



Contents of Volume 661

Special Issue: Selective Reactions of Metal-Activated Molecules

Preface

| | |
|---------------------|---|
| H. Werner | 1 |
|---------------------|---|

Catalytic oxidations by peroxy, peroxo and oxo metal complexes: an interdisciplinary account with a personal view

| | |
|---|---|
| W. Adam, W. Malisch, K.J. Roschmann, C.R. Saha-Möller, W.A. Schenck | 3 |
|---|---|

Biocatalytic synthesis of optically active oxyfunctionalized building blocks with enzymes, chemoenzymes and microorganisms

| | |
|---|----|
| W. Adam, F. Heckel, C.R. Saha-Möller, P. Schreier | 17 |
|---|----|

The lactone concept—a novel approach to the metal-assisted atroposelective construction of axially chiral biaryl systems

| | |
|---|----|
| G. Bringmann, M. Breuning, R.-M. Pfeifer, W.A. Schenk, K. Kamikawa, M. Uemura | 31 |
|---|----|

The directed synthesis of axially chiral ligands, reagents, catalysts, and natural products through the 'lactone methodology'

| | |
|---|----|
| G. Bringmann, S. Tasler, R.-M. Pfeifer, M. Breuning | 49 |
|---|----|

Transition metal-catalyzed oxidations of bishomoallylic alcohols

| | |
|-------------------------------|----|
| J. Hartung, M. Greb | 67 |
|-------------------------------|----|

Transition metal complexes with polydentate amido ligands: novel structural building blocks and chemical reagents

| | |
|---------------------|----|
| L.H. Gade | 85 |
|---------------------|----|

Hydrophosphination with cationic primary phosphine iron complexes: synthesis of P-chiral functionalized phosphines

| | |
|--|----|
| W. Malisch, B. Klüpfel, D. Schumacher, M. Nieger | 95 |
|--|----|

Phosphane- and phosphorane *Janus Head* ligands in metal coordination

| | |
|---|-----|
| F. Baier, Z. Fei, H. Gornitzka, A. Murso, S. Neufeld, M. Pfeiffer, I. Rüdenauer, A. Steiner, T. Stey, D. Stalke | 111 |
|---|-----|

Stereoselective addition reactions of ruthenium thioaldehyde complexes

| | |
|------------------------|-----|
| W.A. Schenck | 129 |
|------------------------|-----|

Iridium-containing cumulenes: how to prepare and how to use

| | |
|---|-----|
| H. Werner, K. Ilg, R. Lass, J. Wolf | 137 |
|---|-----|

Enantiomerically enriched 'carbanions': Studies on the stereochemical course of selective transformations of metal alkyls

| | |
|--|-----|
| C. Strohmann, B.C. Abele, K. Lehmen, F. Villafañe, L. Sierra, S. Martín-Barrios, D. Schildbach | 149 |
|--|-----|

Selective reactions of transition-metal-generated radicals

| | |
|---------------------|-----|
| T. Linker | 159 |
|---------------------|-----|

One-electron oxidation of metal enolates and metal phenolates

| | |
|--------------------------------------|-----|
| M. Schmittel, A. Haeuseler | 169 |
|--------------------------------------|-----|

The metal–carbon bond in vinylidene, carbonyl, isocyanide and ethylene complexes

| | |
|---|-----|
| D. Moigno, B. Callejas-Gaspar, J. Gil-Rubio, H. Werner, W. Kiefer | 181 |
|---|-----|

Time-resolved photoelectron spectroscopy: A unique tool to monitor the vibrational and fragmentation dynamics of metal carbonyls

| | |
|--|-----|
| M. Erdmann, O. Rubner, Z. Shen, V. Engel | 191 |
|--|-----|

Time-resolved organometallic photochemistry: Femtosecond fragmentation and adaptive control of $\text{CpFe}(\text{CO})_2\text{X}$ ($\text{X} = \text{Cl}, \text{Br}, \text{I}$)

| | |
|--|-----|
| M. Bergt, T. Brixner, C. Dietl, B. Kiefer, G. Gerber | 199 |
|--|-----|

Author Index of Volume 661

| |
|-----|
| 211 |
|-----|

Subject Index of Volume 661

| |
|-----|
| 213 |
|-----|

Contents of Volume 661

| |
|-----|
| 217 |
|-----|