

XII European Congress on Catalysis "Catalysis: Balancing the use of fossil and renewable resources"

30.08-04.09.2015, Kazan

International Congress Centre of the Korston Hotel & Mall Kazan

Time-table of 25.08.2015

Saturday, August 29th (18.00-22.00 – Registration, Korston Hotel)	
Sunday, August 30th (10.00-18.00 – Registration, Korston Hotel)	
Sunday, August 30th (09.00-12.30 EFCATS meeting, Korston Hotel, Napoleon hall)	
14:30-15:30	Sunday, August 30th Opening Ceremony (PYRAMIDA, Moskovskay Str. 3)
	Chairmen: V. Parmon, J. Lercher, V. Bukhtiyarov, O. Sinyashin
	Welcome speech: Rustam Minnikhanov , President of the Republic of Tatarstan
15:30-16:30	Butlerov honorary plenary lecture, V. Ananikov, PL-1 (Pyramida)
16:30-17:30	François Gault Lectureship Award (2013), J. Lercher, PL-2 (Pyramida)
19:00	Welcome reception (KORSTON Ball hall)

Monday, August 31 (Registration 8.30-13.00)							
	Chairmen: J. Lercher, A. Stakheev						
08:30-09:30	G. Bellussi, PL-3 (KORSTON Ball hall)						
09:30-10:30	G.J. Hutchings, PL-4 (KORSTON Ball hall)						
TIME	KORSTON Ball hall-1 600 seats	KORSTON Ball hall-2 600 seats	KORSTON Pushkin hall 340 seats	KORSTON Tolstoy hall 170 seats			
10:30-11:00	(Break to separate Ball hall)			Coffee break			
	Chairmen: V. Yakovlev, Y. Kamiya	Chairmen: G. Rupprechter, G. Landi	Chairmen: V. Ananikov, B. Koenig	Chairmen: S. Ordonez, M. Sinev			
11:00-11:20	V-KN1 C. Descorme	II-OP01 J. Ruiz-Martínez	IV-OP01 N. Perret	I-OP01 G.W. Wang			
11:20-11:40		II-OP02 I. Ivanova	IV-OP02 V. Likhobobov	I-OP02 A. Astafan			
11:40-12:00	V-OP01 D. Cani	II-KN2 V. Parvulescu	IV-OP03 F. Cárdenas-Lizana	I-OP03 A. Simakov			
12:00-12:20	V-OP02 D. Kozlov		IV-OP04 E. Nowicka	I-OP04 A. Gervasini			
12:20-12:40	V-OP03 J. Hirayama	II-OP03 W. Huang	IV-OP05 O. Beswick	I-OP05 S. Kegnaes			
12:40-13:00	V-OP04 E. Parhomchuk	II-OP04 A. Stepanov	IV-OP06 K. Koltunov	I-OP06 R. Henry			
13:00-14:30	Lunch						
	Chairmen: M. Tsodikov, P. Mortensen	Chairmen: I. Ivanova, J. Ruiz-Martínez	Chairmen: J.S. McIndoe, N. Perret	Chairmen: A. Simakov, D. Teschner			
14:30-14:50	V-OP05 G. Garbarino	II-OP05 A. Stakheev	IV-KN3 C.W. Jones	I-OP07 P. Pandis			
14:50-15:10	V-OP06 L. Falbo	II-OP06 C. Sprung		I-OP08 J. Horáček			
15:10-15:30	V-OP07 Z. Bukina	II-OP07 K. Kovtunov	IV-OP07 K. Bryliakov	I-OP09 M. Peroni			

15:30-16:00	Coffee break						
	Chairmen: Can Li , A. Karasik	Chairmen: J. Hargreaves, K. Kovtunov	Chairmen: K. Koltunov, V. Hulea	Chairmen: V. Parvulescu, A.A. Lemonidou			
16:00-16:20	III-KN4 G. Centi	II-OP08 Yu. Gulyaeva	IV-OP08 Z.-G. Zhang	I-OP10 Z. Ismagilov			
16:20-16:40		II-OP09 V. Ermolaev	IV-OP09 H.J. Venvik	I-OP11 V. Yakovlev			
16:40-17:00	III-OP01 M. Muhler	II-OP10 E. Talsi	IV-OP10 J.K. Erickson	I-OP12 S. Ordonez			
17:30-20:00	Excursion «Millennial Kazan»						

