Boreskov Institute of Catalysis (Novosibirsk, Russia)
Chemical Process and Energy Resources Institute – CPERI (Thessaloniki, Greece)
PJSC Gazprom Neft (St. Petersburg, Russia)

IV Scientific-Technological Symposium
CATALYTIC HYDROPROCESSING IN OIL REFINING
STS HydroCat
April 26 – 30, 2021
ONLINE

SCIENTIFIC PROGRAM

Novosibirsk, 2021

Timetable

April 26, Monday		April 27, Tuesday		April 28, Wednesday		April 29, Thursday	
Novosibirsk Local Time UTC +7							
		09.00-09.15	OP-8 Pacheco-Jimenez				
		09.15-09.30	OP-9 Alvarez-Majmutov				
		09.30-09.45	OP-10 Diaz de Leon				
		09.45-10.00	OP-11 Saiko				
		10.00-10.15	OP-12 Xuanjun Ai				
		10.15-10.30	OP-13 Vatutina				
		10.30-11.00	*Coffee break*				
		11.00-11.15	OP-14 Danilova				
		11.15-11.30	OP-15 Tregubenko				
		11.30-11.45	OP-16 Shamanaev	11.30-11.45	OP-29 Belskaya		
		11.45-12.00	OP-17 Belopukhov	11.45-12.00	OP-30 Bogomolova		
		12.00-12.15	OP-18 Golubev	12.00-12.15	OP-31 Nazarova		
		12.15-12.30	OP-19 Belinskaya	12.15-12.30	OP-32 Porsin		
		12.30-14.00	Lunch	*12.30-14.00*	*Lunch*		
						14.00-14.45	**PL-3 Lemonidou**
15.00-15.15	OPENING	14.00-14.45	**PL-1 Schwieger**	14.00-14.45	**PL-2 Rana**	14.45-15.00	OP-36 Naranov
		14.45-15.15	**KL-2 Thybaut**	14.45-15.15	**KL-3 Danilevich**	15.00-15.15	OP-37 Romero
		15.15-15.30	OP-20 Karakoulia	15.15-15.30	OP-33 Snytnikov	15.15-15.30	OP-38 Glotov
15.15-15.45	**KL-1 Bezergianni**	15.30-15.45	OP-21 Kokliukhin	15.30-15.45	OP-34 Krivtcova	15.30-15.45	OP-39 Dimitriadis
15.45-16.00	OP-1 Nadeina	15.45-16.00	OP-22 Palos	15.45-16.00	OP-35 Potapenko	15.45-16.00	OP-40 Chuzlov
16.00-16.30	*Coffee break*	*16.00-16.30*	*Coffee break*	*16.00-16.30*	*Coffee break*	*16.00-16.30*	*Coffee break*
16.30-16.45	OP-2 Orlović	16.30-16.45	OP-23 Pernalete	16.30-18.00	Poster Session flash-poster presentations	16.30-16.45	OP-41 Stepacheva
16.45-17.00	OP-3 Kazakov	16.45-17.00	OP-24 Stepanova			16.45-17.00	OP-42 Matveeva
17.00-17.15	OP-4 Shkurenok	17.00-17.15	OP-25 Margellou			17.00-17.15	OP-43 Malbakhova
17.15-17.30	OP-5 Yashnik	17.15-17.30	OP-26 Simakova			17.15-17.30	CLOSING
17.30-17.45	OP-6 Devers	17.30-17.45	OP-27 Zagoruiko				
17.45-18.00	OP-7 Ntagkonikou	17.45-18.00	OP-28 Pimerzin				

PL – Plenary lecture; KL – Keynote lecture; OP – Oral presentation

April 26, Monday

15.00 – 15.15
Opening Ceremony

Keynote Lecture
15.15 – 15.45
KL-1
Dr. Stella Bezergianni
CATALYTIC HYDROPROCESSING: AN EFFECTIVE MODE FOR DIRECT FUELS DECARBONIZATION
Centre for Research & Technology Hellas / CERTH
Chemical Process & Energy Resources Institute / CPERI, Greece

Oral Presentation
15.45 – 16.00
OP-1
Nadeina K.A.[1], Danilevich V.V.[1], Kazakov M.O.[1], Romanova T.S.[1], Gabrienko A.A.[1], Pakharukova V.A.[1], Danilova I.G.[1], Nikolaeva O.A.[1], Gerasimov E.Yu.[1], Kondrashev D.O.[2], Kleimenov A.V.[2], Klimov O.V.[1], Noskov A.S.[1]
INFLUENCE OF Si DOPING TO HYDROTREATING CATALYSTS OF FCC FEED PRETREATMENT
[1]*Boreskov Institute of Catalysis, Novosibirsk, Russia*
[2]*PJSC Gazprom neft, Saint Petersburg, Russia*

16.00 – 16.30 – Coffee break

Oral Presentations
16.30 – 16.45
OP-2
Glišić S.B.[1], Prokić-Vidojević D.[2], **Orlović A.M.[1]**
INFLUENCE OF THE TRANSITION METAL AND CATALYST DRYING PROCEDURE ON THE CATALYTIC PERFORMANCE OF Re/Pd, Co/Mo AND COMMERCIAL CATALYSTS SUPPORTED ON HEXAGONAL MESOPOROUS SILICAS DOPED WITH Ti-IONS DURING THE HDS OF DIBENZOTHIOPHENE AND 4,6-DIMETHYLDIBENZOTHIOPHENE
[1]*University of Belgrade, Belgrade, Serbia*
[2]*Military Technical Institute (VTI), Belgrade, Serbia*

16.45 – 17.00
OP-3
Kazakov M.O.[1], Revyakin M.E.[1], Nadeina K.A.[1], Vatutina Yu.V.[1], Kondrashev D.O.[2], Golovachev V.A.[2], Kleimenov A.V.[2], Vedernikov O.S.[2], Klimov O.V.[1], Noskov A.S.[1]
TUNING METAL-ACID PROPERTIES OF ZEOLITE HYDROCRACKING CATALYSTS BY SUPPORTING NiMo WITH IMPREGNATION SOLUTIONS OF DIFFERENT COMPOSITION
[1]Boreskov Institute of Catalysis, Novosibirsk, Russia
[2]PJSC Gazprom neft, St Petersburg, Russia

