OREPOC Conference Technical program

Sunday		Monday October 1, 2007	Tuesday October 2, 2007	Wednesday October 3, 2007	Thursday October 4, 2007	Friday October 5, 2007
	09:00-10:00	**Keynote Lecture** **Costas G. Vayenas**	**Keynote Lecture** **Christos Comninellis**	**Keynote Lecture** **Ezequiel Leiva**	**Keynote Lecture** **Ronald Imbihl**	**Keynote Lecture** **Eugene Smotkin**
	10:00-10:30	**O1**	**O12**	**O20**	**O22**	**O32**
	10:30-11:00	**O2**	**O13**	**O21**	**O23**	**O33**
	11:00-11:30	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
	11:30-12:00	**O3**	**O14**		**O24**	**O34**
	12:00-12:30	**O4**	**O15**		**O25**	**O35**
	12:30-13:00	**O5**	**O16**		**O26**	**O36**
	13:00-13:30					**O37**
		Lunch	Lunch		Lunch	Closing Remarks
						Lunch
	14:30-15:00	**O6**	**O17**	**Excursion**	**O27**	
	15-00-15:30	**O7**	**O18**		**O28**	
	15:30-16:00	**O8**	**O19**		**O29**	
		Coffee break	**Poster Session**		Coffee break	
	16:30-17:00	**O9**			**O30**	
	17:00-17:30	**O10**			**O31**	
	17:30-18:00	**O11**				
Welcome Reception at City Hotel 20:00					**Conference Banquet**	

Monday October 1, 2007			
Chair: M. Stoukides			
09:00-10:00	**Keynote Lecture**	**Costas G. Vayenas** University of Patras, Greece	**The quest for the origin of Electrochemical Promotion**
10:00-10:30	O1: **A15/T2**	**P. Vernoux** Université de Lyon, CNRS, IRCELYON, France	Physicochemical Origins of Electrochemical Promotion of Catalysis Under Real Operating Conditions
10:30-11:00	O2: **A24/T5**	**D. Labou** ICEHT/FORTH, Greece	Electrochemical Metal Support Interaction (EMSI) and Electrochemical Promotion of Catalysis (EPOC)
Coffee Break			
Chair: B. Luerssen			
11:30-12:00	O3: **A21/T5**	**C. Falgairette** EPFL, Switzerland	Persistent-EPOC related to charge storage at the Pt/YSZ interface
12:00-12:30	O4: **A25/T5**	**A. de Lucas-Consuegra** Universidad de Castilla La Mancha, Spain	In situ electrochemical promotion by potassium of the platinum-catalyzed reduction of N_2O by Hydrocarbons
12:30-13:00	O5: **A30/T5**	**D. Poulidi** Newcastle University, UK	Comparative studies between classical and wireless electrochemical promotion of a Pt catalyst for ethylene oxidation
Lunch			
Chair: E. Leiva			
14:30-15:00	O6: **A42/T5**	**I.M. Petrushina** Technical University of Denmark, Denmark	Electrochemical Promotion of Catalytic Reactions Using Pt (or Pt/Ru)/C/polybenzimidazole (H_3PO_4)/Pt/C Fuel Cell
15-00-15:30	O7: **A40/T5**	**C. Kokkofitis** Aristotle University, CPERI/CERTH, Greece	NH_3 Decomposition in a Double Chamber Proton Conducting Cell
15:30-16:00	O8: **A38/T5**	**R. Karoum** Université de Lyon, France	New definition of the rate enhancement ratio with anionic electrochemical catalyst
Coffee Break			
Chair: G. Kyriakou			
16:30-17:00	O9: **A39/T5**	**A. Hammad** University of Patras, Greece	Electrochemical modification of the SO_2 oxidation reaction over Pt/YSZ catalysts using a Monolithic ElectroPromoted Reactor
17:00-17:30	O10: **A26/T5**	**S. Souentie** University of Patras, Greece	NO reduction by C_2H_4 in presence of high oxygen excess using a Monolithic ElectroPromoted catalytic Reactor
17:30-18:00	O11: **A29/T5**	**V. Roche** Université de Lyon, France	Electrochemical Promotion of Deep Oxidation of Methane on Pd/YSZ

