

Journal of Molecular Catalysis A: Chemical 157 (2000) 299-304



www.elsevier.com/locate/molcata

# Subject index

Acid-base properties

Influence of acid-base properties of mixed oxides derived from hydrotalcite-like precursors in the transfer hydrogenation of propiophenone (Jyothi, T.M. (157) 193)

Acidic resins

Metal ion implantation onto acidic resins upon reaction of metal acetates and carbamates Part I. Synthetic results (Belli Dell'Amico, D. (157) 173)

Adsorption

Studies on superoxide  $O_2^-$  species on the interaction of TS-1 zeolite with  $H_2O_2$  (Zhao, Q. (157) 265)

## Ag-SAPO-34

Adsorption of NO and CO on silver-exchanged microporous materials (Akolekar, D.B. (157) 199)

Ag sites

Adsorption of NO and CO on silver-exchanged microporous materials (Akolekar, D.B. (157) 199)

Ag-ZSM-5

Adsorption of NO and CO on silver-exchanged microporous materials (Akolekar, D.B. (157) 199)

1-Alkyne

Regioselective hydroesterification of 1-alkynes catalyzed by palladium–phosphine complexes (Akao, M. (157) 117)

 $Al_2O_3$ 

Catalytic activity of CrCo/alumina catalyst in thiophene hydrodesulphurisation (Myllyoja, S. (157) 245)

Alumina

Catalytic activity of CrCo/alumina catalyst in thiophene hydrodesulphurisation (Myllyoja, S. (157) 245)

Artificial enzymes

A novel cyclodextrin homodimer with dual-mode substrate binding and esterase activity (Tastan, P. (157) 261)

Asymmetric catalysis

Chiral pyridinyl-oxazolines as ligands for copper(I)-catalyzed asymmetric cyclopropanation (Wu, X.-Y. (157) 59)

Asymmetric oxidation

Effect of portionwise addition of oxidant in asymmetric vanadium-catalyzed sulfide oxidation (Karpyshev, N.N. (157) 91)

# BET

Adsorption of NO and CO on silver-exchanged microporous materials (Akolekar, D.B. (157) 199)

Biphasic

Rhodium catalysed enantioselective hydrogenation in water using pyrphos bound to poly-acrylic acid as ligand (Malmström, T. (157) 79)

PII: \$1381-1169(00)00275-2

Biphasic catalysis

Hydroformylation of functionalized olefins catalyzed by water-soluble rhodium carbonyl complexes (Paganelli, S. (157) 1)

Biphasic Wacker-oxidation of 1-octene catalyzed by palladium complexes with modified  $\beta$ -cyclodextrins (Karakhanov, E. (157) 25)

Biphosphine monoxide

Synthesis and catalytic activity of allyl, methallyl and methyl complexes of nickel(II) and palladium(II) with biphosphine monoxide ligands: oligomerization of ethylene and copolymerization of ethylene and carbon monoxide (Brassat, I. (157) 41)

## Carbamates

 $Rh^{3+}$  and  $Rh^{3+}$ -diamine complexes intercalated in  $\gamma$ -titanium hydrogen phosphate. Synthesis, characterisation and catalytic activity towards aniline oxidative carbonylation processes (Giannoccaro, P. (157) 131)

Carbon monoxide

Adsorption of NO and CO on silver-exchanged microporous materials (Akolekar, D.B. (157) 199)

Carbonylation, WGS reaction

Effect of zeolitic water on the carbonylation route of platinum(II) in NaX to  $[Pt_3(CO)_6]_2^{2-}$  Chini complexes embedded in cavities of the zeolite (Beneke, M. (157) 151)

Catalysis

A new evidence of the high-valent oxo-metal radical cation intermediate and hydrogen radical abstract mechanism in hydrocarbon hydroxylation catalyzed by metalloporphyrins (Guo, C.-C. (157) 31)

# Catalyst

Synthesis, characterization and catalytic activity of polynuclear manganese complexes of 2,5-dihydroxyterephthalaldehyde for epoxidation of olefins with  $H_2O_2$  (Krishnan, R. (157) 15)

Dependence of reactivity on pretreatment in molybdenaalumina catalysts for propene metathesis (Handzlik, J. (157) 237)

The novel use of Ni, Co, Cu and Mn heterogeneous catalysts for the Heck reaction (Iyer, S. (157) 275)

