Lawrence Institute of technology Magazine Summer 1980

AWAY WE GROW! Management Building construction begins

STREET STREET STREET

Synfuels: power for the 21st Century

Engineering: threshold of a new golden age

Plus twins, travelers, teachers, alumni features

And more!



Lawrence INSTITUTE OF TECHNOLOGY Magazine

Summer 1980 Vol. 3, No. 4

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About the cover: Several thousand students, faculty, staff, alumni, and friends witnessed groundbreaking ceremonies April 18 for LIT's new Business and Industrial Management Building. See the story beginning on page 2.

By-lined articles express the views of the authors and not necessarily either the opinions or policies of the College. Persons wishing to comment or submit manuscripts for consideration are encouraged to contact the Editor.

Editor/Designer: Bruce J. Annett, Jr., director of public and alumni relations

Associate Editor: Anne M. Cattermole, associate director of public and alumni relations

Production Assistant; Deborah A. Faes, secretary, public and alumni relations

College Photographer: Walter G. Bizon, BAr'77; additional photos by Bruce Annett, Anne Cattermole, Peter Ziegenfelder, and others.

Notice of non-discriminatory policy as to students

Lawrence Institute of Technology admits students of any race, color, handicap, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded to or made available to students at the College. LIT does not discriminate on the basis of race, sex, color, handicap or national or ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs and athletic and other Collegeadministered programs.

The statement above is included in this publication to conform to Federal guidelines: it represents no change in the policy of LIT.





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34 Alumni Notes Advancements, moves and other news from LIT graduates.

Commentary

"Commentary" encourages letters from alumni, students, parents, and other friends of the College. Occasionally, and with the writer's permission, we will publish letters on subjects of general interest directed to other campus constituencies. When necessary, lengthy letters will be edited to fit available space.



Don Ridler makes a point with then-Governor G. Mennen Williams during a campus visit in this early 1950's photo.

Ridler support continues

Dear Editor:

I want to thank you and all the people at Lawrence Tech for the excellent support of Don Ridler to the Michigan Sports Hall of Fame.

We gave Don's nomination all we could, but failed to elect him this year.

We are urged to try again next year and will have several months to plan and campaign. With the people elected to the Hall of Fame this year, Don's credentials loom a lot brighter.

Your coverage in the *LIT Magazine* was excellent!

Walt Bazylewicz, BA'49 Director Catholic High School League Archdiocese of Detroit

Editor's note: Walt also told us that more than 200 letters were generated in support of Don's nomination (See the LIT Magazine Fall/Winter 1979/80). If you've not already written, or if you want to reemphasize your support of Don Ridler's consideration for posthumous membership, write The State of Michigan Sports Hall of Fame, 1010 Joanne Court, Bloomfield Hills, MI 48013.

The 1980 inductees were Alex Karras, Chuck Davey, Joe Joseph, and the late George Wilson. Letters of support should be sent no later than mid-January, 1981.

A case (almost) closed

Thanks to our readers, many of the "lost" alumni listed in the (Fall/Winter 1979/80) *LIT Magazine* are now again receiving the *Magazine* and other LIT news because



Prof. Maslowski was "ecstatic" about his prize. You too can be a winner!

we've been furnished with their current address.

Richard Maslowski, professor and chairman of electrical engineering, provided eleven new addresses for alumni, so he's the recipient of our "Ace Detective" award an official LIT tee-shirt!

Can you top him? Please review the list again, and if you know an alumnus' current whereabouts, let the Alumni Office know. Find eleven or more, and we'll send you a tee-shirt too! We sincerely appreciate your help!

Bruce Annett LIT Director of Public and Alumni Relations

Annett photo



August 21, 26 Registration, Associate Programs fall term. Classes begin August 28.

August 27, 29 Registration, Evening Baccalaureate College fall term. Classes begin September 3.

September 4, 5 Registration, Day Baccalaureate College fall term. Classes begin September 8.

April 11, 12 Annual all-College Open House.





The hole story. Remember that pretty lawn on the cover of this Magazine? By mid-July, the center of campus looked like this. There's plenty of room for "sidewalk superintendents" to view the progress of LIT's new Management Building. Stop by and watch.

Away we grow!

Construction begins on LIT's Management Building

If perfect weather can be considered a good omen, then the groundbreaking ceremonies for LIT's new Management Building heralded something extraordinary indeed. Bright sunny skies and 70 degree temperatures reigned during ceremonies on April 18, following a week of snow, rain, and general gloom.

A crowd of several thousand students, faculty, staff, alumni, and friends witnessed the 11 a.m. festivities. Spirited music provided by the Southfield-Lathrup High School Band added to the crowd's enthusiasm. After a benediction by Dr. Roger W. Ireson, lecturer in arts and science and minister of St. Timothy's United Methodist Church, the crowd enjoyed a brief welcome and introductions by LIT Chairman of the Board Wayne Buell. Next came remarks presented by Dr. Richard Marburger, LIT president, Mark Pellegrino, student government president, Louis Redstone, architect, Lillian Jaffe-Oaks, Southfield City Council president pro-tem, and Lewis C. Veraldi, ME'68, vice president of Ford

Part of the group of alumni, students, staff, and friends who attended the Management Building groundbreaking.



Several thousand students, faculty, and spectators were on hand April 18 as Lawrence Institute of Technology broke ground for its new Management Building. The new 100,000 sq. ft. structure is the first building to be built as part of the College's \$12.5 million Capital Campaign which is currently almost halfway to its goal. Pictured left to right are Mark Pellegrino, 1979-80 student government president; Lewis C. Veraldi, campaign chairman and vice president of Ford Motor Co.; Lillian Jaffe-Oaks, Southfield City Council president pro tem; Dr. Louis Petro, dean of management; G. Robert Harrington, vice president for development; Dr. Richard E. Marburger, president; and Dr. Wayne H. Buell, chairman of the board.

Motor Company and general chairman of the LIT Capital Campaign.

"It was just twenty-five years ago that then-President E. George Lawrence moved the College to this campus from Highland Park," said Mark Pellegrino. "With this new building we'll be meeting the College's academic needs for the foreseeable future, and fulfilling the dreams of those LIT pioneers who sought to make LIT a leader in technological education.

"These are exciting days for our College and it's an exciting time to be a student here."

After noting that the Campaign was almost halfway to its goal and recog-

nizing pacesetting gifts to date, Mr. Veraldi emphasized that "we still have a big job ahead. This second half of the Campaign will be more difficult than the first." He added that, "The state of the economy, especially, will require redoubled efforts from all of us to continue the momentum of success that has thus far distinguished this Capital Campaign.

"As this milestone in our progress marks the beginning of brighter days ahead for LIT's academic mission, may it also serve as an incentive to continue and expand the "Sharing in Excellence" which will signify the final success of our efforts.

"We have a Campus Affairs and

Activities Center and important alterations of existing buildings yet to come." He concluded, "Let us rejoice in our accomplishments, and prepare for even better things to come!"

With that, the speakers plus Vice President for Development G. Robert Harrington and Dean of Management Louis W. Petro turned the first shovels full of earth. Students released hundreds of blue and white helium balloons to signal the event to the surrounding countryside.

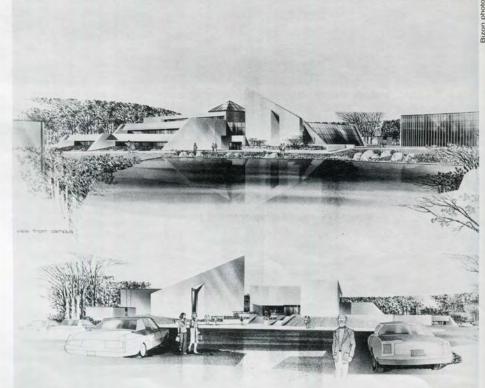
Photos, related story, next page

Bizon photo



Running for Excellence. (above) Over 200 runners from throughout Southeastern Michigan competed in the first LIT "Run for Excellence," held on Saturday, April 19, Open House weekend. The 10-kilometer run was sponsored by LIT students with proceeds going to the Sharing in Excellence Campaign. The popularity of the event has prompted student leadership to plan on making it an annual affair. In addition, the students staged an auction on the same day, selling new and used items solicited from individuals and area businesses.

(Right) Here's the latest architect's rendering of LIT's new Management Building. The building will be partially earth sheltered for energy conservation, and will house the campus library, dining room, and several service offices as well as the Management School. Architects are Louis G. Redstone Associates. General contractors are the Barton-Malow Co. Consulting engineers are Hoad Engineers, Inc.







Above, management student Lisa Krusiewicz stands ready to release balloons signalling LIT's groundbreaking to the surrounding countryside. Ceremonial shovels, left, were readied prior to "digging in."

Major gifts set pace

"Sharing in Excellence," the College's \$12.5 million Capital Campaign, had received more than \$5.8 million in cash or commitments when this Magazine went to press late in June. Lawrence Institute of Technology continues to receive strong support from the corporate and philanthropic sectors.

The following pacesetting gifts have been received since the December 7 kickoff as of June 20, 1980:

Rockwell International	
Corporation	\$100,000
Eaton Corporation	75,000
Michigan Bell Telephone	70,000
LaSalle Machine Tool	
Company	50,000
TRW, Inc.	50,000
American Natural Resources	30,000
Air Products & Chemicals, Ind	. 25,000
American Motors Corporation	25,000
Consumers Power Company	25,000
Detroit Bank Corporation	25,000
Lear Siegler, Inc.	25,000
Allied Chemical Corporation	20,000
Manufacturers National Bank	20,000
R. C. Mahon Foundation	15,000
Gannett Newspapers	
Foundation	10,000
Kmart Corporation	10,000
Alex Manoogian	10,000

"These corporations, foundations, and individuals have had a profoundly positive effect on our Campaign," LIT President, Dr. Richard E. Marburger said. "We extend to them our heartfelt appreciation and thanks."

Synfuels: Power for the 21st Century?

Our nation's energy security, price stability, and economic growth require development of alternate fuels, says Air Product's Ed Donley, ME'43



Today, we are involved in an energy crisis that President Carter has termed "the moral equivalent of war." Many American companies, including Air Products, are willing to enlist in this war, if we as a nation are prepared to make the political decisions necessary to win it.

Most people now recognize that our energy problem is serious. Oil is a major concern. There simply is a limited amount of it left on this planet. OPEC, the world's major supplier, has reserves that are expected to last about 30 years, at present consumption levels. Given this condition, it was inevitable that the exporting countries would raise prices and try to control production. Domestic oil production, which supplies about one-half of our needs, peaked in the early part of this decade and offers little hope of long-term relief from dependence on imports. Even with enhanced recovery techniques, new discoveries, and a dedicated effort by the oil industry, production of oil in the United States is expected to decline steadily over the remainder of this century.

Clean fuel that can be used by utility companies without special pollution-control equipment is produced at this pilot plant in Alabama, built and operated by a division of Air Products. Chemical processing turns ground coal (right) into chunks of shiny, solvent-refined coal. Further processing can convert it into other fuels and gasoline refinery feedstock. The U. S. Department of Energy is working with Air Products and Wheelabrator-Frye on construction of a demonstration plant near Newman, KY, that will produce the energy equivalent of 20,000 barrels of oil a day from 6,000 tons of coal. To complicate this already precarious situation, new dangers have arisen. First, a revolution in Iran rocked the world oil order. Then came the Soviet Union's invasion of Afghanistan. This gave rise to new fears that the entire social and political structure of the Middle East could crumble. That hasn't happened yet, but no one dismisses the possibility.

The problem hasn't been ignored. Numerous studies have been conducted in search of a solution, and the results of these studies have been subjected to seemingly endless debate. We believe that the right solution for our nation is:

1) conservation

 deregulation (to increase domestic energy production and distribution efficiency), and

3) vigorous development of synthetic fuel technologies.

Conservation already is having an effect. Last year gasoline consumption declined five percent, and automobile mileage continues to be improved by Detroit.

Industry has worked hard at conservation for some time, with noteworthy results. Since the OPEC embargo of 1973, industrial energy consumption has declined six percent, while output has increased 12 percent. In the chemical industry, of which Air Products is a part, energy consumption per unit of output has been reduced more than 20 percent over the past seven years.

The American people also have developed a new energy consciousness. We are turning down our thermostats. We are insulating our homes. And we are driving less. But conservation alone —vital though it is—cannot do the job.

Deregulation will help, and will be much more efficient than our present, cumbersome regulated system. But it will not produce enough oil to satisfy our economic growth or provide us with energy price stability and security.

This leaves alternative energy sources, and we must do everything possible to develop them. Some of these alternatives—solar, biomass and wind—have great public appeal, and may have ultimate promise. But these technologies cannot for a long time make a major contribution to the 80 quadrillion Btus we use annually in the U.S.

There are other technologies available with a far greater capacity to contribute to our needs in this decade and the next, and on into the 21st century. These are the technologies that produce solid, liquid, and gaseous fuels and chemical feedstocks from domestic coal and oil shale resources. I will concentrate on coal because that is the field in which Air Products has focused its efforts.

The United States is the "Saudi-Arabia" of coal. In terms of energy content, our coal reserves dwarf the oil reserves of the Middle East. We have enough coal to supply America's energy needs for several hundred years. Congress recognizes this and currently is working on legislation that could foster the growth of a major coal-based synfuels industry.

This legislation would, in part, build on energy research and development work that has been done in both the private While the debate continues, the Department of Energy is moving ahead rapidly with development of synfuels projects such as our Solvent Refined Coal (SRC-I) Refinery and similar demonstration programs.

A coal-based synfuels program has enormous potential. It could use both established and new technologies to convert our coal reserves into a variety of environmentally acceptable fuels. The more established processes for making synfuels from coal use indirect conversion technologies. First they convert coal into synthesis gas—a mixture of carbon monoxide and hydrogen. This gas can be used as a feedstock for producing a variety of chemicals and fuels, including synthetic natural gas and



Samples of liquid fuels that can be produced from coal by solvent refining are examined by an engineer at an Air Products and Chemicals, Inc. pilot plant. The shiny black chunks are clean-burning solvent-refined coal, also manufactured by the SRC-1 process. Liquid fuels are comparable to high-grade crude oil and can be used as gasoline refinery feedstocks, boiler or turbine fuel or petrochemical feedstocks.

sector and cooperatively in the publicprivate sector. The Department of Energy and its predecessors have been perceptive in funding the development of alternative energy technology—in our company and elsewhere. In the private sector, the oil companies and the public utilities among others have made substantial contributions of time, money, and effort to the development of synthetic fuels.

The legislation presently being debated in Congress could accelerate commercialization of those technologies.

gasoline. Some of these indirect technologies have been operated commercially and could contribute to our energy supply early in this decade.

The newer technologies liquefy the coal by direct hydrogenation. They are thermally more efficient than the indirect processes and produce up to 50 percent more fuel per pound of coal. The SRC-I process is among the more promising of the advanced direct liquefaction techniques. During the past 10 years Air Products has spent approximately \$75 million to develop this process, which converts coal with high sulfur and ash into a broad range of clean burning solid, liquid, and gaseous fuels. A pilot plant that we designed, built, and operate in Alabama has been producing small quantities of these synfuels since 1973.

