



Professor Jeffrey Freidberg of nuclear engineering (lower left) shows a group of high school students how plasmas are produced in the Plasma Lab, part of the Plasma Fusion Center. The students and their teachers were at MIT for a PFC Open House. Photo by Donna Coveney

80 GUESTS

Introduction to Plasmas Draws High Schoolers

By Elizabeth A. Thomson
News Office

Most high school students can easily tick off the first three states of matter—gas, solid, and liquid—but how many know the fourth?

After last Friday, 53 juniors and seniors from 24 schools around New England could give you the answer: plasma, or the high-temperature mixture of charged particles critical to nuclear fusion and most observable to us as lightning, the Northern Lights, and the sun.

The students and their teachers—for a total of 80 participants—came to MIT for an Open House sponsored by the Plasma Fusion Center. The program, the PFC's first, focused on the science of plasma fusion, but the ultimate goals were "to encourage students to pursue careers in science and engineering, and to upgrade their overall interest in science," said Ronald R. Parker, director of the PFC and a professor in electrical engineering and computer science.

"We're hoping that some of our enthusiasm and interest will spill over to young students, so perhaps they'll take an extra [science] course," he said.

Professor Parker began the day with a short introduction to fusion basics, and why nuclear fusion "is a potential solution to our emerging energy problem."

PFC staff followed with half-hour tours of the Alcator C-MOD Tokamak, a massive experiment that will allow scientists to study plasmas at near-reactor conditions; the Plasma Lab, a small-scale version of the Alcator C; magnet and superconductivity demonstrations (magnets are essential to con-

fining plasmas); and a plasma rocket.

The Alcator-C tour was impressive for the sheer bulk and power of the ultimate machine, currently under construction. Describing the experiment as "industrial-strength" science, Principal Research Scientist Martin Greenwald pointed out different components of the machine from a balcony above it. For example, the stainless-steel support structure that will eventually cover the machine is more than 10 feet in diameter and 10 feet tall—the largest such structure ever made.

First, however, he gave a short talk on how the Alcator C will work. In general, plasma produced in the machine "will gyrate around a doughnut-shaped magnetic field," Dr. Greenwald said. That magnetic field "will be 100,000-200,000-times stronger than the Earth's" to contain a total amount of plasma that, if frozen, "would take up only a cubic millimeter of space."

Ultimately, the machine will be capable of heating the plasma to thermonuclear temperatures, or about five times hotter than the core of the sun. To get there the Alcator C will use 250 megawatts of power—or as much as the whole city of Cambridge—for five-second intervals. Scientists will then be able to study the basic physics behind plasmas under those conditions and move closer towards using nuclear fusion as an energy source.

In contrast, the Hollow Cathode Discharge experiment at the Plasma Lab, which is also used to study plasmas, was pieced together by three students and Professor Jeffrey Freidberg of nuclear engineering and uses about the same amount of power as a stove with all its burners and oven on.

The HCD can't begin to approach

(continued on page 3)

COURAGEOUS LEADERSHIP

Faculty Condemns DOD Policy Barring Homosexuals in ROTC

The MIT faculty, in a voice vote, gave overwhelming support last week (May 16) to a resolution opposing the Department of Defense policy that bars homosexuals from military service, including participation in ROTC programs.

The vote, at the regular monthly meeting of the faculty, followed the lead of Professor John M. Deutch, MIT provost, who has called on Secretary of Defense Dick Cheney to reverse the policy. Professor Deutch, who has been a member of the DOD's Defense Science Board since 1975, wrote to Secretary Cheney April 10.

The MIT faculty resolution voiced support for "the principled and courageous leadership that the provost and the president of MIT (Paul E. Gray) have provided on this issue of national importance."

The resolution also endorsed a recommendation by the standing presidential Committee on ROTC which urged the university administration "to consider collective action with other universities" in working toward a change in the DOD policy, which is in conflict with MIT's policy of nondiscrimination on the basis of sexual preference.

(In a related development, the presidents of four of the nation's leading organizations of higher education told Secretary Cheney in a May 14 letter that was made public May 16 that the

arguments for changing current ROTC practices "seem to many of us compelling." The letter was signed by Robert H. Atwell, American Council on Education; Robert M. Rosenzweig, Association of American Universities; Allan W. Ostar, American Association of State Colleges and Universities, and Robert L. Clodius, National Association of State Universities and Land-Grant Colleges.)

Among those attending the MIT faculty meeting was Robert L. Bettiker, a senior at MIT who was disenrolled from the Naval ROTC program after he informed his commanding officer that he was a homosexual. The DOD initially sought to recover \$38,612 in scholarship funds from Mr. Bettiker, but on May 8 the student was informed by an assistant secretary of the Navy that the DOD had changed its mind and would not seek reimbursement.

In its resolution, the MIT faculty declared its "opposition to the discriminatory policy of the Department of Defense" and said that if the policy didn't change, "MIT should suspend its participation in the ROTC program."

The faculty said it agreed with MIT Provost John Deutch that individuals should be accepted into the military service without regard to sexual preference, subject only to the same expectation of responsible personal conduct that applies to everyone in the Armed Forces." Both the faculty, in its resolu-

tion, and Professor Deutch, in his letter to Secretary Cheney, likened the ban on homosexuals to "prior discriminatory policies against blacks and women."

The resolution calls on the MIT faculty Committee on ROTC to present at the October faculty meeting its recommendation for a deadline by which MIT should suspend its participation in the ROTC program in the event that the DOD does not abandon its current sexual orientation policy.

In other business, the faculty ap-

(continued on page 3)

IN BRIEF

TCC OPENINGS

Technology Children's Center still has a few full- and part-time preschool openings for children aged two years, nine months to five for the summer and next fall.

This year for the first time TCC is able to offer very modest funds for a limited number of scholarships to those enrolling in the five-day-week programs. Please call Olga Slocum, x3-1592, for more information or to apply.

REPORT AVAILABLE

Copies of a preliminary version of the Report of the Committee on Family and Work will be available in the Information Center, Rm 7-121, on campus and in the Personnel Office, Rm A125, at Lincoln Laboratory beginning Friday, May 25.

The report is in two parts: Summary and Recommendations gives the Committee's recommendations; Analysis of Survey Findings analyzes responses to questionnaires distributed to everyone but undergraduates. It includes a number of comments by respondents. Further comments or suggestions are welcome and should be made to the committee chair, Professor Peter Elias, Rm NE43-317. In the fall a final version of the report, including summaries and responses to comments received, will be printed as a Tech Talk insert.

EREQ DEMOS SET

The Department of Purchasing and Stores has begun to implement its new electronic requisitioning system, EREQ, a free service for the community. EREQ is an on-line, interactive, integrated system that supports three functions: electronic requisitioning, electronic speed orders, and user access to Purchasing and Accounts Payable databases. Demonstrations of EREQ will be held Wednesday and Thursday, May 30 and 31, at 2pm in Rm 9-150. A question and answer period will follow the demonstration.

MANY CHANGES

Policies and Procedures Issued in 1990 Revision

The Institute's revised *Policies and Procedures* has been issued, incorporating changes made over the past five years in policies covering matters such as the closing or reorganization of a department or other academic unit, the annual salary plan, tenure, academic fraud, benefits, pornography, and the use of information technology.

