

IV Scientific-Technological Symposium



**CATALYTIC
HYDROPROCESSING
IN OIL REFINING**

**APRIL 26 - 30
2021 / GREECE**

*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)**

Thessaloniki, Greece, April 26 – 30, 2021

LIST OF ACCEPTED PRESENTATIONS

PLENARY LECTURES

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Prof. Guido Busca

CATALYTIC MATERIALS BASED ON SILICA AND ALUMINA

The University of Genova, Italy

PL-2

Prof. Wilhelm Schwieger

HIERARCHICAL ZEOLITES IN PROCESSING OF HYDROCARBONS

Friedrich–Alexander University Erlangen–Nürnberg, Germany

PL-3

Prof. Angeliki Lemonidou

INTENSIFICATION OF STEAM REFORMING FOR HYDROGEN PRODUCTION

Aristotle University of Thessaloniki, Greece

PL-4

Dr. Mohan S. Rana

RECENT ADVANCES IN RESIDUE HYDROPROCESSING

Kuwait Institute for Scientific Research, Safat, Kuwait

KEYNOTE LECTURES

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

KL-2

Prof. Maria Filipa Ribeiro

FROM POWDER Pt CATALYSTS TO SHAPED NiMo CATALYSTS: A TALE ABOUT HYDROCRACKING COMPLEXITY

Instituto Superior Técnico, Lisbon, Portugal

KL-3

Prof. Joris Thybaut

SIMULATING COMPLEX MIXTURES CONVERSION FROM FIRST PRINCIPLES

Ghent University, Ghent, Belgium

KL-4

Dr. Vladimir Danilevich

ALUMINUM OXIDES AS SUPPORTS FOR HYDROTREATING CATALYSTS

Boreskov Institute of Catalysis, Novosibirsk, Russia

ORAL PRESENTATIONS

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

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OP-2

Escobar J.¹, Gutiérrez A.¹, Ramírez J.², Cuevas R.², Ángeles C.¹, Barrera M.C.³

THIOPHENE HDS ON La-MODIFIED CoMo/AL₂O₃ SULFIDED CATALYSTS. EFFECT OF RARE-EARTH CONTENT

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²*UNICAT, México City, México*

³*F.C.Q.-CIRES, Univ. Veracruzana, Coatzacoalcos, México*

OP-3

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 C₅-C₆ AND C₇-PARAFFIN HYDROCARBONS ISOMERIZATION PROCESSES

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OP-4

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

¹Gubkin University, Moscow, Russia

²Institute for Micromanufacturing, Louisiana Tech University, Ruston, USA

OP-5

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

¹University of Belgrade, Belgrade, Serbia

²Military Technical Institute (VTI), Belgrade, Serbia

OP-6

Yashnik S.A.¹, Ismailov E.G.², Ismagilov Z.R.¹

EFFECT OF BENTONITE ADDITION ON PROPERTIES OF NANOSTRUCTURED PtPd-ZEOLITE HYDRODESULFURIZATION CATALYST

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²Institute of Petrochemical Processes of ANAS, Baku, Azerbaijan

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Quintana-Gamboa S., Richards-Figueroa Z., Torres-Otañez G., S. Fuentes-Moyado,

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

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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

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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

¹IFP Energies nouvelles, Solaize, France

²Synchrotron SOLEIL L'orme des Merisiers, Gif-sur-Yvette Cedex, France

OP-10

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

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Simakova I.¹, Prokhod'ko S.¹, Niphadkar P.², Bokade V.², Murzin D.Y.³

BIODERIVED ANTIKNOCK ADDITIVES: SYNTHESIS OF GAMMA-VALEROLACTONE BY LIQUID-PHASE LEVULINIC ACID HYDROGENATION OVER VIII GROUP METALS

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²*CSIR - National Chemical Laboratory, Pune, India*

³*Abo Akademy University, Turku, Finland*

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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-Al₂O₃ CATALYSTS FOR SECOND STAGE HYDROCRACKING: INFLUENCE OF Si/AI RATIO IN ZEOLITE

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Vela Diaz F., 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

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

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Alvarez-Majmutov A., Sandeep Badoga, Tingyong Xing, Jinwen Chen

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

Natural Resources Canada, CanmetENERGY Devon, Canada

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Shamanaev I., Suvorova A., Gerasimov E., Pakharukova V., Bukhtiyarova G.

