

1971

Revolutionary Chemistry

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Recommended Citation

(1971) "Revolutionary Chemistry," *Iowa Science Teachers Journal*: Vol. 9 : No. 1 , Article 14.

Available at: <https://scholarworks.uni.edu/istj/vol9/iss1/14>

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the paramecia showed six contractile vacuoles in operation. Finally, the paramecia would swell and burst. The extract samples most effective in causing the death of paramecia due to bursting were those boiled for 15 to 20 minutes.

The maple leaf extract seemed to narcotize the paramecia and to reduce their ability to remove excess water entering their cytoplasm. It is thought that the extract possesses a chemical that interferes with the structure of the plasma membrane or the pellicle, thus allowing water to pour into the cytoplasm of the organism. Prior to bursting, the paramecia were stationary, even though their cilia were beating. A possible explanation of this lack of motion might be that the resultant internal pressure on the ciliary neuro-motor organelles rendered them ineffective or uncoordinated. The bursting of the organism appeared first as a small bubble of plasma membrane extruded through a small opening in the pellicle.

The observations made with maple leaf extracts point out the possibilities that these extracts possess a chemical that affects the paramecium's ability to control its internal osmotic pressure causing it to swell and burst. The pressures created seem to affect the neuro-motor system, thus rendering the paramecium immobile. If this chemical could be isolated and purified, it may provide scientists with a new technique for learning more about the neuro-motor apparatus in ciliates.

Revolutionary Chemistry

A chemistry course is "telling it like it is" at the University of Wisconsin in Madison.

Titled Revolutionary Chemistry, the new honors course for non-science majors puts the emphasis on student needs and interests. It is the brainchild of University of Wisconsin chemist, Robert C. West.

Speaking at a symposium on Chemistry Instruction and Social Concern, West pointed to the traditional lack of faculty interest in science courses for non-science majors.

"Past emphasis has been on research and graduate training of chemists. These are the things that received recognition in the form of salary increases and promotions," he said.

Because of this emphasis, people who were not interested in becoming chem-

ists were often lumped together in beginning courses with aspiring chemistry students.

But things are now changing, he explained. Students are forcing changes, demanding courses relevant to their lives.

Increasing faculty concern for the image of science in the public mind has also helped spur creation of science courses specifically for liberal arts students, West said.

The Wisconsin course is built around existing student interests. Chemistry's relationship to social and environmental problems is stressed along with topics in organic chemistry, biochemistry and nuclear chemistry.

Students do not use a text. Instead they read from selected paperbacks—among them Paul Ehrlich's *Population Bomb* and Rachel Carson's *Silent Spring*.

Revolutionary Chemistry, currently in its second year, has had fantastic student response, West said.