

50-YEAR CLASS GATHERING

COMMENCEMENT '73: Time for Traditional Pageantry, Reunion And Celebration of Women's Centennial

The traditional festival of commencement week-end—marked by colorful academic pageantry and the gathering of alumni and friends—will begin with the commencement procession at 10:30am next Friday (June 1) at MIT.

The weekend's activities will include a special Centennial Convocation on Saturday and Sunday, June 2-3, sponsored by the Association of MIT Alumnae, and the annual MIT Alumni Day program on Monday, June 4.

One of the largest groups of 50-year alumni in MIT history will return to the campus to participate in the 107th commencement exercises in Rockwell Cage.

All told, nearly 100 members of the class that was graduated in 1923 will be on hand—by tradition—to don academic robes and march as honored guests in the commencement procession that will precede the awarding of some 1,400 graduate and under-

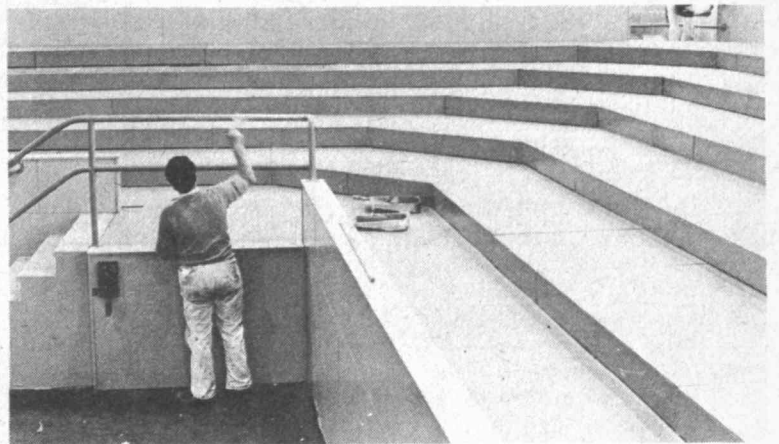
graduate degrees to 1,200 graduating students.

At the annual commencement luncheon in the Great Court following the awarding of degrees, Dr. Julius Adams Stratton, president emeritus (1959-65) and a former chairman of the Ford Foundation who is himself a member of the Class of 1923, will bring greetings from the 50-year class to the graduating Class of 1973. The luncheon will start at 1pm.

The more than 1,200 degree candidates will lead the academic procession, followed by Breene M. Kerr, '51, retiring president of the MIT Alumni Association, who will be chief marshal and carry the MIT mace.

Following Mr. Kerr will be the members of the 50-year class, members of the MIT Corporation, the faculty, guests of honor and the principals.

(Continued on page 2)



MIT painter Joseph Martell, of Woburn, touches up the stage in Rockwell Cage in preparation for Commencement. —Photo by Calvin Campbell



An anonymous roofer for the MIT oarsmen recently decorated the railroad bridge crossing the Charles with these cheering words. —Photo by Susan Pogany

Frosh Heavies Look Good for Regatta

MIT freshman and varsity heavyweight crews are competing this week in the national Intercollegiate Rowing Association regatta at Syracuse University.

The freshman heavyweights—the best freshman team in more than ten years—are expected to do well in the Competition with 13 other universities. The last freshman team to row successfully in the IRA was in 1961.

This year's team has lost only to Harvard, which is not competing in the IRA, and to Dartmouth,

which they beat recently in the Worcester sprints.

Members of the freshman team are: John H. Larson, La Crosse, Wisc., Charles F. Jung, Randolph, Wisc., Douglas M. Johnston, Auburn, N.Y., Gary G. Piantodosi, Burlington, John G. Everett, South Easton, Jeffrey N. Clarke, Millbury, Craig W. Christensen, New Canaan, Ct., stroke Peter D. Beaman, Hampton, N.H. and coxswain Michael J. Newman, Smithtown, N.Y.

The fate of the varsity crew is

less optimistic. Though it has had a 5-3 season, the crew will be pitted against tough Northeastern.

Members of the varsity crew are: Thomas L. Bentley, Milwaukie, Ore., John B. Miller, New Britain, Ct., James J. Gorman, Greenfield, Gregory C. Chisholm, Riverdale, N.Y., Dustin P. Ordway, Cambridge, Charles E. Davies, Erie, Pa., Andrew W. Kernohan, Parrsboro, N.S., stroke Jere B. Leffler, Columbia, Md. and coxswain James E. Clark, Quincy, Fla.

GUESTS AT DINNER

Visiting Chinese Editors Get Lab Briefings

News editors and executives from the People's Republic of China, touring the US as guests of the American Society of Newspaper Editors, paid two visits to MIT during their three-day stay in Boston last week.

Thursday evening, the Chinese group attended a dinner at the MIT Stratton Student Center along with leading editors from Boston newspapers and members of the MIT faculty and staff. On Friday, the group returned for briefings on research at the Electronic Systems Laboratory, some of which deals with newspaper editing with support from the American Newspaper Publishers Assn.

Provost Walter A. Rosenblith served as chairman of the dinner and extended to the Chinese guests his hopes for continued and meaningful exchanges between the US and the PRC.

Institute Professor C. C. Lin of the Department of Mathematics, a native of China who visited his

homeland last year for the first time since 1940, expressed his hope for continued interactions and exchanges between people of the two nations (see text). He spoke in Chinese. An interpreter translated his remarks into English.

Professor Nathan Sivin of the Department of Humanities and a specialist in Chinese technological history, also speaking in Chinese and translating as he went along described for the PRC visitors growing interest at MIT in the scientific and engineering traditions of China.

Prior to arrival, the Chinese editors had expressed specific

interest in city planning because of growing urbanization in their homeland.

Professor Tunney Lee of the Department of Urban Studies and Planning, who will visit China later this year, described for the group current issues and dilemmas in US cities and contrasted these with integrated planning and development possible with Chinese cities.

Professor Alan Altshuler, on leave of absence from the MIT Department of Political Science while serving as secretary of transportation in Governor Francis Sargent's cabinet, outlined efforts to achieve unified and effective transportation systems in Massachusetts. He drew special attention to mammoth problems

(Continued on page 8)

REPORT TO FACULTY

Financial Aid Plan Strengthening Urged

The MIT faculty was told last week that the Institute's financial aid program should be strengthened in order to maintain the quality of the student body and to give it greater diversity.

The view was expressed in a report to the faculty by the Committee on Undergraduate Admissions and Financial Aid. It was presented Wednesday at the concluding session of the annual faculty meeting. The meeting had been recessed the previous week because of the large amount of unfinished business.

The committee said it had "complete confidence" in the work of the Admissions and Student Aid staffs, "under frequently difficult conditions," and cited "the extremely high standard of fairness, judgment, wisdom, responsiveness and compassion"

displayed by the staffs in selecting students.

It said, however, that it was "concerned over the relative weakness of our financial aid program and feels it should be strengthened to minimize the risk of quality erosion in the future."

The committee said it had dealt with a number of issues over the past year. "But we feel," it added, "that the main task for the future is the continuing elaboration of a policy of financial aid (or cost) allocation which, within available resources, maximizes the academic and personal quality and diversity of our student body, and is fully consistent with the principles of affirmative action."

Dr. Leon Trilling, professor of aeronautics and astronautics and chairman of the committee, told the faculty the committee had found that MIT's financial aid package "is not as attractive" as that of some competing universities. He said this had become a major concern because of the high and increasing cost of education for students attending any private, selective university.

There has been "no visible erosion as yet" in the quality of students at MIT, he said, but the diversity of the student body "is not what we would like it to be."

The report made these major findings:

—The academic quality of MIT applicants and registered students (as measured by CEEB scores) has remained essentially constant over the last ten years, although the number of final applications has dropped by 23 percent since 1970.

—While the number of women students and students of minority background has increased appreciably, their total numbers remain small. The student body consists mainly (75 to 80 percent) of white men whose families' incomes are above the median for the US population

(Continued on page 3)



Woman and child find something to delight them in the Building 7 Lobby. A flying carpet, perhaps? See Page 5. —Photo by Calvin Campbell

Skylab's On-Board Guidance System Working Flawlessly

Despite a host of mechanical difficulties that have plagued the Skylab 1 mission, engineers at MIT's Charles S. Draper Laboratory reported this week that their on-board guidance system has thus far performed flawlessly.

The vehicles used for Skylab are virtually identical to the Apollo spacecraft which carried US astronauts to the moon and back, and employ guidance, navigation and control systems that were designed, developed and programmed at the MIT Draper Lab.

Engineering teams are on duty at the Draper Lab around the clock during the Skylab mission—as they were during all Apollo missions—prepared to provide real-time trouble-shooting in case it is needed with the system now in use in space. None of the Skylab problems thus far have involved

the Draper system.

Meantime, two MIT professors—Harry C. Gatos and August F. Witt of the Center for Materials Science and Engineering—were watching the Skylab 1 mission closely.

An experiment in semiconductor crystal growth in the environment of space which they and their associates designed and prepared was carried into space aboard the SIVB rocket stage which Skylab astronauts have turned into an orbiting laboratory.

The experiment itself is not scheduled to be carried out until the third crew of Skylab astronauts take over the laboratory. But with the SIVB possibly short of electrical power due to failure of a solar cell panel to deploy, Professors Gatos and Witt have spent the past week redesigning the experi-

ment to be conducted under reduced power, should the power problem still prevail when the third crew gets there later this year.

In the experiment three crystals grown at the MIT Center for Materials Science and Engineering will be partly melted and regrown in a special furnace by the third crew to be sent to the orbiting laboratory to see if, as suspected, purer crystals can be made in space than on earth.