The new edition, revised through March 1990, updates and replaces the 1985 volume. It is being distributed this week to members of the faculty, campus research staff, laboratories,

centers and administrative offices. Additional copies can be obtained from the Information Center (Rm 7-121, x3-4795).

In order to incorporate new policies and better organize existing ones, this edition of *Policies and Procedures* has been reorganized, with substantial renumbering of sections. In addition, an improved index includes a greater number of entries that are also more detailed.

Vice President Constantine B. Simonides highlighted some of the

(continued on page 3)

FEWER HOURS

Food Service Lists Schedule

Dining rooms in the residence halls will close for the summer after lunch on Thursday, May 24, according to a notice from MIT Food Services.

Hours and services in the other food facilities will also be curtailed effective Friday, May 25, except where otherwise noted. The regular service schedule will resume Monday, Sept. 10.

Lobdell will be open 7:30am-6:30pm Monday-Friday and 11am-6:30pm weekends. It will be closed July 4.

Networks will be open noon-7pm Monday-Friday. It will be closed weekends and holidays.

The Lobby 12/24 Cart will be open

daily 8am-2pm.

Beginning Tuesday, June 5, Morss Hall in Walker will be open daily 8am-2pm, serving continental breakfast and deli service for lunch. It will be closed weekends and holidays.

Pritchett will be closed. Effective Tuesday, May 29, the Faculty Club will stop serving a la carte dinner for the summer. It will remain open daily for lunch and for evening-meal functions. The Club will be closed weekends and holidays.

Refresher Course will be open Monday-Friday 8am-2pm. It will be closed from the end of Summer Session until the beginning of the fall term.

Classified Ads

Tech Talk ads are intended for personal and private transactions between members of the MIT community and are not available for commercial use. The Tech Talk staff reserves the right to edit ads and to reject those it deems inappropriate.

INSTRUCTIONS: Ads are limited to one (of approximately 30 words) per issue and may not be repeated in successive issues. All must be accompanied by full name and extension. Persons who have no extensions or who wish to list only their home telephone numbers, must come in person to Rm 5-111 to present Institute identification. Ads using extensions may be sent via Institute mail. Ads are not accepted over the telephone.

MIT-owned equipment may be disposed of through the Property Office.

Deadline is noon Friday before publication.

FOR SALE

Dining rm tbl w/leaf & 6 capt chrs, maple, \$175; soft, 7', new cond, \$225; M's 10-sp bike, \$35; white stereo cab, \$35; Indian oriental 4'x6', \$175; Chinese oriental 5'x3', \$75. Call x3-3175 or 332-8251.

VCR multistd (can be played anywhere in world), Toshiba, 1 1/2 yrs old, exc cond, \$350; Panasonic 13" color TV, \$75; must sell, prices negot. Jayant x3-7115 or 625-7293 evens.

Ceiling fan w/light, brand new, in box, \$25. Lucy x3-2744.

M's 12-sp bicycle, Univega frame, Shimano components, 105 pedals, new rims, kevlar belted slicks 700 x 1 1/8, gd for commuting & performs on touring/racing rides, \$200 as is, firm. Jeff or Erik 267-9570 lv mssg.

IBM-AT w/2 high-capacity disc drives, Apple IIc w/2 disc drives, Epson FX-80 printer. Hedy Johannessen x3-6077.

Loveseat and chair, less than 1 yr old, you pick up, \$100 or bst. Tali x3-4791 or 391-7829.

Complete bicycle package: 26" M's 12-sp alloy Fuji, helmet, lock, toe clips, bottle, \$200; F-sz futon/rack maple, \$200; sofa, drafting tbl, desk, dresser: negot. Call 623-2850.

XT-compatible, 640K Ram, 20kb HD w/monodisplay, 24-p printer, \$1000; F-sz futon sofa, \$220; multi-purpose tbl 5'x2.5', \$80. Taka 661-9056.

M's leather jacket, bought in London last summer, hardly used, sz 38-40, impeccably tailored, cost \$850, will sell for \$700. Thomas x3-9676 or 864-4440.

Free: bound copies of the proceedings of the IRE 1955-1968. Call x4729 Linc.

Birchwood hutch, 2 pcs, \$500; crystal steinware, \$25. Call 449-2136 or x4251 Draper.

1986 Baldwin spinnet piano (pecan finish), v gd shape, w/bench & lamp, \$1200 or bst. Charlie Slaviv x5-9584.

Leica M-2 camera, ltwtg, quiet, compact, extremely precise w/collapsible Elmar 50mm lens, appraised at \$670, sell for \$500. John x3-4434.

2 air conditioners: Kenmore 8000 BTUs; Fedders 10,000 BTUs; \$575 for both or bst offer. Call x3-2597 MITThF days only.

Q-sz bed, \$200; foam matt, \$45; 9'x6' rug, \$25; curtains (14 pcs), \$25; children's bike, \$15; drawer set w/mirror, \$20; 13" Sony color TV, \$90; rice cooker, \$28; steam vaporiser, \$5. Merg x3-3947 or 621-0439.

VEHICLES

Dismantled Porsche 914, all parts, cheap; 1974 Alfa Spider, rebt eng & brakes, runs grt, \$1700 or bst. Call 736-5752.

1975 Chevy Nova, 350 hp engine, runs grt, ps, pb, nw batt/trs, a/c, body has some rust, reliable car but must sell due to illness, \$600 or bst. Call x3-7802.

1979 Pontiac Grand Le Mans, 2-dr, 68K, gd shape but nds work, black w/red int, \$200 or bst. Todd 247-3687 lv mssg.

1980 Dodge Colt, htchbk, gold, standard transm, AM/FM, v gd cond, nw exh/batt, \$600 or bst. Gene Fairweather x8-1499 Draper or 617-935-0172.

1981 750 custom Honda motorcycle, 12K, exc cond, \$1000. Jim x3-6350 or 436-5035.

1981 Honda Accord, htchbk, 84K, a/c, nw trs, AM/FM, pwr st, auto, grt body, \$1950 or bst. Amy x3-3746 or 455-1954.

1981 Honda Accord, runs well, 117K, nds nw brks, \$1100. Ken 666-5688.

1982 Toyota Corolla sta wgn, maroon, standard transm, 5-sp, under 62K, nw brks/batt, a/c, AM/FM, \$1300. Anne 617-648-6920.

1983 Olds Wagon, 71K, a/c, auto, no rust, exc cond, \$3500. Rich x8-3959 Draper.

1985 Toyota Tercel, htchbk, 2-dr, 4-sp, AM/FM/cass stereo, exc cond, 71K, \$2400 or bst. Marcio 625-7982.

1985 Subaru DL wgn, red, pb, ps, a/c, loaded, new Mich trs, immac cond, 41K, 1 ownr, \$5250. Call 617-491-7384.

1986 Chevrolet Nova CL, 4 dr, auto, a/c, tilt, ps, pb, AM/FM/cass stereo, top-of-the-line model, fully equipped, really made by Toyota, exc cond, \$4499. Demetri x3-3908.

