

Scientific program

Sunday, May 8, 2016	
Arrival - Registration	
20.00	Welcome Cocktail
Monday, May 9, 2016	
08.00-09.30	Breakfast
10.00	OPENING CEREMONY
10.00-10.10	WELCOME ADDRESS Aristidis M. Tsatsakis, Co-head of Organizing Committee University of Crete, Heraklion, Crete, Greece
10.10-10.20	ABOUT SYMPOSIUM PROGRAM Mikhail I. Shtilman, Co-head of Organizing Committee D.Mendeleev University of Chemical Technology of Russia, Moscow, Russia
10.20-11.00	COMBINATION CANCER THERAPY USING LIPID-BASED NANOPREPARATIONS V.P. Torchilin, Ph.D., D.Sc. Center for Pharmaceutical Biotechnology and Nanomedicine, Northeastern University, Boston, MA 02115, USA
11.00-11.30	Coffee Break, Poster Session
11.30-12.30	MORNING SESSION
Chairs: Prof. V.P. Torchilin, Prof. K.B. Dzantiev	
11.30-12.00	IN VIVO IMAGING OF NANOPARTICLE'S PASSAGE INTO THE BRAIN P. Henrich-Noack¹, Q. You¹, N. Voigt¹, W. Hintz², T. Hopf², E. Zhang¹, B.A. Sabel¹, A. Tsatsakis³, M. Shtilman⁴, C. Götze⁵, S. Gelperina⁶ <i>¹Institute of Medical Psychology, Otto-von-Guericke University, Magdeburg, Germany</i> <i>²Institute of Process Engineering, Otto-von-Guericke University, Magdeburg, Germany</i> <i>³ToxPlus SA, Heraklion, Greece</i> <i>⁴Amphion Ltd, Innovation Center Skolkovo, Moscow, Russia</i> <i>⁵arivis AG, Rostock, Germany</i> <i>⁶Drugs Technology Ltd, Moscow Region, Russia</i>
12.00-12.30	MODERN ADVANCES IN MOLECULAR PHYSIOLOGY OF VISION

	<p>M.A.Ostrovskii <i>N.Emanuel Institute of Biochemical Physics of the Russian Academy of Science, Moscow, Russia</i></p>
12.30-13.00	<p>KINETIC CHEMLUMINESCENCE AS A TOOL TO INVESTIGATE OXIDATIVE STRESS <u>Yu.A. Vladimirov</u>, D.I. Izmailov <i>Lomonosov Moscow State University, Moscow, Russia</i></p>
13.00-14.00	Lunch
14.00-16.30	Break
16.30-18.00	EVENING SESSION - <i>Young Scientists Session</i>
Chairs: Prof N.L.Klyachko, Prof. S.A.Eremin	
16.30-16.50	<p>SEMICONDUCTOR QUANTUM DOT TOXICITY IN A MOUSE <i>IN VIVO</i> MODEL</p> <p><u>S.V. Bozrova</u>¹, M. Baryshnikova², T. Karmakova³, R. Yakubovskaya³, I.R. Nabiev^{1,4}, A.V. Sukhanova^{1,4} ¹<i>National Research Nuclear University MEPhI (Moscow Engineering Physics Institute), Moscow, Russia</i> ²<i>Blokhin Russian Cancer Research Center, Russian Academy of Medical Sciences, Moscow, Russia</i> ³<i>Hertzen Moscow Oncological Institute, Moscow, Russia</i> ⁴<i>Université de Reims Champagne-Ardenne, Reims, France</i></p>
16.50-17.10	<p>POLYMERIC MICROPARTICLES AS A BASIS FOR REDUCING TOXICITY OF PESTICIDES</p> <p><u>A.M. Shershneva</u>, N.O. Zhila, E.I. Shishatskaya, T.G. Volova <i>Institute of Biophysics SB RAS, Krasnoyarsk, Russia</i></p>
17.10-17.30	<p>MAGNETITE-GOLD MAGNETIC FIELD-SENSITIVE CARRIERS FOR THE IMMOBILIZATION OF BIOMOLECULES: SYNTHESIS AND INVESTIGATION</p> <p><u>M.V. Efremova</u>^{1,2}, Ya.O. Tsareva², A.D. Blokhina¹, A.S. Garanina², I.S. Grebennikov², M.A. Abakumov^{2,3}, Yu.I. Golovin⁴, A.G. Savchenko², A.G. Majouga^{1,2}, N.L. Klyachko¹ ¹<i>Moscow State University, Moscow, Russian Federation</i> ²<i>National University of Science and Technology «MIS&S», Moscow, Russian Federation</i> ³<i>Russian National Research Medical University Moscow, Russian Federation</i> ⁴<i>Tambov State University, Tambov, Russian Federation</i></p>
17.30-17.50	<p>THE STUDY OF THE INFLUENCE OF LOW-FREQUENCY ALTERNATIVE MAGNETIC FIELD ON THE COMPLEXES OF LIPOSOMES WITH MAGNETIC NANOPARTICLES BY FLUORESCENT METHODS</p> <p><u>E.O.Kutsenok</u>¹, I.M.Deygen¹, P.G.Rudakovskaya^{1,2}, A.G.Majouga^{1,2}, Yu.I.Golovin^{1,3}, E.V.Kudryashova¹, A.V. Kabanov^{1,4}, N.L.Klyachko^{1,2,4} ¹<i>M.V. Lomonosov Moscow State University, Faculty of Chemistry, Moscow, Russia</i> ²<i>National University of Science and Technology «MISIS» (MISIS), Moscow, Russia</i></p>