Tuesday, September 1							
	Chairmen: V. Bukhtiyarov, H.-J. Freund						
08:30-09:30	J.T. Hupp, PL-5 (KORSTON Ball hall)						
09:30-10:30	R. Schlögl, PL-6 (KORSTON Ball hall)						
TIME	KORSTON Ball hall-1 600 seats	KORSTON Ball hall-2 600 seats	KORSTON Pushkin hall 340 seats	KORSTON Tolstoy hall 140 seats	KORSTON Dostoevsky hall, 100 seats	KORSTON Lermontov hall, 60 seats	KORSTON Chekhov hall, 60 seats
10:30-11:00	(Break to separate Ball hall) Coffee break						
	Chairmen: C. Aprile, A. Rempel	Chairmen: S. Penner, J.A. van Bokhoven	Chairmen: C. Jones, E. Talsi	Chairmen: K. Takanabe, T. Tatsumi	XI European Workshop on Innovation in Selective Oxidation Chairmen: J. Lercher, V. Cortés Corberán	Chairmen: D. Murzin, Yu. Román- Leshkov	Chairmen: C. Mirodatos, V. Sadykov
11:00-11:20	V-KN5 W. Leitner	II-OP11 S. Mossin	IV-OP11 F. Cavani	III-OP02 L. Gao	Opening ceremony	Discussion symposium 1 “Value-Added Chemicals from Renewables”	Discussion symposium 2 “Fuel Reforming”
11:20-11:40		II-OP12 D. Zemlyanov	IV-OP12 V. Nese	III-OP03 E. Kozlova	ISO-OP01 J.M. Lopez Nieto		
11:40-12:00	V-OP08 P.M. Mortensen	II-KN6 S. Helveg	IV-OP13 Y. Zhu	III-OP04 S. Pokrant	ISO-OP02 P.P. Pescarmona		
12:00-12:20	V-OP09 M. Bukhtiyarova		IV-OP14 N. d’Alessandro	III-OP05 P. Weide	ISO-OP03 L. Prati		
12:20-12:40	V-OP10 M. Gaillard	II-OP13 F.J. Cadete Santos Aires	IV-KN7 B. Koenig	III-OP06 C. Marchal	ISO-OP04 M. Simonov		
12:40-13:00	V-OP11 G. Bonura	II-OP14 M. Ek		III-OP07 A.V. Puga	ISO-OP05 V. Cortés Corberán		
13:00-14:30	Lunch						
	Chairmen: W. Leitner, I. Nova	Chairmen: D. Zemlyanov, S. Bordiga	Chairmen: A. Trifonov, Qihua Yang	Chairmen: M. Millan, D. Bulushev	Chairmen: S. Perathoner, V. Sadykov	Chairmen: V. Likhobolov, N. d’Alessandro	Chairmen: E. Kozlova, D. Kozlov
14:30-14:50	V-OP12 A. Suknev	II-OP15 D. Doronkin	IV-OP15 W.N.P. van der Graaff	III-OP08 J. Amouroux	ISO-KN1 O. Kholdeeva	Discussion symposium 3 “Selective Catalytic Hydrogenation”	Discussion symposium 4 “Photocatalysis: Water Splitting, CO ₂ Reduction and Oxidative Processes”
14:50-15:10	V-OP13 S. Yashnik	II-OP16 M. Hävecker	IV-OP16 E. Pidko	III-OP09 D. Teschner			
15:10-15:30	V-OP14 A. Khudorozhkov	II-OP17 V. Kaichev	IV-OP17 S. Tolborg	III-OP10 K. Villa	ISO-OP06 A. Pestryakov		
15:30-15:50	V-OP15	II-OP18	IV-OP18	III-OP11	ISO-OP07		

	H. Stotz	A. Klyushin	I. Delidovich	A. Rempel	L. Moskaleva		
15:50-16:10	V-OP16 A.W. Petrov	II-OP19 C.M. Schilling	IV-OP19 A. Padovani	III-OP12 J.L. Faria	ISO-OP08 E. Khaskin		
16:10-16:30	V-OP17 D. Lopez-Gonzalez	II-OP20 E. Vovk	IV-OP20 S.M. Coman	III-OP13 K.E. Sanwald	ISO-OP09 G. Mamontov		
16:30-17:00	Coffee break						
17:00-19:00	Poster Session-I : (KORSTON TOWER, Combine halls: Prokofiev, Rakhmaninov, Chaikovsky, Shostakovich, 09:00 – 19:00)						

Poster Session-I includes the presentations: I-PP01 – I-PP114, III-PP01 – III-PP130, IV-PP01 – IV-PP155, ISO-PP01 – ISO-PP30.

