

**URBAN AIR RESEARCH**—From left to right, Xudong Huang and Michael Ames, graduate students in nuclear engineering, and Ilhan Olmez, senior radiochemist at the Nuclear Reactor Lab, adjust the controls of an apparatus they are using to collect motor vehicle emissions. The resulting data could help scientists track car emissions in urban air around the world.

Photo by Donna Coveney

#### NEW CARS NEEDED

## Team Seeks New Emissions Marker

By Elizabeth A. Thomson  
News Office

A car, a tent and a large flexible tube connecting the two by the muffler make up the visible parts of the apparatus Ilhan Olmez and Xudong Huang are using to collect motor vehicle emissions in a study to help scientists track car emissions in urban air around the world.

For years researchers determined the contribution of motor vehicle emissions to the urban atmosphere by analyzing the amount of lead in the air from leaded gasoline. But with the switch to unleaded gas, scientists lost their marker. "Right now we are not able to accurately calculate how much motor vehicles are contributing to our air," said Dr. Olmez, a senior radiochemist at the Nuclear Reactor Lab.

And that data is important to health professionals and regulatory agencies, especially in cities like Los Angeles where car emissions are major contributors to smog.

So Dr. Olmez and Mr. Huang, a graduate student in nuclear engineering, are using MIT's research reactor to

find a new marker. Specifically, the two are using a technique called neutron activation analysis to determine the composition of today's motor vehicle emissions, in particular the inorganic elements present and their concentrations. With those data they can find a marker.

A good marker, said Dr. Olmez, will be an element or combination of elements emitted in relatively high concentrations that stays around in the air for a while. He believes that the eventual marker will actually come from a car's catalytic converter rather than gasoline. "Unleaded gasoline emits organics that are not useful for tracer purposes because they change their

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#### 4 FROM MIT

## NAS Ethics Panel Expects Report in Fall

Amidst the swirl of several continuing scientific controversies and investigations, a National Academy of Sciences panel met Monday and Tuesday to develop an effective method of self-governance of science.

"We are examining steps that can be taken to reinforce the integrity of science," said Dr. Edward E. David Jr., chairman of the NAS panel and former science advisor to President Richard M. Nixon in an interview Friday with MIT Tech Talk. "We may not have the complete answers, but it is very important that the science community maintain its customary self-governance."

He said the committee, the Panel on Scientific Responsibility and the Conduct of Research, known as the ethics panel, hopes to have a final report in December.

According to a news report in The New York Times Thursday, the panel is considering a body outside of academic centers to write model standards for the investigation of suspected misconduct, to keep track of how much misconduct is reported and how it is handled. Dr. David was quoted as saying, "We must assure the people who pay for the work, such as Congress, that there is some reason to believe we are doing things right, and that we are not cheating."

Dr. David said Friday that the panel will "not necessarily recommend an outside group" and that the final report "will be the work of the entire committee." He said the panel was considering courses in ethics and scientific conduct for science students.

On the subject of investigating suspected or reported misconduct, Dr. David told the Times, "Some [universities] have had more success than oth-

ers, but their performance has not been sparkling overall. We need, therefore, to be sure the mechanisms are in place to handle cases of this kind in a fair and equitable way. First of all, mechanisms for the reporting of misconduct, to protect the whistle-blowers, as well as the privacy of people involved."

The Times said the panel was considering having universities take steps to reduce the pressure on scientists to publish papers and get grants. Dr. David said the rules for tenure might require that only a small number of a scientist's best papers would be considered, rather than the overall number of scientific papers.

The Times reported that Dr. David, commenting on "Why is all of this happening?," said: "Cause and effect is not easy to establish, but a lot of things are different today than they were 20 years ago, when I was active in science. The pressure to achieve tenure, to bring in grant money is much more profound today. Also, the number of researchers has increased."

Dr. Frank Press, president of the NAS, told The Times, "Everyone wants to do something about this without having to send inspectors into every lab to check the day's entries in the notebooks." Dr. Press is a member of the MIT Corporation.

Dr. David, the former chief of the Bell Labs, is a member of the ten-person Executive Committee of the MIT Corporation and received his SM and ScD degrees in electrical engineering from MIT in 1947 and 1950.

The NAS committee, Dr. David said, includes a broad membership ranging from "a whistle-blower and young researchers to old codgers like me."

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#### LETTER TO COLLEAGUES

## Misconduct Review Ongoing, Vest Relates

MIT President Charles M. Vest announced March 21 that MIT's procedures for dealing with allegations of academic misconduct are being reviewed. Further, he urged faculty members to develop a career guidance program for faculty members, embracing "the essence of scholarship and research, namely objective methodologies and attitudes that demand the pursuit of truth with integrity and ethical rigor."

