Реализирани национални научно- изследователски проекти за периода 2005-2009г.

№	Година	Тема на проекта	Ръководител на проекта
1.	2008-2009	“Gelatin nanocapsules obtained by sonochemical method and their applicationfor imprting water solubility of hydrophilic drug”	Dr. Elena Vassileva
2.	2003-2007	“Synthesis, characterization and phtozymes application for an ecologicaldegradation of the residual pesticides”	Prof. George Georgiev, D. Sc.
3.	2004-2009	“Determination of uranium, plutonium, americium and curium in environmental samples”	Assoc. Prof. Dr. Milen Jovtchev
4.	2004-2009	“Targeted modification of the electronic and catalytic properties of clusters of transition metals by additional impurity atoms”	Assoc. Prof. Georgi Vayssilov, D. Sc.
5.	2004-2009	“Study of the formulation, structure and controlled disaggregation of new micro- and nanocapsules with different design used in pharmacy and agronomy”	Prof. Ivan Panaiotov, D.Sc.
6.	2004-2009	“Micro- and nanosized materials and structures of amphiphile molecules for the needs of medicine, pharmacology and agronomy”	Prof. Christian Vassilieff, D.Sc.
7.	2005-2009	Transition metal complexes of tertiary amines and polyamino-ligandssynthesis, structure and cytotoxic activity	Assoc. Prof. Galina Cencheva, PhD
8.	2002-2006	“Complexes of biometals with drugs – synthesis, structural characterization and biological properties”	Prof. Panayot R. Bontchev, D. Sc
9.	2005-2009	"Critical Assessment of Water Ecosystems Ecotoxicity using Intelligent Data Analysis of Data and QSAR Approach"	Prof. Dr.Vasil Simeonov, DSc
10.	2006-2010	"Environmetric Assessment and Modeling of Soils and Sediments"	Assoc. Prof. Dr. Stefan Tsakovski
11.	2002-2006	FP5 RTN (Network) Contract HPRN-CT-2002-00208 entitled “H-Sorption in Mg”	Prof. Alain Reza Yavari; Prof. Tony Spassov
12.	2005-2009	Development of technologies for storage of hydrogen as highly	Prof. Tony Spassov, D.

		efficient and environmentally clean energy source	Sc.
13.	2005-2009	"Electrostatic Forces in Chemical reactions. Reactivity of Carbonyl Compounds"	Prof. Boris Galabov, D. Sc.
14.	2003-2007	"Synthesis and properties of copolymer zwitterions and their application forcontrol of the electrochemical deposition of nanometals and nanooxides"	Prof. George Georgiev, D. Sc.
15.	2003-2007	"Synthesis and properties of copolymer zwitterions and their application for control of the electrochemical deposition of nanometals and nanooxides	Prof. George Georgiev, D. Sc
16.	2003-2007	"Synthesis, characterization and phtozymes application for an ecological degradation of the residual pesticides"	Prof. George Georgiev, D. Sc
17.	2005-2009	"Creation of thin layer nanocomposits based on organic and inorganic semiconductors – materials for sensors and fotonic crystals"	Assoc. Prof. Dr. Ceco Dushkin
18.	2005-2009	Photoluminescence properties of thin films, obtained by immobilization of metal complexes in sol-gel produced SiO_2 matrix	Assoc. Prof. Dr. D. Todorovsky
19.	2004-2008	"Mechanochemical effects at compounds of 5f elements	Assoc. Prof. Dr. Nataliya Minkova
20.	2005-2009	"Synthesis, chemical transformations and quantum chemical investigations of phosphorus containing coumarin derivatives"	Assist. Prof. Rositca Nikolova, Dr.
21.	2006-2010	"Synthesis and biological activity of N1- substituted uracils as a potential antitumor agents and inhibitors of the biosynthesis of nucleic acids"	Prof. Alexander Dobrev, D. Sc.
22.	2005 - 2009	"Proteolytic control of apoptosis - design and synthesis of fluorogenic peptide substrates and inhibitors"	Prof. V. Mitev, D. Sc.
23.	2006-2010	"Synthesis, experimental and theoretical investigation of the reactivity of organic compounds with potential photochemical and biological activity"	Prof. Ivan Petkov, D. Sc.
24.	2006-2010	"Synthesis, experimental and theoretical investigation of the	Prof. Ivan Petkov, D. Sc.

