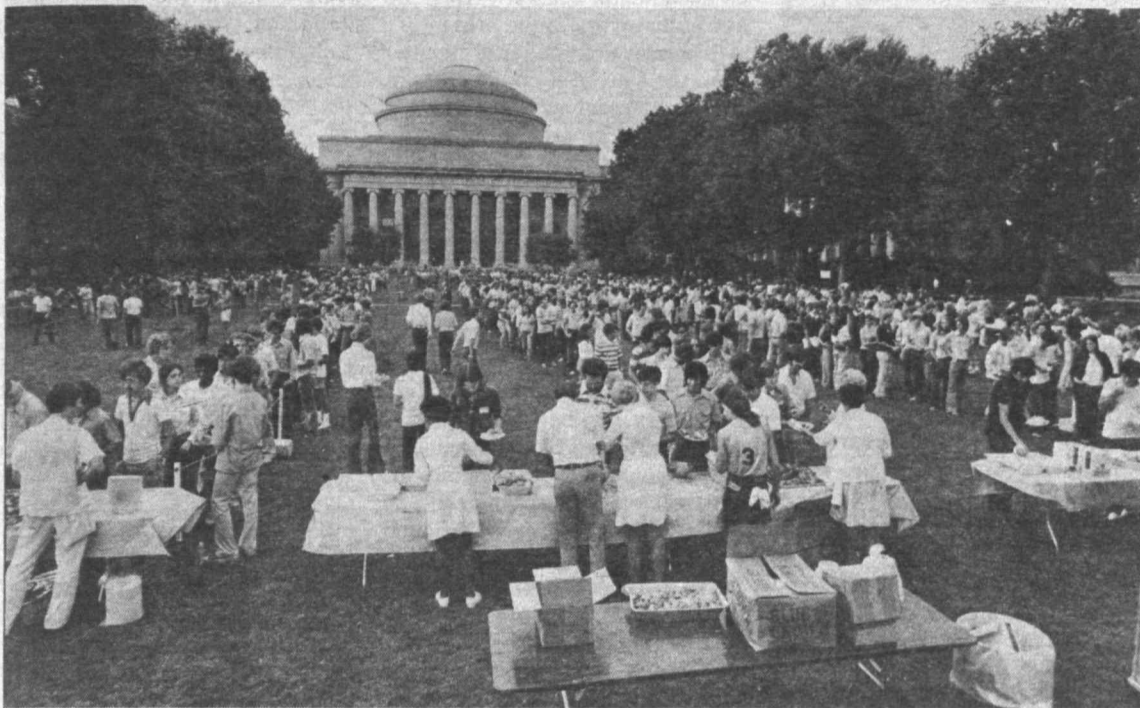


## MIT Welcomes Freshman Class



Freshmen through the picnic which serves as their official introduction to MIT.

—Photo by Calvin Campbell

MIT is welcoming a new freshman class of 1,155 students this week, including students from 47 states and 30 foreign countries.

The freshmen began arriving last Friday for the start of Residence/Orientation Week prior to registration for all students Monday, Sept. 8, and the start of regular classes Tuesday, Sept. 9.

This year's freshman Class of 1979 includes 34 students admitted after only three years of high school. Ninety-one percent of the class members ranked in the upper 10 percent of their high school graduating classes.

Among the freshmen are 175 women (15 percent), 30 blacks, and 74 members of other ethnic minorities (American Indian, Mexican-American, Oriental, Puerto Rican and other Spanish-speaking minorities).

The state with the largest number of entering freshmen is New York with 234. Thirty-three percent of the class is from the middle Atlantic states. Eighteen percent come from New England states.

According to Peter H. Richardson, director of admissions at

MIT, the class was selected from among 4,700 final applicants.

The incoming freshmen have worked at such diverse jobs as archeologist, snake keeper for a zoo, conservationist, disc jockey, manager of a lobster business and a crewman on a Japanese oil tanker before coming to MIT.

The freshmen were officially introduced to MIT with a picnic in

Killian Court last Friday. Academic counselling and social activities will continue through Sunday, Sept. 7, closing with the President's Reception for parents and freshmen at 3:30 at the President's House.

The class is the largest in MIT history—109 more than a year ago—and it represents the first

(Continued on page 3)

## Technology Studies Program Launches Credit Subjects

The MIT Technology Studies Program will offer its first formal group of subjects to undergraduates this coming academic year.

Technology Studies, under the directorship of Louis L. Bucciarelli, Associate Professor of Engineering and Technology Studies, and guided by a steering committee chaired by Harold J. Hanham, Dean of the School of Humanities and Social Science, brings together faculty from widely diverse fields of scholarship to explore complex issues in the domain of science, technology and culture.

The Program's subject offerings will address the interrelationship of individual and collective social values and the conduct of technical work; how the organization (in professions, faculties, corporations, etc.) of those who work in science and engineering affects what they accomplish, and the impact of technological change on society and its members.

These subjects may be used to fulfill MIT's new Field of Concentration requirement in the Humanities, Arts, and Social Sci-

(Continued on page 8)

## Brilliant x-ray Source Repeats 1917 Display

The brilliant show being put on in the sky by a newly-discovered x-ray source is a repeat performance, scientists have found.

The star, which recently emerged from obscurity by increasing its x-ray and visible radiation by a factor of at least a thousand, gave off a similar outburst of visible light in 1917.

Moreover, the star (or two stars in close orbit) is probably relatively near us in the galaxy—although it still may be several thousand light-years away.

These findings have emerged from a combination of sophisticated instruments and historical sleuthing involving researchers at both MIT and Harvard University.

The new x-ray source—now the brightest source of x-rays in the sky—was discovered in early August by the British satellite Ariel-5. MIT scientists working with MIT-designed equipment aboard SAS-3, NASA's x-ray astronomy satellite, soon confirmed the discovery, and located the

(Continued on page 3)

## Four District Officers Named For Leadership Campaign

Appointments of four district officers for MIT's \$225 million Leadership Campaign have been announced by Lt. Gen. James B. Lampert (USA Ret.), '39, vice president for resource development and campaign director.

They are: Robert H. Bliss, '48, Mid-West Region and two Canadian provinces; Kevin J. Kinsella,

Atlantic States and South. A fifth officer will soon be named for the New England Region.

The district officers will work with area leaders in contacting

(Continued on page 3)

## Crime Prevention Notices Issued

The MIT Campus Patrol has begun issuing "Crime Prevention Notices" warnings as part of a program to curtail property losses at MIT.

Patrol officers are leaving notices when they find situations that invite theft. Notices call attention to unlocked areas, unattended valuables, office equipment not bolted down, open or unlocked windows and unsecured motor vehicles or bicycles.

Campus Patrol Chief James Olivieri said MIT property thefts last year nearly doubled when compared to 1973. He said the new program of notices was instituted in an effort to prevent another rise this year.

Chief Olivieri said the patrol is maintaining copies of notices issued to identify areas of the Institute where security is lax and where special prevention efforts are needed.