Dr. Vest, in a letter to research and teaching colleagues, said such a program "would be broadly designed to provide career guidance and mentoring to all members of our faculty and research community."

Dr. Vest wrote: "The news regarding the draft report of the NIH committee investigating alleged scientific misconduct within an MIT laboratory once again brings into focus a painful series of events involving our colleagues, our institution, the public perception, and our relations with the federal government. I have asked a small group of faculty and administrators to look into our procedures for dealing with allegations of academic misconduct. In addition, there are efforts ongoing at the departmental

level to design specific procedures to foster academic integrity and to deal with concerns regarding appropriate academic behavior.

"These events move me to communicate briefly with you now on a topic that I had planned to discuss in more detail later in the term. My comments are intended to address a broad and long-range issue and in no way to imply any judgment on the events immediately before us.

"For generations, science has stood as a brilliant example of a field of human endeavor that requires and promotes the fullest measure of integrity. We consider it so obvious and systemic that we may inadvertently neglect to explicitly transmit this central part of our culture to the next generation. MIT must take a leadership role in promoting these values and methodologies.

"... We have a responsibility that is even more profound than the development and transmission of knowledge. That responsibility is to pass to new generations the essence of scholarship and research, namely objective methodologies and attitudes that demand the pursuit of truth with integrity and ethical rigor.

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### IN BRIEF



MIT: Shaping the Future

#### SIGN OF THE TIMES

You will be seeing this logo popping up frequently this spring: it's the signature of activities associated with the inauguration of Dr. Charles M. Vest as 15th president of MIT. The inauguration itself is scheduled for Friday, May 10, but activities in celebration of the new president will take place throughout the spring and extend into the fall.

#### NO TECH TALK

Tech Talk will not be published April 17 because of the Patriots Day holiday. The Institute Calendar next week will cover the period April 10-28. Deadline for listings in the Calendar, Institute Notices and Classified Ads will be, as usual, noon Friday, April 5.

#### REMINDER

Friday, April 5, is the deadline for applications for the Johnson Games on Saturday, May 4. Return applications to the Games Committee, Rm 3-203.

#### NEW UMBRELLA

## CECI to Succeed Athena

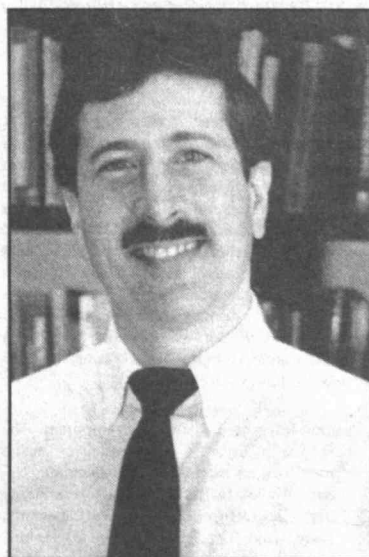
By Robert C. Di Iorio  
News Office

MIT will continue its Project Athena-inspired activities at the frontier of educational computing research under a new umbrella—the Center for Educational Computing Initiatives (CECI).

The center will pursue many initiatives launched under Project Athena and also strike out in new directions, says Professor Steven R. Lerman of the Department of Civil Engineering, who directs the new center.

Professor Lerman, appointed by Provost Mark S. Wrighton, will also chair the Academic Computing Council to be established by the provost who will announce appointments next month. The council will be a focal point for the educational computing needs of the faculty, Professor Lerman said.

Professor Lerman, who was Project Athena's first director (1983-88), has been interested in educational computing for several years. He also is director of the Intelligent Engineering Systems Laboratory in the Department of Civil Engineering.



Professor Lerman

The laboratory's interests dovetail with the goals of academic computing research: Find ways to use multimedia computer environments, communications, artificial intelligence and graphics technologies to improve quality and

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## CROWLEY NAMED

## MIT to Open Office in Washington, D.C.

MIT announced today that it will open an office in Washington, D.C.

John C. Crowley, vice president of the Association of American Universities (AAU), will join MIT as special assistant to the president of MIT and director of the MIT Washington Office. In his AAU post, Mr. Crowley has specialized in science policy, especially research and advanced education.

The announcement was made by MIT President Charles M. Vest.

"Last October, when I first addressed a meeting of the MIT faculty, I talked about the need for developing enhanced approaches toward federal relations," said Dr. Vest, who became MIT's 15th president last fall. "I developed a sense of that need after a series of discussions with faculty that began in June 1990 after I accepted the MIT presidency," Dr. Vest said.

