

Session on X European Workshop on Selective Oxidation(ISO2011)

Tuesday , 30th August 2011

10:30-10:50 ISO01 - Oxidative Functional Group Transformations with Hydrogen Peroxide Catalyzed by Divanadium-Substituted Polyoxometalates

Noritaka Mizuno¹, Keigo Kamata¹, and Kazuya Yamaguchi¹

¹Department of Applied Chemistry, School of Engineering, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo, 113-8656, Japan

10:50-11:10 ISO02 - Novel Mesoporous Gallia/Silica Composites as Catalysts for the Selective Epoxidation of Alkenes with Hydrogen Peroxide

C. Aprile,^{1,2} W. Lueangchaichaweng,¹ Q. Wang,² P.P. Pescarmona¹

¹Centre for Surface Chemistry and Catalysis, University of Leuven (K.U. Leuven), Kasteelpark Arenberg 23, 3001 Heverlee, Belgium

²Unité de Chimie des Nanomatériaux, University of Namur (FUNDP), Rue de Bruxelles 61, 5000, Namur, Belgium

11:10-11:30 ISO03 - Oxidation of Cyclohexanone with Hydrogen Peroxide over β -Zeolites with Various Si/Al Ratio

Ryohei Ohno¹, Keita Taniya¹, Shigeru Tsuruya¹, Yuichi Ichihashi¹, and Satoru Nishiyama¹

¹Kobe University, Rokkoda, Nada, Kobe 657-8501, Japan

11:30-11:50 ISO04 - Aerobic oxidation of alcohols over hydrotalcite-supported gold nanoparticles: the promotional effect of transition metal cations

Peng Liu^{1,2}, Yejun Guan¹, Rutger A. van Saten¹, Can Li^{2*}, and Emiel J.M. Hensen¹

¹Inorganic Materials Chemistry, Eindhoven University of Technology, The Netherlands

²Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China

11:50-12:10 ISO05 - One-pot Synthesis of Amides by Aerobic Oxidative Coupling of Alcohols and Amines using Supported Gold and Base as Catalysts

Jerrick Mielby, Søren Kegnæs and Anders Riisager

Centre for Catalysis and Sustainable Chemistry, Department of Chemistry, Technical University of Denmark, Building 207, DK-2800 Kgs. Lyngby, Denmark

12:10-12:30 ISO06 - Ag catalyzed partial oxidation reactions investigated by in-situ photoelectron spectroscopy

Tulio C. R. Rocha¹, Andreas Oestereich¹, Demid Demidov^{1,2}, Rosa Arrigo¹, Michael Hävecker¹, Axel Knop-Gericke¹ and Robert Schlögl^{1*}

¹Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin, 14195, Germany

²Boroskev Institute of Catalysis, SB RAS, Novosibirsk, 630090, Russia

12:30-14h00 Lunch break

14:00-14:20 ISO07 - Enzymatic Selective Oxidation of Alkanes Under Mild Conditions

M. Bordeaux¹, A. Galarneau¹, F. Fajula¹ and J. Drone¹

¹Institut Charles Gerhardt Montpellier UMR 5253CNRS/ENSCM/UM2/UM1, 8 rue de l'Ecole Normale, 34296 Montpellier, France

14:20-14:40 ISO08 - Gold Nanoparticles on Polyoxometalate as Efficient Catalysts for Selective Oxidation of Cellobiose and Cellulose to Gluconic Acid

Dongli An, Aihua Ye, Weiping Deng, Qinghong Zhang and Ye Wang

State Key Laboratory of Physical Chemistry of Solid Surfaces and National Engineering Laboratory for Green Chemical Productions of Alcohols, Ethers and Esters, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, 361005, China

14:40-15:00 ISO09 - Efficient Routes for Epoxidation of Monoterpenes Using Polyoxometalates
Salette S. Balula¹, Isabel C.M.S. Santos², Luís Cunha-Silva¹, A. P. Carvalho³, J. Pires³, Baltazar de Castro¹,
Cristina Freire¹, Ana M. V. Cavaleiro⁴

