



Scientific Program
II Scientific-Technological Symposium
CATALYTIC HYDROPROCESSING IN OIL REFINING

Belgrade, Serbia, April 17-23, 2016

Boreskov Institute of Catalysis SB RAS (Novosibirsk, Russia)
Institute of Hydrocarbons Processing SB RAS (Omsk, Russia)
JSC Gasprom Neft, (St. Petersburg, Russia)

SYMPOSIUM CHAIRS

Academician Valentin Parmon
Boreskov Institute of Catalysis SB RAS
Novosibirsk, Russia

Professor Gilbert Froment
Texas A&M University
USA

Symposium Proceedings:
«CATALYSIS IN INDUSTRY» Journal

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Professor Nikolaj Ostrovski	Hipol a.d., Odzaci, Serbia
Professor Andrey Zagoruiko	Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

April 18, Monday

13.45 Symposium Opening

PLENARY LECTURES

14.00

PL-1

Professor Milorad P. Duduković

MULTISCALE REACTION ENGINEERING IN HYDRO-PROCESSING

Washington University in St. Louis, USA

14.45

PL-2

Professor Valentin Parmon

DIRECTIONS AND TRENDS IN OIL REFINING: TECHNOLOGIES AND CATALYSTS

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

KEYNOTE LECTURES

15.30

KL-1

Dr. Florian Huber, Berg J., Sauer T., Haas A.

**HIGH THROUGHPUT EXPERIMENTATION AS EFFICIENT TOOL FOR TESTING OF
COMMERCIAL HYDROPROCESSING CATALYSTS**

hte GmbH, Heidelberg, Germany

16.00

KL-2

Professor Andrey Pimerzin, Nikulshin P.A.

CATALYSTS AND TECHNOLOGIES OF FUEL AND OIL FRACTIONS HYDROTREATMENT

Samara State Technical University, Samara, Russia

16.30 Coffee-break

Section I.
CATALYSTS FOR HYDROGENATIVE PROCESSES:
PRACTICAL AND FUNDAMENTAL ASPECTS

16.45

OP-I-1

Belopukhov E.A.¹, Belyi A.S.^{1,2}, Kir'yanov D.I.¹, Smolikov M.D.^{1,2}, Shkurenok V.A.¹

ZEOLITE CATALYSTS AND PROCESSES FOR GASOLINE CUTS HYDROPROCESSING

¹*Institute of Hydrocarbons Processing SB RAS, Omsk, Russia*

²*Omsk State Technical University, Omsk, Russia*

17.00

OP-I-2

**Ivanov D.P.¹, Pirutko L.V.¹, Kharitonov A.S.¹, Noskov A.S.¹, Abrashenkov P.A.²,
Golovachev V.A.³, Kondrashev D.O.³, Kleimenov A.V.³**

**EFFICIENT HYDRODEOXYGENATION OF NONLINEAR KETONES ON A NI-ZEOLITE
COMPOSITE CATALYST**

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

²*PC Gazpromneft-MNPZ, Moscow, Russia*

³*PJSC Gazprom Neft, Saint-Petersburg, Russia*

17.15

OP-I-3

Dzhikiya O.V.¹, Smolikov M.D.^{1,2}, Zatolokina E.V.¹, Kazantsev K.V.¹, Belyi A.S.^{1,2}

**PREPARATION AND STUDY OF Pd/SO₄²⁻/ZrO₂/Al₂O₃ CATALYST FOR ISOMERIZATION OF
N-HEXANE**

¹*Institute of Hydrocarbon Processing, Omsk, Russia*

²*Omsk State Technical University, Omsk, Russia*

17.30

OP-I-4

**Kulikova M.^{1,2}, Nikulshin P.¹, Mozhaev A.¹, Lamonier C.², Fournier M.², Lancelot C.²,
Blanchard P.², Payen E.²**

**ALUMINA SUPPORTED (Ni)MoWS₂ HYDROTREATING CATALYSTS PREPARED USING
MIXED SiW_nMo_{12-n} HETEROPOLYANIONS**

¹*Samara State Technical University, Samara, Russia*

²*Université Lille1, Villeneuve d'Ascq, France*

17.45

OP-I-5

Buluchevskiy E.A.^{1,2}, Lavrenov A.V.¹, Fedorova E.D.¹, Sayfulina L.F.¹, Nepomnyashchy A.A.¹