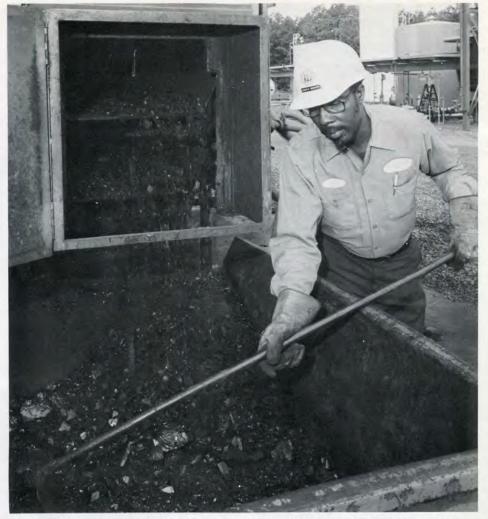
The Department of Energy is providing funds to scale up this pilot-plant to demonstration plant size. This demonstration plant will be located in Kentucky and will cost in excess of \$1 billion. By 1984, we expect it to be producing the equivalent of 20,000 barrels of synthetic crude oil daily. By the end of this decade—and with private financing—we hope to expand this demonstration plant to produce the equivalent of 100,000 barrels of oil daily, and to build additional plants.

Liquid products from this coal refinery will have the characteristics of highgrade crude oil, and will make excellent refinery feedstock for gasoline. The solids will provide high-quality industrial and utility boiler fuel, which will free scarce liquid fuels for transportation use. The plant also will produce carbon coproducts, which will have valuable uses in the steel, aluminum, and other industries.

The chemistry of the SRC-I process has been proven. Scaling up the pilot plant to demonstration size will entail major risks, but we believe they can be overcome. It could also take longer and cost more than we expect. But if we delay development of these technologies, we could face a more serious energy problem in the future.

These demonstration projects are not designed to satisfy the nation's overall energy needs. They are instead being undertaken to demonstrate the viability of these processes from a technological, environmental, and commercial standpoint. I believe the government recognizes the risks inherent in these projects and has taken bold, courageous and—in light of world energy conditions necessary action to develop these processes.

Yet, in spite of the seriousness of our energy situation, our efforts to develop a program to commercialize synthetic fuel technologies are still politically controversial. Some criticize it as intrusion of



Shiny chunks of solvent-refined coal tumble off the production line at Air Product's coal refinery pilot plant operated since 1974 in Alabama. The plant turns soft coal of high sulfur and ash content into clean-burning solvent-refined fuel that can be burned as is or further processed to produce coke for the aluminum and steel industries. A second stage can be added to the SRC-1 process to convert the solvent-refined coal into a liquid fuel that can be refined into gasoline or petrochemical feedstocks.

government into the free market system. Others see it as a threat to health and the environment.

These are unfortunate misunderstandings of a complex issue. The proposed legislation does not intend to replace the invisible hand of free enterprise with the heavy hand of bureaucracy. Nor does it suggest we disregard health and safety considerations. I certainly do not endorse, nor do I know of, any plan for the government to become a producer of synthetic fuels in direct competition with private corporations operating in the free market. And I don't know of any synfuels technology that gives inadequate attention to the importance of a safe and healthy environment.

There is also concern that government is assuming all of the risks in synfuels development. This view fails to recognize that, in addition to capital, industry already has dedicated a portion of its most valuable resource management and skilled technical people—to this effort. And industry will bear an increasing share of the risk once these advanced technologies for producing synfuels have been demonstrated.

There is ample precedent for the kind of government/industry cooperation which is necessary to accelerate commercialization of synthetic fuels. Air Products is only one example of this; but, it's the one I know best.

Our cooperative efforts with the government date back almost to our founding in 1940. World War II created an urgent need for breathing oxygen for use in high-altitude bombing missions, and Air Products responded by designing and building mobile oxygen generators to produce the gas for the government. During the Cold War, our nation's missile and space programs required large quantities of liquid oxygen and liquid hydrogen for use as vehicle propellants. Government-sponsored basic research and development contracts were awarded to our company to help meet these needs. These

contracts were followed by pilot plants and demonstration plants. Subsequently, we—and our competitors—applied this technological knowhow successfully in the private sector, both here and overseas.

Industrial oxygen is just one specific example of the commercial benefits reaped from these government/industry cooperative technological efforts. In 1945, oxygen cost about \$1 per hundred cubic feet. Even though it is a very energy-intense product, oxygen now costs about 30 cents. Why? Because the technology developed cooperatively by government and industry resulted in economies of scale which reduced costs and thus benefited all of society.

We can't promise that kind of cost reduction for synthetic fuels. But I can tell you that the technology for converting our nation's vast coal reserves into environmentally acceptable alternatives to imported oil and natural gas is ready to be developed, demonstrated, and put to work.

In his energy message last summer, President Carter set a synfuels production target of 2.5 million barrels of oil equivalent daily by the end of this decade. The House of Representatives has approved a bill to produce 2 million barrels a day of oil by 1990, and the Senate has set a target of 1.5 million barrels daily by 1995. These are ambitious goals, but I doubt whether they will be enough to limit our imports to the President's other goal of 8 million barrels of oil daily.

We are, however, moving forward. And that is encouraging. Congress is working on legislation that would provide \$20 billion for the first phase of a synthetic fuels program. This money would be used primarily to encourage industrial development of synfuels through purchase contracts, price guarantees, loans, and loan guarantees. This financial support would be a supplement to, not substitute for, market forces.

The costs seem high—until you consider the cost of continued energy insecurity. Our bill in this country for imported oil in 1980 will approach \$90 billion. An oil shortage in the Eighties could cost us more.

What will synfuels cost? If our demonstration plant achieves the results we expect, we believe gasoline made from liquid SRC-I feedstocks could be sold at the refinery gate for approximately 90 cents a gallon in 1979 dollars. This price does not include distribution costs, federal and state taxes, and retail markup. Price at the pump would be in the neighborhood of \$1.50 per gallon. Of course, costs here in the United States are inflating rapidly—but not as rapidly as the price of OPEC oil. The sooner we begin these synfuels projects, the sooner they will become competitive.

Will the cost be worth it? I believe it will. Continued delay and indecision only

'Moving forward with conservation, deregulation, and development of synthetic fuels promises a much brighter future...'

create further dependence on imported oil. This also sends a confusing signal to a world that waits to see whether or not the United States can deal decisively with its energy problems.

Without a synfuels industry, there is no limit to the price OPEC can ultimately charge for oil. That would be catastrophic for the United States, and the world. Moving forward with conservation, deregulation, and development of synthetic fuels promises a much brighter future, a future in which, scores, then hundreds, and finally thousands of American corporations and people would participate.

Some projections foresee an oil shortfall of six million barrels daily by the year 2000. The capital investment required to produce this quantity of syncrude by the year 2000 could create an average of 250,000 jobs over the next 20 years. The operation of this new industry could create an additional 500,000 jobs.

There also would be increased investment in the materials and equipment necessary to get the job done. Our balance of payments would move strongly into the black, our dollar would strengthen, and our credibility would improve throughout the world. Talented scientists, engineers and technicians in all kinds of companies large and small—would be drawn into such an effort. An average of 15,000 engineers would be required to produce six million barrels a day by 2000.

Equally important would be the stimulus the program could provide to scientific and engineering development. A new wave of research in chemistry, in engineering, in control systems, and in extraction methods could occur along with the surge in invention and innovation could help us reassert our technological leadership in the world.

All of this has the potential to carry us to a new plateau of industrial development. It is not too much to hope that in sum—it would constitute "a new industrial revolution"—an American industrial revolution based on broader application of scientific and engineering knowledge, improved utilization of our existing domestic energy resources, and a heightened sense of participation, challenge, and fulfillment for every American.

We have the coal reserves, the technical capabilities, and the capital resources at hand to begin this revolution.

The time to do it is now.

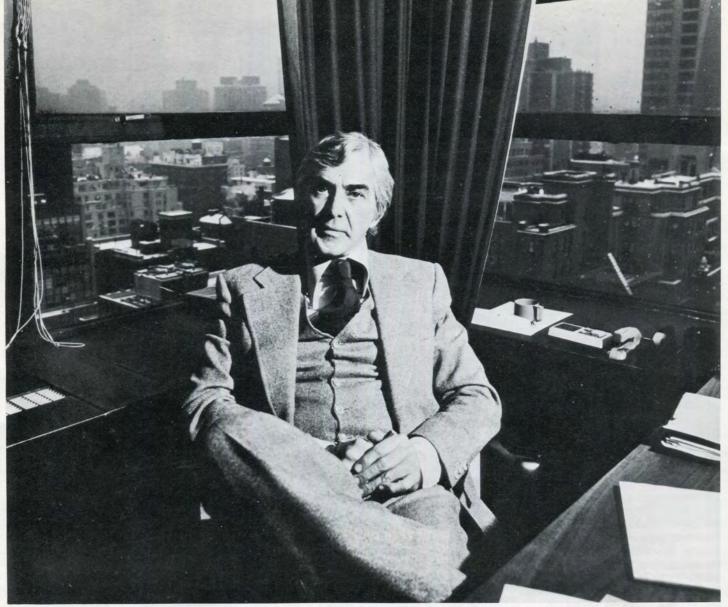


About Edward Donley

Edward J. Donley, ME'43, is chairman and chief executive officer of Air Products and Chemicals, Inc., a major international supplier of industrial gases, process equipment, and engineering services. Among the 500 largest industrial companies listed by Fortune magazine, the firm employs 14,600 persons in 11 countries. It is based in Allentown, PA.

Mr. Donley has served as a member of the LIT Corporation since 1971. This article is excerpted from remarks he presented at the Engineering Society of Detroit, February 15, 1980.

Photographs accompanying this article were furnished courtesy of Air Products and Chemicals, Inc.



Today, John Z. DeLorean, IE'48, awaits the early spring introduction of his innovative new sports car, the DMC-12. But once upon a time, he was one of LIT's most active students. (photo by Alen MacWeeney)

John DeLorean on John DeLorean 'the columnist years'

John Z. DeLorean, IE'48, is probably LIT's most widely known alumnus. Flamboyant, enterprising, colorful, unpredictable, his story has been recounted on the pages of Esquire, in interviews with NBC's Tom Snyder, and in countless other media accounts. The recent best seller, On A Clear Day You Can See General Motors by J. Patrick Wright, has also contributed to DeLorean's notoriety. To further explore this complicated

and controversial man, Anne Cattermole, associate editor of this magazine, embarked on a long hunt through the archives of the College Public Relations Office and through musty Tech News student newspapers of the period. What emerges is a personal account of the future industry leader excerpted from articles he authored during his student years at LIT. © Lawrence Institute of Technology

He was a rebel even then. His column in the *Tech News* was often prefaced by a terse tongue-in-cheek note from the editor, "Because of conditions which are beyond our control, the column originally scheduled for this space will appear." Yet—John Z. DeLorean (or DeLoreanshaw or DeLoreanillo or whatever he called himself that week) was the kind of man that no one could forget.

The man who was to one day turn the automotive industry on its proverbial ear began his career at LIT in 1941 in uncharacteristic anonymity and calm. No banner headlines announced his arrival. In fact—one must look closely even to find him in the *L*-Book freshman pictures for that year. He initiated his engineering career with courses in mechanical drawing, chemistry, and algebra, doing extremely well in all areas, but keeping a low profile outside of the classroom.

By 1942, though, he had joined the *Tech News* staff and that ol' DeLorean spirit had started to show through the freshman jitters. Being an accomplished musician, J. "Goodman" DeLorean, began what would become an "infamous" writing career with a story entitled "Men of Note."

"This term, the freshman class did not come up to expectations insofar as music is concerned," John bemoaned in his first article. "Only four men of this year's class (one of our largest) turned out for the band, as compared with fifteen last.

"The negligent musician," he continued, "is missing many advantages afforded band members. Last season, for instance, the musicians were given a refund of their activities fee, and a letter." Ah John! Always a cajoler.

Obviously, though, John had not perfected that DeLorean charm because he was back next week lamenting, "Where are the jive hounds around this jernt (sic)? The LIT band has dwindled from the 31 pieces of Smartie Pshaw's poor man's symphony to the six man size of Benya Goodman's Sextet (Benny and his five bagels)..."

"Gentlemen," he finally pleaded, "Lawrence Tech is a major College that does not have a major dance band. This certainly is not the type of distinction we want. So, let's get out and do something about it!" The "rally



J. "Satchelpants" DeLorean poses with his first love at LIT-The Lawrence Tech Band. He's in the front row, third from the left. --from the 1942 L-Book

'round the flag' abilities were beginning to emerge!

The same paper, however, also contained another momentous milestone. The creative urge was starting to overtake John and with the opening lines, "Who was that woman I saw you out with last night? I wasn't out, I was just dozing...," his weekly "Five with 'D'" column was born. The rest is history.

It wasn't long after this inaugural column that kind comments began to pour into the campus newspaper office about John's literary pursuits. Quotes the November 18, 1943 *Tech News*, "Five with 'D," "Since the latest issue of the *Tech News*, I have received many kind suggestions from my readers—to whom I say, 'So's your old man' and 'Nuts."

The sense of humor which carried John through many hard times in his life was becoming evident through the lines of print devoted to his column. His ability to laugh not only at the world, but also at himself, endeared him to many of his fellow students.

"After my last speech," he noted, "Mr. Price paid me a very nice compliment.... What does 'asinine' mean?"

But, he did have his pride, "I don't have to work for this scandal sheet for a living...," he wrote later. "I had a very flattering offer from the *Detroit Free Press...*I would have taken it if I had been strong enough to carry that bag around all day."

John's stardom as a writer as well as his career as a student was interrupted late in 1943, as his schooling was cut short by World War II. Along with almost all of LIT's students, he was drafted into the service, yet he still had time for one last "swan song."

"In my spare time I've written a book on how to stay out of the army. Those who wish to secure a copy of this infallible booklet should send 25 cents to...Pvt. J. Sachelpants DeLorean at Camp Custard. But, seriously, the best way to stay out of the army is to join the navy...s'long JD ERC."

The following years, John spent in defense of his country, but by 1946 he was back at home and also back at work at LIT. He attended day and night classes, finishing his industrial engineering degree in a year and a half. Such courses as financial administration, labor relations, fluid mechanics, report writing, and accounting began to lay the academic groundwork for someone who would soon be an automotive legacy.

But, John still found time for his favorite pursuits; and, within weeks of his return to campus, "Five with 'D'" was also back. Students were "ecstatic!"

"I should answer my fan mail," writes John on December 11, 1946. "What's a schtunk?"

Yet even with all this acclaim, the DeLorean "humility" was still intact.

"Dear Editor," a letter in the January 29, 1947 *Tech News* extolled, "I would like to compliment you on securing the services of that distinguished and polished journalist, Mr. DeLorean. Seldom, if ever, does a College of this size boast an author of such proportions. In issue after issue his subtle witicisms, fluent prose, and lofty philosophy have brought warmth and joy to the hearts of his avid readers. Truly such literary grace and charm must come from a pen driven by a truly noble mind. I know most of the student body joins me in this sincere tribute to high endeavor and the matchless style which Mr. DeLorean exemplifies.

Sincerely, Naeroled Nhoj"

It didn't take a genius to unscramble the signature and, it was obvious that John had intended it that way. After all, it was all in the spirit of fun.

This wasn't always the object, though, as John did have a serious side and he was often thinking about the days to come when he would be out in the world. In a column entitled "Know you what it is to be an Engineer?" he slipped out of his "funny guy" image for a moment and readers began to glimpse the "high philosophy" that, indeed, was John DeLorean. Excerpts foretell the rebellious, brilliant "dreamer" about to emerge.