		reactivity of organic compounds with potential photochemical and biological activity”	
25.	2005-2009	“Interuniversity center on computational chemistry for modern theoretical studies of chemical and biochemical systems”	Assoc. Prof. Georgi Vayssilov, D. Sc.
26.	2007-2011	“Targeted synthesis of nano and subnano clusters and complexes of transition metals in zeolites with potential application in eco-catalysis”	Assoc. Prof. Georgi Vayssilov, D. Sc.
27.	2005-2009	“Synthesis, Structures and applications of ‘Organo-phosphorus and -metal’ compounds”	Prof. Galin Petrov, D. Sc
28.	2005-2009	“Synthesis of heterocyclic compounds”	Assoc. Prof. A. Sidjimov
29.	2006-2010	“Polyaniline as component of a variety of modern nanomaterials – challenges for theory and experiment”	Assoc. Prof. Alia Tadjer, Dr.
30.	2003-2007	“Structure and Dielectric Properties of Monolayers – Factors in Monitoring of Water Basins Contamination”	Assoc. Prof. Alia Tadjer, Dr.
31.	2003-2007	“Phase transition in lipid monolayers. Role of the van der Waals and electrostatic interactions”	Prof. Boryan Radoev, D. Sc.
32.	2003-2007	“Dynamic Properties of Submicro- and Nano-sized Aggregates of Amphiphile Molecules in Symmetrical and Asymmetrical Thin Liquid Layers	Prof. Emil Manev, D. Sc
33.	2005-2009	“Nanotechnology and New Materials: Colloid Aspects of Nanoscience. Modul 4. Philosophical and Educational Projections”	Dr. S. Tsakovski
34.	2009-2012	NSFB project “University Centre for Development of Green Chemistry Methods for Trace Analysis of Environmental Objects”	Assoc. Prof. Dr. Veselin Kmetov
35.	2006-2009	“Synthesis, structure and complexation properties of a series of cycloalkanespiro-5-hydantoins and their mono and dithio-analogues	Prof. Mariana Mitewa, D. Sc
36.	2009-2012	"Improving of Life Quality by the Use of Sustainabl Development of Surface Waters - Application for the	Prof. Dr. Vasil Simeonov, DSc.

		catchments of Struma and Mesta Rivers"	
37.	2002-2005	Purification of inorganic and organic substances up to analytical grade, pharmaceutical grade and electronics applications	Assist. Prof. P. Vasileva, Dr
38.	2008-2011	"Quantifying Chemical Reactivity. Applications in Organic Chemistry and Materials Chemistry"	Prof. Boris Galabov, D. Sc
39.	2007-2010	"Generation of engineered chimeric molecules by protein nanotechnologies fortherapy of autoimmune diseases"	Prof. Todor Deligeorgiev, D. Sc.
40.	2004-2007	"Effect of the synthetic low- and high molecular zwitterions on the ligandbindingability of the C1q recognizing component of the Complement system"	PhD Ivo Ivanov
41.	2004-2007	"Effect of the synthetic low- and high molecular zwitterions on the ligandbindingability of the C1q recognizing component of the Complement system"	PhD Ivo Ivanov
42.	2008-2011	"Synthesis of Nanostructured ZnO for Photocatalytic Applications"	Prof. Yanko Dimitriev, D. Sc
43.	2005-2008	"Scanning tunneling microscopy, spectroscopy and atomic force microscopy on adsorbates: theory and application"	Assoc. Prof. Deiana Drakova, Dr.
44.	2002-2005	Pulverization preparation of thin layers nanocomposites from semiconductor in yttria-stabilized zirconium oxide ceramics for sensor devices	Assoc. Prof. Dr. D. Todorovsky
45.	2002-2005	Synthesis, purification and analysis of inorganic substances and organic solvents for use in electronics, analytical and medical purposes	Assist. Prof. Dr. Penka Vasileva
46.	2006-2009	"Synthesis of dimethylphosphinoyl substituted α-aminophosphonic acids and tetrahydropyrrolys - potential agrochemicals"	Assist. Prof. Yulian Zagraniarsky
47.	2009-2012	"Synthesis of chiral aminoalcohols as catalysts in enantioselective addition reactions for the formation of the new	Prof. Alexander Dobrev, D. Sc