17.00 – 17.15
OP-4
Shkurenok V.A.[1], Yablokova S.S.[1], Smolikov M.D.[1], Kir'yanov D.I.[1], Belyi A.S.[1], Kondrashev D.O.[2], Kleimenov A.V.[2]
NEW DIRECTION IN THE HYDROPROCESSING OF GASOLINE FRACTIONS: INTEGRATION OF C_5-C_6 AND C_7-PARAFFIN HYDROCARBONS ISOMERIZATION PROCESSES
[1]Center of New Chemical Technologies BIC, Omsk, Russia
[2]PJSC Gazprom neft, Saint Petersburg, Russia

17.15 – 17.30
OP-5
Yashnik S.A.[1], Ismailov E.G.[2], Ismagilov Z.R.[1]
EFFECT OF BENTONITE ADDITION ON PROPERTIES OF NANOSTRUCTURED PtPd-ZEOLITE HYDRODESULFURIZATION CATALYST
[1]Boreskov Institute of Catalysis, Novosibirsk, Russia
[2]Institute of Petrochemical Processes of ANAS, Baku, Azerbaijan

17.30 – 17.45
OP-6
Devers E.[1], Lesage C.[1,2], Legens C.[1], Briois V.[2]
NEW METHODOLOGY COUPLING RAMAN AND XAS FOR THE SPECIATION OF ADDITIVATED Mo-BASED HDS CATALYSTS AND CHARACTERIZATION BY QUICK-XAS OPERANDO OF THEIR LIQUID SULFIDATION
[1]IFP Energies nouvelles, Solaize, France
[2]Synchrotron SOLEIL L'orme des Merisiers, Gif-sur-Yvette Cedex, France

17.45 – 18.00
OP-7
Ntagkonikou V.[1,2], Bezergianni S.[1], Karonis D.[2]
AN ALTERNATIVE APPROACH FOR LCO UPGRADING
[1]Chemical Process and Energy sources Institute-CPERI, Centre of Research and Technology Hellas-CERTH, Thessaloniki, Greece
[2]National Technical University of Athens, Zografou Campus, Athens, Greece

April 27, Tuesday

Oral Presentations

09.00 – 09.15

OP-8

Pacheco-Jiménez H.O.[1,2], Santes V.[1], Sotelo-Boyás R.[2], Santolalla-Vargas C.E.[1], Gonzalez-Alatriste J.E.[1]

HYBRID DIESEL PRODUCTION VIA CATALYTIC CO-HYDROPROCESSING OF BLENDS GASOIL-WASTE COOKING OIL

[1]Departamento de Biociencias e Ingenieria, Centro Interdisciplinario de Investigaciones y Estudios sobre Medio Ambiente y Desarrollo (CIIEMAD), Instituto Politecnico Nacional, Mexico City, Mexico
[2]Departamento de Ingenieria Quimica Petrolera, Escuela Superior de Ingenieria Quimica e Industrias Extractivas (ESIQIE), Instituto Politecnico Nacional, Zacatenco, Mexico City, Mexico

09.15 – 09.30

OP-9

Alvarez-Majmutov A., Badoga S., Xing T., Chen J.

PRODUCING LOW CARBON FUELS BY CO-HYDROCRACKING HTL BIOCRUDE WITH VACUUM GAS OIL

Natural Resources Canada, CanmetENERGY Devon, Canada

09.30 – 09.45

OP-10

Quintana-Gamboa S., Richards-Figueroa Z., Torres-Otañez G., Fuentes-Moyado S., **Díaz de León J.N.**

NiMoS NANOCUBES FOR HYDRODESULFURIZATION OF LIGHT HYDROCARBONS

Universidad Nacional Autónoma de México, Nanoscience and Nanotechnology Center, Ensenada B.C., México

09.45 – 10.00

OP-11

Saiko A.V.[1], Potapenko O.V.[2], Nadeina K.A.[1], Porotikova O.V.[2], Sorokina T.P.[2], Doronin V.P.[2], Kazakov M.O.[1], Klimov O.V.[1], Kondrashev D.O.[3], Kleimenov A.V.[3], Noskov A.S.[1]

INFLUENCE OF NITROGEN CONTAINING COMPOUNDS OF DIFFERENT NATURE IN HYDROTREATED VGO ON PRODUCT COMPOSITION OF FCC PROCESS FOR LIGHT OLEFINS PRODUCTION

[1]Boreskov Institute of Catalysis, Novosibirsk, Russia
[2]Center of New Chemical Technologies BIC, Omsk, Russia
[3]PJSC Gazprom neft, Saint Petersburg, Russia

10.00 – 10.15

OP-12

Ai X.[1], Chi X.[1], Wang D.[1], Tian Z.[1], Shi Q.[2], Wang J.[2]

DETERMINATION OF VARIOUS CHEMICAL STRUCTURES IN BASE OIL USING MULTIDIMENSIONAL NMR SPECTROSCOPY

[1]Dalian National Laboratory for Clean Energy, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, Dalian, China
[2]School of Biological Engineering, Dalian Polytechnic University, Dalian, China

10.15 – 10.30
OP-13
Vatutina Yu.V., Kazakov M.O., Nadeina K.A., Budukva S.V., Gerasimov E.Yu., Klimov O.V., Noskov A.S.
IS IT POSSIBLE TO REACTIVATE HYDROTREATING CATALYST POISONED BY Si?
Boreskov Institute of Catalysis, Novosibirsk, Russia

