

# «TATNEFTEKHIMINVEST- HOLDING»

—▶▶ June 2023

Coordination of the petrochemical complex  
of the Republic of Tatarstan since 1994

Oil Production

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Oil Refining

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Gas Refining

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Chemical Industry



Rubber and Plastic Products

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Pharmaceuticals

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Biotechnology

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Ecology

# «Tatneftekhiminvest- Holding»

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**Coordinates the development  
of the petrochemical  
complex of the Republic  
of Tatarstan**



## **Attracting Projects**

search, evaluation and attraction of technologies and companies for the implementation of projects in the Republic of Tatarstan



## **Support for Companies**

assistance in the implementation of investment and innovation projects



## **Provision of Raw Materials**

assistance in solving issues of raw materials supply



## **Cooperation**

development of cluster connections



## **Planning**

development of strategic documents and strategic decisions



## **Communications**

organization of conferences and round tables

# Participating in R&D and innovation projects

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## Expertise

Technological and economic evaluation of projects  
External expertise by the Scientific and Technical Council  
of Tatneftekhiminvest-Holding

## Consulting

Market research  
Search for potential partners  
Assistance in concluding a contract

## Financing

Financing costs at the laboratory or prototype stage

## Piloting

Assistance in pilot implementation on the territory  
of the Republic of Tatarstan

## Scholarships

Personal scholarships based on the results of the  
selection of projects of the republican competition  
«Fifty best innovative ideas for the Republic of  
Tatarstan»

# Promoting Innovations in 2022

7

R&D

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received support through assistance in the organization of scientific research and pilot work, co-financing of projects

13

Innovative  
Proposals

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worked out through the search for partners, establishing direct contacts, facilitating the organization of testing products and technologies

27

Market  
Reviews

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conducted to assess the development directions of the petrochemical complex

# R&D support in 2022 (Part 1)

## Supercritical Technologies for Dietary Supplements

Development of supercritical technologies in the production of new types of dietary supplements  
Project of Naturalnoe Zdorovie LLC (Kazan)

## Xanthan Gum

Development of xanthan gum production technology  
Developer - Biocenter-SAS Center for Industrial Implementation of Applied Developments of the Scientific Research Institute of the Russian Academy of Sciences (Pushchino)

## Acrylate Rubbers

Creation of a technology for the production of acrylate rubbers to replace imports for the needs of rubber goods plants  
Project participants — PKF Singer LLC (Kazan), Kazan National Research Technological University

## Polyphenylene sulfide

The project has been implemented since 2020  
In 2022, a pilot plant for the production of polyphenylene sulfide was put into operation in the Khimgrad technopolis  
Project participants — Kazan (Volga Region) Federal University, ITC Inzhekhim LLC (Kazan), STC AhmadullinS - Science and Technology LLC (Kazan)

# R&D support in 2022 (Part 2)

## Cleaning of Wastewater

Development and selection of new bacterial colonies that make up activated sludge for wastewater treatment

The project has been implemented since 2019

The initiator of the project is Kinematika LLC (Kazan)

## Wastewater Control

Creation of a system for determining the biochemical oxygen demand in wastewater

The project has been implemented since 2019

In 2022, the developed method for measuring the biochemical oxygen consumption of water by the barometric method was certified at the All-Russian Research Institute of Metrological Service (Moscow)

Project participants — Kinematika LLC, NPP Ecoenergomash LLC (Kazan)

## Gaprin from Natural Gas

Selection of pure cultures as a production associate with the production of biomass from natural gas to obtain methanotrophic protein (gaprin).

In 2022, a business plan was drawn up for filing an application with the Ministry of Industry and Trade of the Russian Federation

Developer - Biocenter-SAS Center for Industrial Implementation of Applied Developments of the Scientific Research Institute of the Russian Academy of Sciences (Pushchino)

# Promoting Innovations in 2022

## UHMW PE

A series of meetings on the possibility of creating the production of ultra-high molecular weight polyethylene with representatives of the Ministry of Industry and Trade of the Russian Federation, the Advanced Research Foundation, the G.K. Boreskov Institute of Catalysis of the Siberian Branch of the Russian Academy of Sciences, SIBUR LLC

## Cyclopentane

Evaluation of the possibility of using cyclopentane developed by KNRTU for the needs of Haier Fridge Rus LLC (Naberezhnye Chelny)

## Cold Cutting

Opportunity to test the technology of cold cutting of materials by RUSTECH LLC (Kazan) on the territory of the Bugulma Mechanical Plant of PJSC Tatneft

## Cleaning of Wastewater

Possibility to test the technology of purification and disinfection of drinking, cooling and waste waters of UNIKHIM with OZ JSC (Yekaterinburg) at the operated facilities of the Main Directorate of Engineering Networks of the Republic of Tatarstan and at one of the water utilities of the Republic of Tatarstan

## Ground Reinforcement

Testing of the MC-Bauchemie technology (MC-Bauchemie LLC, Ramenskoye) to eliminate structural subsidence and strengthen the soil base at the experimental site at the Vatan sports complex (Kazan)

## Oil Waste Processing

Possibility of introducing the technology of deep processing of complex oil-containing wastes of PMI Systems LLC (Moscow) in the production cycles of Tatneft Group and JSC TAIF-NK

(in the presence of a positive conclusion of the state environmental expertise of technology)

