Monday March 2

10.45	Opening NCCC X (Rotonde)			
11.00	**P1** **Molecular Foundations of Heterogeneous Metal Catalysis Prof. dr. Gabor A. Somorjai** - University of California, Berkeley, USA			
11.45	**P2** **Metal-Ligand Cooperation in Bond Activation and New Catalysis Prof. Dr. David Milstein** - Weizman Institute of Science, Revohot, Israel			
12.30	Lunch (12.30-13.45) Poster session I: Posters with even serial numbers (Asamblea, Alegria and Oxford 18)			
	Rotonde	Sorbonne 2	Cambridge 32	Cambridge 30
	Homogeneous Catalysis	***Heterogeneous Catalysis***	***Tools: Theory, Spectroscopy and Model Catalysts***	***Sustainable Chemistry, Energy & Devices***
13.45	**1** **Ruthenium-diphosphine Cp complexes as catalysts for the allylation of phenols with allyl alcohol; relation between structure and selectivity** *J. A. van Rijn Leiden University*	**5** **On the role of CO2 in the total oxidation of propane over a CuO-CeO2/Al2O3 catalyst** *V. Balcaen Gent University*	**K1** **Frontiers in multi-scale catalysis modeling**	**13** **Experimental and modeling analysis of catalytic reforming of methane to hydrogen in an adsorption enhanced fixed bed reactor** *M.H. Halabi TU/e*
14.10	**2** **Lewis Acid-Controlled Regioselectivity in Styrene Hydrocyanation** *Bini, L. B., TU/e*	**6** **The direct production of methanol over Cu-ZSM-5 zeolites: A quantitative structure-performance relationship** *N.V. Beznis University of Utrecht*	**Dr. Karsten Reuter** - *Fritz-Haber-Institut Berlin, Germany*	**14** **Application of Salts as Catalysts for the Conversion of Glucose to HMF and Levulinic Acid** *C.B. Rasrendra Rijksuniversiteit Grongingen*
14.35	**3** **Single hydrogen bonds to form Supramolecular heterobidentate ligands and for substrate orientation: application in asymmetric hydrogenation** *Breuil, PAR , University of Amsterdam, HIMS*	**K2** **From fundamental insights towards practical catalysts - nanostructured carbons in catalysis**	**9** **Symmetric transition state analysis in computational catalysis** *Bouke Bunnik TU/e*	**15** **Catalytic Glycerol Conversion into 1,2-Propanediol in Absence of Added Hydrogen** *Sels B. F. Catholic University of Leuven*
15.00	**4** **Homogeneous hydrogenation of Olefins and Alkynes Using Iron Nanoparticles as Catalyst** *Pim Huat Phua DSM*	**Dr. Harry Bitter** - *University of Utrecht*	**10** **Haloperoxidase reaction events monitored at single molecule level:Comparison between a Haloperoxidase enzyme and its inorganic biomimic** *Gert De Cremer Universiteit Leuven*	**16** **Integrated Plasma Catalytic Technology for Hexane Oxi-Cracking** *Han Gardeniers TU Twente*
15.25	**K3** **Supramolecular Concepts in Homogeneous Catalysis**	**7** **The influence of Vanadium as dopant for $La_2NiO_{4+\delta}$ in selective oxidation of propane.** *Crapanzano S., TU Twente*	**11** **Electrooxidation of adsorbed CO on stepped platinum single-crystal electrodes in alkaline media** *Gonzalo García Leiden University*	**17** **Telomerization of 1,3-butadiene with polyols over a Pd/TOMPP catalytic system** *A. N. Parvulescu Universtity of Utrecht*
15.50	**Prof. dr. Bernhard Breit** - *University of Freiburg, Germany*	**8** **Catalytic oxi-cracking as a route to olefins** *C. Boyadjian TU Twente*	**12** **In situ x-ray spectroscopy and spectromicroscopy of catalytic systems** *Frank M.F. de Groot Universty of Utrecht Nanomatarials*	**18** **Chemical modification of *Jatropha curcas* oil by co-metathesis reaction** *L. Junistia Rijksuniversiteit Groningen*