Tuesday October 2, 2007

Chair: J. Janek

09:00-10:00	**Keynote Lecture**	**Christos Comninellis** EPFL, Switzerland	**The phenomenon of "Permanent" Electrochemical Promotion of Catalysis (P-EPOC)**
10:00-10:30	O12: **A12/T2**	**B. Luerssen** Justus-Liebig-Universität Gießen, Germany	In situ observation of Electrode Reactions probed by Microspectroscopy
10:30-11:00	O13: **A05/T2**	**A. Spanou** University of Patras, Greece	Scanning Tunnelling Microscopy (STM) observation of the origin of Electrochemical Promotion on metal catalyst-electrodes interfaced with YSZ
		Coffee Break	

Chair: M. Guth

11:30-12:00	O14: **A11/T2**	**G. Kyriakou** Cambridge University, UK	Amperometric / potentiometric hydrocarbon sensors: real world solutions in ultra high vacuum
12:00-12:30	O15: **A08/T2**	**A. Stevens** Cambridge University, UK	Hydrocarbon sensing under UHV conditions: The nature of surface oxygen species responsible for sensing
12:30-13:00	O16: **A03/T1**	**M. Topcu Sulak** Gebze Institute of Technology, Turkey	Detection Of Paraoxon Using An Electrochemical AChE Enzyme Electrode
		Lunch	

Chair: S. Bebelis

14:30-15:00	O17: **A04/T1**	**J. Janek** Justus-Liebig-Universität Gießen, German	The Plasma/Solid Electrolyte Interface – Plasma Electrochemistry
15-00-15:30	O18: **A19/T4**	**A. Billard** Université de Technologie de Belfort Montbéliard	YSZ sputter deposited coatings as dense supported electrolytes for electrochemical catalysts
15:30-16:00	O19: **A17/T4**	**E. Mutoro** Justus-Liebig-Universität Gießen, German	Model Type Thin Film Platinum Electrodes on YSZ
16:00-18:00	**Poster Session**		
	P1: **A02/T1**	**V. Kournoutis** University of Patras, Greece	Electrochemical characterization of a $La_{0.78}Sr_{0.2}FeO_{3-\delta}$ electrode
	P2: **A28/T5**	**C. Koutsodontis** University of Patras, Greece	Electrochemical Promotion of NO reduction by C_2H_4 in presence of O_2 using a monolithic electropromoted reactor and Pt-Rh sputtered electrodes
	P3: **A41/T5**	**S. Balomenou** CPERI/CERTH, Greece	Tailor-structured skeletal Pt catalysts employed in a Monolithic Electropromoted Reactor
	P4: **SC01/T1**	**X. Yang** University of St Andrews, UK	Solid Oxide Steam Electrolysis for High Temperature Hydrogen Production
	P5: **SC02/T5**	**K. G. Papazisi** CPERI/CERTH, Greece	Upgrading of bio-oils derived from pyrolysis of lignocellulosic biomass using various catalytic materials
	P6: **SC03/T5**	**A. Toghan** University of Hannover, Germany	Electrochemically controlled friction and catalysis on solid electrolytes
	P7: **SC04/T5**	**C. Jiménez-Borja** Universidad de Castilla La Mancha, Spain	Complete oxidation of methane and other light hydrocarbons at low temperatures by electrochemical promotion of catalysis
	P8: **A34/T5**	**N. Li** IRCELYON, CNRS Université Claude Bernard Lyon 1, France	Synthesis and application of perovskite materials used in electrochemical promotion of VOCs catalytic combustion
	P9: **A37/T5**	**M. Guth** IRCELYON, CNRS Université Claude Bernard Lyon 1, France	Innovative reduction process of particle emissions

Wednesday October 3, 2007			
Chair: C.G. Vayenas			
09:00-10:00	**Keynote Lecture**	**Ezequiel Leiva** Universidad Nacional de Córdoba, Argentina	**Computer simulation of the effective double layer occurring on a catalyst surface under electrochemical promotion conditions**
10:30-11:00	O20: **A16/T3**	**D. Presvytes** University of Patras, Greece	The effect of Oxygen ion spillover on the performance of Solid Oxide fuel cells and NEMCA reactors
11:00-11:30	O21: **A27/T5**	**M. Tsampas** University of Patras, Greece	Electrochemical promotion of the water gas shift reaction on Pt/YSZ
Coffee Break			
Excursion			

