Massachusetts Institute of Technology

January 15, 1986
Volume 30, Number 18


## Early deadline

Because of the first national observance of Dr. Martin Luther King Jr.'s birthday,
the Institute will be closed Monday, Jan. 20. That means the deadline for listings in next week's Tech Talk-Notices, Calendar and Ads-has been moved for ward to noon Thursday, Jan. 16.
Also, Tech Talk will not be published January 29 because of the hiatus between IAP and the beginning of the second term. The Calendar in next week's paper will cover the period from January 22
through February 9. Remember: early through Fe
deadline.

## Wiesner talk

The National Academy of Engineering will present its third Arthur M. Bueche luncheon on Tuesday, Jan. 21, in the Bush Room.

Dr. Wiesner will receive the award in a special ceremony during a northeastern regional meeting of NAE members. Members of the faculty and administration will be among the invited guests at the meeting, at which Dr. Wiesner will give a talk.

The Bueche award recognizes achievements in statesmanship and active contributions in the fields of science and technology, public policy and the active
inter-relationship of universities, govern-inter-relationship of universit
ment and the private sector.
Dr. Wiesner, president emeritus and Institute Professor at MIT is being recognized for his many contributions to reduce the risks of nuclear war through his efforts on the Atmospheric Test Ban Treaty and other arms reduction initiatives, and for high-level leadership in tives, and for high-level leadership in federal and academic engineering, science and technology programs.

## New T route

The MBTA has inaugurated a new bus route, Route 79, that operates between Alewife Station and Arlington Heights. Heights-Harvard) and 350 may use the Heights-Harvard) and 350 may use the Line. Because of the new route, frequency on Route 77 has been decreased.
The T also announced an additional inbound trip at $3: 45 \mathrm{pm}$ on Route 350 (Burlington Line to Alewife).

## Athena Funds

The next deadline for submission of software and curriculum development 1,1986 for funding to begin in June 1986. Please call Charla Scivally on x3-1300 for copies of the guidelines for proposals explaining the funding process.

## Replies wanted

Remember the questionnaires on career development circulated to support staff members last fall? The Working Group on
Support Staff issues is hoping more of you Support Staff issues is hoping more of you important in recommendations the Working Group makes to the MIT administrationing Group makes to the MIT administration. Group says "thanks." If you need a new Group says thanks. If you need a new copy to fill out, you can get one at the
Working Group's Open House in the Bush Working Group's Open House in the Bush day, $1-2 \mathrm{pm}$. Or you can call $\times 3-3386$ and day, will be dispatched right away.


## Alumnus, project ride Columbia

The space shuttle Columbia, launched Sunday, Jan. 12, earries an MIT alumnusthe first Hispanic American to fly in space the Department of Materials Science and Engineering at MIT,
The alumnus astronaut is Dr. Franklin R. Chang-Diaz, who received the PhD in applied plasma physics from the Department of Nuclear Engineering in 1977, the same year he became an American citizen. Dr. ChangDiaz is a visiting scientist at the Plasma Fusion Center.
The materials experiment was developed

## New 'black hole

Aursts ink massive object, which occasionally bravis into x-ray brilliance and is bound gravitationally to a faint red star in the
Constellation Monoceros, has been identified as a probable black hole. If it is, it would be only the third so far found.
The discovery was announced by Dr. Jeffrey E. McClintock of the Harvard-Smithsonian Center for Astrophysics and the MIT Depart ment of Physics and Dr. Ronald A. Remillard, a research staff member at the MIT Center for Space Research, at a meeting of the American Astronomical Society January 7 in Houston. They said the probable black hole is the nearest to Earth and the first to be linked with a dwarf star in a binary system.
AO620-00 made over a four-year period nova AO620-00 made over a four-year period have revealed that the x-ray eruptions are produced
by a binary system in which one member is a dwarf star and the other the probable black

## New telephon <br> <br> (continued on page 3 ) <br> <br> (continued on page 3 ) <br> New telephones coming in '88 <br> \section*{campus. In many cases existing telepho}

Flemings, head of the Department of Materials Science and Engineering and Toyota Professo of Materials Processing, and Dr. Yuh Shiohara, research associate in the Materials Processing Center. It involves levitation melting of a nickel alloy and is designed to examine the effect of zero gravity on undercooling and solidification. Graduate students Thomas J. M. Dean Dellinger and Anthony L. Owens are participating
The New York Times profiled Dr. Chang in a "man-in-the-news" piece in the January 13 issue under the headline "A Dreamer in Space."

## continued on page 3

believed found hole with a mass at least three times that of
the sun, they said. During outbuirst, stellar material is drawn from the dwarf companion and falls into the gravitational well of the probable black hole, producing more energy than 10,000 suns, the announcement said.
According to current theories, a black hole is a stellar remnant formed by the explosion of a star many times the size of the sun. When the star's outer herements are blow away lopen the then core coll mass is greater than the limit that can be supported as a stable neutron star gravity continues to compare the matrat even light can escape
field field.

If the otherwise invisible black hole is part may detect itstem, however, x-ray astronomer may detect its presence by observing the high

There's a new telephone system in MIT's future, but don't hold your breath. The sc uled operational date is June 11, 1988. What is coming is a $\$ 16$ million state-of-thewhich will permit, among other things, simulta neous voice and data transmission. The new system also will unite the two main existing systems-Centrex and the dormlines-as well as integrating some remote small systems, according to Morton Berlan, director of telecommunications systems.
The new system will be the first to use an Integrated Services Digital Network (ISDN) software program now being developed. The software, which will be tested late in 1986 by Illinois Bell Telephone will permit worldwide connections for voice and data.
Though the 'cutover' date for the new system seems distant, work on the installation has already begun, Mr. Berlan said. The first step is making an inventory of the telephones now in use. This is being carried out by AT\&T people who are moving west to east across the
will be compatible with the new system. Also this year work will be done on the expansion of the duct system and connecting the now-unconnected buildings. MIT will buy England Telephone as well as put in new wire where necessary. Three major switches-on East, Main and West Campus-will be installed to provide for economy in distribution. In 1987 the focus will be on what kind of equipment and service MIT people want and need. All of the existing services and some new ones will be available and people will select those they want. Later in the year new equipment will be delivered and installed so that the campus will be ready for the 1988 change.
The last major telephone change was the installation of Centrex in 1972, Mr. Berlan said. MIT will own the new system, rather than continuing to rent from New England Telephone, which should offer economy as well as improved service.

## Twelfth King Celebration to begin at noon <br> Martin Luther King Jr.'s assassination was

 a turning point for many, including Dr. Shirley Ann Jackson, a research physicist at Bell Laboratories and thereceive a PhD at MIT.
Dr. Jackson will be the featured speaker at the Martin Luther King tribute today (Wednesday,Jan. 15) at 12:30 pm in Kresge Auditorium. On April 4, 1968-the day King was slainDr. Jackson, then an MIT senior, was visiting the University of Pennsylvania where she had been offered a fellowship for graduate study.
"But when King was killed, this totally threw me off," she remembered. She decided to remain at MIT to work at improving the environment for minorities-particularly blacks.
"Martin Luther King's death triggered guilt at the Institute and in the country," she recalled. "There was a feeling that there should be change. His death pressured many to change," she said
Dr. Jackson and a handful of other black students-there were about 10 black American undergraduates-got together to work for change. Their chief aims were to increase the number of minoriti
"A number of students were not friendly," she recalled. She remembered times in the the table once she sat down. Or, if she had choice seat in the lecture hall no one would sit next to her.
The group, the forerunner to the Black Student Union, met with the administration and presented demands which included in creasing the number of black students, faculty and administrators. They negotiated with Paul E. Gray

Don't think everybody was smiling, eating cheese and drinking wine. There were groups of black students who were scared to be in the process. Students were not militant then bu gradually became more so," she said.
Change came slowly after several meetings. The number of minority students grew
"That summer one Native American and five black students were immediately invited to a summer educational program for minori ties called Project Epsilon, now called Project
Interphase. That fall, recruiting efforts mainly (continued from page 3 )

## Sherwood appointed

 to state hazing panelMIT Associate Dean Robert A. Sherwood has been appointed to a six-person committee assembled by the Massachusetts Board of
Regents to help implement a new state law Regents to help imple
making hazing a crime
making hazing a crime.
The law, which went into effect in November provides jail terms and fines for perpetrators of hazing, for witnesses to acts of hazing who administrators who encourage, permit or fail to report hazing.
to report hazing.
Sherwood, section head in the Dean's office for residence and campus activities, will be one of two private college representatives on the Regents committee. The group will prom and timing of the reporting requiremen mandated by the law.
Each secondary school and each public or private school or college must file an annual report with the Regents certifying that th institution
of the law.
Dean Sherwood said it should be understood that the law covers more than initiation rite in fraternities or other living groups, and can be extended to include acts by any group or organization construed as hazing. The state law defines hazing as conduct that "willfully or recklessly endangers the physical or menta health of any student or other person
Anyone wanting to know more about the law, or who has suggestions about the im plementation of its reporting requirements can contact him at $\times 3-4051$ ( $\mathrm{Rm} 7-133$ ), Dean Sherwood said

## THE <br> INSTITUTE CALENDAR

January 15-26


Special Events
Living the Dream* - Dr. Shirley Ann Jackson, research
physicist, AT\&T Bell Laboratories, Murray Hill, N, 12th
Annual Celebration Honoring Dr. Martin Luther King, JJ, Wed,
Jan 15: March to Kresge - assemble 12noon, Lobby 7; Lec.
ture - 12:30pm, Kresge Auditorium, reception folows program;
Developing and Maintaining a Positive Ethnic Identity Developing and Maintaining a arositive Ethnic Identity -
Dr. Shiriey Ann Jackon, lecture followed by open discussion,
4.5:30pm, Student Ctr Sala de Puerto Rico

## Seminars and Lectures

Wednesday, January 15

associate provost, Educational Programs and Policy and
director Center for Cognitive Science, Hayden Gallery
Nude, Naked, Stripped Exhibit Program, 1 pm , Hayden Gallery.
Tuesday, January 21



Noom Chomaks* - LSC Leature, 8 pm , Rm 10.250 .
Wednesday, January 22

 A View to Todas's China" - Dean Eugene Chamberidín,



Thursday, January 23

Comperable Worth." - Bararara Grees, state senator,
Woment Forum
Gay Warner
Friday, January 24


## Films



## Community Meetings







MIT Activities Committee




 Theatre presents this all-new play based on children's own
writings. Lively entertainment for children in grades K-3.
Tickets: $\$ 2$ /pp, available in $\mathrm{Rm} 20 \mathrm{~A}-023$. Don't miss it!
Camping and Recreational Vehicle Show. Sat.Sun, Jan
18-26. Stock up on the trail mix and granola bars, load up the backpack, tack the bikes onto the back of the Winnebago and
gear up for this show of over 600 of the current year's models gear ap ors, motor homes and vans, and a largent yearr's models
in trailesentation
of campsrounds and campsites. Show covers 205,000 of campgrounds and campsites. Show covers 205,000 square feet
of the Bayside Exposition Center, MMat, $1-10 \mathrm{pm;}$ Sun, 12.7 pm .
Tickets: $\$ 2 /$ adults (reg 84 ); $\$ 1$ children ages $6-12$ (reg $\$ 2$;) under 6 free, available in $\mathrm{Rm} 20 \mathrm{~A}-023$.
Home Show. Feb 1.9, M.F, 1-10 pm; Sun, 12.7pm, Bayside Ex
position Center. Everything for both exterior and interior home
 Waterville Valley Day Trip. Sun, Feb 9. Bus leaves West
Garage 6am, returns to MIT approx 6:30pm. Cost: Downhill: $\$ 32.50 / \mathrm{pp;}$, cross-country: $\$ 16.50 / \mathrm{pp}$. Reservations may be made
in Rm 20 A .023 .

Family Ice Skating. Sun, Feb 9, 14pm, MIT Athletic Center No athletic card required. Ice skate rentals, depending on
availability,
rentalea sis. Skizes 4 and up) - athletic card required for rentals. Skates must be returned at the end of the allotted
skating time. Free. Washington, DC Presidents' Day Weekend. Fri-Mon, Feb
14-17. Visit the Smithsonian, FBI, National Zoo, and all the monuments - FREE. Go to some of the best restaurants,
theatre, Georgetown, or go jogging or ice skating on the Mall.
We will be staying at the Best Western Convention Ctr - which is in walking distance to everything - and the Metro, which
will get you everywhere. Naturally, there are the usual sur-
 Boat Show. SatSun, Feb 15-23, Bayside Exposition Center
 Jean-Pierre Rampal. Fri, Feb 21, 8pm, Symphony Hall. Share an evening of musical magic with the world-renowned
Tickets: $\$ 17 /$ ea (reg $\$ 18.50$ ) available in $\mathrm{Rm} 20 \mathrm{~A}-023$.

Cinderella. Sat, Feb 22, 2pm, New England Life Hall. The this lively Boston Children's Theatre production. Tickets: $\$ 4.25$ reg \$5), available in $\mathrm{Rm} 20 \mathrm{~A}-023$.
Rap Master Ronnie. Thurs, Feb 27, 8pm, Next Move Theatre.

The master satirist, Garry Trudeanu, | The master satirist, Garry Yrudea, immerses us into playful- |
| :--- |
| but-thought-provoking satire with this musical revue. Tickets: |
| 18 (reg $\$ 19.50$ ) available in | 18 (reg \$19.50) available in Rm 20 A .023 .