"It is to have a dream without being conscious you are dreaming lest the dream break, it is to be trapped in a terrible tower of pure science.

"It is to live in a mean, bare prison cell and regard yourself the sovereign of limitless space; it is to turn failure into success, mice into men, rags into riches, stone into buildings, steel into bridges, for each engineer has a magician in his soul...

"It is to give imagination full play, to accept the inventions of Nature, to tell stories born of silence that fill the world with wonder...

"It is to be a Conquerer and a coward, a King and a captive, a Savior and a slave, it is to be good unto seeming Godlike while contrasting evil incarnate; it is to suffer a throne alone in your terrible temple of Science while companions roam the city streets make carefree carnival...

"It is loving and winning only to lose and love again and again, for Engineering is a fanciful Goddess clad in fickle fantasy, form fitting fortune, and flaming Fool's Gold who recognizes neither disaster nor despair."

But, despair was something John knew little about. He was popular on campus, being elected vice-president of



Hiding in the back row (perhaps from some admiring reader), John joins the Tech News staff for the annual yearbook photo. —from the 1943 L-Book.

the Student Council during his last year, as well as a good student. Dean George Hendrickson, academic dean and engineering faculty member during John's time recalls him as a "very fine student" and an asset to the School. And, he was elected to Lambda lota Tau honor society.

John graduated in June, 1948 and, as everyone within reach of a daily newspaper knows, went on to pursue one of the most highly publicized careers in the automotive industry. He is currently awaiting the production of the first car from his automobile firm, DeLorean Motor Company, a company he started after leaving General Motors. If he succeeds with this new venture and the DMC-12 is a hit, he will become the first person to successfully launch a new car company since Walter P. Chrysler in 1925. Not bad, for a guy who, finding himself near graduation, once wrote about a future that could hold the possibility of ultimate failure.

"Now you'll find out what this 'out in industry' means...Lord knows you've heard it enough...everyday for four years...and if it's as furtive as they make it sound, you've still got 37 weeks of unemployment coming...and now the distinction of being an unplaced engineer." But, as history has shown, an "unplaced engineer" he never became and, for those who knew him well, there was never any doubt. They remember him as a "musician," or a "clown," or a "genius," but always as an individualist who had new ideas and new plans just waiting to be put into high gear. These plans were not always particularly sensible and almost always "non-conformist," but they abounded throughout his years at LIT and beyond.

His legacy not only remains in the automotive industry where his rise was called "meteoric" as he progressed from staff engineer, to head of all of GM's car and truck production in a few short years, but also in the minds of his LIT classmates who still say, "Yeah, I went to School with John DeLorean. He was quite a character let me tell you about the time when..."

He was "eulogized" by some of these fellow students in the *Tech News* as he left for the "real world" in 1948:

"We mourn the passing of our dear departed *Tech News* columnist John 'B.S. me' DeLorean, whose aim it was to remain a ward of the Veteran's Administration throughout his declining years, as he has finished the prescribed obstacle course of four undergraduate years and passed beyond to the ranks of the unemployed. It is with a wistful tear in our eyes that we realize that we shall no longer see his neat soldierly form bent over the tasks of plant layout and electrical experi-

ments long into the night. But though he has departed to seek his eternal reward, those of us who knew him will draw inspiration from his example. We shall miss his sober countenance and the lofty idealism of his '5 with D' column. But as he stumbles through

the future, we wish him the best of luck and may all his opponent's kings be finessable. We shall always remember his sage remark, 'Eternal vigilance is the price of dishonesty."

It was a great fight, Mom-but unfortunately a losing one-as John was defeated for student council president in 1947 by Al Nash,

ME'48. Happily, as history has shown, John went on to bigger and better things. -from the October 15, 1947 Tech News.



hree Candidates

That's not his question

To build or not to build Construction engineering chairman

George Bowden

Second in a series

For George Bowden, chairman of the construction engineering department at LIT, a love of backpacking in wild, undeveloped areas is not at all inconsistent with a career which teaches students to build on them.

"I don't find the two incompatible," he notes. "The function of a construction engineer is to build things for the benefit of mankind, but not to decide what is beneficial. The decision making on preserving or not preserving a certain area is almost always done before the construction engineer is even brought into the project, so it is his or her job to build whatever is finally decided upon.

"You know, it's sort of like the movie 'Bridge Over the River Kwai,'" he laughs. "Something in that movie touched me because building the bridge became a goal unto itself, an objective that disregarded anything else that was involved. For me, that is the mark of a good construction engineer. I tell my students that it's our job to build a project of proper quality, on time, and at the lowest possible cost considering the safety of people involved. If they can meet all of these, they will be top CE's."

The art of surveying remains an integral part of LIT's construction engineering program. Here, Prof. Bowden checks a student's progress.



George notes, however, that this leaves the "glory" for the architects and other "visible" designers of projects. He believes, though, that the best construction engineers must have the kind of personality that gains satisfaction merely from seeing a structure completed.

"Our task is an important one and for anyone in the know, we are indispensable. If we don't do the job right, many things can happen—all of them bad!" George says. "When we complete a building or a bridge, or whatever, the glory comes in knowing that we have done our best and that what was once a design, is now a reality. We won't get raves from everyone who sees the building, but anyone who needs that kind of applause probably wouldn't be in the construction engineering field anyway. I like to call us the 'invisible profession.'"

Adapting to "invisibility" is not the only prerequisite for being a good construction engineer, though. According to George, the type of person who should consider the field is one who is a serious student, likes the out-of-doors, doesn't want to be tied down to a desk, and has a fascination with construction.

'The students who will make good construction engineers are probably those whose favorite toys were 'Tinkertoys' or 'Lego' when they were young," George notes. "I always ask students who come to me for advice on a career choice, if they have built anything with their own hands. Sometimes, the student will get a little smile on his or her face and say, 'Well, yes I have' and then I ask them if they were proud of it and the smile gets a little wider and they say 'Yes, actually I was proud of it.' Those are the ones that I think will do well in the program and in the construction engineering field.'

Women who are in the program seem to have one more trait that makes them well-suited to entering the field they have confidence in themselves and will stand their ground. The enrollment of women has grown from two in 1972 to 28 in the fall of 1979 and George is very pleased with this trend.

"The women I have had in my classes have been exceptional students. Many of them are returning to school after several years and are very serious about career plans. They know that the jobs will be available when they graduate and that hard work will net them gains financially and personally," he notes. "They are very fine achievers and I have no reservations about them doing a good job. The going will not be easy at first, because the women will not be immediately accepted by everyone. They will have to prove themselves, but once they do, the construction industry will open for all women, now and in the future."

George's own knowledge about construction comes, not just from books, but firsthand from over 25 years of experience in the field. His own background allows him to give classes realworld insight into the construction engineering field, even though he almost had to carve out his own career from a civil engineering degree.

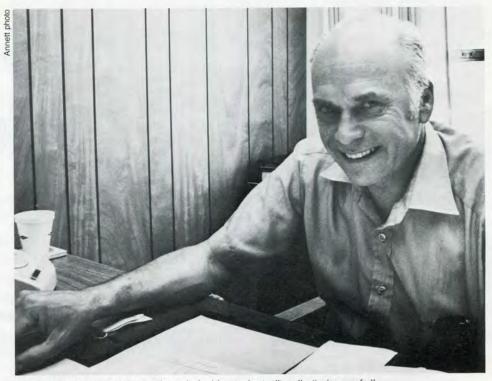
"Ever since I can remember, I wanted to be a civil engineer, even though I don't remember knowing what a civil engineer was," he laughs. "Then, after high school in my hometown of Chicago, I joined the Navy Air Corps and flew for a couple of years. I contemplated aeronautical engineering after I got out but I figured that if we had enough planes for World War II, then the market was probably already saturated, so I went back to my original dream."

George entered Purdue University and earned a B.S.C.E. and then went to Commonwealth Edison where he worked on such sophisticated construction projects as power plants, teaching himself the ins and outs of building structures. From there he moved on to the Symons Corp. where he became vice president and director of research and development.

"I had to go out and analyze the construction industry," he remembers, "and then come back and design something that would fit the need. But, because we had a very clever president, I was also in charge of complaints so I always had to keep my finger on what worked and what didn't."

After 11 years at Symons, George felt that he had something to offer students who were contemplating a career in the field and made a decision to go into education. He found that LIT was one of only four schools offering a construction engineering program and shortly, thereafter, joined the faculty. He was appointed chairman of the construction engineering program in 1973 and later got his M.S.C.E. at Wayne State University. George believes that the move to LIT was one of the best he could have made.

"Teaching has given me a great deal of personal satisfaction, especially



George Bowden stands ready to help his students literally "raise roofs."

because LIT is educating students for the real world," he notes. "The entire construction engineering program was started, with the help of the Builder's Exchange, to fill a need that the industry had for graduates with special skills. Civil engineers were just not adequately educated in the whole area of construction management, so we modified our civil engineering program to make it more applicable. From that point on, we turned a dying program into one which has an enrollment which is continually increasing."

George sees only one problem with the construction engineering curriculum, and that involves the information which prospective students are receiving on the program.

"Due to the high school advisors' lack of knowledge about construction engineering," he states "few students enter our program directly after graduation. There is still a feeling among the counselors that we are just teaching students to saw wood and hammer nails, but that's not even remotely true. Consequently, most of our students come from the industry or from other programs. Those who do enter the program directly after high school graduation are learning about it on their own or from friends in construction rather than from counselors."

The program continues to grow,

however, much of it due to George's hard work and dedication to his students and his field. Through George, men and women are finding that there is much more to construction engineering than meets the eye and their "fascination" with building becomes a career goal with outstanding possibilities for personal and financial growth.

But even with his own "fascination" with construction, George, himself, still enjoys the "wide open spaces." He and wife Barbara have backpacked across Isle Royal in Lake Superior, the Chilkoot Trail in Alaska and are now contemplating a trip across the Andes. Barbara, by herself, joined a Youth Hostel Group on a trek across the Himalayas.

"We like to get away from everything and find the most remote areas," he notes. "We enjoy places which are undiscovered by the in crowd; places where we can learn about other people and other cultures.

"But, even though we spend our vacations far away from civilization," he continues, "I've never really considered 'chucking it all' and living in the wilderness. Vacations are adventures, but after a certain period I'm ready to come back."

For the construction engineering students at LIT—that's good news.



Floyd Bunt sits at the keyboard of his magnificently-restored theatre organ.

When you've shared a plane with Red Chinese soldiers on leave from Vietnam, listened to the sound of guns in the background of a native dance in Cambodia, and stepped over giant turtles in the Galapagos, you might think you'd "done it all."

"Not so," says Floyd Bunt, LIT director of high school relations. "There's much more to see and do and, in fact, my wife Marion and I are now looking forward to a trip to the People's Republic of China."

Floyd, a native of Canada, was traveling himself when he first met Marion in the early 1940s. He was visiting Cranbrook School in Bloomfield Hills on an educational trip, but it wasn't long before he became a permanent resident and a master at the school which first brought him to America. He was at Cranbrook for over 25 years before moving on to the Kingsbury School in Oxford as headmaster and then, in 1971, joining Lawrence Institute of Technology as a member of the chemistry faculty.

In the almost 40 years since their marriage, the Bunts have visited all over the world and now have a collection of international artwork, carvings, artifacts, and other memorabilia that would do many museums proud. In addition, they have brought back a silver spoon from each country and, at last count, the number is well over 80.

The Bunts began their world travels

Travels with Floyd

When LIT Director of High School Relations Floyd Bunt returns home from a week of outstate student recruiting, you'd think he'd like to stay around awhile. But for Floyd and his wife Marion, a trip to Paducah is still in their own "back yard." And Floyd even plays his own traveling music!

right after the war with camping trips to most of the 50 states. They started "roughing it" before it became fashionable for families to take up their tents and sleeping bags and head into the wilderness, but Floyd and Marion feel that the experience was an excellent teacher for the four Bunt children.

"We've camped throughout the United States as well as in Nassau and Europe," Marion notes, "and because we weren't staying in the 'tourist' places, the children learned about other people and their ways of life much better than they might have if we were staying in plush hotels in the cities. We would talk to them each night, explaining the history of where we were going the next day so that they would get a real feeling for the area and the people and know what to expect. We urged them to accept other ways of life and not judge others by our own standards, hoping to keep them from spreading the 'ugly American' image.

These camping trips soon expanded into "regular" excursions into the world of international travel, which often didn't turn out to be as regular as one would expect.

"When we were traveling around the Far East, in 1968, we boarded a plane bound for Manila," remembers Marion, "and right behind us were sitting a group of Red Chinese soldiers. We thought they were taking over the plane and, for a moment, neither one of us knew what to do. Then we learned that they were just soldiers from Vietnam who were going on R&R and for the rest of the trip we had no problems. They didn't bother any of us and we didn't mind them."

On that same trip, the Bunts were treated to a first-hand look at the intricacies of international relations.

"We wanted to visit Cambodia and so we worked our way through a lot of red tape in order to get there," Marion remembers. "Then on our first night in the country, the guide wanted us to rest in our hotel but we convinced him to take us out into one of the neighboring villages.

We luckily caught one of the traditional 'shadow dances' in which the villagers dance behind a giant hanging sheet and in front of a large bonfire so that they appear as shadows," she continues. "Unfortunately, this might have been one of the last times they performed it because soon after that, war broke out in force in Cambodia, putting an end to the old way of life. We could hear guns in the distance while we were there even though our government was saying that American forces were not in the country. Later we learned that this was not really the case and that the sounds we heard were probably our own artillery fire."

Cambodia was not the only place where the Bunts got a unique view of the world. Their out-of-the-way trips have provided many adventures and taken them to places which most people never consider as a travel possibility. Their trip to the Galapagos Islands is a prime example.

"When you're escorted to the islands, you are not allowed to take or leave anything, not even a scrap of paper, because it could upset the balance of nature," Marion states. "The islands are known for the natural life which, in essence, has escaped the process of evolution. Each strain has grown without any of the restraints of life as we know it and many have grown to absolutely enormous size. The best known of these is probably the giant turtles or terrapin. Darwin himself investigated the islands in his research on the origin of the species.

"The animals have not learned to be afraid of man so they act as if we were not even there," she continues. "We could walk among the seals or turtles or over an iguana and they just carried on without paying any attention to us. It was an experience we will never forget."

According to Marion, though, the trip would not have been as fascinating if it were not for the trained guides who took them to the islands.

"The guides for each of the island trips are specially chosen from all over the world," she remarks. "They all have Ph.D's and are specialists in such areas as chemistry or marine biology but they are also unbelievably well-versed in every other area. They are truly extraordinary people."

"Extraordinary," however, can describe more than the Bunts' travels. It is a term that one hears often of Floyd, himself, as he has kept himself busy with much more than visits to other lands. His areas of expertise and interest range into areas not even familiar to most people. The awards which hang on his wall are only a small illustration of the honors he has received for his dedication to a variety of civic, professional, and cultural activities.

He was named one of the five top secondary education teachers in the United States by Yale University while teaching at Cranbrook and has also been commissioned by the Fund for Peaceful Atomic Development to confer with Japanese educators and scientists on the subject of atomic power. The Independent School Association of the Central States cited him for outstanding



Floyd demonstrates the tonal quality of several of his theatre organ's 800 pipes.

leadership, dedication, and contributions to the field of independent education, and the Birmingham Volunteer Fire Department presented him with its service award—and that's just the beginning!!!!