Thursday October 4, 2007

Chair: P. Vernoux			
09:00-10:00	**Keynote Lecture**	**Ronald Imbihl** University of Hannover, Germany	**Artefacts and physical effects in work function measurements on Pt/YSZ**
10:00-10:30	O22: **A14/T2**	**S. Bebelis** University of Patras, Greece	Electrochemical promotion of the CO_2 hydrogenation on Rh/YSZ catalyst-electrodes
10:30-11:00	O23: **A22/T5**	**E. Papaioannou** University of Patras, Greece	Hydrocarbon production via electrochemical promotion of the carbon dioxide hydrogenation
Coffee Break			
Chair: D. Poulidi			
11:30-12:00	O24: **A06/T2**	**G.E. Marnellos** University of Western Macedonia, CPERI/CERTH, Greece	Electrocatalytic Reduction of nitrogen oxides (NO_X and N_2O) using steam electrolysis in a Pd/$SrCe_{0.95}Yb_{0.05}O_{3-a}$/Ag Proton Conducting Solid Electrolyte Membrane Reactor
12:00-12:30	O25: **A23/T5**	**F. Sapountzi** University of Patras, Greece	CO_2 Reduction in PEM fuel cells
12:30-13:00	O26: **A10/T2**	**G. S. Tasic** Vinca Institute of Nuclear Sciences, Serbia	On the Use of Combinatorial Chemistry for Possible Application in Fuel Cells - Different Catalysts Development
Lunch			
Chair: D. Labou			
14:30-15:00	O27: **A32/T5**	**M. M. Jaksic** University of Belgrade, Serbia	Interactive Supported Electrocatalysts and Spillover Effect in Electrocatalysis for Hydrogen and Oxygen Electrode Reactions
15-00-15:30	O28: **A09/T2**	**H.D.A.L. Viana** University of St. Andrews, UK	Catalytic properties of the proton conductor $BaCe_{0.5}Zr_{0.3}Y_{0.16}Zn_{0.04}O_{2.88}$ for Reverse Water Gas Shift
15:30-16:00	O29: **A18/T4**	**V. M. Nikolic** Institute of General and Physical Chemistry, Serbia	Gamma Irradiation Crosslinked Poly(vinyl alcohol) Alkaline Membrane for PEMFC
Coffee Break			
Chair: G.E. Marnellos			
16:30-17:00	O30: **A33/T5**	**X. Li** Tianjin University, China	Investigations of the Thermal-induced Electrochemical Promotion on Pt/YSZ Supported Catalysts
17:00-17:30	O31: **A01/T1**	**K. Wonsyld** Technical University of Denmark, Denmark	Electrocatalytic NO Reduction Using a H^+-Conducting H_3PO_4-Doped Polybenzimidazole Electrolyte With and Without Presence of O_2
Conference Banquet			

Friday October 5, 2007			
Chair: I.M. Petrushina			
09:00-10:00	**Keynote Lecture**	**Eugene Smotkin** Northeastern University/ NuVant Inc., USA	
10:00-10:30	O32: **A31/T5**	**S. Brosda** University of Patras, Greece	NO reduction performance of Rh paste catalyst on YSZ at steady state and forced oscillation conditions
10:30-11:00	O33: **A20/T5**	**A. Lintanf** ENSEEG-INPG-UJF-CNRS, France	Microstructural influence of electrosprayed Pt thin films on the catalytic performances and electrochemical promotion of NO reduction by C_3H_6
Coffee Break			
Chair: S. Brosda			
11:30-12:00	O34: **A36/T5**	**R. N. Vannier** USTL-ENSCL-ECL, France	Effect of a current polarisation on BIMEVOX membranes for oxidation of propane in a Catalytic Dense Membrane Reactor
12:00-12:30	O35: **A13/T2**	**C. Athanasiou** University of Western Macedonia, Greece	Mechanistic analysis of methane dry reforming over palladium electrodes in an YSZ cell
12:30-13:00	O36: **A35/T5**	**A. Hadjar** IRCELYON, CNRS Université Claude Bernard Lyon 1, France	YSZ as a support for NSR Catalysts
13:00-13:30	O37: **A07/T2**	**M. P. Marceta Kaninski** Vinca Institute of Nuclear Sciences, Serbia	Electrolytic D/H isotope separation efficiency of Mo-Pt intermetallic phases
13:30-13:45	Closing Remarks		
Lunch			