16.15	Coffee/Tea (16.15 - 16.40) Poster session I: Posters with even serial numbers (Asamblea, Alegria and Oxford 22)			
16.15	VIRAN Membership Meeting (16.15-17.45, Cambridge 32)			
18.15	Dinner (18.15 - 19.45)			
19.45	**Career Development & Opportunities** CDO lecture			
20.15	Career Development & Opportunities Session			

Tuesday March 3, morning				
8.30	P3 **Structure Sensitivity and Insensitivity of Surface and Bulk Chemical Reactions Prof. dr. Rutger van Santen** - TU/e, The Netherlands			
9.15	P4 **Zeolites meet metal-organic framework materials in chemical industry Dr. Ulrich Müller** - BASF Ludwigshafen, Germany			
10.00	Coffee/Tea (10.00-10.30)			
	Rotonde	Sorbonne 2	Cambridge 32	Cambridge 30
	Homogeneous Catalysis	***Heterogeneous Catalysis***	***Tools: Theory, Spectroscopy and Model Catalysts***	***(Bio)organic synthesis and catalysis***
10.30	19 **Effect of 6-alkyl substituted 2,2'-bipyridines in the Pd-catalyzed styrene carbonylation: shifting the selectivity from polyketones to oligoketones** *D Amora, A., Università di Trieste*	K4 **Heterogeneously catalysed reactions in the liquid phase** **Prof. dr. Chris Hardacre** - *Queens University Belfast, Ireland*	27 **Grafted Organotin Catalyst and Catalytic Process Monitoring Using Advanced Interface NMR** *Rudolph Willem Vrij Universiteit Brussel*	32 **A New Regeneration System for Oxidized Nicotinamide Cofactors** *Seda Aksu TU Delft*
10.55	20 **Towards DNA based transition metal catalysts** *Ernsting, J.E, University of Amsterdam, HIMS*		28 **Understanding automotive exhaust catalysis: Reaction and interaction between CO and NO on the surface of Rh(100)** *Maarten M.M. Jansen TU/e Niemantsverdriet*	33 **Recyclable Homogeneous Dendritic Catalysts for Tandem Reactions in Semi-Permeable Compartments** *Niels J.M. Pijnenburg University of Utrecht*
11.20	21 **In search for single-component homogeneous catalysts for ethylene oligo- and polymerization: the role of the metal oxidation state** *Duchateau, R. TU/e*	24 **Platinum Nano-Particles on and in Colloidal Silica Carriers** *Vincenzo Roberto Calderone Utrecht University*	29 **How the C-C bond breaks in fuel cell ethanol oxidation** *Steven E.F. Kleyn Leiden university*	34 **DNA-based micellar catalysis** *Fiora Rosati Rijksuniversiteit Grongingen*
11.45	22 **Asymmetric Nickel-catalysed reductive coupling reactions of 1,3-dienes with aldehydes** *Teichert, F Rijksuniversiteit Grongingen*	25 **Highly active CeO_2-supported Au clusters for butadiene hydrogenation** *Yejun Guan TU/e*	30 **Zeolites in the act: A combined micro-spectroscopic approach** *Marianne H.F. Kox, University of Utrecht*	K5 **Recent Advances in the Combination of Metal and enzyme Catalysis--** **Prof. dr. Jan-Erling Baeckvall**- Stockholm University, Sweden
12.10	23 **Aromatic diselenides as catalysts in the oxidation of alcohols: the unexpected effect of substituents** *Toorn, J.C. TU Delft*	26 **On the origin of the cobalt particle size effect in Fischer-Tropsch catalysis** *J.P. den Breejen Utrecht University*	31 **A methodology for predictive modeling in homogeneous catalysis: applications in green chemistry** *Ana G. Maldonado University of Amsterdam, HIMS*	