"The possibility that Jack Crowley could be available to serve MIT at this time has made my decision to go ahead with a Washington office an easy one. His impressive experience in the nation's capital will serve MIT and the country well," President Vest said.

The goal of the MIT Washington Office, President Vest said, will be to enhance the Institute's contribution to national policy on science, engineering and education, and to make it easier for government officials to consult with MIT faculty on issues where scientific and technical advice may be needed.

"An important aspect of Mr. Crowley's mission will be reaching out to policy makers in the legislative and executive branches of the government and in the national organizations asking how MIT can help them in their work," Dr. Vest said.

"From this focus on national service will flow improved opportunities to better inform the Congress, as well as Executive Branch agencies and other policy makers, about MIT's continuing contributions to the nation and the related concerns of the university."

Mr. Crowley has received significant recognition for his public service contributions. In 1990 he was the recipient of the Mid-Career Award from the American Society for Public Administration for "exceptional achievement in Science and Government Cooperation" and for making "a significant contribution to national security." In 1988 he was elected a Fellow of the American Association for the Advancement of Science and cited for his "contributions to policy for research and higher education." He is past chairman of the Council on Research and Technology's Operations Committee and convener and steering committee chairman of the

Coalition for National Science Funding.

"The opportunity to serve President Vest and the MIT community in Washington is an honor indeed," Mr. Crowley said. "It also is an exciting challenge. My assignment for MIT builds on my experience as a member of the AAU staff, which under President [Robert M.] Rosenzweig's leadership, strives to serve its members and others in a spirit of public interest. President Vest's invitation to serve MIT in that same spirit of national service is a unique opportunity."

Mr. Crowley added: "I must express my deep gratitude to the AAU, to Dr. Charles V. Kidd, who in 1972 hired me as his assistant, and most especially to Bob Rosenzweig, my friend and mentor. I leave the Association staff but happily not my old friends and colleagues. In many ways, I'm only changing chairs at the table."

The MIT Washington office will be a resource to reinforce the relations between the university and the federal government.

Dr. Vest has frequently spoken about the importance to the nation of the American research university, pointing out that it has been the partnership with the federal government that has enabled this uniquely American system to develop and flourish.

But in a speech last February to the councils of the National Academy of Sciences, the National Academy of Engineering and the National Science Board, Dr. Vest warned: "Today, however, there are breakdowns, or at least strains, in the system, and many of these strains are manifestations of tensions between the federal government and the research universities."

Mr. Crowley, 49, a native of Phelps, N.Y., joined the AAU in 1972 as assistant executive secretary. He became associate executive secretary in 1974 and director of federal relations for science research in 1977. He has been AAU vice president since 1986. The AAU currently consists of 56 American universities, including MIT, and two Canadian universities. All have strong programs of graduate and professional education and research.

Mr. Crowley holds the BS from St. John Fisher College, Rochester, N.Y., and the PhD and the MPA in public administration from the Maxwell School at Syracuse University.

Mr. Crowley will begin a full-time association with MIT in August. Starting immediately, he will devote one day a week to MIT activities as he concludes his relationship with the AAU.

Mr. Crowley will continue to make his home in Bethesda, Md., with his wife, Ellen. They have two children, Kathleen and Michael.

## Inaugural Essays Invited

Members of the community are invited to submit proposals for essays they would like to write on "MIT: Shaping the Future," commemorating the inauguration of Dr. Charles M. Vest as MIT's 15th president.

"The essays do not have to deal specifically with MIT, but should embody aspects of the general theme of visions for MIT and the world in the 21st century," according to the letter inviting proposals. "The essays are expected to be broad and wide-ranging, representing various fields and disciplines," the letter continues.

Proposals should be in the form of a topic title and brief outline and should be submitted to Professor Kenneth Manning, director of the Writing Program, Rm 14E-303, by Thursday, April 25.

The essays themselves—1,000-

5,000 words—will be due at the end of June so that they may be edited over the summer. The publications subcommittee of the Inauguration Committee hopes that the resulting volume may be published by an academic press.

Besides Professor Manning, members of the subcommittee are Kathryn W. Lombardi, executive assistant to the president; and Kenneth D. Campbell and Naomi F. Chase, director and assistant director of the News Office, respectively.



MIT: Shaping the Future



**SAIL ON**—A Jolly Roger adorned Calder's *Great Sail* in McDermott Court in honor of April Fool's Day Monday when, appropriately, *Crazy After Calculus*, the Museum's exhibit of classic MIT hacks, opened in Compton Gallery.