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University of Porto, Rua do Campo Alegre, 4169-007 Porto, Portugal

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³ Department of Chemistry and Biochemistry and CQB, Faculty of Sciences, University of Lisbon, Ed. C8,
Campo Grande, 1749-016 Lisbon, Portugal

⁴ Department of Chemistry, CICECO, University of Aveiro, 3810-193 Aveiro, Portugal

15:00-15:20 ISO10 - Synthesis and Unique Catalytic Performance of Single-site Titanium-containing Silica with 3D Hierarchical Macroporous and Mesoporous Structure

Takashi Kamegawa, Norihiko Suzuki, and Hiromi Yamashita

Division of Materials and Manufacturing Science, Graduate School of Engineering,
Osaka University, 2-1 Yamadaoka, Suita, Osaka 565-0871, Japan

15:20-15:40 ISO11 - Structure, reactivity and catalytic properties of nanoparticles of nickel ferrite in dry reforming of methane

R. Benrabaa^{1,2}, H. Boukhrouf¹, A. Löfberg², E. Bordes-Richard², R. N. Vannier², A. Barama¹

¹ Laboratoire de Matériaux Catalytiques et Catalyse en Chimie Organique, Faculté de Chimie, USTHB, BP32,
El-Alia, 16111 Bab Ezzouar, Alger, Algérie

² Unité de Catalyse et de Chimie du Solide, UMR CNRS 8181, Université des Sciences et Technologies de Lille,
Cité scientifique, 59655 Villeneuve d'Ascq, France

15:40-16:10 Break Tea

Posters with oral presentation (4 Minutes)

16:10-17:30

ISOP01

Titanium Catalysed Stereoselective Sulfoxidations with H₂O₂: Recent Developments

Konstantin P. Bryliakov and Evgenii P. Talsi

¹ Borekov Institute of Catalysis, Pr. Lavrentieva 5, Novosibirsk, 630090, Russia

ISOP02

Gold-catalyzed aerobic co-oxidation of trans-stilbene and methylcyclohexane: identification of a key reaction intermediate

Kevin Guillois, Alain Tuel and Valérie Caps

Institut de recherches sur la catalyse et l'environnement de Lyon (IRCELYON, UMR 5256 CNRS - University of Lyon), 2 avenue Albert Einstein, 69626 Villeurbanne Cedex, France

* Present address: KAUST Catalysis Center, 4700 King Abdullah University of Science and Technology, Thuwal 23955 – 6900, Kingdom of Saudi Arabia

ISOP03

Synthesis of acetaldehyde and acetic acid by the gas phase oxidation of ethanol over gold and vanadia catalysts

N. Iguchi¹, T. Takei¹ and M. Haruta¹

¹ Graduate school of Urban Environmental Sciences, Tokyo Metropolitan University,
1-1 Minami-osawa, Hachioji, Tokyo 192-0397, Japan

ISOP04

In-situ study of ozone and hybrid plasma Ag-Al catalysts for the oxidation of toluene: evidence of the nature of the active sites

Monica Magureanu¹, Daniela Piroi¹, Nicolae Bogdan Mandache¹, Vasile I. Pârvulescu², Viorica Pârvulescu³,
Bogdan Cojocaru², Chris Cadigan⁴, Ryan Richards⁴, Helen Daly⁵, Christopher Hardacre⁵

¹ Department of Plasma Physics and Nuclear Fusion, National Institute for Lasers, Plasma and Radiation Physics,
Magurele-Bucharest, Romania

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³Institute of Physical Chemistry of the Romanian Academy, Bucharest, Romania

⁴Colorado School of Mines, Department of Chemistry and Geochemistry, Golden, Colorado, USA

⁵School of Chemistry and Chemical Engineering, Queen's University, Belfast, BT9 5AG UK

ISOP05

Selective oxidation of glucose over supported Au and PdAu catalysts

Oxana P. Taran¹, Irina V. Delidovich¹, Nikolay V. Gromov^{1,2}, Lyudmila G. Matvienko¹, Pavel A. Pyrjaev¹, Boris L. Moroz^{1,2}, Valerii I. Bukhtiyarov^{1,2} and Valentin N. Parmon^{1,2}