Floyd's talents extend beyond his own field of chemistry into everything from organ playing to agriculture. He has taught swimming, flying, riflery, lifesaving, lapidary (stone cutting and polishing), and first aid, is a qualified radiation detection technician, and is skilled in wood working, silver and metalwork, radio, electronics, and gardening. And, as if that is not enough, he also restores giant theatre pipe organs from the days of the silent films, saving them from extinction in a world of "talkies."



Marion Bunt displays a small artifact acquired during one of her and Floyd's South American adventures.

Floyd restored a pipe organ for Cranbrook School and installed another of the giant musical instruments in his own home. The Bunts' organ was originally part of the State Theatre in Sandusky, Ohio until Floyd rescued it from probable destruction.

The 800 pipes connected to the organ are so gigantic that they take up an entire room and Floyd has had to lay some across the floor rather than up and down in order to fit them in. In addition, the bird whistles, auto horns, xylophones, drums, and other paraphenalia also had to be renovated to create those unusual sound effects long associated with the music which accompanied silent films.

When Floyd begins to play and the pipes fill with air, the noise is reminiscent of a 747 getting ready for take off. But when the music starts, the sound brings up a nostalgic vision of days gone by. Strains of "Bicycle Built for Two," "In the Good Old Summertime," and "Harvest Moon" fill the Bunt home's lower level as shutters open and close to regulate the tones from the "pipe room."

But-even with this magnificently restored organ and all of the beautiful artifacts and woodcarvings in his home, there is one "memory" piece that just may be the Bunts' favorite. It hangs in the place of honor as one enters the family room and is inscribed "To Floyd Bunt on his 65th birthday from his grateful children." The framed poem recounts years of caring, sharing, and understanding and was done by --not Frost, Wordsworth, or Longfellow-but rather Floyd Jr., Mary Elizabeth, Teddy, and Terry-and that makes it more priceless to Floyd than any verified 'treasure" could ever be.

Seeing double

James and Edward Lingenfelter major in the same subject, attend the same classes, and even hold the same job. You'd think they were twins.

"Quit following me around!" is a common complaint from one brother to another, but with James and Edward Lingenfelter things are quite different. Not only did they follow each other 20 years ago when they entered the world, but they have continued to follow each other ever since, from schools, to jobs, and then back to school.

The Lingenfelters, identical twins in

more than just looks, attended Bishop Foley High School in Royal Oak. There, school officials made every attempt to keep them separated with different classes and activities. But, Jim and Ed had a different idea when it came to their own choices.

Unlike many twins who studiously try to go in separate directions, the boys have spent much of their lives together



and, after high school, they didn't see any reason to change. They had always tried to maintain their own personalities but somehow, they always ended up together liking—and doing—the same sort of things.

"After graduating from high school in 1977, Jim and I started in the electrical engineering program at LIT," Ed remembers. "We really didn't make an effort to enroll in the same curriculum but we had always both been really interested in electronics so it just happened."

Now, there's nothing really surprising about that—but the story does not stop there. Coincidentally, both boys, almost at the same time, decided that engineering wasn't for them and both left the program. Still not surprising—but again the story goes on— Jim and Ed both then decided to enroll in LIT's associate degree program in electrical engineering technology where they remain today—both taking identical classes and maintaining near perfect grade point averages.

But—even that's not the end of the "togetherness" story because not only do the boys study together—they also work together at William Beaumont Hospital in Royal Oak at —you guessed it—the same job.

"We really didn't intend to end up working together," states Jim, "it just seemed to happen. I applied for a job in the maintenance department while I was working in dietary. Then Ed decided to apply, but we both knew that there was only one opening."

"The supervisor was going to flip a coin to see which one of us he would hire," Ed continues, "but then decided to make two positions so we ended up working together too."

Does this cause problems for others at the hospital? Sometimes—"But," the boys laugh, "there are still some people who think that there is only one of us who's just mighty fast getting from one



James and Edward Lingenfelter find they're often reaching for the same personal and career goals.

place to another."

Those who do know there are two Lingenfelters, however, have found things a little confusing, especially their supervisor.

"At times, our boss will ask one of us to do something, believing that he's told the other," says Jim. "He often hands us the wrong time cards and with us both wearing the same uniform, it's almost impossible for him to even realize he's made a mistake."

"Once, he told me twice to work Saturday, not realizing the second time that I wasn't Jim," says Ed. "Then when Jim didn't show up he realized what had happened."

The supervisor has now decided to just call them "the boys" and he makes sure that both of them hear all of the instructions.

This confusion doesn't end at work, though, as LIT has, without realizing it, contributed to the 'coincidental' linkings of the two boys. When he enrolled at the College, Ed was assigned the student number 45091. Jim, on the other hand, registering a few days later became student number 45109, making at least one professor believe that there was a computer error in his class printout.

The dean of the School for Associate

Studies, Dr. Richard E. Michel, was also a victim of the confusion which always seems to surround the boys. During the registration period for the fall term at LIT, as he was meeting with students to help them enroll, Dr. Michel suddenly realized that there was one student who kept showing up and registering for the same classes (or so he thought). It took some explaining but finally the questions were cleared up and both boys were ready to begin the same courses even though the professor would probably begin the confusion all over again, himself.

Still, the School expresses pride, not only in the boys' tremendous success in the program—but also in the fact that they have come a long way toward recognizing Jim and Ed and keeping their names straight!

Jim and Ed, themselves, look forward to the time when they will graduate from LIT and—go their separate ways? Not likely. Jim hopes to go on for a further degree—and that sort of appeals to Ed too—not because Jim is doing it but rather because it seems that what interests his brother, interests him—and vice versa. Differences between the boys do exist, but they seem to fade into insignificance when stacked up against the similarities.

"When we were young, our parents got us two different pair of shoes so that they would know who we were," Jim remembers—and then adds with a laugh—"but, unfortunately, the shoes wore out."



Gerald C. Meyers, chairman of American Motors Corporation.

ENGINEERING: threshold of a new golden age?

The challenges of today require engineers with solutions, asserts the chairman of the American Motors Corporation. Gerald Meyers says this so called "Age of Limits" is just a wall to be broken through. I would like to discuss architects and arches; engineers and excellence. In ancient Rome, the engineer who was responsible for the construction of a great arch was required to stand under that arch and all those tons of stone. When the supporting scaffolding was removed, if the calculations were faulty, he found out quickly and permanently. On the other hand, when the arch held, as it almost always did, he stood proud and prominent. It's no wonder that a lot of Roman arches have survived for thousands of years.

Those were the days of the Golden Age of engineering. Today, I would like to suggest to you that we are on the threshold of another Golden Age of engineering. Let me attempt to prove my thesis.

Let's begin with a quick look back, to a time that many of you have lived through—the era just after World War II, a period of great optimism and enthusiasm about the country's future.

I first appeared on that scene when I went to Carnegie-Tech seeking an engineering degree in the summer of 1946. At that time, anyone who wasn't an engineering student was just out of it.

The United States had shown the world what its engineering might could do—the great ships, the fleets of bombers, the astounding level of production which the country reached during the war.

The same technical know-how and industrial might that had won the war would win the peace, or so the thinking went. Engineers were the men of the hour, and of the future. They wore their slide rules on their hips like gunslingers of the Old West. It was they who would cross new frontiers of technology, and bring a new abundance to all the world's people.

Much of that optimism was wellfounded. Through the Fifties and well into the Sixties, America's engineering talent helped rebuild the devastated nations of Europe. It helped propel this nation to a new level of affluence. It

Gerald C. Meyers, chairman of the American Motors Corp., presented the following address April 24 as part of the Engineering Society of Detroit's Breakfast Lecture Series. He appeared at the invitation of Dr. Richard Marburger, president of LIT and president of ESD, who also served as presiding officer of the meeting. helped raise the standard of living in many of the world's underdeveloped nations.

And, finally, in a kind of final exam for our engineering might, we engineers put men on the moon, a feat that only a few years back had been a subject for laughter.

Toward the end of the Sixties, engineering had fallen on hard times after its earlier triumphs. Engineers became the bad guys, the people who fouled the air and the water, built freeways that ruined farmland, made automobiles that choked the cities and worse—they didn't seem to care. Technology fell out of favor. Engineers lost badly on college campuses. The "in" thing became liberal arts, and I mean *liberal*. The country would be saved by new social programs, not new factories.

And where are we today? Well, we've had some bad economic news recently. But if you look at the nation as a whole, you'll find that the pendulum has swung again in favor of our profession.

Classified sections are full of ads for engineers. Enrollments are up in colleges of engineering. Women engineers are swelling our ranks and can practically write their own tickets. And if you've specialized in petroleum engineering, oil company recruiters will just about carry you off campus on their shoulders.

What does this mean? I believe it's more evidence that we are seeing the curtain rise on a new Golden Age of Engineering which could very well surpass the glory days following World War II.

Consider the needs for a minute their range and their scope.

We need engineers to solve our energy problems, to find ways to burn high-sulphur coal, exploit oil shale, develop solar power, capture geothermal power, solve the enormous technical problems that will release the huge potential of fusion, and solve the safety problems of nuclear generating plants.

We need engineers to bring about the revolutionary changes necessary in the auto industry and the housing industry, to spearhead the revolutionary changeover to smaller cars.

We need engineers by the thousands to carry on and expand our efforts to cope with man's waste.

Now, the engineers I'm talking about do not see the world just in terms of sine and cosine. They are a new breed of engineer—the kind already graduating from some of the nation's colleges and universities.

The most important characteristic of the new breed is that they combine technical skill with human skill. They have been educated more broadly than their predecessors. They have a good grasp of history, know literature and the arts and fathom the humanities. They know how to relate to people.

We have this new kind of engineer because no other kind will do.

Some say we have entered an Age of Limits, in which the world's growing population, combined with the growing expectations of the Third World, have imposed an unprecedented strain on global resources.

But let's keep the Age of Limits in perspective. What does that term really mean?

What it really means, I believe, is that

our resources are limited only if we continue to keep our blinders on. In my view, the Age of Limits is a fiction... Malthusian! It is a description contrived by a shocked and older generation when it ran out of ideas and not an acceptable viewpoint for the new generation of engineers.

Our new engineers believe they can break through the limits that others saw. They have confidence in their ability to handle problems. They see the limits as a challenge—a wall to be broken through.

Getting more (not more from less) will be the major challenge of the Eighties and Nineties. This is, first and foremost, a technical problem. But engineers who are merely technicians will be unable to cope.

In the last few years, we have seen how difficult it can be in the U.S. to close the gap between our political and technical institutions. Elected officials



are charged with providing the framework for dealing with, if not solving, society's problems. But more often than not, it is the engineering profession which is called upon to translate political mandates into reality.

Put another way, it is the professional engineer's job to give us the best life possible, within the best system that the politicians can provide.

To do this, the complete professional engineer must first of all be a human being with a strong interest in advancing society. And then secondly, he or she must have the technical skills to do the job.

So the demand for our new breed of engineers is strong. The reason is clear. We can't build a better society solely with better laws. It will take engineers to convert political hopes into blueprints of reality, and do so in ways that truly improve the quality of life.

In the last few weeks, we've had some very gloomy news in the auto industry—news that hits especially hard here in Detroit. Some of you may wonder how I can be so optimistic about the future of engineering when the auto industry is being shaken to its roots.

Overnight, we have seen the entire U.S. automobile fleet become obsolete. Our critics love to argue that the Japanese outwitted us in this respect but that's not true. It is true that the Japanese are ready with large volumes of small cars Americans want now, but it's just luck that they are.

The Japanese had no great insight into the coming U.S. market nor did they foresee the Middle East fiasco. But they were ready because they had been building small cars for their own markets for years before American car buyers suddenly got the fuel economy message.

The point I'm making is that the current troubles U.S. car manufacturers are having with imports are not, I repeat *not*, a result of bad engineering, dumb product planning nor sloppy market research.

They result very simply from the unforeseeable and sudden political events abroad which almost overnight changed the nature of the U.S. auto market.

And this change is the foundation upon which the new world automotive market is being built.

Alliances are forming and the pace is quickening. We calculate that the 30 or so independent auto manufacturers in the world today will narrow to about a dozen by the end of the century. That dozen will be transnational in scope and will compete all over the world, with North America, Europe and Japan simply being parts of the whole.

American Motors and Renault are going to be one of those dozen survivors.

At American Motors, we believe our vital signs are stronger today than they ever have been before. And as for the industry as a whole, reports of its death are exaggerated.

American automotive engineering production and marketing know-how, are superb. The new generations of vehicles that are already beginning to leave the assembly lines will re-establish that fact.

The need for the smart, new breed of well-rounded engineer in the auto industry and throughout U.S. industry is greater today than it has ever been.

Again, it is one thing for government to draft the design for a better society. But it's the professional engineer who will convert those ideas into reality.

Engineers will draw energy from the sun.

Engineers will design housing for the millions who need it.

Engineers will conceive the devices to bring forth the food for a growing world.

Engineers will devise ways to dispose of our waste, without turning to a nogrowth economy as a solution.

Engineers will break the resource barrier that has victimized our fathers.

And finally, and not least, engineers will develop a whole new fleet of small, fuel-efficient automobiles.

I started with the thesis that we are about to enter another Golden Age of engineering. If the list of accomplishments that I have just described is any indication of the coming age, and I believe it is, the world will look back on the decades of the '80s and the '90s as another era in which the technical capabilities of our society excelled. It will be a period when the architects and the engineers again will be standing proud under the structures that you have created.

It isn't going to be easy. In fact, it's going to be a very difficult time. But it will be a challenging time and an exciting time for you and the engineering profession. Personally, I am looking forward to it. And I hope you will, too.

An orphan hymn?

Last summer, the LIT Public and Alumni Relations Office asked alumni to help track down the origins of the *LIT Hymn*, (see the *LIT Magazine*, Summer, 1979). Office staff had discovered aging copies of the basic melody and words during research on the College fight song, "Dear Old LIT," (*LIT Magazine*, Spring, 1978).

But no new information was forthcoming. The author, composer, and date of origin are still a mystery. However, Bob Benson, assistant professor of architecture and organist for the 1980 Commencement exercises saw some potential and harmonized and arranged the music for use as the graduation processional. It served the purpose well, and perhaps a new tradition has been born.

The words and music are below. Since it would be a shame to have an "orphan" hymn, alumni are again called to service! If you can identify the composer and author, or provide other information, please contact the Public and Alumni Relations Office.

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Let them fly so very high our colors blue and white. Flowing free for all to see like a guiding light. With our might for all that's right we march to victory. We can't hide our lasting pride for good old L.I.T.

We will sing and chimes will ring our praise of L.I.T.
Rising loud with hearts so proud ringing true for thee.
Listen to her song, it is calling you and me
On to keep the banner flying for ol' L.I.T.

May her fame and honored name be greater with each year. May they last these mem'-ries past that we hold so dear. Fear not the rival lot who'd stop our cause so free. Show our course with endless force and pray for L.I.T.

On-campus



Marburger

Marburger elected ESD president

Dr. Richard E. Marburger, president of LIT, has been named president of the Engineering Society of Detroit (ESD). He officially assumed office on July 1.

The Society, which has 8,600 members, is considered the world's largest regional technical society. Dr. Marburger has previously served the organization as a director, treasurer, and vice president, as executive chairman of its membership drive, as chairman of the Member Education Council, and he has worked on the ESD-sponsored Science Fair. He also serves as chairman of the Society's Objectives Planning Committee.

