

## **Biographical Sketch of Woodie Flowers**

Woodie Flowers is the Pappalardo Professor of Mechanical Engineering at MIT. He received a B.S. degree from Louisiana Tech University and M.S., M.E., and Ph.D. degrees from MIT. His current research includes work on the creative design process and product development systems. He helped create MIT's renowned course: "Introduction to Design." Dr. Flowers also received national recognition in his role as host for the PBS television series "Scientific American Frontiers" from 1990 to 1993 and he received a New England EMMY Award for a special PBS program on design.

Dr. Flowers is a member of the National Academy of Engineering, a Fellow of the American Association for the Advancement of Science, and he received an Honorary Doctor of Humane Letters from Daniel Webster College. He was recently selected to receive a Public Service Medal from NASA and the Tower Medallion from Louisiana Tech University. He is a MacVicar Faculty Fellow at MIT for extraordinary contributions to undergraduate education. He was also the Inaugural Recipient of the Woodie Flowers Award by FIRST (For Inspiration and Recognition of Science and Technology).

Dr. Flowers is a director of four companies, and he is on the board of *Technology Review* magazine. He is a member of the Lemelson-MIT Prize Board Executive Committee and is National Advisor and Vice Chairman of the Executive Advisory Board for FIRST. He is a member of the Historical Commission in Weston, Massachusetts, where he lives with his wife, Margaret.

## **The George W. Woodruff School of Mechanical Engineering Presents the Sixth Annual**

### **Harold W. Gegenheimer Lecture on Innovation**

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**Dr. Woodie Flowers**

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**Tuesday  
October 10, 2000  
3:30 P.M.**

**Manufacturing Research Center (MaRC)  
Auditorium**



### **Georgia Institute of Technology**

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**Georgia Institute  
of Technology**

## Lecture Synopsis

### *Innovator, Innovatee, or Somewhere Between?*

Erik Hoffer said, “In a time of drastic change it is the learners who inherit the future. The learned usually find themselves equipped to live in a world that no longer exists.” The famous Chinese curse says, “May you live in interesting times.” Most people agree that we are living in times so “interesting” that continuous learning, and maybe even continuous innovation, are essential. As aspiring and/or learned professionals, how innovative ought we be?

In both engineering and education, “percent” is becoming a more common adjective. Typically about 90% of the advertisements in *Mechanical Engineering* magazine are for software products. Most are designed as a replacement for activities once at the core of the engineering profession. Commodity engineers who simply run simulations can be bought and sold like sacks of grain. What parts of engineering will not likely become commodified? Is innovation the key?

Educators are rapidly coming to understand that our cottage-industry style of teaching may die away and when Disney does new-media calculus, those who use chalk and talk will face empty lecture halls. What part of our profession will be commodified by new-media pedagogy and telepresence? Is innovation the key?

To be effective, we must practice *informed creative thinking*. To feel good about our lives, we must also practice *gracious professionalism*. Ideal innovators practice both. Are we?

## Program

Introduction

Dr. Ward O. Winer  
Eugene C. Gwaltney, Jr. Chair in  
Manufacturing and  
Chair of the Woodruff School

Lecture

Dr. Woodie Flowers  
Pappalardo Professor of  
Mechanical Engineering at MIT

Question-and-  
Answer Session

Drs. Winer and Flowers

Concluding Remarks

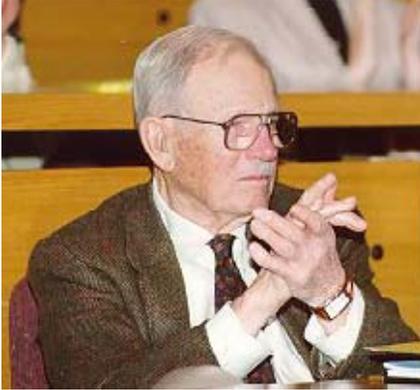
Dr. Ward O. Winer

Reception

In the MaRC Atrium

## **Biographical Sketch of Harold W. Gegenheimer (BME 1933)**

Harold W. Gegenheimer has been associated with the printing industry all his



life: As a machinist, machine design engineer, inventor, product development manager, and corporate chief executive. He is the Chairman Emeritus of the Baldwin Technology Company, an international manufacturer of material handling, press accessory, and prepress equipment for offset printing.

His father, William, started the Baldwin Company in 1918 in a small building next to their house in Baldwin (Long Island), New York.

He invented the Baldwin Press Washer and the company emerged as a manufacturer of printing press accessories and controls.

Harold always took an interest in things mechanical, so it was natural that he went to Georgia Tech, where he received his bachelor's degree in mechanical engineering in 1933. Later, he invented the Convertible Offset Perfecting Press, a feature used by most press manufacturers, that allows for one or more colors to be printed on both sides of the paper with just one pass through the press. His inventions, for which many United States and foreign patents have been obtained, were keys to the great growth of the offset printing process after World War II.

Mr. Gegenheimer was President of the National Printing Equipment and Supply Association from 1977 to 1979. He has been an officer or director of other industry associations and the recipient of numerous technical and educational awards. In 1983 he was elected Graphic Arts Man of the Year.

Mr. Gegenheimer is a long-time contributor to Georgia Tech's *Thousand Club*, served as co-chair of his 50<sup>th</sup> Reunion Committee, and was the recipient of the 1996 Woodruff School Distinguished Alumnus Award.

An endowment given to the Woodruff School in 1995 by Mr. Gegenheimer established the Harold W. Gegenheimer Lecture Series on Innovation to support student programs that encourage creativity, innovation, and design. Through the lecture series and support of capstone design projects, students are exposed to processes that stimulate creativity and lead to inventions and patents. As an inventor, Mr. Gegenheimer continues to express an interest in the great advances made at his alma mater through innovative programs that link industry with graduate and undergraduate studies.