

Contact: Diana Gonzalez

REQUEST TO AWARD HONORARY DEGREE
HONORARY DOCTOR OF SCIENCE DEGREE
AT IOWA STATE UNIVERSITY

Action Requested: Consider recommending approval to the Board of Iowa State University's request to award an honorary doctor of science degree to Dr. R. Byron Bird at Spring 2007 Commencement.

Executive Summary: Iowa State University wishes to recognize Dr. Bird for his revolutionary contributions in the disciplines of chemical and biological engineering and related sciences.

Background:

- ◇ Dr. Bird is Vilas Professor Emeritus of Chemical and Biological Engineering at the University of Wisconsin, Madison.
- ◇ Dr. Bird's work has been described as resulting in "the complete overturning of the intellectual basis of chemical engineer, and, to some extent, the thermal sciences of other disciplines."
- ◇ Dr. Bird's research replaced the concept of "unit operations" in chemical engineering with "transport phenomena" in the 1960s. It began a trend that transformed chemical engineering from an empirical discipline to an engineering science. This transformation has had a significant impact on the chemical and petroleum industries, applications in materials science, food processing, the space program, and biomedical research.
- ◇ His four landmark textbooks are still in print and have been translated into several languages.
- ◇ Dr. Bird's contributions have been recognized by election to three national academies – National Academy of Engineering, National Academy of Science, and National Academy of Arts and Sciences. He also received the Presidential Medal of Science.
- ◇ Iowa State University wishes to recognize Dr. Bird for his "extraordinary contributions to the canons and methods of engineering and applied science, his carefully composed publications of lasting influence, his inspiration to others to high levels of accomplishment, and his outstanding service to the discipline and the academic profession."
- ◇ Dr. Bird won much of his distinction for providing a much needed theoretical foundation for a large share of the field of engineering.