Chemistry Department Involved in Research

By Mike Hirsch

The Canisius College chemistry department has worked on at least ten joint student/faculty research projects in the last five years, according to Dr. Raymond Annino, chairman of the chemistry department.

Annino said that the work is undertaken because "research is a necessary part of an undergraduate education." 50-60% of each class are involved in research, he said.

The projects are also the reason why most of the Canisius chemistry students go on to get their Ph.Ds., he said, since the projects get them interested in research. Canisius is ranked fifth of all undergraduate schools in the country in terms of graduates seeking their Ph.Ds., he stated.

"Since the students are practicing chemists," he continued, "it's natural for them to want to go on and continue their education."

Another aspect to the projects, Annino said, is that they help to support students during the summer. He noted that twelve students each earned $1,200 for 10 weeks of research work last summer.

The research projects can be divided into two categories: those that are contracted by individual firms and those that are supported by grants.

Included among the contract research done in the last five years were a three-month project analyzing the final product mixtures from a coal gasification project for Bell Aero System; identifying gases collected at ground sites for National Fuel Gas; analyzing the lead in paints for Pratt and Lambert; doing a survey and recommendation of the analytical practices at Scott Aviation; and doing work for Oak Ridge National Labs, The Foxboro Co., and Andco Environmental.

All of the results of the grant-supported projects are published, Annino said. The department has an annual average of five papers in scientific journals and 3-4 presentations at scientific meetings.

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Research won't be de-emphasized in the chemistry department, Annino said, because all the faculty are professionals. "We can't just teach, but have to do chemistry," he said. "It's a necessary part of our own growth and vitality. Research is fairly expensive to support, so we have to go out and get the support in the form of grants and money received from consulting work."

The Canisius faculty involved in research includes Fr. McCarthy in inorganic chemistry, Dr. Dick Stanton in theoretic chemistry, Dr. Annino in analytical instrumentation design, and Dr. Frank Dinan in organic chemistry.

Annino said his work entails the technical implementation of chemistry theory. Research ideas, he said, are developed from doing chemistry work. "Research breeds research," he said.