		carbon-carbon bonds”	
48.	2006 - 2009	“Antiaglycating activity of vitamin B6. Mechanism of the interaction between pyridoxal-5'-phosphate and 3-deoxyglucosone”	Assoc. Prof. Dr. R. Mironova
49.	2005-2008	“Photochemical Properties of Macrocyclic (Crown) Ethers Coupled with 2-Substituted 1,3-Indandiones and Azaheterocyclic Compounds, and Their Metal Complexes”	Head Assistant Prof., Dr. Anife Ahmedova
50.	2008-2011	“Molecular “Wires” Based on Mutual Proton and Electron transfer”	Assoc. Prof. Dr. Sci. Venelin Enchev
51.	2007-2010	“Synthesis of New Bioactive Lactames and Lactones with Aminoacidic and Phosphonic Substituents”	Assoc. Prof. Elena Stanoeva, Dr.
52.	2004-2007	“Photochemical investigations of organic molecules immobilized in molecular sieves”	Prof. Ivan Petkov, D. Sc.
53.	2008-2011	“Understanding the mechanism of protein biosynthesis on the ribosome and the ways to control the process - model computational and experimental studies’’	Assoc. Prof. Georgi Vayssilov, D. Sc.
54.	2008-2011	“Coordination chemistry of cations in porous materials: theoretical base, experimental characterization and design of new materials with specific adsorption and catalytic properties”	Prof. Konstantin Hadjiivanov, D. Sc.
55.	2008-2011	“Quantitative characterization of chemical reactivity. Application in organic and materials chemistry”	Prof. Boris Galabov, D. Sc. –
56.	2008-2011	“Reversible Nanotransporters across Fluid Interfaces”	Assoc. Prof. Alia Tadjer, Dr.
57.	2008-2011	“Computer Complex for Advanced Studies in Molecular Design, New Materials and Nanotechnologies”	Prof. Petko Ivanov, Dr. Sci.
58.	2008-2011	“Integrated Research Center for Computational Sciences in the Microworld”	Assoc. Prof. Ana Proykova, Dr. Sci.

59.	2006-2009	"Colloidal aspects of nanoscience"	Prof. Boryan Radoev, D. Sc.
60.	2008-2011	"Atomic Force Microscope University Laboratory"	Prof. Boryan Radoev, D. Sc.
61.	2007-2010	"Interaction of membrane-active conjugates of PEG in phospholipid monolayers and thin liquid films"	Prof. Christian Vassilieff, D.Sc.
62.	2008-2010	"Macrocyclic and supramolecular functionalized systems with potential application in nanotechnologies"	Prof. Petko Ivanov, D. Sc., Institute of Organic Chemistry
63.	2009-2011	"Polyether Ionophore Antibiotics: A Challenge tocomplexation with metal ions for modification of their therapeutic properties	Prof. Mariana Mitewa, D. Sc
64.	2009-2011	"Biochemical, immunological and pharmacological studies on Vipoxin and its components"	Assos. Prof. Svetla Petrova, Dr
65.	2007-2009	"New molecular switches based on tautomeric proton exchange	Assoc. Prof. Ludmil Antonov, D. Sc
66.	2007-2009	"Theoretical (quantum chemical) study on 2-substituted 1,3-indandiones as optical sensors for metal ions"	Assist. Prof. Anife Ahmedova, Dr
67.	2005-2007	"Photochemical properties of macrocyclic (crown) ethers conjugated with 2-substituted 1,3-indandiones, azaheterocyclic compounds and their metal complexes "	Assist. Prof. Ahmedova, Dr.
68.	2009-2011	Nanocomposites based on Mg and Mg alloys for hydrogen storage	Prof. Tony Spassov, D. Sc.
69.	2008-2010	"New polymeric systems for controlled delivery of anti tumor Pt coordinationagents	Assoc. Prof. Neli Koseva
70.	2009-2011	Complexes of lanthanides with new-synthesized coumarine derivates –optical and pharmacological properties	Assoc. Prof. Dr. M. Milanova
71.	2009-2011	New materials with mixed oxidation states for environment protection	Prof. I. Mitov, D. Sc. (Institute of Catalysis, IC,