Wednesday, September 2							
	Chairmen: R. Schlögl, M. Scoglundh						
08:30-09:30	Michel Boudart Award Lecture (2015), H.-J. Freund, PL-7 (KORSTON Ball hall)						
09:30-10:00	(Break to separate Ball hall) Coffee break						
TIME	KORSTON Ball hall-1 600 seats	KORSTON Ball hall-2 600 seats	KORSTON Pushkin hall 340 seats	KORSTON Tolstoy hall 140 seats	KORSTON Dostoevsky hall, 100 seats	KORSTON Lermontov hall, 60 seats	KORSTON Chekhov hall, 60 seats
	Chairmen: A. Vedyagin, M. Bukhtiyarova	Chairmen: S. Mossin, M. Hävecker	Chairmen: S. Coman, Wang Ye	Chairmen: V. Likholobov, E. Pidko	Chairmen: G. Centi, O. Kholdeeva	Chairmen: S. Kegnæs, E. Lokteva	Chairmen: W. Grünert, A. Stakheev
10:00-10:20	V-KN8 Yu. Román-Leshkov	II-OP21 M. Cortés-Reyes	IV-OP21 A. Terentiev	III-OP14 P. Castaño	ISO-OP10 S. Solmi	Discussion symposium 5 “CO ₂ Capture & Valorization”	Discussion symposium 6 “Pollution Control & Oxidation Catalysis”
10:20-10:40		II-OP22 T.H. Vuong	IV-OP22 D.B. Rasmussen	III-OP15 P. Snytnikov	ISO-OP11 J.A. Odriozola		
10:40-11:00	V-OP18 F. Calaza	II-KN9 J.S. McIndoe	IV-OP23 Yue Liu	III-OP16 G. Konstantinov	ISO-OP12 W. Shen		
11:00-11:20	V-OP19 C. Aprile		IV-OP24 T. Otroshchenko	III-OP17 S.D. Angeli	ISO-OP13 R. Ottenbacher		
11:20-11:40	V-OP20 Y. Demidova	II-OP23 K.R. Rout	IV-OP25 O. Martyanov	III-OP18 V. Sadykov	ISO-OP14 S. Perathoner		
11:40-12:00	V-OP21 E. Nowicka	II-OP24 Z.D. Wang	IV-KN10 X.L. Hu	III-OP19 R. Watanabe	ISO-OP15 S. Paul		
12:00-12:20	V-OP22 A.A. Lemonidou	II-OP25 L. Van Haandel		III-OP20 R. Mafessanti	ISO-OP16 M. Florea		
12:20-12:40	V-OP23 M. Zacharska	II-OP26 V. Pfeifer		IV-OP26 H. Atia	III-OP21 A.A. Lytkina		
12:40-13:00	V-OP24 M. Tsodikov	II-OP27 H. Li	IV-OP27 A.A. Zagidullin	III-OP22 C. Lucarelli			
13:00-14:30	Lunch						
	Chairmen: W. Grünert, I.-S. Nam	Chairmen: A. Auroux, F.J. Cadete Santos Aires	Chairmen: O. Taran, Yu. Román-Leshkov	Chairmen: V. Ordomsky, P. Snytnikov	Chairmen: P. Ruiz, F. Cavani	Chairmen: G. Rupprechter, D. Teschner	Chairmen: K. Neyman, E. Pidko
14:30-14:50	I-KN11 U. Olsbye	II-OP28 J. Schnee	IV-OP28 E. Girard	III-OP23 D. Bulushev	ISO-Discussion symposium 7 “Selective Oxidation”	Discussion symposium 8 “In Situ Measurements for Catalytic Studies: Identification of the Structure of	Discussion symposium 9 “DFT Calculation in Catalytic Studies”
14:50-15:10		II-OP29 S. Bordiga	IV-OP29 Ye Wang	III-OP24 E. Ozensoy			
15:10-15:30	I-KN12 T. Tatsumi	II-OP30 J.A. van Bokhoven	IV-OP30 T. Yokoi	III-OP25 M. Millan			
15:30-15:50		II-OP31	IV-OP31	III-OP26			

		G.H. Agata	O.T. Kasaikina	E. Frei		Catalytically Active Sites"	
15:50-16:10	I-OP13 P. Mäki-Arvela	II-OP32 Karim W.	KN20 Award Applied Catalysis Researcher – I. Vasalos	III-OP27 L.A. Petrov			
16:10-16:30	I-OP14 G.D. Yadav	II-OP33 H.O. Fredriksson		III-OP28 J. Kirchner			
16:30-17:00	Coffee break						
17:00-19:00	Poster Session-II (KORSTON TOWER, Combine halls: Prokofiev, Rakhmaninov, Chaikovsky, Shostakovich, 09:00 – 19:00)						

Poster Session-II includes the presentations: II-PP01 – II-PP260, V-PP01 – V-PP150.