¹Boriskov Institute of Catalysis SB RAS, Novosibirsk, 630090, Russia

²Novosibirsk State University, Novosibirsk, 630090, Russia

ISOP06

Gold supported on hydrotalcite as a versatile bifunctional catalyst for the tandem synthesis of methyl esters and benzylimines

Peng Liu^{1,2}, Rutger A. van Saten¹, Can Li^{2*}, and Emiel J.M. Hensen¹

¹Inorganic Materials Chemistry, Eindhoven University of Technology, The Netherlands

²Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China

ISOP07

Influence of H₂O and CO₂ during the preferential oxidation of CO (PROX) over a CuO_x/CeO₂-coated microchannel reactor

O.H. Laguna¹, S. Oraá¹, F.J. Echave², G. Arzamendi³, L.M. Gandía³, M.A. Centeno¹, M. Montes² and J.A. Odriozola¹

¹Instituto de Ciencia de Materiales de Sevilla, Centro Mixto CSIC-Universidad de Sevilla, Avda. Américo Vespucio 49, 41092 Sevilla, Spain

²Departamento de Química Aplicada, Facultad de Ciencias Químicas de San Sebastián, Universidad del País Vasco, Pº Manuel de Lardizábal 3, E-20018, San Sebastián, Spain

³Departamento de Química Aplicada, Edificio de los Acebos, Universidad Pública de Navarra, Campus de Arrosadía s/n, E-31006, Pamplona, Spain

ISOP08

Isotopic studies of ethane oxidative dehydrogenation on Ni-Nb-O selective catalyst

Zinovia Skoufa¹, Eleni Heracleous² and Angeliki A. Lemonidou^{1, 2}

¹Aristotle University of Thessaloniki, Thessaloniki, 54124, Greece

²CPERI/CERTH, 6th km Charilaou-Thermi road, Thermi, 57001, Greece

ISOP09

Study of supported vanadium oxide catalysts in the partial oxidation of H₂S by XAS and Raman in operando conditions

M.D. Soriano¹, J.P. Holgado², J. Jiménez-Jiménez³, P. Concepción¹, A. Jiménez-Lopez³, A. Caballero², E. Rodríguez-Castellón³, J.M. López Nieto^{1*}

¹Instituto de Tecnología Química, UPV-CSIC, Valencia, 46022, Spain

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³Dep. Química Inorgánica, Universidad de Málaga, Málaga, 29071, Spain

ISOP10

Synthesis of nickel molybdate from zwitterionic hybrid precursors: benefiting of the memory effect in the frame of the catalytic propane activation.

B. Farin¹, M. Devillers, E. M. Gaigneaux

¹Institute of Condensed Matter and Nanosciences - IMCN, Division « MOlecules, Solids and Reactivity-MOST », Université catholique de Louvain, Croix du Sud 2/17, B-1348 Louvain-la-Neuve, Belgium

ISOP11

Efficient Oxidation of Lignin and Related Aromatics using CoCl₂/Ionic Liquid and Co-ZIF-9 Catalysts

Pieter C. A. Bruijninx¹, Joseph Zakzeski¹, Agnieszka Debczak¹ and Bert M. Weckhuysen¹

¹Utrecht University, Utrecht, The Netherlands

ISOP12

Partial oxidation of aromatic compounds with nitrous oxide under supercritical conditions

Alexander L. Kustov, Aleksey E. Koklin, Viktor I. Bogdan
Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences,
Moscow, Russia

ISOP13

Selectivity of Product Formation in Catalytic Radiant Burners: Thermodynamic and Kinetic Aspects

Oksana V. Shapovalova, Vladimir S. Arutyunov, Mikhail Yu. Sinev and Kirill Ya. Troshin
Semenov Institute of Chemical Physics, R.A.S., Moscow, 119991, Russia

ISOP14

Selective oxidation of propanediols

Tatyana Kotionova, Miedziak P.J., Taylor S.H., Knight D.W., Hutchings G.J.
Cardiff Catalysis Institute, School of Chemistry, Cardiff University, Main Building,
Park Place, Cardiff, CF10 3AT, UK