Council for the Arts Museum Passes. On campus, there are
10 passes employees may borrow for free admission to the 10 passes employees May borrow for free admission to the
Museum of Fine Arts. To check on availability, call x35651. At
Lincoln Lab, passes are available in the Lincoln Lab Library Lincoln Lab,
Rm A-150.
Museum of Science Tiekets. Available for only $\$ 1$. Pay
another $\$ 1$ at the door, for a total savings of $\$ 3 /$ pp/adult;
$\$ 1 /$ pp/child (reg $\$ 5 /$ pp//adult; $\$ 3 /$ pp/child).
Ski-Key. Books. Containing valuable discount lift ticket
coupons for the greater New England area are here! Only $\$ 9$ ea.
ewt The Greater Boston 86 Books are here! 2.volume 20-page discount coupon book offer discounts on fine and hoteels car washes, cleaners, and more...for the greater Boston
area and beyond (inc areas in the Metro West, South Shore, North Shore \& north of Boston). A limited supply now available,
mportant! To avoid disappointment, purchase tickets and make reservations early as we are limited by ticket availabilare non-refundable due to the non-profit nature of our

## Movies

The Man Who Fell to Earth**-LSC Movie, Jan 15,
$7 \& 10 \mathrm{pm}, \operatorname{Rm} 26-100$. $81 / \mathrm{MIT}$.Wellesley ID.
Harold and Maude*** - LSC Movie, Jan 17, 7\&9:30pm,' Rim'
Lawrence of Arabia** - LSC Movie, Jan 18, 8pm only, Fame ** - LSC Movie, Jan 19, 7\&10pm, Rm 26-100. \$1/MIT-
Wellesley ID. Cat People**- LSC Movie, Jan 22, 7\&10pm, Rm 26-100.
$\$ 1 /$ MIT-Wellesley D . Live and Let Die**- LSC Movie, Jan $24,7 \& 10$ pm, Kresge
Auditorium. $\$ 1$ MIT.Wellesley ID. Cartoon Festival** - LSC Movie, Jan $25,7 \& 10 \mathrm{pm}, \mathrm{Rm}$
26-100. $\$ 1$ MIT.Wellesley ID. Fiddler on the Roof** - LSC Movie, Jan 26, 6:30\&10pm, Rm
26-100. \$1MIT-Wellesley ID. Theater
The Amazing Dacri** - Steve Dacri, Magician, Jan 16,
LSC Seminar - 3 pm, Rm $26-100$; Magic Show - 8 pm , Kresge
Auditorium. 81 MIT. Wellesley ID for either or both. Exhibits
COMmITTEE ON THE VISUAL ARTS Albert and Vera List Visual Arts
Jerome \& Laya Wiesner Building
20 Ames Street

Hayden Gallery - Nude, Naked, Stripped. Examines the
varied attitudes to the body without clothes; its eternal sensualty, its vulnerability in nakedness and the horror of its viola-
ion. The issues which surround its depiction - artistically, culturally and psychologically - discussed in accompanying
8-page catalog published by the CVA, through Feb 4. See
Educational Programs schedule under Seminars and Lectures. THE MIT MUSEUM

Compton Gallery - Images of Infinity: Photomontages by
Yulla Lipchitz, $50-60$ photographs and photomontages reflect. Yulla Lipchitz, $50-60$ photographs and photomontages reflect. ing the artist's personal vision, Jan 24 through March 8 . Open
ing reeption, Jan 23, 4-7pm. Hours: Weekdays 9 am- -5 pm , Satur-
days $10 \mathrm{amm}-4 \mathrm{pm}$.

## Sports

HOME EVENTS: Jan 15: Ms Ice Hockey vs Gordon, 7pm. Jan
16: Squash vs Colby, 4pm. Jan 17: M's Basketball vs Skidmore 16: Squash vs Colby, 4pm. Jan 17: M's Basketball vs Skidmore,
7p. Jan 18: M's Gymnatstics v Y Yale, 1pm; Indoor Track vs
Coast Guard, 1pm; M's Basketball vs Coast Guard, 2pm; M's Swimming vs Southern Conn State, 2pm; M's Ice Hockey Be
Martin Invitational, 2pm. Jan 21: Squash vs Tuts, 4 mm Ms Mockey Ben Martin Invitational, 79 ppm; Ws Basketball vs Su
 son, Tpm. Jan 24 : Squash vs Middlebury Colege, 12:30pm; M's
Fencing vs Rutgers, 7pm. Jan 25: M's Basketball vs Nichols,
2pm. Jan 26: Ms Ice Hockey vs Rochester, 2pm; New England

## INSTITUTE NOTICES

Note: Because of space constraints imposed by the IAP
Timetable, most regularly recurring activities and meetings
are not listed this week. The listings will resume as soon as are not listed this week. The listings will resume as soon as
aret

## Open to public Open to MIT Community only Open to members only

## Announcements

Registrar's Office Official Notice - Fri, Jan 17 is the last
day to petition for February Advanoed Standing Exam and to
return application card for postponed finals.
Registrar's Office Official Notice
day to go on or off the Degree List.
Career Planning and Placement Company Recruitment
Presentations ${ }^{*}$ - Exxon Corporation, Jan $21,5: 30-8 \mathrm{pm}$, Faculty Club.
Faculty Members - Technology Review would like to hear notify us, as far in advance as possible, of your upcoming book. Technology Review, $\operatorname{Rm} 10-140, \times 33-8250$.

Club Notes
MIT Masters Swim Club** - Structured, coached workouts or graduate students and other members of the community who
are not eligible for varsitity swiming. Practices W/F, 8:30-10pm;

## Graduate Studies

Unless otherwise indicated, contact Dean Jeanne Richard at
the Graduate School Office, $R m$ 3-136, $x 3-4869$ for further

US Navy Office of Naval Research Graduate Fellowshipa Approximately 45 three year Fellowships available for $1986-87$, wisciplines: electrical engineering computer science, naval ar chitecture and ocean engineering, materials science, applied physics, aerospace/mechanical engineering, life sciences and nathematics. These renewable fellowships have a 12 -month Applicants must be US citizens who will receive their baccalaureate degree in 1986. Deadline: January 31, 1986. For ap-
plications, write: American Society for Engineering Education, plications, write: American Society for Engineering E.
11 Dupont Circle, Suite 200, Washington, DC 20036 .

Walter S. Barr Fellowships. Awarded by the Horace Smith nidenta mpden C . graduate from college. Candidates should be preparing for careers of "definite social usefulness," such as careers in politics professional school aptitude test is required of applicants. Minmum award is $\$ 1,500$. Deadline: February 1, 1985. Apply to: The Secretary,

Fulbright Scholar Awards 1986-87. The Council for International Exchange of Scholars (CIES) has announced the opening of competition for the 1986-87 Fulbright scholar awards in research and university lecturing abroad. STe basic eligibibity
requirements for a Fulbright award are US citizenship, PhD or comparable professional qualifications, university or college
teaching experience, and for selected countries, proficiency in a teaching experience, and for selected countries, proficiency in a
foreign language. Application deadlines: February 1,1986 for foreign language. Application deadines: February
the seminar in German civilization, Spain Research Fellow-
ships, and France and Germany travel-only awards. For more she seminar in German cinnany France ard travel-only awards. For more
information, contact Dean Eugene R. Chamberlain, Rm 5-106, x 3 -3795.

Howard Heinz Endowment Office Research Grants on Latin American Issues. To interdisciplinary teams with at member must te based at an institutionislocated within the Commonwealth of Pennsylvania. Information and applications:
Marty Muetzel, Howard Heinz Endowment, 301 Fifth Ave, sttsbirth, Penn 15222, 412-391-5120. All applications must be submitted no later
by July 1,1986 .

## Armenian General Benevolent Union (AGBU) Hirair \& An- na Hovnanian Fellowships - two fellowships, each in the amount of $\$ 3,000$ given annually to assist Armenian-American na Hovnanian Fellowships - two amount of $\$ 3,000$ given annually to assist Armenian-American students specializing in ingovernment, international affairs, or inernational law. Applicants must be graduate students with high academic standing. Written requests for application forms high academic standing. . Aritten requests for appication forms must be submitted to the Armenian General Benevolent Union, 585 Sadde River Rd, Saddle Brook, NJ 07662 (tel: 58 201.797.7600) by February 15.

## Other Opportunities

## ummer Programs for Minority Students Interested in

 leaith Professions - 6 -10 week summer sessions offer room, school and to other health-related professional programs.The Whitaker Health Sciences Fund. Research awards for graduate students and faculty - approximately five fellowships
(plus five renewals) for MIT doctoral students, as well as two Whitaker College of Health Sciences, Technology, and Manage-
ment fellowships (plus two renewals), and one Harvard-MIT ment fellowships (plus two renewals), and one Harvard-MIT
Division of fealth hcienoes and Technolog fellowship (plus two
renewals) MIT fellowship applications should be submitted to enewals). MIT fellowship applications should be submitted to
he Dept's Representative for the Committee on Graduate School Policy; Whitaker College fellowship applications to Dr.
Emilio Bizzi's office (E25-526); the Harvard-MIT HST Division fellowship applications to Prof Kenneth A. Smiths office (3-24e)
by February 1,1966 .ll renewal applications should be sent
directly to the Whitaker Health Sciences Fund Office (E25-501). Fellowship awards will pay a $\$ 880 /$ month stipend, plus a full
year's tuition beginning September 1986. In addition, 31 faculty year's tuition beginning September 1986 . In addition, 31 faculty
research grants in the amount of $\$ 40.000$ (excluding overhead)
will be awarded to young investigators in the biomedical will be awarded to young investigators in the biomedical
sciences as follows: 11 MIT faculty research grants submit applications to the respective department head by February 1; 9
Harvard Medical Schol/MIT collaborative faculty research
grants; 7 Boston University School of Medicine/MIT colgrants: 7 Boston University School of Medicine/MIT col-
laborative faculty research grants, 4 Tufts University School of
Medicine/MIT collaborative faculty research grants (submit apve faculty research grants submit applications to the respective chief of the teaching hospita informa-
school department by January 15 , 1986). For further infor
tion, contact the Whitaker Health Sciences Fund Office, Rm

Mellon Fellowship Program, 1986. The Program in Science,
Technology and Society at MIT invites proposeals from scientists, engineers, and physicians for several one year study fellowships
on the relationships of science, technology, or medicine with
society. PhD or equivalent in science or engineering is desirable. society. PhD or equivalent in science or enginerering is desirable.
Partial or full stipend. For more information write: Deborah
Wilkes, Mellon Fellowship Committee, Rm E51-128. Deadline:

Department of Energy-Sponsored Activities. Administered ticipation Program - summersitiesp: Faculty Research Par support for collaborative participation in ongoing energy
research and development at designated DOE facilities. Stipends or salaries are based on the university salary of the ap-
plicant. Undergraduate Student Research Participation
Program Program - summer appointments to participate in ongoing
energy research at designated DOE facilities. Participants paid on a weekly stipend. Graduate Student Research Participa-
tion Program supports summer research in fossil energy
technologies at the Pittsburgh, Penn. and Morgantown W. Va. technologies at the Pittsburgh, Penn. and Morgantown W. Va.
Energy Technology Centers for beginning graduate students. A weekly stipend will be provided. Applications for the above are
due January 20, 1986. Magnetic Funion Energy Technology and Magnetic Fusion Science Fellowships and the Nuclear
Engineering, Health Physics, and Radioactive, Waste Management Fellowships - Competitive fellowships awarded
0 students for graduate study and research at designated universities in magnetic fusion energy technology, applied
plasma physics, nuclear engineering, health physics, and plasma physics, nucleer engineering, health physics, and
radioactive waste management. The practicum is at a DOE research facility. The basic student stipend for both fellowships als or more information, contact the University Programs Divi-
sion, Oak Ridge Associated Universities, PO Box 1127, Oak Ridge, Tenn $37831-0117$, (615) $5765-3255$.

## Internships

The following is the list of internships received this week. For in the Office of Career Services, Rm 12-170.
NOTE:The Office of Career Services has add
NoTE: The Offce of Career Students' Direectory of Summer Internship Programs that Lead Students Directory of Summer internship Programs that Lead
to C sericenta.

Volunteer/low paying internships: Planned Parenthood
League of Massachusetts, Cambridge; State of Ilinois, Office of League of Massachusetts, Cambridge; State of linnois, Office of
the Governor; The Black Sheep Review, Cambridge, Cambrige
Historical Commission; United Nations Dept of Public InformaHistorical Commission; United Nations Dept of Public Informa-
tion, New York City; The Smithsonian Institution, Washington,
DC. The General Court of Massachusetts, Senator Bolling's of. DC; The General Court of Massachusetts, Senator Bolling's of-
fice; Bellevue Hospital Center, New York City; and Institute on

## Internships Offering a Stipend

Arthur D. Little, Inc, Cambridge is accepting applications from first year graduate students in Information Systems/Computer erience and would like to work for A.D. Little during the summer of 1986 as an Intern.
Sponsors for Educational Opportunity is offering their summer investment banking, internship on Wall Street for Minority
Students. Our office has application forms; deadline is March 1 for submission of applications.