The Skylab 1 mission began Thursday, May 25, when the astronauts rode their Saturn launch vehicle into orbit. The Draper guidance and navigation system successfully carried out the maneuvers to make rendezvous with the space workshop.

The Draper system monitored the launch all the way and could

have guided the launch had the primary system in the launch vehicle failed. When orbit had been achieved, the Draper system took over, steering the command module through a series of rendezvous maneuver burns.

Providing back-up for Mission Control in Houston, a full complement of Draper technicians manned the Laboratory's SCAMA room in Cambridge during the launch Thursday. SCAMA is an acronym standing for Scheduling, Conference and Monitoring Arrangement.

On duty in the SCAMA room at launch time were: Communicator Robert Werner, of Acton; Director of NASA Programs, David Hoag, of Medway; George Edmonds, of Cambridge; Philip Felleman, of Sudbury; Bruce McCoy, of Arlington; and Joseph Turnbull, of

Milton.

Draper workers were also on duty Thursday in Florida and Texas. In Launch Control at the J. F. Kennedy Space Center were: Kenneth Kido, of North Reading;

Vincent Megna, of Arlington; and Robert O'Donnell, of Boston.

On duty at Mission Control in the L. B. Johnson Space Center at Houston were Skylab/Skylark Program Manager Russell Larson, of Boxford; Stephen Copps, of Andover; and Thomas Lawton and George Silver of the Draper Lab office at the Space Center.

Others involved in designing the crystal-growth experiment for the Skylab project have been: Clifford J. Herman, Department of Metallurgy and Materials Science, who was responsible for designing the encapsulation technique, the growth, preparation and encapsulation of the three crystals, and who was present at the May 14 launch of the Skylab workshop; Wilfred F. Doucette and Lawrence W. Ryan of the Research Laboratory of Electronics Glass Shop, who assisted in the design of the sealing technique; Patrick Annese, Bomas Machine Specialists, Inc. Boston, where the three crystals were ground to proper diameter; Eugene Newman, Center for Materials Science and Engineering Machine Shop, who was responsible for machining of terminal graphite pieces; Manfred Lichtensteiger, who developed crystal characterization techniques; Dr. K. M. Kim, who conducted the preliminary characterization of the grown crystals; and Abigail Carlstein, a junior in the Department of Metallurgy and Materials Science, who assisted in the early stages of crystal preparation.

CONVOCATION JUNE 2, 3

COMMENCEMENT : Pageantry, Women's Centennial

(Continued from page 1)

Guests of honor will include the deans of the five academic Schools, the dean of the Graduate School, the dean for Student Affairs, the Registrar and Dr. Paul M. Fye, President and Director of the Woods Hole Oceanographic Institution (with which MIT grants joint advanced degrees).

Also seated with the guests of honor will be members of the senior class executive committee and the president of the Graduate Student Council. They are:

Robert J. Longair of Calgary, Alta., Canada, permanent president of the Class of 1973; Steven R. Taylor of Flint, Mich., vice president; Joy C. Judell of Ridgefield, Ct., secretary-treasurer; and Alfred R. Doig, Jr., of Hyde Park, Graduate Student Council.

The principals include Chairman of the MIT Corporation Howard W. Johnson, President Jerome B. Wiesner, Chancellor Paul E. Gray, Dr. James R. Killian, Jr., Honorary Chairman of the Corporation, Cambridge Mayor Barbara Ackerman and the Rev. Stanley F. MacNevin, Roman Catholic chaplain of MIT.

As is customary, President Wiesner will give the Commencement Address and present diplomas individually to the graduates as their names are called by the deans of their respective schools.

Another graduate, Maria A. Bozzuto of Waterbury, Ct., will miss commencement because she will be competing in the Women's National Intercollegiate Sailing Championships in Fort Schuyler, N.Y., on Friday, June 1. Miss Bozzuto is defending national champion among women skippers.

Also missing commencement for similar reasons will be David R. Wilson of Bala Cynwyd, Pa., the New England pole vault champion who will be competing in the National Track and Field Championships at Wabash College, Ind.

Commencement activities will begin Thursday, May 31, at 11am in Kresge Auditorium with commissioning exercises for MIT's Army, Navy and Air Force cadets. Rear Admiral Richard D. Rumble, Commandant of the First Naval District, will speak. Sixteen students will be commissioned, two in the Army, ten in the Air Force and four in the Navy.

On Thursday at 2pm in Kresge Auditorium, political commentator Dick Gregory will be the speaker at the Class Day observance. Admission will be limited to members of the Class of '73, their families and guests and other members of the Institute com-

Ansour Wins Year's Study At Cambridge

Manoug M. Ansour, 19, a senior at MIT, has won a Winston Churchill Foundation Scholarship as one of the nation's outstanding students in engineering, mathematics and science.

Ansour, from Forest Hills, N.Y., is among eight recipients of the prestigious award announced by Lewis W. Douglas, president of the foundation and former Ambassador to Great Britain.

Ansour, who was born in Egypt, came to the United States with his parents in 1968. He will be graduated from MIT on Friday, June 1, after only three years, with bachelor's degrees in both physics and mathematics. He will spend the next academic year at Churchill College, Cambridge University, England, studying astrophysics.

The Winston Churchill Foundation of the United States was also established in 1959. Its scholarships, worth \$3,500, are offered through an annual competition involving 28 leading American colleges and universities.

munity.

Thursday evening the senior class will hold an informal party in the Student Center for parents and the MIT faculty. No set program is planned.

At the commencement luncheon Friday, Class of 1973 President Robert Longair will respond to greetings brought by Dr. Stratton on behalf of the five-year class.

Also at the luncheon, the Goodwin Medal for conspicuously effective teaching by a graduate student will be presented by Dr. Irwin W. Sizer, dean of the Graduate School.

Following the luncheon, traditional alumni activities will begin, including this year the Centennial Convocation Saturday and Sunday, June 2-3, celebrating the 100th anniversary of the graduation from MIT of the first woman student, Ellen Swallow Richards, and Alumni Day on Monday, June 4.

The convocation celebrating the 100th anniversary of the first woman graduate will open Saturday, June 2, at 9am in Kresge with



Maria Bozzuto will miss commencement on Friday, but she gets in some cap-and-gown time while sailing on the Charles River. On commencement day, she'll be competing in the Women's National Intercollegiate Sailing Championships in Schuylers, N.Y. —Photo by Calvin Campbell

an address by Admiral Elmo R. Zumwalt, Jr., Chief of US Naval Operations. Workshops will focus on professional development, career advancement, new directions in education and changing lifestyles. Katharine Graham, chairman and chief executive officer of the Washington Post Company, will address the banquet at 7pm Saturday, June 2, in duPont Gymnasium. The convocation will close Sunday, June 3, with an address by Helvi Sipila, Assistant Secretary-General for Social and Humanitarian Matters at the United Nations.

Some 1,500 alumni and their families are expected to take part in 1973 Alumni Day activities, MIT's traditional homecoming program. Following class reunions at various New England resorts, 1973 Alumni Day will open Sunday, June 3, with a buffet dinner and Tech Night at the Pops at Boston's Symphony Hall. Monday, June 4, at 9:30am in Kresge Auditorium, will begin with a lecture-demonstration by Institute Professor Harold E. Edgerton, MIT's famed pioneer in stroboscopic photography. Three MIT faculty members—Dr. J. Herbert Hollomon, visiting professor of engineering and director of the MIT Center for Policy Alterna-

tives, Dr. Margaret L. A. MacVicar, Class of 1922 Assistant Professor and director of the Undergraduate Research Opportunities Program, and Dr. Salvador E. Luria, Nobel Laureate and Institute Professor—will discuss their activities in a panel entitled "Seeking a New Role for Technology" at 2:30pm in Kresge Auditorium.

Parkers Move On June 1 & 4

West garage parking permit holders have been informed that they will have to use alternate parking lots at Westgate on Commencement Day, Friday, June 1, and on Alumni Day, Monday, June 4. In past years, area A in Briggs Field was used for cars belonging to participants and guests on Commencement and Alumni days, but this practice has been discontinued because of the damage to the turf.

Campus Patrol attendants at West garage will distribute some one-day passes for the other locations where limited accommodations may be available.

TECH TALK
Volume 17, Number 49
May 30, 1973

Editor
Joanne Miller

Managing Director
William T. Struble

Staff Writers
Charles H. Ball
Ellen Burbank
Robert M. Byers
Sally M. Hamilton
Peter Spackman

Business Manager
Paul E. Johnson

Tech Talk is published 50 times a year by the Institute Information Services, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, Mass. 02139, and distributed free to all members of the MIT community. Additional copies are available in the Information Center (Room 7-111) or in the News Office (Room 5-111). Large numbers of additional copies should be requested within two weeks of the issue date.

Mail subscriptions are \$5 per year. Checks should be made payable to MIT, and mailed to the Business Manager, Room 5-122, MIT, Cambridge, Mass. 02139.

Please address all news and comment to the editorial office, Room 5-111, Ext. 3-3277.

Stronger Aid Plan Urged to Assure 'Quality, Diversity'

(Continued from page 1)

—MIT's financial aid program disposes of considerably smaller resources and relies more heavily on loans than some of its competitors' programs. Up to this time, this has not appreciably diminished the level of academic potential of MIT students, but it has undoubtedly been one of several factors in limiting the diversity of their backgrounds.

MIT's policy, the report said, is to meet every applicant's full "need"—defined as the difference between the cost and his resources—by a combination of loan, scholarship and job.

