

# HOLOGRAPHY:

## *Art/Science of the Future*

by Natalie Block

A little out of the way but well worth the trip is one of Chicago's little-known treasures, the Fine Arts Research & Holographic Center at 1134 West Washington Blvd.

A combination museum, school, and research center, this unique facility is the world's only complete institution dedicated to holography both as an art form and as an emerging technology.

A visit to the Center opens up a world of beautiful, almost magical visions in "you have to see it to believe it" displays. On view are examples of "holograms" — three-dimensional recordings of images made possible through the use of laser beams — created by artists from all parts of the United States, as well as Sweden, Canada, England, and the Soviet Union.

Delighting the eye, the holograms are wonderful, glowing images created from light patterns that exactly reproduce their subjects: a human face, an art object, an architectural model, to name a few. And for those who know little or nothing about the emerging technology of holography, there are displays explaining how holograms are created as well as some examples of the kinds of commercial/scientific applications the technology has to offer. The building that houses the museum and research center is equally fascinating — if unexpected on West Washington Blvd.

"Many people ask us why we're in this rather out-of-the-way location," notes the Center's Executive Director Loren Billings. "But we're not here by accident. Actually, we feel we were very lucky to find the building when we were looking for space in 1974. It seemed as though it was made for our purposes."

The structure was built in the beginning of this century for a publishing company. The floors were reinforced with layers of a rubberized material to absorb vibration from their heavy equipment.

"This resistance to vibration is very important to us because the slightest bit of movement can alter the creation of a hologram," explained Billings. "The fact that we're not on a busy, heavily travelled street also cuts down on vibrations and noise."

Besides its quiet location and construction, the building is elegantly equipped with oak panelling and moldings that provide a beautiful background for the museum's displays. Throughout the facility, there is evidence of meticulous care and maintenance, reflecting the devotion to both aesthetics and science.

Included in this impressive institution are 15,000 square feet of space for exhibitions and public lectures; classroom

and reception areas, and fully-equipped labs for study, research, and experimentation.

The Center's School of Holography is guided by nationally and internationally recognized pioneers in the field. Classes are open to high-school graduates, and many teaching institutions, such as the University of Illinois, Chicago Circle, and the City College system, recognize grades received at the school in their own degree programs. The Art Institute of Chicago also permits students to attend the School of Holography on a for-credit basis.

Besides learning the basics of holography, students are involved in exciting research and are taught how to create their own holographic workshops. (Although special equipment is necessary — including a small laser — a holographic workshop can be set up for under \$500.) Still, according to Billings, holography is such a new and emerging field, there are only about 20 holographers working in the Chicago area at this time.

Although the pioneers of holography are few in number, their enthusiasm is unmatched. "Once you've been bitten by the holography bug," Billings admits, "it's difficult to do anything else. We see the potential of holography as comparable to the revolutionary effects photography and computers have had on our lives. And if you're just a little bit visionary, you can foresee this new technology as part of space travel, as the medium for portraiture, in theatre and other arts, medicine and much more. Its potential is limitless in literally every field of human endeavor."

For your introductory visit, the Museum is open Tuesday through Sunday, 12:30 to 5:00 p.m. There's a \$1.00 admission charge plus optional assisted tours at a small additional fee. Groups are welcome.

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Note: Holography in its simplest terms is the technique used to create three-dimensional images of objects. A concept that is barely 30 years old, its potential as a practical reality did not begin until the development of a workable laser in the early 1960s.

Specifically, a "hologram" is the word for both the plate and the image the plate produces. It is actually a recording on a light-sensitive medium of the light reflected from an object illuminated with a laser, forming in complete and full dimension an image of that original object.

Holographic images have no fixed perspective, appearing differently when viewed from different positions. They are light patterns appearing exactly as a human eye would see them.