

Catalysis Today 53 (1999) 743-750



Subject index

N-acetyl-D glucosamine

Two applications of pressure tuning spectroscopy to processes in liquids 317

Acid treatment

The role of carbon surface chemistry in N_2O conversion to N_2 over Ni catalyst supported on activated carbon 669

Activated carbon

Comparison of catalytic processes with other regeneration methods of activated carbon 73

The role of carbon surface chemistry in N_2O conversion to N_2 over Ni catalyst supported on activated carbon 669

Adsorption isotherm

Aerobic and anaerobic TiO₂-photocatalysed purifications of waters containing organic pollutants 145

Adsorption

Comparison of catalytic processes with other regeneration methods of activated carbon 73

The role of adsorption on the observed temperature dependencies of diffusion coefficients 339

Advanced oxidation process

The photo-fenton reaction and the TiO₂/UV process for waste water treatment – novel developments 131

Advanced oxidation processes (AOP) for water purification and recovery 51

Agglomeration

Redispersion of iridium using in situ chlorine generation and avoiding iron contamination 325

Alkane dehydrocyclization

Alkane dehydrocyclization mechanism 443

Alkane

Alkane dehydrocyclization mechanism 443

Ammonia

Catalytic abatement of nitrogen oxides-stationary applications 519

Amorphous catalyst

NMR and modelling studies of structural heterogeneity over several lengthscales in amorphous catalyst supports 207

Aqueous solution

Catalytic hydrogenation of aqueous nitrate solutions in fixed-bed reactors 35

Catalytic ozonation: a promising advanced oxidation technology for water treatment 61

Chemical, biological and physical constrains in catalytic reduction processes for purification of drinking water 21

Arrhenius parameters

Prediction of global reaction kinetics by solution of the Arrhenius parameterised component elementary reactions: microkinetic analysis 161

Bimetallic catalysts

Chemical, biological and physical constrains in catalytic reduction processes for purification of drinking water 21

Biological oxidation

Wastewater treatment: wet air oxidation as a precursor to biological treatment 93

Bubble-column fixed-bed reactor

Catalytic hydrogenation of aqueous nitrate solutions in fixed-bed reactors 35

Carbon fibrous materials

Catalysts for sanitary air cleaning from ozone 703

Carbon formation

Innovation and science in the process industry Steam reforming and hydrogenolysis 311

Carbon monoxide oxidation

Monte Carlo simulations of heterogeneous catalytic reactions on highly dispersed supported metal catalysts 289

Carbon monoxide

Thermal stability of metal-supported catalysts for reduction of cold-start emissions in a wood-fired domestic boiler 647

Catalysis

Simulations of the kinetics of rapid reactions on supported catalyst particles 273

Catalysis: low-temperature

Kinetics and mechanism of low-temperature ozone decomposition by Co-ions adsorbed on silica 715

Catalyst activation

Activation of monolithic catalysts based on diatomaceous earth for sulfur dioxide oxidation 557

Catalyst design

Chemical, biological and physical constrains in catalytic reduction processes for purification of drinking water 21

Catalyst regeneration

Redispersion of iridium using in situ chlorine generation and avoiding iron contamination 325

Catalyst

Catalytic ozonation: a promising advanced oxidation technology for water treatment 61

Ceramic foam as a potential molten salt oxidation catalyst support in the removal of soot from diesel exhaust gas 613 Molecular structure–reactivity relationships for the oxidation of sulfur dioxide over supported metal oxide catalysts 543

New insights into methanol synthesis catalysts from X-ray absorption spectroscopy 433

The influence of NO_x on the oxidation of metal activated diesel soot 623

Catalytic destruction of hazardous halogenated organic chemicals 407

Catalytic combustion

Catalytic purification of flue gas from civil-used stove 661 Catalytic cracking

Catalysis challenges in fluid catalytic cracking: a 49 year personal account of past and more recent contributions and some possible new and future directions for even further improvement 367

Catalytic hydrogenation

Chemical, biological and physical constrains in catalytic reduction processes for purification of drinking water 21