Since 1970, it noted, no merit or quality ranking has been considered in making aid awards.

The committee said there has been a "growing gap" between the total need for financial aid and the

resources available, resulting from inflationary cost increases and from the fact that the number of students with "need" has increased. (It noted that a 1971 requirement to submit the front page of the family IRS statement had created a "noticeable temporary dip" in the "need" curve.)

MIT, the committee noted, has adopted an "equity" system under which all aid up to a stated level is in the form of a loan and/or a job, and the aid above that threshold up to the full amount of "need" is a scholarship. The "equity level" for 1973-74 has been set at \$1750, an increase of \$150 over this year's.

The advantage of the system, the committee said, "is that it concentrates our resources on the neediest cases and puts a uniform ceiling on the amount of indebtedness which our undergrad-

uates incur."

"The main disadvantage," it said, "especially for middle income family students, is that financial aid may consist only in a somewhat more economical (and guaranteed) loan than the family can negotiate at the neighborhood bank."

The report said that some 60 percent of MIT applicants request financial aid, and roughly 50 percent of the students receive it.

Scholarship funds have been increasing at a rate of 2 percent per year while the total "need" has been increasing at some eight percent per year over the last five years, the report added. Since 1971, when MIT put the raising of \$10,000,000 in scholarship and loan funds over five years as a first priority, some appreciable funds have been raised, especially for

loans, the committee said.

But considerable resistance was found among potential donors, it said, "partly as a result of their concerns over some student activities in 1969-71 and partly because student aid money does not achieve the visibility or permanence of a building."

In order to conserve limited student aid resources, the committee also proposed that the number of foreign undergraduate students registered each year as freshmen and transfer students be limited to about 60, and that the total amount of financial aid made available to foreign student applicants not exceed eight percent of the student aid budget.

While the average foreign student's "need" is not significantly different from that of other undergraduates, the foreign student does not have access to federal funds, outside scholarships and some endowment funds. As a result, the committee said, MIT's share of the burden is considerably greater.

The limitation would not apply to alien permanent residents or

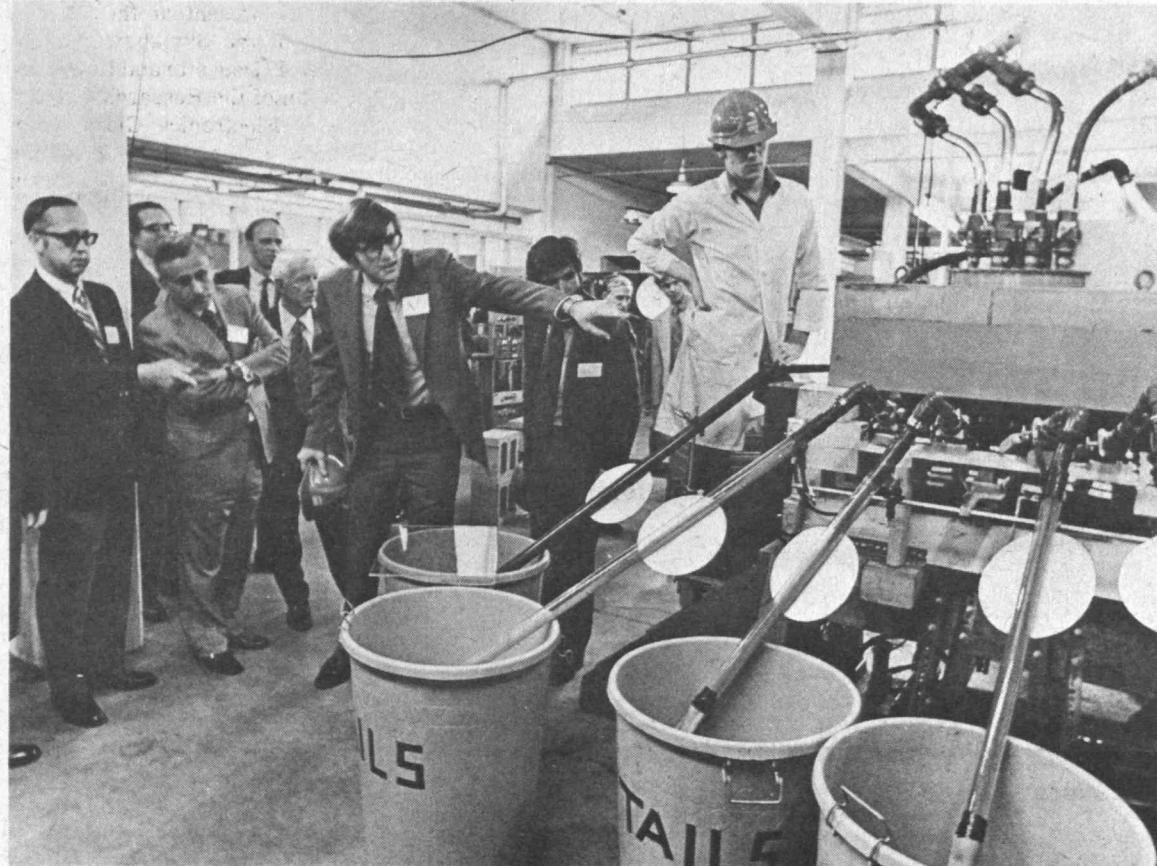
graduate students in residence" at the undergraduate houses.

However, he said that present experience indicates that more flexible housing arrangements would enhance the social goals of giving each student the maximum opportunity to have an individual life style and interaction with other students.

"The residence is all-important for the student's social life," Dr. Graves said, "and the overwhelming social interaction between students takes place in the residential units."

Dr. Graves said that various types of living arrangements should be provided in planning for the construction or renovation of dormitories in order to give students a choice. But he said that campus housing appeared to be "moving in the direction of units of 30 to 50 students."

The report contained a number of specific recommendations, which included encouraging students to live in different houses from year to year as a means for increasing diversity. The committee also recommended that



Guests at MIT symposium on High Gradient Magnetic Separation are shown the Carousel, pilot plant model of a machine that separates weakly magnetic iron ores using HGMS principles. Talking to the

group is Dr. John A. Oberteuffer, staff member at MIT's Francis Bitter National Magnet Laboratory, which sponsored the May 22 meeting. About 100 persons attended the symposium.

—Photo by Calvin Campbell

J. W. Lambert to Head Development Office

Appointment of James W. Lambert as director of the MIT Development Office has been announced by Nelson C. Lees, Director of Resource Planning.

Mr. Lambert, who has been associate director of the Development Office, will take on new responsibilities to support the strengthened resource planning effort being carried out under the overall reorganization of the resource development program by James B. Lampert, Vice President for Resource Development.

Mr. Lambert's duties will emphasize support of senior officers of the Institute and members of the resource development staff in their contacts with individuals, foundations, and corporations concerning Institute priority funding needs. He will also have responsibility for the identification and evaluation of prospects and for the operation of the central development record system.

As Development Office director, he will work closely with Nelson C. Lees, Director of Resource Planning, in support of staff members concerned with special funding activities, including the on-going Joint Harvard-MIT Program in Health Sciences and Technology and the conclusion of the Chemical Engineering Building drive.

Mr. Lambert joined the Development Office as assistant di-



James W. Lambert

ABC Programs To Be Screened

Members of the Institute community are invited to a showing of the first two programs in the ABC-TV series, "What About Tomorrow?"

The first episode, "On the Side of Man," and the second, "Cities: Our Next Frontier," will be screened on Friday, June 1, at 1:30pm and Monday, June 4, at 9am in the Lobby of Building 7.

rector in 1969 and became associate director in 1972.

He came to MIT from the University of Southern California where he was director of planning of the School of Engineering, with the primary responsibility for private gifts and grants to the school.

Mr. Lambert received the BA degree in arts and letters from Pennsylvania State University in 1957. He has worked previously as a lecturer presenting educational science programs in schools throughout the United States and in Canada. He has also served as editor of a weekly publication in the transportation field.

Mr. Lambert, his wife Theresa, who is a former music educator, and their son Gavin reside in Westford.

Sophomore, 18, Found Dead

Thomas M. Demchok, 18, of Lyndhurst, O., an MIT sophomore majoring in computer science in the Department of Electrical Engineering, was found dead in a dormitory room at Baker House on Wednesday night, May 23.

Dr. David C. Dow, Middlesex County medical examiner, said the death was under investigation and that he was awaiting results of laboratory tests.

Canadian citizens.

The faculty also heard reports from the Committee on Student Environment on two subjects—the Ashdown Dining Hall and undergraduate housing.

While recommending that the dining hall at Ashdown remain closed, at least for the "near future," it said that the status of any dining facility on campus "must be seen within the context of the dining system as a whole."

Matters to be explored, it said, include "the alternative possible configurations of the system," the standards of service and "the economic range of possibilities for the dining service."

"In short," the committee said, "work remains to be done to obtain, to organize and to assess information in such a way that adequate decisions can be made on the dining services."

It recommended that the administration make an assessment of the dining services, to be completed by December, 1973, and that "no major changes be made in the status of any unit in the system" in the meantime.

Dr. John C. Graves, of the Department of Philosophy, summarizing the report on undergraduate housing, said that basic changes had occurred in attitudes toward campus housing in the ten years since the last report was submitted.

While there seemed to be a goal at that time of a homogeneous living unit—"a single ideal undergraduate residence"—the basic premise today, he said, "is that of diversity."

"It seems quite clear," he said, that students, in keeping with their own more diverse life styles, "want diverse living arrangements."

Dr. Graves said that the housing system and policy of the past ten years served a useful purpose and had been successful. The number of students living on campus after the compulsory first year has been increasing, he noted, in contrast with experiences at other universities.