10.30 – 11.00 – Coffee break

Oral Presentations
11.00 – 11.15
OP-14
Danilova I.G.[1], Dik P.P.[1], Gabrienko A.A.[1], Sorokina T.P.[2], Paukshtis E.A.[1], Kazakov M.O.[1], Doronin V.P.[2], Kondrashev D.O.[3], Golovachev V.A.[3], Kleimenov A.V.[3], Vedernikov O.S.[3], Klimov O.V.[1], Noskov A.S.[1]
THE INFLUENCE OF FRAMEWORK AND EXTRAFRAMEWORK ALUMINIUM SPECIES IN FAUJASITE ZEOLITES ON VGO HYDROCRACKING OVER NiMo/USY CATALYSTS
[1]Boreskov Institute of Catalysis, Novosibirsk, Russia
[2]Center for New Chemical Technologies BIC, Omsk, Russia
[3]PJSC Gazprom neft, Saint Petersburg, Russia

11.15 – 11.30
OP-15
Tregubenko V.Yu.[1], Vinichenko N.V.[1], Vagapova M.N.[2], Veretelnikov K.V.[3], Belyi A.S.[1,2]
NEW NAPHTHA-REFORMING Pt/Al_2O_3 CATALYSTS WITH Mo OR In
[1]Center of New Chemical Technologies BIC, Omsk, Russia
[2]Omsk State Technical University, Omsk, Russia
[3]Boreskov Institute of Catalysis, Novosibirsk, Russia

11.30 – 11.45
OP-16
Shamanaev I., Suvorova A., Gerasimov E., Pakharukova V., Bukhtiyarova G.
COMPARATIVE STUDY OF Ni-PHOSPHIDE CATALYSTS SUPPORTED ON GRANULATED AL_2O_3 IN HYDROTREATING OF STRAIGHT RUN GAS OIL
Boreskov Institute of Catalysis, Novosibirsk, Russia

11.45 – 12.00
OP-17
Belopukhov E.A.[1], Smolikov M.D.[1], Kir'yanov D.I.[1], Shkurenok V.A.[1], Belyi A.S.[1], Kondrashev D.O.[2], Kleimenov A.V.[2]
REFORMING CATALYST FOR PRODUCING OF A LOW AROMATICS GASOLINE COMPONENT
[1]Center of New Chemical Technologies BIC, Omsk, Russia
[2]PJSC Gazprom neft, Saint Petersburg, Russia

12.00 – 12.15
OP-18
Golubev I.S.[1,2], Dik P.P.[1], Kazakov M.O.[1], Pereyma V.Yu.[1], Klimov O.V.[1], Kondrashev D.O.[3], Golovachev V.A.[3], Vedernikov O.S.[3], Kleimenov A.V.[3], Noskov A.S.[1]
NiW/Y-ASA-Al_2O_3 CATALYSTS FOR SECOND STAGE HYDROCRACKING: INFLUENCE OF Si/Al RATIO IN ZEOLITE
[1]Boreskov Institute of Catalysis, Novosibirsk, Russia
[2]Novosibirsk State University, Novosibirsk, Russia
[3]PJSC «Gazprom neft», Saint Petersburg, Russia

12.15 – 12.30
OP-19
Belinskaya N.S., Ivanchina E.D., Ivashkina E.N., Vymyatnin E.K., Mauzhigunova E.N.
DEVELOPMENT OF THE APPROACH TO MODELLING OF THE DESTRUCTIVE CATALYTIC HYDROPROCESSES OF ATMOSPHERIC AND VACUUM DISTILLATES CONVERSION
National Research Tomsk Polytechnic University, Tomsk, Russia

12.30 – 14.00 Lunch

Plenary Lecture
14.00 – 14.45
PL-1
Prof. Wilhelm Schwieger
HIERARCHICAL ZEOLITES IN PROCESSING OF HYDROCARBONS
Friedrich–Alexander University Erlangen–Nürnberg, Germany

Keynote Lecture
14.45 – 15.15
KL-2
Prof. Joris Thybaut
SIMULATING COMPLEX MIXTURES CONVERSION FROM FIRST PRINCIPLES
Ghent University, Ghent, Belgium

Oral Presentations
15.15 – 15.30
OP-20
Karakoulia S.A.[1], Heracleous E.[1,2], Lappas A.A.[1]
Ni AND Pt CATALYSTS SUPPORTED ON SILICOALUMINOPHOSPHATES FOR n-HEXADECANE HYDROISOMERIZATION
[1]Chemical Process & Energy Resources Institute/Centre for Research and Technology Hellas (CPERI/CERTH), Thessaloniki, Greece
[2]School of Science & Technology, International Hellenic University (IHU), Thessaloniki, Greece

15.30 – 15.45

OP-21

Kokliukhin A.[1,2,5], Nikulshina M.[1,2], Mozhaev A.[1,3,4], Lancelot C.[2], Blanchard P.[2], Marinova M.[3], Mentré O.[2], Lamonier C.[2], Nikulshin P.[1,4,5]

EFFECT OF Mo/W RATIO ON THE CATALYTIC PROPERTIES OF ALUMINA SUPPORTED HYDROTREATING CATALYSTS PREPARED FROM MIXED $SiMo_nW_{12-n}$ kEGGIN TYPE HETEROPOLYACIDS

[1]Samara State Technical University, Samara, Russia
[2]University of Lille, Unité de Catalyse et Chimie du Solide, Lille, France
[3]University of Lille, Institut Michel-Eugène Chevreul, Lille, France
[4]All-Russia Research Institute of Oil Refining, Moscow, Russia
[5]Gubkin Russian State University of Oil and Gas, Moscow, Russia

15.45 – 16.00

OP-22

Vela F.J., Trueba D., **Palos R.**, Arandes J.M., Gutiérrez A.

FUELS OBTAINED FROM HYDROCRACKING OF DIFFERENTS BLENDS OF VGO AND POLYOLEFINIC WASTES

University of the Basque Country, Bilbao, Spain

16.00 – 16.30 Coffee break

Oral Presentations

16.30 – 16.45

OP-23

Pernalete C.G., Ibáñez J., Van Geem K.M., Thybaut J.W.