Photo by Donna Coveney

## INAUGURAL EVENT

## Panel to Discuss Technology Race

The presidents of MIT, Rensselaer Polytechnic Institute and the National Academy of Engineering will join an MIT president emeritus and other MIT and Harvard colleagues April 9 to explore the question: "The Technology Race: Can the US Win?"

The event, starting at 3pm in Kresge Little Theater, is the first J. Herbert Hollomon Memorial Symposium. The symposium, presented by the Technology and Culture Seminar, will be the first of several "inaugural year" events at MIT where Dr. Charles M. Vest's installation as MIT's 15th president will occur May 10.

President Vest, who took office last October, will deliver opening remarks and introduce the panel members. They are:

—Harvey Brooks of Harvard, the Benjamin Peirce Professor of Technology and Public Policy and professor of applied physics, emeritus.

—Roland Schmitt, president, Rensselaer Polytechnic Institute (RPI).

—Jerome B. Wiesner of MIT, Institute Professor emeritus and president emeritus.

—Robert White, president, National Academy of Engineering.

The moderator will be Daniel Roos, Japan Steel Industry Professor of Engineering and the director of the MIT Center for Technology, Policy and Industrial Development.

Among the issues the speakers will address are: How does a technology policy differ from a science policy and should the US have one? What are the appropriate private and public roles in technology research and development? Are we competitive with Germany and Japan in funding civilian technology?

All of the panelists were close to the late Professor Hollomon, who died in 1985 at the age of 66.

Professor Hollomon was widely known for his world role in technology and policy questions. He held leadership positions in academe, industry and the federal government during a career in which he was president of the University of Oklahoma (1968-70), assistant secretary of commerce for science and technology (1962-67), head of GE's General Engineering Laboratory (1960-67), and adjunct professor (1950-62) at RPI.

In the years from 1962-67 he was responsible for the reorganization and restructuring of the US patent system and stimulated US participation in the revision of international patent agreements. He was also responsible for

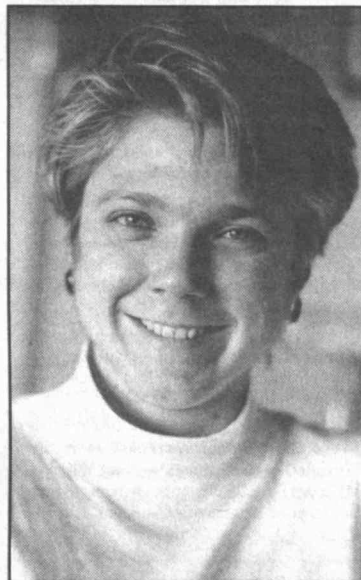
establishing the Institute of Applied Technology, the forerunner of the National Oceanographic and Atmospheric Administration.

In 1970 he returned to MIT where he had received the SB in physics (1940) and the ScD in metallurgy (1946). In 1972 he founded the Center for Policy

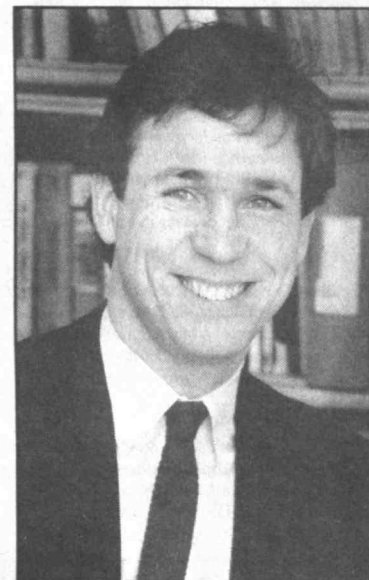
Alternatives which identified major socio-technical issues and the policies and practices surrounding them. In 1985 the center became part of the Center for Technology, Policy and Industrial Development.

A reception will follow the symposium.

Robert C. Di Iorio



Professor Cima



Professor Kytomaa

## MARINE RESEARCH

## Two Win Doherty Chairs

Professors Linda Cima of chemical engineering and Harri K. Kytomaa of mechanical engineering have been awarded the 1991 Doherty Professorships in Ocean Utilization from the MIT Sea Grant College Program.

Every year one or two new faculty members are appointed to the Chair and receive \$25,000 each in annual support.

Dr. Cima, who also holds an appointment with the Harvard-MIT Division of Health Sciences and Technology, will use the fellowship to study the application of algininate, a product of marine algae, to the medical problem of tissue regeneration. This research has potential benefits in the controlled release of drugs and production of antibodies, as well as in organ transplantation.

Dr. Kytomaa will apply the fellowship to research complex sediment transport processes in the ocean. Sedi-

ment transport affects beach erosion, siltation of harbor basins, the distribution of both pollutants and biological nutrients, and many other coastal processes.