He said that the committee also "strongly supports the system of having faculty members and

co-ed housing be set up in as many housing groups as possible, under the guideline that a male-female ratio of 70/30 should not be exceeded in any group.

In other business, three statements were presented to the faculty by the Committee on Educational Policy.

The CEP said that two programs providing alternate modes of education for freshmen—Concourse and the Experimental Study Group—would be continued for three years, "with the CEP retaining the option of re-evaluating the programs at any point during this period."

The committee said it was doing this because it was not ready to bring the programs to the faculty for a vote on their continuation as permanent features of the undergraduate curriculum.

In connection with the Wellesley-MIT Exchange Program, which the faculty recently voted to extend—with another review to take place in three years—the CEP recommended:

—That the presidents of Wellesley and MIT appoint a joint advisory committee with membership from students, faculty and administration at both schools.

—That at MIT, administrative responsibility for the program reside in the Office of the Provost.

In its third statement, the CEP said it would continue the Domestic Year Away program "as an experiment pending conclusion of a more general examination of credit, residence and exchange issues."

Dr. Hartley Rogers Jr., professor of mathematics, the outgoing chairman of the faculty, commented that he expected the program, which enables students to spend a term or a year studying at another US college or university, to become a "major question" for the faculty over the next several years.

The faculty also heard a tribute to Dr. Donald G. Marquis, David Sarnoff Professor of Management and Technology, who died February 17 at the age of 64.

THE INSTITUTE CALENDAR

May 30
through
June 8

Events of Special Interest

Documentary - "What About Tomorrow"

Screening of the first two documentaries on Science and Technology made by ABC-TV in cooperation with M.I.T. Part I, "On the Side of Man" and Part II, "Cities: Our Next Frontier", will be shown Fri, June 1, 1:30-3:30pm and Mon, June 4, 9-11am in Bldg 7 Lobby.

International Conference of Environmental Educators

Workshops and discussions on strategies for implementing multidisciplinary environmental education programs. June 6-8. For further information call Keith Ronnholm, 969-9148.

Senate Watergate Hearings

The Lobby 7 committee is sponsoring a television weekdays for those interested in the Senate Watergate hearings. The television is in the Building 7 lobby, and will be tuned to the hearing weekdays until they conclude.

Seminars and Lectures

Wednesday, May 30

International Conference on Single-Cell Protein

Lectures and discussions. Nutrition and Food Science Conference. 8:30am-4:30pm, Rm 26-100.

Thursday, May 31

International Conference on Single-Cell Protein

Lectures and discussions. Nutrition and Food Science Conference. 8:30am-4:30pm, Rm 26-100.

Monday, June 4

Some Hydrodynamic Aspects of Fish Swimming

Dr. D. Weihs, Dept of Applied Math and Theoretical Physics, Univ. of Cambridge, Cambridge, England. Ocean Engineering Seminar. 3pm, Rm 5-234.

Community Meetings

Woman's Forum

Meetings and discussions. Women's forum will be held on the Great Court, weather permitting. Monday, 12n.

Women's Forum Biweekly Meeting

Meetings and discussions. Tues, 12n, Rm 3-463 ME Dept. Secretary's Lounge.

Faculty Meeting

The faculty will hold a regular meeting on Wed, May 30 at 3:15pm, Rm 10-250.

MIT Club Notes and Meetings

MIT Wheelman**

All aspects of bicycles and bicycling discussed, events planned, advice and help given. Thurs, 7:30pm, Rm 1-203. Call Harry, x3-2384.

Bridge Club

ACBL Duplicate Bridge. Thurs, 7pm, Stu Ctr Rm 491. No card fees if under 5 tables. Call x0453 Dorm.

Chess Club

Sat and Sun, 1:30-5:30pm, Student Center Rm 473.

Classical Guitar Society

Classes, group or private. Mon & Thurs, 5-8pm, Rm 1-132, 134, 136; Sat, 8am-12n, Rm 5-231, 232. Vo Ta Han, 494-8353.

Ergo

Staff meeting. Sun, 7pm, Student Center Rm 443.

Goju Karate Club*

Open to the Cambridge Community. Mon, Wed, Fri, 7:30pm, St Ctr Rm 407. Cal 253-2018.

Hobby Shop

Mon-Thur, summer term, 12n-5pm, Rm W31-031. Fees: \$10/term for students; \$15/term for community. Call x3-4343.

Judo Club**

H. Yanagi, 5th degree black belt, chief instructor. Mon, Wed, Fri, 5-6:30pm; Sat, 1-3pm; duPont Exercise Rm. M. Portnoff, x3-5954.

Kung Fu Club**

Northern Praying Mantis. Tues, Thurs, 7-9pm, T. Club Lounge. For info, H.C. Wong, 876-5071.

MIT/DL Duplicate Bridge Club**

Tues, 6pm, Student Center Rm 473. Call x0453 Dorm.

Rugby Club**

Practice sessions; Tues, Thurs, 5pm, Briggs Field; Sat, 1pm, meet in DuPont Gym.

Scuba Club

Compressor hours, Mon & Fri, 4-6pm, Alumni Pool.

Student Homophile League*

Meeting and coffee hours. Sun, 4-6pm, Rm 14E-307. All men and women welcome. For gay help (anonymous) at MIT, call student gay tutor, 492-7871, anytime.

Science Fiction Society*

Fri, 5pm, Rm 1-236.

Strategic Games Society

Sat, 1pm, Walker Rm 318. Club offers opponents and discounts on merchandise to members plus gaming periodicals library. Kevin Slimak, x0389 Dorm.

Student Information Processing Board Meeting*

Mon, 7:30 pm, Rm 39-200.

Tae Kwon Do Club

Tues, Thurs, 5-7pm; Sat, 11am-1pm. duPont T-Club Lounge. Cal Jae Kim, x9212 Dorm.

Technique

Staff meetings. Sat, 11am, Student Center Rm 451.

Tech Squares***

Western style square dancing. Tues, 8-11pm, Sala de Puerto Rico. Admission: \$1; first time free.

Tiddlywinks Association*

Wed, 8pm, Student Center Rm 491.

Social Events

Friday Afternoon Club**

Music, conversation and all the cold draft you can drink. Fri, 6pm, the Thirsty Ear, Ashdown basement. Admission: \$1 men, 50 cents women. Must be over 18.

Muddy Charles Pub**

Join you friends for music, beer, wine, snacks, conversation at the Muddy Charles Pub, 110 Walker. House Mon-Fri, 11:30am-2pm and 4-7:30pm; Sat, 7-12pm. Nightly specials will include: Mon, all wines 25 cents; Tues-Thurs, free pretzels and chips. Call GSC, x3-2195.

SCC Pot Luck Coffeehouse*

Live entertainment Fri-Sat, 8:30pm-12m. Student Center Mezzanine Lounge. Free coffee, cider, doughnuts. Sponsored by Student Center Committee. Volunteers to perform or otherwise help out, call Paul Mailman, x9629 Dorm, or Doug Fried, x8767 Dorm.

Movies

The Eclipse (Antonioni)

MIT Film Society. Fri, June 1, 8pm, 10pm, Rm 10-250. Admission \$1.

Il Grido (Antonioni)

MIT Film Society. Fri, June 8, 8pm, 10pm, Rm 10-250. Admission \$1.

Dance

Dance Free

Improvisational dance, yoga, changing, light show. Fri, 8pm, Sala de Puerto Rico. Admission: \$1 with student or dance free ID.

Dance Workshop

Courses in Modern, Afro-American and M/J/B dance. For information Chris Peterson, 492-6983.

Folk Dance Club*

International, Sun, 7:30-11pm, Sala. Balkan, Tues, 7:30-11pm, Student Center Rm 491. Israeli, Thurs, 7:15-10:15pm, duPont T-Club Lounge. Afternoon dance break, Fri, 12:30-1:30pm, Bldg 7 Lobby.

Kundalini Yoga

Classes: beg, Mon & Fri, 1pm, duPont Wrestling Room. Tues & Thurs, 3pm, McCormick Green Lge; intermed, Mon, 6:30pm, McCormick Green Lge. Enis Singh Vlug, 436-3753.

Exhibitions

19th Century Italian Paintings

Painting selected from American Collections. May 11-June 9. Mon-Sat, 10am-4pm, Hayden Gallery.

Grass Playgrounds by Stan Resnicoff

Now thru June 14, Hayden Court, 10am-4pm.

Photographs: "New Woman"

Exhibition of photographs with documents on the history of women at MIT. May 21-June 11, Corridor Gallery, open daily.

Photographs by MIT Undergraduates

Photographs by students studying under Minor White. May 23-June 1. Creative Photography Gallery (120 Mass Ave), open daily 10am-6pm.

Music Library Exhibit

Pictorial Exhibition. Mozart's Opera the Magic Flute. Daily, Rm 14E-109.

Hart Nautical Museum*

Exhibits include "Ocean Engineering Summer Laboratory Project 1971 and 1972," and "Tugs and Towing." Bldg 5, first floor.

Religious Services and Activities

The Chapel is open for private meditation from 7am to 11pm every day.

Campus Crusade for Christ/College Life*

Family time, fellowship and teachings from God's Word. Fri, 7-9:30pm, Rm 1-132.

Christian Bible Discussion Group*

Thurs, 1pm, Rm 20B-031. Call Prof. Schimmel, x3-6739, or Ralph Burgess, x3-2415.

Christian Science Organization*

Tues, 7:15pm, Rm 8-314. Meetings include testimonies of healing.