ISOP15

Fullerene supported on mesoporous silica (MCM41) photocatalysts for the photooxidation of 2-methyl-2-heptene

J. Kyriakopoulos¹, G.D. Panagiotou^{1,2}, K. Bourikas², K. Triantafillidis³, M-I. Alberti⁴, M. Tzirakis⁴, M. Orfanopoulos⁴, Ch. Kordulis^{1,5} and A. Lycourghiotis¹

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²Hellenic Open University, Tsamadou 13-15, Patras, 26222, Greece

³Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, 54124, Greece

⁴Department of Chemistry, University of Crete, Iraklion, 71409, Greece

⁵Institute of Chemical Engineering and High-Temperature Chemical Processes (FORTH/ICE-HT), P.O. Box 1414, Patras, 26500 Greece

ISOP16

Hydrogen production by ethanol oxidative reforming over copper/copper chromite based catalysts.

G. Carotenuto¹, A.Kumar², E.E. Wolf² and E.Santacesaria¹

¹University of Naples ‘‘Federico II’’, 80126, Italy

²University of Notre Dame, Notre Dame, Indiana, USA

ISOP17

Syngas production by CO₂-oxidation of natural gas components on nanostructured NiMg catalysts

M. García-Diéguez, I.S. Pieta, M.C. Herrera, M.A. Larrubia, L.J. Alemany
Departamento de Ingeniería Química, Facultad de Ciencias, Campus de Teatinos, Universidad de Málaga,
E-29071, Spain

ISOP18

Continuous Process for the Oxidation of Alcohols using Electrochemically Synthesized Persulfates

Candice Palmer¹ Joana Kettner,¹ King Kuok (Mimi) Hii,² Geoffrey H. Kelsall,¹ Klaus Hellgardt¹
Departments of ¹Chemical Engineering and Chemical Technology and ²Chemistry, Imperial College London,
London SW7 2AZ, U.K.

ISOP19

High Throughput Research on Propane Oxidative Dehydrogenation Catalysis

Hirokazu Shibata¹, Mark McAdon², Rick Schroden², Joost Depicker¹, Gerard Bonte¹,
Garry Meima¹, Billy Bardin³, Rik Tuinstra², and David Devore²

¹Dow Benelux B.V., Terneuzen, 4542 NM, the Netherlands

²The Dow Chemical Company, Midland MI, 48674, USA

³The Dow Chemical Company, Freeport TX, 77541, USA

ISOP20

Low temperature catalytic oxidative coupling of methane assisted by an electric field

K. Tanaka Y. Sekine K. Oshima M. Matsukata and E. Kikuchi
Department of Applied Chemistry, Waseda University, 3-4-1, Okubo, Shinjuku, Tokyo, 169-8555, Japan

Wednesday, 31 August 2011

10:30-10:50 ISO12 - Highly selective oxidative dehydrogenation of ethane with supported molten chloride catalysts

Christian A. Gärtner¹, André C. van Veen¹ and Johannes A. Lercher¹

¹Technical University of Munich, Catalysis Research Center, Garching, 85748, Germany

10:50-11:10 ISO13 -The influence of over-stoichiometry in $\text{La}_2\text{Ni}_{0.9}\text{V}_{0.1}\text{O}_{4.15+x}$ on selective oxidative dehydrogenation of propane

Salvatore Crapanzano, Igor V. Babich, Leon Lefferts

Catalytic Processes and Materials

University of Twente, the Netherlands

11:10-11:30 ISO14 -The role of CO_2 in ethane ODH on $\text{ZrO}_2\text{-CeO}_2$ based catalysts

Navarro P.¹, Gómez A.² and Cortés-Corberán V.¹

¹Institute of Catalysis and Petroleumchemistry (ICP), CSIC, 28049 Madrid, Spain

²Institute of Materials Science of University of Valencia (ICMUV), Valencia, Spain

11:30-11:50 ISO15 - Significant catalytic activity recovery of deactivated industrial Du-Pont VPO catalysts by surface deposition of small amounts of oxide phosphorous-vanadium phase