	³ <i>G.R. Derzhavin Tambov State University, Tambov, Russia</i> ⁴ <i>University of North Carolina, Chapel Hill, NC, USA</i>
17.50-18.50	Round table workshop : ERA.NET Project “NABUKO”
19.00-20.00	Dinner
Tuesday, May 10, 2016	
08.00-9.15	Breakfast
09.30-13.00	MORNING SESSION
Chairs: Prof. A.A. Berlin, Prof. M.A.Ostrovskii	
9.30-10.00	COMPUTER MODELING IN MOLECULAR MEDICINE AND IN DRUG DESIGN S.D.Varfolomeev <i>Institute of Biochemical Physics of the Russian Academy of Sciences and Department of Chemical Enzymology of Moscow State University.</i>
10.00-10.30	PROTEINS ON THE SURFACE OF GOLD NANOPARTICLES: PROPERTIES AND PRACTICAL APPLICATION B.B. Dzantiev <i>A.N. Bach Institute of Biochemistry, Federal Research Centre «Fundamentals of Biotechnology» of the Russian Academy of Sciences, Moscow, Russia</i>
10.30-11.00	NEW-GENERATION PESTICIDES WITH TARGETED AND CONTROLLED RELEASE OF ACTIVE INGREDIENTS T.G. Volova <i>Siberian Federal University Institute of Fundamental Biology and Biotechnology, Krasnoyarsk, Russia Institute of Biophysics of Siberian Branch of Russian Academy of Sciences, Krasnoyarsk Russia</i>
11.00-11.30	Coffee Break, Poster Session
Chairs: Prof. Yu.A.Vladimirov, Prof. P.D.Katsarava	
11.30-12.00	«LIVING» CATIONIC POLYMERIZATION OF NITROGEN-CONTAINING CYCLES A.A. Berlin, E.F. Razvadovskii, A.V. Nekrasov <i>Semenov Institute of Chemical Physics, Russian Academy of Sciences, Moscow, Russia</i>
12.00-12.30	ULTRASONIC TREATMENT AS A WAY TO INCREASE THE BIODEGRADABILITY OF FILLED POLYMER BLENDS