B₂O₃-Al₂O₃ – SUPPORT FOR CATALYST OF HYDROCARBONS PROCESSING

¹*Institute of Hydrocarbons Processing, Omsk, Russia*

²*Omsk State University, Omsk, Russia*

19.00 Welcome Reception

April 19, Tuesday

PLENARY LECTURES

9.00

PL-3

Dr. Kurt VandenBussche

HYDROPROCESSING, A SUITE OF VERSATILE TECHNOLOGIES TO MEET FUEL PRODUCERS' RAPIDLY EVOLVING NEEDS

UOP, A Honeywell Company, Des Plaines, IL, USA

9.45

PL-4

Professor Irina Ivanova

DEVELOPMENT OF ZEOLITE BASED MICRO-MESOPOROUS CATALYSTS FOR PETROCHEMISTRY AND OIL REFINING

M.V. Lomonosov Moscow State University, Russia

11.30 Coffee-break

Section I.

CATALYSTS FOR HYDROGENATIVE PROCESSES: PRACTICAL AND FUNDAMENTAL ASPECTS

10.45

OP-I-6

Kozhevnikov I.V.¹, North J.¹, Poole O.¹, Alotaibi A.¹, Kozhevnikova E.F.¹, Alsalme A.², Siddiqui M.R.H.²

EFFICIENT HYDRODESULFURIZATION CATALYSTS BASED ON KEGGING POLYOXOMETALATES

¹*Department of Chemistry, University of Liverpool, Liverpool, United Kingdom*

²*Department of Chemistry, King Saud University, Riyadh, Kingdom of Saudi Arabia*

11.00

OP-I-7

Nadeina K.A., Klimov O.V., Pereyma V.Yu., Dik P.P., Kazakov M.O., Gerasimov E.Yu., Prosvirin P.P., Noskov A.S.

INFLUENCE OF MG ON ACTIVITY AND SELECTIVITY OF ASA CATALYSTS IN HDS OF FCC GASOLINE

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

11.15

OP-I-8

Nikulshin P., Minaev P., Mozhaev A., Pimerzin A.

**EFFECT OF SUPPORT IN HYDROTREATING CATALYSTS PREPARED USING PW₁₂-
HETEROPOLYACID AND Ni CITRATE ON MORPHOLOGICAL AND STRUCTURAL CHANGES
IN NiWS SPECIES AND THEIR ACTIVITIES**

Samara State Technical University, Samara, Russia

11.30

OP-I-9

Pereyma V.Yu., Gerasimov E.Yu., Prosvirin I.P., Klimov O.V., Noskov A.S.

**EFFECT OF THERMAL TREATMENT ON THE PROPERTIES OF NiW/Al₂O₃ HDS CATALYSTS
PREPARED WITH CITRIC ACID**

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

11.45

OP-I-10

Smolikov M.D.^{1,2}, Belyi A.S.^{1,2}, Kir'yanov D.I.¹, Shkurenok V.A.¹, Belopukhov E.A.¹

A NOVEL CATALYSTS FOR THE ISOMERIZATION OF C₅-C₇ HYDROCARBONS

¹*Institute of Hydrocarbon Processing SB RAS, Omsk, Russia*

²*Omsk State Technical University, Omsk, Russia*

12.00

OP-I-11

**Vatutina Yu.V., Klimov O.V., Nadeina K.A., Danilova I.G., Gerasimov E.Yu., Prosvirin P.P.,
Noskov A.S.**

**INFLUENCE OF B ON PROPERTIES AND CATALYTIC ACTIVITY OF COMO/Al₂O₃ CATALYSTS
FOR HYDROTREATING OF DIESEL FUELS**

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

12.15

OP-I-12

Yeletsky P.M.¹, Mironenko O.O.¹, Sosnin G.A.^{1,2}, Yakovlev V.A.¹

**INVESTIGATION OF STEAM CRACKING OF HEAVY OIL IN THE PRESENCE OF Ni- AND Mo-
BASED NANODISPERSED CATALYSTS**

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

²*Novosibirsk State University, Novosibirsk, Russia*

12.30

OP-I-13

Ostrovski N.