Rowe Price Associates in Baltimore, Md, a leading investment firm, seeks two undergraduate s
ternship. Deadline to apply is Feb 28.
Pacific Gas and Electric Company is offering their Summer least their junior year. Opportunities exist in design engineering, power plan operations, systems planning, planning and
research, energy conservation and services, and computer and energy conservation and servic

IBM in San Jose seeks students in the following areas for six month assignments: computer science, chemical engineering,
physics, industrial engineering, mechanical engineering,

## UROP

MIT and Wellesley undergraduates are invited to join with fascination. Undergraduates are also urged to check the Undergraduate Research Opportunities Program's bulletin Uoards located in the main corrridor of ine insiue anc in the should send project descriptions to
Contact us, $x 3-5049, R m$ 20B-141
ontact us, $33-$-5049, Rm 20B-141.
Sea Grant UROP A ward. AROP Office, Questions? indergraduate research in any area of $\$ 750$ will be given for nanagement of ocean resources. Proposale may come from h). A letter of recommendatation shouldey accompany the proposals Elorent Sthe UROP Office by February 10, 1986. research fellowships for MIT undergraduates will be awarded
this spring for work to be this spring for work to be done during the summer. Areas of
study may be in any field. science, engineering, humanities Travel is encouraged Originality is rewarded Deadlin
31, 1968 . Contact the UROP Office for more details. Civil Engineering UROP Traineeships. The Dept of Civil awarded on the basis of a UROP proposal competition. Deadline is February 10, 1986. For more information, call the Civil
Engineering Undergraduate Center or Prof Sallie Chisholm,

Nuclear Engineering UROP A wards. Several awards are given to encourage research with faculty in the Nuclear Enginerer
ing Dept Freshmen are encouraged to apply. Contact. Prof

Language Training Project for Project Athena. 2 Projects:
1)Student should have some knowledge of signal processing. Focus of project is on programming of computer for a speech pro. 2Need a student to help coordinate, design and administer the experimental components of our developing project. Background
in or knowledge of experimental psychology would be useful. Economics Departmert. Student needed to work on research
project regarding determinants and predictors of academic suc.
cess at MIT. Study will use data supplied by the Admissions of fice and involve econometric and statistical methods, 10
hrs/week continuing through spring and possibly into summer. hresweek continuing through spring and possibly into summer. background. Contact
x 3 -0914, Rm E52-262D.

## TECH TALK



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Office. Massachusetts Institute of Technology. Assis-
tant Directors: China Altman, Charles H. Ball, Omice, Massechusetts institute of Technology. Assis-
tant Directors: China Altman, Charles H. Ball,
Robert C. Di Iorio, Joanne Miller, Tech Talk
editor, and Calvin D. Campbell, photojournalist;
Editorial Assistant: Sharon Davis; Reporter: Lynn
Hein Heinemann (In
Institute Notices)
Address news and editorial comment to MIT News
Office, Room 5 5-11, MIT, Cambridge, MA 02139. Tele-
Mail subscriptions are $\$ 18$ per year by first class
mail Checks should be made payable to MIT and
mailed to Business Manager, Room $5-113$, MIT,

## Seminar to focus on Kalina Cycle

A seminar on the Kalina Cycle, which many engineers and scientists consider to be a majortion, will be presented from $9 \mathrm{am}-4 \mathrm{pm}$ on January 21 in Rm 9-150.
The usual steam-driven power plant vapor izes water in a boiler to produce steam. The Kalina Cycle uses a mixture of 70 per cent ammonia and 30 per cent water which results in variable temperatures during boiling. This permits the transfer of a greater amount of
energy to the working fluid, which allows the system to produce more electricity from a given amount of fuel.
"The Kalina Power Cycle promises thermal efficiencies near 50 per cent without new
kinds of hardware," said Dr. Myron Tribus, professor of engineering and director of the Center for Advanced Engineering Study. The Center, the Department of Mechanical Engi neering, the Department of Nuclear Engineer ing and the MIT Energy Laboratory are sponsoring the seminar. MIT for two years.
has been under study at Malina Cycle is Dr.
The inventor of the Kalina
Alexander I. Kalina who emigrated to the United States was a leading energy official.' ievely on the cyclepment with Dr. Tribus, an internationally renowned whermodynamics expert, and Dr. Yehia M. EISayed, a research engineer at the MIT Center for Advanced Engineering Study. Dr. Kalina president of Fayette Manufacturing Corp., an energy development company based in Tracy, Calif., and H.M. Leibowitz, who heads Fayette's Kalina program. Dr. Kalina has technology.

## Basketball feats

Senior Craig Pool of Exmore, Va., became the tenth player in MIT basketball history to reach the 1,000 mark in scoring when he
totalled 10 points against Bates College last totall

Poole, a 6 -foot forward, now has 1,001 career points. He is only one point behind Jerry Hudson ' 74 and 57 behind Bill Eagleson ' 64 who stands eighth on the all-time scoring list. In other basketball news, junior Mike
McElroy of Watsonville, Calif., recently was McElected to the weekly Eastern College Athletic selected to the weekly Eastern College Athletic
Conference (ECAC) Division III North honor role team.
role team. $6^{\prime \prime} 6^{\prime \prime}$ center had 50 points, shot 73 per cent from the field, and had 22 rebounds in wins over Brandeis and New England College. Against Brandeis, McElroy also made 11 straight field goals
in MIT's $63-62$ win
MIT will host the US Coast Guard Academy at 2pm Saturday, Jan. 18, in Rockwell Cage.

## Alumnus, project ride Columbia

## (continued from page 1

The article began: "As a child in San Jose, Costa Rica, Franklin Chang-Diaz used to play inside an empty packing crate, pretending
that it was a spaceship on its way to a distant that it was a spaceship on its way to a a distant
star. Yesterday Dr. Chang realized part of his star. Yesterday Dr. Chang realized partorutle
dream, riding into orbit aboard the shutle Columbia as the first Hispanic American astronaut. He came to the United States in 1968 with a one-way airplane ticket, $\$ 50$ in his pocket, a suitcase, and a dream to fly in space. He had written to the rocket scientist Wernher
von Braun asking advice on how to become an von Braun asking ad von Braun wrote back astronaut, and Dr. von Braun wrote back,
telling the young man to come to America and telling the young man to come to America and
study science." Dr. Chang came to Hartford, study science." Dr. Chang came to Hartford,
Conn., graduated from the University of Conn., graduated from the University of MIT.
The MIT materials experiment aboard the

## Obituaries

## Robert E. Baker

A funeral Mass was held December 24 for Robert E. Baker, 59, of Wakefield, a stock
clerk at Lincoln Laboratory. Mr. Baker died clerk at Lincoln Laboratory. Mr. Baker died
December 22. He had worked at Lincoln since 1984.

Survivors include his widow, Lucille Albushies Baker; three sons, Robert E. Jr. and Joseph of Malden, and Brian Baker of Wakefield; four daughters, Elizabeth of California, Susan
Robishaw of Wakefield, Karen Kelliher of Robishaw of Wakefield, Karen Kehi, N.H. two brothers and sisters, and six grand children.

## Wilson memorial

 A memorial service will be held at theMIT Chapel on Thursday MIT Chapel on Thursday, Jan. 16, at
2pm for John J. Wilson, retired life 2pm for John J. Wilson, retired life
member of the MIT Corporation, former secretary of the Corporation and past president of the MIT Alumni Associa-
tion. Mr. Wilson, an industrialist, promition. Mr. Wilson, an industrialist, promi-
nent Boston-area trustee and well-known nent Boston-area trustee and well-known
yachtsman, died December 31 at his home in Marblehead. Memorial contributions may be sent to the John and Dorothy Medical Center, 300 Longwood Avenue, Boston.

The January 21 seminar will begin at 9 am with an introduction by Dr . Tribus who will give an overview of the cycle's operation. At
10 am . Dr. El-Sayed will review the status of cycle calculations madeduring the MIT study. At 11 am, Dr. Kalina will discuss the stability of the water/ammonia mixtures and cycle variants for different applications.
At 1 pm Ernest Zabolotny and Thomas A. Vivenzio of Stone and Webster Engineering Corp. will give an engineering appraisal of future of the power industry. At 2 pm Mr . Leibowitz will discuss a particular application and touch on energy and economic considerations. At 3pm Dr. Arthur Cohn of the Electric Power Research Instiute in Palo Alto, Calif.,
will discuss his institute's Kalina program. At 3:30, Dr. Tribus will present a summary.

## Twelfth King Celebration to begin atnoon

(continued from page 1)
by students such as Dr. Jackson, brought in even more. The number of black freshmen

Dr. Jackson's address today is entitled "Living the Dream." She said she will note how time is running out in South Africa but
that the opportunity still exists in the United that the opportunity still exists in the United
States for continued change. She will urge the audience to "believe in themselves and engage
the system" to achieve equity the system" to achieve equity
"This is the legacy of Martin Luther King's dream...This is what he was addressing in a
universal way before he died," she said.
The MIT community is invited to participate in MIT's 12 th celebration of Dr. King. Partici pants will assemble at noon today in Lobby 7
to march to Kresge Auditorium. After Dr. Jackson's lecture, a reception will follow in the Mezzanine Lounge in the Student Center At 4pm she will lead a workshop, "Developing in the Sala de Puerto Rico.
Today's events may be held or extended into normal working hours. Joan F. Rice director of Personnel, has asked the cooperation of supervisors in releasing employees
who wish to attend the events, whenever work who wish to a
Information about the tribute can be ob tained from Josephine M. Bartie or Dr.

## president (Rm 7-203) at x3-5446.

at MIT in which levitation-melted samples are "undercooled" below their melting point by several hundred degrees centigrade before solidification occurs. The solidification that then occurs is extremely rapid and is measured by high-speed optical sensing and cinema tography. A number of potentially important stable and ultra-fine structures that can be stable and ultra-fine structures that can be Flemings said.
The experiments to be conducted in space will be similar to those carried out on earth, although with less instrumentation. Samples earth by the MIT team and the results com pared with those obtained here.
A NASA announcement says that future
aircraft, autos and sporting equipment may contain alloys that are stronger and easier to form thanks to the experiment.

## James A. Holbrook

James A. Holbrook, a staff member at 4 at the age of 50 . Mr. Holbrook leaves his widow, Julia, of Nashua, N.H.
Bertram Humphrey
Bertram Humphrey of Cambridge, a retired guard at Lincoln Laboratory, died December
18. He was 83 and worked at Lincoln from 1954 until his retirement in 1967.
Mr. Humphrey leaves his wife, Irene; a daughter, Ann Barrett of Concord, who also children and one great-grandson.

## John R. Leonard

John R. Leonard, 87, of Melrose, an instrument maker at the Draper Laboratory from 1946 until his retirement in 1964, died January 1. Mr. Leonard is survived by two sons, John
B. of Connecticut and Joseph R. Leonard of B. of Connecticut and Joseph R. Leonard of
Florida; a daughter, Barbara J. Buonaugurio Florida; a daughter, Barbara J. Buonaugurio
of Melrose; two sisters; 10 grandchildren and of Melrose, two sisters;
Alfred Richter
Word has been received of the November 9 death of Alfred Richter, 79, of Sarasota, Fla. Mr. Richter was a machinist at the Draper 1971. He leaves his widow, Frances.

Multi-media artists visit
European multi-media artists Ulay and
Marina Abramovic arein residence at the Virina Abramovic are in residence at the List Wiesner Buiilding this month. Their installaWiesner Buillding this month. Their installaFebruary 9.
These are artists of international reputations. The Stedelijk Van Abbemuseum of ganized a survey of their work during the past five years and they are featured in an exhibition, "Choices: Making an Art of Everyday Life," organized by Marcia Tucker for The
New Museum of Contemporary Art in New New Museum of Contem
York, opening February 1
Next Tuesday (Jan. 21) at 7pm, the artists will present a special two-hour program including slides, video, and a discussion of their integration of life and work. A reception in The Reference Gallery will follow. Marina Abramovic, born in Belgrade,
Yugoslavia, and Ulay (Uwe $F$. Yugoslavia, and Ulay (Uwe F. Laysiepen), born in Solingen, West Germany, have col laborated in performance, installation, photog-
raphy, video and film work since 1975 . They raphy, video and film work since 1975. They Upon their arrival in the United States, the artists worked for three days on new Polaroid photographs for their Reference Gallery installation, entitled "Tuesday/Saturday." These gigantic $80^{\prime \prime} \times 40^{\prime \prime}$ images of rich, saturated color and shallow but crystalline
focus were produced in a room-sized "camera" built by the Polaroid Corporation at the Museum of Fine Arts, Boston.
A lens was attached to the side of a $12^{\prime} \times 16^{\prime}$ and peel the large strips of film. Special masking silhouettes created by the artists were applied to the negative before exposure. Outside, the artists manipulated gestures and colored lighting to create a vivid set of seven
photographs of Marina Abramovic exploring photographs of Marina Abramovic exploring
a range of inner identities felt by the artists, a range of inner identities felt by the artists,
drawn from primal and universal connecting energies, or animism. Two color panels and an image of an anonymous onlooker complete

## the series.

Discussing their installation here, Dana Friis-Hansen wrote: "This Polaroid process has particular significance as a medium for the extension of their work. Sharing the
immediacy of the live event and the instant immediacy of the live event and the instant return of video, this series again reveals the
artists' sophisticated dexterity in focusing their energies, intellectual and spiritual, to tant curator of the Committee on the Visual


Marina and Ulay Abramovic
In addition, the artists hope to complete the third in a series of videotapes planned for all seven continents, each a response to the particularities of place and culture. The third, is being Film/Video Section of MIT's Media Laboratory. It will be premiered at the List Visual details about the screening.
The two completed works in this series are: City of Angels (1983, 20 minutes), created at
the temple of Ayuta near Bankok, Thailand, the temple of Ayuta near Bankok, Thailand,
and Terra delgi dea Madre(1984, 16 minutes), produced in Sicily. While these differ in setting, tone, and structure, Mr. Friis-Hansen has described them as being meditative and authentic.
"Their previous work has focused on the layers of personal and universal energies which they explored through simple unspoken endurance and
Hansen said.
Ulay and Marina Abramovic's residency in the Reference Gallery has been organized by
the CVA and is funded by the Massachusetts Council on the Arts and Humanities. The Reference Gallery and the List Visual Arts Center are open weekdays $10 \mathrm{am}-4 \mathrm{pm}$

## New ‘black hole’ believed found

energy radiation generated when material from its companion star pours into this gravita tional trap.
For two months in 1975, the x-ray nova
AO620-00 suddenly flared up by AO620-00 suddenly flared up by more than a millionfold to become the brightest x-ray object in the sky. At the same time, this outburst was
identified with the optical brightening of a identified with the optical brightening of a
faint star. Beginnin
Beginning in 1981, during a period when the x-ray source was turned off, Dr. McClintock and Dr. Remillárd used an electronic camera Kitt Peak, Arizona, to monitor the optical Kitt Peak, Arizona, to monitor the optica
brightness of the AO620-00 binary brightness of the AO620-00 binary system. In January 1985, spectra were taken using the Astronomy Observatories, also at Kitt Peak.
Secretary's Office sets staff assignments

New staff responsibilities in the Office of announced by Constantine B. Simonides, vice announced by Constantine B. Simonides, vice will be assistant secretary with responsibility for trustee relations. Nancy R. Spears will be assistant to the secretary for visiting com mittees.