	<p>I.A. Kirsh¹, T.I.Chalykh¹, <u>Chalykh A.E.</u>² ¹<i>Plekhanov Russian University of Economics,</i> ²<i>Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences</i></p>
12.30-13.00	<p>SPHEROIDIZED GLASSY MATERIALS FOR LOCAL RADIOTHERAPY</p> <p><u>V.N. Sigaev</u>, G.N. Atroschenko D. Mendeleev University of Chemical Technology, Miusskaya sq., 9, Moscow 125047, Russia. Vlad.sigaev@gmail.com</p>
13.00-14.00	Lunch
14.00-19.00	Break
19.00-20.00	Dinner
Wednesday, May 11, 2016	
08.00-09.30	Breakfast
09.30-13.00	MORNING SESSION
Chairs: Prof. A. E. Chalykh, Prof. V.N.Rakitskii	
9.30-10.00	<p>NEW BIODEGRADABLE COMPOSITIONS ON THE BASE OF NATURE POLYMERS OF DIFFERENT CLASSES</p> <p><u>S.Z. Rogovina</u>, K.V. Aleksanyan, A.A. Berlin <i>Semenov Institute of Chemical Physics, Russian Academy of Sciences, Moscow, Russia</i></p>
10.00-10.30	<p>ECOLOGY AND ENVIRONMENTAL ASPECTS BIO-REFINERY OF LARCH</p> <p>E.L.Akim <i>Higher School of Technology and Energy, Saint Petersburg State University of Industrial Technologies and Design, Saint Petersburg, Russia</i></p>
10.30-11.00	<p>NEW ARGININE- AND SPERMINE-BASED CATIONIC POLYMERS AS ANTIMICROBIAL AND GENE TRANSFECTION AGENTS</p> <p>N.Zavradashvili¹, C. Sarisozen², Teng. Kantaria¹, M.Gurielidze¹, D.Tugushi¹, V.Torchilin², <u>R.Katsarava</u>¹ ¹<i>Institute of Chemistry and Molecular Engineering, Agricultural University of Georgia, Tbilisi, Georgia</i> ²<i>Center for Pharmaceutical Biotechnology and Nanomedicine, Northeastern University, Boston, MA, USA</i></p>
11.00-11.30	Coffee Break, Poster Session
Chairmen: Prof. A.M.Tsatsakis, Prof. Prof. E.L.Akim	
11.30-12.00	VITAL ISSUES OF MODERN TOXICOLOGY

	<u>V.N. Rakitskii</u>, T.A. Sinitskaya <i>Federal scientific center of Hygiene named after F.F. Erisman, Moscow, Russia</i>
12.00-12.30	RISK ASSESSMENT OF NANOPARTICLES IN THE ENVIRONMENT K.S.Golokhvast¹, K.Y.Kirichenko¹, V.V.Drozd¹, A.S.Kholodov¹, A.V.Gridasov¹, V.V.Chaika¹, A.M.Tsatsakis^{1,2} ¹ Far Eastern Federal University, Vladivostok, Russia ² University of Crete, Heraklion, Greece
12.30-13.00	HYDROPHOBIC ADHESIVES FOR TRANSDERMAL SYSTEMS A.A.Shcherbina, A.E.Chalyh <i>A.N. Frumkin Institute of Physical Chemistry and Electrochemistry of RASs, Moscow, Russia</i>
13.00-14.00	Lunch
14.00-19.00	Break
19.00-20.00	Dinner
Thursday, May 12, 2016	
08.00-09.00	Breakfast
09.30-13.00	MORNING SESSION Chairs: Prof. T.G.Volova, Prof. V.N.Sigaev
9.30-10.00	TRIPLOIDY DOES NOT DECREASE EDA AND DHA CONTENTS IN FILETS OF HUMBACK SALMON <i>Oncorhynchus gorbusha</i> <u>M.I.Gladyshev</u>^{1,2}, V.S.Artamonova³, A.A.Makhrov³, N.N.Sushchik^{1,2}, G.S.Kalachova¹, Y.Y. Dgebuadze³ ¹ Institute of Biophysics of Siberian Branch of Russian Academy of Sciences, Krasnoyarsk, Russia ² Siberian Federal University, Krasnoyarsk, Russia ³ A. N. Severtsov Institute of Ecology and Evolution of Russian Academy of Sciences, Moscow, Russia.
10.00-10.30	EFFECTS OF LOW FREQUENCY MAGNETIC FIELD IN THE PRESENCE OF MAGNETIC NANOPARTICLES ON BIOMOLECULES AND BIOPROCESSES: PROSPECTS AND DRAWBACKS <u>N.L. Klyachko</u>^{1,2,4}, Yu.I. Golovin^{3,1,2}, A.G. Majouga^{1,2}, M.V. Efremova^{1,2}, K.Yu. Vlasova¹, M.M. Veselov¹, P.G. Rudakovskaya^{1,2}, A. Usvaliev¹, E.A. Zaitseva¹, M. Haney⁴, I.M. Deygen¹, E.O. Kutsenok¹, A. Petrunin¹, E.A. Markvicheva⁵, E.V. Batrakova⁴, M. Sokolsky⁴, A.V. Kabanov^{1,4} ¹ M.V. Lomonosov Moscow State University, Faculty of Chemistry, Moscow, Russia ² National University of Science and Technology "MISIS" (MISIS), Moscow, Russia ³ G.R. Derzhavin Tambov State University, Tambov, Russia

