

CURRICULUM VITAE

PERSONAL DETAILS

Name: Prof. Nikolaos Dimitratos

Present Address: Department of Industrial Chemistry, “Toso Montanari”, Alma Mater Studiorum, University of Bologna, Italy, Via Gobetti 85, 40129, Bologna, Italy

Date of birth: 03/03/1976, (Born in Athens, Greece)

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Italian Fiscal Code (CF): DMTNLS76C03Z115M

Current position **1st November 2018- Present:** Associate Professor, Department of Industrial Chemistry, “Toso Montanari”, Alma Mater Studiorum, University of Bologna, Italy. Academic discipline: CHIM/04 Industrial Chemistry.

EDUCATION

October 1999 – February 2003 University of Liverpool

Leverhulme Center for Innovative Catalysis, PhD under the supervision of Professor Jacques C. Védrine on:

“Catalytic studies of heteropoly compounds on propane oxidation”.

1998 - 1999 University of Liverpool

Leverhulme Center for Innovative Catalysis, MSc, Distinction, Master in Surface Science and Catalysis.

Master Thesis:

“Catalysts for the ammoxidation of propane and the preparation and characterization of unsupported Sb-V oxide catalysts”.

1995 - 1998 University of Bath

BSc Chemistry, 2:2

Three years honours chemistry course. Graduate Thesis:

“The use of tris(pentafluorophenyl)boron in organometallic chemistry and the reactions of $B(C_6F_5)_3$ with molybdenum alkyne complexes”.

WORK EXPERIENCE

1st November 2018- Present:

Associate Professor, Department of Industrial Chemistry, “Toso Montanari”, Alma Mater Studiorum, University of Bologna, Italy. Academic discipline: CHIM/04 Industrial Chemistry.

<https://www.unibo.it/sitoweb/nikolaos.dimitratos/cv-en>

- 2018-National Scientific Habilitation (ASN) in 2018 for permanent position as Associate Professor (II Fascia in Italian). Returning to Italy in 2018 with the Brain Gain Program to attract the best talents worldwide. <https://asn16.cineca.it/pubblico/miur/esito-abilitato/03%252FC2/2/4>
- 2021- National Scientific Habilitation (ASN) in 2021 for permanent position as Full Professor (I Fascia in Italian). <https://asn18.cineca.it/pubblico/miur/esito-abilitato/03%252FC2/1/6>
- 'World Ranking Top 2% Scientists' list, Stanford list.

Research projects:

- Development of nanomaterials with controlled size/shape using hybrid colloidal methods and microflow technology for catalytic and photocatalytic applications in biomass, wastewater remediation and H₂ production including *in-situ* and *ex-situ* characterisation.

Manpower:

- Bologna: Supervisor of 3 PhD students and co-supervisor of 7 PhD students, 13 MSc students, 11 BSc students, 3 academic research visitors and 2 postdoc researchers.

October 2013 to October 2018

Chancellor's University Research Fellow and independent research group leader, Cardiff University, member of Cardiff Catalysis Institute, UK Catalysis Hub, MAXNET Energy Programme and Cardiff Institute of Tissue Engineering and Repair. Five-year research fellowship awarded by Cardiff University for rising stars.

<https://www.cardiff.ac.uk/people/view/38549-dimitratos-nikolaos>

<http://www.cardiff.ac.uk/cardiff-catalysis-institute>

<http://www.rc-harwell.ac.uk/team-members1>

<http://www.ukcatalysishub.co.uk/>

<https://maxnetenergy.cec.mpg.de/?site=participants>

Research projects:

- Development of nanomaterials with controlled size/shape using hybrid colloidal methods and microflow technology.
- Utilisation of synthesised nanomaterials in catalysis (biomass transformation, C-H activation, hydrogen economy/hydrogen generation, wastewater treatment and production of fine chemicals/fuels).
- Characterisation of nanomaterials for revealing morphology and investigating mechanistic aspects of particle formation using a combination of techniques (spectroscopic and computational modeling).
- Member of the Catalysis Hub and the “Catalysis design” team at Harwell.
- PI of the theme “Active-site design for effecting and affecting catalysis at the nano-scale” at Harwell Campus.
- PI of the theme “Advances in aqueous reforming of glycerol”.
- CoI of the theme “An operando and catalyst synthesis study of propane oxidative dehydrogenation”. <https://www.ukcatalysishub.co.uk/themes/design>.

Manpower:

- Bologna: Supervisor of 3 PhD students and co-supervisor of 7 PhD students, 8 MSc students, 9 BSc students, 3 academic research visitors and 2 postdoc researchers.

- Cardiff: Supervisor of 4 PhD students, 2MSc students, 2BSc students, 2 Erasmus visitor students (3-month, 6-month and 1-year) and 2 academic research visitors.
- Harwell Campus, collaboration with Catalysis Hub-catalyst design theme: 1 PhD student, 1 technician-researcher and 2PDRAs.
- National and International Collaborations: Established research network with University of Milan (Prof. Alberto Villa, Prof. Laura Prati and Prof. Prof. Ilenia Rossetti, Italy) for BSc, MSc, PhD students and academic staff; collaborations with Prof. Maela Manzoli (University of Torin, Italy), Dr. Davide Ferri, (Paul Scherrer Institute PSI-Switzerland), Prof. Flemming Besenbacher (Aarhus University, I nano centre, (Denmark), Dr. Di Wang (Karlsruhe Institute of Technology-KIT, Germany), Prof. Chris Kiely, (Lehigh University, USA), Dr. Ren Su, (SynCat@Beijing, China), Prof. Hans Niemantsverdriet (SynGasChem, Netherlands).

Additional International Collaborations: Cardiff University/Catalysis Hub (Prof. Graham Hutchings, Prof. Richard Catlow, Dr. Alberto Roldan, Dr. David Willock, Dr. Qian He), Imperial College (Dr. Ceri Hammond, Prof. Mimi Hii), University of Southampton (Dr. Peter Wells, Dr. Antonios Kanaras), University of Swansea, (Prof. Richard Palmer), National University of Singapore (Dr. Qian He) and University of Malaga (Pedro Maireles Torres).

Participation in the Maxnet network established between Cardiff and Max Planck Institutes (2013-2018). Advisor/co-supervisor for 8 PhD students and research projects.

- Participation in the EPSRC Centre for Doctoral Training in catalysis (CDT) at Cardiff.
- Co-Investigator in the CDT equipment grant (500,000 pounds).

Grants:

- 1 successful grant for Parallel-screening equipment for advanced catalyst testing and process intensification (874,075 pounds).
- 1 successful grant for CDT equipment (500,000 pounds).

Teaching and Academic roles:

Bologna:

- Teaching the following courses: 79093 - CATALYSIS FOR RENEWABLES - 6 cfu; 66970 - Fundamentals of Industrial Chemistry - 6 cfu; 66973 - Sustainable Processes for the Energy and Chemical Sector - 6 cfu; 2 Phd courses: Low CO₂ industrial processes; Sustainable catalytic processes; In total 138 hours.

Cardiff:

- Participation in the organization and teaching for the 3rd year Physical chemistry Lab (Training in Research method, CH2301), introducing a new course in the area of catalysis for BSc students, "Gold nanoparticle catalysis, hydrogenation of 4-nitrophenol".
- Participation in the teaching for the 2nd year Physical chemistry Lab (Symmetry, Spectroscopy and Quantum Mechanics, CH3204).
- Participation in the teaching for the 4th year Physical chemistry Lab (Chemistry at Phase Boundaries, CH3409).
- Lecturer for the MChem module "Catalytic Materials for Green Chemistry", CH3411/CH342, introducing a new course in the area of colloidal nanoparticle design and catalytic applications.
- Lecturer for the foundation module "Thermodynamics, Kinetics and Equilibria", CH0002.
- Supervisor for the BSc module "Project", CH3325, final year research project of BSc students.
- Supervisor for the MChem module, "Project", CH3401, final year research project of MChem students.
- Supervisor for the MSc module, "MSc Research Project", CHT008.
- Supervisor for the MSc course in Catalysis "Catalyst Design Project", CHT217.
- Supervisor for the MSc course in Catalysis "Final Year Project", CHT216.
- Participating in the organisation and supervision for the Erasmus BSc/MSc/PhD student exchange programme with Bologna and Milan (Italy).
- Participating and supervising PhD students in the "MAXNET Energy Project" of the Max Planck Society in collaboration with 8 Institutes.
- Internal and external examiner for BSc, MSc, PhD vivas.

October 2011 to September 2013

- Research Associate at Harwell campus for the new Centre of Catalytic Science in the group of Prof. Richard Catlow, University College London (UCL). Responsible for the growth, development and management of the new Centre with his colleague Dr. Peter Wells and the

support of Prof. Richard Catlow. The following actions took place this year for establishing the new Centre:

- Arrangements for improving the current lab facilities at the new Centre and making operational the new lab by arranging orders of labware, glassware and essential lab instruments and participating in the writing and submission of successful grant proposals for the new Centre.
- Designing and participating in experiments at ISIS and Diamond with his colleagues for X-ray and Neutron studies.
- Creating links with senior scientists at Diamond, ISIS and the members of the Consortium for the benefit of the new Centre.
- Promoting the research of the consortium members of the new Centre and his own research by achieving long term access to ISIS and Diamond facilities. ISIS programme mode achieved for the next two years and Diamond BAG proposal was awarded. 10 proposals based on his research have been accepted for investigation using the world-class facilities at Harwell Campus.
- Collaboration with consortium members and international collaborations were pursued. Submission of an international exchange scheme application at the Royal Society for starting a collaboration between UCL and University of Milan (Prof. Laura Prati) and members of the consortium Cardiff University (Prof. Graham Hutchings), University of Glasgow (Dr. David Lennon) in the area of synthesis of metal nanoparticles supported onto functionalised carbon nanotubes, advanced characterization using facilities at ISIS and Diamond and computational modelling.
- Ongoing collaboration and drafting a proposal for funding with the Interdisciplinary Nanoscience Centre at Aarhus University (Prof. Flemming Besenbacher, Denmark) in the area of photocatalysis using supported metal nanoparticles. The collaboration was resulted in the successful acceptance of 2 manuscripts in *ACS Nano* Journal.
- Ongoing collaboration with Dr. Ceri Hammond at ETH Zurich (Group of Prof. Ive Hermans, Switzerland) in the area of characterisation of zeotype materials using XAFS/IR studies and exploitation of the synthesised materials for catalytic applications.
- Participating in the writing of the successful grant application for gas installation funded by EPSRC.
- Ongoing collaboration with Dr. Stefania Albonetti and Prof. Fabrizio Cavani at Bologna University (Italy) in the area of characterisation of biomass conversion and utilisation of metal supported nanoparticles.
- Participating in the writing of the successful grant application for gas installation funded by EPSRC.
- Participating in the writing of the successful grant application “Strategic equipment” funded by EPSRC and actively involved in the interview process with Prof. Richard Catlow. Both of the two successful grants substantially increased the research capabilities of the new Centre regarding the performance of catalytic measurements via the utilisation of reactors and analytical instruments for product identification, advanced characterisation and successfully satisfied the needs of the whole catalysis community, therefore allowing the new Centre to compete internationally and attract national and international collaborators and finally additional funding.
- Arranging and managing the process regarding gas installation and equipment.
- Advertising the new Centre by travelling and promoting the Centre at several meetings and participating in the design of the web site.
- Participating in the supervision of students and initiating with his colleagues a new project in the area of fuel cells. Successful funding from STFC Council for the project “Synthesis and characterisation of Pt-based electrocatalysts for direct alcohol fuel cells”.
- Successful request for supply of metal precursors via “Metal Loan scheme” from Johnson Matthey. The supply will satisfy the needs of using noble metal precursors for the whole Centre.
- Participating in the writing of a successful grant application of the UK Catalysis Hub worth of 3,725,000 pounds for Prof. Richard Catlow.
- Participating in the writing of a successful grant application worth of 1,086,897 pounds for Prof. Nora de Leeuw and Prof. Richard Catlow.