Catalysts

Selective hydrogenation of carvone and *o*-xylene on Pd-Cu catalysts prepared by surface redox reaction (Mélendrez, R. (157) 143)

Catalytic hollow-fiber reactor

Selective hydrogenation of cyclopentadiene in mono- and bimetallic catalytic hollow-fiber reactors (Liu, C. (157) 253) Catalytic synthesis

Catalytic synthesis of C-nitroso compounds by cis-Mo(O)<sub>2</sub>(acac)<sub>2</sub> (Porta, F. (157) 123)

Chiral

Rhodium catalysed enantioselective hydrogenation in water using pyrphos bound to poly-acrylic acid as ligand (Malmström, T. (157) 79)

#### Chiral ligand

Chiral pyridinyl-oxazolines as ligands for copper(I)-catalyzed asymmetric cyclopropanation (Wu, X.-Y. (157) 59)

Chiral Shiff bases

Effect of portionwise addition of oxidant in asymmetric vanadium-catalyzed sulfide oxidation (Karpyshev, N.N. (157) 91) Chromium hexacarbonyl

Catalytic activity of CrCo/alumina catalyst in thiophene hydrodesulphurisation (Myllyoja, S. (157) 245)

Cinchonidine

Asymmetric hydrogenation of a-diketones over polymerstabilized and supported platinum clusters (Zuo, X. (157) 217)

 $Cis-Mo(O)_2(acac)_2$ 

Catalytic synthesis of C-nitroso compounds by cis-Mo(O)<sub>2</sub>(acac)<sub>2</sub> (Porta, F. (157) 123)

C-nitroso

Catalytic synthesis of C-nitroso compounds by cis-Mo(O)<sub>2</sub>(acac)<sub>2</sub> (Porta, F. (157) 123)

CO-Ag complexes

Adsorption of NO and CO on silver-exchanged microporous materials (Akolekar, D.B. (157) 199)

Copper

Selective hydrogenation of carvone and o-xylene on Pd-Cu catalysts prepared by surface redox reaction (Mélendrez, R. (157) 143)

Copper phthalocyanine

Spectroscopic investigation and catalytic activity of copper(II) phthalocyanine encapsulated in zeolite Y (Seelan, S. (157) 163)

 $Cr(CO)_6$ 

Catalytic activity of CrCo/alumina catalyst in thiophene hydrodesulphurisation (Myllyoja, S. (157) 245)

Critical solution temperature

Thermoregulated Phase Transfer Ligands and Catalysis IX. Hydroformylation of higher olefins in organic monophase catalytic system based on the concept of critical solution temperature of the nonionic tensioactive phosphine ligand (Wang, Y. (157) 111)

β-Cyclodextrin

Biphasic Wacker-oxidation of 1-octene catalyzed by palladium complexes with modified β-cyclodextrins (Karakhanov, E. (157) 25)

Cyclodextrins

A novel cyclodextrin homodimer with dual-mode substrate binding and esterase activity (Tastan, P. (157) 261)

Cyclopentadiene

Selective hydrogenation of cyclopentadiene in mono- and bimetallic catalytic hollow-fiber reactors (Liu, C. (157) 253)

Cyclopropanation

Chiral pyridinyl-oxazolines as ligands for copper(I)-catalyzed asymmetric cyclopropanation (Wu, X.-Y. (157) 59)

#### $\alpha$ -Diketone

Asymmetric hydrogenation of *α*-diketones over polymerstabilized and supported platinum clusters (Zuo, X, (157) 217)

Enantio-differentiating

Enantio-differentiating hydrogenation of methyl acetoacetate over tartaric acid-NaBr-modified supported nickel catalyst prepared from nickel acetylacetonate (Osawa, T. (157) 207)

Enantioselectivity

Asymmetric hydrogenation of  $\alpha$ -diketones over polymerstabilized and supported platinum clusters (Zuo, X. (157) 217) Encapsulation

Spectroscopic investigation and catalytic activity of copper(II) phthalocyanine encapsulated in zeolite Y (Seelan, S. (157) 163)

Enzyme mimics

A novel cvclodextrin homodimer with dual-mode substrate binding and esterase activity (Tastan, P. (157) 261)

Enzyme models

A novel cyclodextrin homodimer with dual-mode substrate binding and esterase activity (Tastan, P. (157) 261)

