Endohedral Metallofullerenes: Fullerenes with Metal Inside
Hisanori Shinohara, Nikos Tagmatarchis, Sir Harold Kroto (Foreword by)

DESCRIPTION

*Endohedral Metallofullerenes: Fullerenes with Metal Inside* presents a comprehensive survey of the current state of knowledge on endohedral metallofullerenes, from preparation to functionalization, reactivity and applications. Following a brief historical overview, the book describes methods for synthesis, extraction, separation and purification, and provides an insight into the molecular and crystal structures. Subsequent chapters discuss various categories of endohedral metallofullerenes based on the encapsulated species, including carbides, nitrides, sulphides, oxides, non-metal and non-IPR endohedral metallofullerenes, followed by scanning tunneling microscopy studies and the examination of electronic, vibrational, magnetic and optical properties. The book concludes with chapters addressing the chemical functionalization of endohedral metallofullerenes, and applications ranging from solar cells to biomedicine.

ABOUT THE AUTHOR

**Hisanori Shinohara** Department of Chemistry, Nagoya University, Japan

**Nikos Tagmatarchis** Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Greece

Foreword by **Sir Harold Kroto**