February 2008-September 2011

Post-doc researcher in Cardiff University (UK), working in the group of Pr. Graham Hutchings for the project “Methane challenge” sponsored by Dow Chemicals and involvement in the “Glycerol challenge” project. Supervision of six students in the “Methane Challenge” project and 2 students in the “Glycerol challenge” project.

The following assignments were carried out for the two projects:

- Purchase and making operational the following equipment: HPLC (Varian), GC (Varian), multi batch (glass and autoclave reactors (Parr Company)).
- Initiating the two projects by performing the initial reactions and exploring the proper conditions for achieving successful results.
- Synthesis of catalysts (Using methodology based on sol immobilisation method, deposition-precipitation, impregnation and chemical vapor infiltration).
- Training and supervising students on the catalysts methodology and as well as on reactor methodology and establishing the analytical protocols.
- Characterisation of catalysts using a variety of techniques (XRD, MAS NMR, BET, UV, ICP-MS and TEM).
 - Involving in the management of the projects with weekly meetings with students and postdocs and professors involved in the projects (Tony Lopez-Sanchez, Stuart Taylor, Albert Carley, David Willock, David Knight, Graham Hutchings).
 - Training and supervising MChem and M.Phil students during the period 2008-2009.
 1. Title of MChem Thesis: "Oxidation of carbohydrates to high-value products", L. Draper.
- Supervisors: N. Dimitratos, R.L. Jenkins, G.J. Hutchings.
 2. Title of M.Phil Thesis: Selective oxidation of glycerol and 1,2-propanediol over supported precious metal catalysts", J. M. Anthonykutty.Supervisors: N. Dimitratos, G.J. Hutchings.
- September 2009- December 2009.

Followed the course "Medici", organised in University of Birmingham, (cover the basics of business, intellectual property protection and exploitation, funding for knowledge transfer, networking, negotiation and contracts).

February 2007-January 2008

Post-doc researcher in University of Milan (principal investigator in University of Milan for the project "Nanostructured materials for catalysis" financed by the Fondazione Cariplo under the scientific supervision of Prof. Laura Prati and Prof. Francesca Porta and the scientific collaboration with Prof. Graham Hutchings).

July-December 2006

Post-doc researcher in Cardiff University (UK), working in the group of Prof. Graham Hutchings. Experience in the synthesis of mono and bimetallic gold-palladium nanoparticles using the immobilisation method and the deposition precipitation by urea method and in the use of autoclave reactors for liquid phase oxidations (alcohol oxidation and hydrogen peroxide synthesis).

May-June 2006

One month training in the research center of Johnson Matthey (Reading, UK, Dr. P. Bishop, Dr. James Cookson and Dr. Benedicte Thiebaut). Involvement in the synthesis of colloidal gold and gold-palladium nanoparticles supported on carbon and titania, scale-up and characterisation of the synthesised materials, (TEM, XPS, UV).

June 2003- June 2006

3 Year work experience as Post-doc researcher in Milan University (Italy), (Auricat Project Contract HPRN-CT-2002-00174, FP5), working in the group of Prof. Laura Prati and Prof. Michele Rossi. Experience in the built-up and use of fixed bed reactor in gas phase reactions (gas phase oxidation of propene) and batch reactor in liquid phase reactions (e.g. liquid phase oxidation of alcohols and polyols). In addition, development of knowledge for the synthesis of materials: (1) metal nanoparticles using colloidal methods (sol-immobilisation method), (2) VPO and (3) heteropolyacids.

- Participation in the organisation of two conferences (2005-Gandia, Spain and 2006-Milan, Italy).
- Responsible for the writing of 6-Month progress reports and participation in the monthly official newsletter of the Auricat network.
- Supervising 1Phd student and 4 final year students.
- Involvement in the writing-up of several grant proposals (Italian and International, E.U.)
- Collaborations and publishing joint publications with several institutes: Fritz Haber Institute in Germany (Dr. Den Su), Delft Institute in Netherlands (Dr. Michiel Makkee) and Glasgow University (Dr David Lennon), Bologna University in Italy (Prof. Fabrizio Cavani).

1999 - 2003

Experience in using x-ray diffraction, NMR and IR/Raman spectroscopy, HPLC/GC chromatography, mass spectroscopy, thermogravimetric analysis, and N₂-adsorption analysis. Experience in the built-up and use of fixed bed reactor in gas phase reactions (gas phase oxidation of propane to acrylic acid).

1999 - 2001

Demonstrator of first and second year undergraduates.

June - September 1999

3-month work experience as Research Assistant analyzing samples on FT-IR/Raman equipment.

Research summary

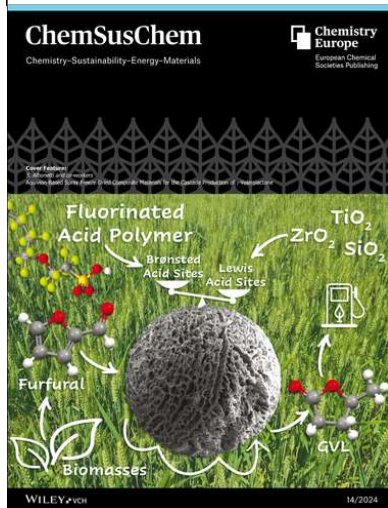
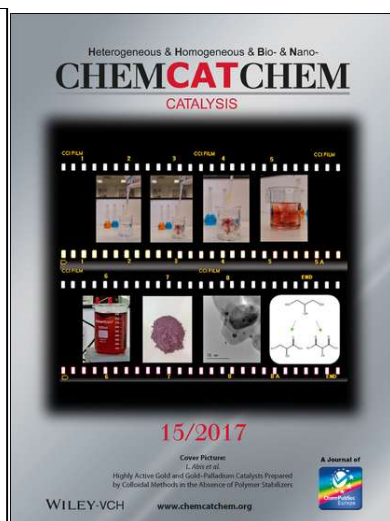
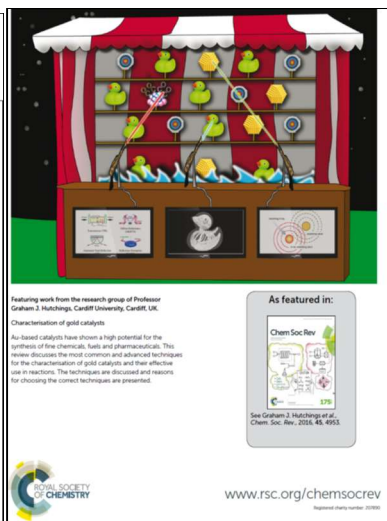
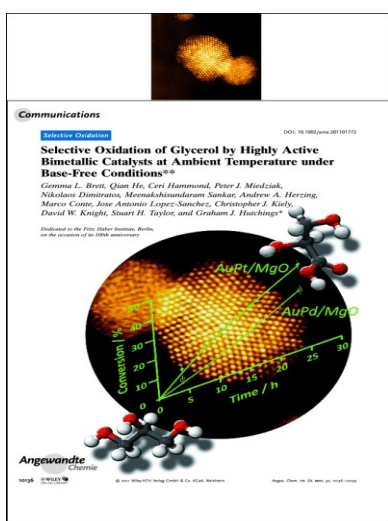
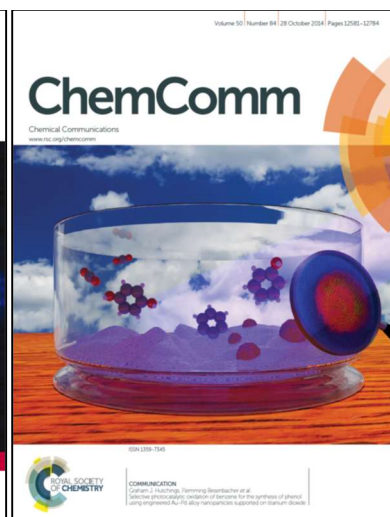
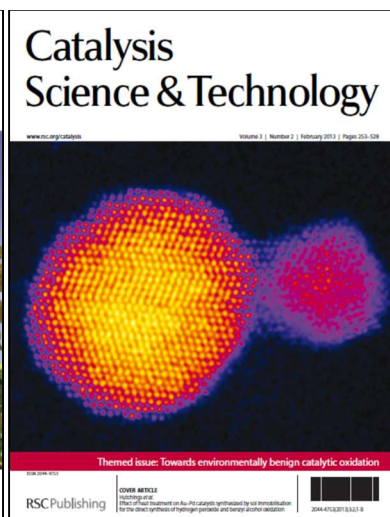
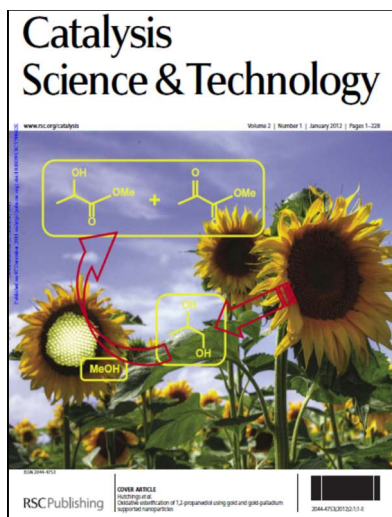
Research fields: Heterogeneous catalysis, Catalysis for energy, H₂ production via (i) photocatalytic reforming of alcohols/polyols/sugars, (ii) catalytic decomposition of carbon and nitrogen based compounds and (iii) aqueous reforming of glycerol, CO₂ transformation to methanol, metal supported nanoparticles, Heteropolyacids, Biomass conversion, Photocatalysis, Catalytic applications, Selective oxidation of alcohols/polyols and alkanes, Total oxidation of volatile organic compounds, Bifunctional catalysts, Size and shape control of metal colloids, *In situ and operando* spectroscopy, advanced characterisation using Synchrotron and Neutron techniques.

Methodologies: Catalytic materials by design focusing on colloidal methods, Reactor design and optimisation of catalytic processes, *In situ/operando* spectroscopy, Insights into the elementary steps of reactions and nanoparticle formation.

PUBLICATIONS (Journals/Book Chapters-Patents-Newsletters-highlights-Patents-Webpages)

Summary: 220 peer-reviewed articles including 10 cover articles, 4 book chapters and 4 patents, including 4 articles published in *Angew. Chem. Int. Ed.*, two articles in *Science*, one article in *Nature Chemistry*, one article in *Nature Catalysis*, one article in *Nature Reviews Chemistry*, three articles in *ACS Nano*, two articles in *JACS*, two articles in *Accounts of Chemical Research*, 2 articles in *Chemical Society Reviews* and 11 articles in *ACS Catalysis*.