Mr. Bliss



Mr. Kinsella



Mr. Phinney



Mr. Singal

'67, Western States; James N. Phinney, Metropolitan New York; and Arnold H. Singal, '63, Middle

## Scientists Find Evidence of New Nuclear Structure

By BARBARA BURKE  
Staff Writer

Evidence for a new nuclear structure has been found by a team of researchers from MIT, the Argonne National Laboratory and the Niels Bohr Institute.

The researchers believe they have created a "nuclear molecule": two carbon nuclei joined at the surface to form an excited, cigar-shaped magnesium nucleus. Such a structure has been sought by physicists for more than 20 years.

The finding was reported in a recent issue of *Physical Review Letters*. It is expected to be significant in elucidating the behavior of the nucleus under large deformations and in understanding the basic processes by which two nuclei collide and fuse to form a new nucleus. The study of the nuclear fusion processes, or "heavy ion fusion reactions," is an

active field of nuclear research; among its objectives are the production of superheavy elements which could be important energy

sources, and understanding the synthesis of the elements during the evolution of stars.

The deformed nucleus was

created by bombarding a stationary carbon nucleus with accelerated carbon nuclei of particular bombarding energies.

Previously, when physicists have observed highly energetic nuclear collisions to combine two nuclei, the nuclei have merged completely, like two drops of water forming a larger drop.

### Key to Understanding

At certain "resonant" bombarding energies, however, a carbon-carbon nucleus can be formed which is a kind of nuclear Siamese twin with the two carbon nuclei joined at their surfaces. Its structure is determined not only by the "liquid drop" properties of nuclei, but also by the behavior of the individual protons and neutrons at the surface.

The nucleons presumably go into new orbits which stabilize the cigar-shaped nucleus, and permit its fleeting existence. (The nucleus

lives about  $10^{-21}$  seconds.)

"This interplay of the collective aspects of nuclear motion and the motion of the individual surface nucleons within the nucleus is the key to understanding this new deformed nuclear structure," said Eric R. Cosman, associate professor of physics in the MIT Department of Physics and a member of the staff of the Laboratory for Nuclear Science.

### Experimental Work

Authors of the report are Professor Cosman; Thomas M. Cormier and Anthony Sperduto, LNS staff researchers; Karl A. Van Bibber and Glenn R. Young, MIT physics graduate students; J. Erskine and L.R. Greenwood of Argonne; and Ole Hansen of the Bohr Institute.

The work was funded by the federal Energy Research and Development Administration. The

(Continued on page 6)

## TT Squeezed in Budget Crunch

A space squeeze, caused by budget cuts, has caught up with *Tech Talk*, forcing reductions in columns given to Classified Ads and Positions Available and in the lengths of most news stories.

Last year, *Tech Talk* published 516 pages in 50 issues. This year, the numbers will be held to 400 pages in 45 issues. Austerity began this summer when issues were published every other week and held to eight pages.

Starting with this issue, *Tech Talk* will resume weekly publication, but most issues will continue to be eight pages.

To accommodate the squeeze, Classified Ads will be limited to one page a week and will be run on a first-come, first-served basis. Ad deadline will continue to be noon, Fridays, but available space may be filled before then and latecomers will have to wait a week.

Positions Available will be listed for two weeks, then listed by job number and title only until filled.

Persons seeking news stories are urged to consult the editors (Rm. 5-111, x3-2701) before preparing copy. It may have to be condensed or cut.



**CLOUD CLEANING.** Workmen at MIT appear to be lost in the clouds while they wash the outer surface of MIT's J.B. Carr Indoor Tennis Center preparatory to painting. The air-inflated structure formed from heavy-duty fabric is 212 feet long, 120 feet wide and 40 feet high and covers four tennis courts. Dedicated in 1971, it was the gift of Mr. and Mrs. J.B. Carr of

Wilkes Barre, Pa., and Palm Beach, Fla., and their son and daughter-in-law, Mr. and Mrs. Davis B. Carr of West Palm Beach, Fla. Painting of the outer surface will protect the fabric from ultra violet light and prolong its expected service life. Workmen tie themselves to the structure's ridge with ropes while wielding long-handled scrub brushes.

## Message Unit Costs Rising

Local telephone calls will cost MIT \$316,000 this year, and a proposed rate increase could boost that another 35 percent next year, according to Morton Berlan, MIT telecommunications, superintendent.

As an institutional customer and user of CENTREX, MIT does not benefit from flat rate service or free message units allowed resi-

dence customers, Berlan said. Each message unit now costs the Institute 8.25¢—the highest unit rate of all major US cities with measured telephone plans.

Proposed rate increases before the Massachusetts Department of Public Utilities would raise the cost-per-unit to 11¢, if approved, according to Berlan.

He urged employees to make

better use of MIT tie-lines to such places as Harvard, Wellesley, Massachusetts General Hospital, and Draper Laboratory as one way of curtailing local telephone costs. A listing of off-campus access codes appears in all staff and student telephone directories.

"Every call that is dialed 9 plus seven digits costs MIT message units," Mr. Berlan said. "By contrast, the percentage of Cambridge residence telephone customers with free local service is 85 percent."

scenery. Assignments for the design of the same subject in each of the three production styles will demonstrate their differing use of color, texture, and layout. Use of video equipment to document the camera's view of color and surface and effects possible only on videotape. Weekly projects and final major project required. Finished art technique not necessary—however students must be willing to explore suggested collage, color rendering, model working and/or photography techniques. Students will supply their own materials and art supplies. Permission of instructor required. Hours to be arranged. W. Fregosi, Leave name and number in Rm. 14N-407 or call x3-4441.

21.116 Nonverbal Communication  
Fall Prereq.: —  
3-0-6

Analysis of nonverbal communication as it appears in two main forms: 1) naturally-occurring face-to-face interaction (such as greeting behavior) and 2) more stylized forms of communication (i.e., dance, drama, and mime.) Introduction to the relevant analytical schemes of Birdwhistell, Schefflen, Kendon, Condon, Byers, Erikson, and Lomax. Employing videotape and working closely with the instructor, students will carry out original research of their own choosing. Permission of the instructor required. Hours to be arranged. S. Krebs. Course subject to approval.

## New UROP Listings

Welcome Freshmen and Other Newcomers.

UROP invites and encourages you to participate with MIT faculty members in a wide range of research activities both on and off campus. The 1975/76 UROP Directory is now available in the Information Office, Rm. 7-111. To get started, first read the "How to Participate" section of the directory then talk with Coordinators and faculty members; check with the UROP office, Rm. 20B-141, x3-5049 if you have specific questions. Current project offerings will be listed in this weekly column and on the UROP bulletin board in the main corridor of the Institute. The UROP office will be open 10am-4pm this Saturday. So come see us if tomorrow's Open House isn't enough.

### Call for Proposals

If you haven't read the "How to Participate" section of the new 1975/76 UROP Directory, do it now. All that information was put together for you with loving care and won't fit in this column. First Term Proposals: Feel free to start submitting them. General Principles: Don't ask for what you don't absolutely need. Be sure to have submitted your past UROP evaluations. Write a good proposal. Announcement of Awards: Starting the week of September 29th. Please don't call and bug us that week: answers will get out as fast as we have them. Decisions will be made in order

of receipt of proposals until we are broke. Availability of Funds: 1) Generally available for materials and supplies requests within reason. 2) Generally available for overhead waiver requests when faculty or departments offer wages to UROP students. 3) Tougher to get if you're asking for significant wages from UROP itself. Promise: If you've been inventive, resourceful, persistent, and responsible in eeking out research support for your UROP work but find there's still an honest-to-gosh personal deficit you can't swallow, we'll manage it.