Mr. Simonides was elected Secretary of the Corporation last fall, adding those duties to his responsibilities as vice president. He said the appointments represent a restructuring of the Office to provide for the full range of
services needed by the Corporation and its visiting committees.
"Ms. Whittaker will be responsible for the management of Corporation meetings, records, and service provided daily to the 100 trustees of MIT,"Mr. Simonides said. "Having served for many years in the Offices of the Chairman exceptional qualities to her new position. She knows MIT
things work
Ms. Whittaker said she welcomes her new responsibilities and particularly the management challenges involved.
Ms. Spears will be responsible for the smooth functioning of the Corporation's 27 visiting committees. Making arrangements for $10-15$ meetings each year, maintaining records, and assisting committee heads and MIT officers
in appointments and communications with in appointments and communications with
some 500 volunteer members of the committees some 500 volunteer members of the committees
is a very complex business, Mr. Simonides said.
"We look to Ms. Spears to establish a system
hat will eliminate surprises and simplify the

Analysis of the optical star's, light curve, as well as its spectral signature, revealed the object was a dwarf star, about two-thirds the
size of the sun, circling a massive companion with a period of 7.8 hours. The great speed of the orbiting dwarf star, more than a million miles per hour, requires that the mass of the dark companion exceed three times that of the mass cannevedown gravitational field. Thus, Dr. McClintock and Dr Remillard concluded that the compact member of A0620-00 is a black hole
Only two other firm black hole candidatesCygnus X-1 and LMC X-3-have been previously identified, both from dynamical as the nova A $0620-00$, have peculiar x-ray as the nova A
spectra which are rich in low-energy $x$-rays.

## orsonalized attention and servic

 that our visiting committees deserve. College. She has been a member of the MIT staff since 1963, serving first as assistant to the director of the Summer Session and, since 1965, as administrative assistant to the Presi dent and to the Chairman of the Corporation. Since 1983 she has had the additional title of assistant secretary in connection with he duties as assistant to the Chairman.Ms. Spears has been a member of the editorial staff of the MIT Press for the past year and before that was a teacher and part-time administrator of the Harvard School in Hollywood, Calif. She holds the BA degree in
English and anthropology from Amherst


## The IAP Time Table

## Introduction

Uso the Timetable as a companion to the Guid. When you locate an activity you are interested in
attending, refer to the Guide to Activities for details about it. To find the complete listing, simply match the number that precedes the title of the aetivity in the
Timetable with the number of the listing in the Guid Activities appear in the Guide in numerical order. New Listings and changes appear at the end of the New Listing.
A schedule with an asterisk (*) by it signifies an activity
in which regular attendance is expected. Preregistration dates of activities have been left in as a reminder to people who have signed up for them. These
activities may be closed. They are listed under the dates that they are being held not under the preregistration dates. If you are interested in attending an activity whose preregistration date has passed, we suggest you call the contact person listed in the Guide to see if there is any

Activities which in the Guide stated "date, time, and location to be arranged," and which were not scheduled
by the Timetable deadline, do not appear here. If you find an activity in the Guide with no schedule, contact the organizer directly for details.
The Timetable for Jan 6-8 activities appears in this
week's Tech Talk, for Jan $9-15$ activities in the Jan 8 week's Tech Talk, for Jan $9-15$ activities in the Jan 8 Tec
Talk, for Jan $16-22$ in the Jan 15 Tech Talk, and for Jan $23-29$ in the Jan 22 Tech Talk. Last-minute cancellations and schedule changes should
be submitted to the IAPOOffice, $7.108, \times 3.1668$, so that the
office can post the information and handle inquiries.

## Thursday, January 16

(New) Motions And Deformations Of Tetonic Plates
By Very Long Baseline Interferometry (VLBD By Very Long Baseline Interferometry (VLBI)
9 am-4 pm, Haystack Observatory 102 Introduction To The Chemical Engineerin


127 Chemical Crystallography
9 am, Norris Room, $18-290$
686 Workshop On Engineering Writing: A Review
Session For Graduate Students Mechanical Engineering and Civil Engineering: ${ }_{9}$ Recommended 12 noon, $5-233$

854 Financing Real Estate Through Syndication
Capital
9 am-4 pm, W31-300. Preregister by Dec 10 .
3503 Reactor Dynamics
9.11 am, NW12-202. Preregister by day before
4568 Creative Problem Solving
4151 Central Utilities Plant Tour
$9: 30-11$ am, building 42
(New) In Search Of Excellence
$10 \mathrm{am}-12$ noon, E51-311
8 Aerodynamic Design For High Lift
$10-11$ am, $33-422$.* Preregister by Jan 13 .
14 Hybrid Finite Element
65 Learning From Building Failures
10 am-12 noon, $5-216$. Preregister by Dec
380 Security Clearances And The MIT Student: Your Rights And Obligatic

630 Sloan School Faculty Open House: Nicolas
Majluf
10 am-12 noon, E52-554
653 Bicycle Plannin
$10 \mathrm{am}-12$ noon, $10-400$
863 Community-Based TV Workshop
10 am-12 noon, $7-335 \mathrm{~A}^{*}$
689 The Writing And Communication Center's Consultations
$10 \mathrm{am}-2 \mathrm{pm}, 14 \mathrm{~N}-3$
$\mathbf{8 6 4}$ How Am I Going To Make This?
4280 Science Museum Tour Of The Mary Rose Exhibit
10 am, E38-302. Preregister by Jan 13 .
4461 Athena Development Directions
Translating Athena Names
$10 \cdot 11: 30 \mathrm{am}, 34-101$
4660 Beginning Hebrew
$10 \mathrm{am}-12$ noon, W2A
3129 Child's Play: The Role of Play In The Developing ${ }_{11}$ am $\mathrm{m}-12 \mathrm{pm}$, West Lounge, Student Center

152 Demonstration Of MIT's Energy Managemen 11 am 12 noon, building 42
(New) Science Act
Revival
12 noon- 2 pm, 4-249
401 Biomechanics: How The Human Motor System Works And How To Fix It When It Doesn
12 noon $1 \mathrm{pm}, 3-133$
12 noon. $1 \mathrm{pm}, 3-133$
1196 Feasting Twice
3076 How Inventions Come To Life And How To Kill Them
12 noon- 1 pm, E15-305
3130 Puberty: Growth And Development In The ${ }_{12-1} \mathrm{pm}$, West Lounge, Student Center
4604 Is There A Peace Process In The Middle East? What Kind Of Process, What Kind Of Peace? Gendzier
Boston University, Joseph Gerson, American Field Service Committee
12 noon- $2 \mathrm{pm}, 1-190$

4751 England Encore: Thames Kayaking And York And The Dales 4757 Yoga
12 noon-1 pm, 10-340
(New) A Community Mental Health Resource For ${ }_{\text {Wemen }}^{\text {W2:30-2 pm, 4-1 }}$
529 A Naval Architect's Tour Of The USS
Constitution
12:30-3:30 pm, location to be arranged. Preregister by
Jan 15.
105 The Kosher Pickle Taste-Of $12: 30 \mathrm{pm}$, Mezzanine Lounge, Student Center
New) Why SADT Works
$1-3 \mathrm{pm}, 4-270$
37 Techniques In Molecular Biology
Antibodies Aga
1.3 pm, $16-310$
402 Theory And Computational Methods For
Machine Dynamics
$1.2 \mathrm{pm}, 37-1866^{*}$ Preregister by Jan 10 .
563 Physics Flicks
Symmetry In Physical Law
1pm, 6 -120
Sin
626 A Brief Introduction To Law
P2tent And Copyright Law
Pat-3 pm, E51-302
727 Management Of High-Technology Entrepreneurship
${ }_{1.3}^{1056}$ Des, 24-612 .
2060 Bicycle Repair And Mainten
3079 Talking To Computers
1-3:30 pm, Media Lab, third floo
3131 Contraception
${ }^{4411}$ Open House: Working Group On Support Staff
Issues
Thurs, Jan $16,1-2$ pm, Bush Room
${ }_{1-2 \mathrm{pm}, 1-132}^{\text {4807 }}$ Jewish-Catholic Relations
377 Integration Bee
l:30
pm, 10-250
$\underset{\substack{\text { (New) Epilepsy } \\ 2 \cdot 3 \mathrm{pm}, 4 \cdot 163}}{\text { and }}$
308 Review of Basic Math And Microeconomics
6 Highlights Of Aeronautics And Astronautics
Turbulence In Fluid Mechanics And Its Consequence
${ }^{6} 0$ Expressive And Deseriptive Watercolor:
Techniques For Designers And Artist
106 Structuring A New Enterprise
566 Physics: Live
Infrared Astronomy And Gravitational Waves $-3 \mathrm{pm}, 2 \mathrm{~F}-00$
3132 Dietary Fiber: Will Your Life Really Depend On
${ }_{2-3}^{\mathrm{It} \text { pm, West Lounge, Student Center }}$
4703 Israeli Folk Dance For Beginners
34 Poetry Reading: Richard Brautigan And Others $3.4 \mathrm{pm}, 4-270$
${ }_{3-5}^{581} \mathrm{pm}, 4-163$ In
630 Sloan School Faculty Open House: Deborah 3.4 pm E 52.58
${ }_{3-5 \mathrm{pm}, 1-134}^{656}$ Planning, Organizing, And Questions of Power
751 Magic Show, Close-Up Style
2072 Bayreuth By The Charles: Wagner's Ring Cycle

3900 Open Meetings or The Institute Colloquium | Committee |
| :--- |
| $3-4: 30 \mathrm{pm}, 10-28$ |

4552 Where To Invest Your Mone
565 Leadership Styles
${ }_{3-4} \mathrm{pm}, 4-370$
570 Investing (Profitably) In Real Estate Limited Partnerships
3.4 pm, 4.159

5051 Feminist Readings
De-Escalation Of The Space Arms Rac
pm, 33-319
456 The Soul Of An Old Machine
$4.6 \mathrm{pm}, 4-160^{*}$
587 The Best Way To Elect The President: Paradoxes,
Curiosities, And Mathematics
4.6 pm, $37-212$
${ }_{4-5: 30}{ }^{725}$ Leadership, 149 , Teamwork, Productivity
76 Things You Can Do With A Technical Degree Besides Hands-On Technical Work
Operations Management And Planning System

103 Operations Research Center Faculty Lecture
Series
$4.5 \mathrm{pm}, \mathrm{E} 40-298$
4562 Bicycle Building And Maintenance
$4-5: 30$ pm, 13-1143. Preregister by Jan 1.
4755 Kundalini Yoga Meditation: A Neurocognitive Approach To Excellence
$5.7 \mathrm{pm}, 24.624$.
aikido
800 Christian Science Organization At MIT: Weekly Testimony Meetings
$5: 45-6: 30 \mathrm{pm}, 4-145$

325 Women In Crime
$7 \mathrm{pm}, 66-110$
2069 Compute
2072 Bayreuth By The Charles: Wagner's Ring Cycle
7 pm, location to be arranged. Preregister by Dec 15 .
2086 Cultural Awareness In Design And Planning
Practice: An EAP Forum
7.9 pm, $10-400^{*}$
250 Introduction To Thoroughbred Handicappin 4250 Introdu
$7 \mathrm{pm}, 36-372$
4765 The MIT Ballroom Dance Club Crash Course
${ }_{7.10}$ Waltz, Sala de Puerto Rico, Student Center
4810 How To Answer A Cultist And Other New
${ }_{7-8}$ Testament Topic
4814 The Baha'i Faith: A New View Of Religion Racial Equality As A Prerequisite To World Peace
7.9 pm, West Lounge, Student Center