Relevant publications

“Underline” denotes corresponding author

1. V. Natale, S. Kamenos, E. Harkou, P. Adamou, S. Panagi, G. Manos, S.M. Al-Salem, **N. Dimitratos**, A. Constantinou, “Kinetic modelling of continuous biomass liquefaction for biopolyols and bio-based polyurethane synthesis”, *Journal of Cleaner Production* 560 (2026) 148396.
2. P. Adamou, E. Harkou, A.I. Latsiou, N.D. Charisiou, M.A. Goula, D. Mintis, A. Afantitis, S.M. Al-Salem, G. Manos, A. Villa, **N. Dimitratos**, A. Constantinou, “Catalytic Innovations and Machine Learning–assisted Approaches for CO₂ Utilisation: Current Status and Future Prospects”, *Chemical Engineering Journal Advances* 26 (2026) 101241.
3. A. García, A. Saotta, E. Da Silva, P.J. Miguel, A. Allegri, R. Sánchez-Tovar, J.-C. Morin, O. Gardoll, T. García, J.M. López, Stefania Albonetti, **Nikolaos Dimitratos**, Benjamin Solsona, “Continuous production of γ -valerolactone from furfural using optimized catalysts containing Zr and Nb”, *Fuel* 411 (2026) 138062.
4. E. Harkou, P. Adamou, S. Kamenos, V. Natale, S.M. Al-Salem, R. Persiani, L. Jasiunas, G. Manos, R. Wojcieszak, **N. Dimitratos**, A. Constantinou, “Recent developments and progress on thermal pyrolysis of biomass towards high quality bio-oil: Mechanisms, comparison of conventional and recent technological advances and the potential of using non-lignocellulosic biomass as feedstock”, *Journal of Analytical and Applied Pyrolysis* 197 (2026) 107794.
5. F. Liuzzi, S. Scurti, G. Fanciullo, A. Allegri, M. Hu, I. Rivalta, C. D’Agostino, A. Bansode, D. Caretti, **N. Dimitratos**, S. Albonetti, “Electronic properties of PVA-PVAm ligands dictate mechanistic pathways in Au/AC-catalyzed HMF oxidation”, *Journal of Catalysis* 456 (2026) 116770.
6. E. Harkou, P. Adamou, S.M. Al-Salem, N. Atanasova, J. Tang, G. Manos, A. Villa, **N. Dimitratos**, A. Constantinou, “Computational fluid dynamics (CFD) modelling as a power multiplier tool for the design improvement of gaseous and liquid fuels: current status, challenges and perspectives”, *Fuel* 404 (2026) 136401.
7. P. Adamou, E. Harkou, L. Jasiunas, R. Persiani, M. J. Valero-Romero, R. Ruiz-Rosas, V. Natale, S. Kamenos, A. Andreou, G. Manos, S.M. Al-Salem, R. Wojcieszak, **N. Dimitratos**, A. Constantinou, “Process modelling for sustainable production of bio-oil from waste biomass”, *Chemical Engineering and Processing - Process Intensification* 220 (2026) 110683.
8. V. Saraceni, A. Saotta, A. García, A. Allegri, G. Fornasari, B. Solsona, **N. Dimitratos**, S. Albonetti, “Furfural Valorization to γ -Valerolactone over Zr/Sn Zeolite-Supported Catalysts in a Liquid-Phase Continuous Flow Reactor”, *Energy & Fuels* 40 (2025) 478-489.
9. A. Marti, R. Wojcieszak, M. Kot, A. Reymond, C. Palombo Ferraz, **N. Dimitratos**, A. Villa, I. Barlocco, S. Bellomi, M. Pietrowski, E. Janiszewska, M. Zieliński, “Tuning silica acidity with ammonium fluoride: Boosting iridium catalyst performance in furfural hydrogenation”, *Applied Materials Today* 47 (2025) 102929.
10. A. Michael, P. Adamou, E. Harkou, C. Christodoulou, I. Barlocco, D. Mintis, A. Afantitis, J.J. Delgado, X. Chen, G. Manos, **N. Dimitratos**, A. Villa, A. Constantinou, “Application of CFD, statistical analysis and DoE for optimising H₂ generation through ammonia borane catalytic hydrolysis: A novel approach for multiobjective optimisation”, *Chemical Engineering Journal* 525 (2025) 170772.
11. A. Reymond, I.M. Abdelsalam, F. Pieretti, **N. Dimitratos**, A. Marti, P.H.C. Camargo, R. Wojcieszak, “Tailored plasmonic gold nanoparticles coated with manganese oxide for selective light-driven oxidation of 5-hydroxymethylfurfural”, *Emergent Materials* 8 (2025) 5765-5775.
12. D.R. Naikwadi, V. Ganesh, H. Sharaf, M. Offidani, S. Albonetti, **N. Dimitratos**, A. Bansode, “Breaking the temperature barrier: Unveiling the potential of ceria nanorods for low temperature thermochemical water splitting”, *Fuel* 10 (2025) 135251.
13. Rocío Maderuelo Solera, Eleonora Monti, Ramón Moreno-Tost, Cristina García-Sancho, Pedro Maireles-Torres, Juan Antonio Cecilia, Nikolaos Dimitratos, “Pd Nanoparticles Supported on Activated Carbon and Their Application in the Oxidative Condensation Reaction of Furfural: Effect of Base and Oxidizing Agent on Catalytic Behavior and Deactivation”, *ChemCatChem* 17 (2025) e00581.
14. M. Offidani, A. Allegri, A. Saotta, F. Liuzzi, A.S. Cattaneo, C. Oldani, A. Brigliadori, S. Ortelli, G. Fornasari, S. Albonetti, **N. Dimitratos**, “Tuning the properties and thermal treatment of

- Aquivion®/oxide hybrid catalysts for the one-pot production of γ -valerolactone from furfuryl alcohol”, *Applied Catalysis A: General* 704 (2025) 120420.
15. C.P. Ferraz, A. Reymond, M.T. Lima, Francesca Liuzzi, S. Scurti, A. Marti, I. Itabaiana Jr, D. Caretti, S. Albonetti, **N. Dimitratos**, R. Wojcieszak, “Low-loading PdPt catalysts for highly selective furfural hydrogenation at ambient temperature”, *Surfaces and Interfaces* 72 (2025) 107362.
 16. P. Adamou, E. Harkou, S. Bellomi, I. Barlocco, D. Mintis, A. Afantitis, J.J. Delgado, X. Chen, G. Manos, **N. Dimitratos**, A. Villa, A. Constantinou, “H₂ Production from Ammonia Borane: Integrating Experiments, Computational Fluid Dynamics, and Statistical Analysis for Predicting and Optimizing Process and Reactor Design”, *ChemCatChem* 17 (2025) e00615.
 17. G.F. Tierney, D. Banks, M. Carravetta, A.E. Oakley, S. Alijani, I. Barlocco, **N. Dimitratos**, A. Villa, P.P. Wells, “Capping Agent, Solvent, and Nanoparticle Interactions: Driving Selectivity for Biomass Transformations”, *ChemCatChem* 17 (2025) e202401892.
 18. G. Galletti, D. Allkanjari, A. Manna, E. Valzano, L. Monti, **N. Dimitratos**, J. De Maron, F. Cavani, T. Tabanelli, “Zinc-based oxides as alternative cheap and stable catalysts for the production of adipates from cyclopentanone and dimethyl carbonate”, *Sustainable Chemistry and Pharmacy* 45 (2025) 102018.
 19. F. Liuzzi, F. Di Renzo, C. Cesari, A. Mammi, L. Monti, A. Allegri, S. Zacchini, G. Fornasari, **N. Dimitratos**, S. Albonetti, “Preparation of Ru-Based Systems Through Metal Carbonyl Cluster Decomposition for the Base-Free 5-Hydroxymethylfurfural (HMF) Oxidation”, *Molecules* 30 (2025) 2120.
 20. P. Adamou, E. Harkou, S. Bellomi, I. Barlocco, J.J. Delgado, X. Chen, R. Wojcieszak, G. Manos, **N. Dimitratos**, A. Villa, A. Constantinou, “Experimental and Computational Fluid Dynamics Studies on Hydrous Hydrazine Decomposition over the Ir/Ni₁₀Ce Catalyst”, *Industrial & Engineering Chemistry Research* 64 (2025) 8130-8142.
 21. A.M. Pérez-Merchán, Benjamín Torres-Olea, M. Scala, **N. Dimitratos**, I. Malpartida, C. García-Sancho, J.M. Mérida-Robles, P. Maireles-Torres, Ramón Moreno-Tost, and J.A. Cecilia, “Catalytic transfer hydrogenation of furfural using mechanically activated MgO as catalyst”, *RSC Mechanochemistry* 2 (2025) 432-442.
 22. J. Ye, **N. Dimitratos**, L.M. Rossi, N. Thonemann, A.M. Beale, R. Wojcieszak, “Hydrogenation of CO₂ for sustainable fuel and chemical production”, *Science* 387 (2025) eadn9388.
 23. S. Scurti, E. Rodríguez-Aguado, J.A. Cecilia, D. Caretti, **Nikolaos Dimitratos**, “Competitive effects of polymeric ligands molecular weight on the gold colloidal nanocatalysts: Impact of catalysts design and catalytic performance”, *Molecular Catalysis* 572 (2025) 114780.
 24. T. Oyegoke, A. Sadier, S. Navarro-Jaén, A. Ventimiglia, **N. Dimitratos**, F. Dumeignil, B. El-Yakubu Jibril, R. Wojcieszak, C. Michel, “Enhancing 5-hydroxymethylfurfural oxidation to 2,5-furan-dicarboxylic acid with Au-supported catalysts: Optimizing reaction parameters and unraveling degradation mechanism through DFT calculations”, *Catalysis Today* 445 (2025) 115086.
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- conditions", *Angew. Chem. Int. Ed.* 50 (2011) 10136-10139. (*Highlighted in the "One Hundred Years of the Fritz Haber Institute" special issue.*)
183. G.L. Brett, P.J. Miedziak, **N. Dimitratos**, J.A. Lopez-Sanchez, N.F. Dummer, R. Tiruvalam, C.J. Kiely, D.W. Knight, S.H. Taylor, D.J. Morgan, A.F. Carley, G.J. Hutchings, "Oxidative esterification of 1,2-propanediol using gold and gold-palladium nanoparticles", *Catalysis Science & Technology* 2 (2012) 97-104. (*Front Cover*).
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 186. R.C. Tiruvalam, J.C. Pritchard, **N. Dimitratos**, J.A. Lopez-Sanchez, J.K. Edwards, A.F. Carley, G.J. Hutchings, C.J. Kiely, "Aberration corrected analytical microscopy studies of sol-immobilised AuPd, Au[Pd] and Pd[Au] catalysts used for benzyl alcohol oxidation and hydrogen peroxide production", *Faraday Discussions* 152 (2011) 63-86.
 187. C. Hammond, J.A. Lopez-Sanchez, M.H. Ab Rahim, **N. Dimitratos**, R.L. Jenkins, A.F. Carley, Q. He, C.J. Kiely, D.W. Knight, G.J. Hutchings, "Synthesis of glycerol carbonate from glycerol and urea with gold-based catalysts", *Dalton Transactions* 40 (2011) 3927-3937. (*Front Cover*).
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202. **N. Dimitratos**, J.A. Lopez-Sanchez, G.J. Hutchings, "Green catalysis with alternative feedstocks", *Topics in Catalysis* 52 (2009) 258-268.
203. J.A. Lopez-Sanchez, **N. Dimitratos**, P. Miedziak, E. Ntainjua, J.K. Edwards, D. Morgan, A. F. Carley, R. Tiruvalam, C.J. Kiely, G.J. Hutchings, "Au-Pd supported nanocrystals prepared by a sol immobilization technique as catalysts for selective chemical synthesis", *Phys. Chem. Chem. Phys.* 10 (2008) 1921-1930.
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213. **N. Dimitratos**, F. Porta, L. Prati, "Au, Pd (mono and bimetallic) catalysts supported on graphite using the immobilisation method. Synthesis and catalytic testing for liquid phase oxidation of glycerol", *Appl. Catal. A* 291(1-2) (2005) 210-214.
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216. **N. Dimitratos**, F. Porta, L. Prati, A. Villa, "Synergetic effect of platinum or palladium on gold catalyst in the selective oxidation of D-sorbitol", *Catalysis Letters* 99 (2005) 181-185.
217. **N. Dimitratos**, J.C. Védrine, "Selective oxidation of propane on $\text{Cs}_{2.5}\text{H}_{1.5}\text{PV}_1\text{W}_x\text{Mo}_{11-x}\text{O}_{40}$ heteropolyoxometallate compounds, Catalysis in Application, [Papers presented at the International Symposium on Applied Catalysis], Glasgow, United Kingdom, July 16-18, (2003), 145-152.
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Abstracts and short papers