COMPARATIVE STUDY OF Ni-PHOSPHIDE CATALYSTS SUPPORTED ON GRANULATED Al₂O₃ IN HYDROTREATING OF STRAIGHT RUN GAS OIL

Boreskov Institute of Catalysis, Novosibirsk, Russia

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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

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OP-18

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

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Pimerzin Al.A.^{1,2}, Glotov A.P.², Savinov A.A.¹

LINEAR ALKANES HYDROISOMERIZATION OVER COMOS CATALYSTS SUPPORTED ON MODIFIED ALUMINOSILICATES

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Karakoulia S.A.¹, Heracleous E.^{1,2}, Lappas A.A.¹

Ni AND Pt CATALYSTS SUPPORTED ON SILICOALUMINOPHOSPHATES FOR n-HEXADECANE HYDROISOMERIZATION

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

CHARACTERIZATION AND HYDROISOMERIZATION PERFORMANCE OF Mg-PROMOTED Pt/ZSM-23/Al₂O₃ CATALYSTS

Boreskov Institute of Catalysis, Novosibirsk, Russia

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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}

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Sazama P.¹, Kaucký D.¹, Morávková J.¹, Pilar R.¹, Bortnovsky O.²

HIGHLY EFFICIENT HYDROISOMERIZATION OVER ZEOLITES WITH MUTUAL CLOSE VICINITY AND HIGH ACCESSIBILITY OF STRONGLY ACIDIC CENTERS

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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/Al₂O₃ CATALYSTS WITH Mo OR In

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³Boreskov Institute of Catalysis, Novosibirsk, Russia

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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

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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

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Ntagkonikou V.^{1,2}, Bezergianni S.¹, Karonis D.²

AN ALTERNATIVE APPROACH FOR LCO UPGRADING

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²National Technical University of Athens, Zografou Campus, Athens, Greece

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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 Gd₂(MO₄)₃ (M=Mo, W)

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

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

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A.V. Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Moscow, Russia

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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»

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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

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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

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Belinskaya N.S., Ivanchina E.D., Ivashkina E.N., Vymyatnin E.K., Mauzhigunova E.N.

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Abu Dhabi National Oil Company (ADNOC Refining), Abu Dhabi, United Arab Emirates

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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

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Pernaete 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

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

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National Research Tomsk Polytechnic University, Tomsk, Russia

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Zagoruiko A., Mikenin P., Lopatin S.

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Boreskov Institute of Catalysis, Novosibirsk, Russia

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National research Tomsk Polytechnic University, Tomsk, Russia

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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

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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}, Sobyenin V.A.^{1,2}

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

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OP-42

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

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²Green Innovative Company (GRINCO), Larisa, Greece

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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

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NEW CATALYSTS BASED ON LAYERED DOUBLE HYDROXIDES FOR THE FURFURAL HYDROGENATION

Center of New Chemical Technologies BIC, Omsk, Russia

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Margellou A.¹, Rekos K.¹, Fotopoulos A.¹, Triantafyllidis K.^{1,2}

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

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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

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M.A. Romero, C.Prieto

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Cepsa Research Center, Madrid, Spain

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., Temirbolat A., 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., Vutolkina A.V., Maksimov A.L., Karakhanov E.A.

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

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PP-4

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

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

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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

Tomsk Polytechnic University, Tomsk, Russia

PP-6

Belozertseva N.E., Bogdanov I.A., Balzhanova A.T., Kirgina M.V.

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

National Research Tomsk Polytechnic University, Tomsk, Russia

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Bogdanov I.A., Altynov A.A., Belozertseva N.E., Kirgina M.V.

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

National Research Tomsk Polytechnic University, Tomsk, Russia

PP-8

Boronoev M.P., Maximov A.L., Karakhanov E.A.

VACUUM GAS OIL HYDROTREATMENT USING NiMo(W)S AND Ni₂P CATALYSTS SUPPORTED ON MESOPOROUS POLYMERIC NANOSPHERES

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

PP-9

Demikhova N., Artemova M., Glotov A., Tsaplin D., Ivanov E., Vinokurov V.

MICRO-MESOPOROUS Pt-CONTAINING CATALYSTS FOR XYLENES HYDROISOMERIZATION

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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 ALKYL BENZENE IN FILM SULFONATION REACTOR ON CONCENTRATION OF TARGET PRODUCT AND TETRALINES AND SULFONES CONCENTRATION

National Research Tomsk Polytechnic University, Tomsk, Russia

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Enikeeva L.V., Faskhutdinov A.G., Arefyev I.A., Enikeev M.R., Gubaydullin I.M.

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

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Enikeeva L.V., Potemkin D.I., Uskov S.I., Snytnikov P.V., Enikeev M.R., Gubaydullin I.M.

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

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

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

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

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Ziyadullaev O.E., Abdurakhmanova S.S., Samatov S.B., Otamukhamedova G.Q., Tirkasheva S.I., Ikramov A.

SYNTHESIS OF ACETYLENE ALCOHOLS BY CATALYSTS $ZrCl_2/Ti(O^iPR)_4/PHME$ AND $Sn(OTf)_2/NET_3/MECN$

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Gubaydullin I.M., Koledina K.F., Zaynullin R.Z., Koledin S.N.

MATHEMATICAL MODELING OF KINETICS OF GASOLINE CATALYTIC REFORMING

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Ignatyeva V.I., Caplin D.E., Maximov A.L., Karakhanov E.A.

MODIFIED ZEOLITE MESOPOROUS CATALYST SYSTEMS OF TYPE ZSM-12 FOR ONE-STEP CONVERSION OF CYCLOHEXANE TO ϵ -CAPROLACTONE

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Isaeva V.I., Chernyshev V.V., Tarasov A.L., Kustov L.M.