Divine Light*

Discourses on the knowledge of Shri Guru Maharaj Ji. Mon, Wed, Fri, 7:30pm, Rm 4-159.

Hillel Classes

Hebrew, Wed: beg 6pm; intermed 5pm, Rm 1-203; adv 1pm, Rm 5-231. Basic Judaism, Kathy Green, Wed, 8am, Hillel Library. Yiddish, Thurs, 7pm, Rm 1-242. Mekhilta, Fri, 12n, Hillel Library. Talmud, beg, Mon-Tues, 8pm; adv, Sun, 12n, Wed, 8pm.

Islamic Society*

Prayers, Fri, 12:15pm, Kresge Rehearsal Rm B. Discussions on the Qur'anic interpretations of various aspects of life, Sat, 4pm, IS Lounge, Walker 2nd floor, coffee served.

Roman Catholic Masses

Sun, 9:15am, 12:15pm, 5:15pm; Tues, 5:05pm; Wed, 4:30pm; Fri, 12:05pm. Chapel.

United Christian Fellowship*

Christians for dinner, food, fellowship. Wed, 5pm, Walker (at the sign of the fish). Followed by singing, praying, sharing meeting. 6pm, Rm 14E-303.

Vedanta Society*

Services, Fri, 5:15pm, Chapel. Followed by discussion hour, 6pm, Lobdell Dining Room.

Westgate I & II Bible Study

Wed, 8pm, Westgate I, apt 1202. For information, 494-8405 or 494-8778.

Zen Society

Meditation meetings. Mon thru Fri, 8-9am, Chapel. Call 492-4943.

Announcements

MIT Musical Theatre Guild

MIT Musical Theatre Guild Needs Directors/Musical Directors and will be interviewing prospective directors and musical directors for summer show, Fantasticks, and/or fall show, Man of La Mancha. June 9, Stu Center, W20-439, 2pm.

Registration for the Centennial Convocation

Weekend of panels and workshops covering issues of current and future international and national concern, as well as questions relating to career selection, education and personal development. Sat-Sun, June 2-3, Kresge. Registration, including meals, \$30. Information, Alumni Association, x3-4875.

MIT Community Softball League

Players and umpires are invited to join teams for the 1973 season beginning June 11. For information, Rick Gentilman, x3-4625.

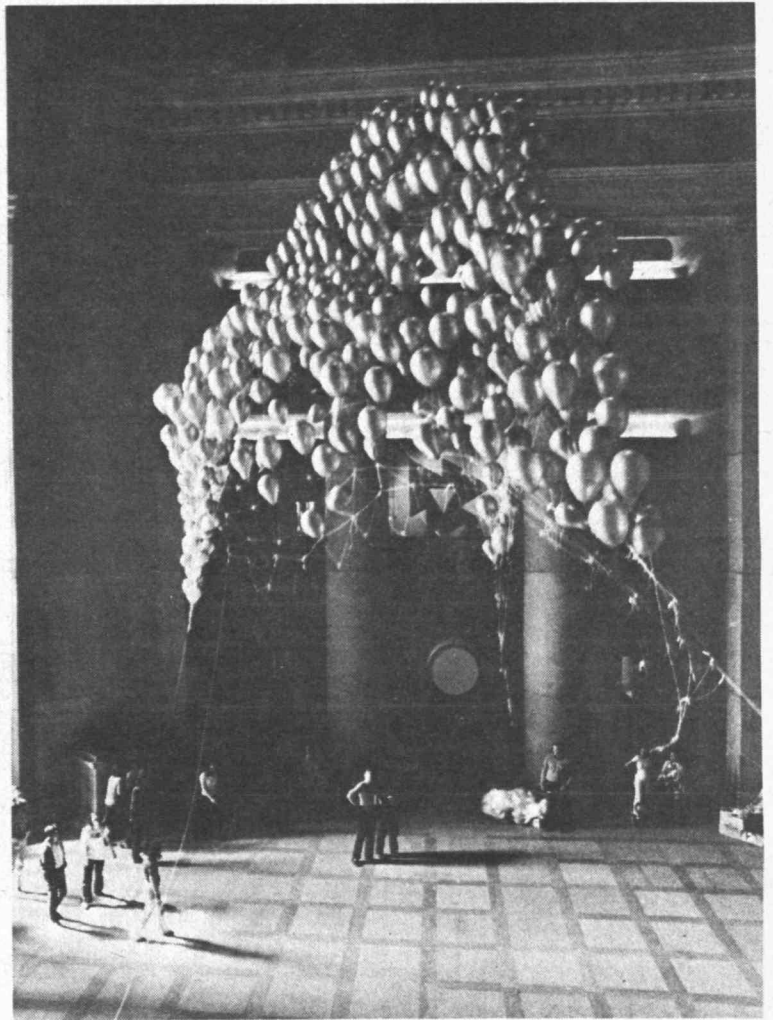
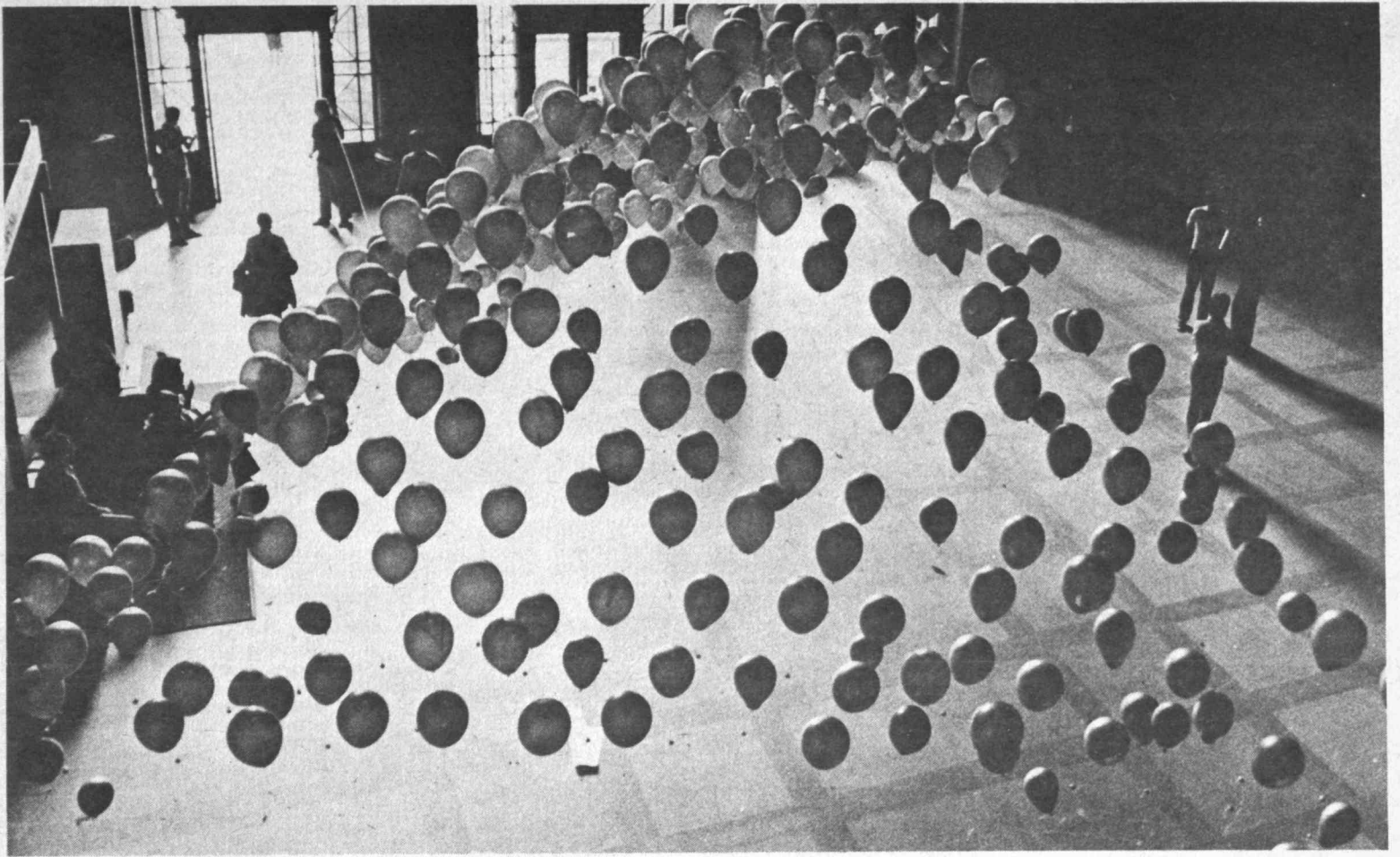
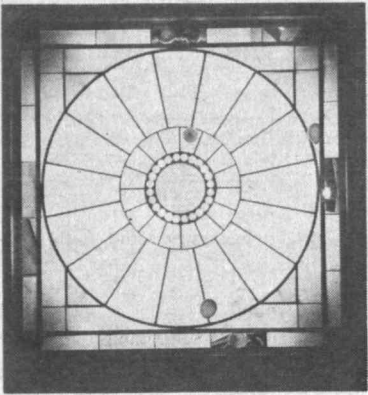
New Collection Days for Paper Recycling Wastebaskets

Beginning on Tuesday, May 29, paper recycling boxes will be collected on Tuesdays and Thursdays of every week.

