

Handbook of Vibrational Spectroscopy. Theory and Instrumentation. Volume 1. Edited by John M. Chalmers (University of Nottingham) and Peter R. Griffiths (University of Idaho). J. Wiley & Sons: Chichester. 2002. xviii + 932 pp. (The page count for the entire set is ~4000 pp.) \$1795 (for five-volume set). ISBN: 0-471-98847-2.

This book is part of a five-volume set covering all significant aspects of infrared, near-infrared, and Raman spectroscopy. Volume 1, which addresses theory and instrumentation, is divided into nine subject areas: Introduction to the Theory and Practice of Vibrational Spectroscopy, Instrumentation for Mid- and Far-Infrared Spectroscopy, Instrumentation for Near-Infrared Spectroscopy, Instrumentation for Raman Spectroscopy, Time-Resolved Spectroscopy, Dichroism and Optical Activity in Vibrational Spectroscopy, Surface-Enhanced Vibrational Spectroscopy, Other Instrumental Approaches for Vibrational Spectroscopy, and Calibration Procedures and Standards for Vibrational Spectroscopy. According to Associate Editor Y. Ozaki, this volume should serve as background material for the ensuing volumes in the series: Sample Handling (Volume 2); Sample Characterization and Spectral Data Processing (Volume 3); Applications in Industry, Materials and the Physical Sciences

(Volume 4); and Applications in the Life, Pharmaceutical and Natural Sciences (Volume 5).

JA025228W
10.1021/ja025228w

CO₂ Conversion and Utilization. Edited by Chunshan Song (Pennsylvania State University), Anne F. Gaffney (Rohm and Haas Company), and Kaoru Fujimoto (University of Kitakyushu). American Chemical Society: Washington, DC (Distributed by Oxford University Press). 2002. xii + 428 pp. \$150.00. ISBN: 0-8412-3747-6.

This book was developed from the papers presented at the title symposium in San Francisco in March 2000. Its 25 chapters are grouped into the following topics: General Overview, Synthesis of Organic Chemicals, CO₂ Reduction over Heterogeneous Catalysts, Synthesis Gas Production from CO₂ Reforming, Effects of Pressure and Reactor Type on CO₂ Reforming, Photocatalytic and Electrochemical Reduction, and Use of Supercritical CO₂ Fluid. References are generally current up to 2000, although there are a few citations from 2001. An author index and a subject index complete the book.

JA0252274
10.1021/ja0252274