

ARTIST AT WORK. Roger Haugwitz demonstrates some of his test-tube artistry at his home workshop. Here he dabs chemicals on canvas for his latest project.

Chemography: a startling blend of art and science

In 1969 there was an exclusive gallery showing of lithographs on New York's eastside. The selections? Maillol, Chagall, Miro, Appel. But among the famous was included the work of an unknown. These canvases were different. Unbounded by confining lines, the colors seemed to leap off each framed surface in an explosion of earth, rain, fire.

Art or science? Kitsch or craft?

It is chemography, a phenomenon of organic and inorganic pigments made possible by chemical reactions on paper - technology as an art form.

Its creator is Roger Haugwitz, an organic chemist who pedals his 10-speed bike (and sometimes jogs) the 12 miles to his Squibb lab, and is a reader of oriental philosophies, admirer of Gandhi, gardener and artist who has captured the elusive, expressive capabilities of chemography, a mutable medium on canvas.

Aesthetic possibilities of chelated metals? Of course. Art is linear, he explains. It can't be categorized neatly.

"The lab is the arena for displaying the imagination and artistry of the chemist," he affirms.

Interestingly, the artist is not the catalyst in this tour de force, but the ingredients themselves! They produce the endless profusions of designs.

Some designs are simply the result of bringing together certain pigments so they react with each other. Others result from applying pigment in a certain way. And still others are obtained by variations in temperature and humidity.

It intrigued Haugwitz enough to first see and then seek the esoteric in a test tube a decade ago.

Haugwitz says he is inspired by whimsy, an impulsive response to a movie or a book, or the strokes of light cast on

the wall by a lamp.

The results are as diverse and as intriguing as nature itself: a centipede that resembles the bends of a river, then the branches of a tree. A cosmos shot with cobalt. Amber slivers, translucent, shell-thin. Landscapes, gritgray, pumice-porous. Bursting, swirling, rippling, dancing in both paroxysm and puddle.

The 45-year-old chemist pursues his art at his home, a 100-year-old structure sandwiched between a tributary to the Raritan canal and Delaware River.

Two tables dominate his work room, their surfaces cluttered with the tools of his trade. Capped bottles of zinc, cadmium, copper salts, pyridine derivatives, acrylic sprays. Heat gun, air gun, spray gun, swivel-bladed knife, brillo pad, spatula and brush.

Haugwitz selects a bottle and pours chartreuse liquid onto the paper. He pours another, rubs tentatively and waits. A coppery flower flushes across the page, its feathery petals seeping into the paper's surface. First a blossom. Then a sunburst. Or is it a mandala?

The room is lined with chemographs. Layered upon tables. Against the walls and windows. One canvas is different. It stands out. It is a vase of flowers.

When painting a picture, he said, you paint it and it is completed. With chemography, however, you search for the essence. That search begins again with attempt.