

Acknowledgments

Development Partner

The American Institute of Chemical Engineers (AIChE) is the world's leading organization for chemical engineers. It has more than 40,000 members in 93 countries. AIChE played a pivotal role in the development of *Active Chemistry* as one of the Co-Principal Investigators of the National Science Foundation Grant. AIChE's involvement has helped to ensure the accuracy of the program's chemistry content as well as its engineering design principles.

Project Director

Dr. Arthur Eisenkraft has taught high school physics for over 28 years and is currently the Distinguished Professor of Science Education and a Senior Research Fellow at the University of Massachusetts, Boston. Dr. Eisenkraft is the author of numerous science and educational publications. He holds U.S. Patent #4447141 for a Laser Vision Testing System (which tests visual acuity for spatial frequency).

Dr. Eisenkraft has been recognized with numerous awards including: Presidential Award for Excellence in Science Teaching, 1986 from President Reagan; American Association of Physics Teachers (AAPT) Excellence in Pre-College Teaching Award, 1999; AAPT Distinguished Service Citation for "excellent contributions to the teaching of physics", 1989; Science Teacher of the Year, Disney American Teacher Awards in their American Teacher Awards program, 1991; Honorary Doctor of Science degree from Rensselaer Polytechnic Institute, 1993; NSTA Distinguished Service Award to Science Education, 2005.

In 1999, Dr. Eisenkraft was elected to a three-year cycle as the President-Elect, President and Retiring President of the National Science Teachers Association (NSTA), the largest science teacher organization in the world. He also served on the content committee and helped to write the National Science Education Standards for the National Research Council. In 2003, he was elected a fellow of the American Association for the Advancement of Science (AAAS). Dr. Eisenkraft has been involved with a number of projects and chaired many competition programs, including: the Toshiba/NSTA ExploraVisions Awards (1991 to the present); the Toyota TAPESTRY Grants (1990 to 2005); the Duracell/NSTA Scholarship Competitions (1984 to 2000). In 1993, he served as Executive Director for the XXIV International Physics Olympiad after being Academic Director for the United States Team for six years. He is currently science consultant to ESPN Sports Figures.

Dr. Eisenkraft is a frequent presenter and keynote speaker at National Conventions. He has published over 100 articles and presented over 200 papers and workshops. He has been featured in articles in *The New York Times*, *Education Week*, *Physics Today*, *Scientific American*, *The American Journal of Physics* and *The Physics Teacher* and has appeared on The Today Show, and NPR, and many other radio and television broadcasts.

Content Specialists

Gary Freebury has been teaching chemistry for more than 35 years. He has been the Safety Advisor for Montana Schools, director of the Chemistry Olympiad, chairman of the Montana Section of the American Chemical Society (ACS), member of the Executive Committee of the Montana Section of the ACS, and a member of the Montana Science Advisory Council. Mr. Freebury has been the regional director and author of Scope, Sequence and Coordination (SS&C) – Integrated Science Curriculum and Co-director of the NSF supported Chemistry Concepts four-year program. He earned a B.S. degree at Eastern Montana College in mathematics and physical science, and an M.S. degree in chemistry at the University of Northern Iowa.

Dr. Gary Hickernell earned a B.S. degree in chemistry at Allegheny College and his Ph.D. in organic chemistry at the University of Washington in Seattle, and studied the chemistry of food flavors for nineteen years at the General Foods Technical Center in Tarrytown, NY, as a research scientist. During this period, he won two patents, a US patent for "Novel Sweetener Effects," and a Canadian patent for the "Resin Decaffeination of Coffee." His second career began at Vassar College in Poughkeepsie where he taught general and organic chemistry as an associate professor. During this period, he co-authored chapters in the NSF-funded series of engineering and environmental books, *Accident and Emergency Management: Problems and Solutions* and *Pollution Prevention: Problems and Solutions*. After two years at Vassar, Dr. Hickernell joined the science faculty at Keuka College, where he participated in the MADCAP project to bring project-based chemistry to college freshmen. Most recently, Dr. Hickernell joined the staff at It's About Time as the Project Coordinator for NSF-funded projects.

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