

## Additions and Corrections

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### Sensitive Wavelength Dependence of PdC and Pd Formation from Photolysis of Bis(hexafluoroacetylacetonato)palladium(II)

[*J. Am. Chem. Soc.* **2000**, *122*, 1227–1228]. PETER MURAOKA, DANIEL BYUN, AND JEFFREY I. ZINK\*

The sharp peaks in the spectra are not solely due to vibronic structure in the metal-to-ligand charge transfer band of the title compound. We observe very similar spectra from (allyl)Pd(hfac) and (allyl)Pd(cyclopentadienyl). The peaks probably arise in part from unreported atomic palladium absorptions. However, PdC<sup>+</sup> was only detected from photolysis of Pd(hfac)<sub>2</sub>.

JA004649F

10.1021/ja004649f

Published on Web 05/27/2000

## Book Reviews

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**Scorpionates—The Coordination Chemistry of Polypyrazolylborate Ligands.** By Swiatoslaw Trofimenko (University of Delaware). Imperial College Press: London 1999. x + 282 pp. \$48.00. ISBN 1-86094-172-9.

This important book, laden with chemical facts, is useful and well written. The author launched the polypyrazolylborate class of ligands in 1966, and now he has literally “written the book” on this topic. This useful reference book includes over 200 pages of text, over 1500 references, and a helpful index. Exhaustive coverage of scorpionate ligands establishes this book as the definitive source for anyone considering any aspect of scorpionate chemistry.

The chapters adhere to a logical organizational plan that minimizes duplication and facilitates access to information about specific metal complexes. The brief introductory chapter includes abbreviations used throughout the book, which make it required reading before seeking specific data in the text. Likewise, the most common pictorial representation of tridentate ligands requires explanation in the first chapter in order to avoid confusion. A complete table of known scorpionate ligands in Chapter 1 typifies the rigorous and systematic style of the book.

The second chapter, organized by periodic groups from 1 to 15, addresses the chemistry of “first generation” scorpionates, namely pyrazole- and 3,5-dimethylpyrazole-based tridentate ligands. The third chapter reflects expanded use of additional or “second generation” scorpionates, since 1986. Following the format of Chapter 3, Chapter 4 covers heteroscorpionate ligands, where only two pyrazole rings are bound to the boron and the third and fourth substituents on boron are not pyrazoles. The organization of chapters 3 and 4 differs significantly from the structure of chapter 2 as they are built around ligand properties and substituents. The final chapter is a compilation of diverse applications including catalysis, enzyme modeling, C–H bond activation, and metal deposition and extraction.

The amount of material covered is voluminous, and as a result the information density per page is high. The succinct presentation format provides an exceptional guide to the literature, but it will be necessary to turn to the original references for details. Some typographical errors remain, perhaps reflecting the tight timeline required to include so many recent results.

The most noteworthy feature of this excellent book is the extensive reference list, which provides a comprehensive guide to polypyrazolylborate literature. The literature citations are both complete and

current; among the 1568 references are numerous articles published in 1999, surely a tribute to the dedication of the author and the efficiency of the publisher.

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JA9957940

10.1021/ja9957940

**Characterizations of Powders and Aerosols.** By Brian H. Kaye (Laurentian University, Canada). Wiley/VCH: Weinheim, Germany. 1999. 293 pp. \$205.00. ISBN 3-527-28853-8.

This is a well-written book summarizing the broad spectrum of techniques for particle sizing. The book is rich in diagrams and pictures elucidating the concepts and principles of the various techniques, and it presents a number of examples based on the rich experience and contributions of the author in the field. The book is particularly strong in addressing sizing of irregular particles and image analysis techniques, an area of particle technology where the author has made an impact. This focus is very important to many evolving research fields, including those in areas outside the ones that are explicitly mentioned in the book, such as biotechnology and nanoparticle synthesis and applications.

The book will be very useful as an introduction to the topic for a scientist or engineer entering the field. It not only lists the techniques but guides the reader toward the most appropriate one for a given particle process by stressing the end use of the particles. In a university setting, the book should serve as a reference book for a particle technology textbook in the area of particle measurements, since it does not contain homework problems or many detailed design calculations. It is a challenge to select a measurement technique from a number of competing ones. In that respect the author makes a great effort to assist the reader by describing the history or evolution of the various techniques and citing pertinent views and results in the literature. Overall, it is a nice book that I would cite in my lectures and recommend to my colleagues and students.

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JA995731H

10.1021/ja995731h