Dr. Changqing Li and Dr. Tok Wang Ling have edited a very important XML book in *Advanced Applications and Structures in XML Processing: Label Streams, Semantics Utilization and Data Query Technologies*. Its purpose is to provide relevant theoretical frameworks and the latest empirical research findings in the area. It is written for professionals and researchers working in the field of XML in various disciplines who want to improve their understanding of the advanced applications and structures in XML processing, that is, XML Data Management, XML Index and Query, XML Stream Processing, Publish/Subscribe, and P2P, XML Query Translation and Data Integration, and XML Semantics Utilization and Advanced Application.

*Advanced Applications and Structures in XML Processing* is not just for experts who work in a very specific field of XML processing to improve their research basing on the latest important findings in this book. It is also a very good book to broaden the readers' XML processing knowledge since this book comprehensively covers different XML processing techniques like XML storage, compression, index, keywords search, stream processing, integration etc.

This book won't replace one of those huge books about XML tutorial or manual. That's not its point. The point of *Advanced Applications and Structures in XML Processing* is for advanced XML users who want to make deep understanding about XML processing techniques and build their work/research on top of the important research results by excellent researchers around the world. Integrated the important findings of researchers from both academia and industry, this book can be a reference book for XML engineers, a must-reading book for graduate students who want to select XML as their research direction, or a textbook for a course like advanced topics in XML.

The book starts right off with XML native storage and XML data management in object relational database systems, and then the XML compression. It helps if you want to know how to effectively manage XML data.

Keyword search is a very important application of XML. By reading further, you will find the important research results about XML keyword search as well as the XML indexing techniques like index structures and XML document labeling.

XML Stream Processing, Publish/Subscribe, and P2P have become hot research topics in recent years, therefore you must continue to read this book if you want to know more about these hot XML topics.

XML natively is a good tool to integrate heterogeneous data, so if you are working on data integration, how can you skip the next important part of this book, in which XQuery translation is also included?

If you are interested in XML semantics utilization and web service or you want to know more about XML, you need to complete the reading of the last section of this book.
In summary, *Advanced Applications and Structures in XML Processing* is a very important book in the XML research field, thus it must be read by researchers, engineers, and students who want to understand advanced XML processing topics in depth!

Philip S. Yu  
Professor and Wexler Chair in Information Technology  
Department of Computer Science  
University of Illinois at Chicago, USA

Philip S. Yu is a Professor in the Department of Computer Science at the University of Illinois at Chicago and also holds the Wexler Chair in Information Technology. He was manager of the Software Tools and Techniques group at IBM Watson Research Center. Dr. Yu is a Fellow of the ACM and the IEEE. He served as the Editor-in-Chief of IEEE Transactions on Knowledge and Data Engineering (2001-2004). He is an associate editor of ACM Transactions on Knowledge Discovery from Data and also ACM Transactions of the Internet Technology. He serves on the steering committee of IEEE Int. Conference on Data Mining. Dr. Yu received a Research Contributions Award from IEEE Intl. Conference on Data Mining in 2003. His research interests include data mining, and database systems. He has published more than 540 papers in refereed journals and conferences. He holds or has applied for more than 300 US patents.