

*Night time at the Dow*

## The Dow Building

by Doug Smith

Among the many new faces that will descend on the campus this fall is the recently completed Dow Building located on North Campus next to the G. G. Brown Laboratory. The Dow Building, which will house Materials and Metallurgical Engineering and Chemical Engineering, is an integral part of the College of Engineering's eventual move onto North Campus.

### A Bit of History

The roots of the Dow Building span three decades when several laboratory facilities were constructed on North Campus, beginning in the 1950's.

In the early 1970's a plan was developed

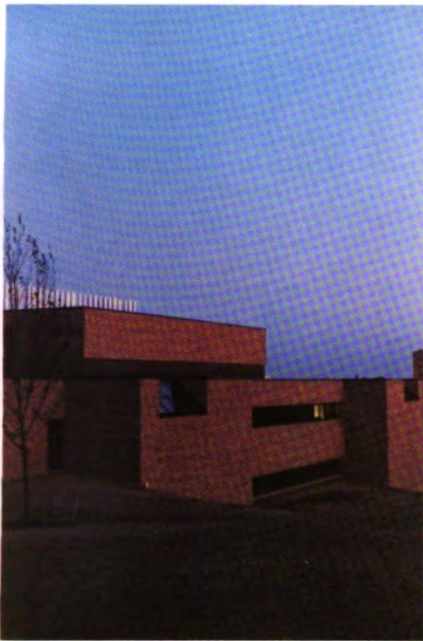
for building an "Engineering Complex" on North Campus, and in the mid-1970's an outline was completed by Swanson & Associates in which a series of four buildings would be constructed to augment the existing laboratories. In this plan the largest of these four buildings, Engineering Building I, would house Mechanical Engineering and Applied Mechanics, Civil Engineering, Industrial and Operations Engineering, Humanities, the Instructional Television System, and the College Administration. Engineering Building II, which has since become the Dow Building would contain Chemical Engineering and Materials and Metallurgical Engineering. Engineering

Building III would be for ECE, CICE and Nuclear Engineering and Engineering Building IV for Naval Architecture and Marine Engineering.

In 1977 the State Legislature formally accepted this plan and passed a resolution which essentially committed the State to funding 60% of the entire project with the University making up the remainder.

The College went on a nationwide campaign to raise \$21 million of which approximately \$10-12 million would be used as the University's contribution of 40%.

Around the time the College had finished raising these funds the State came back and said that due to the worsening economic



The finished product---

conditions, they could no longer meet their commitment to fund the "Engineering Complex". This left the College to decide what to do with the money that had been collected—money that was quickly being gobbled up by inflation. They decided to begin construction on Engineering Building II but with one major revision.

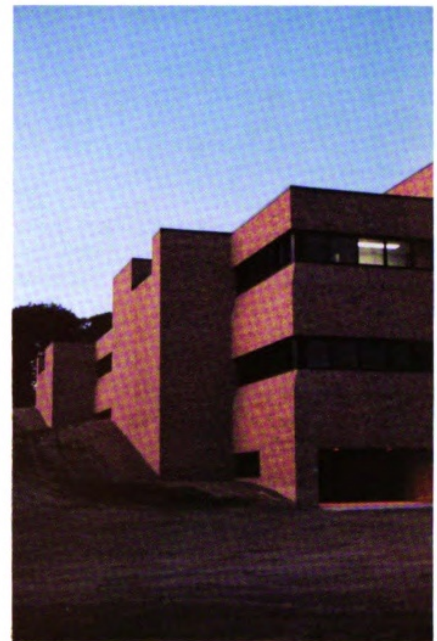
College administrators knew that they would eventually need larger facilities and a study was done by the University which showed that expanding the basement would be the most cost effective way to create the necessary space.

The Dow Building, nee Engineering Building II, was completed in July and will "come on line" this fall. Construction was funded entirely by private funds with the Dow family being the major contributor.

#### A Guided Tour

The first floor basement will be used exclusively as an instructional area and a great deal of attention has been paid to creating a facility that will be adaptable to the Col-

continued on top of next page



---of a well-designed research facility.

## A TOUR OF THE DOW

by Nagihcim Cinhcet

Last April our roving Super Snoop and spy Nagihcim Cinhcet took the liberty to inspect the newest building on campus the Dow Building. The Michigan Technic doesn't approve of Nagihmic Cinhcet investigative techniques, but his reporting is good enough to warrant some readers. Here is his story.

It was a rainy Thursday night. I took a bus from Central Campus up to North Campus to see some Aerospace movies. A Bursley-Baits bus was the first one by so I got off at the Commons. It was raining, but it was such a warm night that I decided to walk. On passing the Dow building, the newest building on North Campus, I looked at my watch and noticed I was 20 minutes early. Just enough time for a quick look-see. This is what I saw.

I was surprised that the doors were unlocked but they were. I walked into a small entrance room. Ahead of me was more doors leading into the building and to the right was a stair case. The room was like the one in East Engineering, but bigger. This I figure, will flood every winter when the snows come, just like the one in East Engineering.

What a better place to start than the first floor. It being dark outside I knew I

couldn't turn on any lights besides the ones already on that were scattered throughout the building. I turned down the first hall and saw small rooms in the hall perpendicular to the one at the exit. Down this hall I walked looking in every door. A bathroom here, a janitor's closet there. I walked in one room and turned on the light and there it was, what every student detests: a big lecture hall. There was a thermostat on the wall. It was set at 68 degrees. The hall was all cement. It doesn't look bad really. It looks something like an outdoor Greek Theatre. I can picture people sitting on the cement teared rows. The room wasn't as big as 1210 Chem, but it will hold more people than the ones who want to be there.