FROM BULK PROPERTIES TO SINGLE EVENT MICROKINETICS FOR VGO HYDROCRACKING

Ghent University, Ghent, Belgium

16.45 – 17.00

OP-24

Stepanova L.[1,2], Belskaya O.[1,3], Trenikhin M.[1], Leont'eva N.[1], Gulyaeva T.[1], Likholobov V.[4]

THE EFFECT OF THE SUPPORT PRECURSOR ON THE PROPERTIES OF BIMETALLIC CATALYSTS Pt-Au/$MgAlO_x$ IN THE PROPANE DEHYDROGENATION

[1]Center of New Chemical Technologies BIC, Omsk, Russia
[2]Dostoevsky Omsk State University, Omsk, Russia
[3]Omsk State Technical University, Omsk, Russia
[4]Boreskov Institute of Catalysis, Novosibirsk, Russia

17.00 – 17.15

OP-25

Margellou A.,[1], Rekos K.[1], Fotopoulos A.[1], Triantafyllidis K.[1,2]

CATALYTIC HYDROGENOLYSIS OF LIGNIN TOWARDS THE PRODUCTION OF PHENOLIC BIO-OILS

[1]Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece
[2]Chemical Process and Energy Resources Institute, Centre for Research and Technology Hellas, Thessaloniki, Greece

17.15 – 17.30
OP-26
Simakova I.L.[1], Warna J.[2], Murzin D.Y.[3]
BIODERIVED ANTIKNOCK ADDITIVES: SYNTHESIS OF GAMMA-VALEROLACTONE BY LIQUID-PHASE LEVULINIC ACID HYDROGENATION OVER VIII GROUP METALS
[1]Boreskov Institute of Catalysis, Novosibirsk, Russia
[2]Process Chemistry Centre, Åbo Akademi University, Turku/Åbo, Finland

17.30 – 17.45
OP-27
Zagoruiko A., Mikenin P., Lopatin S.
DECOMPOSITION OF HYDROGEN SULFIDE INTO ELEMENTS IN THE CYCLIC CHEMISORPTION-CATALYTIC REGIME
Boreskov Institute of Catalysis, Novosibirsk, Russia

17.45 – 18.00
OP-28
Pimerzin Al.A.[1,2], Glotov A.P.[2], Savinov A.A.[1]
LINEAR ALKANES HYDROISOMERIZATION OVER CoMoS CATALYSTS SUPPORTED ON MODIFIED ALUMINOSILICATES
[1]Samara State Technical University, Samara, Russia
[2]Gubkin Russian State University of Oil and Gas, Moscow, Russia

April 28, Wednesday

Oral Presentations

11.30 – 11.45

OP-29

Belskaya O.

NEW CATALYSTS BASED ON LAYERED DOUBLE HYDROXIDES FOR THE FURFURAL HYDROGENATION

Center of New Chemical Technologies BIC, Omsk, Russia

11.45 – 12.00

OP-30

Bogomolova T.S., Smirnova M.Yu., Klimov O.V., Noskov A.S.

CHARACTERIZATION AND HYDROISOMERIZATION PERFORMANCE OF Mg-PROMOTED Pt/ZSM-23/Al_2O_3 CATALYSTS

Boreskov Institute of Catalysis, Novosibirsk, Russia

12.00 – 12.15

OP-31

Nazarova G.[1], Ivashkina E.[1], Ivanchina E.[1], Burumbaeva G.[2], Kaliev T.[2,3], Seitenova G.[3]

KINETIC PATTERNS OF VACUUM DISTILLATE CATALYTIC CRACKING ON DIFFERENT CATALYST

[1]Tomsk Polytechnic University, Tomsk, Russia

[2]LLP Pavlodar Petrochemical Plant, Pavlodar, Kazakhstan

[3]S. Toraighyrov Pavlodar State University, Pavlodar, Kazakhstan

12.15 – 12.30

OP-32

Vlasova E., **Porsin A.**, Aleksandrov P., Bukhtiyarova G.

CO-PROCESSING OF RAPESEED OIL – STRAIGHT RUN GAS OIL MIXTURE: PECULIARITIES OF ULSD PRODUCTION WITH IMPROVED COLD FLOW PROPERTIES

Boreskov Institute of Catalysis, Novosibirsk, Russia

12.30 – 14.00 Lunch

Plenary Lecture

14.00 – 14.45

PL-2

Dr. Mohan S. Rana

RECENT ADVANCES IN RESIDUE HYDROPROCESSING

Kuwait Institute for Scientific Research, Safat, Kuwait

Keynote Lecture

14.45 – 15.15

KL-3

Dr. Vladimir Danilevich

Danilevich V., Nadeina K., Stolyarova E., Klimov O., Noskov A.

ALUMINUM OXIDES AS SUPPORTS FOR HYDROTREATING CATALYSTS

Boreskov Institute of Catalysis, Novosibirsk, Russia

Oral Presentations

15.15 – 15.30

OP-33

Snytnikov P.V.[1,2], Rogozhnikov V.N.[1,2], Badmaev S.D.[1,2], Potemkin D.I.[1,2], Shilov V.A.[1,2], Ruban N.V.[1,2], Gorlova A.M.[1,2], Pechenkin A.A.[1,2], Zazhigalov S.V.[1], Belyaev V.D.[1,2], Zagoruiko A.N.[1,2], Sobyanin V.A.[1,2]

STRUCTURED CATALYSTS FOR HYDROCARBONS AND OXYGENATES MIXTURES CONVERSION TO HYDROGEN-RICH GAS

[1]Boreskov Institute of Catalysis, Novosibirsk, Russia
[2]Novosibirsk State University, Novosibirsk, Russia

15.30 – 15.45

OP-34

Krivtcova N., Ivanchina E.D., Kotcova E.