The professorships, endowed by the Henry L. and Grace Doherty Charitable Foundation, open the way for promising, nontenured professors to undertake marine-related research that will further innovative uses of the ocean's resources. There are no restrictions on the area of research or on how the funds are used, and any aspect of marine use and/or management may be addressed, whether social, political, environmental, economic or technological.

Henrik Schmidt, associate professor of ocean engineering, was named Doherty Professor in 1990; he will hold the chair for a second year to advance his research on acoustic data collection by autonomous underwater vehicles.









**April at MIT**

**3 Weds**

**Best Band Finale**  
Final round of competition in the Student Center Committee Annual Battle of the Bands. 9-1am, Lobdell Dining Hall, Stratton Student Center. 253-3916

**4 Thurs**

**Guitar in Chapel**  
Stephen Aron, guitar. 12noon, MIT Chapel.

**Public Artist Speaks**  
Krzysztof Wodiczko, public projection artist/visiting artist, MIT Visual Arts Program, April 2-22. 7:30pm, Rm 9-150. 253-7791

**Last Chance at Museum**  
*Works by Robert Preusser.* Overview of paintings done since the 1930s by former MIT Professor of Visual Design, Department of Architecture. MIT Museum, 265 Mass Ave, Tues-Fri 9-5, Sat-Sun 1-5. 253-4444

**5 Fri**

**Advanced Performance Violin**  
Amy Huey-Zu Lin '92, violin. Mendelssohn's Concerto in E Minor and Stravinsky's *Suite Italienne*. 12noon, Killian Hall (14W-111).

**BSU Film**  
*Zoot Suit.* Black Student Union Film Series. Depiction of the actual 1942 L.A. trial of a group of Chicanos for the murder of an opposing gang member. 7-9pm, Black Student Union Lounge (Rm 50-105). 253-4861

**Hines at MIT**  
Abramowitz Memorial Lecture presented by dancer/actor Gregory Hines, below. The Abramowitz Lecture Series was established by William L. Abramowitz '35 as a memorial to his father, with the purpose of bringing celebrated artists to the MIT campus without charge. 8pm, Kresge Auditorium. 253-2877



**6 Sat**

**Last Stop, Tibet**  
Closing day for *Where the Earth Meets the Sky: Photographs of Life on the Tibetan Plateau*, color photographs by graduate student Eric Fuchs. Wiesner Student Art Gallery. 253-3913

**7 Sun**

**Pianist Perrone**  
MIT Affiliated Artist Concert: Eleanor Perrone, piano, below. Bach's English Suite in A Minor, BWV 807; Beethoven's Sonata Op. 31, No. 2; Stravinsky's Sonata (1924); Schubert's *Wanderer Fantasie*, Op. 15. 3pm, Killian Hall.



**8 Mon**

**Urban Design Video**  
*Man With a Movie Camera*, 1928, directed by Dziga Vertovs. 6:30pm, Rm 10-485. 253-7305

**10 Weds**

**Visual Poetry**  
"Retinal Poetry: Experiments in Visual Language Seen through the Scanning Laser Ophthalmoscope," a project using medical technology to create art and poetry, by CAVS Exhibits and Projects Director Elizabeth Goldring and Robert Webb of the Eye Research Institute and inventor of the SLO. 5:15 & 8pm, CAVS (W11). Seating limited; call to reserve. 253-4415

**11 Thurs**

**Ragtime to Be-Bop**  
Prosperity of Jazz with Gary Spellissey, Dave Whitney, Bill Novick, Chris Rathburn, Gray Sargent. 12noon, MIT Chapel.

**Architecture Lecture**  
Michael Dennis, architect, Cornell University. 7:30pm, Rm 9-150. 253-7791

**Master of Science**  
An irreverent comical look at science and scientists. Includes "An Act of War" and a live demonstration of her new Snackmaster theory by Betsy Salkind '86, below, feminist comedienne and instructor of an improvisational comedy workshop at MIT. 8pm, Rm 35-225. 253-2877



**12 Fri**

**Lunchtime Piano**  
Advanced Music Performance graduate student Jee-Hoon Yap, piano. Brahms, *Variations on a Theme by Paganini* Bk. I & II; Mozart, C minor Fantasia and Sonata; Harbison, Sonata. 12noon, Killian Hall.

