As wireless IP (Internet Protocol) networking technologies have become increasingly critical for the telecommunications industry, many standards organizations have sought to define a global infrastructure for wireless IP networks. This book is a practical source of up-to-date information on the growing body of specifications associated with wireless IP network architectures, systems, and protocols, with a focus on the network layer and above.

In a clear, understandable manner, the authors, both leading experts in the field, provide a detailed description and comparison of next-generation wireless networks, specifically IP-based wireless networks, and discuss critical issues that may arise in their design.

Starting with a historical look at wireless networks, the authors review the evolution of public mobile services into the current wave of mobile data services. They discuss the motivations for IP-based wireless networks and provide an overview of related architecture and standards activities, particularly as defined by 3GPP and 3GPP2, the two most influential organizations in the field.

In addition to network architecture, the book covers protocols in four major areas:
- signaling
- mobility
- quality of service (QoS)
- security

Comprehensive and authoritative, IP-Based Next-Generation Wireless Networks: Systems, Architectures, and Protocols is an invaluable reference for anyone seeking the clarity and perspective often difficult to obtain from standards specs.

JYH-CHENG CHEN, PhD, is an associate professor at the National Tsing Hua University in Hsinchu, Taiwan. Prior to that, he was a research scientist at Telcordia Technologies, Inc. in Morristown, New Jersey. He has drafted numerous documents for the Internet Engineering Task Force (IETF) and holds six U.S. patents with 12 more pending. TAO ZHANG, PhD, is Director of Mobile and Wireless Networking Research at Telcordia Technologies, Inc., with patents pending in several critical areas of wireless IP networking.