1. V. Peneau, H. Qian, G. Shaw, S.A. Kondrat, T.E. Davies, P. Miedziak, M. Forde, **N. Dimitratos**, C.J. Kiely, G.J. Hutchings, “Selective catalytic oxidation of toluene using supported Au-Pt and Pd-Pt nanoalloys”, Abs. Pap. Am. Chem. Soc 248 (2014).
2. **N. Dimitratos**, C. Hammond, G.J. Hutchings, “Gold-based nanoparticle catalysts for catalytic applications”, Abs. Pap. Am. Chem. Soc 248 (2014).
3. C. Hammond, **N. Dimitratos**, H. Hagen, E. E. Stangland, G. J. Hutchings, “Insights into the Catalytic and Selective Oxidation of Methane to Methanol with Cu-promoted Fe-ZSM-5 at mild conditions”, Abs. Pap. Am. Chem. Soc 245 (2013).
4. M.M. Forde, B.C. Grazia, R. Armstrong, R.L. Jenkins, M.H. Ab Rahim, A.F. Carley, **N. Dimitratos**, J.A. Lopez-Sanchez, S.H. Taylor, N.B. McKeown, G.J. Hutchings, “Supported iron catalysts for selective lower alkane oxidation with H₂O₂: Bio-mimetic approach or nanoparticle based catalysis?”, Abs. Pap. Am. Chem. Soc 242 (2011).
5. G.J. Hutchings, **N. Dimitratos**, P. Miedziak, “Nanocrystalline gold catalysts for selective oxidation”, Abs. Pap. Am. Chem. Soc 242 (2011).
6. G.J. Hutchings, C. Hammond, M.H. ab Rahim, **N. Dimitratos**, R.L. Jenkins, F. Carley, Q. He, C. J. Kiely, D.W. Knight, J.A. Lopez-Sanchez, “Synthesis of chemicals from glycerol with gold-based catalysts”, Abs. Pap. Am. Chem. Soc 241 (2011).
7. J.A. Lopez-Sanchez, **N. Dimitratos**, C. Hammond, M. H. ab Rahim, J. M. Anthonyjuttu, A. F. Carley, R.C. Tiruvalam, C.J. Kiely, D.W. Knight, G.J. Hutchings, “Using gold catalysts for upgrading glycerol from biodiesel production: Selective oxidation and synthesis of glycerol carbonate”, Abs. Pap. Am. Chem. Soc 240 (2010).

Contributions to symposia and compiled volumes

1. A. Villa, **N. Dimitratos**, “Metal-free Functionalized Carbons in Catalysis: Synthesis, Characterization and Applications” (Royal Society of Chemistry (RSC), Catalysis Series, Volume 31) 1st Edition, Editors, A. Villa and N. Dimitratos (2018).
2. **N. Dimitratos**, A. Villa, C.E. Chan-Thaw, C. Hammond, L. Prati, “Petrochemical Catalyst materials, Processes, and Emerging Technologies”, IGI Global, Chapter titled “Valorisation of Glycerol to fine Chemicals and Fuels; Editors Hamid Al-Mergen, Tianun Xio (2016).
3. **N. Dimitratos**, C. Hammond, P.P. Wells, “Gold Catalysis; Preparation, Characterization and Applications”, Taylor & Francis Group. Chapter titled “Liquid phase oxidation using Au-based catalysts”; Editors A. Villa and L. Prati (2015).
4. **N. Dimitratos**, J.A. Lopez-Sanchez, G.J. Hutchings, “Advanced Processes in Catalytic Oxidation. From Laboratory Studies to Industrial Applications”, Imperial College Press. Chapter titled “Supported metals for liquid-phase oxidations”, Editors D. Duprez and F. Cavani, (2015).
5. **N. Dimitratos**, C.J. Kiely, G.J. Hutchings, “Environmental Catalysis over Gold-Based Materials”, RSC Catalysis Series No. 13. Chapter titled “General introduction in the field of environmental catalysis: Green Catalysis with Supported Gold and Gold Bimetallic Nanoparticles”, Editors G. Avgouropoulos and T. Tabakova, (2013).

Patents

The following patents have been filed for an international patent application.

1. “Selective oxygenation of alkanes using oxygen”, G.J. Hutchings, M.M. Forde, J.A. Lopez-Sanchez, **N. Dimitratos**. (WO/2013058983).
2. “Hydrocarbon selective oxidation with heterogeneous gold catalysts”, A.F. Carley, **N. Dimitratos**, G.J. Hutchings, R.L. Jenkins, H.A.B. Rahim, J.A. Lopez-Sanchez, S.H. Taylor, D.J. Willock. (WO/2011/051642, PCT/GB2009/051461).
3. “Selective hydrocarbon oxidation using heterogeneous catalysts”, G.J. Hutchings, J.A. Lopez-Sanchez, C. Hammond, **N. Dimitratos**, N.F. Dummer. (WO/2011/161276, PCT/ES2010/070431).
4. “A catalyst and a method of making the same”, G.J. Hutchings, J.A. Lopez-Sanchez, **N. Dimitratos**. (WO/2011/023953, PCT/GB2010).

Grants/Awards/Funding

2024

1. Clean Energy Transition Partnership (CETP 2023 Call), “GeniusFuels: Gasification and Electrolysis Novel Integration Used for Sustainable FUELS”. Coordinator and P. Investigator, 1,960,320 euro.

2023

2. PRIN 2022, P. Investigator, “GREENHOUSE: Green hydrogen from urea-rich wastewater using novel catalytic processes”, 295,263 euro.

2022

3. PRIN 2020, Co-Investigator “LEVANTE: Levulinic acid Valorization through Advanced Novel Technologies”, 1,100,000 euro.

<https://prinlevante.dcci.unipi.it/research-units.html>

2017

4. Diamond Grant Co-investigator “XAFS Studies of Ultra-Dilute Colloidal Nanoparticles”, (Diamond Beam time I20, Proposal Number: SP17283).

2016

5. Co-Investigator “Parallel-screening equipment for advanced catalyst testing and process intensification”, 874,075 pounds, EP/P001467/1.

<https://testgow.epsrc.ukri.org/NGBOVViewGrant.aspx?GrantRef=EP/P001467/1>

2015

6. Researcher Co-investigator “Bio-inspired sulfide nanocatalysts: From proof of concept to real catalysis”, 769,968 pounds: EP/K035355/2.

<https://testgow.epsrc.ukri.org/NGBOVViewGrant.aspx?GrantRef=EP/K035355/2>

7. Co-Investigator, “New approaches for the selective oxidation of methane”, 447,223 pounds.
8. Diamond Grant Co-investigator “Tracking the solid-state incorporation of Lewis acid heteroatoms into the framework of zeolite-beta”, (Diamond Beam time B18, Proposal Number: SP12597).

2014

9. Co-Investigator, Grant for strategic CDT equipment, 500,000 pounds.
10. Co-Investigator, “New approaches for the selective oxidation of methane”, 164,672 pounds.

2013

11. Researcher Co-investigator “Bio-inspired sulfide nanocatalysts: From proof of concept to real catalysis”, 1,086,897 pounds: EP/K035355/1.

<https://testgow.epsrc.ukri.org/NGBOVViewGrant.aspx?GrantRef=EP/K035355/1>

12. ISIS Grant Co-investigator, “Probing the nature of the interactions at the surface of fuel cell catalysts using INS” (ISIS Beam time application-RB1220289).
13. Chancellor's Research Fellowship (5-year) by the Cardiff Catalysis Institute, Cardiff University, UK, 600,000 pounds.

2012

14. Grant for Gas installation set-up, 200,000 pounds at Harwell Campus.
15. Grant for strategic equipment, 628,000 pounds: EP/K005030/1. Participation in the interview with the EPSRC equipment panel (Swindon).

<http://gow.epsrc.ac.uk/NGBOVViewGrant.aspx?GrantRef=EP/K005030/1>

16. Grant as Researcher Co-investigator “The UK Catalysis Hub”, 3,725,000 pounds: EP/K014714/1.

<http://gow.epsrc.ac.uk/NGBOVViewGrant.aspx?GrantRef=EP/K014714/1>

17. STFC/ISIS Grant Co-investigator, “Synthesis and characterization of Pt-based electrocatalysts for direct alcohol fuel cells”. Funding for one MChem student (Southampton University) for a period of 6 months.
18. “Metal Loan Scheme” request from Johnson Matthey, 15,000 pounds.
19. Diamond Grant PI-investigator “Identification of Fe species of highly active low level iron-containing zeotype materials for the selective oxidation of methane at mild conditions using in situ Synchrotron-Based IR studies”, (Diamond Beam time B22, Experiment Reference number:8741).
20. ISIS Grant Co-investigator, “Investigation of the role of functionalization in the catalytic activity of Au nanoparticles on carbon nanofibers” (ISIS Beam time application-RB1310041).

21. ISIS Grant Co-investigator, “Structural investigation of high active Lewis acid catalysts for selective hydrocarbon oxidation” (ISIS Beam time application-RB1310091).
 22. ISIS Grant Co-investigator, “Investigating the effect of framework structure and Si/Al ratio on the diffusion of branched alkanes in zeolite Y and ZSM-5” (ISIS Beam time application-RB1310046).
 23. ISIS Grant Co-investigator, “Investigation of the nature of organic surface species formed on Au-based supported nanoparticles” (ISIS Beam time application-RB1220127).
 24. ISIS Grant Co-investigator, “Investigation of the core-shell interaction in stabilised Pd-Au nanoparticle catalysts” (ISIS Beam time application-RB1210305). Successful funding request of 2900 pounds.
 25. ISIS Grant Co-investigator, “Structure of multi-component mixed metal molybdates by neutron diffraction”, (ISIS Beam time application-RB1210412).
 26. ISIS Grant Co-investigator, “Polymer protected gold, palladium colloids”, ((ISIS Beam time application-RB1193033).
 27. Diamond Grant Co-Investigator, “Centre for Catalytic Science: Block Allocation Group (BAG) proposal for access to B18”, (Experiment reference number: SP8071).
- 2011**
28. ISIS grant Co-investigator “Polymer layer structure in stabilised metal nanoparticles for heterogeneous catalysis”, (ISIS Beam time application-RB1010343).
- 2009-2010**
29. Researcher Co-investigator.
EPSRC Reference: EP/H029419/1, Title: “Novel high activity nanoparticles catalysts”, 124,117 pounds.
<http://gow.epsrc.ac.uk/NGBOVViewGrant.aspx?GrantRef=EP/H029419/1>
1st rank
 30. SWIFT fellowship.
 31. ISIS grant Co-investigator “Polymer layer structure in stabilised metal nanoparticles for heterogeneous catalysis”, (ISIS Beam time application-RB1010343).
- 2007-2009**
32. Principal Investigator/Consultant in Milan University, Italy. “Nanostructured materials for catalysis” financed by the “Fondazione” Cariplo Organization.
 33. “Metal Loan Scheme” request from Johnson Matthey, 5000 pounds.

Newsletters

1. **N. Dimitratos**, L. Prati, “Collaborators required. Catalytic wet air oxidation research”, CatGold News, 2004, Issue 7.
2. **N. Dimitratos**, “Liquid phase oxidation of alcohols using Au or Au-M (M = Pd, Pt) catalysts”, Auricat Newsletter, 2004, Issue 5.

Highlights

1. “Report on Auricat Workshop, Gandia, Spain, 11-13 May 2005”, Gold Bulletin vol.38/3 (2005) 135.
2. “Conference reports Gold 2006, Highlights of the 4th international conference on the science, technology and industrial applications of gold”, Gold Bulletin vol.39/4 (2006) 226.
3. “Highlights from recent literature”, Gold Bulletin vol.43/1 (2010) 66.
4. “New views of catalysts”, C.J. Kiely, Nature materials, Vol. 9 (2010) 296-297.