PECULIARITIES OF CATALYST DEACTIVATION IN FUELS HYDROPROCESSING

Hipol a.d., Odžaci, Serbia

12.45 Lunch

PLENARY LECTURE

14.00

PL-5

Professor Dragomir Bukur

CONVERSION OF NATURAL GAS-(COAL- OR BIOMASS-) DERIVED SYNTHESIS GAS TO TRANSPORTATION FUELS AND CHEMICAL FEEDSTOCKS VIA FISCHER-TROPSCH SYNTHESIS

Chemical Engineering Program, Texas A&M University at Qatar, Doha, Qatar

KEYNOTE LECTURE

14.45

KL-3

Professor Vladimir Kapustin^{1,2}

STATUS OF HYDROGENATION PROCESSES IN RUSSIA. CHALLENGES AND PROSPECTS

¹*JSC VNIPIneft, Moscow, Russia*

²*Gubkin Russian State Oil and Gas University, Moscow, Russia*

Section 1.

CATALYSTS FOR HYDROGENATIVE PROCESSES: PRACTICAL AND FUNDAMENTAL ASPECTS

15.15

OP-I-14

Djalalova Sh.¹, Gulomov Sh.¹, Nasullaev Kh.^{1,2}, Yunusov M.¹

INFLUENCE OF METHOD OF ACTIVE COMPONENTS DRAWING ON THE DISTRIBUTION OF HYDRATING METALS IN CATALYSTS OF HYDRO PURIFICATION

¹*Uzbek Scientific - Research Chemical - Pharmaceutical Institute named A. Sultanov, Tashkent, Uzbekistan*

²*National University of Uzbekistan named M. Ulugbek, Tashkent, Uzbekistan*

15.30

OP-I-15

Chumachenko Yu.A., Lavrenov A.V., Gulyaeva T.I., Arbuzov A.B., Leontieva N.N., Ivashchenko O.V., Trenikhin M.V.

EFFECT OF STATE HYDROGENATING COMPONENT ON THE PROPERTIES OF Pt-CONTAINING CATALYSTS OF ONE-STEP VEGETABLE OIL HYDROCRACKING

Institute of Hydrocarbons Processing SB RAS, Omsk, Russia

15.45

OP-I-16

Belyi A.S.

CURRENT STATUS OF RESEARCH AND DEVELOPMENT PROSPECTS OF THE PROCESS AND CATALYSTS OF GASOLINE FRACTIONS REFORMING

Institute of Hydrocarbon Processing SB RAS, Omsk, Russia

16.00

Flash presentations

Coffee

Poster Session

18.00 Guide Excursion around Belgrade

April 20, Wednesday

PLENARY LECTURES

9.00

PL-6

Professor Jorge Ancheyta

UPGRADING OF HEAVY OILS AND RESIDUA BY MODERATE CATALYTIC HYDROPROCESSING

Mexican Petroleum Institute, Mexico City, Mexico

9.45

PL-7

Professor Valeriy Kryukov

RUSSIA'S OIL DILEMMA: TO GO NORTH-EAST OR TO GO DEEP?

National Research University Higher School of Economics, Moscow, Russia

11.30 Coffee-break

Section II.
DEVELOPMENT, ENGINEERING, MODELLING AND
PRACTICAL APPLICATION OF HYDROPROCESSING TECHNOLOGIES

10.45

OP-II-1

Leflaive P., López García C.

**ADAPTING CRACKED NAPHTHA HYDROTREATING TO FEED CHARACTERISTICS FOR
ULTRA-LOW-SULFUR GASOLINE PRODUCTION**

IFP Energies Nouvelles, Solaize, France

11.00

OP-II-2

Doronin V.P., Sorokina T.P., **Potapenko O.V**

**CRACKING CATALYSTS DEVELOPED IN THE INSTITUTE OF HYDROCARBONS PROCESSING
OF SB RAS**

Institute of Hydrocarbons Processing SB RAS, Omsk, Russia

11.15

OP-II-3

Sladkovskiy D.A.¹, Kuzichkin N.V.¹, Semikin K.V.¹, Smirnova D.A.¹, Sladkovskaia E.V.¹,
Murzin D.Yu.²

**ALKYLATION OF ISOBUTANE WITH BUTENES ON A SOLID CATALYST USING CATALYTIC
DISTILLATION WITH EXTERNAL REACTION SECTIONS**

¹*St. Petersburg State Technological Institute, St. Petersburg, Russia*

²*Åbo Akademi University, Turku, Finland*

11.30

OP-II-4

Lopatin S.^{1,2}, Mikenin P.^{1,2}, Zazhigalov S.^{1,2}, Pisarev D.^{1,2}, Baranov D.^{1,2,3},
Zagoruiko A.^{1,2,3,4}