Catalytic liquid-phase hydrogenation

Catalytic hydrogenation of aqueous nitrate solutions in fixed-bed reactors 35

Catalytic monolith reactor

Mathematical modelling of catalytic monolithic reactors with storage of reaction components on the catalyst surface 583

Catalytic oxidation

Catalytic strategies for industrial water re-use 3

Catalytic ozonation

Advanced oxidation processes (AOP) for water purification and recovery 51

Catalytic wet oxidation

Recycle rinse water: problems and opportunities 11

Ceria

Cerium–terbium mixed oxides as alternative components for three-way catalysts: a comparative study of $Pt/CeTbO_x$ and Pt/CeO_2 model systems 607

Ceria-terbia

Cerium–terbium mixed oxides as alternative components for three-way catalysts: a comparative study of $Pt/CeTbO_x$ and Pt/CeO_2 model systems 607

CH₄ oxidation

Cerium–terbium mixed oxides as alternative components for three-way catalysts: a comparative study of $Pt/CeTbO_x$ and Pt/CeO_2 model systems 607

Chelated adsorbate

Aerobic and anaerobic TiO₂-photocatalysed purifications of waters containing organic pollutants 145

Chemical oxidation

Advanced oxidation processes (AOP) for water purification and recovery 51

Chemical process industry

Catalytic destruction of hazardous halogenated organic chemicals 407

Chloride destruction catalysts

Catalytic destruction of hazardous halogenated organic chemicals 407

Chlorinated hydrocarbons

Evaluation of V_2O_5 – WO_3 – TiO_2 and alternative SCR catalysts in the abatement of VOCs 525

Chlorinated organic hydrocarbon destruction

Catalytic destruction of hazardous halogenated organic chemicals 407

Civil-used stove

Catalytic purification of flue gas from civil-used stove 661

Claus process

Molecular structure—reactivity relationships for the oxidation of sulfur dioxide over supported metal oxide catalysts 543

CO oxidation

Cerium–terbium mixed oxides as alternative components for three-way catalysts: a comparative study of $Pt/CeTbO_x$ and Pt/CeO_2 model systems 607

Co/beta zeolite

Catalytic abatement of nitrogen oxides-stationary applications 519

Cobalt

Kinetics and mechanism of low-temperature ozone decomposition by Co-ions adsorbed on silica 715

Cobalt/Cerium oxide catalysts

Catalytic combustion of diesel soot on Co, K supported catalysts 631

Cobalt/Magnesium oxide catalysts

Catalytic combustion of diesel soot on Co, K supported catalysts 631

COD removal

Catalytic strategies for industrial water re-use 3

Cold-start

Thermal stability of metal-supported catalysts for reduction of cold-start emissions in a wood-fired domestic boiler 647

Combustion

Ceramic foam as a potential molten salt oxidation catalyst support in the removal of soot from diesel exhaust gas 613

CoMoC

Symmetrical synergism and the role of carbon in transition metal sulfide catalytic materials 357

Copper (II) chloride

Catalysts for sanitary air cleaning from ozone 703

Copper catalyst

Water pollution abatement by catalytic wet air oxidation in a trickle bed reactor 107

Copper metal

New insights into methanol synthesis catalysts from X-ray absorption spectroscopy 433

Copper

Innovation and science in the process industry Steam reforming and hydrogenolysis 311

Deactivation by SO₂

Selective catalytic reduction of N_2O in industrial emissions containing O_2 , H_2O and SO_2 : behavior of Fe/ZSM-5 catalysts 683

Deactivation

Thermal stability of metal-supported catalysts for reduction of cold-start emissions in a wood-fired domestic boiler 647

$DeSO_x$

Activation of monolithic catalysts based on diatomaceous earth for sulfur dioxide oxidation 557

Diesel

Ceramic foam as a potential molten salt oxidation catalyst support in the removal of soot from diesel exhaust gas 613 The influence of NO_x on the oxidation of metal activated diesel soot 623

Diffusion coefficients

The role of adsorption on the observed temperature dependencies of diffusion coefficients 339

Diffusion

Modeling of the transient sorption and diffusion processes in microporous materials at low pressure 189