Thursday, September 3							
Chairmen: J.T. Hupp, G. Bellussi							
08:30-09:30	M. Skoglundh, PL-8 (KORSTON Ball hall)						
09:30-10:00	(Break to separate Ball hall) Coffee break						
TIME	KORSTON Ball hall-1 600 sts	KORSTON Ball hall-2 600 sts	KORSTON Pushkin hall 340 sts	KORSTON Tolstoy hall 140 seats	KORSTON Dostoevsky hall, 100 seats	KORSTON Lermontov hall, 60 seats	KORSTON Chekhov hall, 60 seats
	Chairmen: A. Khodakov, Z. Sojka	Chairmen: W. Huang, M.C. Roman- Martinez	Chairmen: E. Kozlova, S. Damyanova	Chairmen: V. Gevorgyan, E. Ozensoy	Chairman: V. Lunin, D. Murzin Symposium "Education in the Field of Catalysis"	Chairmen: G. Kolb, J.M. Lopez Nieto	
10:00-10:20	V-KN13 I.-S. Nam	II-OP34 J.C. Conesa	III-OP29 N. Weidler	I-OP15 C. van der Wijst		ISO-OP17 C. Mirodatos	
10:20-10:40		II-OP35 W.K. Offermans	III-OP30 R. Thalinger	I-OP16 I. Simakova		ISO-OP18 M. Sinev	
10:40-11:00	V-OP25 W. Grünert	II-KN14 K. Neyman	III-OP31 C. Nervi	I-OP17 E. Heracleous		ISO-OP19 D. Ivanov	
11:00-11:20	V-OP26 P.G. Moses		III-OP32 A. Oshchepkov	I-OP18 V. Ordomsky		ISO-OP20 S.I. Ishikawa	
11:20-11:40	V-OP27 I. Nova	II-OP36 D. Pichugina	Chairmen: X. Hu, K. Bryliakov IV-OP34 V. Hulea	I-OP19 B.N. Kuznetsov		ISO-OP21 O. Taran	
11:40-12:00	V-OP28 J.M. Garcia-Vargas	II-OP37 H.J. Venvik	IV-OP35 E.I. Ruppel	I-OP20 R. Tschentscher		ISO-OP22 I.C. Marcu	
12:00-12:20	V-OP29 P. Granger	II-OP38 I.A.W. Filot	IV-OP36 L. Parfenova	I-OP21 R.U. McVicker		ISO-OP23 I. Pakharukov	
12:20-12:40	V-OP30 M. Sridhar	II-OP39 M. Saab	IV-OP37 G. Fu	I-OP22 A. Chistyakov		ISO-OP24 E. Starokon	
12:40-13:00	V-OP31 Z. Say	II-OP40 M. Bykova	IV-OP38 M. Khrizanforov	I-OP23 V. Kogan		Closing remarks	
13:00-14:30	Lunch						
	Chairmen: V. Kaichev, O. Martyanov	Chairmen: L. Soler, S. Helveg	Chairmen: J.C. Conesa, C. Descorme	Chairmen: Granger Pascal, T. Tabakova	Chairmen: M. Muhler, F. Cavani	Chairmen: M. Sinev, D. Murzin	
14:30-14:50	III-KN15 G. Rupprechter	II-OP41 E. Lokteva	IV-OP39 A. Trifonov	V-OP32 A. García-García	Discussion symposium 10 «Design of Gold Catalysts for Selective	Discussion symposium 11 «Feasibility of Biomass	
14:50-15:10		II-OP42 W.Z. Weng	IV-OP40 M. Botavina	V-OP33 A. Porsin			

15:10-15:30	III-OP33 V. Arutyunov	II-OP43 L. Piccolo	IV-KN17 V. Gevorgyan	V-OP34 J. Zheng	Processes: from Science to Real Application»	Utilization for Making Fuels and Chemicals»		
15:30-15:50	III-OP34 V. Simagina	II-OP44 E. Suslova		V-OP35 A. Serve				
15:50-16:10	III-KN16 C. Li	II-OP45 P. Ruiz		IV-OP41 D. Murzin				V-OP36 A. Kotarba
16:10-16:30		II-OP46 S. Penner		IV-OP42 Yang Qihua				V-OP37 S. Kureti
16:30-17:00	Coffee break							
	Chairmen: U. Olsbye, C. Nervi	Chairmen: E. Shor, M. Smirnov	Chairmen: Z.-G. Zhang, F. Cárdenas-Lizana	Chairmen: A. Garcia-Garcia, S. Kureti				
17:00-17:20	III-OP35 J. Jayakodi Karuppiyah	II-OP47 Y. Yuan	IV-OP43 V.M. Chernyshev	V-OP38 S. Heikens				
17:20-17:40	III-OP36 K. Cheng	II-OP48 W. Shen	IV-OP44 Á. Berenguer- Murcia	V-OP39 Arandiyan H.				
17:40-18:00	III-OP37 W. Chen	II-OP49 Z. Zhao	IV-OP45 A. Auroux	V-OP40 Tang Long				
19:30-23:00	Banquet (restaurant PANORAMA)							
19:30-23:00	Cocktail party-Disco (KORSTON, restaurant EXTRA LOUNGE, 25th floor)							