	<p>⁴ University of North Carolina, Chapel Hill, NC, USA ⁵ Shemyakin–Ovchinnikov Institute of Bioorganic Chemistry, Moscow, Russia</p>
10.30-11.00	<p>PREPARATION OF ION EXCHANGERS BASED ON PREPARED BACTERIAL CELLULOSE FOR REMOVAL OF HEAVY METAL CATIONS FROM WASTEWATER</p> <p>F. Sohair¹, I.Hasan¹, A. Ahmed¹, M. Asker², A. El-Shafae¹ ¹Textile Research Division, National Research Center, Cairo, Egypt ²Microbial Research Division, National Research Center, Cairo, Egypt</p>
11.00-11.30	Coffee Break, Poster Session
Chairs: Prof. M.I. Gladyshev, Prof. S.Z.Rogovina	
11.30-12.00	<p>NATURAL LIPID-TRANSPORTING NANOSTRUCTURES OF BLOOD PLASMA: PATHOGENETIC ROLE IN ATHEROSCLEROSIS AND DIABETES</p> <p><u>V.Lankin</u>, A.Tikhaze Cardiology Research Complex, Moscow, Russia</p>
12.00-12.30	<p>EXPERIMENTAL AND MATHEMATICAL MODELLING OF COMBINED SUBCHRONIC TOXICITY OF MANGANESE (II, III) OXIDE AND NICKEL (II) OXIDE NANOPARTICLES AND ITS ALLEVIATION WITH A COMPLEX OF INNOCUOUS BIOPROTECTORS</p> <p><u>I.A.Minigaliyeva</u>¹, B.A.Katsnelson¹, V.G.Panov², L.I.Privalova¹, A.N.Varaksin², V.B.Gurvich¹, M.P.Sutunkova¹, V.Ya.Shur³, E.V.Shishkina³, I.E.Valamina⁴, O.H. Makeyev⁴, E.V.Grigoryeva¹ ¹The Medical Research Center for Prophylaxis and Health Protection in Industrial Workers, Ekaterinburg, Russia ²Institute of Industrial Ecology, the Urals Branch of the Russian Academy of Sciences, Ekaterinburg, Russia ³The Institute of Natural Sciences, the Ural Federal University, Ekaterinburg, Russia ⁴ The Central Research Laboratory of the Ural Medical University, Ekaterinburg, Russia</p>
12.30-13.00	<p>AN OVERVIEW OF MAIN RESULTS OBTAINED IN A SERIES OF ANIMAL EXPERIMENTS ASSESSING ORGANISM'S RESPONSES TO METALLIC NANOPARTICLES IMPACT THE PULMONARY PHAGOCYTOSIS, <i>in vivo</i> CYTOTOXICITY, SYSTEMATIC TOXICITY AND GENOTOXICITY, BIOPROTECTION</p> <p>M.P.Sutunkova¹, B.A.Katsnelson¹, L.I.Privalova¹, V.B. Gurvich¹, I.A.Minigaliyeva¹, V.Y.Shur², E.V.Shishkina², O.H.Makeyev³, I.E.Valamina³ ¹The Medical Research Center for Prophylaxis and Health Protection in Industrial Workers; Ekaterinburg, Russia ² The Institute of Natural Sciences, the Ural Federal University, Ekaterinburg, Russia ³ The Ural State Medical University; Ekaterinburg, Russia</p>
13.30-14.00	Lunch