HOUSING

Beacon Hill: nice IBR avail 7/1, 25 min walk to MIT, 5 mins to T (Red, Green, Blue Lines), grt location, nr top of the hill. Call Nelson x3-8140 or 227-6268.

Belmont: 4BR, CE colonial, well-maint, lrg fenced yd, on dead-end str, in front of town park, ideal for kids, ask \$239,000. Call x3-4315/5191 or 484-5557.

Bethel, ME: nw 2BR carriage hse condo in town ctr, furn, Pleasant Mt & Sunday Rvr skiing, lakes nrby, ask \$94K. Call x3-5618.

Boston: summer sublet at 155 & 165 Bay State Rd, doubles & singles avail (\$200-\$250/person/mo) to MIT students. Adam Singer 859-8706.

Cambridge: nr Hvd Sq, sunny lrg 2BR apt, comp furn & equipped, ownr on sabbatical, \$1300. Mike x3-4992.

Cambridge: rm avail starting 6/1, bed/dresser/w/d avail, will shr w/2 rmtts, gd nrhhd (170 Webster Ave), \$265/mo. Erol 661-8517.

Cambridge: furn apt nr Porter Sq T, BR, LR w/dining area, 3rd flr, priv entrance, yd, avail from 6/14, \$800/mo incl util. Earle or Ruth x3-4877 and 876-7821.

Cambridge: summer sublet, lovely IBR apt betw Hvd & Central Sqs, close to T, shops, hdwd flrs, d/w, disposal, a/c, \$600/mo, avail 6/1. Anya x3-0549 or Laura 876-6442.

Cambridge: Kendall Sq, walk to MIT & T Lines, nw 3-flr twnhse, 3BR, cent a/c, 2 full baths, gar, yd, fully equipped ktchn, microwave, d/w, disposal, w/d, avail 7/1/90, no pets, \$1500/mo w/lease. Call 617-491-0992.

Cape Cod: E Sandwich Beach, sm IBR cottage, across rd from ocean beach, ideal for 2 couples or sm family, avail 7/7-7/14, 7/14-7/21, 8/4-8/11, or 8/18-8/25, \$400/wk. Call 508-877-9518.

Cape Cod, Wellfleet: 3BR, magnificently situated hse to sublet 7/7 or 7/8 thru 7/15 in wooded area on lake, 5 mins to bay & ocean, sublime solitude & serenity, \$850. Doris 864-7739.

Cape Cod: W Yarmouth, Rt 28, IBR condo "cottage" slps 4, outdr pool, all conv for cooking, etc, avail 2 wks only, 6/16-6/30. Penny x3-4251 or 617-646-1876.

Central Sq: sublet/lease (now - 9/1), MIT affiliate, roommates (\$185/mo) or single (\$370/mo) for lrg rm, med rm (\$250/mo), conv loc, 15 min to MIT. Call Chock x3-0928.

Everett: spacious 2-3BR apt, summer sublet w/option to continue, conv to T, 10-15 min drive to MIT, \$720/mo + utils. Jason or Steve 381-0222.

Glencoe, Nova Scotia: vacation retreat, v private 12-acre site overlooking E River Valley, 2BR, 1/2 loft, swim nrby waterfall pools, ideal for relaxing, hiking, bird watching, \$275/wk. Call x3678 Linc or 508-369-3973.

Madison, NH lakeside cottage w/sandy beach, slps 8, nicely furn, w/w, all appl, rowboat, canoe, swimming, fishing, nr Kancamagus & N Conway, avail 6/30-8/11, \$700/wk. Call x5431 Linc or 508-779-6473.

Needham: pleasantly decor & furn hse for rent, 2BR, LR, DR, eat-in-ktchn, frplc, add'l bsmt living space, gar, quiet pretty str, great access, avail summer from 6/1/90 and/or acad yr from end Aug, \$1200/mo. Sara x3-7797.

Newton: furn 4BR hse for rent for 1990-91 academic yr. Call x3-3230.

Somerville: sublet avail 6/1-9/1 w/option to lse until 9/1/91, beaut apt, shr w/MIT grad students, porches, veg garden, clean, off-st prkg, nr MIT & Hvd, \$275/mo. Abby x3-3065 or 623-7595.

Student Notices

* -Open to public
** -Open to MIT community only
*** -Open to members only

ANNOUNCEMENTS

MIT Strategic Games Society**—Play economic, war, and diplomacy games: Axis & Allies, Titans, 1830, Diplomacy, Junta, etc. New players are always welcome. Club meets every Friday at 7pm, and Saturday at 1pm at the war room: Walker Hall, 4th floor (across from the gym). To hear what's happening, call during club hours, x3-7498.

Student Work in the Media Laboratory Darkroom—Due to construction, the Media Lab Darkroom can no longer store unclaimed student work. Please come and claim work you may have left there between 5/23 and 6/8, 10am-5pm, Rm E15-443. Any work remaining after 6/8 will be thrown away.

Free Museum of Science Admission for MIT Students—With MIT student ID, provided by Mass Beta chapter of Tau Beta Pi, the National Engineering Honor Society. Reduced admission to special exhibits.

Arts Hotline—Recorded information on all art events at MIT may be obtained by dialing x3-ARTS. Material is updated every Monday morning.

Versailles, France: 30 min to downtown Paris by train, beaut 4BR furn apt in old bldg next to park, garden, close to shops and schools, avail 7/90-7/91, \$2000 incl ht & hw. Michel x3-5074.

Walk to MIT, IBR condo comp furn & renov, rental prkg poss, avail June-Aug or June-June, perf for int'l visiting couple. Kathy or Bill 497-5525.

Waterville Valley, NH: rental, 4 seasons of activities, R&R, 2BR condo, fully furn, at Northface, spectacular, avail by season, wk, or wknd. Tom x3-4978 or 617-749-6645 evens.

White Mts, Lincoln, NH: summer vacation, 4 pools, tennis, whirlpool, etc, 2BR, 2b, slps 8, comfortable. Call x3-2772 or 396-4221.

3BR, 2b apt, a/c, laundry, prkg, 10 mins from MIT, 12 mins from Hvd Sq, summer w/fall option, \$1200/mo. Call 661-8495.

WANTED

House or apt nr MIT, 3 months, Oct-Dec, for visiting prof & spouse. Don x3-8006 or 491-3104 evens.

Recent, old, and ancient issues and volumes of biomedical journals like Cell, J Exp Med, Nature, Science, J Immunology. Thomas x3-1931.

ROOMMATES

Cambridge: sk M/F for spacious 3BR apt, 2 min from Davis Sq T, avail 6/1, \$350/mo + util. Call 547-6441.

Somerville: 2M (1 MIT employee) sk 1 M/F nonsmkr to shr 3BR apt, off-st prkg, close to laundry, grocery, etc, bus to MIT, \$265/mo + util. Peter x3-5656.

Waltham: 1 person to shr 2BR twnhse w/professional M, a/c, prkg, free shuttle to Alewife, beaut vw, \$490/mo incl ht. Paul x3995 Linc or 893-2841.