4571 Do-It-Yourself Electronics
${ }_{8-10}^{4571}$ pm, $\mathbf{~ D o - I t - Y o u r s ~} 225^{*}$
4656 Introduction To New Testament Greek
5111 Strat's Rat
Skin $\begin{aligned} & \text { S:30 pm-12:30 am, second floor, Student Center }\end{aligned}$
Friday, January 17
102 Introduction To The Chemical Engineering
Practice School And Seminar In Technical Practice
Cemmication
9 am $-5 \mathrm{pm}, 66-360^{*}$

632 Mysteries $\mathbf{O}$
$9.11 \mathrm{am}, \mathrm{E} 51-310$
686 Workshop On Engineering Writing: A Review
Ocean Engineering
9 am-12 noon, 5-233
686 Workshop On Engineering Writing: A Review
Session For Graduate Students
Electrical Engineering and Computer Science
354 Financing Real Estate Through Syndication
Capital
$9 \mathrm{am}-4 \mathrm{pm}, \mathrm{W} 31-300$. Preregister by Dec 10
4568 Creative Problem Solving
$9 \mathrm{am}-5 \mathrm{pm}, \mathrm{E} 51-332, *$ Preregister by Jan 2
New) Chinese Cultural Festival
Exhibition Of Chinese Antique Arts
10 am $3: 30$ pm, Bush Room, 10-105
New)Chinese Cultural Festival
Life In The Republic Of Chi
10 am, Bush Room, 10-105
14 Hybrid Finite Elements
$10-11: 30 \mathrm{am}, 33-319$
127 Chemical Crystallography
10 am-12 noon, Norris Room, $18-290$
209 The Mexican Crisis
$10 \mathrm{am}-12: 30 \mathrm{pm}$, E51-317
653 Bicycle Planning
10 am- 12 noon, $10-400$
663 Community-Based TV Worksho
89 The Writing And Communication Center's Consultations
$10 \mathrm{am}-2 \mathrm{pm}, 14 \mathrm{~N}-31$
4811 Science Looks At The Bible,The Bible Looks At Science
$10: 30$ am. 12 noon, W2A
180 Current Problems In The Earth Science The Greenhouse Effect And Climate

2025 Semiconductor Manufacturing
3134 Osteoporosi
I2 West Lounge, Student Center
(New) Quilt And Needlework Display and Worksh
12 noon-5 pm, MAP Room, Hayden Library, 14S-100
New) Chinese Cultural Festival
Introduction To Chinese Acupunctu
2 noon-1 pm, Bush Room, 10-105
383 Knitting Clinie
2066 So You're Afraid Of Your Microwave?
12 noon $1: 30$ pm, location to be arranged. Preregister by
Jan 3. key: Change
3076 How Inventions Come To Life And How To Kil Them
12 noon-1 pm, E15-305

3133 The Best Of Outdoors Medicine
135 Severe Premenstrual Syndrome: Evidence For An Endocrine Disorder

4757 Yoga
12 noon- $1 \mathrm{pm}, 10-340$
4804 Torah And Chocolat
12 noon 1 pm, W2A
91 Electron Microscopy Of Biological Material
$1.5 \mathrm{pm}, 16-542$. Preregister by Jan 10
New) Chinese Cultural Festival
Workshop Of Chinese Papercutting
Workshop Of Chinese Pa
1 pm, Bush Room, 10-105
${ }_{1}^{133 \text { High Resolution Multinuclear NMR }}$
175 Earthquake Activity In New England
175 Earthqual
1 pm, E34-430
402 Theory And Computational Methods Fo
Machine Dynamics
$1.2 \mathrm{pm}, 37-186$.* ${ }^{*}$ Preregister by Jan 10 .
626 A Brief Introduction To Law
Starting And Running A High Tech Company
1.3 pm, E51-329
,
686 Workshop On Engineering
Session For Graduate Students
Nuclear Engineering, Technology and Policy

686 Workshop On Engineering Writing: A Review
Session For Graduate Students

## ${ }_{1.4}$ pm, 38.136

727 Management Of High-Technology
Entrepreneurship
$1.4 \mathrm{pm}, 34-101{ }^{\text {s }}$
862 Voyager Encounters Uranus: First Visit To The
$1-3 \mathrm{pm}, 10-250$
3136 Is There A Mammogram In Your Future?
4706 Workshop In Maintenance Of Theatrical
1.4 pm , Kresge Little Theatre

3137 Breast Lumps
1:40-2 pm, West Lounge, Student Center
New) Chinese Cultural Festival
New Chinese Cultural Festival Tomorrow (slideshow
The Republic of China Builds For Tom, Bush Room, 10-105
(New) Some Main Problems Of Philosophy Is it Possible
$2 \mathrm{pm}, 37-212$

57 Drawing Designed Form
2.5 pm, $7-431$, new exhibition r
63 New Design: Sketches And Pixels
2.4 pm, computer resource lab, $9-551 .{ }^{*}$ Preregister by Dec
12 in $7-303$.
209 The Mexican Crisis
209: The Mexican Pm , E51-317
2059 Laboratory For Nuclear Science And Physics 2 pm, 4-145
3010 Music Library Concert Series
2 pm, Music Library, 14E-109
6 Highlights Of Aeronautics And Astronautics
From Myth To Reality: The Daedalus Human-Powered
2:30-4:30 pm, Marlar Lounge, 37-252
New) Chinese Cultural Festival
AVisitor's Guide To Taiwan, The Republic Of China
3 pm, Bush Room, 10-105
285 Social Conflict: Ten Historians View Its Cause
And Nature
${ }_{3.4: 30} \mathrm{pm}, 2 \cdot 190$
527 The Sea-Based Nuclear Deterrent And Arm
${ }_{3.4: 30}$ pm, 1-246**
627 Starting And Running A High-Tech
3.5 pm, E52-341

662 Urban Design: What Should Architects And
$3-5 \mathrm{pm}, 10-485$
2072 Bayreuth By The Charles: Wagner's Ring Cyele
3 pm, location to be arranged. Preregister by Dec 15 .
4561 Personal Financial Planning
$3-5 \mathrm{pm}, 5-134$
4801 Safety Under God's Protection: A Free Christian
Science Lecture
$3 \mathrm{pm}, 4-159$
2071 Learning From The Past
${ }_{3: 30}$ Em, $9-150$
472 Dance Workshop Guest Instrutor Series
456 The Soul Or An Old Machine
$4.6 \mathrm{pm}, 4-160^{*}$
Plasma Fusion Center Seminar Series
on Bernstein Wave Heating Experiments On PLT
$4 \mathrm{pm}, \mathrm{NW} 17-218$
4657 What Is Science Fiction?
4824 Science, Religion, And Life
Spiritual View Of Science
S:15 pm, Chapel
072 Bayreuth By The Charles: Wagner's Ring Cycle
7 pm , location to be arranged. Preregister by Dec 15 .

## 4508 Wintercon ${ }^{\prime} 86$ 7 pm , Student Center

New) Chinese Cultural Festival
The Pioneers (film)
$7: 30 \mathrm{pm}, 10-250$
4611 Media In Contemporary India
nages Of Women On Ind Televisio
4902 The Social Implications Of Rock And Roll
7:30 pm, 270 Student Center
${ }_{11} 1$ In Vino Veritas
ster by Dec 16
450 Violin And Piano Recital: Music Of J. C. Bach
And Mozart
$8 \mathrm{pm}, \mathrm{Kresge}$
Auditorium
4752 Cross-Country Skiing
gister by any Thurs, $5: 30$ pm

## Saturday, January 18

4550 Automotive Engines
8 am- 2 pm , building 31
4508 Wintercon ${ }^{86} 8$ am, Student Center
457 String Sextets
12 noon. 4 pm , Rehearsal Room B, Kresge. Preregister by
Dec 9 .
(New) Chinese Classes
$1-3: 30 \mathrm{pm}, 1-136$
435 Art Classes And Facilities At The Student Ar
Making Marbled Paper
$1-4$ pm, 425 Student Cente
4653 Finnegans Wake, Thunderclaps And All
ister by Jan 10 .
2072 Bayreuth By The Charles: Wagner's Ring Cycl
3 pm and 7 pm , location to be arranged. Preregister by
${ }_{7 \mathrm{pm}, 37.252}^{4808 \text { Day } \text { Or Prayer, Concert Of Prayer }}$
5112 Midnite Movies
11 pm , second floor, Student Center

## Sunday, January 19

(New) Women's LaCrosse Club Practic
$10 \mathrm{am}-12$ noon, infield of indoor track
4508 Wintercon '86
10 am, Student Center
(New) Play WAR On The Chipmunks
noon, 34-501
(New) Ultimate Frisbee
12 noon 3 pm , New Athletic Center, second floor
4505 Monopoly Tournament
12 noon- $5: 30$ pm, Mezzanine Lounge, Student Center 5100 Don't Panic

4510 ct-Opus Music
${ }_{3.6,}$ Kitesge Auditorium. Preregister by Jan 6
6614 Chinese Cooking Made Fun And Easy
3.7 pm, Next House Kitchen. Preregister by Jan
4907 Contemporary Gay Issues
Coming In/Staying Out
Coming In/Staying Out
$5 \mathrm{pm}, 50-306$
New) Intermediate Israeli Folk Dance
$7.9 \mathrm{pm}, 407$, Student
Senter

## Monday, January 20

100 Glassblowing
9 am-12 noon, $66-157 *$
14 Hybrid Finite Element Methods
10-11:30 am, $33-319$. Preregister by Jan 8 .
151 Analytical Solutions To Transportation Problems
233 Space Charge Effects In High Field Conduction
$10: 30 \mathrm{am}-12$ noon, High Voltage Research Lab, N10-220
52 How To Speak
1 am-12 noon, 34-10
582 Central America: Developing Alternatives To US 12 noon- 2 pm, E52-321
3083 Introduction To A Japanese Martial Art
${ }^{\text {Shorinji }}$ nempo nom, dance studio
4661 Media Myths And Manipulations
12 noon, $37-212$
809 What Does It Mean To Be Born Again
564 The Program In Science And Technology For
564 The Program In Sci
International Security
$2.4 \mathrm{pm}, 12-142$
${ }_{4.6 \mathrm{pm}, 33-419^{*}}^{\text {3Private }}$ Ground School:Airplane And Glider
${ }_{4}^{4}$ Instrument Pilot Ground School
853 Nanotechnology Lecture Series
Limits To The Possible
.6 pm , second floor, Burton Science Of Awarenes
floor, Burton
454 Winter School
$6.10 \mathrm{pm}, 407$ Student Center; optional weekend trips.*
reregister by Dec 31 .
4852 Hinterlands: Backgrounds And The African Environment: Abandonment, Investment, And Areas.
6.7:30 pm, W2A

705 Improvisational Comedy Workshop
$7-10 \mathrm{pm}$, Mezzanine Lounge, Student Center. Preregister
by Jan 3 .
4765 The MIT Balliroom Dance Club Crash Course
${ }_{7-10}$ pm, Sala de Puerto Rico, Student Center
5103 Pagan Students' Group
7.9 pm, location to be arranged
753 Kayaking Classes
$8-10$ pm, Alumni Pool.* Preregister by Dec 5 .
4900 What IS SDI All About?
4512 Assassin: Game Of Interna
12 midnight. Preregister by Jan 15

## Tuesday, January 21

76 Tour Of Woods Hole Oceanographic Institutio am 5 pm, Woods Hole

628 Undergraduate Management Game
$9 \mathrm{am}-5 \mathrm{pm}$, E53-311.* Preregister by Dec 9 .
657 Introduction To Microcomputers In Planning
686 Workshop On Engineering Writing: A Review
Session For Graduate Students
Mechanical Engineering: Required
9 am-12 noon, $5-233$
686 Workshop On Engineering Writing: A Review
Electrical Engineering and Computer Science
9 am-12 noon, 38 -136
855 The Cost Control In The Building Industry
9 am-4 pm, W31-300. Preregister by Dec 10.
29 The Dynamics Of Social Syster
2050 Everything You Always Wanted To Know About Manufacturing, The Ball?
$9: 30-10: 30$ am, $35-225$
4756 Cross-Country Ski Trip
$9: 30$ am -5 pm, New Ipswich, N
4206 Science On The Airway

8Aerodynamic Design For High Lift
$10-11$ am, $33-422$.* Preregister by Jan 13 .
9 Tethered Spacecraft: Fundamentals And Applications
10-11 am, $33-319$
14 Hybrid Finite Element Methods
10-11:30 am, 33-319. Preregister by Jan 8 .
127 Chemical Crystallography
10 am-12 noon. Norris Room, $18-290$
455 Theory And Esthetics Of Tonal Harmony: An Overview
10 am-12 noon, 4-146. Preregister by Dec 16.