Friday, September 4							
TIME	KORSTON Ball hall-1 600 seats	KORSTON Ball hall-2 600 seats	KORSTON Pushkin hall 340 seats	KORSTON Tolstoy hall 140 seats	-	-	-
	Chairmen: E. Gaigneaux, I. Vasalos	Chairmen: J. Faria, E. Vovk	Chairmen: Z. Zhao, V. Simagina	Chairmen: K. Köhler, P. Moses			
08:30-08:50	I-KN18 A.Y. Khodakov	III-OP38 Huang X.	II-OP50 S. Vereshchagin	V-OP41 E. Tronconi			
08:50-09:10		III-OP39 F. Frusteri	II-OP51 A. Nartova	V-OP42 A. Shishkin			
09:10-09:30	I-OP24 L. Fratolocchi	III-KN19 K. Takanabe	II-OP52 X. Zhu	V-OP43 U. De La Torre			
09:30-09:50	I-OP25 C.G. Visconti		II-OP53 N. Bion	V-OP44 J.R. Thogersen			
09:50-10:10	I-OP26 D. Otyuskaya	III-OP40 J. He	II-OP54 R. van den Berg	V-OP45 S. Alcove			
10:10-10:30	I-OP27 P. Benito Martin	III-OP41 J.S. Martinez- Espin	II-OP55 D. Ishutenko	V-OP46 P.L. Thomassen			
10:30-11:00	Coffee break						
	Chairmen: E. Lokteva, A. Nartova	Chairmen: F. Cunill, E. Suslova	Chairmen: P. Pescarmona, I. Simakova	Chairmen: E. Tronconi, L. Pinaeva			
11:00-11:20	KN21 E. Karakhanov	III-OP42 A. Beretta	II-OP56 A. Dewaele	V-OP47 Z. Sojka			
11:20-11:40		III-OP43	II-OP57	V-OP48			

		T.E. Bell	B. Acosta	T. Franken			
11:40-12:00	IV-OP46 G. Trunfio	III-OP44 J. Anton	II-OP58 A. Lavrenov	V-OP49 E. Papista			
12:00-12:20	IV-OP47 B. Schaller	III-OP45 O. Gutierrez Tinoco	II-OP59 I. Ismagilov	V-OP50 M. Zabitskiy			
12:20-12:40	IV-OP48 M. Rose	III-OP46 G. Landi	II-OP60 E. Redekop	V-OP51 C. Bradu			
12:40-13:30	Closing ceremony (KORSTON Ball hall)						
13:30-15:00	Lunch						

Saturday, September 5th
Post-tour "The Island-grad Sviyazhsk" (8:30 a.m. - 6 p.m.)

CONGRESS TOPICS

- I. **Novel catalytic materials and processes for securing supplies of raw materials;**
- II. **Catalyst preparation and characterization;**
- III. **Energy-related catalysis;**
- IV. **Catalysis and chemicals;**
- V. **Catalysis and environmental protection.**

PL-Plenary Lecture (60 min) = 8; KN - Keynote lecture (40 min) = 21; OP-Oral Presentation (20 min) = 228;

Poster presentations (2x400) = about 800; 120 short oral presentations (5 min) within 11 microsymbosia.

XI European Workshop on Innovation in Selective Oxidation (2 keynote lectures, 16 oral (20 min) presentations and 30 posters);

Symposium "Education in the field of catalysis" (11 oral presentations).

Poster Session-I includes the presentations: I-PP01 – I-PP114, III-PP01 – III-PP130, IV-PP01 – IV-PP155, ISO-PP01 – ISO-PP30;

Poster Session-II includes the presentations: II-PP01 – II-PP260, V-PP01 – V-PP150.



Tuesday, September 1

Korston Hotel & Mall Kazan (Ershov street, 1A)



KORSTON Ball hall

Morning Session

Chairmen: Prof. Bukhtiyarov Valerii, *Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia*
Prof. Freund Hans-Joachim, *Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin, Germany*

Plenary Lectures

08:30-09:30 PL5 Prof. Hupp Joseph T.
Mesoporous Metal-Organic Frameworks as Platforms for Single-site Heterogeneous Catalysts
Northwestern University, Evanston, IL 60208, USA

09:30-10:30 PL6 Prof. Robert Schlögl
Dynamics in Heterogeneous Catalysis
Fritz Haber Institute of the Max Planck Society, Berlin, Germany
Max Planck Institute for Chemical Energy Conversion, Mülheim a.d.Ruhr, Germany

10:30-11:00 (*Break to separate Ball hall*) *Coffee break*

KORSTON Chekhov hall

Discussion symposium 2. "Fuel Reforming"