LOST AND FOUND

Lost: 5/16/90, 11:28-11:45am betw Mass Ave & Student Ctr: taupe nylon folding wallet holding cash, Riggs Bank checks, calculator, Cross pen, & most importantly, hand-printed info on 5x8 cards & slips of paper. If any of these components are located, pls call collect, 202-244-2174, Mrs. M B Hoffmann (if ans svc picks up, pls call again).

MISCELLANEOUS

Thesis expert, professional typing, editing, word processing, 10 yrs MIT exp. Marie x3-3490 or 547-1311 evens & wknds.

Day care avail, loving & caring mom looks for child of any age in her sunny, spacious Westgate apt, flexible hrs. Call 621-0488.

Nightline**—a student-run campus hotline open every evening of the term, 7pm-7am. If you need information about anything or you just want to chat, give us a call. We're here to listen. x3-8800.

RELIGIOUS ACTIVITIES

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

MIT Hillel*—Info: x3-2982.

Tech Catholic Community**—Masses: Sat, 5pm; Sun, 10am & 5pm. Tues & Thurs, 5:05pm, Fri, 12:05pm, MIT Chapel. Info x3-2981.

Lutheran Ministry and Episcopal Ministry**—Weekly Service of Holy Communion—Wed, 5:10pm, MIT Chapel. Supper follows at 312 Memorial Drive. For further info, call x3-2325/2983.

United Christian Fellowship**—Large group meetings. Join us for worshipful singing, prayer, sharing and Bible teaching, and small group Bible studies during the week in various dorms, Fri, 7pm, Rm 6-321. Info: Tracy, x5-9688 dorm.

Graduate Christian Fellowship**—Come join other grad students, faculty and staff in learning about and growing in the Christian faith. Activities open to both Christians and those interested in learning more about Christianity. Info: John Keen x3-7706, Dave Otis x3-7193.

MIT Islamic Society*—5 daily prayers in the prayer room, Ashdown House (Bldg W-1) west bsmt. Friday congregation: 1:10-1:45pm in Ashdown House (Bldg W-1) west bsmt. Muslim Study Group: open to men & women meets Fridays 8pm-9:30pm, Rm 1-135. Additional presentations available on request. Info: x8-9755.

Christian Science Organization at MIT*—Weekly Testimony meetings, Tues, 8pm, MIT Chapel.

Lincoln Laboratory Noon Bible Studies*—Tues & Thurs, Kiln Brook III, Rm 239. Annie Lescard, x2899 Linc.

Morning Bible Studies**—Fri, 7:30-8:30am, L-217. Ed Bayliss, x3456 Linc.

Noon Bible Study*—Every Wed, Rm 1-150, bring lunch. Ralph Burgess, x3-8121. (Since 1965.)

MIT Bible Study Group*—The Economy of God, a look at God's eternal purpose to dispense Himself into man based on the revelation of the Bible, Fri, 8pm, Student Ctr Rm 407. Singing, prayer, Bible reading, fellowship.

MIT Campus Crusade for Christ*—Fridays, 7:17pm, Marlar Lounge, Rm E37-252, TGIF weekly meeting of MIT Campus Crusade for Christ. We "thank God it's Friday" every week with singing, biblical input, discussion and fun. Info: x5-9153 dorm.

MIT Vedanta Society*—Meditation and discourse on the Bhagavad Gita, Swami Sarvagatananda, religious counselor, classes held Fridays 5:15pm, MIT chapel.

INTERNATIONAL

MIT-Japan Program. A unique opportunity for MIT science, technology and management students to spend a year in Japan working at a major Japanese company or laboratory. Students are trained in Japanese language and culture at the Program's expense before being placed in Japan. Placement is tailored to the student's background and experience. Travel to/from Japan and living expenses will be covered. For further information, call Patricia Gercik, x3-3142, Ctr for International Studies, MIT-Japan Program, Rm E38-754.

STUDENT JOBS

There are more job listings available at the Student Employment Office, Rm 5-119. The Student Employment Office has many "one time only" jobs. Many students find these jobs a good way to earn money fast.

Student manager position for the MIT Symphony Orchestra available. Will assist the Symphony Director of the Concerts office with MIT Symphony activities during rehearsals, recording sessions, and concerts. Various other duties also. Will start in September at the Activities Midway. Hours: Tues and Thurs 7-10 pm (as needed) plus 4 Sat evenings and extra sessions. Salary: \$7/hr. Contact: Robin Dumas or Clarise Snyder, Concerts Office, 14N-207, x3-2826.

Looking for a D-Base or Fox-Base programmer. We are developing a customer-tracking software package. Flexible hours, can work either on or off campus. Hours: 5 hrs/wk. Salary: \$10-\$20/hr, depending on experience. Contact: Dan Burnstein, Beacon Expert Systems, 35 Gardner Rd. Brookline, MA 02146. Phone: 738-9300.

Summer Assistant to the President of a small entrepreneurial consulting company. Duties will include working with IBM PCs on One Write Plus Spreadsheet system plus develop-

ing materials for national publicity and business plans. Emphasis on day to day detail work is essential. Hours: full-time for the summer. Salary: \$10/hr (negotiable). Contact: William Kennedy, ICORP, 100 Memorial Drive, Cambridge, MA 02139. Phone: 864-5555.

Summer opportunity to work in the forefront of font technology for TrueType outline font scaling technology, adopted by both Apple Computer and Microsoft. Position available working on the user interface of a large software project. Includes work in the areas of window handling, mouse driven interfaces, and graphical interfaces. Requires excellent C programming skills, Macintosh programming experience and familiarity with the Macintosh. Hours and salary are to be discussed. Contact: Sampo Kaasila, Type Solutions, Inc, 6 Squirrel Run Road, Plaistow, NH 03865 (appr. 40 miles north of Boston). Phone: (603) 382-4839.

Journals Permissions & Copyright Assistant needed at MIT Press for the summer. Activities include processing permissions requests and copyright registrations, compiling annual permissions report, and some general publishing correspondence using typewriter and IBM PC. Some routine office tasks included also. Needed from June 1-August 30. Hours: appr. 20 hrs/wk. Salary: \$7/hr. Contact: Nancy Higginbotham, MIT Press, Journals Dept., 55 Hayward St., Cambridge, MA 02142, x3-2864.

UROP

MIT and Wellesley students are invited to join with faculty members in pursuit of research project of mutual fascination. Summer term projects are now posted on the bulletin boards in the main corridor and in the UEO. Faculty supervisors wishing to have projects listed should send project descriptions to the UEO. Questions? Contact UEO at x3-7909, 20B-141.

UROP T-Shirts are now on sale for \$6.00 in the UEO. Come by and pick one up.

Quantum Optics Lab. The student will participate in our efforts to generate nonclassical states of light in a four-wave mixing experiment. The student will learn and contribute in all aspects of a quantum optics experiment including balanced photo-detection and quantum noise study and applications. Lab experience is highly desirable. Faculty supervisor: Dr Franco Wong, 36-473, x3-8131.

Reaction Bonded Silicon Nitride. We seek two UROP students to assist with making and characterizing research samples. Characterizations that will be done include quantitative X-ray diffraction analysis and SEM microscopy. Training will be provided. Requires some materials characterization experience. Sophomores/juniors in Course 2, 3, 4, or 10 are preferred. Faculty supervisor: Dr John Haggerty, x3-6819, 12-009.