Epoxidation

Synthesis, characterization and catalytic activity of polynuclear manganese complexes of 2.5-dihydroxyterephthalaldehyde for epoxidation of olefins with  $H_2O_2$  (Krishnan, R. (157) 15)

#### EPR

Spectroscopic investigation and catalytic activity of copper(II) phthalocyanine encapsulated in zeolite Y (Seelan, S. (157) 163)

ESR

Studies on superoxide  $O_2^-$  species on the interaction of TS-1 zeolite with  $H_2O_2$  (Zhao, Q. (157) 265)

Ethylene/CO cooligomerization

Synthesis and catalytic activity of allyl, methallyl and methyl complexes of nickel(II) and palladium(II) with biphosphine monoxide ligands: oligomerization of ethylene and copolymerization of ethylene and carbon monoxide (Brassat, I. (157) 41) Ethylene oligomerization

Synthesis and catalytic activity of allyl, methallyl and methyl complexes of nickel(II) and palladium(II) with biphosphine monoxide ligands: oligomerization of ethylene and copolymerization of ethylene and carbon monoxide (Brassat, I. (157) 41)

EXAFS

Supported organometallic complexes. Part XX. Hydroformylation of olefins with rhodium(I) hybrid catalysts (Lindner, E. (157) 97)

# FTIR

Adsorption of NO and CO on silver-exchanged microporous materials (Akolekar, D.B. (157) 199)

Gel-type resins

Metal ion implantation onto acidic resins upon reaction of metal acetates and carbamates Part I. Synthetic results (Belli Dell'Amico, D. (157) 173)

D-glucose

Hydrogen peroxide oxidation of D-glucose with titanium-containing zeolites as catalysts (Velarde, A.M. (157) 225)

#### Half-sandwich

Stereospecific propylene polymerization using half-sandwich metallocene/MAO systems: a mechanistic insight (Kleinschmidt, R. (157) 83)

#### Hammett relationship

A new evidence of the high-valent oxo-metal radical cation intermediate and hydrogen radical abstract mechanism in hydrocarbon hydroxylation catalyzed by metalloporphyrins (Guo, C.-C. (157) 31)

#### HDS

Catalytic activity of CrCo/alumina catalyst in thiophene hydrodesulphurisation (Myllyoja, S. (157) 245)

Heck reaction

The novel use of Ni, Co, Cu and Mn heterogeneous catalysts for the Heck reaction (Iyer, S. (157) 275)

Heterogeneous

The novel use of Ni, Co, Cu and Mn heterogeneous catalysts for the Heck reaction (Iyer, S. (157) 275)

Heterogeneous catalysis

Rh<sup>3+</sup> and Rh<sup>3+</sup>-diamine complexes intercalated in  $\gamma$ -titanium hydrogen phosphate. Synthesis, characterisation and catalytic activity towards aniline oxidative carbonylation processes (Giannoccaro, P. (157) 131)

#### Hexamethylenediisocyanate

Influence of the alcohol nature on the catalytic properties of  $Fe(acac)_3$  and  $Cu(acac)_2$  in the formation of urethane from a diisocyanate (Ligabue, R.A. (157) 73)

Higher olefins

Thermoregulated Phase Transfer Ligands and Catalysis IX. Hydroformylation of higher olefins in organic monophase catalytic system based on the concept of critical solution temperature of the nonionic tensioactive phosphine ligand (Wang, Y. (157) 111)

Hydrated, dehydrated and calcined Pt tetrammine complexes Effect of zeolitic water on the carbonylation route of platinum(II) in NaX to  $[Pt_3(CO)_6]_2^{2-}$  Chini complexes embedded in cavities of the zeolite (Beneke, M. (157) 151)

Hydrodesulphurisation

Catalytic activity of CrCo/alumina catalyst in thiophene hydrodesulphurisation (Myllyoja, S. (157) 245)

Hydroesterification

Regioselective hydroesterification of 1-alkynes catalyzed by palladium-phosphine complexes (Akao, M. (157) 117)

Hydroformylation

Hydroformylation of functionalized olefins catalyzed by water-soluble rhodium carbonyl complexes (Paganelli, S. (157) 1)

Supported organometallic complexes. Part XX. Hydroformylation of olefins with rhodium(I) hybrid catalysts (Lindner, E. (157) 97)

Thermoregulated Phase Transfer Ligands and Catalysis IX. Hydroformylation of higher olefins in organic monophase catalytic system based on the concept of critical solution temperature of the nonionic tensioactive phosphine ligand (Wang, Y. (157) 111)