14.00-19.00	Break
19.00-20.00	Dinner
Friday, May 8, 2015	
08.00-09.00	Breakfast
9.30-13.00	MORNING SESSION
Chairs: Prof. S.Krylov, E.A.Markvicheva	
9.30-10.00	<p>IMMUNOASSAY TEST-METHODS FOR DETERMINATION OF FOOD CONTAMINANTS</p> <p>S.A.Eremin¹, B.Kabak² ¹<i>M.V. Lomonosov Moscow State University, Faculty of Chemistry, Moscow, Russia, saeremin@gmail.com</i> ²<i>Hitit University, Department of Food Engineering, Faculty of Engineering, Cevre Yolu, Corum, Turkey, bulentkabak@hitit.edu.tr</i></p>
10.00-10.30	<p>KINETIC SEPARATION: A CONCEPTUAL PLATFORM FOR DEVELOPMENT OF HOMOGENEOUS KINETIC AFFINITY METHODS</p> <p>S.N. Krylova <i>Department of Chemistry and Centre for Research on Biomolecular Interactions, York University, Toronto, Ontario, Canada M3J 1P3</i></p>
10.30-11.00	<p>CHITOSAN DERIVATIVES IN MODERN NANOBIOTECHNOLOGIES</p> <p>V.P. Varlamov <i>Federal State Institution «Federal Research Centre «Fundamentals of Biotechnology» of the Russian Academy of Sciences», Moscow, Russia</i></p>
11.00-11.30	Coffee break
Chairmen: Prof. S.Krylov, Prof. V.P.Varlamov	
11.30-12.00	<p>MAGNETIC LIPOSOMES LOADED WITH THYMOQUINONE: PREPARATION AND <i>IN VITRO</i> EVALUATION</p> <p>A.Gileva¹, A. Petrunin², K. Vlasova², R. Akasov¹, Yu. Golovin³, N.Klyachko², <u>E. Markvicheva¹</u> ¹ Shemyakin–Ovchinnikov Institute of Bioorganic Chemistry Rus Acad Sci, Moscow, Russia ² Lomonosov Moscow State University, Moscow, Russia ³ Tambov State University named after G.R. Derzhavin, Tambov, Russia</p>
12.00-12.30	<p>CARBON NANOTUBES: CONSEQUENCES OF IMPURITIES ON METHABOLIC PATHWAYS</p> <p><u>A.Tsatsakis¹</u>, A.Basak², K.Golohvast³, E.Shishatskaya⁴ M.Shtilman⁵ ¹<i>Center of Toxicology Science & Research, Medical School, University of Crete, Heraklion, Crete, Greece</i></p>

	<p>²<i>Gazi University, Faculty of Pharmacy, Department of Toxicology, 06330, Ankara, Turkey.</i></p> <p>³<i>Far Eastern Federal University, Vladivostok, Russia.</i></p> <p>⁴<i>Siberian Federal University, Krasnoyarsk, Russia.</i></p> <p>⁵<i>D.Mendeleyev University, Moscow, Russia</i></p>
12.00-12.30	<p>CARRIERS OF BIOACTIVE SUBSTANCES BASED ON AMPHIPHILIC POLYMERS</p> <p><u>M.I.Shtilman</u>, A.N.Kuskov, A.V.Goryachaya, P.P.Kulikov <i>D.Mendeleyev University of Chemical Technology of Russia, Moscow, Russia</i></p>
<p>CLOSING CEREMONY Farewell Address – Closing Remarks</p>	
13.00-14.00	Lunch
19.00-22.00	Farewell Dinner
<p>Saturday, May 13, 2016</p>	
08.00-09.00	Breakfast
10.00-13.00	Excursion
13.00-14.00	Lunch
19.00-22.00	Dinner
<p>Sunday, May 10, 2016</p>	
08.00-09.00	Breakfast
<p>Departure of Participants</p>	