CONVERSION OF CARBON DIOXIDE INTO PROPIONIC ALDEHYDE ON Co (Rh) NANOPARTICLES ENCAPSULATED IN THE METAL-ORGANIC MATRIX MIL-53 (Al)

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Kazakova M.A., Vatutina Y.V., Kazakov M.O., Klimov O.V., Noskov A.S.

NOVEL COMPOSITE SUPPORT FOR CoMoS HYDROTREATING CATALYST BASED ON MWCNTs GROWN ON γ - Al_2O_3 BY CVD

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Koledina K.F., Gubaydullin I.M., Koledin S.N.

MULTI-CRITERIAL OPTIMIZATION OF A HETEROGENEOUS CATALYTIC REACTION

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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

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Kovalev I.V., Popov M.P., Bychkov S.F., Malbakhova I.A., Nemudry A.P.

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

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Krivosos 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

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Krivtsova N.I., Kotkova E.P.

JOINT HYDROTREATING OF DIESEL FRACTION WITH GASOLINE

National Research Tomsk Polytechnic University, Tomsk, Russia

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Najafova M.A., Salmanova C.G.

INITIATED PHOTOCATALYTIC PROCESSES OF HYDROTREATMENT OF HEAVY OIL RESIDUES

Institute of Petrochemical Processes named after Yu.G. Mamedaliyev ANAS, Baku, Azerbaijan

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Nazarova G.Yu., Ivanchina E.D., Chernyakova E.S., Pchelintseva I.V., Poluboyartsev D.S.

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

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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

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

FURFURYL ALCOHOL AS ONE OF THE PRODUCTS OF LIGNOCELLULOSIC BIOMASS HYDROTREATMENT

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

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

National Research Tomsk Polytechnic University, Tomsk, Russia

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Podryga V., Polyakov S., Trapeznikova M., Churbanova N.

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

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Popov M.V., Zagoruiko A.N., Brester A.E., Lopatin S.A.

DECOMPOSITION OF LIGHT HYDROCARBON TO HYDROGEN ON A FIBERGLASS CATALYST

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Zazhigalov S., Popov M., Belotserkovskiy V., Nemudry A., Zagoruiko A.

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

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MODELING OF HYDROGEN PRODUCTION BY DIESEL REFORMING AT Rh/Ce_{0.75}Zr_{0.25}O_{2-δ}-η-Al₂O₃/FeCrAl WIRE MESH HONEYCOMB CATALYTIC MODULE

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Potemkin D.I., Uskov S.I., Gorlova A.M., Zagoruiko A.N., Fedorova Z.A., Snytnikov P.V., Kirillov V.A., Sobyenin V.A.

HYTHANE PRODUCTION VIA LOW-TEMPERATURE STEAM REFORMING OF NATURAL GAS

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Roldugina E.A., Shayakhmetov N.N., Maximov A.L., Karakhanov E.A.

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

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Salnikov V.A., Borutskii P.N., Dorofeeva E.A., Sorokin I.I., Pakhomov N.A.

DEVELOPMENT OF NiMoP CATALYST FOR HYDROTREATING OF DIESEL FUEL UNDER HIGH PRESSURE

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Semikin K.V., Sladkovskiy D.A., Sladkovskaya E.V., Kuzichkin N.V.

PROPANOL PRODUCTION FROM PROPYL PROPIONATE

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Sineva L.V., 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–TROPSCHE SYNTHESIS CATALYST

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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

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

LIGNIN AND MODEL SUBSTANCE CATALYTIC HYDROGENOLYSIS

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Tirado A., Trejo F., Ancheyta J.

MODELLING OF A BENCH-SCALE FIXED-BED REACTOR FOR CATALYTIC HYDROTREATING OF VEGETABLE OIL

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Vutolkina A.V., Pimerzin A.A., Glotov A.P.

MESOPOROUS HALLOYSITE AND HIERARCHICAL MCM-41/HALLOYSITE ALUMINOSILICATES SUPPORTED CoMoS HDS CATALYSTS

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Yunusov M.P., **Nasullaev Kh.A.**, Djalalova Sh.B., Gulomov Sh.T., Sultanov A.P.

STUDY OF ZEOLITE SORBENTS SYNTHESIZED BASED ON LOCAL KAOLIN

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Yunusov M.P., **Nasullaev Kh.A.**, Gulomov Sh.T., Turdieva D.P., Abduraxmanova I.S., Rahimjanov B.B.

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

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DOUBLE PROMOTION EFFECT ON HDS CoNiMo/Al₂O₃ 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-Al₂O₃ MIXED OXIDES FOR THE HYDRODESULFURIZATION OF DIBENZOTHIOPHENE

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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

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VP-4

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

HYDROTHERMAL SYNTHESIS OF FLUORINATED TITANIA FOR PHOTOCATALYTIC APPLICATIONS

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VP-5

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

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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

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