MATHEMATICAL MODELING OF THE HYDROTREATING PROCESS USING BI-FUNCTIONAL CATALYSTS

National Research Tomsk Polytechnic University, Tomsk, Russia

15.45 – 16.00

OP-35

Potapenko O.V.[1], Doronin V.P.[1], Sorokina T.P.[1], Iurtaeva A.S.[1], Plekhova K.S.[1], Lipin P.V.[1], Dmitriev K.I.[1], Porotikova O.V.[1], , Kondrashev D.O.[2], Kleimenov A.V.[2]

NEW ACHIEVEMENTS OF THE CRACKING CATALYSTS DEVELOPMENT FOR PETROCHEMICAL DIRECTION OF PJSC «GAZPROMNEFT»

[1]Center of New Chemical Technologies BIC, Omsk, Russia
[2]PJSC Gazprom neft, Saint Petersburg, Russia

16.00 – 16.30 Coffee break

16.30 – 18.00 FLASH POSTER SESSION

April 29, Thursday

Plenary Lecture
14.00 – 14.45
PL-3
Prof. Angeliki Lemonidou
INTENSIFICATION OF STEAM REFORMING FOR HYDROGEN PRODUCTION
Aristotle University of Thessaloniki, Greece

Oral Presentation
14.45 – 15.00
OP-36
Naranov E.R., Sadovnikov A.A., Maximov A.L.
A STEPWISE FABRICATION OF MORDENITE FRAMEWORK INVERTED (MFI) NANOSHEETS IN ACCELERATED MODE
A.V. Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Moscow, Russia

15.00 – 15.15
OP-37
Romero M.A., Prieto C.
INDUSTRIAL HYDROCRACKING UNITS: NEW R&D CHALLENGES AND OPPORTUNITIES AS A WAY FORWARD TO IMPROVE REFINERY MARGINS
Cepsa Research Center, Madrid, Spain

15.15 – 15.30
OP-38
Glotov A.[1], Stavitskaya A.[1], Smirnova E.[1], Gushchin P.[1], Vinokurov V.[1], Lvov Y.[1,2]
MESOPOROUS ALUMINOSILICATES BASED ON NATURAL CLAY NANOTUBES FOR HYDROPROCESSING: SYNTHESIS, PROPERTIES, APPLICATION
[1]Gubkin University, Moscow, Russia
[2]Institute for Micromanufacturing, Louisiana Tech University, Ruston, USA

15.30 – 15.45
OP-39
Dimitriadis A.[1], Bezergianni S.[1], Meletidis G.[1], Kokkalis A.[2], Doufas L.[2]
ANIMAL FATS: A PROSPEROUS FEED FOR 2ND GEN BIOFUELS PRODUCTION
[1]Centre for Research & Technology Hellas (CERTH), Chemical Process & Energy Resources Institute (CPERI), Thessaloniki, Greece
[2]Green Innovative Company (GRINCO), Larisa, Greece

15.45 – 16.00
OP-40
Ivanchina E., **Chuzlov V.**, Ivashkina E., Nazarova G., Tyumentsev A.
MODELING OF MOTOR GASOLINE COMPONENTS COMPLEX PRODUCTION
National Research Tomsk Polytechnic University, Tomsk, Russia

16.00 – 16.30 Coffee break

Oral Presentations

16.30 – 16.45

OP-41

Stepacheva A.A.[1], Markova M.E.[1,2], Gavrilenko A.V.[1], Lugovoy Yu.V.[1], Sulman M.G.[1], Matveeva V.G.[1,2], Sulman E.M.[1]

HIGHLY DISPERSED CATALYSTS FOR OIL HYDROPROCESSING IN SUPERCRITICAL CONDITIONS

[1]Tver State Technical University, Tver, Russia

[2]Tver State University, Tver, Russia

16.45 – 17.00

OP-42

Manaenkov O.V., Kislitsa O.V., Ratkevich E.A., **Matveeva V.G.,** Sulman M.G., Sulman E.M.

MAGNETICALLY RECOVERABLE CATALYST BASED ON HYPERCROSSLINKED POLYSTERENE FOR CELLULOSE HYDROCONVERSION INTO GLYCOLS

Tver Technical University, Tver, Russia

17.00 – 17.15

OP-43

Malbakhova I.A.[1]**,** Titkov A.I.[1], Matvienko A.A.[1], Popov M.P.[1,2], Nemudry A.P.[1]

THE DEVELOPMENT OF NICKEL MEMBRANES FOR HYDROGEN PURIFICATION

[1]Institute of Solid State Chemistry and Mechanochemistry, SB RAS, Novosibirsk, Russia

[2]Novosibirsk State University, Novosibirsk, Russia

17.15 – 17.30

Closing Ceremony

POSTER PRESENTATIONS

PP-1

AlHumaidan F.S., **Rana M.S.**, Bouresli R., Raajasekaran N.

GUARD BED CATALYST: ROLE OF TEXTURAL PROPERTIES AND THEIR CHARACTERIZATION

Petroleum Research Center, Kuwait Institute for Scientific Research, Safat, Kuwait

PP-2

Altynov A., Bogdanov I., Kirgina M.

INVESTIGATION OF THE INFLUENCE OF STABLE GAS CONDENSATE ZEOFORMING PROCESS TECHNOLOGICAL PARAMETERS ON THE OBTAINED PRODUCTS CHARACTERISTICS

National Research Tomsk Polytechnic University, Tomsk, Russia

PP-3

Baygildin I.G.[1], Vutolkina A.V.[1], Maksimov A.L.[1,2], Karakhanov E.A.[1]

HYDRODESULFURIZATION OF SULFUR-CONTAINING AROMATIC COMPOUNDS VIA WGSR OVER DISPERSED Ni–Mo SULFIDE CATALYSTS

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PP-4

Belinskaya N.S.[1], Ivashkina E.N.[1], Afanasyeva D.A.[1], Krivtsova N.I.[1], Vymyatnin E.K.[1], Arkenova S.B.[1], Kaliev T.A.[1,2]

DEVELOPMENT OF THE FORMALIZED SCHEME OF CHEMICAL CONVERSIONS IN THE PROCESS OF VACUUM GAS OIL HYDROTREATING FOR THE PROCESS MODELLING

[1]National Research Tomsk Polytechnic University, Tomsk, Russia

[2]S. Toraighyrov Pavlodar State University, Pavlodar, Kazakhstan

PP-5

Ivanchina E., Ivashkina E., Lutsenko A., Nazarova G., Vymyatnin E., **Belinskaya N.S.**

HYDROCARBONS CONVERSION REGULARITIES OF DIESEL FRACTION WITH ATMOSPHERIC GAS OIL DURING HYDRODEPARAFFINIZATION

National Research Tomsk Polytechnic University, *Tomsk, Russia*

PP-6 (+ FLASH poster presentation)

Sosnina D.V., Belozertseva N.E., Bogdanov I.A.