Raquel Mateos Blanco¹, Ali Shekari², Silvia González Carrazán³, Aurora Caldarelli⁴, Fabrizio Cavani⁴, Elisabeth Bordes-Richard⁵, Gregory S. Patience² and Patricio Ruiz¹

¹Université Catholique de Louvain, Louvain-la-Neuve, 1348, Belgium ;

²École Polytechnique de Montréal, H3T 1J4, Montréal, Québec ;

³Universidad de Salamanca, Salamanca, 37008, Spain ;

⁴Università di Bologna, Bologna, 40136 ;

⁵Université des Sciences et Technologies de Lille, Villeneuve d'Ascq Cedex, 59655, France

11:50-12:10 ISO16 - Selective Oxidation of Methane to Methanol at Low Temperatures with Molecular Inspired Solid Catalysts

Mario Soorholtz¹, Robin White², Maria-Magdalena Titirici², Markus Antonietti², Regina Palkovits^{1,3}, Ferdi Schüth¹

¹Max-Planck-Institut für Kohlenforschung, Mülheim an der Ruhr, 45470, Germany

²Max-Planck-Institute of Colloids and Interfaces, Potsdam, 14476, Germany

³RWTH Aachen, Aachen, 52062, Germany

12:10-12:30 ISO17 - Mo_3VO_x with High Dimensional Structures as True Active Phase for Catalytic Acrolein Oxidation and Ethane Oxidation

Toru Murayama, Kosuke Nakatani, Takeshi Konya, and Wataru Ueda

Catalysis Research Center, Hokkaido University, N21-W10, Kita-ku, Sapporo 001-0021, Japan

12:30-14h00 Lunch Break

Poster session

Tuesday 30th August

17:30-19h30

ISOP01

Titanium Catalysed Stereoselective Sulphoxidations with H_2O_2 : Recent Developments

Konstantin P. Bryliakov and Evgenii P. Talsi

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ISOP02

Gold-catalyzed aerobic co-oxidation of trans-stilbene and methylcyclohexane: identification of a key reaction intermediate

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ISOP03

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In-situ study of ozone and hybrid plasma Ag-Al catalysts for the oxidation of toluene: evidence of the nature of the active sites

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¹Department of Plasma Physics and Nuclear Fusion, National Institute for Lasers, Plasma and Radiation Physics, Magurele-Bucharest, Romania

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ISOP05

Selective oxidation of glucose over supported Au and PdAu catalysts

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ISOP06

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Influence of H₂O and CO₂ during the preferential oxidation of CO (PROX) over a CuO_x/CeO₂-coated microchannel reactor

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ISOP08

Isotopic studies of ethane oxidative dehydrogenation on Ni-Nb-O selective catalyst

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¹Instituto de Tecnología Química, UPV-CSIC, Valencia, 46022, Spain

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ISOP10

Synthesis of nickel molybdate from zwitterionic hybrid precursors: benefiting of the memory effect in the frame of the catalytic propane activation.

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¹Utrecht University, Utrecht, The Netherlands

ISOP12

Partial oxidation of aromatic compounds with nitrous oxide under supercritical conditions

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Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences,
Moscow, Russia

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Selectivity of Product Formation in Catalytic Radiant Burners: Thermodynamic and Kinetic Aspects

Oksana V. Shapovalova, Vladimir S. Arutyunov, Mikhail Yu. Sinev and Kirill Ya. Troshin

Semenov Institute of Chemical Physics, R.A.S., Moscow, 119991, Russia

ISOP14

Selective oxidation of propanediols

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Cardiff Catalysis Institute, School of Chemistry, Cardiff University, Main Building,
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Fullerene supported on mesoporous silica (MCM41) photocatalysts for the photooxidation of 2-methyl-2-heptene

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³Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, 54124, Greece

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ISOP16

Hydrogen production by ethanol oxidative reforming over copper/copper chromite based catalysts.