**MICRO-FIBROUS STRUCTURED CATALYSTS VS CONVENTIONAL CATALYTIC SYSTEMS:
DIRECT COMPARISON OF THE MASS TRANSFER EFFICIENCY**

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

²*Research and Educational Center for Energy Efficient Catalysis, Novosibirsk State
University, Novosibirsk, Russia*

³*Novosibirsk Technical State University, Novosibirsk, Russia*

⁴*Tomsk Polytechnic University, Tomsk, Russia*

11.45

OP-II-5

Kondrasheva N.K.¹ Kondrashev D.O.²

**RATIONAL USE OF THE PRODUCTS OF HYDROCRACKING IN THE "ENVIRONMENTALLY
FRIENDLY" MOTOR FUELS**

¹*National Mineral Resources University (Mining University), Saint-Petersburg, Russia*

²*JSC Gazprom Neft, Saint-Petersburg, Russia*

12.00

OP-II-6

Aleksandrova T.N., Kondrasheva N.K.

DEMETALLIZATION OF HEAVY OIL AS A COMPLEX PROBLEM

National Mineral Resources University (Mining University), Saint-Petersburg, Russia

12.15

OP-II-7

Glisic S.B., Orlovich A.

SIMULATION AND MODELLING OF AN INDUSTRIAL HYDROTREATING PROCESS USING BLENDS OF STRAIGHT-RUN GAS OIL AND LIGHT CYCLE OIL

Faculty of Technology and Metallurgy University of Belgrade, Serbia

12.30

OP-II-8

Bukur D.B.¹, Antzara A.², Heracleous E.³, Ipsakis D.², Silvester L.¹, Lemonidou A.A.²

A NOVEL PROCESS FOR PRODUCTION OF HIGH-PURITY H₂: SORPTION-ENHANCED CHEMICAL LOOPING METHANE REFORMING

¹*Chemical Engineering Program, Texas A&M University at Qatar, Doha, Qatar*

²*Department of Chemical Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece*

³*School of Science & Technology, International Hellenic University, Thessaloniki, Greece*

12.45 Lunch

KEYNOTE LECTURES

14.00

KL-4

Professor Anton Maximov^{1,2}

HYDROCRACKING AND HYDRODEAROMATIZATION USING DISPERSED SLURRY CATALYSTS

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

²*Moscow State University, Moscow, Russia*

14.30

KL-5

Kharitonov A.S.¹, Parfenov M.V.¹, Pirutko L.V.¹, Ivanov D.P.¹, Dubkov K.A.¹, Noskov A.S.¹, Abrashenkov P.A.², Golovachev V.A.³, Miroshkina V.D.³, Kondrashev D.O.³, Kleimenov A.V.³

THE SYNTHESIS OF HIGH-OCTANE COMPONENTS FROM THE PRODUCTS OF CATALYTIC CRACKING

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

²*PC Gazpromneft-MNPZ, Moscow, Russia*

³*PJSC Gazprom Neft, Saint-Petersburg, Russia*

Section III.

HYDROGENATIVE PROCESSING OF HEAVY OILS, SHALE OILS, RENEWABLE AND ALTERNATIVE FEEDSTOCKS

15.00

OP-III-1

Dimitriadis A., Bezergianni S.

BIOMASS VS. PLASTIC PYROLYSIS OIL UPGRADING VIA HYDROTREATING

Chemical Process & Energy Resources Institute (CPERI), Centre for Research and Technology Hellas (CERTH), Thessaloniki, Greece

15.15

OP-III-2

Dobrynkin N., Batygina M., Noskov A.

THE STUDY OF INORGANIC ROCK MATRICES FOR DEVELOPMENT OF EFFECTIVE CATALYSTS FOR UPGRADING OF HEAVY OILS IN SITU

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

15.30

OP-III-3

Maniecki T., Gzowska A., Mierczyński P., Ciesielski R., Kędziora A.

HYDROCONVERSION OF POLIETHYLENE WASTE – A WAY FOR UTILISATION OF THE WASTE PLAS

Lodz University of Technology, Institute of General and Ecological Chemistry, Poland

15.45

OP-III-4

Kazakov M.O., Dik P.P., Klimov O.V., Cherepanova S.V., Chesalov Yu.A., Noskov A.S.

EFFECT OF THE MINERAL MATRIX ON HYDROCONVERSION OF OIL SHALE

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

16.00

OP-III-5

Mierczyński P., Ciesielski R., Kędziora A., Maniecki T.