Concurrent with his ESD presidency, Dr. Marburger is serving as president of the Detroit Metropolitan Science Teachers Association, as a vice chairman of the 1980 Freedom Festival, as a trustee of the Detroit Business/Education Alliance, and as chairman of the nominating committee of the Economic Club of Detroit.

He has served as president of LIT since 1977. Dr. Marburger joined the College's adjunct faculty in 1965. He advanced to professor, dean of arts and science, and vice president for academic affairs prior to assuming his current position. Earlier, he served as a Lieutenant in the U.S. Air Force where he collaborated on the development of the cadium sulfide photovoltaic cell and published papers on the subject. He also was associated for 17 years with the G.M. Research Laboratories, where his contributions included development of x-ray diffraction techniques which are of great value to physicists, chemists, metallurgists, and mechanical engineers.

He attended Kenyon College and received three degrees from Wayne State University, including his Ph.D. in physics in 1962. He is a member of the national scientific honor society, Sigma Xi, and the national engineering honor society, Tau Beta Pi.

Enrollment growth continues

While many other colleges contend with declining numbers of students, Lawrence Institute of Technology continued to set enrollment records into 1980.

The second evening term baccalaureate program registered a record enrollment of 1,723 students, compared to 1,576 students one year ago. This represents a 10 percent increase. About 34 percent of LIT's over 4,990 students are enrolled in the evening school program.

The largest increase in the evening enrollment occurred in the School of Engineering where a total of 819 students registered for second term evening classes. This was a 13 percent increase over last year's total of 728.

In addition, the third term day college program enrollment in March was a record 2,380 students. The previous record of 2,199 occurred in March, 1978.



Brown

Brown accepts Campaign position

Paul B. Brown has recently accepted the position of vice chairman of the Professionals Division in the Lawrence Institute of Technology Capital Campaign. In this position, he will be responsible for coordinating the fundraising activities of area architects, engineers, and accountants.

Brown is a senior executive and partner of Harley Ellington Pierce Yee Associates, a Southfield-based architectural and engineering firm. He is a graduate of Oberlin College and the University of Michigan and was recently presented with the Gold Medal Award by the Detroit Chapter, American Institute of Architects.

A former director of the Michigan Society of Architects, Brown has also served as the president of the Detroit Chapter, AIA and is a fellow in the Engineering Society of Detroit and in the national AIA. His civic activities include serving on the Birmingham City Planning Commission and the Advisory Council on Regional Planning of the Southeast Michigan Council of Governments.

'LIT Day' at Greenfield Village

A special program April 24 brought LIT students, faculty and the College's several hundred TAB (Technical and Business) Club students to Greenfield Village and the Henry Ford Museum in Dearborn for a day of education and historic insight.

The deans from the College's five schools gave special presentations in areas of their expertise, primarily concentrating on the inventions and life of Thomas Edison.

Funded by several major corporations, TAB is a special LIT program in Detroit high schools geared to increasing the number of students seeking careers in business, engineering, and science. The Clubs provide "hands-on" experience of the work world through field trips, guest speakers, a co-op program, and a summer career institute. Necessary high school preparation for college work is also stressed.







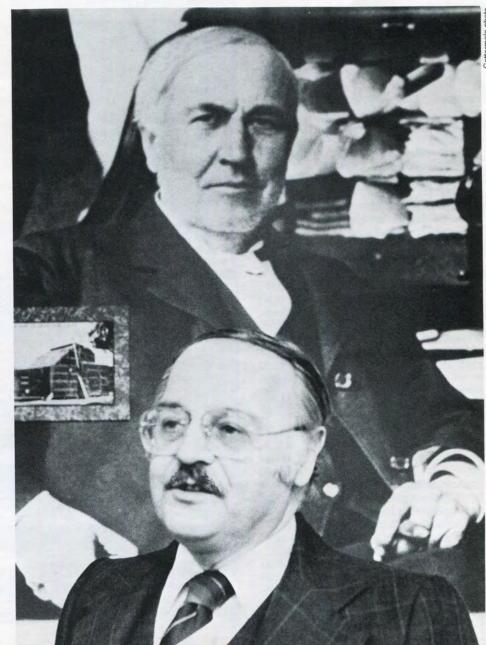
Dean Richard Michel, top, discusses some of Thomas Edison's inventions with TAB students in Edison's Menlo Park labs. Left, Dean Stephen Davis was stationed in Edison's machine shop. Above, Dave Castillo, ME'80, was one of several students who helped answer visitor inquiries.





Dean Karl Greimel, above, discussed the environment Edison grew up in. Dean Louis Petro (top right) discussed the com-panies Edison founded. Dean Zaven Margosian (right) appeared in the Henry Ford Museum and discussed early efforts in computerization.





Class of '80 joins graduate ranks

Intermittant showers failed to dampen the enthusiasm of more than 500 graduates and their parents, spouses, and friends as they filled the Detroit Civic Center's Ford Auditorium June 1 for LIT's forty-eighth annual Commencement Exercises.

James W. McLernon, president and chief executive officer of Volkswagen of America presented the Commencement Address and received an honorary doctor of engineering degree in recognition of his "outstanding accomplishment and significant achievement in the fields of engineering and technology."

Receiving an honorary doctorate in science was Stanford R. Ovshinsky, president of Energy Conversion Devices, Inc.,-a firm he founded with his wife in 1960 to continue research and development of amorphous materials for use in various phases of information storage and control combined with concepts of energy conversion. Mr. Ovshinsky is a self-taught physicist and inventor whose credentials include over 60 U.S. patents and authorship of numerous scientific papers on subjects ranging from neurophysiology to amorphous semiconductors.

Among his many interests, he has theorized remarkable new ways of converting sunlight into commerciallyfeasible electricity.

Also cited were five distinguished LIT alumni, who were presented with Alumni Achievement Awards: Ernest E. Brown, AIA, AE'37, of Astoria, OR, who recently retired as a partner with his firm of Brown, Brown, and Grider; John J. Dziurman, AIA, Ar'70, of Rochester, president of John Dziurman Associates, Inc.; Ronald C. Maday, IM'63, of Detroit, partner in Touche, Ross and Company; Roger E. Marce, ChE'37, of Bloomflield Hills, executive director of finishing for the Zinc Insti-tute; and David C. Travis, IE'60, of Saline, general manager of Ford Motor Company's plastics, paint, and vinyl division.



Dr. James W. McLernon presented the Commencement Address.



Dr. Stanford R. Ovshinsky was honored for his pioneering research.

Register now for pre-college program

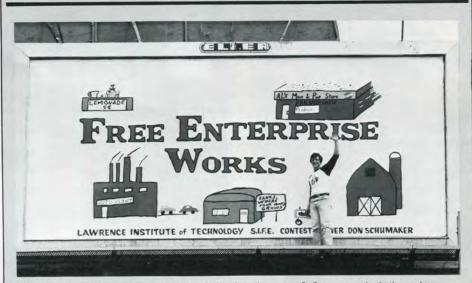
High school juniors and seniors are urged to apply now for the September Pre-College Architecture program at Lawrence Institute of Technology.

Students attending the program will be given a chance to explore and advance their interest in art and architecture before entering a full program of study. They will also learn the nature of professional training and discover whether they have the necessary aptitudes and talent for further study at the College level. The fall term will begin on September 27, meeting Saturdays until January 31.

Students may choose one or any combination of courses offered in the program including: visual communications, basic design, and interior architecture/interior design. There will also be an art and architecture seminar and field trips offered to the students.

Tuition for each of the courses is \$75; \$25 for the seminar. It is also estimated that materials will cost up to an additional \$100.

Students who wish to visit the campus during the summer to talk to an advisor about the program may call the LIT School of Architecture at (313) 356-0200.



Billboard editorial. Truth, justice, and the American way? Superman isn't the only champion of these ideas. Student Don Schumaker, BA'80, designed this billboard for a Students in Free Enterprise contest. Eller Outdoor Advertising Co. displayed Don's work on Eight Mile Road.



A passel of presidents. LIT president Richard Marburger, left, and chairman Wayne Buell, right, congratulated past Presidents Club presidents Arthur Kelley and Lee Zwally. Newly elected Club president Roger Shtogrin also offered his best wishes.

Presidents Club elects Shtogrin, directors

Members have elected Roger F. Shtogrin, IM'61, to serve as the 1980-81 president of the LIT Presidents Club. Election results were announced at the Club's annual spring meeting, held this year at Plum Hollow Golf Club.

Also elected were Robert J. Schlaff, IM'62, vice president; Stephen R. Davis, dean of engineering, secretary/ treasurer; and three new directors: David E. Fillion, EE'76; Victor L. Kochajda, EE'52, and Alvin R. Prevost, ArE'51.

Daniel Redstone, representing Louis

G. Redstone Associates Inc., architects for LIT's new Management Building, gave a brief presentation on the structure's design and progress, and President Richard E. Marburger presented a State of the College address. Also speaking were Wayne H. Buell, board chairman, and G. Robert Harrington, vice president for development.

C. Lee Zwally, EE'41, Frank Noggle, ME'70, and Arthur L. Kelley, ME'47, were given special recognition as the Club's past presidents. Former director Jack L. Korb, CivE'54, was also honored for his service to the Club.

The LIT Presidents Club recognizes the substantial support of the College's contributing alumni and friends. Members have pledged to invest at least \$1000 in the College over a five year period. Gifts of stock, real estate, bonds, life insurance, or other gifted assets may also be considered.

Architecture students sweep national interior design competition

LIT architecture students have been named recipients of three out of a possible seven top prizes in the 1980 National Student Design Competition sponsored by the American Society of Interior Designers (ASID).

There were a total of 117 students registered for the competition, which ASID officials considered the most difficult contest the Society has ever sponsored. Students from all over the United States were challenged to re-design the interior of an 1898 vintage building in San Francisco, including commercial and residential space.

All of the LIT winners are 1980 architecture graduates who submitted their entries as part of their interior design class studies. Jack Bullo will receive a \$1000 first place prize and David Horschig will be awarded \$500 for second place. Robert Formisano is an award of merit winner. The three students will receive their awards during the national ASID conference in August in New York City.

Leonard Else, assistant professor of architecture and director of the College's new interior architecture degree program (inaugurated only in September) was especially pleased with the "sweep."

"The fact that our students competed with others from long established schools of interior design speaks well for the quality of our program and the students enrolled in it," he commented.

MacDonald cited

Harold C. MacDonald, president of the Society of Automotive Engineers and vice president-engineering and research of Ford Motor Company, was presented with an honorary doctorate in engineering by the College at his SAE installation ceremonies in February.

MacDonald is responsible for Ford's staff activities in the area of scientific research, product research, planning and engineering, and technical planning and control.

Among his many professional and community activities, he is a "Fellow" and director of the Engineering Society of Detroit, and is extremely active in his church and several religious service organizations. He is a 1940 mechanical engineering graduate of Michigan State University and was chairman of its Alumni Association in 1968.

Goodbye BIM; Hello Management

A familiar name will be missing from the academic catalog next year. LIT's School of Business and Industrial Management has a new name: the School of Management.

Dr. Louis W. Petro, dean, says the name change was made because the academic scope of the School is broader than the old name implied.

"Besides educating students to work in the private and industrial sector, a great many graduates are also seeking employment in service and non-profit organizations like hospitals and government," he says. "The new name is more all-encompassing and more accurately accommodates the programs we offer."

The School of Management continues to offer Bachelor of Science degrees in Business Administration and Industrial Management. Course concentrations or options are available in accounting/ finance, business systems, human resources, industrial studies, manufacturing and marketing.

"Graduate management programs are under consideration for the future." Dean Petro adds. Also being explored is an undergraduate course concentration in entrepreneurship or emerging enterprises —small self-owned businesses.



Michael Mitchell, right, director of business affairs, ended his 26-year LIT career January 31. He received the College's Founders Award from Dr. Wayne Buell, chairman of the board, at a special reception. Looking on is Mike's wife, Liz.

Mitchell ends 26-year career

Twenty-six years of service culminated January 31 when Michael L. Mitchell retired as director of business affairs at Lawrence Institute of Technology.

Mitchell first joined LIT in 1953 when the College was located in Highland Park. He began his LIT career that year as controller and was named director of business affairs in 1964. He also served the College as secretary and treasurer of the LIT corporation.

"When we first moved to the new Southfield campus in 1955, we had to take chattel mortgages out on the typewriters just to make ends meet," he remembers. "I never thought that LIT would become as large as it is today, but it has been wonderful to watch it grow and prosper through the years."

A 1938 graduate of Detroit Institute of Technology where he received a B.S. in accounting, Mitchell is also a Certified Public Accountant. Before joining LIT, he worked for the accounting firm of Coopers and Lybrand. He is a member of the American Institute of C.P.A.'s, the National Association of College and University Business Officers, and the National Association of Accountants. He was presented with the LIT Founders Award for distinguished service at a special staff reception in his honor.

His retirement plans include "working in the yard," "resting," and private accounting practice.



Michel

Michel elected secretary

Dr. Richard E. Michel has been elected secretary of the LIT Corporation by the Board of Trustees.

Michel is the dean of LIT's School for Associate Studies and the chairman of the baccalaureate physics department. He is a graduate of Michigan State University where he received a B.S. and Ph.D. in physics and is replacing Michael Mitchell, the former secretary, who retired.



Hromi

M.E. head named

Dr. John D. Hromi has been named professor and chairman of mechanical engineering, Dr. Stephen R. Davis, dean of engineering has announced. The appointment is effective September 1.

Hromi, currently an associate professor at LIT, has been a member of the College's faculty since 1976. He is a graduate of the University of Detroit where he received a doctorate in engineering. He also holds a B.E.E. degree from Clemson, a B.S. degree in mathematics from Carnegie-Mellon University, and a master's degree in mathematics from the University of Pittsburgh.

Formerly a principal staff engineer at Ford Motor Company, Hromi has also worked for the U.S. Steel Corp. He is national president-elect of the American Society for Quality Control.

Faculty and staff notes

Dr. Hans J. Bajaria has been named "Man of the Year" of the Greater Detroit Section, American Society of Quality Control.

Bajaria, associate professor of mechanical engineering, is the national vice president for education for the 30,000 member organization. He was presented with the award during special ceremonies at the Engineering Society of Detroit on February 19.

Helping cement a firmer town and gown relationship, **Vita S. Buell**, wife of Board Chairman **Wayne H. Buell**, served as chairperson of Michigan Week for the City of Southfield in May. She chaired the Michigan Week Planning Committee which , coordinated such events as the City Hall dedication, a parade, a Kiwanis pancake breakfast, and a special LIT program for Southfield's senior adults.

Patrick Corcoran has accepted an appointment as an assistant professor of architecture.



A native of Ireland, Corcoran attended the National University of Ireland where he earned a bachelor of architecture degree. He has previously worked for Albert Kahn and Eero Saarinen and was most recently employed by Chrysler Corporation. While in private practice in Dublin, Corcoran was also architectural consultant in the government of Sudan.

Corcoran will be teaching architectural design in LIT's School of Architecture.

Dr. Stephen R. Davis, dean of engineering, presented remarks and chaired a session of the American Society of Metals conference on "Material Applications in Industrial Heat Recovery Systems" June 3-4 in Pittsburgh.