4, N, N-dimethylaminobenzonitrile

Two applications of pressure tuning spectroscopy to processes in liquids 317

Doping

The photo-fenton reaction and the TiO_2/UV process for waste water treatment — novel developments 131

DRIFTS spectra

Aerobic and anaerobic TiO₂-photocatalysed purifications of waters containing organic pollutants 145

Drinking water purification

Catalytic hydrogenation of aqueous nitrate solutions in fixed-bed reactors 35

Electron density

The photo-fenton reaction and the TiO_2/UV process for waste water treatment – novel developments 131

Electronics industry

Recycle rinse water: problems and opportunities 11

Elementary reactions

Prediction of global reaction kinetics by solution of the Arrhenius parameterised component elementary reactions: microkinetic analysis 161

Ethylene hydrogenation

Monte Carlo simulations of heterogeneous catalytic reactions on highly dispersed supported metal catalysts 289

Eutectic

Ceramic foam as a potential molten salt oxidation catalyst support in the removal of soot from diesel exhaust gas 613

FCC

Molecular structure-reactivity relationships for the oxidation of sulfur dioxide over supported metal oxide catalysts 543

Fe/ZSM-5

Selective catalytic reduction of N_2O in industrial emissions containing O_2 , H_2O and SO_2 : behavior of Fe/ZSM-5 catalysts 683

Flue gas purification

Catalytic purification of flue gas from civil-used stove 661

Foam

Ceramic foam as a potential molten salt oxidation catalyst support in the removal of soot from diesel exhaust gas 613

Fuel additives

The influence of NO_x on the oxidation of metal activated diesel soot 623

Fundamental kinetics

Prediction of global reaction kinetics by solution of the Arrhenius parameterised component elementary reactions: microkinetic analysis 161

General kinetics

Diffusion and reaction in porous networks 245

Global reaction simulation

Prediction of global reaction kinetics by solution of the Arrhenius parameterised component elementary reactions: microkinetic analysis 161

Gold

Innovation and science in the process industry Steam reforming and hydrogenolysis 311

Graphite nanofiber

Hydrogenation of crotonaldehyde over graphite nanofiber supported nickel 385

Hazardous halogenated compounds

Catalytic destruction of hazardous halogenated organic chemicals 407

Heterogeneous catalysis

Catalytic hydrogenation of aqueous nitrate solutions in fixed-bed reactors 35

Comparison of catalytic processes with other regeneration methods of activated carbon 73

Heterogeneous catalysts

Wastewater treatment: wet air oxidation as a precursor to biological treatment 93

Heterogeneous photocatalysis

The role of H_2O in the photocatalytic oxidation of toluene in vapour phase on anatase TiO_2 catalyst A FTIR study 695

Hydrodesulfurization

Symmetrical synergism and the role of carbon in transition metal sulfide catalytic materials 357

Hydrogen peroxide

Advanced oxidation processes (AOP) for water purification and recovery $51\,$

Hydrogenolysis

Alkane dehydrocyclization mechanism 443

Innovation and science in the process industry Steam reforming and hydrogenolysis 311

Hydrotalcite-like compounds

Catalytic decomposition of nitrous oxide over calcined cobalt aluminum hydrotalcites 725

Hydroxybenzoic acid

Aerobic and anaerobic TiO₂-photocatalysed purifications of waters containing organic pollutants 145

Immobilization

The photo-fenton reaction and the TiO_2/UV process for waste water treatment — novel developments 131

Industrial water treatment

Catalytic strategies for industrial water re-use 3

Integrated treatment

Wastewater treatment: wet air oxidation as a precursor to biological treatment 93

Iridium redispersion

Redispersion of iridium using in situ chlorine generation and avoiding iron contamination 325

Iron contamination

Redispersion of iridium using in situ chlorine generation and avoiding iron contamination 325

Iron transfer

Redispersion of iridium using in situ chlorine generation and avoiding iron contamination 325

Iron-oxide nanocluster

Selective catalytic reduction of N₂O in industrial emissions containing O₂, H₂O and SO₂: behavior of Fe/ZSM-5 catalysts 683

Isotopic tracer studies

Alkane dehydrocyclization mechanism 443

Lanthanide

Role of lanthanide elements on the catalytic behavior of supported Pd catalysts in the reduction of NO with methane 597