689 The Writing And Communication Center' Consultations
$10 \mathrm{am}-2 \mathrm{pm}, 14 \mathrm{~N}-317$
864 How Am I Going To Make This?
10 An Am Going To Make This?
1080 Tour Of The Francis Bitter National Magnet
Laboratory
10 am-12 noon, NW14.2209
4461 Athena Development Directions
Workstations And Window Systems
4461 Athena Development Directio
Workstations And Window Systems
$10-11: 30$ am, $34-101$
4503 Great IAP Mystery Hunt
10 am, Lobby 7
2050 Everything You Always Wanted To Know About
Manufacturing,
Proces Automation: The Real Story
10:30-11:30 am, $35-225$
17 Restructurable/Reconfigurable Control
$11 \mathrm{am}, 33-419$
103 Trends In Fossil Fuel Utilization: Implications To Combustion
11 am-12 noon, $66-110$

255 Survival Russian In Six Hour
$11 \mathrm{am}-1 \mathrm{pm}, 14 \mathrm{~N}-313$. Preregister by Dec 3 in $14 \mathrm{~N}-207$.
3006 History
11 am, $5-231^{*}$ Navigation
3138 Preparing For Pregnancy
4757 Yoga
11 am- 12 noon, $10-340$
2050 Everything You Always Wanted To Know About Manufacturing,
Heuristics And Decision-Making For Manufacturing 11:30 am-12:30 pm, 35-225
${ }_{12}^{229}$ naonsic Television Concepts
401 Biomechanics: How The Human Motor System
401 Biomechanics: How The Human Motor
Works And How To Fix It When It Doesn't
12 noon-1 pm, 3-133
12 noon-1 pm, 3-133
1196 Feasting Twice
12 noon-2 pm, E51-017
582 Central America: Developing Alternatives To
U.S. Foreign Policy
Current Conditions In Central America
12 noon

12 noon- $2 \mathrm{pm}, \mathrm{E} 52-321$
${ }_{12}^{2068 \text { noon, E15-070 Bohr Film Series }}$
3083 Introduction To A Japanese Martial Art Shorinij Kempo
12 noon- 2 pm , dance studio

3139 The Year Or The Colon
12 noon. 1 pm. West L
12 noon -1 pm , West Lounge, Student Cente
(New) Christian Faculty/Graduate Studen
Workshop
12 noon- $3 \mathrm{pm}, 491$ Student Cente
4435 Art Classes And Facilities At The Student Art Association
History And Science Of Color
History And Science Of Color
12 noon-1:30 pm, 407 Student Center
4655 Journal Writing Workshop
4820 Vatican II: Renewal, Reform, Or Revolution?
77 Swimming Stroke Analysis
1.3 pm Alumni Pool
$\underset{1-3 \mathrm{pm}, 16-310}{85}$ Complex Sugars And Blood Vessel Wall Disease
${ }_{1-2: 30}^{206}$ Careers In E E $51-317$.onomic
402 Theory And Computational Methods For
Machine Dynamics
1.2 pm, 37.186.* Preregister by Jan 10.
625 A Brief Introduction To Management
Overview Of Management And Management Education
$1.3 \mathrm{pm}, \mathrm{E} 51.329$ 1.3 pm, E51-329

686 Workshop On Engineering Writing: A Review
Session For Graduate Students
Session For Graduate Students
Chemical Engineering
Chemical Engineering
$1.4 \mathrm{pm}, 38.136$
686 Workshop On Engineering Writing: A Review
Session For Graduate Students
Civil Engineering: Required
$\underset{1-4 \mathrm{pm}, 5-233}{\text { Civil Engineering: Required }}$
${ }_{1.3}^{1150 \text { pm, } \text { Introduction To The PC Family }}$
3140 Rape Awareness And Prevention
$1-3 \mathrm{pm}$, West Lounge, Student Center
4437 Quilter's Exchange
$1-2 \mathrm{pm}, 66-148$. Preregister by Dec 30
16 Robust Multivariable Control; Fault-Tolerant
Systems
$1: 30-3: 30 \mathrm{pm}$, CSDL Simulation Lab. Preregister by
an 14 with Dr. David Burke.
2050 Everything You Always Wanted To Know About
Manufacturing,
Design Of Robot Manipulators For Industrial
Applications
(New) Using The S Statistical Package for Data
Analysis, Graphics, and Matrix Calculations
and
4201 What Should A University Be? MIT in 1988 And
The Military Influence On MIT: How Much And Why Should I Care, Anyway?
$2-4 \mathrm{pm}, 4-145$
Highlights Of Aeronautics And Astronautics
dvent World World
${ }_{\text {2-3:30 }}^{50 \text { pm, } 5-216}$ Light, Color, And Vision
60 Expressive And Deseriptive Watercolor
Techniques For Designers And Artists
$2.5 \mathrm{pm}, 7-404 *$ Preregister by Dec 12 .
63 New Design: Sketches And Pixels
2.4 pm , computer resource lab, $9-5511^{*}$ Preregister by Dec.
12 in 7.303 .
${ }_{2 \cdot 4}^{106}$ Structuring A New Enterprise
564 The Program In Science And Technology For
${ }_{2-4 \mathrm{pm}, 12-142}^{\text {International Securit }}$
629 The Dynamics Of Social Systems
$\underset{2-4 \text { pm, } 1-390}{1162 \text { Technical Text Formatting On Multics: Part One }}$
2059 Laboratory For Nuclear Science And Physics
Department Lecture
Super Strings: The Theory of Everything???
2 pm, 4-149
3010 Music Library Concert Series
Math Department Recital
2 pm, Music Library, 14E-109
4207 Technology And Science Journalism: Toward
Definitions

## 2.4 pm, E51-125

4558 Inside R/O
${ }_{2.3}^{4703 \text { Ismaeli Folk Danee For Beginners }}$
${ }_{2-3: 30}^{485}$ Acoustics -249
${ }_{2 \cdot 3: 30}^{5102}$ Quasquicentennial Celebration
755 The
755 The Animals
2:30 pm, 54-100
2050 Everything You Always Wanted To Know Abou
Lazy Robots: Creatures That Like To Lean On Things
2:30-3:30 pm, $35-225$
125 Tour Of Picosecond And Femtosecond Spectroscopy Lab
$3 \cdot 4: 30$ pm, Amdur Room, 6-233
152 Seminar Series On Arctic Offshore Engineering ${ }_{3-4: 30}^{\text {Constitutive } 1-350}$ Models For Sea Ice

4202 Negotiation Games In Architectural And ${ }_{3.5 \text { pm, E51.004 }}^{\text {Engineering Design }}$
158 Fracture Mechanics In Civil Engineering $3-4 \mathrm{pm}, 1-350$ (first meeting)
${ }_{3-5}^{227}$ Plex
630 Sloan School Faculty Open House: France
$\underset{3-4: 30}{\text { Mo pm, Schell Room, E51-332 }}$
$\underset{3.5 \mathrm{pm}, 1-134}{656}$ Planning, Organizing, And Questions Of Power
${ }_{3.4 \mathrm{pm}, \mathrm{W} 2 \mathrm{~A}}^{4812 \text { And Religion: Issues }}$
4914 The Discarded People: Food Crisis In South
${ }_{3-4: 30}^{\text {Africa }}$, Center Lounge, Student Center
776 Things You Can Do With A Technical Degree Besides Hands-OnTechnical Work
$\underset{4 \mathrm{pm}, 4-153}{\text { Management }}$ Consulting
1046 Mr. And Mrs. Right: Do They, Or Will They, Ever
Meet?
1054 Beguiling And Bewildering Physics
$4.5 \mathrm{pm}, 24.612$
4100 Operations Research In The Real World
4.5 pm, E40.298
4853 Nanotechnology Lecture Series
Genetic Engineering
4.5 pm, West Lounge, Student Center
4854 Electrical Noise: Sources, Transmission,
${ }_{4}$ Consequences, Elimination
582 Central America: Developing Alternatives To US
Foreign Policy
In The Name Of The People (film)
In The Name Of The
$4: 30-6 \mathrm{pm}, 10-250^{*}$
4710 Dancing In Red Sneakers
5 Space Station Activities Series
${ }_{7 \mathrm{pm}, 37-212}^{\text {The }}$ Station Systems Laboratory
${ }_{7.8: 30}^{222}$ Bm, 34-101 Your Own Computer
325 Women In Crime
Diabolique
$7 \mathrm{pm}, 66-110$
757 Snake Handling For Real People
1079 The Magnetic Monster
$7.9 \mathrm{pm}, \mathrm{NW} 14-2209$
4277 Health Effects Of Fish Oil
${ }_{7}^{4607 \text { Are You A Chinese-American? Why Or Why Not? }}$
4700 Winterliederfes
$7.9 \mathrm{pm}, 14 \mathrm{~N}-313$
4810 How To Answer A Cultist And Other New ${ }_{7-8 \mathrm{pm}, 66-319}^{\text {Testament Topics }}$

4814 The Baha'i Faith: A New View Of Religion Are Science And Religion Incompatible?
7.9 pm, West Lounge, Student Center

4908 Gay/Straight Rap
tudent Center
4911 Marriage And Parenting From A Biblical Perspective
7.9 pm, $3.133^{*}$
${ }_{7}^{753}$ The Animals Film
7.30 pm, 54-100

4566 Build Your Own Speaker

452 Jazz Improvisation Worksho
8.11 pm , location to be arranged
571 Do-It-Yourself Electronic
4658 Introduction To New Testament Greek
$8.9 \mathrm{pm}, 66-319$
4805 Talmud
4910 MIT Students For Individual Freedom

Wednesday, January 22
(Special) The Age Of The Photon Is Upon Us
Prehistory Of The Laser am, 10-250

84 Visit To Woods Hole Oceanographic Institution
9 am-5:30 pm. Preregister by Jan 15.
526 Systems Engineering In Ship Design
$9 \cdot 10: 30$ am, $5 \cdot 314^{*}$
576 Magnetometry With Superconducting Devices
$9 \mathrm{am}-12$ noon, $8-203$
634 Starting International Development Projects
$9 \mathrm{am}-12$ noon, E51-302
${ }_{9.11 \text { am, 1-132 }}^{657}$ Introduction To Microcomputers In Planning
686 Workshop On Engineering Writing: A Review Mession For Graduate Students
Mechanmended
9 am-12 noon, 5-233
355 The Cost Control In The Building Industry
$9 \mathrm{am}-4 \mathrm{pm}$, W31-300. Preregister by Dec 10 .
4850 Computer-Based Laboratory Me
$9 \mathrm{am}-3 \mathrm{pm}, 3-050$. Preregister by Dee 13 .
629 The Dynamics Of Social Systems
4803 Inspiration, Prophecy, And Law
$9: 30-11: 30 \mathrm{am}, \mathrm{W} 2 \mathrm{~A}$
(Special) The Age Of The Photon Is Upon Us Overview Of Photon Sources And Applications

9 Tethered Spacecraft: Fundamentals And
Applications
$10-11 \mathrm{am}, 33-319$
14 Hybrid Finite Element Methods
10-11:30 am, $33-319$. Preregister by Jan 8.
61 Atriums: Building For People And Plants - A
10 am -12 noon, $3-133$
108 How To Get A Job As A Chemical Engineer
111 Laboratory Tour
127 Chemical Crystallography
10 am-12 noon, Norris Room, $18-290$
151 Analytical Solutions To Transportation Problem
$10 \cdot 11: 30 \mathrm{am}$, location to be arranged
386 Infinite Series
$10 \mathrm{am}-12: 30$ pm, $4-270$
455 Theory And Esthetics Of Tonal Harmony: An
Overview
Overview
10 am-12 noon, 4-146. Preregister by Dec 16 .
654 The Great Negative Income Tax-Welfare Reform
Mystery
10 am-12 noon, 1-134
689 The Writing And Communication Center's
Consultations
Consultations $10 \mathrm{am}-2 \mathrm{pm}, 14 \mathrm{~N}-317$
866 X-Ray Astronomy
2050 Everything You Always Wanted To Know About
Fifth-Generation Computing Technology And Its Promise
Fifth.Generation Computing Tec
For Design And Manufacturing
10-11 am, $35-225$
3005 Computer-Assisted Retrieval
3502 Nuclear Research Reactor Tou
10 am-12 noon, NW12-202. Preregister by day before.
4203 Images Of Science: A Video Exploration
$10 \mathrm{am}-12$ noon, $\mathrm{E} 51-218$
4461 Athena Development Directions
Authentication And Network Services
10. $11: 30 \mathrm{am}, 34-10$

4511 The First Annual SIPB Hack Tournament
$10 \mathrm{am}-5 \mathrm{pm}$, location to be arranged. Preregister by
Dec 15 .
4652 Yiddish
and 20
4711 Appalachian Dulcimer Playing
$10 \mathrm{am}-2 \mathrm{pm}, 24.612$
(Special) The Age Of The Photon Is Upon Us
Semiconductor Laser
$10: 30 \mathrm{am}, 10-250$
233 Space Charge Effects In High Field Conduction
10:30 am-12 noon, High Voltage Research Lab, N10.220
17 Restructurable/Reconfigurable Control
11 am, 33-419
180 Current Problems In The Earth Sciences
Submarine Hot Springs
Submarine Hot Springs
11 am $54-100$
355 Problems In Materials Economics
$11 \mathrm{am}-1 \mathrm{pm}, 13-5002^{*}$
.
528 Ship Design Competition
11 am-12 noon, $5-314^{*}$
2050 Everything You Always Wanted To Know Abou
Manufacturing,
Consulting In Man
Consulting In Manufa
11 am-12 noon, $35-225$
3141 Abortion: The Steps Involved
1 am-12 noon, West Lounge, Student Center
(Special) The Age Of The Photon Is Upon Us
Short Pul se Laser
$11: 15 \mathrm{am}, 10-250$
$\rightarrow$ - $\rightarrow$

229 Basic Television Concepts
253 Introducing German Television Geisler
12 noon $-2 \mathrm{pm}, 14 \mathrm{~N}-225$
890 Finding A Summer Camp For Your Child
3083 Introduction To A Japanese Martial Ar
Shorinji Kempo
12 noon- 2 pm , dance studio
3142 Images Of The Enemy