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Syngas production by CO₂-oxidation of natural gas components on nanostructured NiMg catalysts

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ISOP18

Continuous Process for the Oxidation of Alcohols using Electrochemically Synthesized Persulfates

Candice Palmer¹ Joana Kettner,¹ King Kuok (Mimi) Hii,² Geoffrey H. Kelsall,¹ Klaus Hellgardt¹
Departments of ¹Chemical Engineering and Chemical Technology and ²Chemistry, Imperial College London, London SW7 2AZ, U.K.

ISOP19

High Throughput Research on Propane Oxidative Dehydrogenation Catalysis

Hirokazu Shibata¹, Mark McAdon², Rick Schroden², Joost Depicker¹, Gerard Bonte¹, Garry Meima¹, Billy Bardin³, Rik Tuinstra², and David Devore²

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ISOP20

Low temperature catalytic oxidative coupling of methane assisted by an electric field

K. Tanaka Y. Sekine K. Oshima M. Matsukata and E. Kikuchi

Department of Applied Chemistry, Waseda University, 3-4-1, Okubo, Shinjuku, Tokyo, 169-8555, Japan

ISOP21

Tuning the Particle size in Supported Au-Pd Alloy Nanoparticles for Catalytic evaluation

Lokesh Kesavan¹, Gemma L. Brett¹, Ramchandra Tiruvalam², Nikolaos Dimitratos¹, Jose Antonio Lopez-Sanchez¹, Stuart H. Taylor¹, Christopher J. Kiely², Graham J. Hutchings¹

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²Department of Materials Science and Engineering, Lehigh University, 5 East Packer Avenue, Bethlehem, PA 18015-3195, USA.

ISOP22

Increasing the selectivity of supported Rh catalysts during the partial oxidation of methane by the addition of N₂O into the feed.

C. Mateos-Pedrero¹, B. Blerot¹, S. R. González-Carrazán² and P. Ruíz¹

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²Universidad de Salamanca, Salamanca, 37008, Spain.

ISOP23

Photocatalytic oxidation of Acid Black 194 in aqueous medium over an α -Fe₂O₃-TiO₂ composite material

*A. Eliyas¹, L. Dimitrov², D. Paneva¹, E. Stoyanova³, I. Mitov¹, V. Iliev¹

¹Institute of Catalysis, Bulgarian Academy of Sciences,

²Institute of Applied Mineralogy and Crystallography, Bulgarian Academy of Sciences,

³Institute of Physical Chemistry, Bulgarian Academy of Sciences,

ISOP24

DFT modelling of mixed oxide selective catalysts for oxidative dehydrogenation of ethane

José C. Conesa

Instituto de Catálisis y Petroleoquímica, CSIC, Marie Curie 2, 28049, Madrid, Spain

ISOP25

Influence of vanadium loading on the activity and selectivity of V/AlGaPO catalysts in the propane ammoxidation

M. A. Soria, E.M Gaigneaux, P. Ruiz

Institute of Condensed Matter and Nanosciences – IMCN, Division Molecules, Solids and Reactivity – MOST, Université Catholique de Louvain, Croix du Sud 2/17, 1348 Louvain-la-Neuve, Belgium

I ISOP26

Propylene epoxidation by molecular oxygen with supported silver catalysts: Effect of preparation method and silver size/morphology

Ioannis D. Charisteidis and Kostas S. Triantafyllidis
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ISOP27

Ethylene Epoxidation by Highly Active Nano-Silver (Ag) Catalysts Supported on Ordered Mesoporous Silicas

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ISOP28

Alkene epoxidation by Mn(III)porphyrin and Jacobsen catalysts immobilized on nanostructured carbon CMK-3

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ISOP29

Selective oxidation of alcohols over Ag-containing Si₃N₄ catalysts

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ISOP30

Catalysts for the production of styrene from ethylbenzene: redox and deactivation study

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ISOP31

The reactive role of CO₂ in reactions with oxygen. Implications on the selectivity.

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ISOP32

Molybdenum, Phosphorous and Antimony Doping Effect on Titania-supported Vanadium Catalysts in Propane Ammoxidation Reaction

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ISOP33

A Novel and Catalytically Active Boron Peroxotungstate

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ISOP34

Ethanol dehydrogenation reaction to ethyl acetate on copper/ copper chromite catalysts.