Hydrogenation

Rhodium catalysed enantioselective hydrogenation in water using pyrphos bound to poly-acrylic acid as ligand (Malmström, T. (157) 79) Enantio-differentiating hydrogenation of methyl acetoacetate over tartaric acid-NaBr-modified supported nickel catalyst prepared from nickel acetylacetonate (Osawa, T. (157) 207)

Asymmetric hydrogenation of α-diketones over polymerstabilized and supported platinum clusters (Zuo, X. (157) 217) Hydrogen peroxide

Hydrogen peroxide

Synthesis, characterization and catalytic activity of polynuclear manganese complexes of 2,5-dihydroxyterephthalaldehyde for epoxidation of olefins with  $H_2O_2$  (Krishnan, R. (157) 15)

#### Hydrotalcites

Influence of acid-base properties of mixed oxides derived from hydrotalcite-like precursors in the transfer hydrogenation of propiophenone (Jyothi, T.M. (157) 193)

2-Hydroxy-1,4-naphthoquinone (HNQ, lawsone)

Selective catalytic oxidation of naphthol to 2-hydroxyl-1,4naphthoquinone by hydrogen peroxide over metalloporphyrin catalysts (Yan, Y. (157) 65)

#### Immobilized catalysts

Supported organometallic complexes. Part XX. Hydroformylation of olefins with rhodium(I) hybrid catalysts (Lindner, E. (157) 97)

# Intercalation compounds

 $Rh^{3+}$  and  $Rh^{3+}$ -diamine complexes intercalated in  $\gamma$ -titanium hydrogen phosphate. Synthesis, characterisation and catalytic activity towards aniline oxidative carbonylation processes (Giannoccaro, P. (157) 131)

Ion exchangers

Metal palladium dispersed inside macroporous ion-exchange resins: rotational and translational mobility inside the polymer network (D'Archivio, A.A. (157) 269)

# β-Isophorone

Kinetics of oxidation of  $\beta$ -isophorone to keto-isophorone catalyzed by manganese Schiff base complex using molecular oxygen (Halligudi, S.B. (157) 9)

#### Keto-isophorone

Kinetics of oxidation of  $\beta$ -isophorone to keto-isophorone catalyzed by manganese Schiff base complex using molecular oxygen (Halligudi, S.B. (157) 9)

## Macroporous polymer supports

Metal palladium dispersed inside macroporous ion-exchange resins: rotational and translational mobility inside the polymer network (D'Archivio, A.A. (157) 269)

# Manganese

Kinetics of oxidation of  $\beta$ -isophorone to keto-isophorone catalyzed by manganese Schiff base complex using molecular oxygen (Halligudi, S.B. (157) 9)

meso-TPP

Photocatalysed reaction of meso-tetraphenylporphyrin on mesoporous TiMCM-41 molecular sieves (Kandavelu, V. (157) 189)

Metal-\beta-diketone complexes

Influence of the alcohol nature on the catalytic properties of  $Fe(acac)_3$  and  $Cu(acac)_2$  in the formation of urethane from a diisocyanate (Ligabue, R.A. (157) 73)

Metal ion implantation onto acidic resins upon reaction of metal acetates and carbamates Part I. Synthetic results (Belli Dell'Amico, D. (157) 173)

Metallocene/MAO system

Stereospecific propylene polymerization using half-sandwich metallocene/MAO systems: a mechanistic insight (Kleinschmidt, R. (157) 83)

Metalloporphyrin catalysts

Selective catalytic oxidation of naphthol to 2-hydroxyl-1,4naphthoquinone by hydrogen peroxide over metalloporphyrin catalysts (Yan, Y. (157) 65)

# Metalloporphyrins

A new evidence of the high-valent oxo-metal radical cation intermediate and hydrogen radical abstract mechanism in hydrocarbon hydroxylation catalyzed by metalloporphyrins (Guo, C.-C. (157) 31)

## Methyl acetoacetate

Enantio-differentiating hydrogenation of methyl acetoacetate over tartaric acid-NaBr-modified supported nickel catalyst prepared from nickel acetylacetonate (Osawa, T. (157) 207)

# Mixed oxides

Influence of acid-base properties of mixed oxides derived from hydrotalcite-like precursors in the transfer hydrogenation of propiophenone (Jyothi, T.M. (157) 193)