4661 Media Myths And Manipulations
12 noon, 37.212
4819 Adam, Eve, Izanagi, And Izanami: Creation
Accounts Of The Mid East and Far East
ccounts of The M. East and Far Eas
820 Varican II: Renewal, Reform, Or Revolution
582 Central America: Developing Alternatives To
Foreign Policy
Human Rights in
Rol pms in El Salvador and Nicarague
.
4821 Videotape Sessions On Islamic Teachings
$12: 30 \mathrm{pm}, 3-133$
83 The Konchenjunga: Nepal 1985
${ }_{1 \cdot 3} 111$ Laboratory Tours
402 Theory And Computational Methods For
Machine Dynamics
1-2 pm, 37-186.* Preregister by Jan 10
${ }_{1-2: 30}^{453}$ IAP Chorus
563 Physics Ficks
The Relation Of Mathen
The Relation Of Mathematics To Physic
1 pm, $6-120$
568 Tour Of Haystack
1.5 pm , meet in lobby 34
625 A Brief Introduction To Management
Financial Markets And Financial Managemen
655 Reconstruction In Mexico City: A Workshop
802 Cuisine Japanese (How To)
1 pm, Moore Room 6-321
803 Midgetman: A New ICBM
1.2 pm, CIS Seminar Room I, E38-615
863 Voyager Encounters Uranus: The JPL Press
${ }^{1.3} \mathrm{pm}$, Marlar Lounge, 37.252
3008 Latin American Experiences
rence Roon
3143 Domestic Violence: The Truth About Wife
$\underset{1-2: 30}{ }{ }^{\text {Battery }}$, West Lounge, Student Center
4150 Cogeneration At MIT?
$1.2 \mathrm{pm}, 66.144$
${ }^{4326 \text { Lies, Damn Lies, And Statistics }}$
${ }_{1-2}^{4806 \text { Jew, W2A }}$
(Special) The Age Of The Photon Is Upon Us
Fiberoptics Fiberoptics
1:30 pm, $10-250$
16 Robust Multivariable Control; Fault-Tolerant
Systems
$1: 30-3: 30$ pm, CSDL Simulation Lab. Preregister by
by
Jan 14 with Dr. David Burke.
477 New Radioactive Source Term Information:
Reduction In Concern For Nuclear Power Plant Accidents
$1: 30-4 \mathrm{pm}, 24$
(New) Some Main Problems Of Philosophy
What Is Truth?
6 Highlights Of Aeronautics And Astronautics Testing Jet Engines: Why It Takes All The Money In The
World World
$2.3 \mathrm{pm}, 33-206$

59 Artificial Intelligence In The Field Of ${ }_{2.5 \mathrm{pm}, 3-133}^{\text {Architecture }}$
$\underset{2-3 \mathrm{pm}, 26-310}{379}$ Real Simple Lie Algebras
564 The Program In Science And Technology For International Security
$2.4 \mathrm{pm}, 12-142$
${ }_{2} 629$ The Dynamics Of Social Systems
4207 Technology And Science Journalism: Towar Definitions
$2-4 \mathrm{pm}$, E51-125
4208 Controversy In Cambridge: Video
2-4:30 pm, E15-054B
${ }_{2.4}^{4459}$ Tooling 66 At Tech: An Interactive Computer Game
${ }_{2.3 \text { pm, W2A }}^{\text {47 }}$. For Beginners
Special) The Age Of The Photon Is Upon Us (Special) The Age Of The
Lasers And Atomic Physics
$2: 15 \mathrm{pm}, 10-250$ (New) MIT And Military Research From World War I
To Vietnam: A Scientific Arsenal Of Democracy
3-4:30 pm, 8-105 ${ }_{3.5 \mathrm{pm}, 33-319}^{10}$ Seminar On The History Of Aeronautics

152 Seminar Series On Arctic Offshore Engineering Ice Forces On Arctic Structures: Part I
3-4:30 pm, $1-350$
${ }_{3-5}^{227}$ Pm, 34
285 Social Conflict: Ten Historians View Its Cause

356 Laser Engineering: From Crystal Growth ${ }_{3-4 \mathrm{pm}, 13-3101}$
$\underset{3-4}{750}$ Delivering True Artificial Intelligence
(Special) The Age Of The Photon Is Upon Us
Light And Chemistry
$3: 15 \mathrm{pm}, 10-250$
4709 Magic: Interm
3:15-4:30 pm, W2A.
(New) Spanish Tertulia
3:30-5:30 pm, MeCormick
$\underset{\text { 3:30.5 pm, E51-329 }}{\text { 202 }}$ Modigliani On Economic
4712 Dance Workshop Guest Instructor Series
(New) The Retirement Of Speaker Of The House Tip
O'Neil And How It Affects The Educational Community

Special) The Age Of The Photon Is Upon Us
$4 \mathrm{pm,10-250} 0$
3 Private Pilot Ground School: Airplane And Glider
$4.6 \mathrm{pm}, 33-419^{*}$
4 Instrument Pilot Ground School
$4.6 \mathrm{pm}, 33-418^{*}$
4101 Student Workshops In Operations Research
$4.5 \mathrm{pm}, \mathrm{E} 40-298$
4425 The New Scholarship On Women: The Impact On Five Disciplines
History
, H,

## 4853 Nanotechnology Lecture Series

${ }_{4.5 \mathrm{pm} \text {, West Lounge, Student Center }}$
582 Central America: Developing Alternatives To US Foreign Policy
Turmoil And Flight: Central American Refugees And The U.S. Sanctuary Movement
(Special) The Age Of The Photon Is Upon Us
Laser Light Shows (with demonstrations) 4:45 pm, 10-250
4754 Winter School
$6-10 \mathrm{pm}, 407$ Student
Preregister by Dec 31 ,
New) Science Action Coordinating Committee
Revival
6.8 pm,

- 249
25 Ancient Egyptian Technology.
6:30 pm, Museum of Fine Arts
New) Ultimate Frisbee
7.10 pm , New Athletic Ce
56 Phenomena: In Search Of Chinese Art Form
The First Empire Of China: A Problem In Visual Data
Base Design
7.9 pm, Edgerton Lecture Hall, 34-101
458 Films About Music
Opera
$7 \mathrm{pm}, 66-110$
726 Getting The Job You Want In Industry: A
Women's Guerrilla Guide To The Pin-Striped World W.9:30 pm, 10-105*

3001 The Chemical Information Maze: How To Beat It The Mazebuster: Computerized Chemical Information

## 113 Ham Exams

pm,1-134
4436 Quilting For The Beginner
7:30.9:30 pm, MacGregor seminar room 1.* Preregister by
4566 Build Your Own Speakers
411 Media In Contemporary India
Government.Owned Media: Distortions And Reality
7759 Roller Skating
$7: 30$ pm, du Pont gym
In Celebration Of The Pioneers And Voyagers: To
upiter, Saturn, Uranus, And Beyond
753 Algorithmic Probability And Universal Problem
8pm, floor 7, NE-43
$\underset{8 \mathrm{pm}, 9-150}{4813 \text { Scientific Cosmogony And Biblical Creation }}$

## New Listings

In Search Of Excellence
Coleen V. Barry, Duglas S. Smith
Thurs,
Videotape presentation of In Search of Excellence: a condensed version of the PBS series, based on the best-selling
book. Sponsor: Society of American Military Engineers. Contact: Richard J. Kury, 20E. $1, \times 3$.4471.

412 Dance Workshop Guest Instructor Series Mon, Wed, Fri, Jan 13.17 3:30.5 pm, T.Clur Lounnge. Wed
ri, Jan $22.24,3: 30-5$ pm, T.Club Lounge (time)
Motions And Deformations Of Tectonic Plates By
Very Long Baseline Interferometry
ery Long Baseline Interferometry
Thurs, Jan 16,9 am -4 pm, Haystack Observatory
Excursion to Haystack Observatory will focus on precise
position determinations of large radio antennae and use in measuring plate motions and deformations. Transpor tion and lunch provided. Sponsor: Earth, Atmospheri and Planetary Sciences Department and Haystack Ob -
ervatory. Contact: Thomas H. Jordan, $54-518, \times 3-3589$
A Community Mental Health Resource for Women
Thurs, Jan 16, 12:30-2 pm, 4-163
A representative from the Elizabeth Stone House, a me
al health facility run by and for women, will discuss Imen and mental health. Powerful video will be show Sponsor: Medical Department. Contact: Constance Bean,

## Aikido

Dick Stroud ${ }_{\text {Jan }} 6-31,5: 30-6: 30$ pm, exercise room, du Pont
Aikido is a Japanese martial art with emphasis on central term, ki, or centeredness. Non-competitive and pri-
marily defensive. Sponsor/contact: Dick Stroud, x 3 -7019

Why SADT Works
Thurs, Jan 16, 1-3 pm, 4-27
xample of PLEX in action. What meaning means. How models model. Insights on insight, which show that the
neaning of an SADT model is the subject being modeled itself, Sponsor/contact: D. T Ross, NE43-437, x3-6900.
Science Action Coordinating Committee Revival
Rich Cowan, Seth Tuler, Scott Saleska
Wed, Thurs, Jan 15, 16, 29, 12 noon- -2 pm, Jan 22, 23,
iscussion group on political issues involving MIT, such
SDI, Project Athena, curriculum reform, "institution Louis Menand III. Contact: Rich Cowan, 497-0870.

## Epilepsy

Thurs, Jan 16, 2-3 pm, 4-163
Epilepsy, patient care, the doctor-patient relationship,
and latest advances in drug therapy. A videotape of a
hannel swim by a seizure-free individual will be show
Sponsor: Medical Department. Contact: Constance Bea
$x-1316$.
Chinese Cultural Festival
Fri, Jan 17, Bush Room, 10-105
Exhibition Of Chinese Antique Art
ntroduction To Chinese Acupuncture
Workshop Of Chinese Papercutting
11 am-12 noon

The Republic Of China Builds For Tomorrow: Te
Major Construction Projects (slideshow)
fe In The Re Olic Of Chin
2 pm
Visitors Guide To Taiwan, Republic Of China
sm

The Pioneers (film
Tells of a legendary man immigrating to Taiwan in the 18 th century, devoting (and losing) his life to digging an
oil well, the first of its kind in Taiwan. Early immigrants II well, the first of its kind in Taiwan. Early immigran

Quilt And Needlework Display And Workshop
ri, Jan 17,12 noon-5 pm, Map Room, Hayden Library
Bring needlework skills or family heirlooms for exhibi-
ged. Special invitation to join old fashioned quilting bee Supplies and instruction provided. Sponsor: Libraries and Women's League. Contact: Nancy Whitman,
$235-6040$, or Beth Harling, $749-4077$.
APO Open House
Fri, Jan 17, 2.5 pm, W20-407
Meet the members of APO, find out about service around
MIT and community, maybe paint posters or make can-
Mles. Eat food and be merry. Sponsort Alpha Phi Omega.
Contact: Tamar More, 4 Ames St., x5-6111.

Stewart Clamen
WAR is an interactive, real-time, tank-battle game which
an exciting format. Teams of two people will compete
in the Second Annual Tournament, and we will experi-
ent with larger groups as well. Sponsor/contact: Ste
New) Christian Faculty/Graduate Student
orkshop
i, Jan 21,12 noon- 3 pm, 491 Student Center
Videotapes and discussion on ways to share Christian
ampus Crusade, will lead discussion with two profes.
Comp.
Using The S Statistical Package For Data Analysis,
Graphics, and Matrix Calculations
ees, Fri, Jan 21, 24, 1:30-2:30 pm, E40-153
An introduction to the Unix-based S system for potential
users. Sponsor: Alan Zaslavsky. Contact Alan Zaslavsky
sers. Sponsor: Alan Zasiavky. Contact Alan Zaslavsky
MIT And Military Research From World War IITo
ich Cowan, Seth Tuler, Scott Saleska
Wed, Jan $22,3-4: 30 \mathrm{pm}, 8-105$
resentation and discussion on Lincoln and Draper labs
and their work on SABRE radar, gunsights, missile gui ance, MIRV, ABM, MTI, and the space program. Sponsor:
Disarmament Study Group. Contact: Chris Linn, x 5.9692

## panish Tertulia

Wed, Jan 22, 3:30-5:30 pm, McCormick country kitchen
There will be a special two-hour session for those interistening toaking spanish. This social event will inclu axed atmosphere. Snacks will be served. Sponsorl' ontact: Margery Resnick, $\mathbf{x} 3-5277$, Douglas Morgenste
me Main Problems Of Philosophy
Prof. George Boolos
What IsTruth
Wed, Jan 22,2 pm, 37-212

## Changes

64 Chair Design Workshop/Competition
${ }_{\text {Cancelled }}$ Thing
08 Review Of Basic Math And Microeconomics
hurs, Jan $9,16,23,30,24$ pm, E38-615 (schedule a

325 Women In Crime
Out Of The Past
Thurs, Jan $16,7 \mathrm{pm}$

Tiabolique
Tues, Jan $21,7 \mathrm{pm}, 66-100$

The Trojan Women
Thurs, Jan $23,7 \mathrm{pm}, 66-11$
(dates and film titles)
2059 Laboratory For Nuclear Science And Physics
eptons, Quarks And Other Particles Of Nature

630 Sloan School Faculty Open Hous
Nicholas Majluf
Thurs, Jan 16,10 am-12 noon, E52-554
Deborah Gladstein
Thurs, Jan $16,3-4 \mathrm{pm}, \mathrm{E} 52.582$
Franco Modigliani
Tues, Jan 21, $3-4: 30 \mathrm{pm}$, E51-332
Tony Wong
Mon, Jan 27, 9-11 am, E53-335
John Henderson and Michael Scott Morton
Tues, Jan 28, 10:30 am-12 noon, E52-598 (complete sched ule)

