society. Sun, Apr 27: Initiation of new members 1:30pm, Rm 37-252, followed by election of new officers; Banquet at Su Shiang, 158 Prospect St, Cambridge, 7pm. Reservations due in Rm 38-476 by Fri, Apr 18. Info: x8635 Dorm.

ing new projects & our trip to Talbot House Tues, Apr 29, 7:30pm, Stu Ctr Rm 450. Refreshments.

Tech Model Aircrafters*-Contest in duPont Gym. Sat, May 3, all day.

basketball. Sun, 1pm, in front of Stu Ctr. Beginners welcome. Info: come, or call Mike, x0680 Dorm.

MIT Wheelmen*-Meetings Tues, 7:30pm, Rm 1-203.

Religious Activities

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

Baha'i Discussion Group*-Thurs, 7-9pm, Rm 8-105. Dale, 354-1907. Of Special Interest: Thurs, Apr 10 & Mon, Apr 14, Laura Lupsewicz, MIT employee and sec'y of the assoc, will show slides of her recent pilgrimage to Israel. 7pm, Rm 8-105. Refresh-

Campus Crusade for Christ/College Life*-

Christian Science Organization*-Weekly meetings, including testimonies of healing. Tues, 7:30pm, Rm 8-314.

Hillel Services*-Fri: Traditional 6:15pm, Kosher Kitchen; non-Traditional 8:30pm Chapel. Sat: Traditional 9am, Chapel.

Interdenominational Holy Communion Service-All members of the Institute welcome. Wed, 5:05pm, Chapel. Revs Parvey and

MIT Islamic Society*-Congregational pray-

MIT Latter Day Saint Student Association*-Truman G. Madsen, Richard L. Evans Endowed Chair of Christian Understanding at Brigham Young University, will speak on "The Mormon Approach to Religious Experience." Thurs, Apr 24, 4pm, Braun Rm,

class led by Miriam R. Eccles. Fri, 1-2pm, Rm

Prophets*-Wed, 12n 2nd f1 seminar rm, Bldg W2. Bring lunch, drinks provided. Discussion of Old and New Testament Prophets.

12:15pm & 5:15pm; Tues & Thurs, 5:05pm; Fri, 12:05; Chapel.

United Christian Workship Service*-Sun, 10:45am, Chapel.

United Christian Fellowship*-Sunday school and nursery for infants and children during United Christian Worship Service. Sun, 10:45-12n, Stu Ctr Mezzanine Lge.

Vedanta Society*-Services Fri, 5:15pm Chapel. Swami Sarvagatananda will lead

INSTITUTE **NOTICES Announcements**

OFFICIAL NOTICE FINAL EXAMINATIONS

All students should obtain an examination schedule at the Information Center, 7-111.

Examinations not listed or a conflict in examinations, such as two examinations in the same period, must be reported to the schedules office by Friday, April 25.

Nominations Committee—Hearings on Thurs, Apr 24. Contact appropriate chairperson if interested, and call UA secretary for appointment, x3-2696. Committee on Discipline: 7:15pm, Judith J. Thomson, x3-4457. Committee on Academic Performance: James L. Kinsey, x3-1488, x3-5922.

Freshman Advisors -The Freshman Advisory Council is seeking people to be freshman advisors for 1975-76. Interested faculty, staff, and graduate students are encouraged to contact the FAC Office, Rm 7-103, x3-6771.

Funds Relief Drive-APO & Vietnamese Students Assoc will sponsor a Funds Relief Drive to help South Vietnam refugees. Booth will be in Bldg 10 Lobby Wed, Apr 16-Fri, May 9,

Basic Pistol Marksmanship Course-Open to adult members of MIT Community. 5 Thurs sessions, beginning Thurs, Apr 24, 6:30pm, duPont Pistol Range. Fee: \$15, covers ammo & equipment. Registration: Tom McLennan, x3-3296 or Andy Platais, x8-1417 Draper. If interested in small bore rifle shooting contact Andy Platais.

Course VI Steak Fry*-Sponsored by EE & CS Stu-Fac Committee. Featuring steak, baked potato, cole slaw, bread, beer, soft drinks. Thurs, Apr 24, 6pm, Bldg 13 Lobby. Admission \$3.50. Info: Mei Mei Wang, Rm 38-476.

Associate Advisors—Any student interested in working with a freshman advisor should stop by the FAC Office, Rm 7-103, to pick up and fill out an information sheet.

New UROP Listings

For more detailed information on UROP opportunities listed, MIT undergraduates should call or visit the Undergraduate Research Opportunities Program Office, Room 20B-141, Ext. 3-5049 or 3-4849 unless otherwise ecified in the listing. Undergraduates are also urged to check with the UROP bulletin board in the main corridor of the Institute.

Arthur D. Little Cancer Chemotherapy-The goal of this project is to devise ways of increasing the therapeutic effectiveness of drugs by decreasing their toxicity. It has long been known that body temperature can profoundly affect the pharmacologic/toxicologic resonses to drugs. Laboratory animals will be administered a clinically used drug during hypothermia, and the survival compared to uncooled animals. A second group of animals will be given a malignant tumor and the same protocol followed to determine the degree of enhanced therapy of

Location of Catheters-To measure pressures and atmospheres within the lung, it is necessary to implant catheters in selected airways. This project is directed at developing a precise method which is rapid and does not depend upon digital palpation or use of x-ray. for locating the end of the catheter or the wire.

Foxboro Company Foxboro, MA The first project can take place at MIT while the second requires Foxboro facilities. Automatic Patching of Analog Computers/ Programming-This study has the objective of conceiving, developing and debugging digiautomatic patching system for an anlog

tal computer programs and routines in Hybrid Fortran, that will enable an experimental

B75-136

Secretary IV-V

pending final decision:

Secretary III-IV

lights and papered with plastic to retain moisture.

"Pachysandra usually go for a dollar a pot and the begonias for even more," Mr. Pickard said. "For our first try we are having great success and we haven't

The gardeners are currently computer model EAI 680 to be controlled and commanded from a Teletype terminal of a digital computer model EAI 640. Automatic Patching of Analog Computers/Performance Evaluation-The aim of this research effort is to evaluate an experimental automatic patching system for an analog computer Model EAI 680, from the point of view of simulation performance, electronic signal integrities, sufficiency in patching (interconnectiv-

Ratheon Service Co.

practical significance and the results will be considered in the design of full-scale recovery Cambridge Collaborative

Hospital

Alternative Energy Interest Group*-Meeting welcome. Wine & cheese.

MIT Ballroom Dancing Club**—The club will

MIT Gospel Choir**-Members and musicians

6-7:30pm, T-Club Lge. Beginners welcome

Chinese boxing, Northern Praying Mantis style, Classes Tues, Thurs, 7-9pm, Stu Ctr Rm 407. Visitors welcome. Info. Dave Smith,

According to Mr. Pickard this

Delta Chi (372 Memorial Drive.).

Strategic Games Society-Offers opponents

MIT Tae Kwon Do Club**-Beginner and ad-

TCA General Meeting**-Discussion of find-

MIT Unicycle Club*-Unicycle riding &

MIT Women's Chorale**-Wives and working members are encouraged to join. Thurs, 8pm,

Family time, singing, prayer, teaching from God's word. Fri, 7:30pm, Rm 37-252.

Mon-Fri, Minyan 7:30am, Rm 7-102.

ers Fri. 3:15pm, Kresge rehearsal Rm B; discussion session Sat, 4pm, International Stu Lge (2nd fl Walker). Refreshments.

Harvard Divinity School. Refreshments. Prayer Time**-Lunch hour prayer and Bible

meditation & Gita discourses.