## Foreign Studies

### Fulbright-Hays Full Grants

Available to US citizens who have completed one year or more of graduate study but will not have the doctorate degree before the beginning date of the grant. The grants offer study in 50 countries, but the applicant must specify only one. Sufficient knowledge of the appropriate language is necessary to communicate with the people of the host country and to carry out the proposed study. The grant covers round-trip transportation, tuition, books, health and accident insurance, and a maintenance allowance for one academic year, based on living costs in the host country. Graduate School Office, Rm. 3-136, x3-4860. Deadline: September 26, 1975.

### Winston Churchill Foundation

The Winston Churchill Foundation offers scholarships in engineering, mathematics and science at Churchill College, Cambridge University, England. About 10 awards are given each year to outstanding men and women who are US citizens between the ages of 19 and 26 and who hold a bachelor's degree from a US college. At the time of application the student must be enrolled at one of the 28 participating universities. MIT nominates two candidates. Churchill Scholars have the option of spending one year at Cambridge working toward a certificate or diploma, or three years for the PhD. Applicants must have taken the Graduate Record Examination no later than October 18, 1975. Graduate School Office, Rm 3-136, x3-4860. Deadline: November 3, 1975.

### Marshall Scholarships

The Marshall Scholarships enable US citizens under the age of 26 who are graduates of US colleges and universities to study for a degree of a university in the United Kingdom for a period of at least two academic years. Candidates will be selected for distinction of intellect and character, as evidenced by their activities and achievements. A total of 30 scholarships will be awarded. The award averages \$3700 per year. Married persons are eligible for Marshall Scholarships but preference will be given to those who intend to remain unmarried. Graduate School Office, Rm. 3-136, x3-4860, Deadline: October 15, 1975.

The following brief descriptions of selected graduate fellowships have been received recently by the Graduate School Office. More

# Henry Steele Commager Named Visiting Professor

One of America's most distinguished living historians, Henry Steele Commager, will be at MIT as visiting professor in history.

Professor Commager, emeritus professor and Simpson Lecturer in History at Amherst College, will teach "Foundations of American Nationalism, 1774-1815" (21.413)—a new undergraduate subject—in the fall term.

Professor Commager's career spans almost 50 years. He is author or editor of more than 60 books on American intellectual and constitutional history as well as documentary history from the age of discovery to the present.

Professor Commager graduated from the University of Chicago in 1923, and received the master's

and PhD degrees there in 1924 and 1928.

Among his best known works are: *Documents of American History* (1934); *Majority Rule and Minority Rights* (1943); *America in Perspective: The United States Through Foreign Eyes* (1947); *Freedom and Order: A Commentary on the American Political Scene* (1947); *The American Mind: An Interpretation of American Thought and Character Since the 1880's* (1950), and *Freedom, Loyalty and Dissent* (1954). His most recent works include: *The American Enlightenment* (1974); *Jefferson, Nationalism and the Enlightenment* (1974), and *Defeat of America: Presidential Power and the National Character* (1975).

# Pulitzer Winner John Hersey To Teach Here This Fall

John R. Hersey, Pulitzer Prize winning novelist and journalist, will teach at MIT during the coming fall term.

Mr. Hersey, a lecturer at Yale University, will be visiting professor in writing and literature in the MIT Department of Humanities and will teach a seminar—"The Writer's Craft" (21.740)—in fiction writing. The subject takes its title from a recent book of essays edited by Mr. Hersey. He will spend three days a week at MIT and his seminar will be limited to 12 to 15 undergraduates.

A writer of what he describes as "contemporary chronicles," Mr. Hersey has written more than 16 books in fiction and journalistic forms. His *A Bell for Adano* won the 1945 Pulitzer Prize for fiction and *Hiroshima* was an account of the lives of six atom bomb survivors. Two recent books by Mr.

Hersey are: *The Algiers Motel Incident* about an incident during the 1968 Detroit riots, and *The President* recounting a week the author spent with President Ford. His other books include: *The Wall* (1950), *A Single Pebble* (1956), *The War Lover* (1959) and *White Lotus* (1965).

Born in China, he graduated from Yale in 1936, studied at Cambridge University in England, and worked as an assistant to the late Sinclair Lewis before becoming a war correspondent in World War II.

## Close Exhibit

An exhibition of drawings and paintings by artist Cynthia Close is currently showing at the MIT Faculty Club, through Sept. 26. Ms. Close is married to Peter M. Close, athletic instructor and sports information director.

# INSTITUTE NOTICES

## Announcements

**Official Notice**—Transcripts with summer session 1975 included will be available the week of Sept 22 if orders are placed now.

**Students Interested in Applying to Medical School\*\***—Group meeting Mon, Sept 8, 4pm, Rm 3-270. Sponsored by Preprofessional Advising & Education Office.

**Action/Peace Corps (Health Care, Education)**—New England District Office holding one day luncheon seminar for prospective volunteers Tues, Sept. 9, with assistance of Center for International Education. Need experienced & skilled people in health care and scientific fields. Applicants should be available for employment this fall. Contact Preprofessional Advising & Education Office, Rm 10-186, x3-4158.

**Students Interested in Applying to Law School\*\***—Group meeting Wed, Sept 10, 4pm, Rm 3-133. Preprofessional Advising & Education Office.

**Student Activities**—All presidents of undergraduate student activities should contact Terry at the Undergraduate Association office, x3-2696, to update.

**Student Furniture Exchange**—Open Tues & Thurs, 10am-2pm. Buy and sell to students. Tax-free donations gratefully accepted. 25 Windsor St. x3-4293.

## New Course Listings

21.113 DESIGN FOR THE PERFORMING MEDIA  
Year: U  
Prereq.: —  
3-0-6

Analytical breakdown of scripts and formation of design concepts for stage and studio leading to projects exploring the scale and format of theatre, opera, and television

complete descriptions are available in the office, Rm. 3-136.

### Amelia Earhart Aerospace Fellowships

The Amelia Earhart Fellowships are awarded to women for advanced study and research in the aerospace sciences. Grants of \$3,000 will be awarded to the best qualified candidates for assistance in the 1976-77 school year. A bachelor's degree in a science qualifying a candidate for graduate work in some phase of aerospace and related sciences is the basic requirement of the fellowship. Applications must be filed by January 1, 1976.

### Graduate Research Fellowships in Criminal Justice

The National Institute of Law Enforcement and Criminal Justice is making available a limited number of graduate research fellowships to doctoral candidates who are writing their dissertations. Dissertations must be in a major area of criminal justice or topics closely related to criminal justice. Application deadline: November 15, 1975.

