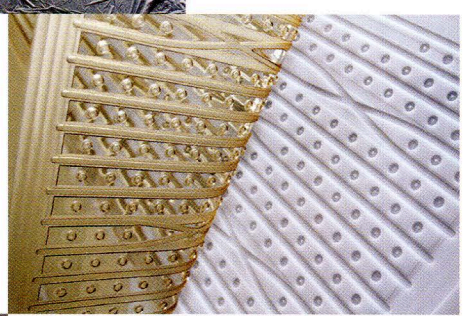
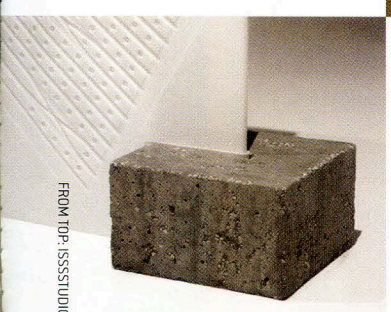
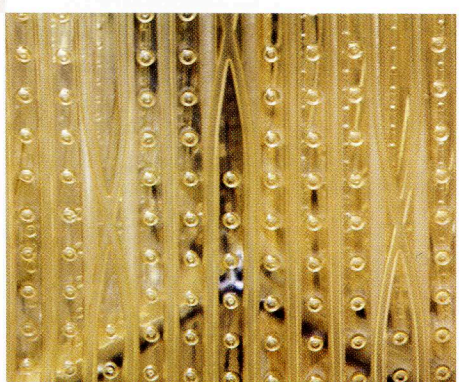
From top: *To create the sculpture in "Protoplastic" at the Tops Gallery in Memphis, Issstudio poured bioplastic into six digitally etched acrylic forms. It was peeled away when cured. Supported by custom-cast concrete bases, the formwork became a part of the exhibition. Different degrees of relief, from 1/16 to 1/4 inch, tested bioplastic's structural limits.*

molding opinions

At a Memphis gallery, Igor Siddiqui makes a case for bioplastic







A passion for plastics drives architect Igor Siddiqui. "I love the aesthetic effects that you can get from synthetic materials. They have infinite capabilities and a mesmerizing glow when lit certain ways," he says. Eager to develop a more sustainable alternative to petroleum-based polymers, his Issstudio started experimenting with bioplastics, which are made with biodegradable, nontoxic matter such as algae and vegetable glycerin.

Siddiqui showcased his research with an exhibition at the Tops Gallery in Memphis. "Protoplastic" was anchored by a single sculpture. He made it with the help of six acrylic forms etched with computer-generated geometric patterns at different reliefs to experiment with the bioplastic's texture and density. When cured, lengths of the material were peeled away and tied to a concealed steel armature to create a treelike three-armed shape suspended from the ceiling. Around this centerpiece, he then placed the empty formwork, held vertical by slotted bases. The two types of plastic, thus contrasted, challenged our perception of their intrinsic values. We might be visually drawn to the crispness of the acrylic forms or perhaps favor the organic looseness of the bioplastic.

The exhibition also spoke to the interdependence of architecture and industrial design. "We think of buildings as a container for products, like a room full of furniture," he says. "But products, from structural materials to finishing accents, also come together to make buildings." To expand on that idea, "Protoplastic" was site-specific to the Tops Gallery, a former coal storeroom in the basement of a printing plant. Visitors have to walk past massive presses and welding equipment to get to the gallery's unusual entrance, a hole blasted through a wall. Inside, the rough concrete walls and the smooth white epoxy floor gave him cues for his installation: The slotted bases are concrete, the acrylic forms white.

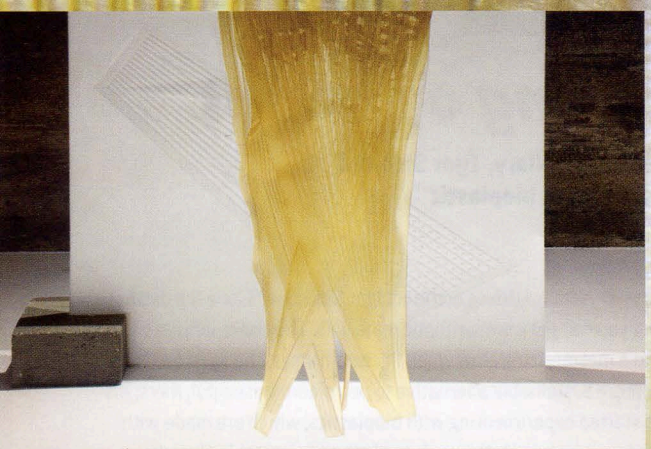
He hopes that "Protoplastic" educated the Memphis public about the possibilities of a sustainable material. Before it ultimately decomposes.

—Stirling Kelso

THROUGHOUT ACRYLITE: FORMWORK MATERIAL. **CLOUD CONCERN:** METALWORK.

FROM TOP: ISSSSTUDIO; COURTESY OF ISSSSTUDIO (2); MATT DUCKLO (2)

UNFOLD



centerfold

From left: *Tied to steel cables bolted to the ceiling, the sculpture descended 7 feet. It comprised 21 separately cast segments tied to a steel armature. The site-specific installation played against the former coal storeroom's concrete walls and epoxy floor.*

MATT BUCKLO

MATT DUCKLO