MONO Ni(Cu) and BIMETALLIC Pd- Ni(Cu) SUPPORTED CATALYSTS FOR OXY-STEAM REFORMING OF METHANOL REACTION

Lodz University of Technology, Institute of General and Ecological Chemistry, Poland

16.15

OP-III-6

Mierczyński P., Ciesielski R., Kędziora A., Maniecki T.

BIMETALLIC Pd-Cu/ZnO-Al₂O₃, ZrO₂-Al₂O₃ CATALYSTS FOR METHANOL SYNTHESIS

Lodz University of Technology, Institute of General and Ecological Chemistry, Poland

12.45 Closing

POSTER PRESENTATIONS

PP-1

Dimitriadis A., Bezergianni S., Dagonikou V.

EFFECTIVENESS OF HDT CATALYSTS DURING CO-PROCESSING OF BIOMASS AND PETROLEUM FRACTIONS

Chemical Process & Energy Resources Institute (CPERI), Centre for Research and Technology Hellas (CERTH), Thessaloniki, Greece

PP-2

Kulikov L., Vinnikova M., Terenina M., Maximov A., Karakhanov E.

MESOPOROUS AROMATIC FRAMEWORKS AS MATRIX FOR IN SITU PREPARATION OF HYDROGENATION–HYDROCRACKING CATALYSTS

M.V. Lomonosov Moscow State University, Moscow, Russia

PP-3

Onishchenko M.I.¹, Kulikov A.B.¹, Maximov A.L.^{1,2}

COLOPHONY HYDROCONVERSION OVER Pt-CONTAINING MESOPOROUS SILICA-ALUMINA CATALYST

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

²*M.V. Lomonosov Moscow State University, Moscow, Russia*

PP-4

Petrukhina N.N.¹, Maksimov A.L.^{1,2}

ACTIVITY OF SULFIDE NANOPARTICLES FORMED FROM POLYMETALLIC PRECURSORS IN SLURRY-PHASE HYDROCRACKING

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

²*M.V. Lomonosov Moscow State University, Chemistry Department, Moscow, Russia*

PP-5

Roldugina E.A.¹, Kardashev S.V.¹, Maksimov A.L.^{1,2}, Karakhanov E.A.¹

HYDROTREATMENT OF GUAIACOL AND BIO-OIL USING BIFUNCTIONAL CATALYSTS OF NOBLE-METALS SUPPORTED ON MESOPOROUS ZIRCONIA AND ALUMINOSILICATES

¹*M.V. Lomonosov Moscow State University, Department of Chemistry, Moscow, Russia*

²*A.V. Topchiev Institute of Petrochemical Synthesis, Moscow, Russia*

PP-6

Sizova I.A.¹, Maximov A.L.^{1,2}

LIGHT CYCLE OIL HYDROCRACKING AND HYDRODEAROMATIZATION ON UNSUPPORTED NI-W-S CATALYSTS SYNTHESIZED IN SITU

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

²*M.V. Lomonosov Moscow State University, Dep. of Chemistry, Moscow, Russia*

PP-7

Topolyuk Yu.A.^{1,2}, Maximov A.L.^{1,3}

MoNiW SULFIDE CATALYSTS FOR AROMATICS HYDROGENATION SYNTHESIZED BY THERMAL DECOMPOSITION OF POLYMER-METAL COMPLEXES

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

²*Gubkin Russian State University of Oil and Gas, Moscow, Russia*

³*M.V. Lomonosov Moscow State University, Dep. of chemistry, Moscow, Russia*

PP-8

Zazhigalov S.^{1,2}, Mikenin P.^{1,2}, Pisarev D.^{1,2}, Baranov D.^{1,2,3}, Lopatin S.^{1,2}, **Zagoruiko A.**^{1,2,3,4}

IMPROVEMENT OF THE ADSORPTION-CATALYTIC SYSTEM FOR ORGANIC IMPURITIES REMOVING

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

²*Research and Educational Center for Energy Efficient Catalysis, Novosibirsk State University, Novosibirsk, Russia*

³*Novosibirsk Technical State University, Novosibirsk, Russia*

⁴*Tomsk Polytechnic University, Tomsk, Russia*

PP-9

Elyshev A.^{1,2}, Larina T.¹, Cherepanova S.¹, Mikenin P.^{1,2}, Lopatin S.^{1,2}, Zazhigalov S.^{1,2}, Pisarev D.^{1,2}, Baranov D.^{1,2,3}, **Zagoruiko A.**^{1,2,3,4}