### The Latin American and Caribbean Learning Fellowship in Social Change

To provide opportunities for scholars to learn from Latin American and Caribbean social change programs, the Inter-American Foundation announces the availability of a small number of pre- and postdoctoral research fellowships. The fellowships are open to doctoral candidates in the social sciences and professions. To be eligible, candidates must have a multidisciplinary academic and experiential background with specialization in at least one academic discipline or problem area (e.g., rural credit, producer and consumer cooperatives, nutrition, housing, regional planning, non-formal education, etc.). Candidates must be able to write and speak a language of the Caribbean or Latin American area. Doctoral candidates must be enrolled in higher educational institutions in the US and have fulfilled all degree requirements other than the dissertation at the time of the award. Stipends for research vary from country to country. Field research is normally supported for a nine-month period after which time the Fellow spends up to three months as an intern under the auspices of the Inter-American Foundation. Deadline: December 1, 1975.

## MIT Club Notes

**MIT Baha'i Association\*\***—Meeting Mon, Sept 8, 5pm, Rm 8-105 to get acquainted and make plans for year. Pot Luck picnic 6pm. All are welcome.

**MIT/DL Bridge Club\*\***—ACBL Duplicate Bridge. Tues, 6pm, Walker Memorial Blue Rm.

**MIT Choral Society\*\***—Directed by John Oliver. Open rehearsals Mon, Sept 8 & Thurs, Sept 11, 7:30pm, Rm 10-250. 1975-76 season will include Brahms, Reguier; Stravinsky, Mass

for Double Chorus and Beethoven, Mass in C Major.

**MIT Concert Band**—Short organizational meeting Registration Day, Mon, Sept 8, 5pm. Stu Ctr West Lge. Old & new members asked to attend. Regular rehearsals start Wed, Sept 10, 8pm & Mon, Sept 15, 7:30pm, Kresge. Repertoire of contemporary music includes large number of original manuscripts. Players at all levels welcome.

**Strategic Games Society**—Sat, 1pm-1am, Walker Rm 309 & 318. Offers opponents and discounts on merchandise to members plus gaming & periodical library. Info: Paul Bean, 266-6108.

**Student Homophile League\***—Gay Lounge, Rm 50-306, open daily for lunch & random other hours, x0745 Dorm (x8745 Dorm after switch-over.) Tom, Contact Line, x3-5440, provides info, referrals counseling or just talking to gay persons. Meetings 1st & 3rd Sun every month, Gay Lge. Consult bulletin board, Bldg 3, for info. Gay pub-crawling tour Thurs, Sept 4, 9:30pm, call Contact Line for place.

## Religious Activities

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

**Christian Worship Service\***—Sun, 10:45am, Chapel. Refreshments following service.

**Islamic Society\*\***—Prayers Fri, 1pm, Kresge rehearsal rm B.

**Prayer Time\*\***—Lunch hour Bible classes led by Miriam R. Eccles. Fri, 1-2pm, Rm 20E-226. All are welcome.

## TECH TALK Volume 20, Number 5 September 3, 1975

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Address news and editorial comment to MIT News Office, Room 5-111, MIT, Cambridge, MA 02139. Telephone 253-2701.

Mail subscriptions are \$6 per year. Checks should be made payable to MIT and mailed to the Business Manager, Room 5-111, MIT, Cambridge, MA 02139.

# Time Notes Seismologists

Faculty and alumni in MIT's Department of Earth and Planetary Sciences (Course XII) are prominent among leading seismologists referred to in a major cover story on earthquakes and earthquake prediction in the Sept. 1 issue of *Time* magazine.

Moreover, the magazine credits MIT research carried out in the 1960s as a key element in seismologists' improving ability to predict some earthquakes.

Faculty and alumni cited include: Dr. Frank Press, Robert R. Shrock Professor of Geophysics and head of the department; Dr. William F. Brace, Professor of geology and an alumnus (SB XIII '46, SB I '49, PhD XII '53); Lynn R. Sykes (SB SM XIII '60) and Christopher H. Sykes (PhD XII '67), both now at Columbia University's Lamont-Doherty Geological Observatory; and Amos M. Nur (PhD XII '69) of Stanford University.

The magazine said Dr. Brace and associates, while studying reaction of materials to great mechanical strains, discovered that as rock approaches its breaking point, there are unexpected changes in its properties—electrical resistance increases, seismic waves passing through it slow down. This understanding is now proving essential as seismologists develop prediction techniques by watching for the events that signal the coming of an earthquake.

## Freshmen Welcomed

(Continued from page 1)  
step in implementing decisions made last spring to seek to increase the total undergraduate student body at MIT by about 10 percent over the next four years in order to make maximum use of existing facilities. Added to 3,000 upperclass students expected back from last year, the new freshmen will bring total undergraduate enrollment for 1975-76 to slightly less than 4,200. Freshmen classes on the order of 1,100 to 1,150 will be admitted over the following three years so that the undergraduate enrollment will level out at between 4,400 and 4,500 by the 1978-79 academic year.

Chancellor Paul E. Gray, in announcing the growth plan to the Faculty last spring, said MIT will be able to absorb additional students without diluting the quality and effectiveness of teaching.

"We will need a small increase in the teaching staff, particularly at the instructor level, to accommodate the additional freshmen," Dr. Gray said. "What we really will be doing is increasing as much as is reasonable and prudent the productivity of our existing facilities and resources—our class-

## Brilliant x-ray Source Made First Appearance in 1917

(Continued from page 1)  
source, which is in the direction of the constellation Orion, precisely enough so that astronomers working with optical telescopes could find it.

Information on the star's distance comes from studies of its low-energy x-ray emission. MIT researchers pointed SAS-3's unique low-energy x-ray detector at the new x-ray source last Friday and found that it was emitting extremely low-energy x-rays.

Since the few gas atoms between stars in the Milky Way can absorb this low-energy radiation, this indicates that the star may be relatively nearby, says Dr. Saul A. Rappaport, associate professor of physics at MIT.

Information on the star's past

## Mime Troupe To Perform

Noon hour events, held weekly in the Rogers Lobby (Bldg. 7), will resume, Wednesday (Sept. 10) with two performances—at noon and again at 12:30pm—by Boston's National Mime Theatre. All lobby events are open to the public free of charge.

The mime troupe—directed by Kenyon Martin, a well-known figure in American mime, will perform a series of classical mime vignettes from their repertoire work, "Beyond Words."

## New Deadlines Affect Registration Procedures

Several changes in registration procedures will take effect with the start of the fall term.

Class cards replace the former roll cards. The class cards are for the use of instructors only and do not affect registration in a subject.

The end of the fifth week of the term—October 10 this year—will be a major deadline for all students. After that date no subjects may be added. Moreover, credit standing—such as listening or junior/senior pass fail—may not be changed.

An exception to adding subjects will be allowed when an instructor certifies that a subject does not

begin within the first five weeks of the term.

The fifth week of the term is also the deadline for undergraduates to register for reduced loads if they expect a reduction in tuition. This includes students registering for thesis only. Students must submit a form for "Application for Light Load Undergraduate Term Program." There will be a \$25 charge for late submission of this form.

The drop date has also been changed. Dropped subjects must be recorded three weeks before the end of the term—November 21 this fall.

