Caban Spectroscopy Laboratory Demonstrated By Geology Dept.

The Geology Department plans to reopen an open room 24-231, for informal conferences with parents. This room will also be the starting point for tours through the Caban Spectroscopy Laboratory in Room 24-018. A demonstration of the use of spectroscopy in modern geology will be in progress throughout the afternoon. The program will endeavor to show the application of new techniques to the science of geology.

The Massachusetts Audubon Society says many birds have a poor sense of smell. The horned owl’s favorite dinner is skunk. The Mathematics Department says many birds have a poor sense of smell. The horned owl’s favorite dinner is skunk.

Famous MIT Auditorium

'Clouds Diffuse Sound
Kresge Dome 'Breathes' With Weather

The most unusual feature of MIT’s Kresge Auditorium is its ceiling, or shell—a curved slab of concrete, triangular in shape. If you should eat a three-cornered piece from an orange, representing one-eighth of the total surface, it would have the proportions and shape of the dome.

The dome is not structurally joined to the rest of the building. The top of interior walls are separated from the dome by as much as four inches, the space being filled by rubber gaskets. Steel window frames are joined to the dome by metal slip joints which permit slight movement between them.

This movement is necessary because there are varying rates of expansion in the different parts of the dome, depending on the weather and position of the sun. The dome "breathes.

The concrete shell is only 1 ¼ inches thick—slimmer in proportion to its area than the shell of an egg, four inches thick.

The auditorium seats 3,500 people. Backs of the seats, in three shades of green, two of blue and one of orchid, give an unusual chromatic effect.

The huge stage has room for 200 musicians. At the left is a choir loft with space for 75 singers. At the right is an organ loft, which houses the Goldkamp organ given by former governor Alvan T. Fuller. The organ was designed especially to suit the size, shape, and acoustical properties of the building.

Since the dome ceiling would tend to focus sound on the parts of the auditorium, various acoustical devices were employed so that every member of the audience might hear well. Most important of these devices are "clouds," rectangular baffles suspended from the dome to diffuse sound.

Excessive testing of acoustics has been conducted. The layman’s cliché, "you can hear a pin drop," actually applies. A pin dropped at any point on the stage can be heard throughout the auditorium—providing the audience is quiet enough.

The auditorium also serves to move ventilating, lighting and sound control equipment without any noticeable light or noise from the center of the domes can be reached by a catswalk above it.

Although speeches and concerts occasionally will not be quite amplified, there are loudspeakers in the ceiling above the stage. "The domes" is a "woofer" for high and low frequency sounds and can be used for radio, recorded music and sound motion pictures.

Built For TV

At the rear of the auditorium is a carefully engineered, fixed-projection booth, with lighting and sound controls and a motion picture projector. There is a sound-proof booth for an announcer and there are two optical glass plates for television cameras.

The needs of television were carefully taken into consideration in the planning, and the auditorium is one of the few buildings today with an abundance of "built-in" television facilities. As many as six TV cameras can be used at one time for the recording of a performance.

There is television wiring within the walls of the auditorium, which will enable camera to be “plugged-in" at various points. Television control trucks from other stations can be parked at the rear of the auditorium, with plug-ins connections with cameras inside.

Below the main auditorium is a small theater, seating 214, for chamber music, conferences and intimate dramatic productions. It also has facilities for television broadcasting.

There are two large rehearsal rooms in the basement for band and orchestra, both designed to meet high acoustical standards. They can also be used for radio and television studio.

Hidden below the ground floor level of the hall and orchestra, both designed to meet high acoustical standards. They can also be used for radio and television studio.

Construction of the auditorium was made possible by a gift of $1,500,000 from the Kresge Foundation, which was built shortly before the Auditorium.

The chief architect was the late Eero Saarinen.

Parents’ Weekend

X-Rays, Closed Circuit TV

On Saturday, at 2:00 p.m., the Department of Metallurgy will begin its program for Parents’ Weekend with a brief meeting in Room 8-308. Following this, there will be a closed circuit television demonstration in which a few members of the Senior Class will describe the metallic phase transformation, as seen through microscopes.

MITRE is located in pleasant suburban Boston.

Write in confidence to Vice President—Technical Operations, The MITRE Corporation, Box 208, Dept. MIT, Bedford, Mass.

In confidence to Vice President—Technical Operations, The MITRE Corporation, Box 208, Dept. MIT, Bedford, Mass.

This Coupon Is Worth 50c Towards Any Dinner Over $1.75

GOOD TILL JUNE 30, 1962

THE TECH WEDNESDAY, APRIL 25, 1962