INVESTIGATION OF THE SYNTHESIS PARAMETERS INFLUENCE ON THE PRODUCT YIELD AND CHARACTERISTICS OF THE PRODUCED BIODIESEL FUELS

National Research Tomsk Polytechnic University, Tomsk, Russia

PP-7 (+ FLASH poster presentation)

Bogdanov I.A., Martyanova E.I., Altynov A.A.

IMPROVEMENT OF STRAIGHT-RUN DIESEL FUEL LOW-TEMPERATURE PROPERTIES ON THE ZEOLITE CATALYST

National Research Tomsk Polytechnic University, Tomsk, Russia

PP-8

Demikhova N.[1], Artemova M.[1], Glotov A.[1], Tsaplin D.[2], Ivanov E.[1], Vinokurov V.[1]

MICRO-MESOPOROUS Pt-CONTAINING CATALYSTS FOR XYLENES HYDROISOMERIZATION

[1]Gubkin Russian State University of Oil and Gas, Moscow, Russia

[2]Lomonosov Moscow State University, Chemistry Department, Moscow, Russia

PP-9 (+ FLASH poster presentation)

Dolganov I.M., **Dolganova I.O.**, Solopova A.A., Pasyukova M.A., Bunaev A.A. Ivanchina E.D., Ivashkina E.N.

INFLUENCE OF FLOW RATE OF LINEAR ALKYLBENZENE IN FILM SULFONATION REACTOR ON CONCENTRATION OF TARGET PRODUCT AND TETRALINES AND SULFONES CONCENTRATION

National Research Tomsk Polytechnic University, Tomsk, Russia

PP-10 (+ FLASH poster presentation)

Enikeeva L.V.[1,2], Faskhutdinov A.G.[3], Arefyev I.A.[2], Enikeev M.R.[2], Gubaydullin I.M.[2,3]

SIMULATION THE CATALYTIC PROCESS OF ISOMERIZATION REACTION OF PENTANE-HEXANE FRACTION TO MAXIMIZE THE OCTANE NUMBER OF REACTION PRODUCTS

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[3]Institute of Petrochemistry and Catalysis of RAS, Ufa, Russia

PP-11 (+ FLASH poster presentation)

Enikeeva L.V.[1,2], Potemkin D.I.[1,3,4], Uskov S.I.[1,3], Snytnikov P.V.[1,3], Enikeev M.R.[2], Gubaydullin I.M.[2,5]

GRAVITY SEARCH ALGORITHM FOR DETERMINING THE OPTIMAL KINETIC PARAMETERS OF LOW-TEMPERATURE STEAM CONVERSION OF C2 + HYDROCARBONS

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[2]Ufa State Petroleum Technological University, Ufa, Russia
[3]Boreskov Institute of Catalysis, Novosibirsk, Russia
[4]Novosibirsk State Technical University, Novosibirsk, Russia
[5]Institute of Petrochemistry and Catalysis of RAS, Ufa, Russia

PP-12

Díaz de León J.N.[1], Huerta-Mata C.[1,2], Kumar Chowdari R.[1], Infantes-Molina A.[3], Zepeda T.[1], Alonso-Núñez G.[1], Fuentes-Moyado S.[1], Huirache-Acuña R.[2]

TWO STEPS SYNTHESIS OF BULK NiW CATALYSTS FOR 3-METHYL THIOPHENE DESULFURIZATION

[1]Universidad Nacional Autónoma de México, Nanoscience and Nanotechnology Center, Ens., B.C., México
[2]Facultad de Ingeniería Química, Universidad Michoacana de San Nicolás de Hidalgo, Mexico
[3]Universidad de Malaga, Departamento de Química Inorgánica, Cristalografía y mineralogía Malaga, Spain

PP-13 (+ FLASH poster presentation)

Glazov N.A., Zagoruiko A.N., Dik P.P.

CONNECTION BETWEEN STRUCTURE ATTRIBUTES AND ANALYTICAL METHODS USED FOR STOCHASTIC RECONSTRUCTION OF VACUUM GASOIL

Boreskov Institute of Catalysis, Novosibirsk, Russia

PP-14

Ziyadullaev O.E.[1,2], Abdurakhmanova S.S.[1], Samatov S.B.[1], Otamukhamedova G.Q.[2], Tirkasheva S.I.[2], Ikramov A.[3]

SYNTHESIS OF ACETYLENE ALCOHOLS BY CATALYSTS $ZNET_2/TI(O^iPR)_4$/PHME AND $SN(OTF)_2/NET_3$/MECN

[1]Chirchik State Pedagogical Institute, Chirchik, Uzbekistan
[2]National University of Uzbekistan, Tashkent, Uzbekistan
[3]Tashkent Chemical Technological Institute, Tashkent, Uzbekistan

PP-15

Kazakova M.A.[1,2], Vatutina Y.V.[1,2], Kazakov M.O.[1], Klimov O.V.[1], Noskov A.S.[1]

NOVEL COMPOSITE SUPPORT FOR CoMoS HYDROTREATING CATALYST BASED ON MWCNTs GROWN ON γ-AL_2O_3 BY CVD

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[2]*Novosibirsk State University, Novosibirsk, Russia*

PP-16

Kovalev I.V.[1,2], Popov M.P.[1,3], Bychkov S.F.[1], Malbakhova I.A.[1], Nemudry A.P.[1]

CATALYTIC CONVERSION OF HYDROCARBONS USING OXYGEN-SELECTIVE MICROTUBULAR MEMBRANES FOR HYDROGEN PRODUCTION

[1]*Institute of Solid State Chemistry and Mechanochemistry, SB RAS, Novosibirsk, Russia*
[2]*Novosibirsk State Technical University, Novosibirsk, Russia*
[3]*Novosibirsk State University, Novosibirsk, Russia*

PP-17 (+ FLASH poster presentation)

Krivonos O.I., Terekhova E.N., Belskaya O.B.