Ceramic-Composite Work. Ceramic composites will be formed using sol-gel techniques. The student will be responsible for preparing gels and characterizing the products using techniques such as x-ray diffraction and TGA/DTA. Students who have some chemistry experience or who have taken 3.081 would be preferred. Supervisor: W Rhine; contact: A Hardy, 12-096, x3-9450.

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KENNETH D. CAMPBELL

Editor

JOANNE MILLER

Assistant Editor

ELIZABETH THOMSON

Photojournalist

DONNA COVENEY

Production

GENEVIEVE PARENT, KAREN SKLUT
OF MIT GRAPHIC ARTS

News Office

Director: Kenneth D. Campbell; Associate Director: Robert C. Di Iorio; Senior Assistant Director: Charles H. Ball; Chief Science Writer: Eugene F. Mallove; Assistant Directors: Naomi F. Chase; Donna Coveney; Joanne Miller; Assistant Editor: Elizabeth A. Thomson; Administrative Assistant: Myles Crowley; Senior Staff Assistant: Lisa Damtoft; Receptionist: Cynthia Consentino.

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Institute Calendar

* -Open to public
 ** -Open to MIT community only
 *** -Open to members only

May 23 - June 3

SPECIAL INTEREST

From All Walks of Life*—June 3: A 10-kilometer pledge walk to benefit AIDS care and research. People are needed both to walk and to sponsor walkers. Contact Liz Quinn, GAMIT, x5-8607.

SEMINARS & LECTURES

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

THURSDAY, MAY 24

Comparison of ¹⁴C and ²³⁰Th Dates of Corals by Mass Spectrometry: Implications for ¹⁴C Production by Cosmic Rays Over the Past 30,000 Years*—Dr Edouard Bard, Lamont-Doherty Geological Observatory. Sponsored by the Dept of Earth, Atmospheric and Planetary Sciences, 4pm, Rm 54-915.

FRIDAY, MAY 25

Total Magnetic Reconnection During a Tokamak Major Disruption*—John Goetz, U of Wisconsin. Plasma Fusion Center Seminar Series, 4pm, Rm NW17-218.

Bikes Not Bombs: Alternative Transportation Development in Nicaragua*—Carl Kurz, co-founder of Bikes Not Bombs. Sponsored by MIT Prof Dr David Gordon Wilson and the Boston Area Bicycle Coalition, 7pm, Rm 3-133.

THURSDAY, MAY 31

Structure of Inverse Diffusion Flames in Supercritical Fuel/Water Mixtures*—Billy R Sanders, Sandia National Laboratories. Energy Laboratory Seminar, 11am, Rm E40-464.

Ship Wave Patterns and Motions by Rankine Panel Methods***—Dimitris E Nakos, PhD Defense. Sponsored by the Dept of Ocean Engineering, 11am, Rm 5-314.

COMMUNITY INTEREST

Alcoholics Anonymous (AA)**—Meetings every Tues, 12-1pm; Thurs, 12-1pm, Rm E23-364. For info call Sarah, x3-4911.

AI-Anon**—Meetings every Fri, noon-1pm, Health Education Conference Rm E23-297; every Tues, noon-1pm, Rm 1-246; and every Mon, 12-1pm, Lincoln Lab Bldg 1218, Family Support Ctr. The only requirement for membership is that there be a problem of alcoholism in a relative or friend. Call Sarah, x3-4911.

Alcohol Support Group**—Meetings every Wednesday, 7:30-9am, sponsored by MIT Social Work Service. For info call Sarah, x3-4911.

Co-Dependents Anonymous (CoDA)*—Meetings every Thurs, 6:30-8pm, Rm 66-144. Info: Sarah, x3-4911.

German Lunch Table**—Come to lunch and speak German, every Tues 1:15-2pm, Walker dining hall. Look for the German flag, all levels welcome. Sponsored by the Foreign Languages & Literatures Section.

Graduate Student and Postdoc Parents Support Group*—Co-leaders: Dawn Metcalf, Social Worker, MIT Medical Dept; Rae Goodell, Coordinator of Parent Programs, MIT Child Care Office. Info: x3-1592 or x3-4911.

Informal Embroidery Group*—MIT Women's League Group meets May 2 & 16, June 6, 10:30am-1:30pm, Rm 10-340.

Lincoln Laboratory Children's Center has full and part-time infant, toddler, and preschool openings in the new child care center opening in Lexington on September 4, 1990. The center is open to the entire MIT community and the public at large. Information, call Christina Logan, Director, 861-3850.

Boston Mutagenesis Group*—Meetings are held the first Wednesday of the month in the 6th

floor conference room, E17, 7pm. Speakers from MIT, Harvard and other local schools discuss their research; related topics include mutagenesis, carcinogenesis, cellular repair systems and DNA damage in prokaryotic and eukaryotic cells. Info: Kara Best x3-6729.

Narcotics Anonymous*—Meetings at MIT, every Mon, 1-2pm, Rm E23-364 (MIT Medical Dept). Call 569-0021.

Overeaters Anonymous (OA)*—Meets Thurs, 1-2pm, Rm E23-364. Only requirement for membership is the desire to stop eating compulsively. Info: Sarah, x3-4911.

Office Workers Issues Group**—Women's Forum informal support staff meetings, Wed, 12:10-1pm, Rm 8-219. Bring your lunch; network or talk about office worker's issues.

Summer Physical Education Courses**—Aerobics, Exercise Fitness, Golf (Beg), Scuba, Sailing, Sculling, and Tennis (Beg & Int) are being offered by the Physical Education Office, W32-125. Info, x3-4291.

Summer Recreational Rowing**—Sculling program (single-person boats) open to all members of the MIT community, beginners welcome. Phys Ed courses (see above): Open Instruction/Coaching 6/11-8/16, M/W 7am-10am, T/Th 4-7pm. Pierce Boathouse open for rowing M-F 6am-2pm (T/Th until 7pm). All rowers must have a valid MIT Sculling Card (\$30/student; \$100/faculty, staff, alumni; \$50/add'l family member) and pass small boats swimming test. Info, Stu Schmill, x3-6246.

Wives' Group**—All women in MIT community welcome. *Afternoon Group*: meetings 3-4:45pm, Rm 491, Student Center; babysitting, Rm 407. *May 23: "A Dessert Party."* Wives' Group members are asked to bring a small dessert, along with the recipe, to share with the group and to say goodbye to those who are leaving soon. *Sightseeing Group*: *May 25*: 10am, Newbury Street galleries and shops. Further info: x3-1614.

HEALTH EDUCATION

Nursing Mothers' Support Group**—Pregnant and breastfeeding women at MIT meet to gain confidence and share info and practical tips. First Tues of each month, 10-11am and third Weds of each month, 4-5pm, Rm E23-297. Babies welcome. Info: Connie Bean, x3-1316.

Working Mothers Support Group**—An ongoing support group that meets to discuss parenting-related issues in a casual atmosphere. Meets every other Wednesday, 12-1:30pm (drop in anytime), Rm E23-364. Next meeting: *May 30*. Info: Janette Hyde x3-4290.