**12-13 Fri/Sat**

**Song and Dance**  
Original dances and songs by MIT Artists-in-Residence. Beth Soll & Company, below, perform the premiere of *Sanddance*, a work based on Aboriginal songlines. Beth Soll, choreographer; Richard Cornell, composer. Beth Soll & Company also perform the Boston premiere of Soll's *Outset*, a satirical love duet set in an abstract gas station with music by Muddy Waters, Blind Lemon Jefferson and Art Tatum. Karol Bennett and John McDonald perform works by members of the MIT composition faculty, including two song cycles: *Simple Daylight* by MIT Professor John Harbison, and *The Great Panjaram* by MIT Associate Professor Peter Child. Also, *Fractal-Head*, a work for piano by Prof. Evan Ziporyn. 8pm, Kresge Auditorium. \$12, \$5 seniors/MIT students. 253-2877



**12-14 Fri/Sun**

**The Mikado Opens**  
"The Town of Titipu" presented by the MIT Gilbert & Sullivan Society. Fri/Sun-8pm, Sat-2pm, Rm 54-100. \$9, \$7 seniors/students/MIT community, \$6 MIT students. 492-6983

**14 Sun**

**List Closings**  
*Juan Francisco Elso Padilla.* First US showing of works blending secularism, mysticism, magic and ethics by a Cuban sculptor who died of leukemia at age 32. Draws on both Afro-Cuban and Indian traditions.

*Robert Arneson: The Jackson Pollock Series.* Dramatic large portrait busts and heads of Pollock; ceramic recreations of Pollock's final car crash; and a full-scale sculptural interpretation of one of Pollock's major paintings.

*Barbara Broughel: Storytelling Chairs.* Ensemble of eight richly doctored and decorated early American chairs reflecting on the extent to which colonial American culture was indebted to Iroquois example and precedent. Weekdays 12-6, Weekends 1-5. 253-4680

**15 Mon**

**Koyaanisquatsi**  
Environmental Design Group Urban Video. 6:30pm, Bartos Theater, Wiesner Bldg (E15). 253-7305

**Child World Premiere**  
Charles River Concert features world premiere of Sonatina, composed and performed by Peter Child, MIT Music and Theater Arts associate professor. Also, J.S. Bach's Chromatic Fantasia and Fugue; Chopin's Four Mazurkas, Opus 41 and Fantasia in F Minor; Brody's *Apparitions* (1981); Robert Schumann's *Carnival*. \$10, \$8. 8pm, Boston University's Tsai Performance Center, 685 Commonwealth Ave. 262-0650

**16 Tues**

**Minority Theater**  
*Los Perez*, an original play by Guillermo A. Preciado '92 presented by Theater Workshop for Minority Students. 8pm, Kresge Auditorium. 253-2877

**17 Weds**

**Arts Grant Deadline**  
Final round of applications for 1990-91 for funding of arts activities and projects by the Council for the Arts at MIT. Forms are available at the Office of the Arts, E15-205. 253-4003



**18 Thurs**

**Haydn and Mozart**  
Anne Hooper, violin; James Johnston, viola; Sandi-Jo Malmon, cello. Haydn Trio in G; Mozart Divertimento in Eb, K.V. 563. 12noon, MIT Chapel.

**Architectural History Lecture**  
Akos Moravanszky, historian, Hungary. 7:30pm, Rm 9-150. 253-7791

**Two Poets Read**  
Rosanne Wasserman and Pierre Martory. Both recently had their first books of poetry published by Groundwater Press, which Ms. Wasserman edits. She currently teaches in the New York City area. Martory lives in Paris where for many years he was arts editor for Paris Match. He has published several novels. 8pm, Bartos Theater, Wiesner Bldg. 253-9469

**19 Fri**

**Baritone in Killian**  
Advanced Music Performance graduate student Kenneth Goodson, baritone, below. Selections from Fauré's *La Bonne Chanson*; Ravel's *Histoires Naturelles*; Wolf's Selections from *Italianisches Liederbuch*. 12noon, Killian Hall.



**Who Killed Vincent Chen?**  
Black Student Union Film. A look at the American trial process after a Chinese American is murdered. 7-9pm, Black Student Union Lounge (Rm 50-105). 253-4861

**19 Fri**

**"Cypher" Concert**  
New music and improvisations for human performers and an interactive computer music system. Program includes two pieces composed by Robert Rowe, MIT Media Lab PhD candidate, using "Cypher," an interactive program written by the composer which responds musically to human performances: *Banff Sketches*, a duet for pianist and computer; and *Rant*, a world-premiere for ensemble, soprano (Jane Manning from Britain), and computer, based on a text by Dianne di Prima, conducted by Tod Machover. Composer Greg Tucker, MIT Media Lab research engineer, premieres a new work for two MIDI keyboards, played by John MacDonald and Kathleen Supové, both MIT Artists-in-Residence. Also, jazz saxophone player Steve Coleman improvises with "Cypher." 8pm, Experimental Media Facility, (The Cube). \$8, \$4 students. 253-0649

