

# Nuclear Energy perceived as 'unacceptable risk'

by Tess Lecuyer

The production of nuclear energy is perceived by the society of the United States as an unacceptable risk, according to Dr. Joseph Bieron, professor of chemistry here. Bieron spoke on the subject of "Energy As People See It," on March 8th in Bosch Lounge.

There are certain controversial "questions of technology," Bieron said, which society finds difficult to deal with. When this difficulty is encountered, "we tend to adopt an over-cautious attitude toward them."

"Twenty years ago, nuclear energy was 'the energy of the future,' said Bieron. "In the course of twenty years, it went from a savior of the energy problem to a standstill in production."

This "standstill," said Bieron, is the result of a decrease in the number of contracts approved to build new nuclear plants from 75 per year to zero. This trend has occurred over a period of 3 to 4 years, he said. Bieron added "it is

safe to say that there will be no new production (of nuclear plants) in the next few years."

Another reason for the standstill in nuclear development, stated Bieron, is that certain characteristics of the risks involved in nuclear production are not acceptable to society.

"Nuclear energy as a technology presents very little risk; very few people die from it," he said. He argued that other forms of energy have more risks, but are socially acceptable. "One coal miner dies every two days," he explained.

The actual risk, "the measure of the probability and severity of harm to human health," Bieron explained, does not totally affect the acceptability of the risk, which is a "value judgement." What results from this judgement is the "perceived risk."

Perceived risk, such as that involved in the production of nuclear energy, is "influenced by imagination and complicated by media exposure." According to Bieron, acceptability is affected not only

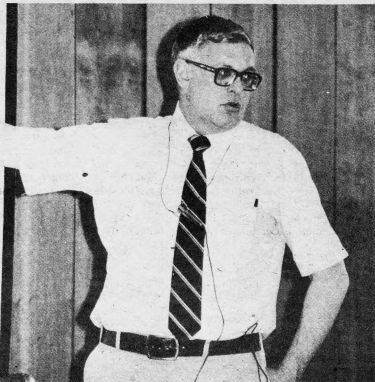
by calculated risks, but other things such as uncertainty and the availability of alternatives. He added that "evidence (to the contrary of fears) does not change perceptions."

He concluded that "nuclear energy has seen its day . . . and under present conditions, (it) is not an option to us."

This fear of the risks of nuclear power production, he said, "is preempting future (energy) choices."

He compared three projections on energy usage in the future — government, private and industry sponsored. Each forecasted a "slow but steady" growth in energy consumption and a decrease in, but not elimination of, imported energy sources. "We are going to continue to depend on foreign oil imports," stated Bieron.

This uncertainty, about the risks of nuclear energy and the halt in its production, he said, will also result in a projected use of 60% more coal by the year 2000 than we now produce to keep up with energy demand.



Dr. Joseph Bieron discusses the demise of nuclear power as an alternative energy form for the U.S.

—photo by Bill Murphy