Barbara C. Gram, associate professor of humanities, has retired. A member of the faculty since 1968, Gram taught classes in language, literature, and linguistics. She is a graduate of Colorado State University where she received an M.A. degree and Lake Erie College where she was awarded an A.B. degree. She also attended Syracuse University and the College of William and Mary. Active in the Avon Player theatre group. Gram is also a member of the Modern Language Association, the American Association of University Professors, and the American Association of University Women. She will work as a travel agent, now on a full time basis.

Melvin L. Janney has been appointed director of business affairs for the College and elected treasurer and resident agent of the LIT Corporation by the Board of Trustees.

Janney, previously the College's assistant director of business affairs, is replacing Michael L. Mitchell who retired after 26 years of service. As director, Janney will be responsible for all of LIT's accounting, payroll, personnel, and purchasing, as well as maintaining student accounts and other related business functions. An employee of LIT since 1964, he has also worked for Snap-on Tools Corporation, Municipal Consultant Service, Paramount Engineering, and Ford Motor Company.

A graduate of Wayne State University where he received a B.S. in business administration, Janney also earned an associate's degree in commerce from Macomb County Community College. In addition, he is a Certified Purchasing Manager and is working toward a law degree.

Judith S. Milosic has been named assistant director of business affairs at Lawrence Institute of Technology.

A graduate of LIT where she received a B.S. degree in mathematics, Milosic has worked at the College since 1968. Most recently she was employed as an accountant in the LIT Office of Business Affairs. As assistant director, Milosic will be



An electrifying ride. Dr. and Mrs. Wayne H. Buell, right, took a test drive in G.M.'s Electrovette experimental electric car during the College Open House. Also "testing the vehicle's front seat" is Dr. Stephen Davis, dean of engineering. Dr. Richard E. Marburger, president, and Edward L. Pauly, of the General Motors Advance Design Center, who arranged for the car's display, look on.

responsible for aiding in the College's accounting, payroll, and personnel functions, as well as handling student accounts and other related duties.

James S. Rodgers, assistant professor of humanities, will participate in the National Endowment for the Humanities seminar, "The Functions of Discourse in Science and Literature" July 23-August 15. He will study late Eighteenth Century theories of language by scientific and literary figures.



New staffers Miller, Long, and Isaacson.

Three individuals have joined the LIT Development Office to aid the College's Capital Campaign and other fund-raising activities, **G. Robert Harrington**, vice president for development has announced.

Dr. John E. Miller has been named executive director of development.

Formerly with Peterson & Schouman, Inc., a private fund-raising consulting firm, Miller has specialized in organizational planning, management, evaluation, and resource development as a consultant and at several institutions, including Detroit Institute of Technology and Siena Heights College in Adrian. He received a B.A. degree from Goshen College in Indiana, an M.Ed. from Kent State University, and a Ph.D. from The Ohio State University.

John J. Long has been named associate director of development.

Long was also formerly with Peterson & Schouman, Inc., where he was responsible for creating and maintaining a full range of financial development systems for non-profit institutions.

A 1970 graduate of St. Joseph's College in Rensselaer, IN where he received a B.A. degree in political science, Long is a former editor and reporter with *The Ypsilanti Press* and the *Dearborn Press & Guide* newspapers.

Kari S. Isaacson has joined the staff as an associate director of development.

A graduate of the University of Oregon School of Law where she received a J.D. degree, Isaacson was also awarded a B.A. from Pacific Lutheran University in Tacoma, WA. She has previously worked for the Lutheran Social Services of Michigan as well as several law firms.

Isaacson's activities include staff support of campaign divisions, solicitation of corporations and individuals, and planning and directing direct mail and telephone campaigns. She will also be involved in coordinating the College's deferred giving programs.



A 12-hour student and staff marathon readied LIT's new Ren Cen model for Open House visitors.

An LIT 'Renaissance'

Sailboats bob along the Detroit River, families stroll across the Hart Plaza, and light sparkles off the Renaissance Center's reflective glass towers—not so unusual except that everything takes place inside studio 222 of LIT's Architecture Building.

The School of Architecture is the new home for a 16 by 36 foot model of the towering Detroit landmark, donated by the Renaissance Center Partnership. Dedicated at the College's April Open House, the model was originally built by the Partnership before the Center opened. It would cost about \$30,000 to duplicate. More than twelve feet high, the exhibit will be on permanent display in the studio, originally the College's library. Dean Karl Greimel indicates that it will serve as a catalyst for discussion, as a visual and space divider, and perhaps may even provide inspiration for students to "think big."

Students and staff labored more than 12 hours to set the display up prior to the Open House deadline. The massive model had to be sawed in three parts to fit it through the Architecture Building's doors.

Publication and news writing take awards

LIT's Public and Alumni Relations Office has been cited twice in the 1980 national competition and recognition program sponsored by the Council for Advancement and Support of Education (CASE) in Washington D.C.

Anne M. Cattermole, associate director of public and alumni relations, has won a special merit award for excellence in news writing and information.

Selected material from LIT's news bureau, which she coordinates, competed with entries from colleges and universities from across the nation. The stories often ultimately appear in the *LIT Magazine*.

Cattermole joined LIT in 1978, after serving as public relations coordinator at Macomb County Community College and as public relations director for the city council of Warren.

LIT's 1979-81 Student Handbook, edited and designed by Bruce J. Annett, Jr., director of public and alumni relations, also received a special merit award for excellence.

The award recognized the publication's editorial content, graphics, and production economy.

The award is the fourth publications award Annett has won in national competition since 1974. He joined LIT in 1976, following service with DePauw University.



Instant arches. Chuck Dobson, left, and John Van Slembrouck stand in front of their "ceremonial arch," a project they designed and built for a Basic Design III Class. The sculpture was chosen, from the class models, to be built full-scale on campus as an experiment on the effects of sculpture and design on an environment. Dobson is a junior and Van Slembrouck a freshman in architecture.

Alumni Association News

Dance honors Classes of '55, '70

Almost 200 alumni, their spouses or guests renewed old friendships by returning to campus April 19 for the Alumni Association's Annual Dinner Dance.

Honored guests were the anniversary classes of 1955 and 1970. Members of both received mementos and listened to brief but humorous recounts of their exploits from their respective program hosts, Frank Noggle ME'70 and Reed Abt, CivE'55.

A number of door prizes were awarded, including a prize to the oldest alumnus present: Wayne H. Buell, ChE'36; earliest class represented: Bruce D. Curtis, ME'41; voungest alumnus present: James Horne, IM'79, and a special tie award to alumni coming the longest distance: Benjamin D. Gralla, ME'70, of Lake Bluff, IL, and Samuel G. Muhling, ME'55, of Bartlett, IL. The event was held in conjunction with the College's Open House weekend, assuring the viewing of plenty of special events and exhibits. Angelo Torcolacci, Ar'70, was the winner of a 50/50 drawing which netted him and the Capital Campaign about \$100.00 each.

Hard working alumni volunteers who worked to make the event a big success were Henry Selewonik, IM'57, committee chairman; Frank Noggle, ME'70; Richard Darbyshire, ME'54, EE'61; Reed Abt, CivE'55; Leon Kohls, ArE'55; Marlyn Lisk, MT'69, IT'70, IM'73; and Phil Peters, ME'70.



Class of 1970. Class of '70 members attending their 10 year reunion were: Angelo Torcolacci, Howard Kuhn, Doug Parnin, Marlyn Lisk, Jim Storfer, Ben Gralla, Mike Bullion, Phil Peters, Vincent Render, and Nick Novak.

In the second row were: Steve Tertel, "Rocco" Romano, Ron Myers, Ken Pawlowski, Frank Noggle, Wally Pociask, Ken Hojnacki, Dave Sepesi, Larry Engel, and Dennis O'Connell.

Alumni Association elects 1980-82 officers; first woman director

The LIT Alumni Association has elected officers for 1980-82 and three directors to three year terms. Election results were announced at the annual business meeting of the Association June 10 at Plum Hollow Golf Club.

The new officers are Roger Avie, IM'68, president; Charles Koury, Ma'73, vice president; Nicholas Sarzynski, IM'64, treasurer; Henry Kovalsky, ME'62, recording secretary; and Robert Heintz, ME'51, EE'61, corresponding secretary. Elected directors were John Fawcett, ME'43; Dennis R. O'Connell, IM'70; and Paula Stofer, Hu'79. Paula is believed to be the first woman director of the Alumni Association since its founding in 1936.

The six directors not up for election this year are Theodore Milek, ME'51; Henry Selewonik, IM'57; Henry Tamagne, ME'51; Richard Darbyshire, ME'54, EE'61; James Storfer, IM'70; and immediate past president Marlyn Lisk, MT'69, IT'70, IM'73.

Classes of '56, '71: you're next!

Class members of the Classes of '56 and '71 will celebrate their 25th and 10th anniversary reunions at the April, 1981 Alumni Dinner Dance. A planning committee is being formed now and will hold its first meeting on October 14, 1980.

Your participation is welcomed. Please call or write Bruce Annett, director of public and alumni relations, if you'd like to help out in the planning of your reunion activities.



Class of 1955. Three 25-year anniversary class members able to return to campus for their reunion were: Leon Kohls, Reed Abt, and Sam Muhling.

Alumni Association Bylaws

Since 1976, the directors of the LIT Alumni Association have worked to update and clarify the organization's Bylaws. Amendments have been approved in accordance with Article IX, and the task was completed this spring.

Readers may wish to retain this latest copy for future reference.

ARTICLE I: NAME

Section 1. NAME — The name of this organization shall be "The Alumni Association of Lawrence Institute of Technology."

ARTICLE II: PURPOSE

Section 1. PURPOSE — The purpose of the Association shall be:

- To promote the general welfare of Lawrence Institute of Technology;
- B. To actively further the advancement of the College as an educational institution;
- C. To encourage active business and social relationships among members of the Alumni Association;
- D. To establish a mutually beneficial relationship between Lawrence Institute of Technology and its alumni;
- E. To be operated as an integral part of Lawrence Institute of Technology.

ARTICLE III: MEMBERSHIP

- Section 1. MEMBERSHIP Membership in this Association shall be of three classes; active, life and honorary:
 - A. Active Membership: To be an "active member" or a "member in good standing" an individual must meet the following requirements under these Bylaws: a) be either a graduate of the College, or have completed at least one half the hourly requirements for graduation at Lawrence Institute of Technology, provided that the original class has graduated and a contribution is made to the College or Alumni Association. Membership is effective for the next twelve (12) months from the date of the

contribution. b) The Board of Directors may, by appropriate action, grant active membership to current graduates for the ensuing period of twelve (12) months following their graduation.

- B. Life Membership: All alumni having qualified for life membership as set forth in the original Bylaws (Article III Section 1 Paragraph B) on or before June 30, 1981 qualify as an active member for life and shall enjoy all rights and privileges without termination. After this date, life memberships will not be offered.
- C. Honorary Memberships: Those persons whose work or service is deemed, by the Association, to be worthy of recognition and whose memberships have been proposed and approved by the Board of Directors or by proper action of the Active General Membership as provided by these Bylaws. Honorary Members shall not have the right to vote or to hold office. The Board of Directors may by appropriate action grant honorary membership to recipients of an honorary degree of the College.
- D. Termination of Membership: A majority vote of the Board of Directors may disqualify a member's good standing provided there is good cause.

Section 2. MEMBERSHIP RESTRICTIONS —Only Association members in good standing shall be entitled to voting privileges on any Association business requiring such action or to hold any elective office or chairmanship of any committee conducting Association business.

ARTICLE IV: FINANCE

Section 1. FINANCING

- A. Contributory Support Consistant with the Articles of Incorporation.
- B. Dues (formerly Art. IV Dues): The establishment, amount, continuance and/or waiver of any authorized entrance fees, dues, or assessments shall be determined by the Board of Directors, as hereinafter provided. The only membership classes liable for dues shall be Active and Life.
- C. Assessments: Special or extra assessments may be made only with the approval of the Board of Directors and two-thirds (2/3) majority of the voting members (Active or Life) present at a regular or special meeting.
- D. Other Sources: Consistant with the the Articles of Incorporation.
- Section 2. EXPENDITURE LIMITATION 1. The Board of Directors will exercise reasonable and prudent care in the administration of the financial affairs of the Alumni Association.
 - 2. Deficit spending or borrowing on

future income is prohibited.

ARTICLE V: OFFICERS AND DIRECTORS

- Section 1. OFFICERS The following elective officers shall comprise the Association's administrative section; President, Vice-President, Treasurer, Recording Secretary, and Corresponding Secretary, all of whom shall hold office two years, and whose duties shall be in accordance with Robert's Rules of Order. The foregoing officers shall hold office until their successors are elected and gualified.
- Section 2. DIRECTORS Elective Directors shall consist of nine (9) Board members at large and the immediate past President, ex-officio, whose term shall be two (2) years. At each annual election three (3) Board members at large shall be elected for the term of three (3) years in the place of those whose terms have expired, and any vacancies shall be filled by the election of a Board member at large for the unexpired term. All Board members shall hold office until their successors are elected and qualified.
- Section 3. BOARD OF DIRECTORS The Board shall consist of the five (5) elected administrative Officers (in Section 1) and ten (10) Directors (in Section 2).
- Section 4. ATTENDANCE Any Board member who does not attend, personally, at least two (2) Board meetings in any one year in office may be required by the Board to resign his post on the Board. The Board will then exercise its authorized power to fill the vacancy made by such resignation.
- Section 5. POWERS OF THE BOARD The Board of Directors shall manage and administer the affairs of the Association. They shall fill any vacancy in office or on the Board until the next election. All appropriation of the funds of the Association must be made or approved by the Board of Directors. The Board shall have other powers and duties as shall be prescribed by Law, the Articles of Incorporation, Bylaws, or by appropriate action of the Association.

ARTICLE VI: ELECTIONS OF OFFICERS AND DIRECTORS

Section 1. NOMINATIONS

A. Election Committee — The Board of Directors shall appoint by March 1st of each year an Elections Committee of two (2) members of the Board and two (2) members from the Association at large. By May 1st of each year or not less than five weeks prior to the Annual Business meeting, the Elections Committee shall nominate one or more eligible persons for each office, and the several terms of the Directors at Large, as these vacancies occasioned by expirations of term, death, resignation or other cause.
B. Notification — Notice of such

B. Notification — Notice of such nominations, along with ballots, together with notice of the time and place of the

Annual Business Meeting shall be mailed to the members of the Association not less then four (4) weeks prior to the annual business meeting date, at which time the new officers are to be installed. C. Other Nominations — Any member of the Association may be nominated as a candidate for officer or director by written petition signed by at least fifteen (15) members in good standing filed with the Recording Secretary not less then six (6) weeks before the date of the election.

Section 2. ELECTIONS - The names of all duly nominated candidates shall be printed alphabetically upon the official ballot prepared by the Election Committee. The ballots shall be counted by the Elections Committee at the annual business meeting with at least three (3) members from the audience appointed by the President. None of those so appointed shall be candidates or members of the Board of Directors. No one on the Elections Committee who is also a candidate shall be permitted to count the ballots. All ballots received in mail and those from the meeting must be from active members in good standing in the Association and be counted together. The results of the election are to be announced at the Annual Business Meeting.

ARTICLE VII: COMMITTEES

Section 1. GENERAL PROVISIONS — The Board of Directors shall determine the special committees of the Association which shall be constituted and shall define the powers and duties of such committees subject to the provisions of these Bylaws, and may, at any time dismiss or abolish any special committee so constituted.

Section 2. APPOINTMENT OF COMMITTEES — The President shall appoint the members of all committees and designate the chairman of each, subject to the approval of the Board of Directors. The members of all standing committees shall be appointed annually and shall continue as such members at the pleasure of the Board of Directors.

