MIDDLETOWN, N. Y.
TIMES HERALD RECORD
D. 46,349 SUN. 41,720

FEB 29 1976

College institute geared to area industries

By ROBERT RIEMANN
Staff Writer

POUGHKEEPSIE — Marist College here begins on the beautiful Hudson River. And keeping that river and others like it clean may provide additional income for the school.

The idea behind the project is that science professors can help area municipalities and industries comply with the new federal and state water quality standards.

Dr. Robert E. Rehwoldt, who has a PhD degree in analytical inorganic chemistry, heads the program. In a recent interview in his office at the school, he explained the idea.

"Whenever an industry discharges into a stream they have to have a permit," he said. "And any municipality that uses federal funds to build or enlarge a sewer plant must have an environmental assessment statement too."

The scientist has been involved in research on the Hudson River for as long as he has been in the area, "some 12 to 13 years."

As he spoke, water bubbled in fish tanks behind him. "That's my own private research project," he said. "We are studying the breeding habits of fish."

Rehwoldt became head of the Marist Research Institute in October. Since then he has sent letters out to local municipalities and industries explaining the service the college can offer.

"We have 13 faculty members in the division of natural science that could work as consultants," he said. The scientist estimated the staff could handle eight or nine clients at one time.

"At present I am the institute," he said with a smile. He is working on one area project now. "The assessment of a landfill site somewhere in greater Dutchess County," he said vaguely. He couldn't give the exact location, he said, because it was a touchy subject. "Nobody wants a dump."

When the program is underway, he said, he will have faculty members working on environmental assessment statements. Students will be hired to do some of the leg work.

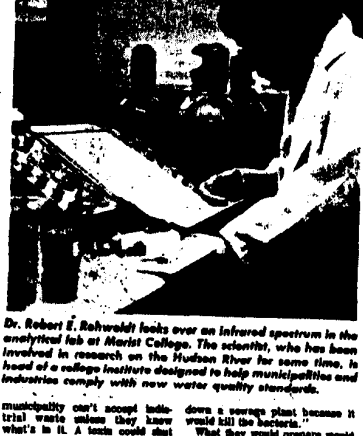
Rehwoldt has done such assessments himself. He plopped one heavy volume down on the table. The assessment was filled with facts, figures, diagrams and lots and lots of words.

"I foresee the assessments becoming smaller and more specific," he said.

Rehwoldt also teaches at the college and is head of the department of natural science. Did he ever try to use a class to gather some of the necessary data?

The scientist laughed. "It doesn't work," he said. "They just walk around and get nothing done."

"But municipalities and industries really do need the scientific knowledge that a college can provide," he said. "For instance, a municipality can't accept industrial waste unless they know what's in it. A toxin could shut down a sewage plant because it would kill the bacteria."



Dr. Robert E. Rehwoldt looks over an infrared spectrum in the analytical lab at Marist College. The scientist, who has been involved in research on the Hudson River for some time, is head of a college institute designed to help municipalities and industries comply with new water quality standards.

What they would prepare would be an environmental assement statement. "It doesn't condone or bar. The statement gives an evaluation of benefits and deficits."

Some industries advertise for bids and other contract local services, he said. Then he reads the application and gets a feel for the job and comes up with a bid.

The ball-park figure he comes up with often includes a fee for attending hearings and holding hearings. "Of course, if a project is accepted then it requires a new bid."

A cost-plus bid is less common now, but is better from him, Rehwoldt said, because sometimes "you get into something you didn't expect."

Certain engineering firms also supply this service. "I work with engineering firms, not against them," he said. "My point of view is that they could hire a staff to do the assessment statement, but it's not worth it from their point of view."

The intention is the program will benefit the college. The scientist said the institute will pay overhead to the school. "And the funds would go into improved teaching."

If the instructors can get some consulting work, teaching at the college more attractive to professors too, he said.

As for his own interest in water quality, Rehwoldt said, "I've always done research on the river. It's beautiful. And it's getting cleaner, too."

Asked about the PCB (polychlorinated biphenyl) pollution on the river, Rehwoldt said, "I think in principle it's a very serious problem." He added that at present the chemical analysis of PCB in fish is not developed to its maximum. "Certain portions of a fish have more PCB than others," he said.

Because of PCB pollution, commercial fishing on the Hudson River has been severely restricted. A General Electric plant upstream in Albany has been cited as the major cause of the PCB pollution. But Rehwoldt said water quality, sanitary landfills also cause PCB.

"It's in light bulbs, [illegible] plastics, a great many things." He added that to help solve the problem sewage treatment plants would have to be made more careful of their processes.

The scientist's specialty is heavy metals research. He said he is now discovering other river pollution problems. "I'm doing three rivers," he said. "In the Hudson I'm doing the [illegible] river, in the Saugerties area, and in Fishkill. In this area, around Poughkeepsie, the river is really more like a lake.

"The action of the tides mixes up whatever is in the river pretty well. But whatever flows into the river here tends to stay here."

As you might expect from a river oriented scientist, Rehwoldt took his sabbatical in the city of water — Venice.

"The canals, of course, were originally designed for commerce. They aren't used for that much anymore, except for an occasional barge."

The city had changed the tidal flow in the canals, and they wanted a scientific analysis of what was happening.

During a tour of the labs, one of the senior science students was analyzing mud from the river bottom in an emission spectrograph. "I've always used the river in my teaching," Rehwoldt said.

If assessment projects start rolling in, would he give up teaching and just run the institute? "No," he said. "I couldn't do that. I enjoy teaching too much. I could never just become an administrator."

Still, as water quality standards are raised, he foresee an increased demand for the type of consulting work a college can offer. "We certainly ought to be able to do consulting work statewide and maybe even nationally," he said.



A student enters one of the classroom buildings of Marist College in Poughkeepsie. The building contains the science labs which will be used by the research institute to prepare environmental assessment statements.

—Record photos by Robert Riemann

MONS 033089