LAPW calculations

The photo-fenton reaction and the TiO_2/UV process for waste water treatment — novel developments 131

Low temperature

Kinetics and mechanism of low-temperature ozone decomposition by co-ions adsorbed on silica 715

Low-temperature catalysis

Catalysts for sanitary air cleaning from ozone 703

Lysozim

Two applications of pressure tuning spectroscopy to processes in liquids 317

Magnacat triangular process

Catalysis challenges in fluid catalytic cracking: a 49 year personal account of past and more recent contributions and some possible new and future directions for even further improvement 367

Magnetic Hook

Catalysis challenges in fluid catalytic cracking: a 49 year personal account of past and more recent contributions and some possible new and future directions for even further improvement 367

Manganese activation

Catalysis challenges in fluid catalytic cracking: a 49 year personal account of past and more recent contributions and some possible new and future directions for even further improvement 367

Manganese oxides

Thermal stability of metal-supported catalysts for reduction of cold-start emissions in a wood-fired domestic boiler 647

Mass transfe

Chemical, biological and physical constrains in catalytic reduction processes for purification of drinking water 21

Mathematical modelling

Mathematical modelling of catalytic monolithic reactors with storage of reaction components on the catalyst surface 583

Mechanism

Alkane dehydrocyclization mechanism 443

Mesoscopic modeling

Kinetic simulation of ammonia synthesis catalyzed by ruthenium 177

Metal oxide

Molecular structure-reactivity relationships for the oxidation of sulfur dioxide over supported metal oxide catalysts 543

Metal-activated soot

The influence of NO_x on the oxidation of metal activated diesel soot 623

Metallic monolith

Thermal stability of metal-supported catalysts for reduction of cold-start emissions in a wood-fired domestic boiler 647

Methane

Role of lanthanide elements on the catalytic behavior of supported Pd catalysts in the reduction of NO with methane 597

Thermal stability of metal-supported catalysts for reduction of cold-start emissions in a wood-fired domestic boiler 647

Methanol synthesis

New insights into methanol synthesis catalysts from X-ray absorption spectroscopy 433

Microkinetic analysis

Kinetic simulation of ammonia synthesis catalyzed by ruthenium 177

Microporous materials

Modeling of the transient sorption and diffusion processes in microporous materials at low pressure 189

Mixed metal oxide

Catalytic decomposition of nitrous oxide over calcined cobalt aluminum hydrotalcites 725

Mn oxide

Evaluation of $V_2O_5\text{--}WO_3\text{--}TiO_2$ and alternative SCR catalysts in the abatement of VOCs 525

Model catalysts

Monte Carlo simulations of heterogeneous catalytic reactions on highly dispersed supported metal catalysts 289

Models of non-equilibrium phenomena

Simulations of the kinetics of rapid reactions on supported catalyst particles 273

Models of surface chemical reactions

Simulations of the kinetics of rapid reactions on supported catalyst particles 273

Molten salt

Ceramic foam as a potential molten salt oxidation catalyst support in the removal of soot from diesel exhaust gas

Monochlorophenols

Aerobic and anaerobic TiO₂-photocatalysed purifications of waters containing organic pollutants 145

Monolith

Activation of monolithic catalysts based on diatomaceous earth for sulfur dioxide oxidation 557

Monte Carlo simulation

Monte Carlo simulations of heterogeneous catalytic reactions on highly dispersed supported metal catalysts 289

Simulations of the kinetics of rapid reactions on supported catalyst particles 273

$MoS_{2-x}C_x$

Symmetrical synergism and the role of carbon in transition metal sulfide catalytic materials 357

MoS2

Symmetrical synergism and the role of carbon in transition metal sulfide catalytic materials 357

Multicomponent diffusion

Diffusion and reaction in porous networks 245

N₂O reduction

Selective catalytic reduction of N₂O in industrial emissions containing O₂, H₂O and SO₂: behavior of Fe/ZSM-5 catalysts 683

The role of carbon surface chemistry in N_2O conversion to N_2 over Ni catalyst supported on activated carbon 669