- Section 3. STANDING COMMITTEES The following committees shall constitute permanent standing committees:
 - A. Membership
 - B. Publicity
 - C. Program
 - D. Constitution and Bylaws
 - E. Election

ARTICLE VIII: MEETINGS

Section 1. MEETINGS OF MEMBERS OF THE ASSOCIATION — A. ANNUAL BUSINESS MEETING — The Annual Business Meeting of the Association shall be held during the month of June each year, at a time and place to be designated by the Board of Directors. Notice of the time and place of the Annual Meeting shall be sent by mail to each member of the Association at least two (2) weeks before the day of the Annual Meeting. All Board members are expected to attend the Annual Business Meeting.

B. GENERAL MEMBERSHIP MEETING — There shall be at least one (1) General Membership Meeting held each year, exclusive of the Annual Business Meeting.

C. SPECIAL MEETINGS — Special meetings of the Association may be called by the President or by the Board of Directors, or upon written petition to the President of at least twenty-five (25) members. Notice in writing of the time, place and purpose of such meeting shall be mailed to each member of the Association at least five (5) days prior thereto.

D. QUORUM — Twenty-five (25) members of the Association shall constitute a quorum at all meetings of the Association. Fifteen of these must be there in person and the rest may vote by proxy consistent with the procedures set forth in section 2C of this Article.

Section 2. MEETINGS OF THE BOARD OF DIRECTORS —

A. FREQUENCY — The Board of Directors shall meet at least during the months of March, June, September, and December.

B. SPECIAL - Meetings may be called at any time by any four (4) members of the Board by submitting their request to the President who will then notify the other members in writing or by phone no less than two (2) days prior to the meeting. Such notice will specify the time, place and purpose of the meeting. PROXY VOTE - Any member of the C. Board of Directors may assign his vote for a specific Board meeting to the President or a designated representative. The proxy shall be so designated by filling out a suitable form to be included with the meeting notice. The proxy must be submitted to the President or the **Recording Secretary of the Association** prior to the opening of the meeting. QUORUM - Seven (7) members shall constitute a quorum necessary for the transaction of business. Four (4) persons must be present and the rest may vote by proxy.

Section 3. ORDER OF BUSINESS — At each meeting of the Board of Directors or Annual Business Meeting of the Association members, the order of business shall be as follows:

- a) Call for proxies;
 - B) Reading of the minutes of the preceding meeting;
 - c) Treasurer's report;
- d) Reports of Officers;
- e) Reports of Committees;

- f) Old business;
- g) New business;
- h) Report of Election Committee and installation of new Directors and/or Officers (at annual business meeting only).

This order may be changed by a vote of the members present except as otherwise required by the Statutes of the State of Michigan, Constitution and Bylaws of the Association. Meetings of the Association or Board shall be governed by Robert's Rules of Order for Deliberative Assemblies.

ARTICLE IX: AMENDMENTS TO BYLAWS

Section 1. AMENDMENTS BY THE ASSOCIATION — These Bylaws may be amended by a two-thirds vote of the members present at any Association membership meeting provided the proposed amendment shall be read and on record at a Board of Directors meeting at least thirty (30) days before being brought to a vote, and also the notice of same shall have been given in the notice of the meeting.

A. VOTING AT MEETINGS: Upon the consideration of any proposed amendments, amendments thereto may be offered and voted upon at the meeting (as designated above).

B. VOTING BY MAIL: The Board of Directors may, in lieu of a vote at a meeting of the Association members, authorize a vote by mail upon any proposed amendment to the Bylaws. Such mail vote shall require for adoption at least two-third majority of the ballots received and such mail vote shall not be effective unless twenty-five (25) votes are cast.

- Section 2. AMENDMENTS BY THE BOARD OF DIRECTORS — The Board of Directors shall have the power to make, amend or repeal the Bylaws of the Alumni Association by a vote of nine (9) of the elected officers and directors at any regular or special meeting of the Board, provided that notice of intention to make, amend or repeal the Bylaws, in whole or in part, shall have been mailed to each director and officer at least ten (10) days prior to the meeting or without such notice, by a vote of all members of the Board.
- Section 3. COMPLIANCE All amendments to these Bylaws shall comply with Federal, State of Michigan laws and the Articles of Incorporation.
- Section 4. REVIEW These Bylaws shall be reviewed at least every two years by the Constitution and Bylaws Committee for the purpose of considering amendments thereto.

These bylaws are adopted and made effective April 8, 1980, and shall replace and supersede any previous bylaws.

Alumni Notes



Tiger Stadium bound. The LIT Alumni Association sponsored another of their popular sports safaris to an early May Tigers game. A full bus load of alumni, faculty, and their families parked on campus and enjoyed not having to individually fight traffic down and back.

1933-59

Ray Urban, ME'35, writes that he has retired from the U.S. Postal Service in Detroit where he was manager of the Maintenance Service Division for the metropolitan area. "I am taking it easy now and confining my work and ulcer to work in and around the house. As gasoline availability permits, my wife Clara and I check on our five grandchildren in Troy (where our twin daughters reside) and four more grandchildren in Scottsdale, AZ, where our son works and lives.

"When we drive to see Tom and his family in Scottsdale, we usually go through Albuquerque, NM, where we stop to visit my good buddy **Alfred Quigley**, ME'35, and his wife, Neola."

Nathan M. Mills, ME'36, reports that he retired from Sperry Vickers in 1975 after 39 years with the company's industrial engineering department. He also has furnished the alumni office with the address of 'lost' alumnus Allen Perry, ME'38, who retired from Sperry Vickers in 1971. Upon his retirement, Allen was serving as Sperry Vickers' Industrial sales manager in the Cincinnati area, a post he had held since 1947.

Jack V. Shy, ME'43, retires in June from Ford Motor Company after more than 33 years of service with the Ford research and engineering center in Dearborn. He resides in Dearborn Heights.

Prof. Steve M. Slaby, ME'43, of the Department of Civil Engineering at Princeton University, Princeton, NJ, has been invited to spend four weeks this summer in Vietnam. Steve's trip is under the auspices of the U.S. Committee for Scientific Cooperation with Vietnam. He will work with a team of 37 engineers and technicians to construct a solar thermal rice drying facility designed to handle 10 tons of rice daily. Steve received an alumni achievement award in 1965.

Walter T. Hartung, ME'48, suffered a heart attack in December but writes that he's recovering and returned to his position with Chrysler in power plant research. He is a design leader. Michael Yugovich, EE'49, ME'50 ended his 38-year career with Ford Motor Co. when he was honored February 22 at a special retirement dinner at Ford's World Headquarters. He has been Ford's chief electrical engineer for the past 17 years.

Hoad Engineers, Inc. has named Edwin S. Shymanski, CivE'52, to the position of manager-business development. Ed will be responsible for the business development effort of providing consulting architectural and engineering services to clients. A registered civil engineer, Ed lives with his wife, Gail, and three children in Livonia.

John K. Dixon, EE'57, who works for the Computer Science Laboratory, Naval Research Laboratory, in Washington, has published a technical paper in *IEEE Transactions on Systems, Man, and Cybernetics.* John received his M.B.A. from Wayne State University, an M.S. in physics from the University of California at Davis, and a Ph.D. from the University of California at Livermore.

Clark B. Wilson, ME'59, has been named president and chief executive officer of Campbell Chain Company, a McGraw-Edison Company based in York, PA. Clark moves to Campbell from McGraw-

Clark moves to Campbell from McGraw-Edison's Wagner Electric Corp. unit, Parsippany, NJ, where he was senior vice president, manufacturing services, since 1978.

Prior to that, he was a vice president of Onan Corp., Minneapolis, and executive vice president and general manager of the Onan Division. He was also general manager, Agricultural Tractor Division of Allis Chalmers, Milwaukee, and had served in various engineering positions at Ford Motor Co., Detroit.

1960-69

Walter Crosby, Jr., EE'60, is now president and sole owner of Rutkofske-Neal Inc. Electrical Contractors in Port Huron. The firm specializes in electrical construction for commercial, institutional, and industrial buildings, and employs 53 people.

Larry A. Williamson, ET 60, is chief engineer of Detroit Coil Co., maker of industrial grade solenoids. He's been with Detroit Coil for 17 years, and received his B.S. degree from Eastern Michigan University in 1963. A registered Professional Engineer, he lives in Farmington Hills.

Robert Formella, ME'61, has joined ITT General Controls as director of quality assurance and reliability for heating/cooling and heavy industrial product lines. He will be responsible for implementation and direction of consumer affairs, product safety, and environmental quality programs. He will also assure that performance requirements of products and services are met.

A resident of Burbank, CA, Bob earned an M.B.A. from the University of Detroit. In 1976 he was awarded the ITT Ring of Quality for outstanding personal contributions to ITT's worldwide quality assurance program.

William Hood, BT'62, is the Northville School District's administrative assistant for operations. He is responsible for transportation, operations, maintenance, building improvements, safety, personnel evaluation of the service group, and equipment needs.

James B. Ross, IM'62, has been appointed on-highway sales manager for the Universal Joint Division of Rockwell International. Jim earned his M.B.A. at Michigan State University. He and his family reside in Troy.

Vincent J. Styrma, IM'63, has been promoted to the newly created position of manager of dealer communication systems with General Motors Truck and Coach Division of GM. He will be responsible for formation of a new computer based terminal system for GMC truck dealers.

Thomas O'Connor, ArE'64, has been named associate with Smith, Hinchman, and Grylls Associates, Inc., Detroit architects, engineers, and planners.

Kenneth J. Cook, PE, EE'64, has passed his Michigan Professional Engineers examination. Ken received an alumni achievement award in 1972.

Ronald G. Hughes, CivE'64, has been named an associate in the Lansing and Kalamazoo-based architectural, engineering, planning and surveying firm of Gove Associates Inc. With Gove, his prime responsibilities will be management of the company's new service-initiative in the Northwest Michigan Regions, and new business development.

Ron is registered as a land surveyor in Michigan and as a Professional Engineer in Michigan, Wisconsin, Pennsylvania, and Ohio, and has 15 years of experience in field, design, and managerial positions, including five years as public works engineer and thoroughfare planner and designer for the City of Ann Arbor. He has also taken graduate studies in civil engineering at the University of Michigan. He lives with his wife and two children in Montague.

Neil R. Karl, PE, EE'64, has been appointed to serve on and was elected recording



Hadfield '68

Hughes '64

secretary of the City of Westland's Cable TV and Security Task Force. Neil has also started his own firm, K Systems Company, which specializes in a variety of services relating to data processing software and hardware, microfilming, patenting, copyright and technical filing, and product distribution.

David G. Gilmartin, CivE'64, was among those who were honored recently by the American Red Cross for their donations of blood for the new Pheresis Program.

The studio of Tkacz & Associates, Architects/ Interior Designers in Plymouth, has received recognition from the Michigan Historical Commission for their work in the restoration program of the Pioneer Bank in North Branch.

Stanley Tkacz, Jr., BT'65, architect, had spent over two years doing research and background work on the program development and design.

The Pioneer Bank, because of this restoration program and the return to its original styling of English Palladian Design, has been listed in the State Register of Historic Sites and Significant Points of Interest within the State of Michigan.

Dr. Robert B. Trombley, ET'65, has been appointed supervisor of the nuclear engineering group, Chrysler Defense Engineering. Robert works on the new XMI main battle tank and is responsible for nuclear hardening of all electronic systems and vehicle sub-systems. He also conducts studies on the effects of nuclear weapons on the tank, electronic systems, and its crew.

Harold Varner, ArE'65, executive vice president of Sims-Varner and Associates, has been named chairman of the board of Detroit's Inner-City Business Improvement Forum. Harold received an alumni achieve-ment award in 1971.

The Wyandotte architectural firm of Yops and Wilkie, AIA, is celebrating its 25th anniversary. John Wilkie, ArE'65, joined the firm in 1967 and in 1975 the partnership was formed between him and Jack W. Yops. The firm has completed numerous churches, schools, municipal, recreational, and commercial projects.

Charles R. Bisel, AIA, ArE'66, has been named director of construction of Providence Hospital in Southfield. He will remain a parttime instructor in the School of Architecture's evening program.

Charles resides in West Bloomfield with his wife, Leah, who is a teacher in the Livonia School system.

Robert Alan Black, AIA, Ar'66, will join the University of Georgia at Athens College of Art in September as an assistant professor in interior architecture. Presently, he is working as a weekly columnist and cartoonist for the Athens Banner-Herald, and as a creative consultant, architect, and apartment developer.

He received his M.A. in art from Wayne State, M.Ed. from Florida Atlantic University, and is currently working on his Ph.D. He is a leader with the Creative Education Foundation for their annual international conference held in Buffalo, NY, in June. He and his

family live in Athens.

James L. Hadfield, IM'68, has been named corporate controller of LOF Plastics Inc., Detroit-based subsidiary of Libbey-Owens-Ford.

Jim, who is a certified public accountant, will be responsible for coordinating the company's accounting practices and related reporting.

Before joining LOF Plastics, he was manager of corporate accounting for Ameri-can Motors. He previously was audit super-visor for Coopers & Lybrand, Detroit. He has a Master's degree in finance from Wayne Stae University

He is a member of the American Institute of Certified Public Accountants and the Michigan Association of Certified Public Accountants.

LOF Plastics produces laminated and molded plastic products and self-adhering body trim moldings for automotive markets. Libbey-Owens-Ford is a diversified industrial products manufacturer with other interests in automotive and construction glass and fluid system components.

Gerald T. Hargraves, ME'68, has taken a new position as works manager, Spring City Plant, Grade Foundries, Inc., in Waukesha, WI. He has moved to Brookfield, WI. Gerald was formerly general superintendent of manu-facturing with the Central Foundry Division of G.M.

Gary L. Ludeke, EE'68, has joined the Mitre Corporation of Bedford, MA at their Colorado Springs facility as a systems engineer. Mitre is the systems engineer for the North American Aerospace Defense Command's automatic data processing facility in Cheyenne Mountain. Gary, his wife, Sandy, and their two children live in Colorado Springs, CO.

James L. Morse, ME'69, has been appointed to the West Bloomfield Township Board of Review. James is president of Morse Sales Inc. and owner of Earl Keim Realty Bloomfield Inc. He is a licensed real estate broker, a Realtor, and has been involved in broker-age, development, sales, training marketing, merchandising and property appraisal for 11 years.

Steven C. Stanford, ME'69, of Waterford has married Constance Youren. Steve is a building planner for Oakland County Central Services in Pontiac.

Lawrence E. Zellen, ME'69, who received his Juris Doctorate 1976, has become associated with the law firm of Bennett, Gorgyca and Associates of Southfield, concentrating his efforts in counseling small businesses and civil practice.