Chairmen: Prof. Mirodatos Claude, *Institut de Recherches sur la Catalyse et l'Environnement de Lyon, Université Lyon 1, CNRS, Villeurbanne, France*
Prof. Sadykov Vladislav, *Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia*

11:00-13:00 DS2-1
Somacescu S.¹, Petrea N.², Sonu M.², Somoghi V.³, Neatu F.⁴, Neatu S.^{3,5}, Florea M.⁴
Synthesis of Mesoporous SnO₂ as Anode for PEMFCs
1 - "Ilie Murgulescu" Institute of Physical Chemistry, Romanian Academy, Spl. Independentei 202, 060021, Bucharest, Romania
2 - Scientific Research Centre for CBRN Defense and Ecology, 225 Oltenitei Road, 041309 Bucharest, Romania
3 - S.C. STIMPEX S.A., 46-48 Teclu Nicolae Street, 032368 Bucharest, Romania
4 - University of Bucharest, Faculty of Chemistry, Department of Organic Chemistry, Biochemistry and Catalysis, 4 – 12 Regina Elisabeta Bvd., Bucharest 030016, Romania
5 - National Institute of Materials Physics, 105bis Atomistilor Street, 077125, Bucharest, Romania

DS2-2

Puleo F.¹, Banerjee D.², Pantaleo G.¹, Longo A.^{1,3}, Aprile C.⁴, Collard X.⁴, Martinez-Arias A.⁵, Liotta L.F.¹

Ni-based Catalysts for Methane dry Reforming: EXAFS, TEM and DRIFT Investigation on the Au/Pt/Pd Effects

1 - ISMN-CNR, Palermo, Via Ugo La Malfa, 90146, Palermo, Italy

2 - DUBBLE, European Synchrotron Radiation Facility (ESRF), Grenoble, France

3 - Netherlands Organization for Scientific Research (NWO) Grenoble CEDEX, France

4 - University of Namur (UNAMUR), 61 rue de Bruxelles, B-5000 Namur, Belgium

5 - CSIC, C/Marie Curie 2, Cantoblanco, 28049, Madrid, Spain

DS2-3

Mansur A.J.¹, Vallezi Paladino L.A.²

Catalysts (NiMg)AlO_x + CeO₂ Derived of Hydrotalcite Type Structures Applied to Dry Reforming of Biogas

1 - Federal University of São Carlos, Chemical Engineering Department, Brazil

2 - Federal University of São Carlos, Chemical Engineering Department, Brazil

DS2-4

Mondal T.¹, Pant K.K.¹, Dalai A.K.²

Role of Rh as a Promoter on the Activity of Ni/CeO₂-ZrO₂ Catalyst for Oxidative Steam Reforming of Bio-ethanol

1 - Indian Institute of Technology Delhi, Department of Chemical Engineering, Hauz Khas, New Delhi 110016, India

2 - University of Saskatchewan, Department of Chemical and Biochemical Engineering, Saskatoon, SK S7N 5A9, Canada

DS2-5

Smal E.A.^{1,2}, Mezentseva N.V.^{1,2}, Sadykov V.A.^{1,2}, Krieger T.A.¹, Rogov V.A.^{1,2}, Simonov M.N.¹, Larina T.V.¹

Ethanol Steam Reforming over Mn_xCr_{3-x}O₄-based Spinel-type Oxide

1 - Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

2 - Novosibirsk State University, Novosibirsk, Russia

DS2-6

Fedotov A.¹, Antonov D.¹, Tsodikov M.¹, Uvarov V.²

Syngas and Hydrogen Production by Dry and Steam Reforming of Methane and Fermentation Products on Porous Ceramic Membrane-Catalytic Ni-Co-containing Converters

1 - A.V. Topchiev Institute of Petrochemical Synthesis RAS, Moscow, Russia

2 - Institute of Structural Macrokineics and Materials Science RAS, Chernogolovka, Moscow Region, Russia

DS2-7

Karuppiah J., Mok Y.S.

Dry Reforming of Propane over CeO₂/Ni-foam Catalysts

Jeju National University, Department of Chemical Engineering, Jeju 690-756, South Korea

DS2-8

Palma V., Ricca A., Miccio M., Martino M., Meloni E., Ciambelli P.