			BAS)
72.	2009-2011	Nanostructured transparent ceramics as a new medium for lasers	Sen. Res. Fellow Dr. V. Nikolov,
73.	2009-2011	Nanosized photocatalyst for sunshine utilization	Sen. Res. Fellow Ist degree Dr. S. Rakovski,
74.	2006-2008	Purification of inorganic and organic substances up to analytical grade, pharmaceutical grade and electronics applications	Assist. Prof. Dr. Penka Vasileva
75.	2007-2009	"New molecular switches based on tautomeric proton exchange"	Assos. Prof. Ludmil Antonov, D. Sc.
76.	2008-2010	"New Bioactive Lactams and Lactones Incorporating Amino Acid and/or Phosphonate Fragments – Structure-Activity Relationship"	Assoc. Prof. Dr. Elena Stanoeva
77.	2007-2009	"Preparation of hybrid organic-inorganic materials based on zeolites"	Assoc. Prof. Georgi Vayssilov, D. Sc.
78.	2007-2009	"Preparation of hybrid organic-inorganic materials based on zeolites"	Assoc. Prof. Georgi Vayssilov, D. Sc
79.	2004-2006	**"** Functionalization of lipid nanocapsules" (Program Rila/Egide)	Prof. Ivan Panaiotov, D.Sc.
80.	2008-2009	"Structure and properties of complexes of polyether ionophore antibiotics with bio- and toxic metal ions in solution and in solid state"	Assist. Prof. Ivayla Pantcheva, Dr.
81.	2007-2008	"Metal complexes of Monensin: preparation, structure and biological properties"	Assist. Prof. Ivayla Pantcheva, Dr.
82.	2007-2008	"Protective and helper effect of polyzwitterionic block co-polymer on the β– galactosidase activity"	Assist. Prof. Anife Ahmedova, Dr
83.	2002-2003	"Metal complexes of biological-active substances – properties and structure"	Assoc. Prof. B. Evtimova, PhD
84.	2009-2010	"Synthesis and structure of metal complexes with biologically active hydantoin ligands – potential non-classical anticancer drugs"	Assist. Prof. Anife Ahmedova, Dr.
85.	2008-2009	New metal-organic frameworks (MOFs) for hydrogen storage	Head Assist.Prof.

			Vesselina Rangelova, Dr
86.	2008-2009	Nanoporous Ag-Cu materials produced by selective dissolution of one of the alloy components	Sen. Assist.Prof. Lyudmila Lyubenova, Dr
87.	2007-2008	Chemical reactivity of thermally activated kaolinite as admixture by soil stabilization”	Assist. Prof. Jordan Ninov, Dr.
88.	2008-2009	“New composites: self-reinforced, based on cyclic oligomers, reinforced byclays and carbon nanotubes”	Dr. A. Apostolov
89.	2005-2006	“ Investigation on composites and nanocomposites based on polymers and polymer blends”	Dr. A. Apostolov
90.	2007-2008	“Polyzwitterion influence on the binding ability of the C1q recognizing agent of the Complement”	Assoc. Prof. Lachezar Christov
91.	2008-2009	“Synthesis and properties of new zwitterionic copolymers on the base of 3- dimethyl(methacryloyloxyethyl)ammonium propane sulfonate	Assoc. Prof. Elena Kamenska
92.	2000-2001	“Environmentally friendly materials with improved mechanical properties basedon modified biopolymers”	Dr. Anton Apostolov
93.	2007-2008	“Preparation of catalytic and photocatalytic active low-percentage catalyst ZnO:TM (TM = Cu, Mn) using doped $ZnC_2O_4.2H_2O$ as precursor”	Chief Assist. Prof. Borjana Donkova, Dr
94.	2008-2009	„Investigation on the influence of dopants, support structure and particles size on the surface properties of thin films and powder nanosized ZnO, obtained by zol-gel methods”	Chief Assist. Prof. Borjana Donkova, Dr.
95.	2006-2007	Corrosion of aluminum and aluminum alloys under the action of water-ethylene glycol solutions simulating the automotive engines exploitation	Assoc. Prof. Dr. M. Milanova
96.	2006-2007	“Development and validation of a method for determination of Am in liquid radioactive wastes”	Prof. D. Sc. Dr. Rumyana Djingova
97.	2009-2010	Purification of waste waters from organic pollutants by	Assoc. Prof. Dr. M.