12.35	Lunch (12.35-13.45) Poster session II: Posters with odd serial numbers (Asamblea, Alegria and Oxford 22)			

Tuesday March 3, afternoon

13.45 P5 **Coordination Chemistry with pi Radical Ligands: Where are the (Valence) Electrons** **Prof. dr. Karl A. Wieghardt** - Max Planck Institut fuer Bioanorganische Chemie, Muelheim a/d Ruhr, Germany

	Rotonde	Sorbonne 2	Cambridge 32	Cambridge 30
	Homogeneous Catalysis	***Coordination Chemistry and Organometallic Chemistry***	***Heterogeneous Catalysis***	***Micro- and Mesoporous Catalytic Materials***
14.35	K6 **NMR Studies on the Supramolecular Structure of Catalytically-Important Transition-Metal Complexes**	36 **Synthesis and Characterization Studies of a Two-Step Spin-Crossover Mononuclear Iron(II) complex with a [HS-LS-LS] Intermediate Phase** *Bonnet, SA Leiden University*	39 **Towards an ultra-stable and zero leaching supported metal oxide catalyst for liquid oxidation reactions** *Ilke Muylaert University of Gent*	42 **Discontinuities in the low coverage adsorption of C1-C14 linear alkanes on Na-CHA and SAPO-34.** *Sarah Couck Vrije Universiteit Brussel*
15.00	**Prof. dr. Alceo Macchioni** - *University of Perugia, Italy*	37 **Efficient access to complex ligands for catalysis by MCR chemistry** *Ruijter, E. VU*	40 **Operando Raman and ATR-FTIR Spectroscopy of Liquid Phase Heterogeneous Catalytic Processes** *María D. Hernández-Alonso University of Delft*	43 **Impregnation of Mesoporous Silica Studied with Differential Scanning Calorimetry** *Tamara M. Eggenhuisen University of Utrecht*
15.25	35 **Selective hydroformylation of 2,2-disubstituted alkenes using chiral diphosphites** *Cornelissen, L.L.J.M., TU/e*	38 **Essential Building Blocks** *Slootweg, J.C. VU*	41 **Synthesis of Carbon Nano Fiber (CNF) based structured catalyst support layers on fused silica and silicon substrates: model systems towards multi-phase microreactors** *D.B. Thakur TU Twente*	44 **Synthesis and integration of diameter and chirality controlled CNTs in zeolites** *J. Van Noyen KU Leuven*
15.50	Coffee/Tea (15.50-16.10)			
	Rotonde	Sorbonne 2	Cambridge 32	Cambridge 30
	Industrial Catalysis and Bulk Chemicals	***Coordination Chemistry and Organometallic Chemistry***	***Heterogeneous Catalysis***	***Tools: Theory, Spectroscopy and Model Catalysts***
16.10	45 **A new proposed mechanism for the activation of iron-based Fischer-Tropsch catalysts based on in-situ TEM-EELS measurements** *S. Janbroers Albemarle*	46 **[NiFe] Complexes as Structural and Functional Models for Hydrogenases** *Angamuthu, R Leiden University*	49 **Desilication of ferrierite for mesoporosity generation and improved catalyst effectiveness** *Adriana Bonilla Sanchez Catalan Institution of Chemical Research (ICIQ-Tarragona)*	52 **Chemical reactivity of high-silica zeolites modified with gallium: the unexpected case of anionic oligomerization of alkenes** *Evgeny A. Pidko TU/e*
16.35	K7 **Industrial Catalysis; Challenges and Opportunities**	47 **Tris(pyrazolyl)phosphines as versatile ligands in coordination chemistry** *Tazelaar, C.G.J. VU*	50 **High rates of mass transfer and reaction in rotating foam reactors** *R. Tschentscher TU/e*	53 **Raman spectroscopy as a versatile tool for reaction monitoring in homogeneous oxidation catalysis** *D. Pijper Rijks Universteit Groningen*