PHYSICAL AND CHEMICAL PROPERTIES OF CuCr₂O₄-BASED GLASS FIBER CATALYST SYNTHESIZED BY SURFACE THERMO-SYNTHESIS METHOD

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

²*Research and Educational Center for Energy Efficient Catalysis, Novosibirsk State University, Novosibirsk, Russia*

³*Novosibirsk Technical State University, Novosibirsk, Russia*

⁴*Tomsk Polytechnic University, Tomsk, Russia*

PP-10

Elyshev A.^{1,2}, Larina T.¹, Cherepanova S.¹, Mikenin P.^{1,2}, Lopatin S.^{1,2}, Zazhigalov S.^{1,2}, Pisarev D.^{1,2}, Baranov D.^{1,2,3}, **Zagoruiko A.**^{1,2,3,4}

PHYSICAL AND CHEMICAL PROPERTIES OF FeO_x-BASED GLASS FIBER CATALYST SYNTHESIZED BY SURFACE THERMO-SYNTHESIS METHOD

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

²*Research and Educational Center for Energy Efficient Catalysis, Novosibirsk State University, Novosibirsk, Russia*

³*Novosibirsk Technical State University, Novosibirsk, Russia*

⁴*Tomsk Polytechnic University, Tomsk, Russia*

PP-11

Mierczyński P., Ciesielski R., Kędziora A., Maniecki T.

MONOMETALLIC Ni SUPPORTED CATALYSTS FOR OXY-STEAM REFORMING OF METHANOL

Lodz University of Technology, Institute of General and Ecological Chemistry, Poland

PP-12

Vasilevich A.V., Baklanova O.N., Lavrenov A. V.

HYDROCONVERSION OF HEAVY RESIDUE ON FINE MoNi CARBIDE CONTAINING CATALYST

Institute of Hydrocarbons Processing of SB RAS, Omsk, Russia

PP-13

Rodríguez Emmanuel¹, Ancheyta Jorge², Trejo Fernando¹

ANALYSIS OF COMPATIBILITY AND STABILITY OF ASPHALTENES FROM BLENDS OF CRUDE OILS

¹*Centro de Investigación en Ciencia Aplicada y Tecnología Avanzada del Instituto Politécnico Nacional, México*

²*Instituto Mexicano del Petróleo, México*

PP-14

Félix Guillermo¹, Ancheyta Jorge², Trejo Fernando¹

**Determination of particle size of asphaltene from crude oils and them blends
ANALYSIS OF COMPATIBILITY AND STABILITY OF ASPHALTENES FROM BLENDS OF CRUDE OILS**

¹*Centro de Investigación en Ciencia Aplicada y Tecnología Avanzada del Instituto Politécnico Nacional, México*

²*Instituto Mexicano del Petróleo, México*

PP-15

Kondrasheva N.K.¹ Kondrashev D.O.²

EFFECT OF THE HYDROCARBON AND NON-HYDROCARBON COMPOSITION ON QUALITY AND ECOLOGICAL PROPERTIES OF MARINE LOW-VISCOSITY FUELS FROM MIDDLE DISTILLATE FRACTIONS OF CATALYTIC CRACKING AND THERMODESTRUCTIVE PROCESSES

¹*National Mineral Resources University (Mining University), Saint-Petersburg, Russia*

²*JSC Gazprom Neft, Saint-Petersburg, Russia*

PP-16

Kondrashev D.O.

IMPROVING THE YIELD AND QUALITY OF CATALYTIC REFORMING REFORMATES DUE TO THE COMBINED IMPLEMENTATION OF THE INTER-STAGE SEPARATION AND HYDROISOMERIZATION

JSC Gazprom Neft, Saint-Petersburg, Russia

VIRTUAL PRESENTATIONS

VP-1

Boronoev M.P.¹, Ignatyeva V.I.¹, Terenina M.V.¹, Kardasheva Yu.S.¹, Maximov A.L.^{1,2}, Karakhanov E.A.¹

NiW SULFIDE NANOCATALYSTS SUPPORTED ON MESOPOROUS PHENOL-FORMALDEHYDE POLYMERS FOR HYDROGENATION AND HYDROCRACKING

¹*M.V. Lomonosov Moscow State University, Moscow, Russia*

²*A.V. Topchiev Institute of Petrochemical Synthesis, Moscow, Russia*

VP-2

Akchurin T.I., Baybulatova N.Z., Dokichev V.A.

