Colleagues and Members of NAMF

We, the co-editors, on the behalf of the 46 contributors, take great pleasure in announcing the publication of:

**The Handbook of Industrial Mixing**

*Science and Practice*


The book was officially launched at the 2003 Annual Meeting of the AIChE in San Francisco, California, on November 17th. The vital statistics are as follows:

- 22 Chapters authored by 46 contributors - Table of Contents follows
- Visual Mixing CD: a collection of mixing video clips
- a 29 page Editors’ Introduction, including Conversations overheard in a chemical plant and Mixing diagnostic charts
- 1352 pages of text
- 770 figures
- a 24 page Index

Order your own copy before the first printing is sold out:
- or on-line through Amazon [http://amazon.com](http://amazon.com)

We hope you will seize the opportunity to own a book that we are confident is a lasting and significant contribution to the mixing literature, thanks to the efforts of many in the mixing community. All royalties from the sale of the book will be used to sponsor young academics who are winners of the NAMF sponsored grant for mixing research.

Edward L. Paul  Victor Atiemo-Obeng  and  Suzanne M. Kresta
# Table of Contents and Authors:

**Introduction**  Edward L. Paul, Victor Atiemo-Obeng, Suzanne M. Kresta  
**Chapter 1:** Residence Time Distributions  E. Bruce Nauman  
**Chapter 2:** Turbulence in Mixing Applications  Suzanne M. Kresta and Robert S. Brodkey  
**Chapter 3:** Laminar Mixing: A Dynamical Systems Approach  Edit S. Szalai, Mario M. Alvarez, Fernando J. Muzzio  
**Chapter 4:** Experimental Methods  
- Part B: Fundamental Flow Measurement  George Papadopoulos and Engin B. Arik  
**Chapter 5:** Computational Fluid Mixing  Elizabeth Marden Marshall and André Bakker  
**Chapter 6:** Mechanically Stirred Vessels  Ramesh R. Hemrajani and Gary B. Tatterson  
**Chapter 7:** Mixing in Pipelines  Arthur W. Etchells III and Chris F. Meyer  
**Chapter 8:** Rotor-Stator Mixing Devices  Victor A. Atiemo-Obeng and Richard V. Calabrese  
**Chapter 9:** Blending of Miscible Liquids  Richard K. Grenville and Alvin W. Nienow  
**Chapter 10:** Solid-Liquid Mixing  Victor A. Atiemo-Obeng, W. Roy Penney, Piero Armenante  
**Chapter 11:** Gas-Liquid Mixing in Turbulent Systems  John C. Middleton and John M. Smith  
**Chapter 12:** Immiscible Liquid-Liquid Systems  Douglas E. Leng and Richard V. Calabrese  
**Chapter 13:** Mixing and Chemical Reactions  Gary K. Patterson, Edward L. Paul, Suzanne M. Kresta, Arthur W. Etchells III  
**Chapter 14:** Heat Transfer  W. Roy Penney and Victor A. Atiemo-Obeng  
**Chapter 15:** Solids Mixing  
- Part B: Mixing of Particulate Solids in the Process Industries  Konanur Manjunath, Shrikant Dhodapkar Karl Jacob  
**Chapter 16:** Mixing of Highly Viscous Fluids, Polymers, and Pastes  David B. Todd  
**Chapter 17:** Mixing in the Fine Chemicals and Pharmaceutical Industries  Edward L. Paul, Michael Midler, Yongkui Sun  
**Chapter 18:** Mixing in the Fermentation and Cell Culture Industries  Ashraf Amanullah, Barry C. Buckland, Alvin W. Nienow  
**Chapter 19:** Fluid Mixing Technology in the Petroleum Industry  Ramesh R. Hemrajani  
**Chapter 20:** Mixing in the Pulp and Paper Industry  Chad P.J. Bennington  
**Chapter 21:** Mechanical Design of Mixing Equipment  David S. Dickey and Julian B. Fasano  
**Chapter 22:** Role of the Mixing Equipment Supplier  Ronald J. Weetman  
**CD-ROM:** Visual Mixing  Suzanne M. Kresta and Keith Boyle
pipeline mixing (including static mixers), rotor-stator mixers, mechanical aspects of mixing and the role of the mixing equipment vendor. Specialized equipment for powder blending, pulp and paper, petroleum industry and high-viscosity mixing are discussed in the respective applications chapters. The core mixing design topics of miscible liquid blending, solid/liquid suspension, gas/liquid contacting, liquid/liquid mixing, mixing and chemical reaction, as well as heat transfer and mixing, are each covered in detail in one or more dedicated chapters. This Handbook is the most comprehensive, definitive and up-to-date treatise on industrial mixing available anywhere. It is well written, structured, illustrated and referenced.