A statute of limitations has been adopted by the Committee on Academic Performance for petitions to change student records. Petitions for changes in records more than a year old will be accepted during 1975-76, but normally will be refused thereafter.

Likewise, undergraduates will have 1975-76 to make up any incompletes received in June 1975 or before. After this year, the faculty rule on incompletes will be strictly enforced.

These and other modifications in the registration procedure are given in detail in a Supplement to the Guide for Undergraduates and Faculty Counselors, and the Graduate School Manual September, 1975. Copies of the supplement are available from faculty counselors or in the Committee on Academic Performance office, Rm 10-191.

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## Three New Edgerton Professors Appointed

Three young MIT faculty members have been appointed Esther and Harold E. Edgerton Assistant Professors for two years, effective Sept. 1. Announcement of the appointments was made by Provost Walter A. Rosenblith.

Those named were: Alan J. Grodzinsky, assistant professor of electrical engineering and computer science; Robert E. Cohen, assistant professor of chemical engineering; and David G. Holmes, assistant professor of mechanical engineering.

The Edgerton professorships were established by the MIT Corporation in 1973 to honor Institute Professor Emeritus Edgerton and

his wife, who have been associated with the Institute community nearly 50 years. The three new appointees are the second group of young faculty to hold the two-year appointments.

Corporation Chairman Howard W. Johnson and MIT President Jerome B. Wiesner said at the time the fund was established that it would provide new horizons in research and career development for younger faculty. Concurrently, it also provides funds needed by the faculty members to involve undergraduate students directly in their research.

"There is no more fitting way for us to honor this man and this woman for the devotion, affection and warm friendship they have given freely to young people at this university over a period of nearly half a century," Mr. Johnson and President Wiesner said.

Professor Grodzinsky, 29, of Cambridge, received the Goodwin Medal for effective teaching as a graduate student and instructor at MIT from 1972-74. He received his SM and SB degrees from MIT in 1971 and the PhD in 1974. His research has been



Dr. Grodzinsky

mainly on transduction properties of the biological tissue, collagen, and other membrane structures, with application to implantable medical assist devices.

Professor Cohen, 28, of Newton, joined the faculty in 1973 after a

year of postdoctoral study at Oxford. He received the BS with distinction from Cornell (1968), and the MS degree (1970) and PhD degree (1972) in chemical engineering from



Dr. Cohen

California Institute of Technology. His research concerns the physics and chemistry of polymers, and he is a member of MIT's Interdepartmental Committee for Polymeric Materials. He was awarded the DuPont Young Faculty Award by the Department of Chemical Engineering last year.

Professor Holmes, 32, of Somerville, holds a BA degree from St.

John's College of Cambridge University (1965), and SM from Harvard (1967), and a PhD from MIT (1973). Formerly a high school teacher in Malaya, he began studies of



Dr. Holmes

noise control, outdoor sound propagation and pressure fluctuations as a research associate in the MIT Department of Mechanical Engineering. He was appointed assistant professor in 1973 and last year was awarded a Lilly Post-Doctoral Teaching Fellowship in the Division for Study and Research in Education.

## District Officers Named

(Continued from page 1)  
MIT alumni, friends, foundations and corporations in support of the Leadership Campaign. The five-year effort to raise funds for new teaching and research programs is the largest in MIT history. The campaign total also includes funds to increase MIT's endowment by nearly one-third and money for new classroom, dormitory, laboratory and department facilities.

Bliss, alumnus of the Department of Mechanical Engineering (SB '48) and former Sloan Fellow (SM '58), began his career at the USM Corporation, where he most recently was Planning Director. In MIT alumni activities he served as Downtown Boston Chairman for the Second Century Fund (1961-63), co-founder of the MIT Club of Route 128 (1964), and member of the club advisory board of the Alumni Association.

Kinsella holds the SB in management from MIT (1967) and the MA in international economics (1969) from Johns Hopkins. Following study at the University of Stockholm's International Peace Institute (1970-71), he was deputy di-

rector of the Latin American Teaching Fellowship Program for the Tufts University Fletcher School of Law and Diplomacy. He has also worked with the US AID mission to Peru.

Phinney, former assistant director of alumni relations and graduate of Johns Hopkins University in 1955, was director of the MIT Alumni Center of New York from its establishment in 1963 to 1972. Previously he was Assistant to the President and director of development at Pacific University (1958-63). Since 1972 he has been Regional Director of the Alumni Fund for the metropolitan New York area.

Singal is a graduate of Harvard '58, Yale Law School '61, and the Sloan School of Management '63. From 1963 to 1968 he was vice president for research, planning and development at Federal Distillers, Inc., in Cambridge. He returned to MIT in 1968 as staff associate for estate and life income plans and in 1972 was appointed Institute Secretary for Charitable Trusts—a position he will retain in part as district officer.

## Obituary

### Howard J. Werne

Howard J. Werne, 19, a resident of MacGregor House who would have been a sophomore at MIT this term, was killed in an automobile accident in his home town, Evansville, Ind., Aug. 22.

Police said Werne was alone in a car that struck a utility pole on an Evansville street. He died of a skull fracture three hours later. Funeral and burial were in Evansville.

the density and heat become so great that hydrogen nuclei pulled onto the dwarf fuse, creating an explosion similar to an enormous hydrogen bomb.

The explosion cools the star, and it then takes years before enough heat builds up to set off another explosion.

Dr. Rappaport believes that in the case of the new x-ray source, the partner to the regular star may be a neutron star rather than a white dwarf. Neutron stars are so dense that the atoms in the center are crushed; the interior of the star is just one giant atomic nucleus.

In such a case, matter spiraling onto the tremendously dense neutron star would heat up enough to emit bursts of x-rays as well as

visible light.

The SAS-3 experiments are under the direction of Dr. George W. Clark, professor of physics in the Department of Physics and the Center for Space Research at MIT. Co-investigators are Professor Rappaport; Professors Hale Bradt and Walter H.G. Lewin, of the Department of Physics and the Center for Space Research; and Dr. Herbert H. Schnopper. Also working on interpreting the SAS-3 data is Professor Paul C. Joss.

The star was first sighted optically by Dartmouth College astronomers Forrest I. Boley and Richard L. Wolfson using the McGraw-Hill Observatory at Kitt Peak, Arizona.

The observatory is operated by the University of Michigan, MIT,

and Dartmouth. It was set up primarily to coordinate optical and x-ray study of x-ray sources, and particularly to take advantage of SAS-3's unique ability to locate sources of x-rays to within 10 or 20 arc seconds—five or 10 times more precisely than has been done before.

The rewards of this collaboration have been swift and impressive: the new x-ray source is only one of a series of findings made since the satellite and observatory began operation less than four months ago.

"This has worked exactly the way we dreamed it would," Professor Rappaport said.

# THE INSTITUTE CALENDAR

September 3 through September 14

## Events of Special Interest

**Blood Drive** - Sponsored by TCA. Walk-ins only, help relieve Labor Day shortage. Wed, Sept 3, 9:45am-3:30pm, Stu Ctr Rm 491. Admission: 1 pint. Note: those who gave at July 11 Emergency drive not eligible.

