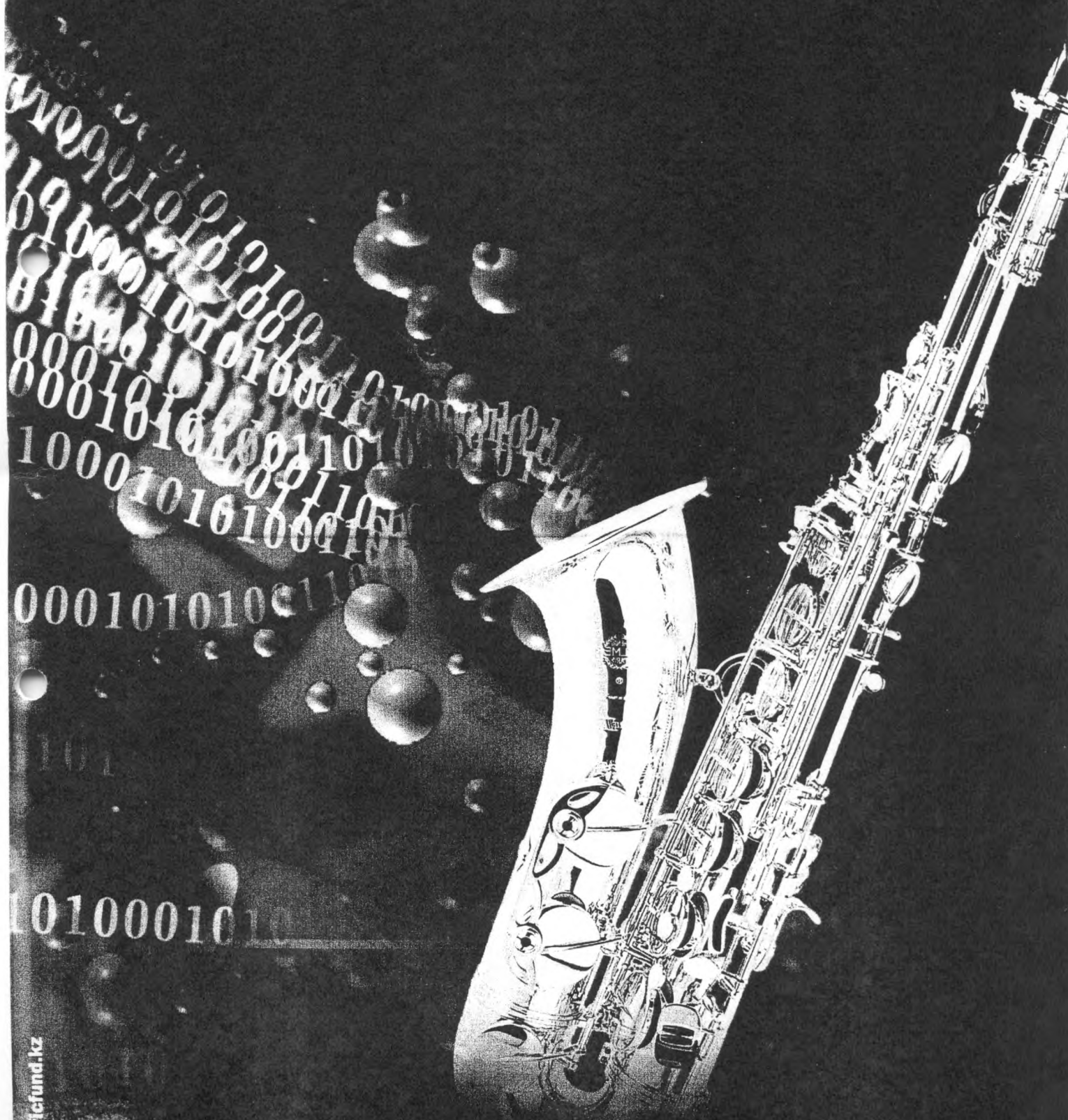


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# CONTENT

WE WOULD LIKE ACQUAINT YOU WITH PROF. D. SANFILIPPO - NEW MEMBER OF EDITORIAL BOARD .....	1	RATE OF THE CAPITAL SHAKENOV R.K. ....	64
THE ANCIENT WORLD OF KAZAKH LAW AND ITS SOURCES S.Z.ZIMANOV .....	4	SOLVING OF INVESTMENT PORTFOLIO MANAGEMENT PROBLEM SHAKENOV R.K. ....	68
FORMATION AND DEVELOPMENT OF SPACE SCIENCE IN THE REPUBLIC OF KAZAKHSTAN Zh.Sh. ZHANTAEV. ....	12	INFORMATIZATION OF KAZAKHSTAN RAILWAYS. Y. MAKHANOV, K. RSYMBETOV .....	73
СТАНОВЛЕНИЕ И РАЗВИТИЕ КАЗАХСТАНСКОЙ КОСМИЧЕСКОЙ НАУКИ ЖАНТАЕВ Ж.Ш. ....	22	PROCESSING TECHNOLOGY OF DEAD VANADIUM CATALYSTS NURZHANOVA S.B. ....	74
INVESTIGATION OF ARGENTUM, COPPER, COBALT AND NICKEL NANOPARTICLES BY TRANSPARENT ELECTRONIC MICROSCOPY Esen BEKTUROV, Rinat ISKAKOV and Sergey SHMAKOV. ....	34	SEPARATION OF PROTEIN MIXTURES BY POLYAMPHOLYTES Zh.E. IBRAYEVA, S.E. KUDAIBERGENOV .....	78
THE HYDROGENATION OF COAL DISTILLATES WITH APPLICATION OF Mo-Hu OF CATALYSTS ON METAL CARRIERS K.A. JUBANOV, Zh.K.KAIRBEKOV, Zh.K.MYLTUKBAEVA, S.M.SUEMBAYEVA .....	38	SYNTHESIS AND PHYSICAL AND CHEMICAL AND COMPLEX FORMATION PROPERTIES OF POLYELECTROLITE HYDROGELS BASED ON ALLYLIC ESTER OF 2-METHYL-3-N-(DIETHYLAMINE) PROPANE ACID Zh.E. IBRAYEVA .....	80
IDEA OF INDEPENDENCE AND «NATIONALIST» LITERATURE S. KIRABAEV .....	42	RATIONAL USE OF BY-PRODUCTS OF THE CHEMICAL ENTERPRISES FOR RECEIVING OF SULFOCATIONS T.T. TURSUNOV. ....	84
MULTIFUNCTIONAL CATALYSTS FOR PRODUCTION OF SYNTHESIS-GAS AND OXYGENATES BY DRY REFORMING OF METHANE TAIMAGAMBETOV Zh. K. ....	47	STUDYING OF THE GENESIS OF Ni-Cu-Cr/2%Ce/( $\theta$ + $\alpha$ )- Al <sub>2</sub> O <sub>3</sub> CATALYST FOR PRODUCTION OF SYNTHESIS-GAS S.A. TUNGATAROVA .....	86
HISTORY OF STATES ON THE TERRITORY OF KAZAKHSTAN KUMEKOV B.E. ....	52	AHMET ZHUBANOV - THE GREAT SON OF KAZAKH PEOPLE A.A. ZHUBANOVA .....	90
GENETIC LINKS OF TURKIC RUNES Altay S. AMANJOLOV .....	58	J. AUBAKIROVA'S INTERVIEW TO JOURNAL "SCIENCE OF CENTRAL ASIA" .....	94
SOLVING OF THE PROBLEM OF MANAGEMENT OF THE PORTFOLIO BY CRITERION OF GROWTH		ALL HIS LIFE HAS BEEN DEVOTED TO A FAVOURITE SCIENCE Kair A. ZHUBANOV, Valentina S. YEMELYANOVA .....	98
		SAVELIEVA GALINA ANDREEVNA. ....	102

# THE HYDROGENATION OF COAL DISTILLATES WITH APPLICATION OF Mo-Hu OF CATALYSTS ON METAL CARRIERS

K.A. JUBANOV, ZH.K.KAIRBEKOV,  