Webpages

<https://www.unibo.it/sitoweb/nikolaos.dimitratos/cv-en>
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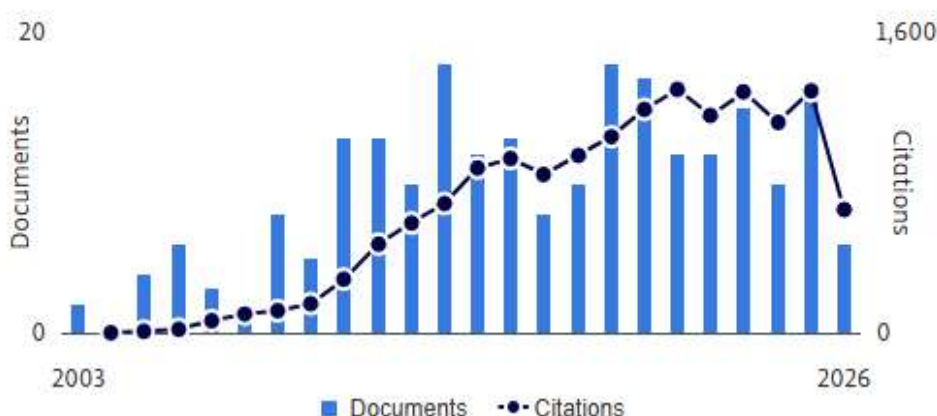
Editorial Duties

Reviewer in the following Journals: Applied Catalysis A, J. of Catalysis, Catal. Today, Angewandte Chemie, JACS, ACS Nano, J. Materials Chemistry, Chem. Comm., Catalysis Communications, Applied Catalysis B: Environmental, CrystEngComm, Nature Communications.

Citation Index

Index factor h=61 (Web of Science), h=62 (Scopus), h=69 (google scholar)

Document & citation trends



CONTRIBUTIONS TO CONFERENCES/WORKSHOPS

June 2026

Oral presentation at the Fourth International Conference on Unconventional Catalysis, Reactors and Applications (UCRA) UCRA4 in Mariehamn, Åland Islands, 2026.

1. "Hydrous Hydrazine decomposition over Rh/Al₂O₃ catalyst: CFD studies", P. Adamou, S. Bellomi, E. Harkou, A. Villa, **N. Dimitratos**, A. Constantinou.

May 2026

Oral presentation and invitation at the Department of Chemical and Environmental Engineering, Bilbao, 2026.

2. "Exploiting Colloidal Metal Nanoparticles to Elucidate Structure-Performance Relationships in Heterogeneous Catalysis", **N. Dimitratos**.

June 2025

Oral presentation at the 13th International Conference on Environmental Catalysis (ICEC 2025), Palermo, Italy.

3. "Use of ternary Cu/Zn/La mixed oxides for the hydrogenation/hydrogenolysis of hexyl hexanoate to 1-hexanol aimed at overcoming the issues of chromium-based systems", D.

Licursi, N. Dimitratos, G. Luzzati, L. Carmassi, N. Di Fidio, S. Fulignati, C. Antonetti, A. M. Raspolli Galletti.

4. "Gold nanoparticles on manganese oxides with different crystalline structures: enhancing low-temperature air pollutants abatement", N. Grifasi, F. Liuzzi, E. Cali, S. Bensaid, N. Russo, F. Deorsola, **N. Dimitratos**, S. Albonetti, F. Cavani, D. Fino, M. Piumetti.

November 2024

Oral presentation at the XXIII National Congress of the Industrial Chemistry Division, Pisa, Italy, 2024.

5. "Dimethyl adipate from bio-based cyclopentanone and dimethyl carbonate: a heterogeneously catalyzed alternative approach", M. Pagliara, S. Iadarola, G. Galletti, D. Allkanjari, **N. Dimitratos**, J. De Maron, F. Arfelli, F. Cavani, D. Cespi, T. Tabanelli.

August 2024

Oral presentation at the XXVIII National Congress of the Italian Society, Milan, Italy, 2024.

6. "Levulinate esters valorization: the production of γ -valerolactone and consecutive products through an innovative gas-phase continuous flow process", L. Visentin, P. Zappalorti, S. Albonetti, **N. Dimitratos**, L. Ardemani, N. Scotti, F. Cavani, T. Tabanelli.

July 2024

Oral presentation at the 18th International Congress on Catalysis (ICC), Lion, France, 2024.

7. "Levulinate esters valorization: from γ -valerolactone to ethyl pentenoates through an innovative gas-phase continuous flow process", L. Visentin, A. Ventimiglia, L. Conte, S. Albonetti, **N. Dimitratos**, L. Ardemani, N. Scotti, T. Tabanelli, F. Cavani.

June 2024

Oral presentation at the ISCRE 28 International Symposium on Chemical Reaction Engineering 2024, Turku, Finland.

8. "Hydrous Hydrazine decomposition over Rh/Al₂O₃ catalyst: CFD studies", P. Adamou, S. Bellomi, E. Harkou, A. Villa, **N. Dimitratos**, A. Constantinou.

November 2023

Oral presentation at the Merck Young Chemists' Symposium 2023" (MYCS 2023), 2023.

9. "Catalytic transfer hydrogenation of levulinate esters with ethanol over Zr-based catalysts under continuous flow conditions L. Visentin, A. Ventimiglia, L. Conte, S. Albonetti, **N. Dimitratos**, L. Ardemani, N. Scotti, T. Tabanelli, F. Cavani.

September 2023

Oral presentation at the 6th EuChemS Conference on Green and Sustainable Chemistry (6th EuGSC), Salerno, Italy, 2023.

10. "Catalytic transfer hydrogenation of levulinate esters with ethanol over Zr-based catalysts under continuous flow conditions", L. Visentin, A. Ventimiglia, R. Bacchiocchi, L. Conte, M. Berti, I. Rivalta, S. Albonetti, **N. Dimitratos**, L. Ardemani, N. Scotti, C. D'Agostino, T. Tabanelli, F. Cavani.

August 2023

Oral presentation at Europacat 2023, Prague, Czech Republic.

11. "Design of oxide-polymer hybrid materials with multifunctional properties for biomass valorisation and wastewater treatment", A. Allegri, C. Oldani, A. Brigliadori, M. Blosi, S. Ortelli, **N. Dimitratos**, A. L. Costa, G. Paul, E. Gianotti, G. Fornasari, S. Albonetti.
12. "Beyond γ -valerolactone: from levulinates to C5 and C7 esters through innovative continuous-flow processes in the gas phase", T. Tabanelli, L. Visentin, A. Ventimiglia, M. Berti, **N. Dimitratos**, I. Rivalta, S. Albonetti, L. Ardemani, N. Scotti and F. Cavani.
13. "Supported Pt and Pt/Ni nanoparticles from metal carbonyl clusters as effective catalysts for biobased molecules valorisation", F. Liuzzi, C. Cesari, **N. Dimitratos**, S. Zacchini, S. Albonetti.
14. "Continuous-flow liquid-phase valorisation of furfural to γ -valerolactone over Ti/Zr/O catalysts", A. Allegri, A. Saotta, **N. Dimitratos**, G. Fornasari, S. Albonetti.

Poster

15. "Comparison between the crystalline phases of ZrO₂ in methyl levulinate reduction to γ -valerolactone: a theoretical and experimental study", A. Ventimiglia, R. Bacchiocchi, **N. Dimitratos**, I. Rivalta, T. Tabanelli.
16. "Enhanced stability of sub-nanometric Iridium decorated graphitic carbon nitride for H₂ production upon hydrous hydrazine decomposition" S. Bellomi, I. Barlocco, X. Chen, J.J. Delgado, R. Arrigo, **N. Dimitratos**, A. Roldan, A. Villa.

June 2023

Oral presentation at the Women in Science-2nd Erlangen Symposium, Nurnberg, Germany.

17. “Water-soluble gold nanoparticles stabilized by N-heterocyclic carbenes for applications in catalysis and medicine”, S.R. Thomas, A.L. de Andrade-Querino, **N. Dimitratos**, A. Casini.
Oral presentation at the XXIII National Congress of Catalysis-GIC 2023, Genova, Italy, 2023.

18. “Beyond γ -valerolactone: from levulinic esters to C5 and C7 esters through innovative continuous-flow processes in the gas phase”, T. Tabanelli, L. Visentin, L. Conte, A. Ventimiglia, M. Berti, Nicola Scotti, Leandro Ardemani, **Nikolaos Dimitratos**, Fabrizio Cavani.

May 2023

Oral presentation at EMRS, European Materials Research Society, Spring 2023, Strasbourg, France.

19. “Catalytic conversion of nitroaromatic pollutants mediated by metal-cryogels hybrid nanostructured catalysts”, S. Scurti, G.P. Salanitri, G. Cucurato, T. Mecca, **N. Dimitratos**, Daniele Caretti.

November 2022

Oral presentation at the XXII Congresso Nazionale Della Divisione Di Chimica Industriale, Catania, Italy.

20. “Role of PVA-based polymeric stabilizers on catalytic activity of gold nanostructured materials”, S. Scurti, F. Liuzzi, A. Allegri, F. Capancioni, N. Tacconelli, S. Albonetti, **N. Dimitratos**, Daniele Caretti.

October 2022

Oral presentation at the Petrochemistry Division of DGMK, the Division of Industrial Chemistry of the Società Chimica Italiana (SCI), the Austrian ÖGEW Österreichische Gesellschaft für Erdölwissenschaften, and Leibniz-Institut für Katalyse e.V. (LIKAT), Ludwigshafen, Germany.

21. “Toward an Efficient, Continuous-flow, Production of GVL through a Catalytic Transfer Hydrogenation Processes with Ethanol in the Gas Phase”, T. Tabanelli, L. Conte, R. Bacchiocchi, E. Paone, **N. Dimitratos**, F. Mauriello, F. Cavani.
22. “Electronic Effect of Polymeric Stabilisers on the Catalytic Activity of Supported Au Nanoparticles for the Selective Oxidation of HMF”, F. Liuzzi, A. Allegri, S. Scurti, **N. Dimitratos**, D. Caretti, S. Albonetti.

September 2022

Oral presentation at the XXIV Convegno Nazionale AIM, Trento, Italy.

23. “Effect of highly electron donor copolymeric stabilizers in redox nanocatalysis”, S. Scurti, N. Tacconelli, F. Liuzzi, A. Allegri, S. Albonetti, **N. Dimitratos**, D. Caretti.

Oral presentation at the GIC-2022 XXII National Congress of Catalysis, Riccione Italy.

24. “Electronic effect of polymeric stabilisers on the catalytic activity of supported Au nanoparticles for the selective oxidation of HMF”, F. Liuzzi, A. Allegri, S. Scurti, **N. Dimitratos**, D. Caretti, S. Albonetti.
25. “Layered-Double Hydroxides as CRM-free Highly Active Catalysts for the Reduction of 4-nitrophenol”, E. Orfei, A. Fasolini, **N. Dimitratos**, F. Basile.
26. “Improved Catalytic Transfer Hydrogenation of alkyl levulinates with ethanol over ZrO₂ based catalysts”, T. Tabanelli, R. Bacchiocchi, E. Paone, L. Conte, S. Albonetti, **N. Dimitratos**, F. Mauriello, F. Cavani.
27. “Comparison between the crystalline phases of ZrO₂ in methyl levulinate reduction to γ -valerolactone: a theoretical and experimental study”, A. Ventimiglia, I. Rivalta, T. Tabanelli, **N. Dimitratos**.

June 2022

Oral presentation at the IX National workshop of interdivisional group of Green Chemistry-Sustainable Chemistry (GC-CS), Pavia, Italy, 2022.

28. “Valorizzazione di alchil levulinati a γ -valerolattone mediante processi di H-transfer in continuo, in fase vapore”, T. Tabanelli, L. Conte, R. Bacchiocchi, E. Paone, **N. Dimitratos**, F. Mauriello, F. Cavani.

May 2022

Oral presentation at ISGC 2022, Rochelle, France.

29. “Glucose oxidation using supported gold catalysts: experimental and computational studies for elucidating reaction mechanism and deactivation phenomena”, A. Ventimiglia, **N. Dimitratos**, E. Monti, I. Rivalta, T. Tabanelli.

