Foreword

Within the last two decades, communication advances have reshaped the way we live our daily lives. Wireless communications has grown from an obscure, unknown service to an ubiquitous technology that serves almost half of the people on Earth. Whether we know it or not, computers now play a dominant role in our daily activities, and the Internet has completely reoriented the way people work, communicate, play, and learn.

However severe the changes in our lifestyle may seem to have been over the past few years, the convergence of wireless with the Internet is about to unleash a change so dramatic that soon wireless ubiquity will become as pervasive as paper and pen. WiMAX—which stands for Worldwide Interoperability for Microwave Access—is about to bring the wireless and Internet revolutions to portable devices across the globe. Just as broadcast television in the 1940's and 1950's changed the world of entertainment, advertising, and our social fabric, WiMAX is poised to broadcast the Internet throughout the world, and the changes in our lives will be dramatic. In a few years, WiMAX will provide the capabilities of the Internet, without any wires, to every living room, portable computer, phone, and handheld device.

In its simplest form, WiMAX promises to deliver the Internet throughout the globe, connecting the "last mile" of communications services for both developed and emerging nations. In this book, Andrews, Ghosh, and Muhamed have done an excellent job covering the technical, business, and political details of WiMAX. This unique trio of authors have done the reader a great service by bringing their first-hand industrial expertise together with the latest results in wireless research. The tutorials provided throughout the text are especially convenient for those new to WiMAX or the wireless field. I believe *Fundamentals of WiMAX* will stand out as the definitive WiMAX reference book for many years to come.

> —Theodore S. Rappaport Austin, Texas