HYDROGENATION OF LINEAR AND CYCLIC OLEFINS ON PALLADIUM CATALYST ON CARBON-SILICA SUPPORT

Ufa Institute of Chemistry RAS, Ufa, Russia

VP-3

Akimkhan A., Tulepov M., Lussyukov D.

STYRENE POLYMERIZATION BY DISPERSING BENTONITE

Al-Farabi Kazakh National University, Almaty, Kazakhstan

VP-4

Alexandrova Y.V., Nemtsov A.A., Pachina M.I.

ALKYLATION OF ISOBUTANE ON COPPERCONTAINING ZEOLITE CATALYSTS

Saint-Petersburg State Institute of Technology (Technical University), Saint-Petersburg, Russia

VP-5

Balobaeva N.N., Orehov V.S., Vyzhanov A.V., Degtarev A.D., Leont'eva A.I.

NANOSTRUCTURED CATALYSTS FOR GASOLINE YIELD INCREASE IN THE PROCESS OF ATMOSPHERIC VACUUM CRUDE OIL DISTILLATION

Tambov State Technical University, Tambov, Russia

VP-6

Batov A.E.^{1,2}, Kadiev Kh.M.^{1,2}, Dandaev A.U.^{1,2}, Kadieva M.Kh.^{1,2}, Oknina N.V.¹, Maksimov A.L.^{1,2}

HYDROCONVERSION OF HEAVY WASTES FROM REFINERY IN THE PRESENCE OF ULTRAFINE CATALYSTS

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VP-7

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OPTIMIZATION OF DIESEL FUEL COMPONENTS PRODUCTION USING THE MODEL OF INTERCONNECTED HYDROTREATING AND HYDRODEWAXING PROCESSES

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VP-8

Boretskaya A.V., Lamberov A.A., Ilyasov I.R.

COMPARISON OF PERFORMANCE OF Pd/ γ -Al₂O₃ CATALYSTS BASED ON ALUMINA WITH DIFFERENT ACIDITY IN THE HYDROGENATION OF 1,3-butadiene

Physical Chemistry Department, Kazan (Volga Region) Federal University, Kazan, Russia

VP-9

Chuzlov V.A.¹, Ivanchina E.D.¹, Molotov K.V.²

THE EFFICIENCY IMPROVEMENT OF THE LIGHT NAPHTHA ISOMERIZATION BY OPTIMAL RAW MATERIALS DISTRIBUTION

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VP-10

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Platonov V.V.², Belinskaya N.S.¹, Glik P.A.¹

TECHNOLOGY TO SAVE THE RESOURCE OF PT-CATALYST FOR HIGHER PARAFFINS DEHYDROGENATION

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VP-11

Galimova A.T., Sagdeev A.A., Hazipov M.P., Hisamov A.E., Sagdeev K.A.

REGENERATION OF CATALYST USING SUPERCRITICAL FLUID CO₂-EXTRACTION PROCESS

Nizhnekamsk Chemical Technological Institute (Branch Institute) of the Kazan National Research Technological University, Nizhnekamsk, Russia

VP-12

Glotov A., Nikiforova A., Levshakov N., Kardashev S., Lysenko S., Karakhanov E.

USING SULFUR REDUCTION ADDITIVES ON MESOPOROUS MCM-41 IN FLUID CATALYTIC CRACKING OF VACUUM GAS OIL

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VP-13

Ibragimova D.A.¹, Petrov S.M.¹, Baybekova L.R.¹, Ganeeva Yu.M.², Lakhova A.I.¹,
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CATALYTIC ACTION OF MINERALS OF RESERVOIR ROCKS ON THE TRANSFORMATION OF THE HYDROCARBON COMPOSITION OF HEAVY CRUDE OIL IN CONDITION OF STEAM METHOD

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VP-14

Khadzhiev S.N., Kadiev Kh.M., **Kadieva M.Kh.**, Dogova E.S.

CATALYSIS IN DISPERSED PHASE: SYTHESIS AND STUDY OF NANOSCALE CATALYSTS IN ADVANCED REFINING OF PETROLEUM

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VP-15

Kuznetsov P.N.¹, Buryukin F.A.², **Kazbanova A.V.**¹, Kuznetsova L.I.¹, Tarasova L.S.³

STUDY OF THE REASONS OF DEACTIVATION OF PLATINUM PROMOTED WO_x-ZrO₂ IN THE ISOMERIZATION OF n-HEPTANE-BENZENE MIXTURE

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VP-16

Abdyushev R.R., Khamzin Y.A., Shiriyaev R.R., Davletshin A.R., Makhmutova O.N., Yakupov N.V., Telyashev E.G.