**Orientation '75** - Graduate Student Council invites graduate students to meet faculty, administrators, other students. Thurs, Sept 4, beginning 9:30am, Kresge. Welcomed by Dean Kenneth R. Wadleigh, Graduate School, & Dean for Student Affairs Carola Eisenberg. Information Midway with representatives of student organizations 10:30am, Sala. Picnic, Killian Court, 12:30pm; tickets \$2.25. Department open houses, 2pm. Reception 5pm, Bush Bldg Lobby, attended by President, Chancellor, Provost, other members of Academic Council.

**Alumni Officers Conference** - Fri, Sept 12, opens with reception, 5pm, Stu Ctr; dinner, 7pm, duPont Gym, with Corporation Chairman Howard W. Johnson, co-chairman of Leadership Campaign, speaker. Sat, Sept 13: Welcome by President Jerome B. Wiesner; discussion at Kresge by Vice President Constantine B. Simonides, Chancellor Paul E. Gray, Alumni Association executive vice president James A. Champy. Morning program concludes with panel including Dean Alfred H. Keil of the School of Engineering; Dean Kenneth R. Wadleigh of the Graduate School; Dean Emeritus Irwin W. Sizer of the Graduate School; Dean William L. Porter of the School of Architecture and Planning; & Dean for Student Affairs Carola B. Eisenberg. Awards Program during luncheon, Walker Memorial, presided over by Howard L. Richardson, '31, president of the Alumni Association. Program on "The Human Brain: The Relationship of Physical Structure and Behavior", Dr. Hans-Lukas Teuber, head of Department of Psychology; Dr. Ann M. Graybiel, psychology & brain science; Dr. John Robert Ross, linguistics; 2:30pm, Kresge. Conference concludes with gymnastic team exhibition, duPont Gym, & social hour, Stu Ctr. Conference Chairman, George J. Schwartz, '42.

## Community Meetings

**MIT Women's Forum\*\*** - Meetings Mon, 12n, Rm 10-105 (Tues in case of holiday). Mon, Sept 8: Vera Kistiakowsky will speak on "Women and Physics Internationally: a Perspective on the Edinburgh Conference on Physics Education." Nominations accepted for Women's Advisory Group representatives until Fri, Sept 12. Send names to Betty Campbell, Rm 24-017, x3-6067.

**MIT Club of Boston** - September Luncheon Meeting with Jonathan Kozol, author. Thurs, Sept 11, 12n, Aquarium Restaurant, 100 Atlantic Ave, Boston. Reservations: Ms. Kiirats, x3-3878.

**MIT Diet Workshop\*\*** - Thurs, 12n-1pm, Stu Ctr Rm 491.

**English Conversation Classes** - For wives of visiting faculty, wives of staff and students from foreign countries, offered by Technology Matrons. Registration Thurs, Sept 18, 10am-12n, Rm 10-240. Classes Tues & Thurs morn for 10 weeks. Fee: \$20. Babysitting provided for additional \$5.

## Social Events

**MIT Chinese Students' Club Welcome Party** - Meet new and old members, find out what CSC does. Informal discussions, Chinese refreshments. Sat, Sept 6, 7:30pm, Ashdown crafts lge. Free.

**Rock Revival\*\*** - Sponsored by Student Center Committee with Little Walter & his golden oldies. Fri, Sept 12, 9pm, Sala. Admission: \$.75/couple, MIT or Wellesley ID required. Free beer & punch, live DJ.

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

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

## Movies

**Mad Adventures of Rabbi Jacob\*\*** - LSC. Sat, Sept 6, 8 & 10pm, Kresge. Admission \$.50, free for frosh.

**Apna Desh\*** - Sangam. Indian movie with English subtitles. Sun, Sept 7, 2:30pm, Rm 10-250. Admission \$.50.

**The Cheerleaders\*\*** - LSC. Mon, Sept 8, 5:30, 8 & 10:30pm, Kresge. Admission \$.50, ID required.

**Chinatown\*\*** - LSC. Fri, Sept 12, 7 & 10pm, Kresge. ID required.

**Paisan (Rossellini)\*** - Film Society. Fri, Sept 12, 7:30 & 9:30pm, Rm 6-120. Admission \$1.

**The Sting\*\*** - LSC. Sat, Sept 13, 7 & 10pm, Kresge. ID required.

**Klute** - MidNite Movie. Sat, Sept 13, 12m, Sala. Free, MIT or Wellesley ID required, 2 persons/ID.

**It's a Mad (etc.) World\*\*** - LSC. Sun, Sept 14, 7 & 9:30pm, Rm 26-100. ID required.

## Theatre and Shows

**The Fantasticks\*** - MIT Musical Theatre Guild. Sept 5, 6, 12 & 13 at 8pm, Sept 13 also at 3pm, Kresge Little Theatre. Tickets: \$1.50, advanced sales & reservations, \$2 at door. Special free performance for freshmen ONLY Sun, Sept 7, 3pm, Kresge Little Theatre. Info: x3-6294.

**MIT Musical Theatre Guild** seeks director, music director, designers & tech people for fall show, "South Pacific." Info, x3-6294.

## Lobby 7 Events

**National Mime Theater\*** - Wed, Sept 10, 12n. Free.

## Exhibitions

**Faculty Club Art Exhibit\*** - Works by Cindy Close exhibited during Sept.

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

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

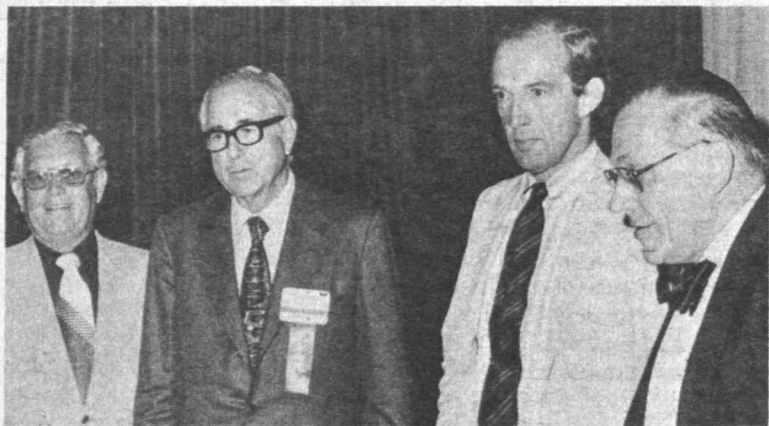
Freshmen are encouraged to attend departmental lectures and seminars. Even when these are highly technical they provide students one means to learn more about professional work in a department and field.

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

Send notices for September 10 through September 21 to the Calendar Editor, Room 5-111, Ext. 3-3279, before noon Friday, September 5.

# IFAC Congress Draws 1,400 from 35 Nations

MIT took on a cosmopolitan air last week (Aug. 24-30) as approximately 1,400 persons from 35 nations attended the sixth triennial



Attending the opening session of the sixth world congress of the International Federation of Automatic Control last week are (left to right) Cambridge Mayor Walter Sullivan; Nathan Cohen, chairman of the US Organizing Committee for the congress; Dr. Hartley Rogers, Jr., associate provost; and US Secretary of Labor John T. Dunlop. The congress attracted 1400 participants from 35 nations.

world congress of the International Federation of Automatic Control.

