

## BIOGRAPHY OF JAMES W. SERUM

Dr. Serum received a B. A. in Chemistry from Hope College and was awarded a Ph.D. degree in Organic Chemistry in 1969 from the University of Colorado. His doctorate research was directed toward studies in Mass Spectrometry. Following his graduate studies, he taught and did research at the University of Ghent, Belgium. He spent a year at Rice University as a Welch Fellow, and then joined the staff at Cornell University as Director of the National Institutes of Health High Resolution Mass Spectrometry Facility.

Dr. Serum joined the Hewlett-Packard Company in 1973 as Applications Chemist for Mass Spectrometry. Since then he has held a number of management positions, including Technical Support Manager for Mass Spectrometry in Europe (Paris, France); Marketing Manager for Mass Spectrometry and Spectroscopy at the Scientific Instruments Division; R&D Manager at the same division; and R&D Manager for the Avondale Division (Laboratory Automation and Chromatography Instrumentation). Since 1984 he has held business unit level positions as Operations Manager for Laboratory Automation Systems, Automated Chemical Systems Operation and Analytical Group Research & Development Manager. In 1992 Dr. Serum was named General Manager for Mass Spectrometry, Infrared, and Protein Chemical Systems. He was the founder of HP's Bioscience Products business. He has served as chairman of HP's Bioscience Council, co-chairman of the Hewlett-Packard R&D Council and the Pharmaceutical Business Council. He retired from Hewlett Packard in August 1999 to co-found Viaken Systems Inc, where he was a Director and served as Executive Vice President and Chief Operating Officer. Dr. Serum is currently a Venture Partner with Flagship Ventures and President of SciTek Ventures, a science and technology consulting firm that he founded in 2002. In 2002 he was elected as a lifetime National Associate of the National Academy of Sciences and in 2004 he was elected to serve on the Visiting Committee for Advanced Technology of NIST. In 2005, Dr. Serum was named to the President's Advisory Board for Advanced Technology at the Research Corporation.

### OTHER PROFESSIONAL ACTIVITIES

- Member of American Chemical Society
- Member of National Academy of Sciences task force on the Future of Analytical Chemistry in the U.S.(1986)
- Member of National Science Foundation task force to Review Policy for Science Education in the U. S. (1987)
- Invited speaker at numerous educational meetings and conferences on Science Education
- Past member of Hewlett-Packard Education Relations Board
- Review Panel for Hewlett-Packard Grants Program for Analytical Chemistry (1989-1992)
- Member of Science & Technology Board, College of Letters and Science, James Madison University (1988-1993)
- Member of Board of Directors, Biotechnology Research and Development Corporation (1988-1994)
- Member of the National Institute of Standards and Technology (NIST) technology assessment panel (1990-1992)
- Counselor (alt), Analytical Chemistry Division, American Chemical Society (1992- 1995)
- Member of the Board, Center for Photochemical Sciences, Bowling Green State University (1994-Present)
- Member of ACS subcommittee for improvement of chemistry curriculum (1994-1995)
- Member of National Research Council, Committee on Undergraduate Science Education (1996-2001)
- Member of National Research Council, Committee on A National Digital Library (1997)
- Chairperson, NRC Review committee on National Math Standards (1999)
- Member & Vice Chairman of Board of Assessment for Chemical Science & Technology Laboratory, NIST ('97-'01)
- Chairman of Board of Assessment for CSTL, National Institute of Standards and Technology ('01-'03)
- Member Nation Research Council Committee on Undergraduate Science Education (02-03)
- National Associate (life), National Academy of Sciences (2002)
- Member of Visiting Committee for Advanced Technology, NIST (2004-'09, Vice Chair 2007)
- President's Advisory Board for Advanced Technology, Research Corporation (2005- present)