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

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

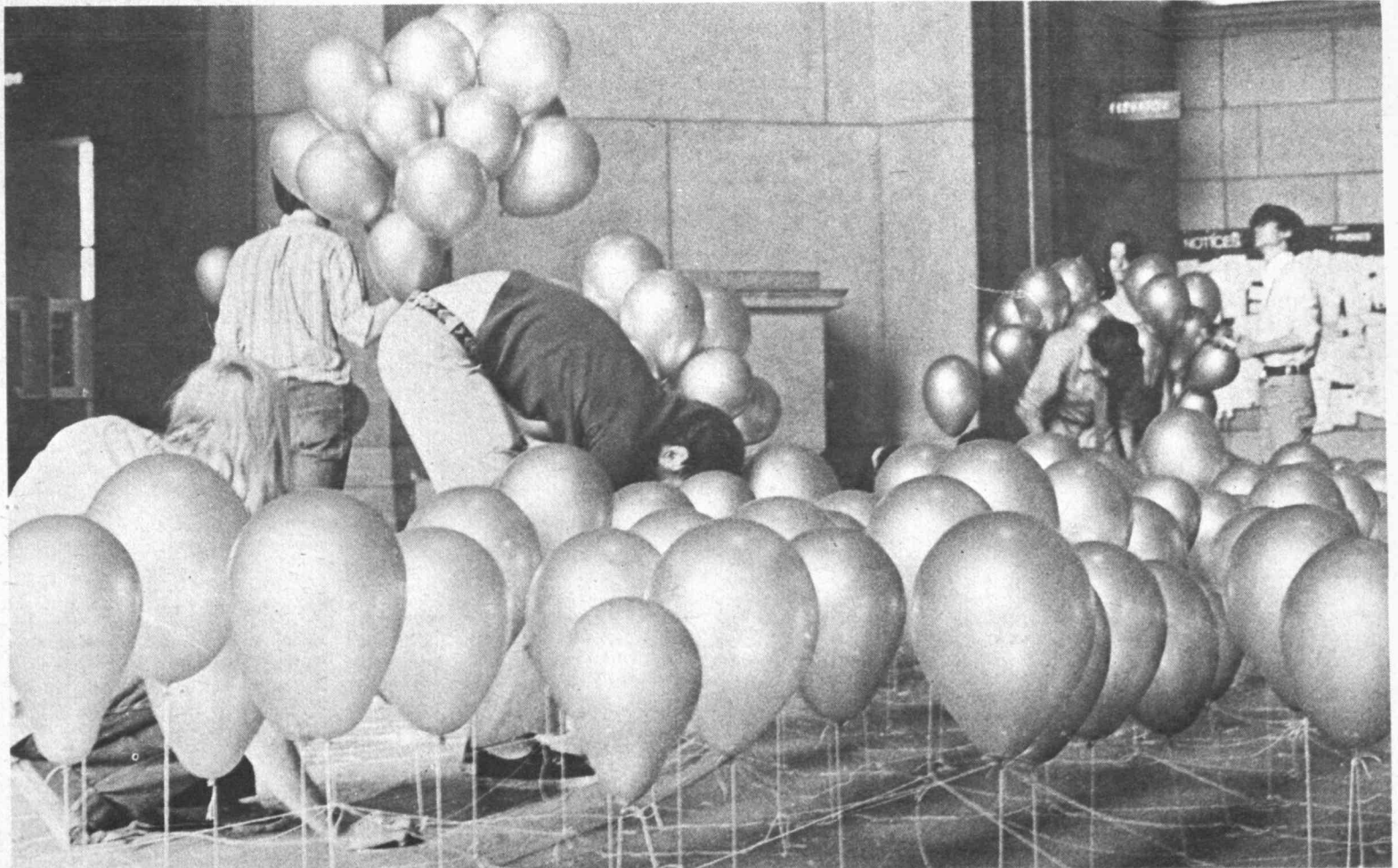
Send notices for June 6 through June 15 to the Calendar Editor, Room 5-111, Ext. 3-3279, before noon Friday, June 1.



How to Make a Carpet Fly

A flying carpet of sorts finally came to MIT last week. The carpet had some unusual components—about 750 silver-painted helium balloons, a hand-tied nylon net that formed a 60-foot equilateral triangle and jingle bells tied to the net. The carpet, which went aloft in the Lobby of Building 7, was the project of ten students in the Advanced Visual Design course taught by Otto Piene, visiting professor for environmental art. It was described as a visual expression—a work that had the visual appearance of a carpet as the balloons hoisted the net upwards, with the bells adding a lyric quality. The carpet delighted a lot of people, but especially a group of children from the Technology Nursery School, who took along some of the balloons after the carpet was dismantled. A few balloons, however, escaped to the dome of the lobby where they formed a visual expression of their own.

—Photos by Calvin Campbell



Administrative Staff member will work in area of resource development dealing with individual contributors. Develop strategies and programs, prepare reports, provide advice and counsel of a legal nature for resource development activity. Some travel required to represent MIT. Must have legal training and preferably some experience as a counselor in practice or in a job situation utilizing legal training. Writing and organization ability, motivation, enthusiasm required. 73-480.

Technical Assistant - Academic Staff will perform experiments using both biochemical and micro-biological techniques from planned protocol; minimum supervision, organization and ordering of laboratory supplies. Bachelor's degree in Biology, Bio-Chemistry or related fields required; also, one year's experience in biological laboratory. 73-317

Administrative Staff Assistant to the Director of budget planning area. Will work on the MIT Operating Plan. Assist with the preparation of special studies and the total cost and income of departments. Degree in Accounting or Finance with a minimum of 3 yrs. experience (preferably at MIT) in accounting or administrative duties is necessary. 73-458.

Technical Assistant - DSR Staff will work in a lab studying the problems of motor control and motor coordination in mammals. Will handle computer analysis of experimental data; will construct and design training devices for mammals; train and care for animals; manufacture micro and macroelectrodes; assist with surgery and record data. Electrical Engineering degree, familiarity with elementary electronics and digital logic, and willingness to work with animals essential. 73-486

Research Assistant - DSR Staff will assist in the study of the natural gas and oil industries. Familiarity with the concepts of basic economics; ability to manage a large computerized data base and to organize and coordinate the activities of other part-time research assistants; strong background in applied econometrics is required. Masters degree preferred; Bachelor's degree is acceptable. 73-171

Administrative Assistant (Staff) will administer payroll, personnel, benefits, procedures. Assist the Director with budget preparation; monitor accounts; handle property control, safety; schedule work assignments and tours. A mature individual with several years' administrative experience and technical and business background required. 73-388

DSR Staff member will conduct economic analysis of experimental and proposed direct housing allowance programs in connection with a research program in urban studies, Ph.D., or equivalent in economics with specialization in the economics of urban housing is required. 73-348

Economic Research Assistant - DSR Staff member will work on regional economic research on transportation and energy problems, write research reports for government agencies, submit computer runs, maintain large multi-regional input-output data bank. Excellent background in economics, minimum one semester of linear algebra, experience on IBM 370/165, 1-2 yrs. research experience, familiarity with Fortran programming required. 73-415

Administrative Staff member will work in hazard control activities and the use of lasers, microwave devices, ultraviolet sources and the use of radioisotopes. B.S. in Radiological Health; Electrical Engineering or Physics, with some training and experience in Radiation Protection. 73-183

Industrial Hygienist - (Academic Staff) will work in the Environmental Medical Service to study and control occupational disease and other environmental factors such as noise, heat, pressure and toxic materials that may be physically or chemically hazardous to employee health. Will work closely with physicians, depts., supervisors. BS. in Chemical Engineering is required. 73-336

Administrative Staff member will administer sponsored projects, including proposal review grant and contract negotiations, and post-award administration. Minimum of two years experience in administration of sponsored programs in a university or hospital. Familiarity with Public Health Services grant regulations and procedures will be needed to administer grants from the National Institutes of Health and private foundations involving research in sciences related to health. 73-448.

Administrative Staff member will provide substantial writing support for resource development activities. Tasks will include preparation of proposals for major private donors, pamphlets supporting planned giving program, and correspondence. The position is sensitive and demanding. College graduate with previous writing experience and a sense of humor required. 73-452

Administrative Staff member will write press releases on Institute activities in art and music, provide direct contact with the news media for promotion of these events, act as liaison between Institute offices. Knowledge of various news media, reporting skills and ability to make independent judgments required. Should have at least three years experience writing news, editing, etc. for a Metropolitan daily newspaper. 73-437

Technical Assistant - Academic Staff for graduate student lab will develop experiments in food chemistry. BS in Biology, Biochemistry or Chemistry areas is required. 40 hr/wk; temporary opening for 6 months. 73-428

Technical Assistant (Academic Staff) - will care for a greenhouse, prepare media, transfer plant tissue culture, examine plant cells under the microscope. Background in plant sciences desirable. Must have 1-2 years experience in lab and greenhouse work. 73-398

Administrative Staff member will coordinate EDP systems operated in resource planning as part of private gift support programs. Duties will include system maintenance, updates, changes, and interaction with OASIS, but will not include programming and related technical operation. Requirements call for analytical interests and ability to work with data, plus previous exposure to EDP via card or information systems. Accounting orientation could be helpful. 73-453

DSR Staff Marine Liaison Representative will assist the project Advisory Service Officer in planning, organizing, and implementing programs which will provide technical assistance to persons engaged in activities involving the resources of the coastal zone and the ocean; identify the problems and needs of the marine resources users and assist in the conduct of a marine extension program. The agent will travel as necessary to provide regular coverage to the marine community in Massachusetts and the New England Region. 73-358

Administrative Staff member will work as Exhibition Manager and will be responsible for a wide range of creative and administrative tasks; will plan and stage exhibitions, maintain M.I.T. collection, develop new exhibition programs. MA in modern art, minimum 2 years museum or gallery experience required. Available August 1st. 73-376