The congress, devoted to "Control Technology in the Service of Man," included twice-daily plenary sessions, 63 technical sessions, and a number of round table discussions.

Among those attending the opening session Monday (Aug. 25) were Cambridge Mayor Walter Sullivan; Dr. Thomas E. Crooks, director of the Harvard Summer School; Dr. Hartley Rogers, Jr., associate provost of MIT; and US Secretary of Labor John T. Dunlop, who gave the keynote address.

Dr. Dunlop commended the federation for attention to social concerns. He stressed the importance of automatic control in developing cheaper and more efficient ways

of producing and delivering goods and services.

But he warned participants against imputing their own values and assumptions about work to others. He said "most men and women find their real lives in an outside activity," not in their jobs.

Several MIT researchers spoke in the technical sessions and round table discussions. In addition, Dr. Jay W. Forrester, Germeshausen Professor of Management in the Alfred P. Sloan School of Management, outlined the case for limits to growth in a talk on "World Dynamics" in the plenary session Monday afternoon.

Chairman of the US Organizing Committee for the 1975 congress—the first held in the United States—was Nathan Cohen, a 1927 graduate of MIT in electrochemical

engineering and retired vice-president of Leeds and Northrup Co. of Philadelphia.

Among MIT persons who planned the congress were George C. Newton, Jr., professor of electrical engineering; Henry M. Paynter, professor of mechanical engineering; Wallace R. Vander Velde, professor of aeronautics and astronautics; and John E. Ward, lecturer in the Department of Electrical Engineering and Computer Science.

IFAC officials late in the week issued a resolution encouraging "greater understanding of the world as a dynamic system," so that natural resources can best be used to promote the "life, health, and well-being of all peoples of the world."

IFAC president presiding over the congress was Dr. John C. Lozier of Bell Telephone Laboratories. The new president, who will preside over the next IFAC world congress in Helsinki in 1978, is Dr. U.A. Luoto of Finland.

IFAC, founded in 1957, is a world-wide federation of 38 member organizations, each representing national scientific and engineering societies concerned with automatic control. Previous world congresses have been held in Paris, Warsaw, London, Basel and Moscow.

# Hardest Part Was Learning English, Cosmonaut Says

The hardest part of preparing for the Apollo-Soyuz flight was not reconciling two different technical systems, but learning English, Soviet cosmonaut Nikolai N. Rukavishnikov, flight engineer for the back-up Soyuz crew, told IFAC participants last week.

Speaking in English, Rukavishnikov explained that it was decided that Soviet cosmonauts should speak English, and the Americans speak Russian, on the theory that it is easier to speak a foreign language than understand it.

He brought down the house with his imitation of the first attempts of the Soviet cosmonauts to speak English, their heavy accent contrasting strangely with the idiomatic phrasing of "I read you loud and clear."

But eventually, he said, the Russians and Americans even evolved their own language, with expressions like "ochen okay" for "A-Okay."

Rukavishnikov conceded Amer-

ican astronauts learning Russian also had a difficult task.

Program Chairman was Boris N. Petrov, member of the USSR Academy of Sciences, and chairman of InterCosmos, the Soviet equivalent of the National Aero-

navics and Space Administration.

Also participating were Dr. Walter Haeussermann, associate director for science at NASA's George C. Marshall Space Flight Center in Huntsville, Ala.; Sam Carlisle, president of the Interna-

tional Measurement Confederation (IMEKO); Dr. Victor P. Legostayev, deputy technical director for the USSR of the Apollo-Soyuz program; and Captain Chester M. Lee, US program director for Apollo.

Captain Lee showed NASA films of the flight last July, including dramatic shots of docking and shots of the earth. He also mentioned some of the results of the flight's scientific experiments—including the discovery of two new sources of extreme ultraviolet radiation, measurements of helium flow in the solar system, the growth of crystals in space, and studies of the solar corona.

Both Soviets and Americans on the program agreed that the Apollo-Soyuz flight was valuable in improving cooperation between scientists and engineers of the two nations.

The technical difficulties that were overcome—particularly developing docking gear—will also improve space flight safety, they said, and could make possible more joint flights in the future.



Soviet academician Boris N. Petrov (center), chairman of the Soviet space agency, answers questions about US-Soviet space cooperation. Listening intently are (left to right) Dr. Victor P. Legostayev, Soviet deputy technical director of the Apollo-Soyuz program; Soviet cosmonaut Nikolai Rukavishnikov; and Chester M. Lee, US program director for the Apollo-Soyuz program. The four spoke in a morning panel on the Apollo-Soyuz flight last Thursday, during the IFAC world congress.







# Magnetic Technique Aids Surgery

A Massachusetts General Hospital-MIT Francis Bitter National Magnet Laboratory team has developed a new method to correct certain cases of a congenital defect which prevents babies from swallowing food.

The method, described in the latest New England Journal of Medicine, offers a new approach for some babies born with esophageal atresia, a blockage of the tube which carries food from the mouth to the stomach.

Esophageal atresia occurs about once in every 2,000 to 3,000 births. In about 80% of babies born with this malformation it can, in the first few days of life, be repaired directly by major chest surgery. However, in about 20% of such newborns the ends of the esophagus are too far apart to be joined safely.

For these unfortunate babies, the problem has been managed in recent years by a lengthy, major operation that involves constructing an artificial esophagus from a piece of large intestine, or from a section of the stomach, brought up into the chest, usually at about a year of age.

Neither of these methods, however, has proven as satisfactory as swallowing in the natural manner, through one's own esophagus. Therefore, Dr. W. Hardy Hendren, MGH Chief of Pediatric Surgery and Professor of Surgery at Harvard Medical School, developed in collaboration with J. Richard Hale a new method for treating infants with these problems not suitable for direct repair. Hale is a staff scientist at the MIT Bitter National Magnet Laboratory.

A metallic "bullet" was inserted into each end of the esophagus, the ends of which were initially several centimeters apart. The patient was then placed in an electromagnetic field arranged to draw the two metal "bullets" together, thereby stretching the

esophageal ends so that they could be safely joined at a surgical operation several weeks later.

In collaboration with colleagues Norton Pierce, Lawrence Rubin and Robert Weggel at MIT, Hale constructed the magnet device complete with a small crib which could fit into the center of a large magnet. The first relatively crude machine required the space of two hospital beds. Since then a smaller unit has been constructed.

The magnet machine was timed to go on and off intermittently, painlessly pulling the ends of the esophagus together for 60 seconds and relaxing the pull on the "bullets" for 90 seconds. Thus in a period of 24 hours this stretched the two ends of the esophagus approximately 600 times.

The esophageal ends moved steadily closer to each other during a period of weeks. Subsequent exploration through the chest revealed that the esophagus could be safely joined, resulting in normal swallowing for the babies. Before that date they had been fed artificially by a tube through the abdominal wall into the stomach.

The first infant to undergo the new procedure died eight months later from unrelated causes. A second patient, Chad Stephen, son of Mr. and Mrs. John Stephen of South Attleboro, is thriving. He is now a robust, healthy, 13-month-old baby.