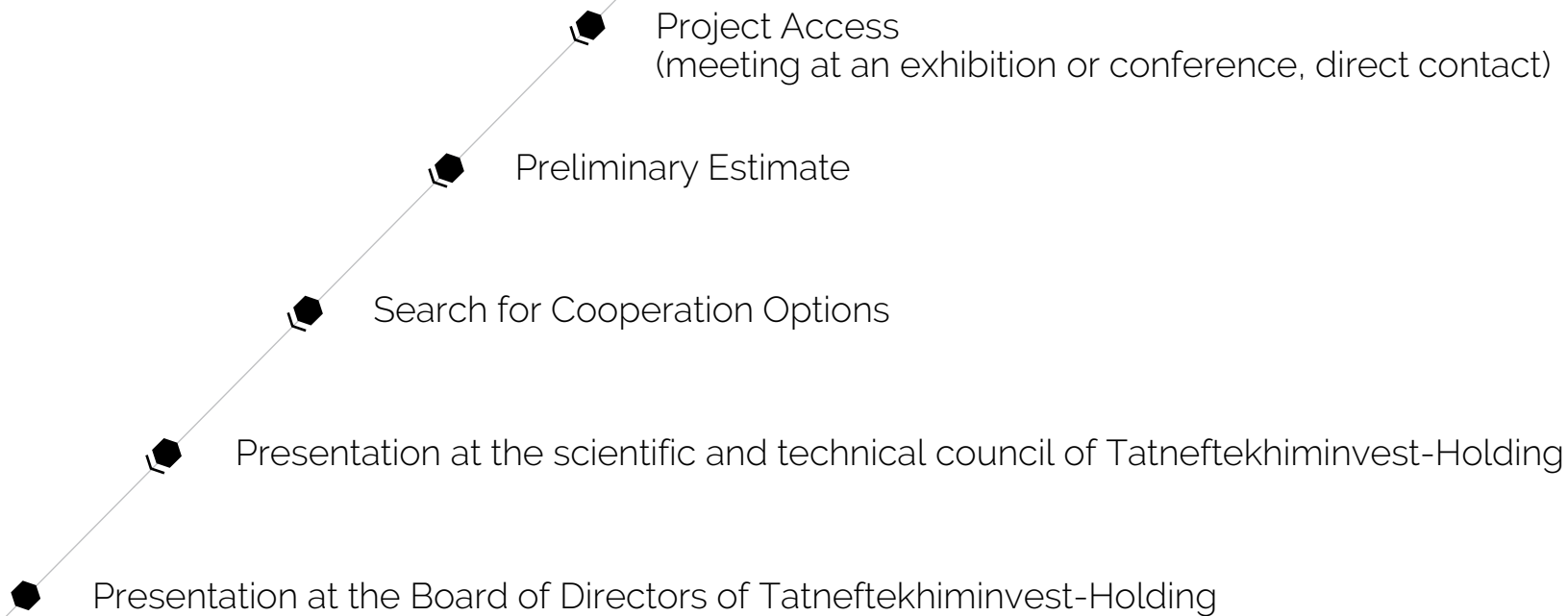
## Demulsifiers

Testing of Intens-3 demulsifiers and Intens-7 corrosion inhibitors developed by KNRTU for acid compositions in SPC Khimtechno JSC (Kazan)



# Algorithm for working with proposals and projects

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# At the board of directors, a project can be presented to the heads of authorities and major companies

Chairman of the Board of Directors –  
Rais of the Republic of Tatarstan  
**R.N. Minnikhanov**

Ministry of Economics  
Ministry of Industry and Trade  
Investment Development Agency  
Ministry of Construction, Architecture and Housing



# 12

meetings  
of the board of directors  
are held annually



# 58

projects and companies  
were presented in 2022

# Participating in the Formation of Feed Stream

## Conclusion of Contracts

Assistance in concluding direct contracts for the supply of hydrocarbon raw materials and chemical products between companies of the Republic of Tatarstan



## Discussion of Issues

Organization of meetings of enterprises - producers of hydrocarbon raw materials with consumers to solve problems

## Demand Forecast

Formation of the current and strategic balance of raw materials for the petrochemical complex of Tatarstan

## Forming strategic decisions

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# 5th

program developed by us for the development of the petrochemical complex is being implemented in Tatarstan



### Industry Programs

Developed programs for the development of the petrochemical complex of the Republic of Tatarstan

▷ for 1999-2003

▷ for 2004-2008

▷ for 2010-2014

▷ for 2015-2019

▶ for 2020-2024

Target Program for the Development of Biotechnology for 2010-2020

Target Program for the Development of the Pharmaceutical Industry of the Republic of Tatarstan for 2011-2020



### Regional Documents

Participation in the development of regional strategic documents



### Corporate Plans

Assistance in the development of strategic documents for manufacturing companies, educational organizations



### Current Analysis

Quarterly analysis of the results of the development of the petrochemical complex of the Republic of Tatarstan

# Organizing Events

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## Annual Conference

Annual International scientific and practical conference on advanced technologies of petrochemistry and oil refining within the framework of the Tatarstan Petrochemical Forum (held in late August or early September)



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Thematic round tables at republican events



**TATARSTAN PETROCHEMICAL FORUM**

Held annually

# Publishing Information Materials



## **Analytics and catalogs**

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Catalog of manufacturers  
of materials for construction  
and road purposes,  
produced on the basis  
of chemical products

Analytical materials  
on the development  
of the petrochemical  
complex

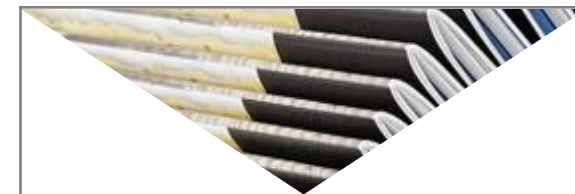


## **Information for Investors**

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Presentation materials

Scheme of cluster  
development  
of hydrocarbon  
processing



## **Articles**

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Publications  
in newspapers  
and magazines

Posting industry news  
on the company's  
website

Formation of digests  
for ministries  
and departments

# Contact us to start cooperation



**Yarullin Rafinat Samatovich**  
Director General

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