1970-79

Many Class of '70 alumni returned reunion information questionnaires to class president Frank Noggle, ME'70, so that he could print up a booklet of responses for distribution at the April 19 alumni dinner. The responses were extensive. Here are the occupational

pursuits of the hard-working Class of 1970 members responding: Michael Bauslaugh, Ar'70, is chief engineer for Fruehauf Corporation's vans, refrigerated transport, and containers division; Michael Bullion, ME'70, is a principal design engineer with Ford; William T. Cruickshank, EE'70, is assistant chief engineer in charge of industrial control new product development for B/W Controls, Inc.; James E. Deevey, IM'70, is manager of product engineering service with Allied Chemical; William Goode, IM'70, is plant controller of the South Charleston, WV, stamping plant of Volkswagen of America, Inc.; Glenn Grace, IM'70, is a fire protection consultant with Wausau Insurance Co.; John Dziurman, Ar'70, is president of John Dziurman Associates Inc., Architects/Planners;

Benjamin D. Gralla, ME'70, is district manager, power generation service division of Westinghouse Electric Corp.; Richard E. Kiefer, EE'70, is senior electrical engineer with Armco Autometrics; Ray J. Krupa, IM'70, is manager of engineering for French and Hecht division of Kelsey Hayes; Howard C. Kuhn, ME'70 is a design

engineer for Ford; Daniel J. Kraus, EE and IM'70, is president of Engineering Systems Associates; Ken Hojnacki, ME'70, is manager-contract administration, with F. Joseph Lamb Co.; Larry E. Monigold, ME'70, is engineering manager, advanced projects, with Kysor of Cadillac; Ronald G. Myers, Ar'70, is owner of R. G. Myers and Associates; Frank Noggle, ME'70, is a project engineer with Ford; Nicholas Novak, ME'70, is a development engineer with Chrysler; Dennis R. O'Connell, IM'70, is an attorney with Michigan Consolidated Gas Co.; Kenneth E. Pawlowski, Ar'70, is vice president and assistant director of architecture for Hoyem-Basso Associates, Inc; Douglas J. Parnin, Ar'70, is a project manager and job captain with Hoyem-Basso Associates, Inc.; Phil Peters, ME'70, is a manager with the Chrysler Corp.; Walter Pociask, IM'70, is a superintendent with K and D Industrial Services; Phil Quidort, Ar'70, is a principal with Knoell/Quidort Architects; Richard A. Robertson, IM'70, is corporate treasurer of G. B. DuPorit Co., Inc.; Donald L. Roy, EE'70, is a staff engineer for IBM; Roy Rocco Romano, Ar'70, is a job captain with Sigmund Blum, architect; Frank R. Scarpelli, IM'70, is an industrial engineer with General Motors Truck and Coach; David A. Sepesi, ME'70, is a sales engineer with Timken Co. Automotive Division; Brent Smith, IM'70, is president and owner of Brent Smith Co.; Stephen J. Tertel II, Ar'70, is a project planner with the Austin Co.; and Angelo A. Torcolacci, Ar'70, is an architectural engineering coordinator for Michigan Consolidated Gas Co.

John Dziurman, Ar'70, has reorganized his architectural and planning practice into John Dziurman Associates, Inc.

In private practice since 1974, Dziurman has designed and supervised numerous projects throughout the country. His projects have earned design awards from the Engineering Society of Detroit, Michigan Society of Architects, and the Detroit Chapter of American Institute of Architects.

He was selected "Outstanding Young Engineer" in 1975 by the Engineering Society of Detroit.

David C. Geoffrey, IM'70, of Troy was appointed vice president-marketing for Stanley Door Systems, a division of the Stanley Works, located in Troy. He joined the company as product engineer in 1970, and was named marketing manager in 1976.

Alan L. Benglian, IM'71, works as an accountant for Mooney Process Equipment Company. He writes that he's been married four years and, having played two years on the LIT golf team, "I continued my golf escapade and landed a job as a part-time instructor at Farmington Country Club."

Kenneth E. Bennett, IM'71, is sales manager of the Taylor branch of Armstrong Carpet and Resilient Flooring Division. He and his wife have five children. He reports he's bowling five nights a week and currently carries a 202 average in two classic leagues.

Charles E. Marzolf, IM'71, of St. Clair Shores, has been named credit manager and sales coordinator by Dundee Cement Co. He serves the company's North Central Division at Ann Arbor and the South Central Division, headquartered in Cincinnati.

Richard Honer, IT 71, is employed as a manufacturer's representative for Management Services and Sales Inc. of Detroit, representing major casting and forging companies to the automotive industry. Rick and his family reside in West Bloomfield.

National Bank of Detroit (NBD) has announced the appointment of **James P. Pickett**, IT'71, of Howell as assistant vicepresident in its General Services Division.

A manager of the project development, Picket oversees the development of new systems and procedures for the bank's Item Check Processing and Deposit Bookkeeping operations. In his 10 years with NBD, he has worked as a project manager in the Item Check Processing group and a methods analyst and senior methods analyst in the Methods Department.

Jim is currently working toward a B.S. degree in industrial management.

The National Council of Architectural Registration has awarded a National Council certificate to architect **David Wulff**, Ar'71, a partner in the firm of Wulff-Nichols Architects in Cheboygan. His certificate indicates that he has met requirements at least as high as the most demanding state board, and is conclusive evidence of his eligibility for registration and license in every state and U.S. territory.

David, his wife, Carole, and three sons reside in Cheboygan.

Judy Miller, Ar'72, is an associate partner in TMP Associates, Bloomfield Hills architects. She was recently featured in the West Bloomfield *Eccentric* as the architectura firm's project excent

West Bloomfield *Eccentric* as the architectural firm's project manager for the Township's new fire station. She is married to **Robert Miller**, Ar'71.

News for Alumni Notes

Use the space below to send us news about you or your LIT friends. Tell us about honors, promotions, marriages, appointments and activities. Moving? Please send us your new address.

Major		Class Year	
State	Zip Code		

Check here if this is a new address

News notes:

Send to: Director of Public and Alumni Relations, Lawrence Institute of Technology, 21000 West Ten Mile Road, Southfield, Michigan 48075.





Joseph T. Ryerson and Son, Inc. has announced that **Gary J. Steigerwald**, IM'72, has been named superintendent of the firm's Chicago service center's automated bar operation. The stacker facility has 40-foot racks containing more than 33,000 tons of carbon and alloy bars. Gary, his wife, Glenda, and two daughters

reside in Naperville, IL.

Control Data Corporation has announced the appointment of **Paul Allmacher**, IM'73, as manager of fleet administration. Paul leads all elements of fleet management including the development of an employee lease car program and van pooling transportation. Paul spent the last 16 years with Chrysler Corp., most recently as national accounts manager in fleet sales.

Lawson Gist, Jr., IM'73, is a corporate manager with Fram Corp. in Providence, RI. The Sharon, MA, resident has been listed in Who's Who in the East. He earned his M.B.A. from the University of Detroit in 1975.

Chuck Koury, Ma'73, vice president of the LIT Alumni Association, was selected as management member of the month for the Chrysler Management Club. He was recognized for his outstanding leadership in the club, including signing up 45 new members.

Chuck is well-known to Alumni Association members as the perennial, jovial, co-host (along with Nick Sarzynski, IM'64) of the Association's bus safaris to Detroit football, baseball, and hockey games.

Thomas P. Rowe, IM 73, is a sales repre-sentative for the Miles Fox Office Products Company in Warren. He resides in Warren with his wife and daughter.

Kenneth W. Sucher, Ma'73, is director of research for World Computer, Inc. He lives in Lake Orion.

John Weber, Jr., ME'73, has been promoted to corporate staff analyst for General Motor's worldwide product planning staff. His new responsibilities include planning and analysis for GM's worldwide manufacturing facilities specifically with regard to assembly operations. John received his M.S. in management from Oakland University in 1978. He lives in Sterling Heights.

Edward E. Bisson, PE, ME'74, has been promoted to associate for Hoyem-Basso Associates, Inc., an engineering-architectural firm located in Bloomfield Hills. He has recently completed the requirements for regis-tration as a Professional Engineer in the State of Michigan.

Ronald A. Florkowski, IM'74, has joined the Carmet Materials Division in Madison Heights as regional sales manager. Carmet is an Allegheny Ludlum Industries company and manufacturers of tungsten carbide cutting

tools, wear parts, dyes, and mining tools. He was formerly with Teledyne Firth Sterling as a sales engineer.

Steve D. Nowotarski, Ar 74, has been named president of A.I., Inc. He is an active member of the Legislative Action Program and president of the American Association of Free Enterprise. Steve lives in Novi.

James R. Wangler, IM'74, is sales manager for Dravo Mechling in Pittsburgh, formerly Union Mechling Corp. He and his wife, Nancy, have a new son, Matthew John.

Michael W. Yoos, ME 74, has been promoted to supervisor of the engine design detail unit of Ford Motor Company. He has been with Ford since 1967, advancing through a number of engineering positions including fastener engineering, value engineering, the fuels and lubricants section, and all of powertrain and chassis engineering.

Christopher Eseman, Ar'75, BAr'76, has received an international award for an architectural design for the City of Melbourne, Australia.

Chris is a practicing architect in Seattle, WA. As part of a team of five, he submitted a winning entry in the Landmark Ideas Competition sponsored by the Australian city.

The aim of the competition was to discover Melbourne's riverfront. Out of 2.300 entries, Eseman's was one of 48 first place prize winners selected by a panel of nine judges.

The competition was generated by Melbourne's long standing rivalry with the city of Sydney and the famed Sydney Opera House.

Eseman's team proposed building an 'urban scaled kinetic sculpture" in conjunction with a "multi-use center.

Self-supporting multi-colored banners serve as a horizontal landmark, pointing the way to the proposed center. The center itself consists of a three-dimensional grid into which 'activity modules" and structural components can be inserted.

Mahmood Shafi Nia, EE'75, has begun a program leading to a J.D. (Juris Doctor) degree at Western State University College of Law, Fullerton, CA.

Jill Werschin, BA'75, was promoted to Navy Lieutenant in November. She's also become the bride of Lt. Richard Jones, whom she met when both were stationed in Guantanamo Bay, Cuba. Both are now stationed in Guam.

Jill's mother wonders in a note to us whether mail should be addressed to them. 'Lt. and Lt. Richard Jones," or, since the Navy requires that her records be in her maiden name, "Lt. Richard Jones and Lt. Jill Werschin.

Inflexible bunch, those sailors.

Richard L. Evans, Ar'76, BAr'77, became a Michigan registered architect in February. He is employed at Mayotte, Crouse, and D'Haene Architects, Inc., and resides in East Lansing.

Stanley Vemco, Detroit-based manufacturer of garage door openers, has announced the promotion of Ronald W. Smith, BA'77, to manager, sales administration for the Division. Ron has been with Stanley for ten years, during which he has held various positions in manufacturing, production scheduling, sales and marketing. His promo-tion encompasses responsibility for the Division's installing dealer and retail order departments as well as administration of parts and service operations.

Kathleen E. McNally, Ma'78, was awarded an M.S. in computer information and control engineering by the University of Michigan in Ann Arbor in December 1979.

Patricia A. Lewis, MT'79, division project engineer - on/off highway for Detroit Diesel Allison div. of GM was cited in the March 1980 issue of Wards Auto World. She was pictured in a sidebar feature called "Young Women on the Way Up," which was part of a story entitled "The Rising Role of Women Engineers.

Richard P. Theobald, Ar'79, has been appointed an account manager in the Detroit Branch of Symons Corp. of Des Plaines, IL. The company designs and manufactures concrete forming systems and accessories. Richard, who has worked for the corporation since 1977, will be responsible for the sales and service of company products.

David Thome, ET'79, married Sue Mayville in October. He is a field engineer for Storage Technology Corp. and resides with his wife in Walled Lake.

In memoriam

Earl E. Daniel, Cert.'34, of St. Clair Shores, March 24, 1978, Member of Phi Kappa Upsilon fraternity. Survived by his wife, Evolution and three scenes Evelyn, and three sons.

Morris Musser, ME'37, of South Lyon, March 16, 1978.

Donald W. Neal, ME'38, of Cedarville, MI March 2, 1978.

Ralph O. Parker, EE'41, of Granada Hills, CA, July 26, 1979. Survived by his wife and daughter.

Donald A. Roesch, ME'49, of Indian Harbor Beach, FL, October 17, 1979. Survived by his wife, Lucille.

Milton G. Harris, EE'52, of Oceanside, CA, June 13, 1979. Survived by his wife, Edna.

Robert B. Eckel, IE'53, of Farmington. He is survived by his wife, Hilda, and children, including **James B. Eckel**, EE'79.

Clayton H. White, ME'53, IM'64, of Mt. Clemens.

Eugene L. Nething, CivE'54, of Detroit. April 3, 1980. Survived by his wife, Ellen.

Bernard J. Champine, MT'55, of Detroit.

James M. Hare, Hon. Hum. D. 56, of Venice, FL. Mr. Hare served seven consecutive terms as Michigan's Secretary of State. He retired from public service in 1970. He is survived by two sons and a daughter.

Robert J. Thiefels, ArE'59, of Grand Blanc.

John E. Walters, EE 64, of Hanover Park, IL. He is survived by his wife, Christine, and three daughters.



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ADDRESS CORRECTION REQUESTED

A second degree for a first-class lady

It was 27 years ago that Maria Aniela Wegrzecki received her master's degree in economics from the University of Warsaw. On June 1, however, she received something which she probably treasured far more — a bachelor's degree in business administration from LIT.

Maria came to Canada in 1959, just for four months to visit her sister who had emigrated some years before. Maria was a highly placed official in a state controlled corporation working in the area of financial planning. Marriage was probably the furthest thing from her mind.

"In my country," she states, "it was important first for a woman to have a career. Marriage was also important, but our families wanted us to be independent, to choose a career and get an education. I couldn't believe the attitude of the American women to marry and then leave work, this was all they wanted from life. They seemed to have no imagination about what could happen if sickness or hard times came to the family and the husband could no longer work."

What Maria didn't anticipate, herself, was that a visit to Detroit to let her friend's brother know about his family would bring this problem even closer to home. Lester Wegrzecki proposed to Maria on their second date and shortly she found herself in a new country, with a husband who was



A beaming Maria Wegrzecki, BA'80, gets a congratulatory peck from her husband, Lester.

unemployed and — worst of all — a degree which no one would recognize. "I was embarrassed because it was as if my degree had been erased from my life and so many of my cousins and other family members were highly educated people. I couldn't find a job in my field and so I became a cafeteria worker at Hudson's until something else opened up," Maria reminisced.

Finally, Lester and Maria found work, but for Maria it was still far below her capabilities — in an accounting office doing elementary mathematics. She began to think, once again, about her lost degree.

"I took some of Lester's second paycheck," she remembers, "and enrolled in some courses at Walsh Institute but they wouldn't give me any credit for my master's so I didn't continue." She also was beginning to advance in her company, though, finally being named assistant to the president of finance, and it looked as if her degree might be forgotten. But, in 1978, the company closed and while looking for work, Maria realized that it was time to seriously do something about the "lost prestige."

So, she visited LIT on the advice of a young friend who eventually attended with her. Frank de Hesselle, the College's director of international student affairs, carefully checked her records and granted her two years worth of credits and Maria was on her way.

"At first I was a little worried about the classes," she notes. "Would the students accept me? But, it was as if I were not different at all. The homework was hard because of my English, but slowly I learned a great deal about the language and the American systems."

She became the assistant controller at Alsar Aluminum shortly after, and became active in Polish cultural organizations, sharing with Americans her own heritage, even while studying theirs.

She attended classes each night after working all day. Lester helped out at home and himself took an English class to learn the language better. And — as time flew by, Maria began to realize, once again, the value of education.

On June 1, Maria earned her bachelor's degree in business administration with a major in accounting. Those who attended the ceremony, remember the pride in her walk and on her face as she came forward for her diploma. For Maria, the pride was deeper. It encompassed twenty years of working and moving forward to the moment when her dream could be fulfilled.