**Paksmit Cultural Evening**  
Pakistani Students' Association at MIT show featuring a play, skits, folk singing and dancing. 8:30pm, Kresge Auditorium. Tickets TBA. 253-0003

**19-21 Fri/Sun**

**Merrily We Roll Along**  
Musical Theater Guild production of the Stephen Sondheim musical. \$8, \$7 seniors/MIT community, \$6 students; \$5 MIT/Wellesley students. 8pm, Sala de Puerto Rico, Student Center. 253-6294



**20-21 Sat/Sun**

**More Mikado**  
See 12-14. Sat-2pm, Sat/Sun-8pm.



**21 Sun**

**Emerson Quartet**  
MIT Faculty Series. Emerson Quartet with MIT Professor Marcus Thompson, viola. Mozart, Quintets (Continued on following page)

**21 Sun**

for Strings, K. 515, 516, and Adagio and Fugue K. 546. 4pm, Kresge Auditorium. Marcus Thompson, viola, below.



**22 Mon**

**Urban Design Video**  
*Miracle Mile*, 1988, by Steve deJarnatt. 6:30pm, Rm 10-485. 253-7305

**Performance Masterclass**  
Final session conducted by Prof. David Epstein, below, for performers on all instruments. 7pm, Killian Hall.



**Japanese Film**  
*Tora-san Goes North*. MIT Japan Program/Japanese Language Program at MIT presents the 38th in the world's longest continuous feature film series. In this film, Tora-san, a lovable, boorish, itinerant peddler, always unlucky in love, travels to Japan's northernmost island of Hokkaido, below, where he encounters a veterinarian, Junkichi (Toshiro Mifune), and becomes involved in his life. 7:30pm, Rm 10-250. \$2 donation. 253-2839



**24 Weds**

**Writer Reads**  
Boston-resident William Corbett, author of several books of poetry, most recently *On Blue Note*. 8pm, Rm 14E-304. 253-9469

**24-25 Weds/Thurs**

**Buy A Pot**  
Student Art Association ceramics sale. 9-5pm, Lobby 10. 253-7019

**25 Thurs**

**Cello in Chapel**  
Michal Schmidt, cello. 12noon, MIT Chapel.

**Poetry at the Media Lab**  
Stanley Kunitz. Born in 1905, Kunitz has published poetry, translations and essays since 1928, and has taught at universities including Yale, Brandeis, and Clark. His prizes and honors include the 1959 Pulitzer Prize for Poetry, the Consultantship in Poetry to the Library of Congress in 1974 and 1975, election to the 50-member American Academy of Arts and Letters in 1975, and Chancellorship of the Academy of American Poets. 7:30pm, Bartos Theater, Wiesner Bldg. 253-0312

**25-27 Thurs/Sat**

**More Merrily We Roll Along**  
See 19-21 Fri/Sun above.

**26 Fri**

**Two for Lunch**  
Two Advanced Music Performance Solo Recitals: Eran Egozy '93, clarinet. Bernstein's Sonata for Clarinet and Piano; Poulenc's Sonata for Clarinet and Bassoon; Tomasi's Concerto. And, graduate student Michael Valdez, jazz piano. Works of Gershwin, Monk, Parker and others with Steven Conahan '93, acoustic bass and Keith M. Swartz. 12noon, Killian Hall.

**Poster Show Opening Reception**  
*Affissi! Affiches! Plakate! Posters! Swiss Poster Art 1906-1990.* Exhibit includes 90 posters, below, for consumer products, tourism, art exhibitions, and public service by Swiss designers, reflecting the three dominant cultures of Switzerland (Swiss-German, Italian, French), and representing many of the European art movements since 1900. Swiss refreshments. 5-7pm, MIT Museum. 253-4444



**Watercolors at Museum**  
Lanscapes, primarily of Mexico and Maine by Freddy Homburger, physician, scientist, diplomat, artist. MIT Museum. 253-4444

**Aardvark**  
MIT Faculty Concert. The Aardvark Jazz Orchestra, directed by trumpeter Mark Harvey, who also teaches at MIT. 8pm, Kresge Auditorium.

**26-28 Fri/Sun**

**Scene Night**  
MIT Shakespeare Ensemble presentation of student-directed scenes from plays by Shakespeare and others. 8pm, Killian Hall. 253-2903

**Original Melodrama**  
*The Helpless Heroine*, student workshop production of an original student-written melodrama, presented by Artistic License. 5:30pm, Kresge Side Lawn. 253-2877

**27 Sat**

**Poster Symposium**  
Swiss Poster Art: Origins and Designs: "A Contextual View of Graphic Design and the Poster". See below. Prof. Roger Remington, Director, Graphic Design Archives, Rochester Institute of Technology and "Six Posters I Wish I Had Designed and Why"- Chris Pullman, Vice President of Design, WGBH-Boston. 2pm, MIT Museum. 253-4444



**Band Concert**  
MIT Concert Band. John Corley, director, below. The MIT Concert Band has been known since 1953 for its performance and commissioning of modern works. 8pm, Kresge Auditorium.