ZH.K.MYLYTKBAEVA, S.M.SUEMBAYEVA

Scientific research institute of new chemical technologies and materials Kazakh National University named al-Farabi

38

Приведены исследования по совершенствованию технологии гидрогенизации угольных дистиллятов для получения экологически чистого топлива путем гидрирования бензиновой фракции на основе никель скелетных катализаторов. Показано, что нанесение Мо-Гу комплексов определенного состава на поверхность Ni-Re приводит к существенному повышению активности и селективности скелетного никелевого катализатора в реакциях гидрообессеривания, гидроизомеризации и гидрокрекинга бензиновой фракции угольного дистиллята.

Никель қаңқалы катализатор қатысында гидрлеу арқылы экологиялық таза отындарды алу үшін көмірлі дистилляттарды гидрогендеу технологиясын жақсарту мақсатында көптеген зерттеулері жүргізілді. Мо-Гу комплексін Ni-Re катализатор бетіне отырғызу нәтижесінде көмірлі дистилляттың бензин фракциясын гидрокрекинглеу, гидроизомерлеу, гидрокүкіртсіздендіру реакцияларында никель қаңқалы катализатордың активтілігі және селективтілігі жоғарлайтынын көруге болады.

## ABSTRACT

Investigation results on improvement of hydrogenation technology of coal distillates are given for obtaining ecologically friendly fuels by means of hydrogenation of gasoline fractions on the basis of Ni-skeleton catalysts. It is shown that coating of Mo-Humate complexes of a definite composition on the surface of Ni-Re results in a significant increase of activity and selectivity of Ni-skeleton catalyst in reactions of hydrodesulfurization, hydroisomeration and hydrocracking of gasoline fraction of a coal distillate.

**Keywords:** molybdenum, catalyst, octane number

## 1. INTRODUCTION

At the present time, of particular interest is the search for new types of catalysts on the basis of natural materials and wastes different chemical productions which are highly active and selective and operate under soft technologically profitable conditions, for a small-scale production of liquid products from brown-coals of the Republic of Kazakhstan. The use of catalytic systems will allow to exclude, using expensive and deficit Mo catalyst, which is used in foreign technologies that to a great extent will allow to improve the ecological situation in industry in the whole [1-5].

## 2. EXPERIMENTAL