Nafion

The photo-fenton reaction and the TiO_2/UV process for waste water treatment – novel developments 131

Naphtha reforming

Alkane dehydrocyclization mechanism 443

Naphthalene

Thermal stability of metal-supported catalysts for reduction of cold-start emissions in a wood-fired domestic boiler 647

Network model

Diffusion and reaction in porous networks 245

NH₃ synthesis

Kinetic simulation of ammonia synthesis catalyzed by ruthenium 177

Ni catalyst

The role of carbon surface chemistry in N_2O conversion to N_2 over Ni catalyst supported on activated carbon 669

Nickel catalysts

Innovation and science in the process industry Steam reforming and hydrogenolysis 311

Nickel

Hydrogenation of crotonaldehyde over graphite nanofiber supported nickel 385

NiMoC

Symmetrical synergism and the role of carbon in transition metal sulfide catalytic materials 357

Nitrate removal

Catalytic hydrogenation of aqueous nitrate solutions in fixed-bed reactors 35

Chemical, biological and physical constrains in catalytic reduction processes for purification of drinking water 23

Nitrous oxide decomposition

Catalytic decomposition of nitrous oxide over calcined cobalt aluminum hydrotalcites 725

Nitrous oxide

Catalytic abatement of nitrogen oxides-stationary applications 519

NMR

NMR and modelling studies of structural heterogeneity over several lengthscales in amorphous catalyst supports 207

No reduction

Role of lanthanide elements on the catalytic behavior of supported Pd catalysts in the reduction of NO with methane 597

NO_x storage

Mathematical modelling of catalytic monolithic reactors with storage of reaction components on the catalyst surface 583

NO_v reduction

Catalytic abatement of nitrogen oxides-stationary applications 519

NO_x

The influence of NO_x on the oxidation of metal activated diesel soot 623

Non-selective catalytic reduction

Catalytic abatement of nitrogen oxides-stationary applications 519

Nuclear magnetic resonance

The role of adsorption on the observed temperature dependencies of diffusion coefficients 339

Organics oxidation

Catalytic ozonation: a promising advanced oxidation technology for water treatment 61

Oxidation

Ceramic foam as a potential molten salt oxidation catalyst support in the removal of soot from diesel exhaust gas 613 Comparison of catalytic processes with other regeneration

methods of activated carbon 73

Molecular structure—reactivity relationships for the oxidation of

sulfur dioxide over supported metal oxide catalysts 543 The influence of NO_x on the oxidation of metal activated diesel

Thermal stability of metal-supported catalysts for reduction of cold-start emissions in a wood-fired domestic boiler 647

Oxygen buffering

Cerium–terbium mixed oxides as alternative components for three-way catalysts: a comparative study of $Pt/CeTbO_x$ and Pt/CeO_2 model systems 607

Oxygen storage

Cerium–terbium mixed oxides as alternative components for three-way catalysts: a comparative study of $Pt/CeTbO_x$ and Pt/CeO_2 model systems 607

Mathematical modelling of catalytic monolithic reactors with storage of reaction components on the catalyst surface 583

Ozone decomposition kinetics

Catalysts for sanitary air cleaning from ozone 703

Kinetics and mechanism of low-temperature ozone decomposition by Co-ions adsorbed on silica 715

Ozone

Catalytic ozonation: a promising advanced oxidation technology for water treatment 61

Palladium

Role of lanthanide elements on the catalytic behavior of supported Pd catalysts in the reduction of NO with methane 597

Pd-Cu bimetallics

Catalytic hydrogenation of aqueous nitrate solutions in fixed-bed reactors 35

Pd-only three-way catalyst

Characteristics of the Pd-only three-way catalysts prepared by sol-gel method 575

Periodic operation

Mathematical modelling of catalytic monolithic reactors with storage of reaction components on the catalyst surface 583

PH effect

Characteristics of the Pd-only three-way catalysts prepared by sol-gel method 575

Phenol

Water pollution abatement by catalytic wet air oxidation in a trickle bed reactor 107

Photo-Fenton

The photo-fenton reaction and the TiO_2/UV process for waste water treatment - novel developments 131