# Mn(II) complexes

Oxidation of cyclohexene with *tert*-butylhydroperoxide catalyzed by manganese(II) complexes included in zeolite Y (Salavati Niassary, M. (157) 183)

Modified supported nickel catalyst

Enantio-differentiating hydrogenation of methyl acetoacetate over tartaric acid-NaBr-modified supported nickel catalyst prepared from nickel acetylacetonate (Osawa, T. (157) 207)

Molecular recognition

Biphasic Wacker-oxidation of 1-octene catalyzed by palladium complexes with modified  $\beta$ -cyclodextrins (Karakhanov, E. (157) 25)

MoO<sub>3</sub>/Al<sub>2</sub>O<sub>3</sub>

Dependence of reactivity on pretreatment in molybdenaalumina catalysts for propene metathesis (Handzlik, J. (157) 237)

# 1-Naphthol

Selective catalytic oxidation of naphthol to 2-hydroxyl-1,4naphthoquinone by hydrogen peroxide over metalloporphyrin catalysts (Yan, Y. (157) 65)

2-Naphthol

Selective catalytic oxidation of naphthol to 2-hydroxyl-1,4naphthoquinone by hydrogen peroxide over metalloporphyrin catalysts (Yan, Y. (157) 65)

# Nickel

Synthesis and catalytic activity of allyl, methallyl and methyl complexes of nickel(II) and palladium(II) with biphosphine monoxide ligands: oligomerization of ethylene and copolymerization of ethylene and carbon monoxide (Brassat, I. (157) 41) Nickel acetylacetonate

Enantio-differentiating hydrogenation of methyl acetoacetate over tartaric acid-NaBr-modified supported nickel catalyst prepared from nickel acetylacetonate (Osawa, T. (157) 207) Nitric oxide

Adsorption of NO and CO on silver-exchanged microporous materials (Akolekar, D.B. (157) 199)

# N, N'-diphenylurea

 $Rh^{3+}$  and  $Rh^{3+}$ -diamine complexes intercalated in  $\gamma$ -titanium hydrogen phosphate. Synthesis, characterisation and catalytic activity towards aniline oxidative carbonylation processes (Giannoccaro, P. (157) 131)

## NO-Ag complexes

Adsorption of NO and CO on silver-exchanged microporous materials (Akolekar, D.B. (157) 199)

Nonionic tensioactive phosphine ligand

Thermoregulated Phase Transfer Ligands and Catalysis IX. Hydroformylation of higher olefins in organic monophase catalytic system based on the concept of critical solution temperature of the nonionic tensioactive phosphine ligand (Wang, Y. (157) 111)

# Organic monophase system

Thermoregulated Phase Transfer Ligands and Catalysis IX. Hydroformylation of higher olefins in organic monophase catalytic system based on the concept of critical solution temperature of the nonionic tensioactive phosphine ligand (Wang, Y. (157) 111)

# Oxazoline

Chiral pyridinyl-oxazolines as ligands for copper(I)-catalyzed asymmetric cyclopropanation (Wu, X.-Y. (157) 59)

# Oxidation

Kinetics of oxidation of  $\beta$ -isophorone to keto-isophorone catalyzed by manganese Schiff base complex using molecular oxygen (Halligudi, S.B. (157) 9)

Hydrogen peroxide oxidation of D-glucose with titanium-containing zeolites as catalysts (Velarde, A.M. (157) 225)

Oxidation of cyclohexene

Oxidation of cyclohexene with *tert*-butylhydroperoxide catalyzed by manganese(II) complexes included in zeolite Y (Salavati Niassary, M. (157) 183)

# Palladium

Synthesis and catalytic activity of allyl, methallyl and methyl complexes of nickel(II) and palladium(II) with biphosphine monoxide ligands: oligomerization of ethylene and copolymerization of ethylene and carbon monoxide (Brassat, I. (157) 41) Selective hydrogenation of carvone and *o*-xylene on Pd–Cu catalysts prepared by surface redox reaction (Mélendrez, R. (157) 143)

Metal palladium dispersed inside macroporous ion-exchange resins: rotational and translational mobility inside the polymer network (D'Archivio, A.A. (157) 269)

# Palladium complex

Regioselective hydroesterification of 1-alkynes catalyzed by palladium–phosphine complexes (Akao, M. (157) 117)

Phosphine

Rhodium catalysed enantioselective hydrogenation in water using pyrphos bound to poly-acrylic acid as ligand (Malmström, T. (157) 79)