Administrative Staff member will provide advisory and programmatic services and radiation protection for all Institute laboratories using sources of potentially harmful radiation. M.S. in Radiological Health with 2 years experience; or B.S. in R.H. with 4 years experience. Will interview, instruct, lecture, and conduct radiation surveys, supervise Radiation Protection Technicians. 73-174

DSR Research Staff member will conduct independent computer programming and analysis of census and other related housing data in connection with studies of metropolitan and national housing needs. Experience with housing data analysis, ability to present complex data in written and graphic form, academic background in urban studies and/or economics required. 73-476

Senior Secretary V to Director, Associate Director, and Executive Office of a research lab. Type technical reports, thesis correspondence; assist in preparation of technical proposals; handle travel arrangements and appointments; maintain office files and library of technical documents. Individual will need a security clearance, and must have strong secretarial experience. 73-405

Senior Secretary V will work for academic department Chairman. Will type correspondence from dictaphone; arrange appointments, meetings, and travel; answer routine correspondence. Three to five years secretarial experience, good typing, good judgment and ability to establish priorities and handle a generally heavy workload in a busy atmosphere. 73-445

Secretary IV or Senior Secretary V to the Director and Assist. Directory of an Interdepartmental Laboratory will type technical reports and journal articles. Occasionally coordinate office workload; handle all general secretarial procedures. Excellent shorthand and typing skills, 3-5 years experience and ability to learn technical typing required. 73-342

Secretary IV in high level Institute office will coordinate extremely busy appointment calendar, type correspondence, maintain records of several office accounts. Excellent typing skills, shorthand preferred, knowledge of basic accounting required. Ability to set priorities and work with details important. 73-343

Secretary IV to four professors will need good skills of shorthand, dictaphone and typing to handle technical reports and journal articles. Will maintain student records and answer requests for information associated with them. 73-232.

Secretary IV will handle hourly and student payrolls for the department, order supplies, type from rough draft and dictaphone. Good typing important, knowledge of M.I.T. payroll systems helpful. Temporary from Sept. to June 1974. 73-365

Secretary IV in busy academic department will handle secretarial duties; assist with administrative matters. Type research proposals, correspondence; handle student payroll; maintain records of expenditures. Responsible for department Microprobe facility. Strong typing skills; ability to work with figures important. Establish priorities and work independently. 73-441

Secretary IV will assist in programs related to industrial and social applications of technology. Take dictation, compose short memos and letters, type reports and correspondence, arrange meetings. Ability to establish priorities, good typing, shorthand, and organizational skills important. 73-483

Secretary IV will perform secretarial duties for the administrative officer of an academic department. Maintain department contract and personnel records. Excellent shorthand, dictaphone, typing skills needed. Organizational ability, familiarity with keypunch or computers desirable. 73-390

Secretary IV to academic department Executive Officer will type faculty and staff apts., catalog information, maintain personnel files, and records in an on-line computer system, accurate typing required. Will be trained in the use of an interactive computer system. Able to work independently. 73-484

Senior Secretary V will work for a Dean; answer some correspondence, arrange meetings, appointments and travel, maintain confidential files. Excellent typing and shorthand skills needed, previous experience in an academic atmosphere preferred. Poise, tact, good judgment, ability to establish priorities in work important. 73-253

Secretary IV to the Associate Department Head of an engineering department. Good typing and shorthand skills are needed for general office functions. Handle travel arrangements and appointment calendar, maintain files and records. 73-468

Secretary III-IV two openings in an academic department working for 2-3 professors. Good skills of shorthand and typing, organization ability and experience required. 73-323, 73-322

Secretary III or IV will provide secretarial support for a Professor involved with journal editing and economics research. Maintain files or materials for publication, type manuscripts from rough copy (some technical), handle other secretarial duties. Good typing and strong organization ability required. 73-462

Secretary III-IV to three professors in an academic department. Will type quizzes, reports, technical manuscripts; handle reception duties; maintain department library. Organization ability, excellent typing and dictaphone skills needed. 73-405

Secretary III in project lab will need some previous office experience and good typing skill for typing technical reports and handling other general secretarial duties; use of some edit routines on Multics computer terminals. 73-319

Secretary III will handle general secretarial work of typing memorandums, research summaries, class notes, correspondence, technical papers; xeroxing of class material; assist with billing and purchasing procedures for an administrative officer and for a professor. Good typing skills and knowledge of accountin and office procedure important. 73-455

Secretary III will assist with an academic headquarter's secretarial duties; act as liaison with department members. Individual with good typing and office skills will also fill in for other secretaries in busy office. 73-424

Secretary III will handle general reception duties for small academic department headquarters office. Good typing skills needed for correspondence and manuscripts. Maintain student records, order text books, arrange for films for courses. Shorthand helpful. 73-457

Secretary III to a group of faculty, staff, and students will type letters, technical reports, and manuscripts; handle general office duties. Good grammar and spelling, and the ability to proofread and edit the material of the foreign staff important. 73-440

Secretary III to four professors. Will do technical typing on reports, manuscripts, proposals; handle student payroll; coordinate mailing lists. Good typing skills, ability to establish priorities important. 73-402

Systems Programmer will work in the Program Development Office as a full-time Multics System Programmer. Two or three years experience with the Multics System and PL/1 is required. Other experience in system design and programming desirable. 73-466.

Systems Programmer will work full time in the Programming Development Office on the 370/165. The job will consist of system programming and maintenance, systems assurance, and user interface functions. Applicants should be familiar with the internals of OS/MVT and have a good working knowledge of OS assembler language. Experience with TSO desirable. 73-384

Computer Operator IV will operate IBM Model 135 and all peripheral equipment associated with it, including disk drives, tape units, card reader/punch, printers. Must have a good knowledge of DOS job control, multi-programming experience and be capable of understanding operating instructions. 4pm-12:30am shift. 73-443

Keypunch Operator III will punch into computer input cards formatted and unformatted documents. Will operate IBM 029 keypunch machine. Minimum of two years experience required; familiarity with the creation of program drum cards important. 73-444

Keypunch Operator II or III will keypunch and keytape input, maintain control and sequence or source document. Will perform other clerical duties. Keypunch experience preferred; 6 months keypunch experience acceptable. 73-406

Keypunch Operator II or III will work on Inforex Keypunch System; responsible for keypunching journal voucher input. Experienced keypunch or keytape operator needed. 73-385

Technical Typist III will type manuscripts and reports from rough data. Responsible for punctuation and paraphrasing, may involve some editing for preparation for publishing. Excellent skills, minimum of one years experience. 73-397

Senior Clerk III will provide Customer service for publications section. Answer telephones and correspondence regarding errors and complaints on shipments; handle debit and credit memos; vouchers and order acknowledgements. Candidate must be a mature individual with good typing and the ability to communicate intelligently. 73-450

Senior Clerk III in schedules and publications office will handle room reservation and scheduling information. Type correspondence; keypunch master subject cards. Ability to work with details important. 73-270

Clerk Typist II will work in lab publications area. Fill publication requests, receive printed material, sort and file reports, type publication records. Ability to follow detailed office procedures important. 73-451.

Clerk II will process unemployment claims, maintain files; assist in gathering data for statistics. Accurate typing needed for reports, statistical summaries, charts. Ability to communicate clearly and to handle details efficiently. 15 or 20 hrs. 73-439

Computer Technical Assistant V will be responsible for all input into the computer system for the book order process; categorize orders, generate invoices, process foreign orders, process special coding and entries, generate new codes and records on new books and accounts, update all computer input. Individual must have ability and interest in Electronic Data Processing. Maturity, a good memory, ability to handle details with precision most important. 73-467

Senior Clerk IV in administrative office will maintain listing of both career opportunities and interested alumni; establish cross reference for files, prepare monthly statistical reports. Accurate typing desired. 35 hr/wk: 8am-4pm. 73-407

Accounting Clerk III in academic department will handle payroll procedures, billings, monthly summary statements, miscellaneous analysis, maintain Data Information Systems. Accounting experience helpful; discretion very important. 73-430

Clerk II will pull, file and dispatch medical records; assist with maintenance of patient files. Previous office experience required; accuracy in work very important in very busy office. Must be able to stand on his/her feet all day. 40 hr/wk. 8am-5pm. 73-475

Electronic Technician A will operate, maintain, and repair commercial electronic instruments. Will assist in laboratory, research, or analytical work under direction of scientific personnel. Graduate from a two year day technical school or its equivalent and a minimum of two years experience in trouble shooting and repairing instruments, especially oscilloscopes and digital measuring equipment. 73-391

Houseman will perform general cleaning in the MIT dormitories. Previous experience preferred. 73-418

Architectural Draftsman will develop architectural plans, elevations and details of Institute remodeling and alteration work. Technical school graduate with 5-10 yrs. experience, knowledge of electrical and mechanical systems helpful. 40 hr/week. 73-396

Library Assistant III will assist in circulation procedures: maintain records and statistics, check materials in and out of library, type overdue notices and collect fines. Individual will also work in Reference and Information areas. Interest in library procedures, efficiency in maintaining good library relations, ability to deal with people effectively important. 73-464.