		photocatalytic and wet-air-oxidation and by biodegradation	Milanova
98.	2005-2006	"Isolation and identification of triterpenoids and sterols from Epilobium parviflorum"	Assoc. Prof.Yordanka Ganeva
99.	2007-2008	"Diagnostics of Students' Achievements in Chemistry and Environment – 10th Grade"	E. Boiadjieva
100.	2008-2009	"External Evaluation of Students' Achievements in Chemistry and Environment – 9th Grade"	E. Boiadjieva
101.	2006-2007	"Structure and properties of metastable tin and zirconium oxides"	Assoc. Prof. Dr. Stoyan Gutzov
102.	2007-2008	**"**Metastable crystalline states of tin in partially oxidized massive tin samples"	Assist. Prof. Dr. Katja Djuneva
103.	2007-208	"Complexes of cyclodextrins with styrylheterocyclic polymethines – new optical sensors for aliphatic alcohols"	Stanimir Stoyanov
104.	2000	Synthesis and purification of inorganic substances up to pure, high purity and suprapure grade	Dr. Atanas Terziev
105.	2005 2006	" Investigation on nanocomposites reinforced by organophilic clays, rubber and resins"	Dr. A. Apostolov
106.	2005	"Scientific Periodicals: Khimiya/Chemistry. Bulgarian Journal of Chemical Education"	Prof. B. V. Toshev, D.Sc.
107	2006	"Synthesis and characterization of new ion-imprinted polymer	Chief Assist. Prof. Ivanka Dakova, Dr.
108	2006	"Complexes of platinum metals with 1,3,5-triamino-1,3,5-trideoxy-cis-inositol physico-chemical properties and cytotoxic activity", No124	Assoc. Prof. Galina Cencheva, PhD
109.	2006	"Synthesis of Aminomethylpiperidinones with Expected Biological Activity via the Reaction of Glutaric Anhydride and Benzylidenebenzylamine"	Dr. Elena Stanoeva
110.	2006	"Alkaloids of Thalictrum species from Bulgaria"	Assoc. Prof. A. Sidjimov

111.	2006	"Systematic study of BC, BNC and BCN clusters as building blocks of BC and BCN nanotubes"	Chief Assist. Prof. Anela Ivanova, Dr.
112	2007	"Hg(II)-imprinted polymer gel: synthesis, characterization and application"	Chief Assist. Prof. Ivanka Dakova, Dr.
113	2007	"Ruthenium complexes of N-ligands- synthesis, structure and cytotoxic activity",	Assoc. Prof. Galina Cencheva, PhD.
114.	2007 2010	Nanobiocomposites – new materials for bone implants	Assoc. Prof. Liljana Pramatarova
115.	2007	"Synthesis and characterization of metal nanoparticles for application **in** molecular electronics**"**	Assoc.Prof.Dr.Ceco Dushkin
116.	2007	"Determination of the degree of sorption of radionuclides (^{241}Am, ^{137}Cs, ^{85}Sr, ^{60}Co) in soil samples from the region of the NPP "Belene"	Prof. D. Sc. Dr. Ivelin Kuleff
117.	2007	"Synthesis of Biologically Active Piperidinones with Peptide Bond in the Side Chain"	Dr. Elena Stanoeva
118.	2007	"Modification of the energy spectrum and the electronic structure of carbon nanotubes by controlled insertion of defects and/or functionalization"	Chief Assist. Prof. Galia Madjarova, Dr.
119.	2007	"Scientific Periodicals: Khimiya/Chemistry. Bulgarian Journal of Chemical Education"	Prof. B. V. Toshev, D.Sc.
120.	2008	"Transition metal complexes of first transition series with hematoporphyrin IX",	Assist. Prof. Daniela Tsekova, PhD.
121.	2008	"Synthesis and characterization of nano- and micrometer silica spheres for colloidal-crystal matrices, composite materials and chromatography packing	Assist. Prof. Dr. Penka Vasileva
122.	2008	"Hybrid polymer films with organoborate complexes and metal nanoparticles for application in optoelectronics"	Assist. Prof. Dr. Hristo Hristov
123.	2008	Design of methods for conditioning of radioactive wastes, containing tritium aiming the decrease of tritium emission in the	Assoc. Prof. Dr. D. Todorovsky, Chief Assist.