Steam Reforming of Methane on Ni-based Catalysts Characterized by Innovative Structured Carriers

University of Salerno, Department of Industrial Engineering, Fisciano (SA), Italy

DS2-9Braga A.H.¹, Batista J.B.O.¹, Damyanova S.², Bueno J.M.C.¹**Ethanol Steam Reforming to Hydrogen over CoNi-based Catalysts***1 - Universidade Federal de São Carlos, Departamento de Engenharia Química, C.P. 676, 13565-905, São Carlos, São Paulo, Brazil**2 - Institute of Catalysis, Bulgarian Academy of Sciences, Sofia, Bulgaria***DS2-10**Erdinc E., Aksoylu A.E.**A Study on Kinetics of Methane Oxidative Steam Reforming (OSR) over Pt-Ni/Al₂O₃ Bimetallic Catalysts***Bogazici University, Department of Chemical Engineering, Istanbul, Turkey***13:00-14:30***Lunch**KORSTON Chekhov hall***Evening Session****Chairmen:** Dr. Kozlova Ekaterina, *Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia*
Dr. Kozlov Denis, *Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia***Discussion symposium 4. "Photocatalysis: Water Splitting, CO₂ Reduction and Oxidative Processes"****14:30-16:30****DS4-1**Jiao J.Q., Wei Y.C., Zhao Z., Liu J., Li J.M., Jiang G.Y., Duan A.J.**3D Ordered Macroporous Ti-based Catalysts: Design, Synthesis and High Catalytic Activity for the Photoreduction of CO₂ with Water to Methane***State Key Laboratory of Heavy Oil Processing, China University of Petroleum, Beijing, China***DS4-2**

Tsyganenko A.

Advances in Catalyst Characterization by FTIR spectroscopy*V.A. Fock Institute of Physics, St.Petersburg State University, St.Petersburg, Russia***DS4-3**Keller V.¹, Pichot V.², Minetti Q.¹**New Nanodiamonds/TiO₂ Composite Materials for the Solar Energy Conversion into Hydrogen by Water Splitting***1 - ICPEES, « Institut de Chimie et Procédés pour l'Energie, l'Environnement et la Santé », Université de Strasbourg, UMR 7515 (CNRS), 25 rue Becquerel 67087 Strasbourg Cedex, France**2 - NS3E, « Nanomatériaux pour les Systèmes Sous Sollicitations Extrêmes », UMR 3208 (ISL/CNRS/UdS) Institut franco-allemand de recherche de Saint-Louis, 5 rue du Général Cassagnou, BP 70034, 68301 Saint-Louis Cedex, France***DS4-4**Szíjjártó G.P., Tálás E., Pászti Z., Mihályi J., Bálint S., Tompos A., Boráth I.**Pt-SnO_x-TiO₂ Catalysts for Methanol Photocatalytic Reforming: Influence of Co-catalysts on the Hydrogen Production***Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Hungarian Academy of Sciences, Budapest, Hungary*

DS4-5

Lisachenko A.A.

Sensitization of Wide-Bandgap Oxides ZnO and TiO₂ to the Visible Region Using Intrinsic Point Defects, Surface 2D Nanostructures and Composites ZnO/Si, TiO₂/Si
St. Petersburg State University, Department of Physics, Saint-Petersburg, Russia

DS4-6Altunoz Erdogan D.¹, Solouki T.², Ozensoy E.¹

Bio-inspired “Buckyball-shaped” Photocatalytic Architectures

1 - Bilkent University, Department of Chemistry, 06800, Ankara, Turkey

2 - Baylor University, Department of Chemistry & Biochemistry, Waco, TX, USA

DS4-7

Bellardita M., García-López E., Marcì G., Palmisano L.

Photocatalytic Conversion of Glucose in TiO₂ Aqueous Suspensions

“Schiavello-Grillone” Photocatalysis Group, Dipartimento di Energia, Ingegneria dell’informazione, e modelli Matematici (DEIM), Università degli Studi di Palermo, Viale delle Scienze Ed. 6, 90128, Palermo, Italy

DS4-8Kolinko P.^{1,2}, Lyulyukin M.¹, Besov A.^{1,2}, Parkhomchuk E.^{1,2,3}, Kozlov D.^{1,2,3}

Development of the Methods for Fast Catalytic Air Purification from CWAs

1 - Borekov Institute of Catalysis SB RAS, Novosibirsk, Russia

2 - Novosibirsk State University, Novosibirsk, Russia

3 - Research and Educational Centre for Energoefficient Catalysis (Novosibirsk State University), Novosibirsk, Russia

DS4-9Striegler K.¹, Richter D.¹, Benndorf G.², Gläser R.³

New Approaches for Solar Fuel from Suspended Photocatalysts

1 - Universität Leipzig, Faculty of Chemistry and Mineralogy, Institute of Chemical Technology, Leipzig, Germany

2 - Universität Leipzig, Faculty of Physics and Earth Science, Institute for Experimental Physics II, Leipzig, Germany

3 - Universität Leipzig, Faculty of Chemistry and Mineralogy, Institute of Chemical Technology, Leipzig, Germany

DS4-10

Xie S., Wang Y., Zhang Q., Wang Y.