CATALYTIC HYDROPROCESSING OF ORGANIC MATTER OF SAPROPELS IN VALUABLE CHEMICAL PRODUCTS

Center of New Chemical Technologies BIC, Omsk, Russia

PP-18 (+ FLASH poster presentation)

Krivtsova N.I., Kotkova E.P.

JOINT HYDROTREATING OF DIESEL FRACTION WITH GASOLINE

National Research Tomsk Polytechnic University, Tomsk, Russia

PP-19 (+ FLASH poster presentation)

Nazarova G.Yu.[1], Ivanchina E.D.[1], Chernyakova E.S.[1], **Pchelintseva I.V.[2]**, Poluboyartsev D.S.[3]

OPTIMIZATION OF A SEMIREGENERATIVE CATALYTIC REFORMING OF NAPHTHA WITH THE MATEMATICAL MODELLING METHOD USING

[1]*National Research Tomsk Polytechnic University, Tomsk, Russia*
[2]*«GasInformPlast» Well Testing Center, Tomsk, Russia*
[3]*Joint stock company «Tomsk Oil and Gas Research and Design Institute», Tomsk, Russia*

PP-20

Nikoshvili L., Grigorev M., Abusuek D., Mikhailov S., **Matveeva V.**, Sulman E.

MONO- AND BIMETALLIC CATALYSTS BASED ON HYPER-CROSSLINKED POLYSTYRENE FOR HYDROGENATION OF BIOMASS-DERIVED LEVULINIC ACID

Tver State Technical University, Tver, Russia

PP-21 (+ FLASH poster presentation)

Salnikova K.E.[1,2], Sulman M.G.[1], Mikhailov S.P.[1,2], Bykov A.V.[1], **Matveeva V.G.[1,2]**

FURFURYL ALCOHOL AS ONE OF THE PRODUCTS OF LIGNOCELLULOSIC BIOMASS HYDROTREATMENT

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[2]*Tver State University, Tver, Russia*

PP-22 (+ FLASH poster presentation)

Orlova A.M., Bogdanov I.A., Kirgina M.V.

INVESTIGATION THE INFLUENCE OF ADDITION THE HEAVY N-PARAFFINS ON THE EFFECTIVENESS OF DEPRESSANT ADDITIVE ACTION

National Research Tomsk Polytechnic University, Tomsk, Russia

PP-23

Podryga V.[1,2], Polyakov S.[1,3], Trapeznikova M.[1,2], Churbanova N.[1,2]

DEVELOPING OF MULTISCALE APPROACH TO HPC-SIMULATION OF MULTIPHASE FLUID FLOWS

[1]Keldysh Institute of Applied Mathematics RAS, Moscow, Russia
[2]Moscow Automobile and Road Construction State Technical University, Moscow, Russia
[3]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute), Moscow, Russia

PP-24

Popov M.V.[1,2], Zagoruiko A.N.[3], Brester A.E.[2], Lopatin S.A.[3]

DECOMPOSITION OF LIGHT HYDROCARBON TO HYDROGEN ON A FIBERGLASS CATALYST

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[2]Novosibirsk Technical State University, Novosibirsk, Russia
[3]Boreskov Institute of Catalysis, Novosibirsk, Russia

PP-25

Zazhigalov S.[1,2], Popov M.[2,3], Nemudry A.[3], Zagoruiko A.[1,2]

MATHEMATICAL MODELING AND EXPERIMENTAL STUDIES OF HYDROGEN COMBUSTION IN MICROTUBULAR SOLID OXIDE FUEL CELLS

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[2]Novosibirsk State University, Russia
[3]Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia

PP-26

Zazhigalov S.V.[1,2], Rogozhnikov V.N.[1,2], Snytnikov P.V.[1,2], Potemkin D.I.[1,2], Simonov P.A.[1,2], Shilov V.A.[1,2], Ruban N.V.[1,2], Kulikov A.V.[1,2], Sobyanin V.A.[1,2], **Zagoruiko A.N.[1,2]**

MODELING OF HYDROGEN PRODUCTION BY DIESEL REFORMING AT Rh/$Ce_{0.75}Zr_{0.25}O_{2-\delta}$-η-$Al_2O_3$/FeCrAl WIRE MESH HONEYCOMB CATALYTIC MODULE

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[2]Novosibirsk State University, Novosibirsk, Russia

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Potemkin D.I.[1,2], Uskov S.I.[1,2], Gorlova A.M.[1,2], Zagoruiko A.N.[1,2], Fedorova Z.A.[1,2], Snytnikov P.V.[1,2], Kirillov V.A. [1,2], Sobyanin V.A. [1,2]

HYTHANE PRODUCTION VIA LOW-TEMPERATURE STEAM REFORMING OF NATURAL GAS

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[2]Novosibirsk State University, Novosibirsk, Russia

PP-28 (+ FLASH poster presentation)

Sineva L.V., **Nalivaiko (Gorokhova) E.O.**, Gryaznov K.O., Mordkovich V.Z.

ZEOLITES AS A TOOL FOR INTENSIFICATION OF MASS TRANSFER ON THE SURFACE OF A COBALT FISCHER–TROPSCH SYNTHESIS CATALYST

Technological Institute for Superhard and Novel Carbon Materials, Troitsk, Moscow, Russia

PP-29

Stepacheva A.A., Bykov A., Demidenko G., Nikoshvili L., Bakhvalova E., Dobryanskaya A., Matveeva V., Sulman M.

NOBLE METAL-CONTAINING NANOPARTICLES STABILIZED IN HYPERCROSSLINKED POLYSTYRENE AS EFFECTIVE CATALYSTS OF AROMATIC RING HYDROGENATION

Tver Technical University, Dep. Biotechnology, chemistry and standardization, Tver, Russia

PP-30 (+ FLASH poster presentation)

Stepacheva A.A., Shimanskaya E., Molchanov V., Sulman A., Sulman E., Sulman M.