# Photocatalysis

Photocatalysed reaction of meso-tetraphenylporphyrin on mesoporous TiMCM-41 molecular sieves (Kandavelu, V. (157) 189)

#### Platinum cluster

Asymmetric hydrogenation of α-diketones over polymerstabilized and supported platinum clusters (Zuo, X. (157) 217) Polyketones

Synthesis and catalytic activity of allyl, methallyl and methyl complexes of nickel(II) and palladium(II) with biphosphine monoxide ligands: oligomerization of ethylene and copolymerization of ethylene and carbon monoxide (Brassat, I. (157) 41)

Polymer-anchored mono- and bimetallic catalysts

Selective hydrogenation of cyclopentadiene in mono- and bimetallic catalytic hollow-fiber reactors (Liu, C. (157) 253)

Polymerization

Stereospecific propylene polymerization using half-sandwich metallocene/MAO systems: a mechanistic insight (Kleinschmidt, R. (157) 83)

Polynuclear manganese complexes

Synthesis, characterization and catalytic activity of polynuclear manganese complexes of 2,5-dihydroxyterephthalaldehyde for epoxidation of olefins with  $H_2O_2$  (Krishnan, R. (157) 15)

#### Propene metathesis

Dependence of reactivity on pretreatment in molybdenaalumina catalysts for propene metathesis (Handzlik, J. (157) 237)

Propiophenone

Influence of acid-base properties of mixed oxides derived from hydrotalcite-like precursors in the transfer hydrogenation of propiophenone (Jyothi, T.M. (157) 193)

Reductive carbonylation

 $Rh^{3+}$  and  $Rh^{3+}$ -diamine complexes intercalated in  $\gamma$ -titanium hydrogen phosphate. Synthesis, characterisation and catalytic activity towards aniline oxidative carbonylation processes (Giannoccaro, P. (157) 131)

Resin metallation

Metal ion implantation onto acidic resins upon reaction of metal acetates and carbamates Part I. Synthetic results (Belli Dell'Amico, D. (157) 173)

Rhodium

Hydroformylation of functionalized olefins catalyzed by water-soluble rhodium carbonyl complexes (Paganelli, S. (157) 1)

Rhodium catalysed enantioselective hydrogenation in water using pyrphos bound to poly-acrylic acid as ligand (Malmström, T. (157) 79)

Supported organometallic complexes. Part XX. Hydroformylation of olefins with rhodium(I) hybrid catalysts (Lindner, E. (157) 97)

Thermoregulated Phase Transfer Ligands and Catalysis IX. Hydroformylation of higher olefins in organic monophase catalytic system based on the concept of critical solution temperature of the nonionic tensioactive phosphine ligand (Wang, Y. (157) 111)

Rhodium-supported

 $Rh^{3+}$  and  $Rh^{3+}$ -diamine complexes intercalated in  $\gamma$ -titanium hydrogen phosphate. Synthesis, characterisation and catalytic activity towards aniline oxidative carbonylation processes (Giannoccaro, P. (157) 131)

Rotational and translational mobility

Metal palladium dispersed inside macroporous ion-exchange resins: rotational and translational mobility inside the polymer network (D'Archivio, A.A. (157) 269)

Salen

Kinetics of oxidation of  $\beta$ -isophorone to keto-isophorone catalyzed by manganese Schiff base complex using molecular oxygen (Halligudi, S.B. (157) 9)

Schiff base

Synthesis, characterization and catalytic activity of polynuclear manganese complexes of 2,5-dihydroxyterephthalaldehyde for epoxidation of olefins with  $H_2O_2$  (Krishnan, R. (157) 15)

Selective catalytic oxidation

Selective catalytic oxidation of naphthol to 2-hydroxyl-1,4naphthoquinone by hydrogen peroxide over metalloporphyrin catalysts (Yan, Y. (157) 65)

Selective hydrogenation

Selective hydrogenation of carvone and *o*-xylene on Pd-Cu catalysts prepared by surface redox reaction (Mélendrez, R. (157) 143)

Selective hydrogenation of cyclopentadiene in mono- and bimetallic catalytic hollow-fiber reactors (Liu, C. (157) 253)

# Sol-gel

Supported organometallic complexes. Part XX. Hydroformylation of olefins with rhodium(I) hybrid catalysts (Lindner, E. (157) 97)