Clinical Research Nurse will assist scientists and physicians in research procedures. Work being done at this 12-bed unit includes research in cardiology, clinical nutrition and biomedical engineering. Must be a Mass. Registered Nurse with at least 2 years hospital experience. 4pm-12 midnight shift. 73-236

2nd Class Engineer must have a Mass. second class Engineer's license or higher. Individual must be willing to work on any shift. 73-182

Photographer B will assist in photographic work under the direction of photographic personnel. Make continuous tone and line copies for prints and slides; carry through dark room and finishing work; assist with camera work. Minimum of two years experience required; industrial photography background desirable. 40 hr/wk. 8am-4:30pm. 73-371

Editorial Assistant V will work under the Chief Editor; proofread and copy edit manuscripts. Must be familiar with editorial procedures and the various aspects of book production. 73-449

Campus Patrolmen/Patrolwomen Recruits will become proficient in all phases of law enforcement: traffic control, patrol of buildings and grounds. Administer first aid; participate in emergency procedures, investigations; write reports and other general police duties. Ability to learn all phases of law enforcement: court procedures, case preparation, investigation and reporting of complaints. Prior experience as mobile operator, first aid worker or a familiarity with the use of firearms is desirable. A valid driver's license, honorable discharge for any earlier police service, ability to work long hours on occasion and rotating shifts is required. Must be able to handle top level public relations. Physical requirements: Height: 5 feet, 8 inches.

Maintenance Mechanic will service, maintain, and repair bookcases, shelves, cabinets, partitions, furniture; may install locks, vacuum lines, lamps, etc. Class I or 2 Mass. Drivers License, 3 yrs. experience operating a large truck (24,000 lbs GVW), will operate fork lift vehicles and go on out-of-state trips. 40 hr. work week. 73-316



SKY DISPLAY—Interpreter (second from left) helps explain an experimental aircraft cockpit display system to editors from the People's Republic of China who toured the MIT Electronic Systems Laboratory last week. The cockpit display, part of a research program on air safety, is designed to show airliner pilots where other planes are with respect to his position in the vicinity of an air terminal.



NEWSPAPER MAKE UP—Professor J. Frank Reintjes, director of the MIT Electronic Systems Laboratory (at console), explains to visiting editors from the People's Republic of China the computer-based system developed at ESL to help newspaper editors layout display advertising blocks. The research is supported by the American Newspaper Publishers Association. The Chinese editors were the guests in the US of the American Society of Newspaper Editors. Second from left is Donald R. Knudson of the ESL staff and seated beside console is Hsin-Kue Kan from Taipei, Taiwan, China, MIT graduate student whose graduate research centers on the display program.

—Photos by Calvin Campbell

Continued Exchanges Urged in Visit of Chinese Editors

(Continued from page 1)

imposed by the widespread use of private automobiles in the US.

Professors Lee and Altshuler spoke in English and their remarks were translated by interpreters.

Chu Mu-chih, director of the Hsinhua (New China) News Agency in Peking and head of the delegation, responded on behalf of the 18 PRC editors—16 men and two women—at the dinner. Four others had remained at their hotel following a full day of visits to historic sites in eastern Massachusetts.

Dinner guests, besides others from MIT, included delegations from the *Christian Science Mon-*

itor, headed by Editor-in-Chief Edwin Canham, and from the *Boston Globe*, headed by Editor Thomas Winship.

John Hughes of the *Monitor* and Mr. Winship were co-hosts on behalf of the ASNE for the PRC group in Boston. The PRC editors' visit to the US was in reciprocity for a visit from a group of US editors to China, arranged by the ASNE last year. Mr. Hughes was one of the US editors who was in China.

At the Electronics Systems Laboratory Friday afternoon, the PRC editors were the guests of Professor J. Frank Reintjes, ESL director.



CHINESE GUESTS—Boston area hosts for editors from the People's Republic of China are shown with the head of the Chinese delegation at a dinner at MIT. Left to right, Edwin D. Canham, editor-in-chief of *The Christian Science Monitor*; Chu Mu-chih, director of the Hsinhua News Agency in Peking and head of the PRC delegation; MIT Provost Walter A. Rosenblith; Thomas Winship, editor of *The Boston Globe*; and Dr. C. C. Lin, Institute Professor and Professor of Applied Mathematics at MIT.

Course XXI Lounge Named For Pearson

The Course XXI Lounge (14N-311) will be dedicated in honor of Henry Greenleaf Pearson, the noted biographer and long-time head of MIT's Department of English and History, in a ceremony Thursday, May 31 at 4pm.

Professor Pearson, who died in 1943, was a member of the faculty from 1893 until his retirement in 1938. During the 19 years he headed the department he guided its development as an integral part of the curriculum.

Dr. James R. Killian, Jr., Honorary Chairman of the MIT Corporation, will speak at the dedication ceremony which will be attended by members of the Pearson family.

Obituaries

Beatrice Rogers, 74

A memorial service for Beatrice A. Rogers, 74, who died on Tuesday, May 22, will be held at the MIT Chapel on Wednesday, June 6 at 10:30am.

Miss Rogers retired in 1969 from MIT where she served as administrative secretary and assistant to the editor of the *American Economic Review* in the Department of Economics. She came to MIT in 1941 and interrupted her career here to work as secretary to the President of Radcliffe College.

L. R. Grabin, 18

Lawrence R. Grabin, 18, a sophomore in life sciences, died Thursday, May 10, following a long illness.

Mr. Grabin was the son of Mr. and Mrs. Samuel Grabin, of East Meadow, N.Y. He was a member of Pi Lambda Phi fraternity.

After 33 Years: Reminiscence and 'Welcome'

(Dr. C. C. Lin, Institute Professor and Professor of Applied Mathematics at MIT, is a native of China who left China in 1940 to study first in Canada and then the US. Because of World War II and subsequent events, he was unable to revisit his homeland and his relatives there for 32 years. Last year, he was part of a group of US scientists who visited the People's Republic of China and when PRC newspaper editors came to MIT for a dinner last week, Professor Lin was asked to address them. His remarks—an appeal for mutual understanding between his native country and his adopted country—follow.)

"I feel honored and happy to have this opportunity to participate in this reception at MIT to welcome the delegation of newspaper editors from my native country of China.

Let me first express my happiness and my welcome to the delegation by quoting a word from the Chinese classics of Confucius: "Isn't it a great joy to have friends visiting from far away?"

"If some of the members of this delegation have any minor questions about everyday life in this country, for example, where to find the best Chinese restaurants, my wife and I, as long-term local residents here, shall be glad to help you.

"But I wish also to take this opportunity to report to the distinguished newspaper editors of both countries a little bit of my own experience and add a few remarks for their consideration; because I feel that the exchange visits of newspaper editors are extremely important for the mutual understanding of the two peoples.

"I left China in 1940. At that time, I did not expect that I would still find myself here today, after thirty-odd years. I did not have the opportunity to go back to visit my relatives and friends until July of last year.

"After my return from that trip, I talked with my friends here about the developments in Chinese society. Quite a few of them were skeptical.

"For example, last night, at a banquet in Providence, R.I., I mentioned to an old American friend

of mine—who is a professor of engineering and whom I have not seen for many years—the fact that China can now manufacture her own automobiles; he expressed great surprise. Of course we know—and indeed it has been reported in the news magazines here—that China's industrial progress is not limited to the making of automobiles.

"I mention this specific experience in order to underline the fact that: because of the lack of communication between China and the United States during the past two decades, there is a lack of mutual understanding between the common people of the two countries.

"This is indeed regrettable, for there had been a deep relationship in former times. Many of the scientists and engineers now in China studied here; some of them remained longer to gain working experience. When I was a student at Tsing Hua University, the famous MIT mathematician, the late Professor Norbert Wiener, was lecturing at my college. I still remember vividly how he strolled around the campus.

"Science and engineering are rapidly developing in China, and MIT, as an Institute of Technology, will have a special position in the cultural exchanges between the two countries.

"Tonight, the distinguished guests here are the leaders of journalism of the two countries. News reporting is indeed the most important instrument to promote mutual understanding.

"I am a mathematician and astronomer, and have little knowledge of humanities and social sciences. I speak only as a layman and want to express two simple wishes.

"First, I welcome our visitors and wish them success in their mission.

"Secondly, I hope that the journalists of the two countries will, from now on, cooperate intimately to inform the public to establish broader and deeper mutual understanding between the two peoples."

Howard to Guide Interdisciplinary Science

Dr. Louis N. Howard, professor of mathematics at MIT, has been named faculty counselor for the interdisciplinary science course, Course 25, effective September 1, by Dr. Robert A. Albery, dean of the School of Science.

Course 25 provides special opportunities for students interested in programs which differ significantly from established departmental offerings. It allows an interdisciplinary approach to such fields as astronomy, meteorology, oceanography, environmental sciences and medical sciences.

Professor Howard succeeds Professor Charles C. Counselman III, of the Department of Earth and Planetary Sciences, who has

guided the development of the program since it began in September, 1972, and before that was registration officer for a predecessor program within his department.

"We are indebted to Professor Counselman who has done an excellent job in seeing the program through its transitional period," Dean Albery said.

Each student in Course 25 develops his or her own curriculum in consultation with a faculty advisor and subject to the approval of the Course 25 Committee. The curriculum must include a strong and coherent set of science subjects. Twenty-seven students were in Course 25 in its first year.

Professor Howard is an applied mathematician recognized for his research in fluid dynamics, geophysical fluid dynamics, and hydrodynamic stability theory.

A native of Chicago, he received the AB degree from Swarthmore College in 1950 and the MA in 1952 and PhD in 1953 from Princeton University. At Princeton he was a National Science Foundation Fellow from 1952-53 and was a Higgins Instructor and Lecturer from 1953-55.

Dr. Howard was appointed assistant professor at MIT in 1955, became associate professor in 1959 and professor in 1964. He held a Guggenheim Fellowship in 1962-63 and a Sloan Fellowship in 1963-64.