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ISOP35

Impact of feed composition on the reactivity of M1 catalyst

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ISOP36

Epoxidation of cyclohexene catalyzed by mixed oxides V₂O₅-TiO₂ as catalyst and TBHP as an oxidant

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ISOP37

Oxidation of cyclohexane by transition metal complexes with biomimetic ligands

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ISOP38

Influence of the phosphate addition on the activity of Ag and Cu supported catalyst for selective oxidation of ethylene glycol

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ISOP39

Graphite as a selectivity controller of VAlO mixed (hydr)oxides for propane oxidative dehydrogenation

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ISOP40

Selective carbon monoxide oxidation on platinum-copper catalysts.

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ISOP41

Enhancement of catalytic activity of Ir/TiO₂ by partially reduced titanium oxide in oxidation of alcohols with molecular oxygen

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ISOP42

Cobalt-iron magnetic composites as heterogeneous catalysts for the aerobic oxidation of thiols under alkali free conditions

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ISOP43

Effect of the composition of TiO₂ support over the performances of Rh/TiO₂ catalysts in the partial oxidation of methane

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ISOP44

Exploring the influence of the support in vanadium oxide catalysts for partial oxidation of light alkanes

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ISOP45

Supported Rhenium catalysts for the methanol conversion to methylal – Water as unexpected ingredient for catalytic activity

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ISOP46

Partial Oxidation of Methane on Pt-Supported Nanocrystalline Doped Ceria-Zirconia

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ISOP47

Aerobic oxidation of HMF to FDA with ruthenium containing ferrite-spinel catalyst

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ISOP48

Highly chemoselective metal-free oxidations with diluted H₂O₂ in continuous flow reactors

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ISOP49

Niobium-doped metal antimonates, catalysts for propane ammoxidation to acrylonitrile

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ISOP50

Partial oxidation of methane over Pd/Ni/LaAlO₃ catalyst at low temperature

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ISOP51

LaInO₃ perovskite oxide catalyst for oxidative coupling of methane

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ISOP52

Propene epoxidation on heterogeneous copper catalysts

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ISOP53

Mesoporous silica supported catalysts in the partial oxidation of methane

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ISOP54

Selective Oxidation of Primary Alcohols over Carbon-Supported Platinum-Bismuth Nanoparticles

Benias C. Nyamunda and Josef Heveling

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ISOP55

Selective oxidation of alcohols using supported gold palladium nanoparticles

Ewa Nowicka, Meenakshisundaram Sankar, Stuart H. Taylor, Donald Bethell, David W. Knight, Graham J. Hutchings

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ISOP56

Performances and deactivation of Pd supported on N-doped CNT in the direct synthesis of H₂O₂

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ISOP57

Kinetic Study of the Oxidative Dehydrogenation of Propane (ODP) on promising model catalyst type VO_x/TiO_y/SBA15

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ISOP58

Nanocarbon materials grown on carbon felts as catalysts for the oxidation of organic compounds

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ISOP59

Gold and gold palladium catalysts for the selective epoxidation of cyclo-octene

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ISOP60

Effect of Bimetallic Sr-Bi Dopants on the Physico-Chemical, Reactivity and Catalytic Properties of Vanadyl Pyrophosphate Catalysts.

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ISOP61

The role of the support of Mn-Na-W/Silica and Na-W/Silica

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ISOP62

Preferential oxidation of CO over Pt-Sn/AC catalyst: Adsorption, performance and DRIFTS studies

Burcu Selen-Çağlayan, Ilgaz Soykal, A. Erhan Aksoylu

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ISOP63

Combining Spatially Resolved Kinetic and Spectroscopic Measurements as Novel Research Tool in Selective Oxidation Catalysis

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ISOP64

Reactions of Silanes with Carbonyl Compounds Catalyzed by Rhenium and Manganese Carbonyl Complexes

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ISOP65

The effects of gold nanosize for the exploitation of furfural by selective oxidation