MITAC

Tickets may be purchased at the MITAC Office, Rm 20A-023 (x3-7990), 10am-3pm Monday-Friday. Tickets are also sold in Lobbies 10 and E18 on Fridays, 12-1:15pm. Lincoln Lab sales in Rm A263, 1-2pm Tuesday-Friday. Further details on events are included in MITAC's monthly flyer. To avoid disappointment, make reservations and purchase tickets early. Because MITAC is non-profit, refunds are not available.

MITAC, the MIT Activities Committee, offers discount movie tickets for General Cinema (\$3.75/ea) and Showcase (\$4.25/ea). Tickets are good 7 days a week, any performance.

Museum of Fine Arts—The Council for the Arts has 10 passes employees may borrow for free admission. Call the MIT libraries, x3-5651, for availability. At Lincoln Lab, MFA passes are available in A-150.

Ferry Discounts are here! Woods Hole to Martha's Vineyard, r/t, adults \$6.40 (reg \$8), children \$3.20 (reg \$4). Hyannis to Nantucket, r/t, adults \$14.40 (reg \$18), children \$7.20 (reg \$9). Discount coupons avail in MITAC office on campus & Rm A263 Linc.

Tech Night at The Pops—June 7: Sponsored by the Alumni Association as part of the Technology Day Festivities. 8pm. Tkts: \$21/pp, 1st balcony, \$6/pp, 2nd balcony. Tkts. must be purch'd by May 24.

Whitewater Rafting in Calumet, Quebec—Jun 22-24: Incl round-trip transportation, 2 breakfasts/lunches/dinners, & campsite. Only \$145/pp. Bus leaves West Garage Fri, Jun 22, 12 noon; & returns approx. 12 midnight Jun 24.

Summer Weekend Escapes at Talbot House in Vermont—Jul 6-8, Jul 13-15, Aug 3-5, Aug 10-12: South Pomfret, VT. Dorm style accommodations in a cooperative living environment. Room sizes for 4, 5, or 6 people/room, & reservations must be made by the room. \$58.50/pp/wknd, meals included. You provide your own transportation. One room per customer. Reserve by Jun 29.

MUSIC

For recorded information on upcoming concerts and lectures call the MIT Music and Theater Arts Concert Line, x3-9800. Updated weekly.

Advanced Music Performance*—May 25: Graduate student Wilson Hsieh, viola student of Marcus Thompson. 12:05pm, Killian Hall.

1990 Revised Policies and Procedures Issued

(continued from page 1)

sections that are either new in this edition or revised since the 1985 edition.

Included in the new edition are several policies which have been revised to reflect the Institute's obligations to faculty and to research scientists in the event of the closing or reorganization of a department or other academic unit.

The Annual Salary Plan for Faculty has been revised to modify the exceptions to the general rule that a faculty member may be paid no more than two-ninths of his or her annual plan salary for teaching duties during the summer months. The thrust of the exceptions is to permit a rate of compensation for teaching in specified programs unrelated to the faculty member's regular nine-month salary, but limited in time commitment and with the time counted as consulting days. Requests for approval under the exceptions must be submitted to the Provost six months in advance.

The Promotion and Tenure Policy reflects the change from seven to eight as the maximum years of service for granting tenure to associate professors if they are continued after age 35. The change also provides for counting each year of recognized professional leave as a year of service on the tenure clock.

The Termination of Tenure policy affirms the entitlement of a faculty member for whom the President has received a recommendation to terminate tenure to a review of the case by a committee of peers, reporting its findings and recommendations to the President.

The Procedures in Dealing with Academic Fraud in Research and Scholarship have been changed to provide more detailed guidelines in initiating, conducting, and reporting an inquiry into or investigation of alleged academic fraud. The new policy was printed

in MIT Tech Talk on April 11, 1990.

The section on Benefits for Faculty and Staff Members and subsequent sections replace the description of individual benefit plans with a comprehensive statement on benefits communications and the means by which faculty and staff members can inform themselves of the benefits available to them. In the recent past, many changes and improvements have been made in the MIT benefits program and great emphasis has been placed on accurate and effective communication of benefits information. Instead of attempting to telescope and paraphrase the plan descriptions in *Policies and Procedures*, with the attendant risks of imprecision and incompleteness, the decision was made to list the primary and official sources of benefits information. The Retirement of Tenured Members of the Faculty section has been significantly changed to reflect the major restructuring of MIT's pension plans.

A new policy included in the document is the Policy on Pornography, adopted by the Academic Council in February, 1990, to be in effect for three years (MIT Tech Talk, February 7, 1990). It states that no pornographic films shall be shown in common areas of the Institute, including classrooms, lecture halls, corridors, and common spaces in dormitories.

Another new policy is on the Use of Information Technology. It sets forth the legal, contractual, professional, and policy obligations which must be complied with whenever information technology is used. The statement covers privacy of institute records; information security; responsible use of MIT computers; networks and telephones; privacy of electronic communications, and the organization and use of third-party products and services.

Finally, the Intellectual Property

Policies and Procedures have been substantially rewritten to reflect updated policies.

Mr. Simonides recommended reviewing the 1990 edition because of the large number of revisions to existing policies.

Mr. Simonides acknowledged the efforts of John Wynne, Vice President Emeritus; Nancy Lombardi, administrative officer in the President's Office; Laura Mersky, associate in the Analytical Studies and Planning Group (ASPG), and Sarah Campbell, staff assistant in the ASPG. Ms. Lombardi will be responsible for collecting changes in policy on an ongoing basis and will respond to requests for interpretation of policy or for the latest status of a policy.

Faculty Condemns DOD Policy

(continued from page 1)

proved a resolution to establish a study panel to review the process by which campus demonstrations are handled and to make recommendations including guidelines for the conduct and handling of demonstrations and the possible establishment of an advisory panel to be consulted in times of crisis and which would monitor major demonstrations.

The resolution stems from the recent demonstrations by the Coalition Against Apartheid and the arrests of several students. The matter was first raised at the faculty meeting in April and continued to the May meeting for action.

The faculty also gave formal approval to a motion discussed at the April meeting to provide faculty membership for Athletic Department faculty. The vote amended the faculty membership rule (Rule 1) to include as faculty members those holding the rank of assistant professor/coach, associate professor/coach and associate professor/senior coach.

The faculty also heard from Associate Professor Martin F. Schlecht, chairman of the Faculty Commencement Committee, on guidelines for the exercises. Because of the presence of President Virgilio Barco of Colombia, the commencement speaker, the Secret Service will treat with low tolerance any disruptive activity in Killian Court, he said. Non-disruptive demonstrations are appropriate in public spaces away from Killian Court, he said.

High Schoolers Introduced to Plasmas

(continued from page 1)

near-reactor conditions like the Alcator C, but it can be run at a steady state for more basic experiments. "We use the HCD to generate plasmas, then make density and temperature measurements on them," Professor Freidberg told the high-school students.