December 2021

Oral presentation at the XX Giornata della Chimica dell'Emilia Romagna (GdC-ER 2021), Ferrara, Italy.

30. "Influence of poly vinyl-alcohol hydrolysis degree on metal nanocatalysts for the catalytic conversion of organic pollutants", S. Scurti, F. Capancioni, D. Caretti, **N. Dimitratos**.

Oral presentation at the workshop (on-line) on Advanced Catalysis Soochow University International 2021.

31. "Novel nanostructured catalysts for the catalytic conversion of aromatic pollutants", S. Scurti, **N. Dimitratos**.

Oral presentation at the International school on Inorganic Materials, (InoMat-2021), Bardonecchia, 2021, Italy.

32. "Comparison between the crystalline phases of ZrO₂ in methyl levulinate reduction to γ -valerolactone: a theoretical study", A. Ventimiglia, A. Canciani, **N. Dimitratos**, I. Rivalta.

Poster presentation at the 26th International Symposium on Chemical Reaction Engineering, New Delhi, India.

33. "Hydrogen production from formic acid decomposition using a Pd/C catalyst in flow: Experimental and CFD modelling studies", S. Hafeez, F. Sanchez, S.M. Al-Salem, A. Villa, G. Manos, **N. Dimitratos**, A. Constantinou.

November 2021

Oral presentation at the Merck Young Chemists' Symposium 2021, Rimini, Italy.

34. "Effect of stabilizers on gold supported nanoparticles in 4-nitrophenol reduction to 4-aminophenol", A. Ventimiglia, E. Monti, **N. Dimitratos**.

September 2021

Oral presentation at the (on line) XXVII CONGRESSO NAZIONALE DELLA SOCIETÀ CHIMICA ITALIANA, SCI 2021.

35. "Theoretical study of glucose oxidation to glucaric acid using gold based catalyst", A. Ventimiglia, Ivan Rivalta, E. Monti, **N. Dimitratos**, M. Garavelli, T. Tabanelli, and F. Cavani.

Oral presentation (invitation) at the international webinar (online) on Recent Trends in Catalysis, Alphonso College, India, 2021.

36. "Colloidal metal nanoparticles as a toolbox for catalytic studies", **N. Dimitratos**.

Poster presentation at the Conference proceedings of E-MRS 2021 Fall Meeting-Virtual Conference.

37. "Impact of temperature on gold nano-structured catalysts for the conversion of nitroaromatics pollutant", S. Scurti, D. Caretti, **N. Dimitratos**.

June 2021

Oral presentation at the New Trend in Materials Science and Engineering 1st International Virtual Conference, Italy.

38. "Influence of hydro-soluble polymeric stabilizers in nano-catalysis: molecular weight effect", S. Scurti, S. Bianchi, D. Caretti, **N. Dimitratos**.

February 2021

Oral presentation at the 1st Online Conference of Young Scientists on "Mineral Resources-Environment-Chemical Engineering, Kozani, Greece.

39. "Colloidal metal nanoparticles as a toolbox for catalytic studies", **N. Dimitratos** (Invitation).

October 2020

Oral presentation at the Petrochemistry Division of DGMK, the Division of Industrial Chemistry of the Società Chimica Italiana (SCI), the Austrian ÖGEW Österreichische Gesellschaft für Erdölwissenschaften, and Leibniz-Institut für Katalyse e.V. (LIKAT), Rostock, Germany.

40. "Improved Catalytic Transfer Hydrogenation of Levulinate Esters with Alcohols Over ZrO₂ Catalyst", T. Tabanelli, E. Paone, F. Blair Vásquez, R. Pietropaolo, **N. Dimitratos**, F. Cavani, F. Mauriello.

November 2019

Oral presentation at the Young chemists' symposium in Rimini, Italy.

41. "Oxidation of glucose to glucaric acid using gold-based catalysts", E. Monti, C.A. Garcia Soto, T. Tabanelli, **N. Dimitratos**, F. Cavani.

August 2019

Oral presentation at Europacat 2019, Aachen, Germany.

42. "Reactant-induced transformation of mixed metal oxides in gas-phase catalysis: The peculiar behavior of iron vanadate and methanol", T. Tabanelli, C. Lucarelli, A. Beale, I. Gonzalez, V. Celorrio, G. Malta, **N. Dimitratos**, F. Cavani.
43. "Innovative bifunctional catalytic system for methyl methacrylate synthesis: The peculiar role of gallium" J. De Maron, M. Eberle, T. Tabanelli, **N. Dimitratos**, F. Cavani.

Poster

44. "Gold and Palladium Based Catalysts Prepared Batch and Semi-Continuous Colloidal Methods for the Selective Oxidation of 5-hydroxymethyl-2-furfural", T. Bere, S. Cattaneo, M.S. Grasina, **N. Dimitratos**, D. Bonincontro and S. Albonetti.
45. "Study of the gas-phase catalytic transfer hydrogenation of methyl levulinate with ethanol over ZrO₂", B. Vasquez, T. Tabanelli, E. Monti, **N. Dimitratos**, S. Albonetti, F. Cavani.

June 2019

Poster presentation at the AIZ 2019 Congress (XVI National Congress of Zeolites Science and Technology) joint with the 8th Czech-Italian-Spanish Conference on Molecular Sieves and Catalysis, and with the GIC 2019 Congress (XXI National Congress of Catalysis) in Amantea (CS), Italy.

46. "An in situ raman and reactivity study of the transformation occurring in Nb-doped vanadyl pyrophosphate", L. Setti, A. Caldarelli, F. Cavani, T. Tabanelli, F. Puzzo, **N. Dimitratos**, C. Lucarelli, C. Cortelli, S. Luciani.
47. "Oxidation of glucose to glucaric acid using supported gold catalysts", E. Monti, S. Solmi, C. Morreale, T. Tabanelli, **N. Dimitratos**, F. Cavani.

September 2018

Oral presentation at the XX Congresso Nazionale di Catalisi – XX Congresso Nazionale della Divisione di Chimica Industriale (GIC-DiChIn2018).

48. "Towards the continuous production of supported metal nanoparticles in continuous for applications in catalysis", S. Cattaneo, **N. Dimitratos**, S. J. Freakley, M. Sankar, L. Prati, G. J. Hutchings.

49. "Sonochemical synthesis of Ni-Based catalysts for ethanol steam reforming", A. Di Michele, A. Dell'Angelo, **N. Dimitratos**, G. Ramis, I. Rossetti.

50. "Cooperative effect between Au, AuPd and NiO for the base-free oxidation of HMF", D. Bonincontro, A. Lolli, A. Villa, L. Prati, **N. Dimitratos**, F. Cavani, S. Albonetti.

August 2017

Oral presentation at the Europacat in Florence, Italy.

51. "Directed glycerol reforming through tailored platinum nanoparticles", J. Callison, N.D. Subramanian, S.M. Rogers, D. Gianolio, C.R.A. Catlow, P.P. Wells, **N. Dimitratos**.
52. "Towards the continuous production of supported monometallic and bimetallic nanoparticles for applications in catalysis", S. Cattaneo, **N. Dimitratos**, S.J. Freakley, M. Sankar, G.J. Hutchings.
53. "Low temperature selective oxidation of methane using gold-palladium based catalysts", N. Agarwal, S.J. Freakley, **N. Dimitratos**, D.J. Morgan, R.L. Jenkins, C.J. Kiely, G.J. Hutchings.

Poster presentation

54. "Size controlled palladium nanoparticles for the transfer dehydrogenation of 1-phenylethanol under mild conditions", R. Albilali, **N. Dimitratos**.
55. "Synthesis of shape and size controlled nanoparticles using non-conventional approaches", M.P. Simplicio Grasina, S. Taylor, G. Hutchings, C. Hammond, M. Jones, **N. Dimitratos**.

January 2017

"Oral presentation at the UK Catalysis Hub Conference, Loughborough, UK.

56. "Continuous production of supported Au nanoparticles for catalysis applications", S. Cattaneo, **N. Dimitratos**, S. Freakley, M. Sankar, G.J. Hutchings.
57. "CNFs-supported Pd series catalysts: Comparison for hydrogen evolution from additive-free formic acid decomposition" F. Sanchez, **N. Dimitratos**, A. Villa.
58. "Controlled glycerol reforming through tailored platinum nanoparticles", J. Callison, N.D. Subramanian, S. Rogers, D. Gianolio, C.R.A. Catlow, P.P. Wells, **N. Dimitratos**.
59. "Hydrogen evolution from liquid chemical storage materials", D. Motta, **N. Dimitratos**, L. Bocelli.
60. "Electronic properties of furfural on Pd and PdC surfaces", A. Chutia, S.M. Rogers, A. Villa, **N. Dimitratos**, P.P. Wells, C.R.A. Catlow.

61. "Transfer dehydrogenation of 1-phenylethanol over supported palladium nanoparticles under mild conditions", R. Albiali, **N. Dimitratos**.

September 2016

Oral presentation at the 6th EuChemMS Chemistry Congress in Seville, Spain.

62. "CO₂ photoconversion to fuels and chemicals under high Pressure", M. Compagnoni, A. Olivo, F. Galli, A. Villa, C. Pirola, L. Prati, M. Signoretti, **N. Dimitratos**, I. Rossetti.

Oral presentation at the Catalysis for Clean Energy and Sustainable Chemistry (CCESC) 2016, Madrid, Spain.

63. "Hydrogen production by aqueous phase reforming of glycerol: Tuning the synthesis of Pt nanoparticle catalysts", N.D. Subramanian, J. Callison, S.M. Rogers, M. Perdjon-Abel, C. R.A. Catlow, P.P. Wells, **Nikolaos Dimitratos**.

July 2016

Poster presentation at the 16th International Congress on Catalysis (ICC 16) Beijing, China.

64. "How the TiO₂—Pd interaction determines the photocatalytic performance", R. Su, **N. Dimitratos**, E. Carter, S. Althahban, X. Wang, Y. Shen, S. Wendt, B.B. Iversen, C.J. Kiely, G.J. Hutchings, F. Besenbacher.

Oral presentation at the 7th Annual Global Congress of Catalysis, Goyang, S. Korea.

65. "Catalytic applications of colloidal metal nanoparticles", R. Armstrong, **N. Dimitratos**.

January 2016

Oral presentation at the UK Catalysis Hub Conference, Loughborough, UK.

66. "Modifying the synthesis of platinum nanoparticle catalyst", N.D. Subramanian, J. Callison, C.R.A. Catlow, P.P. Wells, **N. Dimitratos**.

67. "UV-vis in-situ study on activity of Au/NiO catalysts for the reduction of 4-nitrophenol", D. Motta, **N. Dimitratos**, C. Hammond, M. Hewitt, A. Villa.

September 2015

Oral presentation at the Surface Reactivity and Catalysis (SURCAT) annual group meeting, London, UK.

68. "Pd/C on hydrogen generation in aqueous formic acid solution", F. Sanchez, **N. Dimitratos**, C. Hammond.

August 2015

Oral presentation (invited talk) at the 5th KACST-Oxford conference, Oxford, UK.

69. "Catalytic applications of colloidal metal nanoparticles", **N. Dimitratos**.

June 2015

Oral presentation (invited talk) at the "The Science behind CO₂: Capture and Conversion" Conference in Varadero, Cuba.

70. "Catalytic applications of colloidal Au-based nanoparticles", **N. Dimitratos**.

May 2015

Oral presentation (invited talk) at the Energy Materials Nanotechnology conference in Phuket, Thailand.

71. "Catalytic applications of Au-based nanoparticles", **N. Dimitratos**.

February 2015

Oral presentation (invited talk) at the UK-S. Korea workshop in Seoul, S. Korea.

72. "Supported metal nanoparticles for heterogeneous catalytic applications", **N. Dimitratos**.

September 2014

Oral presentation (invited talk) at the UK-S. Korea workshop in London, Royal Society, UK.

