



Joint stock company  
«Research and design institute of urea  
and organic synthesis products»  
(JSC «NIIK»)

## Why partner with NIIK?



# НИИК remains a leader in a national engineering sector

- More than 60 years of experience in mineral fertilizers market
- More than 150 production units already built
- More than 500 inventions
- Company's annual turnover – RUB 6,5 bil (2015)



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# BUSINESS GEOGRAPHY

## Our partners:

- Mitsubishi Heavy Industries,
- Toyo Engineering Corporation,
- Linde AG,
- Saipem S.p.A,
- Stamicarbon BV,
- Casale SA,
- De Dietrich Process Systems GmbH,
- Chemoproject Nitrogen AS,
- HaldorTopsoe A/S,
- Maire Tecnimont SpA,
- AIR LIQUIDE Global E&C Solutions

## Our customers :

- EuroChem,
- UralChem,
- PhosAgro
- Ammonii,
- Acron,
- Kuibyshev Azot,
- TogliattiAzot,
- OSTCHEM group,
- Grodno Azot,
- KazAzot,
- Gasprom Neftehim Salavat,
- ShchekinoAzot,
- Metafrax etc.



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# International cooperation

NIIK is a member of international fertilizer associations-  
International Fertilizer Industry Association (IFA),  
Arab Fertilizer Association (AFA),  
Fertilizer Association of India (FAI).



**The Fertiliser Association of India**



Arab Fertilizer Association  
since 1975



**International  
Fertilizer Industry  
Association**



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# We offer our clients the full range of services

- Technology development
- Project engineering
- Packaged delivery of equipment
- DCS, simulators
- Industrial safety assessment and diagnostic
- Test center
- Project management
- Capital construction



**NIIK includes departments covering engineering, technological and project management fields.**

- Technology and process department** – is responsible for developing ideas and technologies, know-hows, equipment design etc
- **Design and engineering department** – is responsible for project management and design documentation development
- **Procurement and turn- key projects-** is responsible for procurement of materials and equipment



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# Our patented technologies

- **UREA TECHNOLOGIES**
- **MELAMINE TECHNOLOGIES**
- **NEW TYPES OF FERTILIZERS**
- **ADVANCED REPAIR METHODOLOGIES**
- **ECO FRIENDLY TECHNOLOGIES, BENEFITING THE EARTH**



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# AUTHORIZATIONS AND APPROVALS REQUIRED FOR DESIGNING, CONSTRUCTION AND EXPERT EXAMINATION OF INDUSTRIAL SAFETY

NIIK is a member of:

- Self-regulatory non-profit organization  
«Neftegazohimproekt»
- Self-regulatory non-profit organization  
«Nizhny Novgorod builders Association»
- Self-regulatory non-profit organization  
«Expertprombezopasnost»



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# Russian Leader Of Quality

**2010** – NIIK has become a winner of the Second Annual National Competition in the field of quality management.

**2012** – General Director of NIIK Mr Oleg Kostin was awarded the title of Russian Leader of Quality

NIIK gained chartered status from Chartered Quality Institute, a grade of CQI membership is held by General Director Mr Oleg Kostin.



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# Human resources

**Total number of employees ~650 persons**

**Average age of the staff– 42 years**

**Average work experience of the staff– 7 years**

- **personnel qualification**
- **qualification required for members of self-regulatory organizations**
- **necessary trainings to gain additional experience**
- **technical knowledge and skills training**



## Licensed up-to-date soft wear for design, engineering and scientific research



Office system - more than 500 licenses

CAD system – more than 170 licenses

AVEVA complex for 3D design – more than 30 workstations

Calculation programmes – more than 80 licenses

Every work station is equipped with modern tools meeting all necessary requirements for engineering and research working environment.



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## Project management on EPC basis



**Engineering**



**Procurement**



**Construction**



**Commissioning**



# НИИК'S EXPERIENCE IN ADAPTATION OF FOREIGN LICENSOR'S TECHNOLOGIES



**JSC «Ammony» (Mendeleevsk, Tatarstan, Russia)**  
Chemical complex Methanol/Ammonia/Urea  
in cooperation with Mitsubishi Heavy Industries (Japan)

**TogliattiAzot (Togliatti, Russia)**  
Urea unit, 2200 TPD in cooperation with Casale SA

**JSC «Eurochem» (Novomoskovsk, Russia)**  
Revamp of urea unit in cooperation with Casale SA

**JSC «Azot» (Cherkassy, Ukraine)**  
in cooperation with Casale SA

**Salavatnefteorgsintez (Salavat, Russia)**  
Urea granulation unit, capacity 1400 MTPD  
in cooperation with Toyo Engineering Corporation  
(Japan)

**JSC «Schekinoazot» (Schekino, Russia)**  
Hydrogen unit in cooperation with Haldor Topsoe A/S  
(Denmark)

**CJSK «Korund-Cyan» (Dzerzhinsk, Russia)**  
Sodium cyanide unit in cooperation with EPC  
(Germany)

**JSC «Cherepovetsky Azot» (Cherepovets, Russia)**  
Ammonia unit, capacity 2200 t/d in cooperation with Mitsubishi Heavy  
Industries (Japan)

**LLC Baltic Urea Plant (Leningrad region, Russia)**  
Ammonia unit with capacity 3000 TPD, urea unit with capacity 3535 TPD in  
cooperation with Saipem SpA (Italy)

**KuibyshevAzot (Togliatti, Russia)**  
Ammonia unit, capacity 1340 TPD in cooperation with Linde AG (Germany)

**Cherepovetsky Azot (Cherepovets, Russia)**  
Urea unit, capacity 1500 TPD in cooperation with «Chemoproject Nitrogen  
AS» (Czech Republic)

**NevAzot (EuroChem) (Nevinnomyssk, Russia)**  
Melamine unit, capacity 50 000 TPY in cooperation with «Lurgi» (Germany)



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