5112 Midnite Movies
Prime Of Miss Jean Brodie
Sat, Jan 18, second floor, Student Center
(New) Chinese Cultural Festival
Fri, Jan 17, Bush Room, 10.150
Workshop in Chinese Papercutting, 10-11 am; The
Republic Of China Builds For Tomorrow, 10-2 pm; Life In
Repubice Of China Buids
The Republic Of China, $10 \mathrm{am}-2 \mathrm{pm}$
(New) Some Main Problems of Philosophy
Is It Possible To Travel Beas In Thil Fri, Jan 17, 2 pm, $37-212$ (new date)
4712 Dance Workshop Guest Instructor Serie Fri, Jan 17, 3:30.5 pm, T. Club Lounge, Wed, Jan 22,
$3: 0.5$ pm, Walker 201, Fri, Jan $24,3: 30-5$ pm, T.Club
Lounge (location, time) Lounge (location, time)

4175 Plasma Fusion Center Seminar Series
Ion Bernstein Wave Heating Experiments on PLT
Fri, Jan 17, 4 pm, NW17.
Fri, Jan 17, 4 pm, NW17-218 (new sublisting)
Assassin: The Game Of International Espionage
Mon, Jan 20, 12 midnight. Preregister by Jan 15. (sched
ule arranged)
4201 What Should A University Be? MIT In 1986 And

The Military Influence On MIT: How Much And Why
Should Care, Anyway?
Tues, Jan $21,2-4$ pm, $4-145$ (time change)
How Can Students Have A Voice In Setting University
Policy?
Mon, Jan $27,2-4 \mathrm{pm}, 4-145$ (time change)
4202 Negotiation Games In Architectural And
Engineering Design
Tues, Thurs, Jan $21,23,3-5 \mathrm{pm}$, E51-004 (new date, loca
tion)
5111 Strat's Rat
Skin
Thurs,

The Ritz
Thurs, Jan 23, 9:30 pm-12:30 am, second floor, Student

Comedy Night
Thurs, Jan 30,
Thurs, $C$,
866 X-Ray Astronomy 1962-200
Wed, Jan 22,10 am -12 noon, Marlar Lounge, $37-252$ (new
date)
4203 Images of Science: A Video Exploration
E51-218, (full day's shooting) Wed, Jan 29, 2-4 pm, E51-218
diek
Tues, Jan 21, 9:30-12 noon, E51-125 (time change); We
Jan 22 , cancelled
180 Current Problems In The Earth Science
Submarine Hot Springs
Wed, Jan $22,11 \mathrm{am}, 54-100$ (subtitle changed)

## 582 Centra U.S. Policy

Current Conditions In Central America (seminar)
Tues, Jan 21,12 noon -2 pm, E52-321
In The Name Of The People(film
Tues, Jan $21,4: 30-6 \mathrm{pm}, 10 \cdot 250$

Human Rights In El Salvador And
Wed, Jan 22, 12 noon-2 $\mathbf{p m}, \mathrm{E} 52 \cdot 321$
Turmoil And Flight: Central American Refugees And The
U.S. Sanctuary Movement (presentation
Wed, Jan $22,4: 30.6$ pm, 4-270

## White photos shown

An exhibition of 102 prints by photographer Minor White will be on view at the MIT Museum until March 29.
This is part of a series of great American
photographers being shown at the Museum photographers being shown at the Museum
this academic year, beginning with Berenice Abbott this past fall and continuing in the spring with Ansel Adams, April 8-June 30.
The White exhibition was developed by the Philadelphia Museum of Art and covers his career from its early days in the late 1930's until 1968, or the beginning of his MT career photography here until his death in 1976 .
Ansel Adams described his fellow photog. rapher as "one of the greatest." Continuing, he said, "I do not make this statement lightly The extraordinary dignity of his work is, for me, the first impact-reaction. The next reaction is to the creative-craft: the sheer beauty of the medium of photography tuned to the exact meaning and feeling of the visualized image. . These great photographs live for themselves
and for us."

In a statement about his work, Mr. White said: "Surfaces reveal inner states-cameras record surfaces. Confronted with the world of surfaces in nature, man and photographs, I must somehow be a kind of microscope by which the underlying forces of spirit are observed and extended to others.



Page 8, Tech Talk, January 15, 1986
 tional and interpersonal skills. Excellent
typing of 50 wrow with accuracy and
proofreading skills more important than
speed. Familiarity with word processing systems preferred but will train. Mini-
mum 2.5 years directrelated experience
required. NON-SMOKING OFFICE


reports and proposals, journal articles and
correspondence, maintain filing systems,
answer telephones and student inquiries. Word processing and technical typing ex.
perience necessary. Minimum 2.5 years
direct/related experience required. perience
direct/rel
B85-040


Technical Support Staff

Office Assistant

## Administrative Assistant, Biology, to provide edministrative and office support to the Biology Finance Office. Will serye

as coordinator of proposal subbmissioss, in-
luding budget development, review for
correct and thorough preparation, routing
cluding budget development, review for
corret and thorough preparation, routing
through necessary Institute channels, and maintenance of sponsor information files.
Will prepare payrol reports including
verification of personnel appointments, $\begin{array}{llll}\text { Sr. Secretary, Aeronautics and Astro- } & \text { verification of personnel appointmens, } \\ \text { nautics. to provide secretarial support for } & \text { termination, special actions, vacation and } \\ 3 \text { faculty and one research associate in } & \text { sick leaves. Will serve as primary faci- } \\ \text { itator }\end{array}$ clude typing and proofreading reports, ex-
aminations, correspondence and other ma-
terials from rough draft Will answer tel
ephones and receive laboratory visitors, ephones and receive laboratory visitors,
maintain filise, arrange travel, prepare
vouchers, distribute mail, maintain office
supplies, issue keycards, petty cash, and prepare and distribute aboratory report
Will use word procesing system on Cor vus computer. Knowledge of technical
typing essential. Minimum 2.5 years di-
rect/related experience required. Ability rect/related experience requred organiza
to work independently and good
tional skills essential. $885-047$ Sr. Secretary, Electrical Engineering
and Computer Science, to perform secre-
tarial duties for two faculty members.
Will arrange appointments, meetings,
and travel. check monthy research ac.
counts; ttype course material, technical

## Kendall Square work progresses

planning, much of the wects is sche afted to be completed by September or soon
ultese timetables have been established, Mr. Simha said:

Subway Station: Scheduled for completion in September. The new head house at Carlton Associated landscape developments should be under way in late summer and early fall, -Marriott Hotel: Expected to be completed by late August, 1986, with possible opening in early September

Main Street: Should be reopened for eastbound traffic in September
Meanwhile, good news of a sort comes from the state Department of Public Works regardthe Harvard Bridge.
Present plans, the DPW told Mr. Simha, call for the bridge to remain open at all times-
although traffic lanes will be limited-to
moving to this new plan," Mr. Simha said was an environmental assessment whic determined that the air pollution caused by he bridge would be an unacceptable impact n the surrounding community
The initial work on the bridge, according to ownstream side to accommodate MBTA buses. This work should begin in early spring At that time, the down-stream side will be pen to the buses only; trucks will continue
e prohibited.
dvertise for bidrom now, the DPW intends to bidge, with one-half to be done at a time first the up-stream side and then the down-tream-and the bridge remaining open to raffi
The reconstruction, which will involve th mplete replacement of the superstructure, is expected to begin in 1987
approximately two years.

| rience in office procedures, and the ability to compose memos and short letters is necessary. Minimum 4.5 years direct/related experience required. S86-189 |  |  |
| :---: | :---: | :---: |
|  |  |  |
| responsibilities including meeting and function planning, coordinating travel itineraries, monitoring accounts, and in teracting with MIT faculty, students, and others. Will perform related secretarial duties and utilize a DECMate II word pro cessor in related processes. Will coordinate and facilitate the duties for the Of fices of the Department Head and of the Executive Officer. Must be discreet in handling confidential material. Will coordinate meetings for faculty searches, reviews and promotion cases. Will ensure smooth operation of and supervise other support staff in Headquarters Office. Minimum 4.5 years direct/related experience |  | nter, <br> ead. <br> ment <br> ling <br> roof <br> pon- <br> shed <br> Ding <br> pon- <br> High <br> das <br> rga- |
| tarial procedures required. MIT experience preferred. Ability to maintain con fidentiality and deal with sensitive issues with tact and discretion necessary. Good interpersonal skills and the ability to adapt to a variable work environment with a minimal amount of supervision essential. S86-182 | Sr. Office Assistant, MIT Press Promotion Department, to assist publicity manager. Will solicit endorsements for books by mail and phone; handle page proofs; order review copies; maintain computerized media lists; answer phones; make copies and file. Must become famil- | cal |
| Journals Production Assistant (Editorial Assistant), MIT Press Journals (part-time - 17.5 hours/week), to send proofs, manuscripts, and mechanicals to editors, suppliers, manufacturers, illustrators and freelancers. Will also order courier pickups, wrap packages, follow schedule for deliveries, paste up |  |  |
| printer. Will check and correct, if necessary, all illustrations, figures and tables, and handle production in absence of Production Manager. Duties also include pasting up and correcting advertisements; |  |  |
| Manager; creating file of in-house ads, to be kept current and camera-ready; creating file of order cards, to be kept current; and keeping exchange ads camera-ready and current. Will assist Promotion Manager in design and paste-up of direct mail piéces and promotional materials; handle quarterly billing for offprints and alterations charges and follow up problem bills. Will paste-up for Cireulation when | of Purchase Order Commitment/Signature Authorization system. Will also batch sales requisitions for computer input and resolve computer error list problems. Duties will include becoming familiar with gas cylinder deposits, petty cash, furniture procedures, and statement errors in order to fill in during absence of other personnel. Minimum 2.5 years direct/related experience required. Typing speed of $40+$ wpm essential. S86-174 |  |
|  | Office Assistant, Laboratory for Computer Science, to perform a variety of routine tasks including operation of a copying machine - keeping it in good working order - collating, stapling and binding. Will order supplies and perform additional related duties as necessary. High School graduate or equivalent with a minimum of one year direct/related experience required. Must be flexible and willing to learn and perform repetitious work in a busy office. Proficiency with copy machines preferred. S86-185 | $\begin{aligned} & \text { ight } \\ & \text { walk } \\ & \text { nds. } \\ & \text { sser- } \\ & \text { time } \\ & \text { enic } \\ & \text { enck } \\ & \text { ons, } \\ & \text { per } \\ & \text { ular } \end{aligned}$ |
| Department, to provide administrative support to the Medical Department's Pharmacy Service (extremely busy, patient-oriented Service, staffed with two full-time and one part-time pharmacists filling an average of 1,200 prescriptions per week). Duties will include significant purchasing activities including weekly ordering of medications, processing invoices for payment, monitoring and updating current prices, review of 200 purchasing contracts, and maintaining detailed purchasing records and inventory control. Responsible for managing pharmacy computer data files and will act as liaison with computer company and inAlso responsible for daily cash and charge receipts, preparation of monthly financial reports, assistance with budget prepara- | Second Cook, Endicott House, to report directly to Executive Chef. In absence of chef will supervise kitchen staff and assume leadership of department. Will prepare food as outlined and according to recipes for all meals with high standards of cooking and presentation; and maintain high standards of personal and work hygiene for self and staff. Will purchase, stock and issue food as directed by chef, and work toward creative improvement of menus. Will price menus as directed by chef; maintain food control program with regard to receiving, stocking and issues; and publish food control reports as directed by chef. Must be capable of ordering food, food costing, menu-making, and sanitation control. Must be able to provide own transportation as Endicott dability is essential. S86-183 | up and s. Re- e con- gation uation yers its yed. In- he use ols, in- hines. he con- of elec- work of the dders. or no |
| Quality Assurance reports. High school graduate with college degree preferred. Four to five years work experience in progressively responsible position, preferably with purchasing and financial duties, preferred. Good interpersonal, organizational, word processing, and computer skills essential. Ability to work independently necessary. S86-171 | Office Assistant, Comptroller's Account ing Office, to process invoices through CRT's. Will perform occasional review of vendor statements, prepare invoices for CRT operators and perform other duties as assigned and required by supervisor. Some overtime will be required. Good typing ability and knowledge of CRT operation desirable. Minimum 1 year direct/related experience required. | ication spring vailable 0am to te does f time; |
| inistrative Assistant, Treasurer's responsible for control of central received account, checking all cash its, security credits, transfers and from terminals against backup on mittal sheets; $\log$ security gifts and ctions, and maintain securities er. Will process gifts of securities, notifications, broker letters and acknowledgements, and handle telne inquiries. Must be good with and details; accounting back d helpful. Good typing skills, ac | Office Assistant, Resource Development, to provide general office support and some secretarial support for the Assistant Director responsible for senior officer research and the Business and Personnel Manager. Will answer telephones; act as key operator for copiers; perform courier service when necessary; type documents as needed; copy and distribute correspondence on a daily basis, and act as backup for mail distribution and copying. Will | $\begin{aligned} & \text { SMA } \\ & \text { writer. } \\ & \text { with } \\ & \text { be able } \\ & \text { ly and } \\ & \text { either } \\ & \text { ting or } \\ & \text { ably in } \\ & \text { erience } \\ & \text { inglish } \end{aligned}$ |
| years direct/related experience r <br> ed. S86-163 |  |  |