17.00	**Dr. Carl Mesters** - *Shell Amsterdam, The Netherlands*	48 **Hemilabile donor-functionalized NHCs as ligands in low-valent Palladium complexes** *Warsink, S University of Amsterdam, HIMS*	51 **Hairy foam: Novel catalyst support for fast mass transfer in liquid phase catalytic reactions** *J. K. Chinthaginjala TU Twente*	54 **Direct measurement of adsorption behaviour using a sub second liquid transient ATR microreactor** *T.J.A.Renckens TU/e*
17.30	**NWO CW Talent workshop** (Sorbonne 2) Membershipmeeting KNCV-section Catalysis (Cambridge 30)			
18.15	Poster session II: Posters with odd serial numbers (Asamblea, Alegria and Oxford 22)			
20.00	Conference Dinner (VIRAN NCCC Award + KNCV Catalysis Award)			

Wednesday March 4, morning				
	Rotonde	Sorbonne 2	Cambridge 32	Cambridge 30
	Industrial Catalysis & Bulk Chemicals	***Coordination Chemistry and Organometallic Chemistry***	***Micro- and Mesoporous Catalytic Materials***	***Sustainable Chemistry, Energy & Devices***
9.15	**55** **Deep Desulfurization of Fossil Fuels by Air in lactone solvent; the remarkable absence of a role for Catalysts** *X. Xu TU Delft*	**K8** **Theory-Assisted Elaboration of Catalysts** **Prof. dr. Pascal Le Floch** - *CNRS, France*	**61** **Carbon nanolawn growth from cellulose, an attractive catalyst carrier** *J. Hoekstra University of Utrecht*	**65** **Alkylation of benzyl cyanide in a microreactor - effect of hydrodynamics on reaction rate and selectivity -** *J. Jovanović TU/e*
9.30	**56** **Deactivation of the catalyst during the MTO process from a molecular modeling perspective** *Karen Hemelsoet Uni Gent*		**62** **Amino-based Metal Organic Frameworks as stable, highly active basic catalysts** *J. Gascon TU Delft*	**66** **Solid acid catalysts for the conversion of trioses to lactates** *Paolo P. Pescarmona Catholic University of Leuven*
	Homogeneous Catalysis	***Coordination Chemistry and Organometallic Chemistry***	***Micro- and Mesoporous Catalytic Materials***	***Sustainable Chemistry, Energy & Devices***
9.55	**57** **UREAPhos: Supramolecular Bidentate Ligands for Asymmetric Hydrogenation and Hydroformylation** *Meeuwissen, J. University of Amsterdam, HIMS*	**59** **Phenol-pyrazole based ligands towards the design of polynuclear manganese(III) complexes** *Viciano-Chumillas, M Leiden University*	**63** **New families of hierarchical metallosilicate zeolites by desilication** *Johan C. Groen Delft Solids Solutions*	**67** **Upgrading fast-pyrolysis oil:hydrodeoxygenation of sugar fraction molecules from pyrolysis oil using ru/c catalysts** *J. Wildschut Rijksuniversiteit Groningen*
10.20	**58** **Homogeneous oxidation catalysis by proline-based manganese complexes** *Moelands, M.A.H. University of Utrecht*	**60** **Ligand Effects in *Z* -Selective Linear Dimerization of Phenylacetylenes by Organo Rare Earth Compounds with Mono-anionic N_4-based azepine Ligands** *Ge, S Rijksuniversiteit Groningen*	**64** **Support-Dependent Shape Selectivity for Specifically Immobilized Hoveyda-Grubbs Metathesis Catalysts** *Boris Van Berlo KU Leuven*	**68** **Promoted and supported hydrotalcites for enhanced CO_2 capture** *N.N.A.H. Meis University of Utrecht*
10.45	Coffee/tea (10.45-11.10)			
	Homogeneous Catalysis	***Coordination Chemistry and Organometallic Chemistry***	***Micro- and Mesoporous Catalytic Materials***	***Industrial Catalysis & Bulk Chemicals***