SUPERACID CATALYSTS BASED ON MONTMORILLONITE DURING OLIGOMERIZATION PROCESS OF THE BUTANE-BUTYLENE FRACTION

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VP-17

Omarov Sh.O., Vlasov E.A., Semikin K.V.

INHIBITION OF Al-Zr-CATALYSTS FOR ISOBUTANE ALKYLATION

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VP-18

Petrov S.M.¹, Zaidullin I.M.¹, Ibragimova D.A.¹, Baybekova L.R.¹, Kaukova G.P.², Lakhova A.I.¹

CONVERTING BITUMINOUS OIL IN SUPERCRITICAL WATER WITH SUSPENDED PARTICLES AND HEMATITE CAUSTOBIOLITES

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VP-19

Safiullina A.G., Petrov S.M., Baybekova L.R., Ibragimova D.A., Lakhova A.I., Petrova A.N.
AUTOCATALYTIC PROCESSES IN CONVERSION OF HEAVY OIL IN THE PRESENCE OF NANOSIZED METAL OXIDE PARTICLES OF VARIABLE VALENCE FE+2, NI+2

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VP-20

Volkova G.G.¹, Zagretdinova E.R.^{1,2}, Maksimovskaya R.I.¹, Plyasova L.M.¹

BIFUNCTIONAL CATALYSTS FOR HALIDE-FREE CARBONYLATION OF DIMETHYL ETHER TO METHYL ACETATE

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VP-21

Vutolkina A., Zanina A., Makhmutov D., Kardashev S., Maksimov A., Kardasheva Y., Karakhanov E.

BIMETALLIC SULFIDED CATALYSTS BASED ON NANOSTRUCTURED MESOPOROUS AL-HMS AND AL-MCM-41 IN HYDROCRACKING OF SHALE OIL

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VP-22

Vyzhanov A.V., Leont'eva A.I., Belkov A.I., Degtyarev A.A., Balobaeva N.N.

CATALYSTS FOR PROCESSING HEAVY OIL DISTILLATES INTO FUEL OIL

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VP-23

Yakupova I.V., Kirillova M.D., Chernyakova E.S., Ivanchina E.D.

THE REACTOR PRESSURE EFFECT ON THE REFORMING CATALYST LIFETIME

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VP-24

Tataurshchikov A.A., Ivanchina E.D., Krivtcova N.I.

MODEL OF SULFUR COMPOUND KINETICS IN THE HYDROTREATING PROCESS BASED ON INDUSTRIAL DATA of LG-24/7

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VP-25

Gryaznova I.A., Samborskaya M.A., Romanenkova V.V., Volf A.V.

OPTIMIZATION OF REACTOR OF HYDROCARBON REFINING ON ZEOLITE CATALYSTS

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VP-26

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APPLICATION OF THE NEW NANOMATERIALS IN THE CRACKING OF PROPANE

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VP-27

Grigoryev A.S.¹, **Matveyeva A.N.**¹, Nemykina E.I.², Pakhomov N.A.¹

INFLUENCE OF THE PRECURSORS NATURE IN THE PREPARATION OF CROMIA/ALUMINA CATALYSTS FOR DEHYDROGENATION

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VP-28

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HYDRODEAROMATIZATION OF MIDDLE DISTILLATES ON SULFIDED NiW CATALYSTS CONTAINING MICRO/MESOPOROUS NANOCRYSTALS

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VP-29

Salnikov A.V.¹, Yashnik S.A.¹, Kerzhentsev M.A.¹, Ismagilov Z.R.^{1,2}, Yaming J.³, Koseoglu O.R.³

PROSPECTS OF APPLICATION OF OXIDATIVE DESULFURIZATION COMBINED WITH HDS FOR PRODUCTION OF LOW-SULFUR DIESEL FUEL

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VP-30

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FILTERLESS TECHNOLOGY FOR HYDROPROCESSES

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VP-31

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NEW HYBRID PEROVSKITE-TYPE CATALYSTS $(\text{Gd,Sr})_{n+1}\text{Fe}_n\text{O}_{3n+1}$ FOR DRY REFORMING OF METHANE AND SUBSEQUENT LIGHT OLEFINS PRODUCTION

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