LIGNIN AND MODEL SUBSTANCE CATALYTIC HYDROGENOLYSIS

Tver State Technical University, Tver, Russia

PP-31

Pérez-Cabrera L. [1], Antúnez-García J. [1], Díaz de León J.N. [1], Suresh C. [2], Zepeda T.A. [1], **Fuentes-Moyado S. [1]**, Alonso-Núñez G. [1]

DOUBLE PROMOTION EFFECT ON HDS CoNiMo/Al_2O_3 CATALYSTS APPLIED IN THE HYDRODESULFURIZATION OF DIBENZOTHIOPHENE

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Pérez-Cabrera L., Antúnez-García J., Díaz de León J.N., Galván D.H., Zepeda T.A., Alonso-Núñez G., **Fuentes-Moyado S.**

NiMoW CATALYSTS SUPPORTED ON MgO-Al_2O_3 MIXED OXIDES FOR THE HYDRODESULFURIZATION OF DIBENZOTHIOPHENE

Universidad Nacional Autónoma de México, Centro de Nanociencias y Nanotecnología. Ensenada, México

PP-33

Cherednichenko A.G., Markova E.B., Akhmedova L.S., Kovtun S.O., Serov Ju.M.

INVESTIGATION OF CATALYTIC CRACKING PROCESSES OF PROPANE AND POLYPROPYLENE USING GADOLINIUM MOLYBDATES AND TUNGSTATES $Gd_2(MO_4)_3$ (M=Mo, W)

RUDN University (Peoples' Friendship University of Russia), Moscow, Russia

PP-34

Eran N.T.[1], Galli F.[1], Pirola C[2], Mazzoni F[2], Patience G.S.[1]

The Review of Recent Fischer Tropsch Catalysts: A Guide to understand the effect of catalyst structure on the catalyst activity

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[2]*Universita degli Studi di Milano, Dipartimento di Chimica, Milano, Italy*

PP-35

Mamedova M.T., Abasov S.I., Agaeva S.V., Isaeva E.S., Imanova A.A., Zarbaliev R.R., Khudiev A.T.

JOINT HYDROTRANSFORMATION OF A MIXTURE OF STRAIGHT-RUN GASOLINE AND TOLUENE ON A COMPOSITE ZEOLITE CONTAINING CATALYST

The Y.H. Mamedaliyev Institute of Petrochemical Processes, National Academy of Sciences of Azerbaijan, Baku, Azerbaijan

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Mamedova M.T., Abasov S.I., Agaeva S.B., Iskenderova A.A., Nasibova A.R., Nasirova F.M., Chalabova K.S.

JOINT CONVERSION OF STRAIGHT-RUN GASOLINE AND PROPANE-BUTANE FRACTION ON ZEOLITE CONTAINING COMPOSITE CATALYSTS

The Y.H. Mamedaliyev Institute of Petrochemical Processes, National Academy of Sciences of Azerbaijan, Baku, Azerbaijan

PP-37

Yunusov M.P.[1], **Nasullaev Kh.A.[1,2]**, Djalalova Sh.B.[1], Gulomov Sh.T.[1], Sultanov A.P.[1]

STUDY OF ZEOLITE SORBENTS SYNTHESIZED BASED ON LOCAL KAOLIN

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Yunusov M.P.[1], **Nasullaev Kh.A.[1,2]**, Gulomov Sh.T.[1], Turdieva D.P.[1], Abduraxmanova I.S.[3], Rahimjanov B.B.[3]

OPTIMIZATION OF THE SYNTHESIS TECHNOLOGY OF HIGHLY DISPERSED ALUMINUM HYDROXIDE USING VARIOUS REAGENTS

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PP-39

Gubaydullin I.M.[1,2], Koledina K.F.[1,2], Zaynullin R.Z.[2], Koledin S.N.[2]

MATHEMATICAL MODELING OF KINETICS OF GASOLINE CATALYTIC REFORMING

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PP-40

Koledina K.F.[1,2], **Gubaydullin I.M.[1,2]**, Koledin S.N.[2]

MULTI-CRITERIAL OPTIMIZATION OF A HETEROGENEOUS CATALYTIC REACTION

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PP-41

Kondrasheva N.K., Konoplin R.R., Kondrashev D.O., Parfenova L.V., Shaidulina A.A.

PUT INTO INDUSTRIAL PRODUCTION DIFFICULTIES OF NOVEL EFFECTIVE HYDRODESULFURIZATION-CATALYSTS IN RUSSIAN FEDERATION

Saint-Petersburg Mining University, Saint Petersburg, Russia

VIRTUAL PARTICIPATION
(abstract publication)

VP-1

Frantsina E.V.[1], Grinko A.A.[1], Maylin M.V.[1], Berdnikova A.A.[1], Mashnich V.S.[1]

THE USE OF CHROMATOGRAPHY-MASS SPECTROMETRY IN THE STUDY OF THE HYDROCARBON COMPOSITION OF DIESEL FUELS

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VP-2

Boldushevskii R.[1,2], Iusovskii A.[1,2], Guseva A.[1,2], Nikulshin P.[1,2], Shmelkova O.[1], Chernysheva E.[2], Kapustin V.[2]

HEAVY FEEDSTOCK HYDROPROCESSING FOR MARINE FUELS PRODUCTION

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VP-3

Khazipov M.R., Pastushenko I.L., Galimova A.T., Sagdeev A.A., Kiryukhin V.G., Pletnev A.S.

REGENERATION OF LD-145 CATALYST BY SUPERCRITICAL FLUID EXTRACTION

Nizhnekamsk Institute of Chemical Technology (branch) Federal State Budgetary Educational Establishment of Higher Education, KNITU, Nizhnekamsk, Russia

VP-4

Sadovnikov A.A., Naranov E.R., Maximov A.L.

HYDROTHERMAL SYNTHESIS OF FLUORINATED TITANIA FOR PHOTOCATALYTIC APPLICATIONS

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

VP-5

Roldugina E.A.[1], Shayakhmetov N.N.[1], Maximov A.L.[1,2], Karakhanov E.A.[1]

HYDROTREATMENT OF FURFURAL AS BIO-OIL MODEL COMPOUND OVER Ru-CATALYSTS SUPPORTED ON MESOPOROUS MATERIALS

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