With that, he and Thomas Hsu, a graduate student in the department and one of the students who helped assemble the machine, invited individu-

als to help them make a plasma by adjusting various knobs and dials on the machine. Before long a bright blue beam of plasma shot across the middle of the HCD, visible through portholes along the sides.

Judging by the reactions and attention of students on the tours, Professor Parker may well have met one of his goals: no doubt some of these kids will become scientists.

Summer Concert Band Activities*—The MIT Concert band, John Corley, director, will be sponsoring a summer band program open to all interested musicians in the Boston area. Rehearsals Tues evenings 7-9pm beginning 6/19, Kresge Auditorium. Musicians of all levels welcome. Call x3-2826 bef 6/15.

DANCE

MIT Folk Dance Club*—weekly dancing: Sun, Beginning International Dancing, 7pm, Student Ctr Sala de Puerto Rico; Tues, Advanced Balkan and Western European Dancing, 8pm, Student Ctr Rm 407; Wed, Israeli Folk Dancing, 7pm, Lobby 13 (subject to change). Info: x3-3655.

Aerobics Classes*—Sponsored by the MIT Dance Club, Every Mon, Wed, Fri, 6-7pm, Bldg W31 Dance Studio, \$3/per class. Info: Julia, 492-1369.

Aerobics/Workout Class**—Open to activity card users/MIT Health Plan. Sponsored by the Phys Ed Dept. Tues & Thurs, 1:10-2pm, Swimming Pool, Racket Court Rm #1.

Rhythmic Gymnastics Classes for Women**—MIT Women's League classes, Thurs, 12-1pm, Rm 10-340. Info: Helena, 596-2396 eves.

Yoga*—Ongoing classes in traditional Hatha and Iyengar style. Beginners: Mon, 5:10pm, Rm 10-340; Intermediate/Advanced: Mon, 6:30pm, Rm 10-340. For information call Ei Turchinets, 862-2613.

MIT Dance Workshop Classes*—An activity of the Theatre Arts program taught by members of the Beth Soll & Co, MIT's resident dance company. Beginning Modern Technique, M,W, 3:30-5pm, T-Club Lounge, Dupont Ctr; Intermediate Modern Technique, Tu,Th, 5:30-7pm, Walker-201; Discussion, Tu 4-5pm, Rm 4-148; Composition/Improvisation, Tu 11-12:30, Walker-201; Technique/Repertory/Improvisation, Tu 11-12:30, Walker-201. Info: x3-2877.

EXHIBITS

LIST VISUAL ARTS CTR

Matt Mullican. A quasi-architectural space inhabited by found and fabricated objects comprising Mullican's cosmological model. **Nancy Burson: "The Age Machine" and Composite Portraits**. Participatory video photo-booth allows visitors to look into the mirror of the future and see what they might look like in 20 years. **Bill Traylor: Drawings**. 80 whimsical and colorful works created by this self-taught artist, a freed slave who began work in 1936 at age 84. Through July 1.

THE MIT MUSEUM

MIT Museum Bldg (N52)—From the Ecole to Tech: Desiree Despradelle, His Colleagues, and Students. Drawings from the museum's extensive architectural collections will be featured in discussing the nationwide influence of the Ecole des Beaux Arts trained architect Despradelle. Through June 10. **Richard Bertman: Architect and Sculptor**. Drawings, sculpture, and architectural plans by the eminent Boston architect. Through July 29. **Math in 3D: Geometric Sculptures by Morton C. Bradley, Jr.** Revolving sculptures based on mathematical formulae. Form and color relations lend these works a unique visual appeal, ongoing. **Holography: Types and Applications**. Changing exhibit demonstrating the uses of this three-dimensional imaging medium. Works include scientific, medical, technical, and artistic imaging drawn from the work of the Spatial Imaging Group at MIT's Media Laboratory, ongoing. **Light Sculptures by Bill Parker, MIT '74**. Changeable, touchable plasma sculptures by the artist who developed this medium, ongoing. **Marcia Oakes Woodbury**. Oils, watercolors and drawings by celebrated turn-of-the-century artist, ongoing. Hours: Tues-Fri 9am-5pm. MIT Museum closed to the public on Mondays; Open 12-4pm Sat-Sun.

HART NAUTICAL GALLERY

Ongoing exhibits: **George Owen '94: Yacht Designer**—Line drawings and half-models designed by one of the early professors of naval architecture at MIT. **Half Models in Naval Architecture and Ship Building**—Half-models, ship drawings and photographs illustrate how the half model has aided ship and yacht designers and builders.

CORRIDOR EXHIBITS

Corridor Exhibits: Bldg 1 & 5, 2nd floor: **John Ripley Freeman**. Lobby, Bldg 4: **Norbert Wiener**, Karl Taylor Compton. **Community Service Fund**, Ellen Swallow Richards. **Women at MIT**. An overview of the admission of women at MIT. Five photographic panels with text documenting the circumstances that increased the number of women in the classroom since Ellen Swallow Richards. Bldg 6: **Laboratory for Physical Chemistry**. Bldg 4: **Edgerton's Strobe Alley**: Exhibits of high-speed photography. (Corridor Exhibit).

COMPTON GALLERY

Microscapes. Color photographs by AT&T photographer Charles Lewis. Microprocessor chips, glass fibers, crystals, magnetic bubbles shot at speeds up to 1/720,000th of a second and magnified as much as a billion times. Ongoing. 77 Massachusetts Ave. Hours: Mon-Fri 9-5, Sat 12-4.

OTHER EXHIBITS

Institute Archives and Special Collections—Jerome C. Hunsaker, Father of Aeronautics at MIT: Chronicles his founding of aeronautics at the Institute; his design and construction of Navy airships and NC-4, the first airplane to cross the Atlantic, and his role in leading the Dept of Aeronautical Engineering from 1939-51.

Send notices for Wednesday, May 30, through Sunday, June 10, 1990 to Calendar Editor Rm 5-111, before 12 noon Friday, May 25.



MUSIC



Violist Hsieh in AMP Concert

Graduate student **Wilson Hsieh '88**, above, will present the last of this year's Advanced Performance Music (AMP) concerts at 12:05pm Friday, May 25 in Killian Hall. He studied viola this year with Professor of Music Marcus Thompson. Information: 253-9800

Songs of Love and Circus Freaks Will Be Sung

Two graduate students, baritone **Joel Wachman** and pianist **Michael Hawley**, will present a vocal concert in The Atrium of the Wiesner Building (E15) this Friday, May 25 at 4:30pm. Entitled *Songs of Love and Circus Freaks*, the concert will include music by Schumann, Gershwin, Ives and Cole Porter.

DANCE

Dance Explores Curie's Life, Attitudes on Radioactivity

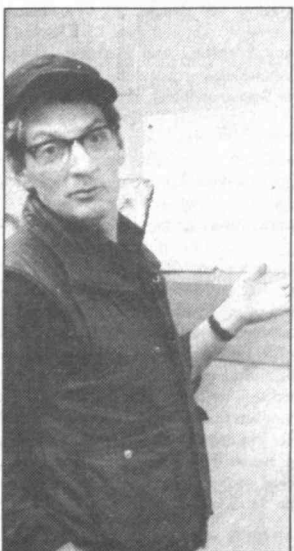
A dance performance based in part on the life of Marie Curie will be presented at Mobius by the dance company of choreographer/artist **Laura Knott** who received her Master of Science in Visual Studies from MIT. This new work, *CURIE/US*, was described by Ms. Knott as concentrating on radioactivity, "the topic which brings most clearly into view the public's ambivalence toward science and technology." It will be presented at 8pm May 24 and 25, and at 7 and 9pm on May 26 in the Mobius performing space at 354 Congress Street in downtown Boston. Admission: \$10 and reservations, necessary because of limited space, may be made by calling 542-7416.