I entered another door into a huge room. This must be where they are going to put all those machines in East Engineering. The walls weren't painted and the poles were bare. I walked through the big opening wondering how they are going to get the machines in here. At the other end was one of the staircases at the four corners of the Dow Building. At the top of these stairways was a skylight. It will enable the engineer to actually get some sunlight. It is a revolutionary idea, I think. The second and third floors have four hallways making a square. On the inside of the hall you can tell Dow Chemical donated it. Each room has Chemical Engineering equipment in it. The Chemical Engineer is going to spend a lot of time in this building. It will be home. On

the outside was the ever present offices. The offices are as big as offices go, but too small for my liking. The corner office, from which you can see the Chrysler Center is my kind of office, with two other offices, one to each side. This could be well used.

On down the hall I discovered a room with a spiral staircase that goes up to the third floor. I believe this is just an ornament.

Across the hall is a classroom. A typical classroom with a typical flaw. The flaw I can't believe still exists in classroom's across the country (college wide that is.) The flaw is that it has a blackboard spanning the whole of two walls. Two walls I said. When will people learn. I will be surprised if one of the walls of the blackboard will ever be used. I feel it safe to say that 95% of T.A.'s and Professors don't use two walls in one lecture or discussion. Why people still build classrooms with two walls of blackboard I'll never know?

At the other end of the hallway from the office I like was another office similar to it. I still feel my first choice was best, but this will do in a jam. Down the next hallway were more small offices, and across from them was more of Chemical Engineering heaven.

The third floor looks much like the second but without the neat offices.

And so goes a tour of the Dow.

lege's future needs. The finished portion of the basement is devoted entirely to classrooms and features an auditorium designed to seat approximately 165 people plus several other large classrooms. They are all well-done, attractive and will help ease the current overcrowding.

The College has some particularly exciting plans for the expanded, as of now unfinished, section of the basement. (At press time, they are tentative.) It has been designed to accept a mezzanine level which means there will be a second story covering one-half to two-thirds of this portion of the first floor. Part of this area will be used for

standard classrooms. It will also house the Instructional Television System and the new freshman computer course which will utilize IBM personal computers exclusively.

The second and third floors contain faculty offices, some staff and graduate student offices, and research and teaching laboratories. One of these labs is being equipped with a spectrometer and an impressive array of laser spectroscopy devices. Another lab has been outfitted with some interesting bioengineering equipment.

The second floor is primarily for Materials & Metallurgy and the third floor will be used almost solely by Chemical Engineering.

#### Future

As mentioned earlier, the goal is to have the College of Engineering based on North Campus and the Dow Building is a major part of this. As we go to press there is a proposal before the State Legislature to appropriate funds for the construction of Engineering Building I, and plans are being made to move the remaining departments to North Campus. Projections are for the entire move to be completed in five years. It will be exciting to watch the College of Engineering prepare to meet the challenges of the future.

*Doug Smith is majoring in electrical engineering. He enjoys reading, swimming and sailing.*

## WHO ARE THE CLASS OF 1986?

by Nadine-Marie Pokorski

Every university, from the days of Aristotle and Socrates to the present, have always boasted of their brilliant students in order to give them a better edge over competitive institutions. This situation still exists today as students, faculty and concerned others question the truth of these statements. The most popular reason to find the truth of the matter is that in order to be admitted into any particular institution one must exhibit worthiness through mostly scholastic abilities. Some of the most common questions asked today concern high school class rank and test scores for entering students. University of Michigan students, particularly in engineering and sciences all seem to have been in the top of their high school class with exceptional test scores. But how true are these generalizations and exactly what did it take for us to be admitted in to this particular institution.

The first idea that came to mind was

writing a letter to the Dean of Engineering asking for the statistics of this year's entering freshmen. When then referred to Dean Quackenbush, the Assistant Dean of Engineering, in regards to the issue at hand, he explained that the data for the class of 1985 would not be available until the end of September. The Assistant Dean then proceeded by saying, "The class of 1986 are, for all practical purposes, about the same as the class of 1985."

The last referral lead us to the Admissions Office and Mr. R. Selser, who examines each class of entering freshmen. His "profile" of the freshmen of 1980 and 1981 revealed mostly similarities in class ranks and test scores therefore upholding Dean Quackenbush's statement that this year's entering freshmen would appear similar.

These profiles show that Michigan is indeed very selective when considering freshman applications. This is especially true for instate students as shown in Figure 1. Outstate students ranked somewhat lower in

class rank than did instate students. The same was also true for the Freshman entering in 1980 as shown in Figure 2. But overall this does also show that for both years the majority of freshmen were in the top 10% of their class or better.

When examining College Board Scholastic Aptitude Test Scores it seems that the lower high school class rank of outstate students is compensated for by higher test scores in both 1980 and 1981 freshmen classes. It is also interesting to note that for engineers the median mathematics scores are more than 100 points higher than the median verbal scores, except for those of instate students where the median is only 10 points higher.

Overall it is plain to see that the University of Michigan Engineering students admitted as freshmen are of extremely high scholastic quality and standing. This year's freshmen will also be a part of that great tradition and hopes for a fine and future are with them also.

### ENROLLED FRESHMEN FALL 1981

High School Class Standing	All Students	Instate Students	Outstate Students
Top 1%	22.4%	23.1%	20.8%
Top 5%	53.4%	54.7%	49.5%
Top 10%	77.3%	79.5%	71.2%
Second 10%	18.2%	16.9%	21.7%
Third 10%	2.7%	2.0%	4.7%
Fourth 10%	1.1%	1.2%	0.9%
Bottom 60%	0.6%	0.3%	1.4%

**Figure 1.** The above table shows that for the Freshmen of 1981 outstate students ranked a small amount lower than instate students.