		environment	Prof. Dr. P. Kovacheva
124.	2008	Development of methods for conditioning of radioactive waste, containing tritium, aiming to decrease the tritium releases in the environment”	Assoc. Prof. Dimitar Todorovsky, D. Sc.
125.	2008	“Synthesis, spectral data and structure of some derivatives of 3,4-dihydro-2H-pyrrole-2-carboxylic acid”	Dr. Donka Tasheva
126.	2008	“Synthesis of the Potential Topoisomerase I Inhibitors	Head Assistant of Prof., Dr. Meglena Kandinska
127.	2008	“Theoretical modeling of the interaction of chloroform with alkali cations in zeolites and identification of experimentally observed adsorption complexes.”	Assoc. Prof. Georgi Vayssilov, D. Sc.
128.	2008	“Synthesis of 2-metacryloyloxyphosphorylcholine, 2-cynnamoyloxyethylphosphorylcholine and their biocompatible polymers”	Main. Assist. Prof. Petar Y. Petrov, Dr.
129.	2008	“Ab Initio (DFT) study of metal-organic spin hybrid structures with potential application for information storage”	Chief Assist. Prof. Anela Ivanova, Dr.
130.	2008	“Investigation on the preparation of platinum and gold nanoparticles in monolayers build of aniline derivatives at the air-water interface”	Assist. Prof. Ivan Grozev, PhD
131.	2008	“Scientific Periodicals: Khimiya/Chemistry. Bulgarian Journal of Chemical Education”	Prof. B. V. Toshev, D.Sc.
132.	2009	„Механизъм на отделяне на смесени твърдо-течни маслени фази от твърди подложки”	Захари Винаров
133.	2009	„Повърхностни свойства на разтвори на натриев лаурат”	Румяна Станимирова
134.	2009	„Стабилизация на пени със смеси на повърхностно-активни вещества и полимери”	Радка Петкова
135.	2009	„Влияние на повърхностно-активното вещество върху вискозното триене при движещи се пени”	Златина Митринова
136.	2009	„Разкъсване на капки в концентрирани емулсии”	Иван Лесов
137.	2009	„Привличане между заредени частици на течна повърхност	Мариана Бонева-

		дължащо се на взаимодействието на повърхностни деформации породени от гравитационното и електричното поле”	Аструкова
138.	2002 2005	Synthesis, purification and analysis of inorganic substances and organic solvents for use in electronics, analytical and medical purposes	Assist. Prof. P. Vasileva, Dr.
139.	2006 – 2007	“Development and validation of a method for determination of 241Am in liquid radioactiv wastes”	Prof. Dr. Rumyana Djingova, DSc
140.	2005–2008	“Development of the methods for the determination of chemical species of toxic and essential elements in food and environmental samples	Assoc. Prof. Dr. Irina Karadjova
141.	2005–2009	“New approaches in the determination of “difficult” elements (arsenic, cadmium, mercury, lead) in traditional Bulgarian food and beverages	Assoc. Prof. Dr. Irina Karadjova.
142.	2006 2008	“Chemical and isotope composition of archaeological metal artifacts from Bulgaria”	Prof. Dr. Ivelin Kuleff
143.	2005 –	**“**Amorphous silica sol-gel materials”	Assoc. Prof. Dr. Stoyan Gutzov
144.	2006–2010	“Passive sampling, determination of toxic element species in waters”	Prof. Sonja Arpadjan-Ganeva, D.Sc.
145.	2007 – 2009	“Archaeometric investigation of bones for reconstruction of the diet of the population of Apolonia Pontica (V-III c.BC)”	Prof. Dr. Ivelin Kuleff
146.	2007 – 2010	“Radiochemical investigations of the concentration and behaviour of selected radionuclides after their release from liquid radioactive wastes to the environment “	Prof. Dr. Rumyana Djingova, DSc
147.	2008 –	“Archaeometric investigation of gold finds from Varna eneolithic	Prof. Dr. Ivelin Kuleff

	2010	necropolis (5th millennium BC) and there sources identification”	
148.	2008–2012	“Lipids, essential and toxic elements in walnut and hazelnut cultivars, grown in Bulgaria - effect of environmental factors and changes during nut development and storage”	Assoc. Prof. Svetlana Momchilova
149.	2008–2012	“Detoxification of aqueous ecosystems polluted with heavy metals and xenobiotics”	Prof. Venko Beshkov