73. "Metal nanoparticles: Applications in catalysis and challenges", **N. Dimitratos**.

August 2014

Oral presentation at the 248th ACS National Meeting, San Francisco, USA.

74. "Selective catalytic oxidation of toluene using supported Au-Pt and Pd-Pt nanoalloys", 1. V. Peneau, H. Qian, G. Shaw, S.A. Kondrat, T.E. Davies, P. Miedziak, M. Forde, **N. Dimitratos**, C.J. Kiely, G.J. Hutchings.

75. "Gold-based nanoparticle catalysts for catalytic applications", **N. Dimitratos**, C. Hammond, G.J. Hutchings.

July 2014

Oral presentation at the UK colloids 2014 conference in London.

76. "Designing bimetallic nanoparticles for high catalytic performance", **N. Dimitratos**.

May 2014

Oral presentation (invited talk) at the 4th KACST-Oxford conference in S. Arabia.

77. "Catalytic applications of Au-based nanoparticles", **N. Dimitratos.**

February 2014

Oral presentation (invited talk) at the Chicheley Hall (RS meeting).

78. "Au-based nanoparticles: Applications in catalysis and challenges", **N. Dimitratos.**

Oral presentation (invited talk) at Birmingham University.

79. "Synthesis of Au-based nanoparticles and catalytic applications", **N. Dimitratos.**

January 2014

Oral presentation at the UK-S. Korea workshop in Seoul, S. Korea.

80. "Catalysis using supported gold nanoparticles", **N. Dimitratos**

November 2013

Oral presentation at the "SciMed Open days" in London, UK.

81. "R@D of novel materials for oxidation reactions and future applications-a use for Parr Pressure Vessels", **N. Dimitratos.**

September 2013

Oral and poster presentations at the 11th European Congress in Catalysis Europacat-XI, Lyon, France.

82. O: "Influence of the metal nanoparticle decoration of TiO₂ on the photocatalytic phenol decomposition", **R. Su**, R. Tiruvalam, Q. He, **N. Dimitratos**, L. Kesavan, C. Hammond, J.A. Lopez-Sanchez, R. Bechstein, C.J. Kiely, G.J. Hutchings, F. Besenbacher.

83. O: "Low-temperature selective oxidation of methane over Cu-promoted Fe-ZSM-5", **G.J. Hutchings**, C. Hammond, R.L. Jenkins, **N. Dimitratos**, J.A. Lopez-Sanchez, M.H. Ab Rahim, M.M. Forde, A. Thetford, D.M. Murphy, J.M. Mouljin, S.H. Taylor, D.J. Willock.

84. O: "QM/MM investigations of Fe-doped Zeolites: Active site characterisation and reaction pathway elucidation", **A. Logsdail**, **N. Dimitratos**, C. Hammond, D. Willock, R. Lobo, V. Blum, T. Keal, P. Sherwood, R. Catlow, A. Sokol.

85. P: "The oxidative esterification of diols using gold based catalysts", **G. Brett**, P. Miedziak, T. Kotionova, **N. Dimitratos**, A. Carley, D. Knight, S.H. Taylor, D. Morgan, G.J. Hutchings.

86. P: "Base-free glycerol oxidation: Studying the effects of structural and acid properties of support in bimetallic catalysts", **S. Campisi**, K.M.H. Mohammed, A. Villa, **N. Dimitratos**, P.P. Wells, J. Evans, R. Catlow, L. Prati.

87. P: "Supported AuPd and AuPt alloys for low temperature base free glycerol oxidation", **G. Brett**, Q. He, C. Hammond, P. Miedziak, **N. Dimitratos**, M. Sankar, A. Hierzing, M. Conte, C.J. Kiely, D. Knight, S.H. Taylor, G.J. Hutchings.

88. P: "Photocatalytic hydrogen production by alcohol reforming on metal-loaded TiO₂", **H. Bahruji**, M. Bowker, P. Davies, J. Kennedy, C. Brookes, W. Jones, **N. Dimitratos**.

89. P: "Photocatalytic hydrogen production by methanol reforming on Au based TiO₂ catalysts: studying particle size and metal loading using colloidal methods", **W. Jones**, J. Kennedy, M. Bowker, **N. Dimitratos**, P.P. Wells.

90. P: "Switching-off toluene formation in the solvent free oxidation of benzyl alcohol using trimetallic Au-Pd-Pt catalysts", **P. Miedziak**, **N. Dimitratos**, J.K. Edwards, D. Knight, S.H. Taylor, Q. He, C.J. Kiely, G.J. Hutchings.

August 2013

Oral presentation (invited talk) at the 3rd KACST-Oxford conference, Oxford, UK.

91. "Catalytic applications of Au-based nanoparticles", **N. Dimitratos.**

July 2013

Oral presentation at the 17th International Zeolite Conference in Moscow, Russia.

92. "Insights into the selective and catalytic oxidation of methane to methanol with Cu-promoted Fe-ZSM-5 at mild conditions" **C. Hammond**, **N. Dimitratos**, H. Hagen, E.E. Stangland, D.J. Willock, G.J. Hutchings.

March 2013

Oral presentation at the 245th ACS National Meeting, New Orleans, USA.

93. "Insights into the Catalytic and Selective Oxidation of Methane to Methanol with Cu-promoted Fe-ZSM-5 at mild conditions", C. Hammond, **N. Dimitratos**, H. Hagen, E. E. Stangland, **G. J. Hutchings.**

December 2012

Oral presentation at the Catalysis Winter School 2012 (Oxford University/Imperial College London/University College London)" at St Catherine's College, Oxford.

94. "Catalysis at Harwell", **N. Dimitratos.**

July 2012

Oral presentation at the 15th International Congress on Catalysis, Munich, Germany.

95. "Au-Pd and Au-Pt alloy supported nanocrystals for polyol oxidations", P. Miedziak, G.L. Brett, T. Kotionova, Y. Ryabenkova, Q. He, **N. Dimitratos**, C.J. Kiely, D.W. Knight, S.H. Taylor, G.J. Hutchings.

June 2012

Oral presentation at the seminar for Richard Catlow 65th birthday "New Advances in Materials Chemistry" at University College London, London, UK.

96. "Centre for Catalytic Science-Concept and future research plans", **N. Dimitratos**.

November 2011

Oral presentation at the ISIS Molecular spectroscopy Group Meeting, Abington, UK.

97. "Centre for Catalytic Science-Concept and future research plans", **N. Dimitratos**.

October 2011

Oral presentation at the AIChE 2011 Meeting, Minneapolis, USA.

98. "Oxidation of polyols using Au-Pd and Au-Pt alloy supported nanocrystals", P. Miedziak, G.L. Brett, Y. Ryabenkova, **N. Dimitratos**, J.A. Lopez-Sanchez, M. Sankar, A.F. Carley, R.C. Tiruvalam, A.A. Herzing, C.J. Kiely, D.W. Knight, S.H. Taylor, G.J. Hutchings.

Oral presentation at the 1st International Congress on Catalysis for Biorefineries 2011 Meeting, Malaga, Spain.

99. "Supported gold-copper nanoparticles as a reusable catalyst for the oxidation of 5-hydroxymethyl-2-furfural under mild conditions", T. Pasini, S. Albonetti, M. Blosi, R. Bonelli, M. Piccinini, **N. Dimitratos**, J.A. Lopez-Sanchez, C.J. Kiely, G.J. Hutchings, F. Cavani.
100. "Synthesis of glycerol carbonate from glycerol and urea with heterogeneous catalysts", J.A. Lopez-Sanchez, C. Hammond, M.H. Ab Rahim, **N. Dimitratos**, R.L. Jenkins, A.F. Carley, Q. He, C.J. Kiely, D.W. Knight, G.J. Hutchings.

September 2011

Oral presentation at the 14th European Conference on Applications of Surface and Interface Analysis, Cardiff, UK.

101. "Recent advances in the synthesis of Au-Pd colloids in the preparation of very active selective oxidation catalysts", J.A. Lopez-Sanchez, **N. Dimitratos**, C.J. Kiely, G.J. Hutchings.
102. "Oxidation of polyols using Au-Pd and Au-Pt alloy supported nanocrystals", P. Miedziak, G.L. Brett, Y. Ryabenkova, **N. Dimitratos**, J.A. Lopez-Sanchez, Meenakshisundaram Sankar, A.F. Carley, R.C. Tiruvalam, A.A. Herzing, C.J. Kiely, D.W. Knight, S.H. Taylor, G.J. Hutchings.

Oral and Poster presentations at the Europacat X, Glasgow, UK.

103. O: "Direct synthesis of hydrogen peroxide using Au-Pd/C catalysts prepared by sol-Immobilization", J. C. Pritchard, L. Kesavan, M. Piccinini, Q. He, R. Tiruvalam, **N. Dimitratos**, J.A. Lopez-Sanchez, A.F. Carley, J.K. Edwards, C.J. Kiely, G.J. Hutchings.
104. P: "Highly active titania supported Pt and Pd catalysts for oxidation reactions prepared by a vapour deposition method", M.M. Forde, L. Kesavan, I. Saiman, **N. Dimitratos**, J.A. Lopez-Sanchez, A.F. Carley, C.J. Kiely, S.H. Taylor, G.J. Hutchings.
105. P: "Effect of methodology for the synthesis of active gold based Copper Oxide Catalysts", M.H. Ab Rahim, **N. Dimitratos**, J.A. Lopez-Sanchez, A.F. Carley, S.H. Taylor, G.J. Hutchings.
106. P: "Recent advances in the synthesis of Au-Pd colloids in the preparation of very active selective oxidation catalysts", J.A. Lopez-Sanchez, **N. Dimitratos**, C.J. Kiely, G.J. Hutchings.

August 2011

Oral presentation at the 242th ACS National Meeting, Denver, USA.

107. "Supported iron catalysts for selective lower alkane oxidation with H₂O₂: bio-mimetic approach or nanoparticle based catalysis?", A More Realistic View Using Aberration Corrected Analytical Electron Microscopy", M.M. Forde, C.G. Bezzu, R.L. Jenkins, M.H. Ab Rahim, A.F. Carley, **N. Dimitratos**, J.A. Lopez-Sanchez, S.H. Taylor, N. B. McKeown, G.J. Hutchings.
108. "Nanocrystalline gold catalysts for selective oxidation", G.J. Hutchings, **N. Dimitratos**, P. Miedziak.

July 2011

Oral presentation at the Gold: Faraday Discussion 152, Cardiff, UK.

109. "Characterising supported Au and AuPd clusters", A more realistic view using aberration corrected analytical electron microscopy", C.J. Kiely, A.A. Herzing, R.C. Tiruvalam, M. Watanabe, J.K. Edwards, **N. Dimitratos**, J.A. Lopez-Sanchez, A.F. Carley, G.J. Hutchings.

March 2011

Oral presentation at the 241th ACS National Meeting, Anaheim, USA.

110. "Synthesis of chemicals from glycerol with gold-based catalysts", C. Hammond, J.A. Lopez-Sanchez, M.H. Ab Rahim, **N. Dimitratos**, R.L. Jenkins, A.F. Carley, Q. He, C.J. Kiely, D.W. Knight, G.J. Hutchings.

September 2010

Oral presentation at the 15th Solid State Chemistry Lecture Meeting, Berlin, Germany.

111. "Selective oxidation using supported gold and gold-palladium nanoparticles prepared by sol-immobilisation", J. Pritchard, L. Kesavan, R.C. Tiruvalam, **N. Dimitratos**, J.A. Lopez-Sanchez, A.F. Carley, J.K. Edwards, C.J. Kiely, G.J. Hutchings.

Oral and poster presentations at the 3rd EuCheMS Chemistry Congress, Nürnberg, Germany.

112. O: "Effect of the preparation method on the direct synthesis of hydrogen peroxide and benzyl alcohol oxidation using Au-Pd catalysts", J.A. Lopez-Sanchez, **N. Dimitratos**, L. Kesavan, J. Pritchard, M. Piccini, J.K. Edwards, A.F. Carley, R.C. Tiruvalam, H. Quian, C.J. Kiely, G.J. Hutchings.