Photoassisted Fenton

Advanced oxidation processes (AOP) for water purification and recovery 51

Photocatalysis

Advanced oxidation processes (AOP) for water purification and recovery 51

Pilot plant

Chemical, biological and physical constrains in catalytic reduction processes for purification of drinking water 21

Platinum

Cerium–terbium mixed oxides as alternative components for three-way catalysts: a comparative study of $Pt/CeTbO_x$ and Pt/CeO_2 model systems 607

Thermal stability of metal-supported catalysts for reduction of cold-start emissions in a wood-fired domestic boiler 647

Pollutants

Catalytic purification of flue gas from civil-used stove 661 Polyethylene glycols

Wastewater treatment: wet air oxidation as a precursor to biological treatment 93

Polyphenols

Wastewater treatment: wet air oxidation as a precursor to biological treatment 93

Pore structure optimization

Diffusion and reaction in porous networks 245

Pores

The role of adsorption on the observed temperature dependencies of diffusion coefficients 339

Porous media

Diffusion and reaction in porous networks 245

Potassium promoter

Catalytic combustion of diesel soot on Co, K supported catalysts 631

Preparation

Ceramic foam as a potential molten salt oxidation catalyst support in the removal of soot from diesel exhaust gas 613

Pressure tuning spectroscopy

Two applications of pressure tuning spectroscopy to processes in liquids 317

Process engineering

Chemical, biological and physical constrains in catalytic reduction processes for purification of drinking water 21

Prometers

Characteristics of the Pd-only three-way catalysts prepared by sol-gel method 575

Propane

Selective catalytic reduction of N_2O in industrial emissions containing O_2 , H_2O and SO_2 : behavior of Fe/ZSM-5 catalysts 683

Pt-Ir/Γ-Al₂O₃

Redispersion of iridium using in situ chlorine generation and avoiding iron contamination 325

Pt/R1

Catalytic abatement of nitrogen oxides-stationary applications 519

Radicalic mechanism

Advanced oxidation processes (AOP) for water purification and recovery 51

Raman

Molecular structure–reactivity relationships for the oxidation of sulfur dioxide over supported metal oxide catalysts 543

Reaction kinetics

Catalytic hydrogenation of aqueous nitrate solutions in fixed-bed reactors 35

Reaction selectivity

Catalytic hydrogenation of aqueous nitrate solutions in fixed-bed reactors 35

Recycle water

Recycle rinse water: problems and opportunities 11

Redox catalysts

Catalytic strategies for industrial water re-use 3

Reduction

Comparison of catalytic processes with other regeneration methods of activated carbon 73

Regeneration

Comparison of catalytic processes with other regeneration methods of activated carbon 73

Reversible pressure

Two applications of pressure tuning spectroscopy to processes in liquids 317

Rinse water

Recycle rinse water: problems and opportunities 11

Ru catalysts

Kinetic simulation of ammonia synthesis catalyzed by ruthenium 177

$RuS_{2-x}C_{x}$

Symmetrical synergism and the role of carbon in transition metal sulfide catalytic materials 357

SCR catalysts

Evaluation of V_2O_5 – WO_3 – TiO_2 and alternative SCR catalysts in the abatement of VOCs 525

SCR

Molecular structure-reactivity relationships for the oxidation of sulfur dioxide over supported metal oxide catalysts 543

Selective catalytic reduction

Catalytic abatement of nitrogen oxides-stationary applications 519

Silica

Kinetics and mechanism of low-temperature ozone decomposition by Co-ions adsorbed on silica 715 So_2

Role of lanthanide elements on the catalytic behavior of supported Pd catalysts in the reduction of NO with methane 597

Sol-gel method

Characteristics of the Pd-only three-way catalysts prepared by sol-gel method 575

Sol-gel

Role of lanthanide elements on the catalytic behavior of supported Pd catalysts in the reduction of NO with methane 597

Solar

The photo-fenton reaction and the TiO_2/UV process for waste water treatment - novel developments 131

Solvent viscosity

Two applications of pressure tuning spectroscopy to processes in liquids 317

Soot combustion

Catalytic combustion of diesel soot on Co, K supported catalysts 631

Soot

Ceramic foam as a potential molten salt oxidation catalyst support in the removal of soot from diesel exhaust gas 613. The influence of NO_x on the oxidation of metal activated diesel soot 623.