11.10	**69** **Fast and Selective Hydroaminomethylation using Xanthene-based Amino-functionalised Phosphorus Ligands** *Hamers, B TU/e*	**71** **Framework Engineering of Zn(II)/4,4'-bipy Porous Coordination Polymers and Carboxylate-regulator: Synthesis, Structures and Thermal Properties** *Phuengphai, P Leiden University*	**73** **Quantization of pore corrugation in SBA-15 by image analysis of electron tomograms** *Heiner Friedrich University of Utrecht*	**75** **NOx storage catalysis for ultimate pure CO_2 fertilization in greenhouses** *Michiel Makkee TU Delft*
11.35	**70** **METAMORPhos: Adaptive Supramolecular Ligands and the Mechanistic Consequences for Asymmetric Hydrogenation** *Patureau, F.W. University of Amsterdam, HIMS*	**72** **Coordination chemistry of polycationic phosphine ligands and their application in homogeneous catalysis** *Snelders, DJM University of Utrecht*	**74** **Carbon-Silica composites for shape selective separations** *Alexios Harkiolakis KU Leuven*	**76** **The preparation of commercially attractive nanocatalysts: a Pd nanocatalyst as a lead-free alternative for the Lindlar catalyst.** *Peter T. Witte BASF*
12.00	Lunch (12.00-13.15)			

Wednesday March 4, afternoon				
	Rotonde	Sorbonne 2	Cambridge 32	Cambridge 30
	Tools: Theory, Spectroscopy and Model Catalysts	***(Bio)organic synthesis and catalysis***	***Homogeneous Catalysis***	***Micro- and Mesoporous Catalytic Materials***
13.15	**85** **Co-adsorption of water with hydrogen or oxygen on Ni(111)** *Shan, J Gorlaeus Laboratories Leiden Uni*	**K9** **Enzymes as Catalysts: New opportunities for selective oxidations**	**77** **Mechanical catalyst activation** *Sijbesma, R.P. TU/e*	**81** **Thiophene-based Metal-Organic Frameworks** *Gerard P.M. van Klink TU Delft*
13.40	**86** **Reversible Enzymatic Hydrogen Production at High Temperature** *S.A. Tromp TU Delft*	**Prof. dr. Isabel Arends** - *TU Delft, the Netherlands*	**78** **Supramolecular Anchoring of Transition Metal Catalysts on Support: New Materials for "*Reverse Flow Reactors*"** *Marras, F, University of Amsterdam, HIMS*	**82** **Introducing mesoporosity in mordenites using alkaline treatment** *A.N.C. van Laak*
14.05	**K10** **Identifying the rate limiting step and its reaction site**	**87** **Cross-Linked Enzyme Aggregates: an efficient tool for the enantioselective synthesis of protected cyanohydrins** *Monica Paravidino TU Delft*	**79** **Asymmetric Hydrogenation of N-Aryl Imines** *Mrsic, N.M. Rijksuniversiteit Groningen*	**83** **The shape-selective hydrogenation of FAMEs and vegetable oils** *Philippaerts An KU Leuven*
14.30	**Prof. dr. Ib Chorkendorff** - *Technical University of Denmark, Denmark*	**88** **Chiral Separation by Enantioselective Liquid-Liquid Extraction** *Bastiaan J.V. Verkuijl Rijksuniversiteit Groningen*	**80** **Multimetallic Supramolecular Salen Architectures for Enhanced Cooperative Catalysis** *Wezenberg, S.J. ICIQ*	**84** **Preparation of supported nickel oxide with tunable particle size via confinement** *M. Wolters Universty of Utrecht*
15.00	**P7** **Platinum anticancer coordination compounds: Study of DNA binding inspires new drug design Prof. dr. Jan Reedijk** - Leiden University, The Netherlands			
15.45	Lecture Awards, Poster Awards and Game Award - Closing (Rotonde)			