113. O: "Using gold catalysts for upgrading glycerol from biodiesel production: selective oxidation and synthesis of glycerol carbonate", J.A. Lopez-Sanchez, **N. Dimitratos**, C. Hammond, M.H. Ab Rahim, A.F. Carley, R.C. Tiruvalam, H. Quian, C.J. Kiely, G.J. Hutchings.

114. P: "Au-Pd supported nanoparticles for catalytic applications", **N. Dimitratos**, J.A. Lopez-Sanchez, N. Glanville, L. Kesavan, C. Hammond, J.K. Edwards, A.F. Carley, R.C. Tiruvalam, H. Quian, C.J. Kiely, G.J. Hutchings.

Oral presentations at the 240th ACS National Meeting, Boston, USA.

115. "Recent advances in the synthesis of Au-Pd colloids in the preparation of very active selective oxidation catalysts", J.A. Lopez-Sanchez, **N. Dimitratos**, J.M. Anthonykutti, A.F. Carley, R.C. Tiruvalam, A.A. Herzing, C.J. Kiely, D.W. Knight, G.J. Hutchings.

116. "Using gold catalysts for upgrading glycerol from biodiesel production: Selective oxidation and synthesis of glycerol carbonate", J.A. Lopez-Sanchez, **N. Dimitratos**, C. Hammond, M.H. Ab Rahim, J.M. Anthonykutti, A.F. Carley, R.C. Tiruvalam, C.J. Kiely, D.W. Knight, G.J. Hutchings.

August 2010

Oral and poster presentations at the 3rd IUPAC Conference on Green Chemistry, Ottawa, Canada.

117. O: "Using gold catalysts for upgrading glycerol from biodiesel production: Selective oxidation and synthesis of glycerol carbonate", J.A. Lopez-Sanchez, **N. Dimitratos**, C. Hammond, M.H. Ab Rahim, J.M. Anthonykutti, G. Brett, A.F. Carley, R.C. Tiruvalam, C.J. Kiely, D.W. Knight, G.J. Hutchings.

118. P: "Recent advances in the synthesis of Au-Pd colloids for use as highly active selective oxidation catalysts", J.A. Lopez-Sanchez, **N. Dimitratos**, L. Kesavan, J.K. Edwards, J. Pritchard, G. Brett, A.F. Carley, R.C. Tiruvalam, C.J. Kiely, D.W. Knight, G.J. Hutchings.

July 2010

Oral presentation at the M4 Colloids Symposium, Bristol, UK.

119. "Recent advances in the synthesis of Au-Pd colloids in the preparation of very active selective oxidation catalysts", J.A. Lopez-Sanchez, **N. Dimitratos**, J.M. Anthonykutti, A.F. Carley, R.C. Tiruvalam, A.A. Herzing, C.J. Kiely, D.W. Knight, G.J. Hutchings.

March 2010

Oral presentation at the AIChE Spring Meeting, San Antonio, USA.

120. "Heterogeneous catalytic systems for the synthesis of organic carbonates", J.A. Lopez-Sanchez, C. Hammond, M.H. Ab Rahim, **N. Dimitratos**, G.J. Hutchings.

June-August 2009

Poster presentations at the 6th Word Congress on Oxidation Catalysis, Lille, France.

121. "Solvent-free oxidation of benzyl alcohol using Au-Pd catalysts prepared by sol immobilisation", **N. Dimitratos**, J.A. Lopez-Sanchez, D. Morgan, A.F. Carley, R.C. Tiruvalam, C.J. Kiely, D. Bethell, G.J. Hutchings.

122. "Oxidation of glycerol using gold palladium alloy supported nanocrystals", J.A. Lopez-Sanchez, **N. Dimitratos**, J.M. Anthonykutti, A.F. Carley, R.C. Tiruvalam, A.A. Herzing, C.J. Kiely, D.W. Knight, G.J. Hutchings.
- Oral presentation at the Taylor Conference, Cardiff, UK.
123. "The synthesis of glycerol carbonate from glycerol and urea with zeolite supported catalysts", C. Hammond, J.A. Lopez-Sanchez, **N. Dimitratos**, G.J. Hutchings.
- Poster and oral presentations at the 5th International Conference on Gold Science "Gold 2009", Heidelberg, Germany.
124. P: "Solvent-free oxidation of benzyl alcohol using Au-Pd catalysts prepared by sol immobilisation", **N. Dimitratos**, J.A. Lopez-Sanchez, D. Morgan, A.F. Carley, R. Tiruvalam, C.J. Kiely, D. Bethell, G.J. Hutchings.
125. O: "Oxidation of polyols using Au-Pd alloy supported nanocrystals", J.A. Lopez-Sanchez, **N. Dimitratos**, J.M. Anthonykutti, A.F. Carley, R.C. Tiruvalam, A.A. Herzing, C.J. Kiely, D.W. Knight, G.J. Hutchings.
126. O: "Characterising Supported Au and Au-Pd Clusters", A More Realistic View Using Aberration Corrected Analytical Electron Microscopy", C.J. Kiely, A.A. Herzing, R.C. Tiruvalam, M. Watanabe, J.K. Edwards, **N. Dimitratos**, J.A. Lopez-Sanchez, A.F. Carley G.J. Hutchings.
- Poster presentation at the 42nd IUPAC Congress, Glasgow, UK.
127. "Solvent-free selective epoxidation of cyclooctene using supported gold catalyst", S.M. Bawaked, N.F. Dummer, **N. Dimitratos**, D. Bethell, Q. He, C.J. Kiely, G.J. Hutchings.
- July 2008**
- Oral presentation at the Recent Appointees in Materials Chemistry Conference (RAMC), Bath, UK.
128. "Preparation and characterisation of mono and bi-metallic catalysts based on Au and Pd supported on carbon and titania using the sol-immobilisation method", **N. Dimitratos**, J.A. Lopez-Sanchez, G.J. Hutchings.
129. "Au-Pd supported nanocrystals prepared by sol immobilisation technique as catalysts for selective chemical synthesis", J.A. Lopez-Sanchez, **N. Dimitratos**, G.J. Hutchings.
- Poster presentations at the 14th International Congress on Catalysis, Seoul, South Korea.
130. "The influence of the protective agent in Au-Pd alloy formation through metallic sols", A. Villa, **N. Dimitratos**, L. Prati, D. Su, D. Wang, G. Vieth.
131. "Metal catalysed alcohol oxidation: from activated carbon to carbon nanotubes", A. Villa, **N. Dimitratos**, L. Prati, D. Su, D. Wang, R. Arrigo.
- September 2007**
- Oral presentation at the Annual Congress of the Italian Chemical Society, Milan, Italy.
132. "Role of the protecting agent on catalytic behavior of gold based catalyst", A. Villa, **N. Dimitratos**, D. Wang, L. Prati.
- October 2006**
- Oral presentation at the Annual meeting of the Auricat Project, University of Milan, Italy.
133. "Selective gas phase oxidation of alkanes/alkenes using Au modified catalysts", **N. Dimitratos**, M. Rossi.
- September 2006**
- Poster presentations at the World Conference for Gold Catalysis, Limerick, Ireland.
134. "Gold promoted selective oxidation of hydrocarbons. I: propene oxidation on heteropolyacid-gold system", **N. Dimitratos**, C. Della Pina, E. Falletta, M. Rossi.
135. "Catalytic performance of Au catalysts in the total oxidation of VOCs", C. Della Pina, **N. Dimitratos**, E. Falletta, M. Rossi, A. Siani.
- March 2006**
- Oral presentation at the Final Meeting of the Auricat Project, University of Delft, Netherlands.
136. "Selective gas phase oxidation of alkanes/alkenes using Au modified catalysts", **N. Dimitratos**, M. Rossi.
- September 2005**
- Poster presentation at the 5th World Congress on Oxidation Catalysis, Sapporo, Japan.

137. "Application of gold based bimetallic catalysts to alcohol oxidation: correlation between substrate and composition of the catalyst", **N. Dimitratos**, F. Porta, L. Prati, A. Villa.
138. "Catalytic applications of Au in gas phase and liquid phase oxidation", M. C. Blanco, S. Carretin, S.T. Daniells, B. Silberova, **N. Dimitratos**, C. Lemire, J. A. Lopez-Sanchez, F. Moreau, B. Solsona, G.J. Hutchings.
- May 2005**
Oral presentation at the Auricat Workshop, Gandia, Spain.
139. "Catalytic applications of Au modified catalysts in the liquid phase oxidation", **N. Dimitratos**, L. Prati.
- October 2004**
Oral presentation at the Annual Meeting of the Auricat Project, University of Berlin-Fritz Haber Institute, Berlin, Germany.
140. "Gas phase oxidation of alkanes/alkenes/alcohols, liquid phase oxidation of organic compounds, oxychlorination of hydrocarbons, complete oxidation of organics (non-halogenated/halogenated molecules)", **N. Dimitratos**, L. Prati, M. Rossi.
- July 2004**
Poster presentation at the International Symposium on Carbon for Catalysis, Carbocat 2004, Lausanne, Switzerland.
141. "Selective oxidation of glycerol with oxygen using mono and bimetallic catalysts based on Au, Pd and Pt metals", **N. Dimitratos**, F. Porta, L. Prati.
- July 2004**
Poster presentation at the International Congress of Catalysis, Paris, France.
142. "Selective propane oxidation to acrylic acid by tuning the catalyst properties", E.K. Novakova, **N. Dimitratos**, I. Nowak, J.C. Védrine.
- March 2004**
143. Attendance at the workshop organised by Johnson Matthey, Sonning Common, UK.
- November 2003**
Oral presentation at the Annual meeting of the Auricat project, University of Valencia, Valencia, Spain.
144. "Liquid phase oxidation of Glycerol on mono and bimetallic catalysts (Au, Pd, Pt) supported on carbon", **N. Dimitratos**, L. Prati, M. Rossi.
- October 2003**
Oral presentation at the 3rd Asia-Pacific Congress on Catalysis, APCAT-3, Dalian, China.
145. "Propane selective oxidation over Keggin type heteropolycompounds" **N. Dimitratos**, J.C. Védrine.
- September 2003**
Poster presentation at the EuropaCat-VI, University of Innsbruck, Austria.
146. "Role of transition metal cations M in $\text{Cs}_{2.5}\text{M}_{1-x}\text{H}_y\text{M}_x\text{Mo}_{11-x}\text{O}_{40}$ Keggin salt catalysts in propane oxidative dehydrogenation", **N. Dimitratos**, J. Quartararo, J.C. Védrine.
- July 2003**
Oral presentation at the International Symposium on Applied Catalysis, Glasgow, UK.
147. "Selective oxidation of propane on $\text{Cs}_{2.5}\text{H}_{1.5}\text{PV}_1\text{W}_x\text{Mo}_{11-x}\text{O}_{40}$ heteropolycompounds", **N. Dimitratos**, J.C. Védrine.
- September 2002**
Oral presentation at the Catalyst Life Cycle conference, Bath, UK.
148. "Role of transition metal cations M in $\text{Cs}_{2.5}\text{H}_x\text{M}_{(0-1)}\text{V}_1\text{Mo}_{(10-11)}\text{O}_{40}$ catalysts on propane oxidation", **N. Dimitratos**, J.C. Védrine.
- March 2002**
Poster presentation at the annual EPSRC meeting, Manchester, UK.
149. "Oxidation of propane on heteropolyacids", **N. Dimitratos**, J.C. Védrine.
- March 2001**
Poster presentation at the Annual poster presentation, Liverpool, UK.
150. "Oxidation of propane on heteropolyacids", **N. Dimitratos**, J.C. Védrine.
- October 1999**
151. Attendance at the workshop Elementary steps in fast catalytic oxidation reactions, Leiden, Holland.