Solid-state NMR

Supported organometallic complexes. Part XX. Hydroformylation of olefins with rhodium(I) hybrid catalysts (Lindner, E. (157) 97)

#### Spectroscopy

Spectroscopic investigation and catalytic activity of copper(II) phthalocyanine encapsulated in zeolite Y (Seelan, S. (157) 163)

Styrene epoxidation

Spectroscopic investigation and catalytic activity of copper(II) phthalocyanine encapsulated in zeolite Y (Seelan, S. (157) 163)

## Sulfides

Effect of portionwise addition of oxidant in asymmetric vanadium-catalyzed sulfide oxidation (Karpyshev, N.N. (157) 91) Sulfoxides

Effect of portionwise addition of oxidant in asymmetric vanadium-catalyzed sulfide oxidation (Karpyshev, N.N. (157) 91) Superoxide O<sub>2</sub><sup>-</sup> species

Studies on superoxide  $O_2^-$  species on the interaction of TS-1 zeolite with H<sub>2</sub>O<sub>2</sub> (Zhao, Q. (157) 265)

Supramolecular catalysis

Biphasic Wacker-oxidation of 1-octene catalyzed by palladium complexes with modified  $\beta$ -cyclodextrins (Karakhanov, E. (157) 25)

Surface redox reaction

Selective hydrogenation of carvone and *o*-xylene on Pd–Cu catalysts prepared by surface redox reaction (Mélendrez, R. (157) 143)

#### Swollen state

Metal palladium dispersed inside macroporous ion-exchange resins: rotational and translational mobility inside the polymer network (D'Archivio, A.A. (157) 269)

#### Synergic effect

Selective hydrogenation of cyclopentadiene in mono- and bimetallic catalytic hollow-fiber reactors (Liu, C. (157) 253)

#### TiMCM-41

Photocatalysed reaction of meso-tetraphenylporphyrin on mesoporous TiMCM-41 molecular sieves (Kandavelu, V. (157) 189)

#### Titanium

Hydrogen peroxide oxidation of D-glucose with titanium-containing zeolites as catalysts (Velarde, A.M. (157) 225)

# Titanium hydrogen phosphate

Rh<sup>3+</sup> and Rh<sup>3+</sup>-diamine complexes intercalated in  $\gamma$ -titanium hydrogen phosphate. Synthesis, characterisation and catalytic activity towards aniline oxidative carbonylation processes (Giannoccaro, P. (157) 131)

#### Titanium silicalite-1

Studies on superoxide  $O_2^-$  species on the interaction of TS-1 zeolite with  $H_2O_2$  (Zhao, Q. (157) 265)

# TPR

Catalytic activity of CrCo/alumina catalyst in thiophene hydrodesulphurisation (Myllyoja, S. (157) 245)

## Transfer hydrogenation

Influence of acid-base properties of mixed oxides derived from hydrotalcite-like precursors in the transfer hydrogenation of propiophenone (Jyothi, T.M. (157) 193)

#### Urethanes

Influence of the alcohol nature on the catalytic properties of  $Fe(acac)_3$  and  $Cu(acac)_2$  in the formation of urethane from a diisocyanate (Ligabue, R.A. (157) 73)

#### V(IV)-complexes

Effect of portionwise addition of oxidant in asymmetric vanadium-catalyzed sulfide oxidation (Karpyshev, N.N. (157) 91)

```
Wacker-oxidation
```

Biphasic Wacker-oxidation of 1-octene catalyzed by palladium complexes with modified  $\beta$ -cyclodextrins (Karakhanov, E. (157) 25)

#### Water-soluble

Rhodium catalysed enantioselective hydrogenation in water using pyrphos bound to poly-acrylic acid as ligand (Malmström, T. (157) 79)

## XPS

Dependence of reactivity on pretreatment in molybdenaalumina catalysts for propene metathesis (Handzlik, J. (157) 237)

#### Zeolites

Hydrogen peroxide oxidation of D-glucose with titanium-containing zeolites as catalysts (Velarde, A.M. (157) 225)

## Zeolite Y

Spectroscopic investigation and catalytic activity of copper(II) phthalocyanine encapsulated in zeolite Y (Seelan, S. (157) 163)

## Zeolite-Y

Oxidation of cyclohexene with *tert*-butylhydroperoxide catalyzed by manganese(II) complexes included in zeolite Y (Salavati Niassary, M. (157) 183)