

This book would not have been possible without the efforts of scientists in the field who have labored to advance the field of structural mass spectrometry over the last several years. These efforts, and the germ of an idea that a book such as this was timely and possible, came together in January 2006 in the form of a mass spectrometry meeting, the 18th Sanibel Conference on Mass Spectrometry, titled "Focus on Biomolecular Structure, Dynamics and Function: Hydrogen Exchange and Covalent Labeling Techniques", organized by Igor Kaltashov and John Engen. At this three-day meeting, experts in mass spectrometry, many of which are authors of chapters in this book, exchanged the latest ideas related to understanding protein structure and dynamics, and found that mass spectrometry based approaches were converging on a common goal: to fill gaps in our understanding of protein structure and conformational dynamics, built on a firm foundation of high resolution structure data.

This group has since that time strengthened their interactions, forming a Hydrogen Exchange and Covalent Labeling interest group within the American Society for Mass Spectrometry; this group has grown in two short years to over 750 members. This book provides a milestone in the efforts of this group to present the state-of-the-art in their field and disseminate that art as widely as possible. The future of this field looks very bright indeed.

On a personal note, I wish to thank all of my co-authors, I earnestly hope they find their efforts to be rewarded in this volume. I also wish to acknowledge the outstanding editing assistance from Shannon Swiatkowski and the support of all the faculty and staff of the Case Center for Proteomics, whose single minded pursuit of excellence makes being Center director a very rewarding occupation.

Mark Chance
Cleveland, Ohio
May 2008