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ISOP66

Oxidative dehydrogenation of alkanes over vanadium oxide prepared with V(t-BuO)₃O and Si(OEt)₄ in the presence of polyethyleneglycol

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ISOP67

Doping vanadyl pyrophosphate with Nb^V: improved efficiency of the catalyst for n-butane oxidation to maleic anhydride

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ISOP68

Elucidation of the reactivity of different oxygen species over V-Ti-O surface towards partial oxidation of light hydrocarbon using isotope methods

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ISOP69

One-Step Oxidation of Benzene to Phenol over Cu/Ti/HZSM-5 Catalysts

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ISOP70

Oxidative Coupling of Thiols by Manganese Carbonyl Complexes

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ISOP71

The role of the supports for gold in the catalytic oxidation of methanol

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ISOP72

Green Chemistry Route for Selective Oxidation of Cyclohexane to Adipic Acid Using Bimetallic Gold Catalysts

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ISOP73

Experimental Determination, Modeling and Utilization of the Phase Behavior in the Selective Oxidation of Alcohols in Dense CO₂

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ISOP74

Green routes to lactic acid synthesis using nanoalloy precious metal catalysts

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ISOP75

On the active state of multicomponent mixed oxide catalysts for the selective oxidation of propene to acrolein

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ISOP76

Influence of support, preparation method and operating condition on the selective oxidation of glycerol

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ISOP77

New insight into the structure and dispersion of silica supported molybdenum oxide catalysts

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ISOP78

Gold on modified activated carbons: influence of the support surface chemistry on the glycerol oxidation.

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ISOP79

Electrochemical enhancement of solar photocatalysis: Degradation of endocrine disruptor bisphenol-A on Ti/TiO₂ films

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ISOP80

Ammonoxidation of propane over Fe-silicalite activated by nitridation

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ISOP81

Catalytic oxidative depolymerization of organosolv lignins

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ISOP82

A new heterogeneous catalyst for epoxidation of alkenes via one-step post-functionalization of IRMOF-3 with a manganese(II) acetylacetonate complex

Wha-Seung Ahn, Samiran Bhattacharjee and Da-Ae Yang

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ISOP83

Improvement of the performances of supported (NH₄)₃HPMo₁₁VO₄₀ catalysts for isobutane selective oxidation

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ISOP84

Modified carbonaceous materials as catalysts for oxidation of a commercial dye with H₂O₂

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ISOP85

Titanium dioxide phases in mesostructured silica matrices for cyclohexene oxidation

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ISOP86

Transition metal-containing mixed oxides catalysts derived from LDH precursors for propane oxidative dehydrogenation

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ISOP87

Liquid-Phase Oxidation of Propylene Glycol Using Heavy-Metal-Free Pd/C under Pressurized Oxygen

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ISOP88

Aerobic oxidation of secondary aromatic alcohols in the presence of carbon-supported noble metal catalysts

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ISOP89

Low temperature CO oxidation and ethane oxidative dehydrogenation over Nb-doped nickel oxides

Haibo Zhu, Samy Ould-Chikh, Gregory Biousque, Paco Laveille, Jean-Marie Basset and Valérie Caps

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ISOP90

Morphology Impact of Mn_{0.3}Ce_{0.7}O_x in Ethanol Oxidation

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ISOP91

Carbon Nanotube Supported Pt-Co Catalysts for Low-temperature Preferential Oxidation of CO in a H₂-Rich Stream

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ISOP92

AOP for wasters purification

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ISOP93

Baeyer-Villiger oxidations with ionic liquids intercalation compounds into layered zirconium phosphates

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ISOP94

Selective suppression of disproportionation reaction in solvent-less benzyl alcohol oxidation catalysed by supported Au-Pd nanoparticles

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ISOP95

Liquid-Phase Oxidation of Glycerol over Au-Pd/TiO₂ Catalysts Using Molecular Oxygen as an Oxidant

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ISOP96

Activation of alkanes by gold modified lanthanum oxide

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Are Li/MgO and Gd-Li/MgO suitable Catalysts for Methane Coupling?

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