**28 Sun**

**Special Children's Concert**  
Technology Children's Center (TCC) 25th Birthday Concert. Rick Charette and the Bubble Gum Band. Profits to the Technology Children's Center Scholarship Fund. 2:30pm, Kresge Auditorium. \$6. 253-5907

**MIT Women's Chorale**  
Nancy Wanger, director. Program includes *Laetatus Sum* by Niccola Porpora, and selections by Mozart, Handel, Copland, Irving Fine, and Randall Thompson. 3pm, Hilles Library, Radcliffe College, Shepard and Garden Streets. 661-3385

**Bassoon Recital**  
Senior recital by Erika Anderson '91, bassoon, above. Bach's Sonata for viola da gamba No. 2 in D Major; Beethoven's Sonata for Cello and Piano, No. 1 in F Major; Francaix's *Divertissement* for Bassoon and Strings; Villa-Lobos' *Bachianas Brasileiras* No. 6. 8pm, Killian Hall.



**Columbia University Orchestra**  
George Rothman, conductor. Performing at MIT as part of an exchange program with the MIT Symphony Orchestra. Shostakovich's Festival Overture; Sibelius' Violin Concerto with Victor Schultz, winner, Carnegie Hall International Music Competition; Hindemith's *Mathis der Maler*. 8pm, Kresge Auditorium.

**29 Mon**

**Tokyo-Ga**  
Environmental Design Group Urban Video by director Wim Wenders (1985). 6:30pm, Bartos Theater, Wiesner Bldg. 253-7305

**Wind Masterclass**  
Virtuoso flutist Robert Stallman, below, former student of Jean-Pierre Rampal, conducts a masterclass for flute, clarinet, bassoon. 7-9pm, Killian Hall.



**All Month**

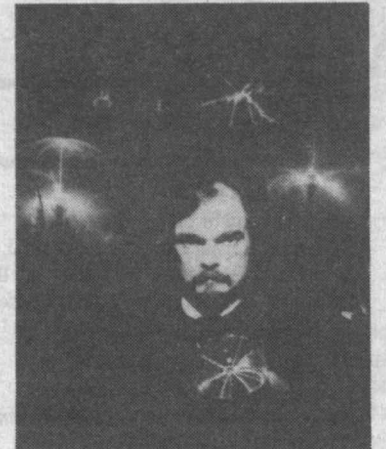
**Compton Gallery Hack Show**  
*Crazy After Calculus: Humor at MIT* Photographs, cartoons, and a collection of artifacts documenting a rich history of MIT wit and wizardry shown through "hacks" - elaborate practical jokes involving humor and/or engineering technique. See below. Weekdays 9-5. Off Lobby 10. 253-4444



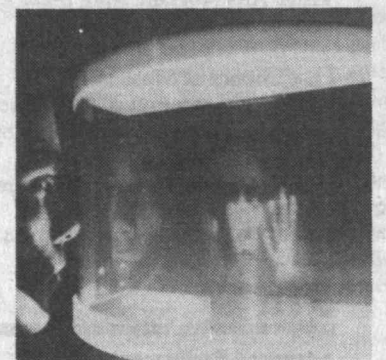
**MIT Museum**

**Ongoing Exhibits**  
*Doc Edgerton: Stopping Time.* Photographs, instruments, and memorabilia documenting the late Harold Edgerton's invention and use of the strobe light.

*Light Sculptures by Bill Parker.* Vivid interactive light sculptures, each with its own personality and set of moods. See photo below.



*Holography: Types and Applications.* Scientific, medical, technical and artistic imaging drawn from the work of the Spatial Imaging Group at MIT's Media Lab, below.



*Math in 3D: Geometric Sculptures* by Morton G. Bradley, Jr. Colorful revolving sculptures based on mathematical formulae.

**MIT Museum Hours**  
Tues-Fri 9-5, Weekends 12-4. Closed holidays. 265 Massachusetts Avenue Cambridge, MA

All events are free unless prices are noted. All concerts: 253-9800 unless otherwise noted. MIT Arts Hotline: 253-ARTS. Month-at-a-Glance is produced by the MIT Office of the Arts (253-4003) and ARTSNET. Celia Metcalf, design.