Sometimes, Dr. Hendren said, babies esophageal atresia have multiple malformations, but generally speaking, an infant with a successfully repaired esophageal atresia can lead a normal life.

Success in treating this condition has more recently led to the use of this electromagnetic stretching procedure to facilitate repair of a second malformation termed imperforate anus. This condition, like esophageal atresia, occurs once in every 2,000 to 3,000 births.

In the most severe cases the rectum ends blindly several centimeters above the baby's bottom and is frequently complicated by a second problem, an abnormal communication with the urinary tract. Treatment has usually involved a temporary colostomy on the first day of life, diverting the colon (large intestine) to the abdominal wall, and then repairing the defect at six months to a year of age. Results have not always been satisfactory.

## Innovation Show

The MIT Innovation Center will hold its second annual exposition Wednesday, Sept. 10, from 2-5pm in the Marlar Lounge (37-252).

Center projects to be displayed include a new type of frame for racing bicycles, an electronic game package for home television, a new method of cleaning oil tankers and a new process for testing the purity of gold bullion.

Faculty and participating students will be on hand to answer questions. Admission will be restricted to members of the MIT Community.

## TSP Launches Credit Subjects

modern-day Western Science.

"Emergence and Growth of New Research Fields: A Social History," taught by Professor Charles Weiner, will explore the interaction of individuals, ideas, institutions and national environments in the formation and development of research fields. The focus is on developments since 1930.

"History of Nuclear Engineering: A Case Study in the Interaction between Technology and Society" taught by Professor Irving Kaplan, presents the physical basis of the large-scale applications of nuclear energy and of

Using the same electromagnetic device which successfully stretched the esophagus in two babies, the lower colon was stretched down to the bottom permitting a more simple correction of the malformation from below.

The MGH-MIT team believes this will give a more satisfactory functional result but emphasizes that a greater experience with this method will be needed before hard and fast conclusions can be reached. This work was supported in part by the MGH Pediatric Surgical Research Fund and the National Science Foundation's program of Research Applied to National Needs (RANN).

## McLellan Named In Admissions

Julia C. McLennan, who has been associated with the MIT Admissions Office for 30 years, has been appointed associate director of admissions, effective July 1.

Announcement of the appointment was made by Peter H. Richardson, director of admissions.

"The promotion of Ms. McLennan recognizes the increasingly active role she has taken in the admissions process over the past several years," Mr. Richardson said.



Ms. McLellan

"She has played an instrumental part in a variety of special recruiting programs, such as careers conferences for minorities and women. Her support in arranging programs introducing young people and their advisors to educational opportunities offered at MIT has been invaluable," he said.

In her new position, Ms. McLellan will continue as the senior administrative staff member in admissions, but she will become increasingly more involved in other aspects of the admissions process.

Ms. McLellan has been assistant director of administration of the office since 1970.

## Strobe Stolen

A strobe light and water drop machine were stolen from a popular stroboscopic display in the lobby of the Fairchild Bldg. (Bldg. 36) recently. Campus patrol placed value of the equipment at \$500. The display belonged to Dr. Harold E. Edgerton, Institute Professor Emeritus and director of the Stroboscopic Light Laboratory.

## APS Elects Shapiro

Dr. Irwin I. Shapiro, professor of geophysics and professor of physics in the Department of Earth and Planetary Sciences and the Department of Physics, is among 46 scientists recently elected Fellows of the American Physical Society.

the problems arising from these applications.

"Alternative Technologies" taught by Professor Langdon Winner, contrasts present assumptions about technology and social relations with theories of past cultures and experiments in progress.

"Growth and Structure of Urban Environments" taught by Professor Joel Yellin is designed as an upper-class seminar addressing historical and theoretical perspectives on urban structure and growth as affected by technological change.

# Softball Champions



Metallurgy emerged this season as the overall winner of the MIT Summer Softball League, beating Haley's Train, composed of players from throughout the university, in the final playoff game. The overall champion was picked from a playoff among teams that played during the summer in the League's East and West Divisions. Metallurgy tied for first with Ashdown and Chemistry in the regular season East Division. Transportation won the regular season in the West Division with an undefeated record. The Summer Softball League, with Sam Benichasa of the Draper Laboratory as commissioner, has grown from 12 teams in two divisions to 38 teams in five divisions in just three years. Members of the winning Metallurgy team (shown above) are: front L-R, Tom Tearnery, Jerry Moscovitz, Steve Hansen, Steve Warner and Bob Fontana; standing L-R, Bill Sherry, Nick DeCristoforo, Jim Carisella, Tom Pollak and Dick Salzbrenner.

—Photos by Calvin Campbell



Champion in the intermediate competition playoffs in this year's MIT Summer Softball League was Toxicology, a team drawn from the MIT Department of Nutrition and Food Science. Toxicology defeated the Cosmic McMuffins, drawn primarily from people who work in Bldg. 13. Regular season winner in the intermediate division, known as the Central Division, were the Leftovers, made up of players from throughout the university. Another team from the Department of Nutrition and Food Science, this one known as the "Food and Nuts" with Mary Montgomery as captain, won playoffs in the League's "picnic style" slow pitch competition, known as the South Division. Regular season winner in the South Division were the Smokers, all ex-Burton House residents. Toxicology included (above): front L-R, Rich Saunders, Bill Thilly, John Groopman, Mike Arnold, and Jim Flink; standing L-R, Tom Hansen, J.P. Montgomery, Bob Reynolds, Wayne Siegel, Tom Kensler, Dennis Moran and Ken Grant.



Champions in the Summer Softball League's slow-pitch North Division were the Tubers, a team made up primarily of people from the Theta Delta Chi fraternity house. They defeated the Flying Freaks, primarily civil engineering graduate students, in the final game of the playoffs. The Tubers also finished first in the division's regular season play. Tubers (above) included: front L-R, Alan Weinstein, Dave Fox, Howard Herzog, Bob Webber and Jim Fisher; standing L-R, Bob Schreiber, Peter Terwilliger, Mike Eissenstat, Dan Geer and Dave Wall.

## Seminar Offered On Simone Weil

An undergraduate seminar (21.935) on Simone Weil (1911-1943), whose philosophical writings, journals and social activities in France attracted widespread intellectual attention in the 1930s and early 1940s, will be offered in the Department of Humanities during the Fall term. George Abbott White, visiting lecturer and an authority on Miss Weil's life and work, will direct the seminar.

In conjunction with the department seminar, meanwhile, the MIT Seminar on Technology and Culture headed by the Reverend John Crocker, Jr., MIT Episcopal chaplain, will sponsor during 1975-76 four public lectures dealing with Miss Weil's work. Among lecturers will be the writer-psychiatrist Robert Coles and Miss Weil's brother, the distinguished mathematician Andre Weil of the Institute for Advanced Study at Princeton. Lecture dates will be announced later.

(Continued from page 1)

ences and several are available for Distribution credit. Subject descriptions are included under Course XXI listings in the MIT Bulletin for 1975-76.

Included among these offerings are:

"Chinese Science and Natural Philosophy" taught by Professor Nathan Sivin, will use historical and anthropological studies of medicine and other achievements of traditional China to understand