Two-dimensional SrNb₂O₆ as an Efficient Photocatalyst for the Preferential Reduction of Carbon Dioxide in the Presence of Water

State Key Laboratory of Physical Chemistry of Solid Surfaces, Collaborative Innovation Center of Chemistry for Energy Materials, National Engineering Laboratory for Green Chemical Productions of Alcohols, Ethers and Esters, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, China

DS4-11

Selishchev D.S., Kozlov D.V.

Photocatalytic Oxidation of Diethyl Sulfide Vapor over TiO₂ Deposited on Porous Supports

Borekov Institute of Catalysis SB RAS, Novosibirsk, Russia

Novosibirsk State University, Novosibirsk, Russia

Research and Educational Centre for Energoefficient Catalysis (NSU), Novosibirsk, Russia

16:30-17:00

Coffee break

KORSTON TOWER, Combine halls: Prokofiev, Rakhmaninov, Chaikovsky, Shostakovich

17:00-19:00 **Poster Session-I: I-PP1÷I-PP114, III-PP1÷III-PP130, IV-PP1÷IV-PP155,**

ISO-PP1÷ISO-PP30 (Poster set-up time 09:00 – 19:00)

I-PP106

Martin L.^{1,2}, Paul J.-F.^{1,2}

Density Functional Theory Study of Alcohol Amination Reaction on Monoclinic Zirconia Surfaces

1 - *Unité de Catalyse et Chimie du Solide, Villeneuve d'Ascq, France*

2 - *Lille University, Lille, France*

I-PP107

Marques Mota F.¹, Jung J.², Ryoo R.^{1,2}

Ethylbenzene Hydroisomerization over an EU-1 Zeolite Generated in Presence of a Multivalent Surfactant Capping Agent

1 - *Center for Nanomaterials and Chemical Reactions, Institute for Basic Science (IBS), Daejeon, South Korea*

2 - *Department of Chemistry, KAIST, Daejeon, South Korea*

I-PP108

Oleneva P.V., Berdnikova P.V., Pai Z.P.

Catalytic Oxidation of α -Alkenes C₈-C₁₂ to Carboxylic Acids

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

I-PP109

Lefevère J.^{1,2}, Protasova L.², Mullens S.², Meynen V.¹

Innovative Catalyst Design for Improved Catalytic Properties for Methanol-to-Olefins Reaction

1 - *University of Antwerp, Antwerp, Belgium*

2 - *VITO*

I-PP110

Baizhumanova T.S., Zheksenbaeva Z.T., Tungatarova S.A., Zhumabek M., Kassymkan K.

Development of Technology for Catalytic Neutralization of Toxic Waste Gas Impurities

D.V. Sokolsky Institute of Organic Catalyst and Electrochemistry, Almaty, Kazakhstan

I-PP111

Larichev Y.V.^{1,2,3}, Martyanov O.N.^{1,2,3}

Asphaltene Aggregation Processes in the Crude Oils

1 - *Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia*

2 - *Novosibirsk State University, Novosibirsk, Russia*

3 - *Unicat Ltd, Novosibirsk, Russia*

I-PP112

Vlasova E.N.^{1,2}, Aleksandrov P.V.^{1,2}, Deliy I.V.^{1,2,3}, Bukhtiyarov A.V.^{1,2}, Gerasimov E.Y.^{1,2}, Paharukova V.P.^{1,2}, Bukhtiyarova G.A.¹

Peculiarities of MoS₂/Al₂O₃, CoMoS/Al₂O₃ and NiMoS/Al₂O₃ Catalyst's Behaviour in the Hydroconversion of Aliphatic Esters and Rapeseed Oil

1 - *Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia*

2 - *Research and Educational Center for Energy Efficient Catalysis in Novosibirsk National Research University, Novosibirsk, Russia*

3 - *Novosibirsk National Research University, Novosibirsk, Russia*

I-PP113

Salhi N.^{1,2}, Benadji S.², Boudjeloud M.², Saadi A.², Rabia C.²

HMS Supported H₄PMo₁₁VO₄₀ Catalysts for the Isopropanol Decomposition Reaction

1 - *Laboratoire LCPMM, département de chimie, Faculté des Sciences, U.Blida, route de Soumaa BP Blida, Algeria*

2 - *Laboratoire de Chimie du Gaz Naturel, Faculté de Chimie, USTHB 109 El-Alia Bab Ezzouar, Alger-Algérie*

I-PP114

Muhler M.¹, Chew L.M.¹, Kangvansura P.², Ruland H.¹, Xia W.¹, Worayingyong A.²

The Effect of K- and Mn- Promoters on N-doped Carbon Nanotube-Supported Iron Nanoparticles for CO₂ hydrogenation

1 - *Laboratory of Industrial Chemistry, Ruhr-University Bochum, Bochum, Germany*

2 - *Faculty of Science, Kasetsart University, Bangkok, Thailand*