Steady-state kinetics

Kinetic simulation of ammonia synthesis catalyzed by ruthenium 177

Steam reforming

Innovation and science in the process industry Steam reforming and hydrogenolysis 311

Structural heterogeneity

NMR and modelling studies of structural heterogeneity over several lengthscales in amorphous catalyst supports 207

suflur trioxide

Molecular structure–reactivity relationships for the oxidation of sulfur dioxide over supported metal oxide catalysts 543

Sulfur dioxide oxidation

Activation of monolithic catalysts based on diatomaceous earth for sulfur dioxide oxidation 557

sulfur dioxide

Molecular structure–reactivity relationships for the oxidation of sulfur dioxide over supported metal oxide catalysts 543

Molecular structure–reactivity relationships for the oxidation of sulfur dioxide over supported metal oxide catalysts 543

Sulphur

Innovation and science in the process industry Steam reforming and hydrogenolysis 311

Surface modifications

Innovation and science in the process industry Steam reforming and hydrogenolysis 311

Thermal ageing

Thermal stability

Thermal stability of metal-supported catalysts for reduction of cold-start emissions in a wood-fired domestic boiler 647

Characteristics of the Pd-only three-way catalysts prepared by sol-gel method 575

TiO₂ photocatalysis

Aerobic and anaerobic TiO₂-photocatalysed purifications of waters containing organic pollutants 145

TiO₂

The photo-fenton reaction and the TiO_2/UV process for waste water treatment – novel developments 131

The role of H₂O in the photocatalytic oxidation of toluene in vapour phase on anatase TiO₂ catalyst A FTIR study 695

Toluene photo-oxidation

The role of $\rm H_2O$ in the photocatalytic oxidation of toluene in vapour phase on anatase $\rm TiO_2$ catalyst A FTIR study 695

Transient kinetics

Kinetic simulation of ammonia synthesis catalyzed by ruthenium 177

Transient sorption

Modeling of the transient sorption and diffusion processes in microporous materials at low pressure 189

Trickle bed

Water pollution abatement by catalytic wet air oxidation in a trickle bed reactor 107

Trickle-bed reactor

Catalytic hydrogenation of aqueous nitrate solutions in fixed-bed reactors 35

V₂O₅-WO₃-TiO₂

Evaluation of V_2O_5 – WO_3 – TiO_2 and alternative SCR catalysts in the abatement of VOCs 525

V2O5/TiO2

Catalytic abatement of nitrogen oxides-stationary applications 519

Vent gase

Catalytic destruction of hazardous halogenated organic chemicals 407

VOC

Evaluation of $V_2O_5\text{--}WO_3\text{--}TiO_2$ and alternative SCR catalysts in the abatement of VOCs 525

Waste water treatment

The photo-fenton reaction and the TiO_2/UV process for waste water treatment — novel developments 131

Waste water

Water pollution abatement by catalytic wet air oxidation in a trickle bed reactor 107

Wastewaters

Wastewater treatment: wet air oxidation as a precursor to biological treatment 93

Water catalytic technologies

Recycle rinse water: problems and opportunities 11

Water treatment

Advanced oxidation processes (AOP) for water purification and recovery 51

Catalytic ozonation: a promising advanced oxidation technology for water treatment $61\,$

Comparison of catalytic processes with other regeneration methods of activated carbon 73

Wet air oxidation

Wastewater treatment: wet air oxidation as a precursor to biological treatment 93

Water pollution abatement by catalytic wet air oxidation in a trickle bed reactor 107

Wood combustion

Thermal stability of metal-supported catalysts for reduction of cold-start emissions in a wood-fired domestic boiler 647

X-ray absorption spectroscopy

New insights into methanol synthesis catalysts from X-ray absorption spectroscopy 433

X-ray photoelectron spectroscopy

Catalytic decomposition of nitrous oxide over calcined cobalt aluminum hydrotalcites 725

Zeolites

The role of adsorption on the observed temperature dependencies of diffusion coefficients 339