The Arts Page is produced by the Office of the Arts in collaboration with ARTSNET--253-4003

PROFILE

Edward Darna Award in Theater Arts Is Founded--

"You have been our history and conscience and support"



What is it about Ed Darna? Whenever you mention his name to anyone who's been connected with theater at MIT in the last 25 years, the person tends to glow. One longtime observer of Dramashop tried to explain it: "Well, he's the glue and the cake, the bread and the soul."

Last Saturday afternoon those in Dance and Theater Arts gathered on the roof deck of Random Hall for their annual spring picnic and surprised Darna with a succession of gifts to celebrate the last quarter century of his many guises and gifts that can't begin to be covered by his official role as technical director and lighting director.

Leading the honors was an announcement that the Edward S. Darna Theater Arts Award has been established by the MIT Theater Program in cooperation with Dramashop. It will be given each spring, beginning in 1991, "to an undergraduate who has demonstrated excellence in theater arts and made a substantial contribution to the life of the theater on the MIT campus."

Part of the announcement—signed by Professor Alan Brody, director of theater arts, and Julie Schmittiel '91, president of Dramashop—follows.

"This award represents a small portion of the respect, appreciation and, above all, affection which the faculty, staff and students of theater at MIT hold for you. It is to you we have all come in times of conflict, of confusion, and joy—and you've never failed to be there to remind us of the pride we can take in our work, its rewards beyond the moment, and the values of humanity and generosity which our work celebrates."

Brody said "Sometimes you've reminded us of those things simply by your presence and the model of commitment you've presented, sometimes with tough clear-headed frankness, and sometimes with humor and interminable stories (loud laughter from the picnickers). You have been our history and conscience and support. You have been, in the truest sense of the word, our educator, 'leading us out' of ourselves and into discovery."

How did it begin? Not too long out of Emerson College, where he majored in theater, Darna was brought to MIT in 1965 by a legendary figure, the late Joseph D. Everingham, who came to MIT in 1954.

Though Darna said recently that the early times were difficult for him, abundant stories describe him as quickly displaying the talents of a designer, actor, builder, inventor, teacher, coach, organizer, facilitator, and friend.

Jonathan Rockman '91 began this spring to gather reminiscences from Dramashop alums. Several mentioned the time when Darna made a thunderstorm, with rain, on the stage of Kresge Little Theater for *Night of the Iguana*.

William Lee Roberts '69 wrote "I always thought of Ed Darna as a man of courage, risking life and limb working with inexperienced crews who are too young to know the meaning of fear."

Mail flowed in from around the country, building up to an almost musical collection: "Ed was one of my biggest friends at MIT. . . I'll never forget his enthusiasm, like the great fun we had when I designed a set completely in purple and pink for *Please Don't Walk Around in the Nude*. . . The on-stage crap game he organized for *Six Characters in Search of an Author*. . . Ed was probably one of the best teachers I had at MIT. . . I have never worked with anyone who is so able to create theater as a collaborative art. . . He taught me the techniques of theater and he instructed me in the techniques of honest, ethical, dedicated, joyful living. . . Ed was one of the best teachers I had at MIT."

All these studies of Ed Darna--and also Wilson Hsieh in the first column--are by photographer Robert Newman '89.

Jim Pelegano '70 wrote that he is active in community theater in the Milwaukee area. "I find myself often saying 'When I was in college, Ed always said—' I think the people here think that this guy Ed must be God's gift to the technical theater. As far as I am concerned he was and is."

"He has the gift, absolutely, of making the audience see more than what is going on," said Dramashop director William Fregosi. "Everything works better when he works on it. And his skills! He creates the completeness and the polish, the final sparkle. Being around him everyone realizes that heaven is in the details."

Students come to us, Fregosi said, not only because they want to learn acting or other parts of the theater but because of the atmosphere here. "And the atmosphere is the backstage. And the backstage is created by Ed," he said. As intricate and varied as Darna's backstage work is, it is paralleled by his subtle work among human beings. "More than telling people what to do, you've got to create the atmosphere in which they can be liberated to do their own best work. Ed does that better than anyone I've ever known," Fregosi said.

From Manhattan, playwright A.R. (Pete) Gurney, on extended leave of absence from MIT, recalled the winter he directed *Measure for Measure* when Everingham was ill. That was the time he worked most closely with Darna. "Ed has the most amazing ability to accomplish technical magic with limited resources and space. I remember him as a wonderfully loyal, industrious and imaginative stage artist during all the 20 years I've known him."

Another thought, from Kent Stahl '75: "I was right in the middle of the perennial 'techy' vs. 'artist' (read actor) squabbles. How was one to handle that situation? I watched Ed. With a smile and a good word he demonstrated that to him all were truly created equal, and everyone had something to contribute."

In addition to being what one former student described as Darna's (n+3)rd celebration, this academic year also marked the beginning of the minor in theater arts, team teaching by members of the professional staff, an emerging collaborative and cooperative structure among the various theater groups, and an artist-in-residency program in theater. In connection with all that Darna was asked to speculate on the future of MIT theater and how it has changed for the students.



This year we probably reached a new beginning, he said. "Students can get more help with their projects now. As one example, they have easier access to instruction on how to write a play. They don't have to sit in their rooms and hack away and hope," he said.

"There's a larger look and it's giving the students another alternative to find out who they are, what their talents are, how they handle responsibility, what they can do. They have more guidance, supervision, backing, and support."

Though all specialties have their stars, those in theater tend to be more visible, and Darna was asked whether he worked with Dramashop's most famous alum, actor James Woods. "I remember Jimmy," he said. "He had the talent and the instinct. You could see it. He was in most of the plays and Joe (Everingham) was a wonderful mentor for him. He had Jimmy doing a lot of classical pieces, *School for Scandal*, *Zoo Story*, and *Russian Plays* so that he developed the discipline for doing other things rather than playing himself."

Darna hasn't ceased to study and expand his skills. He became a competition fencer, a mime, a student of master cabinet makers, and—most recently—a clown. In his Darna-designed makeup and gear—including a head of fluffy yellow hair that looks like a combination of scrambled eggs and cotton candy, he belongs to the national clown registry as "Paint Drops." He works parades, walkarounds, and special events out of Clown Alley 54 of Marblehead.

And the future for Ed Darna? In his own words: "I was going to stay on another couple of years and leave to write the great American play. You know, I remember all these years how I'd work with a great student and a wonderful bunch of them and I'd think 'There'll never be another as great as this one.' And then they keep showing up, and they're different, and they have their own possibilities. And I thought—I'm not leaving. This is the great American play."

—China Altman

