

**Protocol for Confirmation of the New Joint Research Projects
for the period 2012-2014**

The State Agency on Science, Innovations and Informatization of Ukraine and the Department of Science and Technology (DST) for the Government of the Republic of India agreed to initiate new research projects through bilateral discussion in November 2011, pursuant to the Treaty on Friendship and Cooperation between Ukraine and the Republic of India of 27 March 1992 and the Agreement between the Government of Ukraine and the Government of the Republic of India on Economic and Technical Cooperation of 27 March 1992.

After the call for proposals, exchanging reports, evaluation procedures and bilateral discussions, both Sides agreed to select and fund the ten new joint research projects as below for the period from 2012 to 2014.

The Sides agreed the mechanism of projects financing as follows:

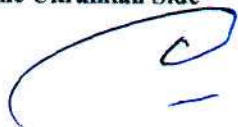
- The Ukrainian Side would provide international fare, travel expenses and medical assurance of the Ukrainian scientists visiting India, as well as provide local hospitality, including accommodation, per diem, inter-city travel and local transport for the Indian scientists visiting Ukraine;
- The Indian Side would provide international fare, travel expenses and medical assurance of the Indian scientists visiting Ukraine, as well as provide local hospitality, including accommodation, per diem, inter-city travel and local transport for the Ukrainian scientists visiting India.

#	Title of project	Ukrainian partner	Indian partner
1.	Dark matter, Dark energy and modified gravity	Dr Yuri Shtanov Bogolyubov Institute for Theoretical Physics of National Academy of Sciences of Ukraine Kiev- 03680 Ukraine Ph- +380 44 521 3453 Fax-+380 44 526 5998 shtanov@bitp.kiev.ua	Dr Varun Sahni Inter-University centre for Astronomy and Astrophysics Ganeshkhind, 411 007 Pune Tel +91 20 25604406 Fax +91 20 2560 4699 varun@iuca.ernet.in
2.	Thermodynamic Behaviour of IV Generation Working fluids for renewable energy Technologies	Prof. Victor Mazur Odessa state Academy of Refrigeration 1/3 Dvoryanskaya St. 65082 Odessa Ukraine Ph- +380 977995050 Fax-+380 487231145 bkosoy@yahoo.com	Prof. G Venkatarathnam IIT, Madras Refrigeration and Air conditioning Lab, Chennai 600036 Ph-044 2257 4680 Fax-044 2257 4652 ssmurthy@iitm.ac.in
3.	Design and synthesis of novel functionalized chalcones as inhibitors of hemoglobin- degrading malarial cysteine proteases, falcipain 2/3	Dr Nikolay Gorobets Dept. of Chemistry of Heterocyclic compounds SSI Institute for single crystals of NAS of Ukraine, Kharkiv- 61001 Ukraine Ph- +380 57 341 0256 Fax-+380 57 340 9343 gorobets@isc.kharkov.com	Dr B K Singh Dept. of Chemistry University of Delhi Delhi Tel +91 11 2766 6646 Fax +91 11 2766 7206 singhbk@chemistry.du.ac.in
4.	Research of the new processes of motor fuel production from	Dr. Olekseii Dudnyk Coal energy technology Institute	Dr Anil Kumar Sinha Sc "E-I "

	wastes. Hydrogen and synthesis gas generation from solid biomass and domestic wastes. Conversion of biomass-derived gases (syn-gas) to second & third generation liquid biofuel using nanocatalysts	of National Academy of Sciences of Ukraine, Andreiivska st. Kyiv 04070- Ukraine Ph- +380 44 4250419 Fax-+380 44 537 2241 aldudnik@bigmir.net aldunik@nas.gov.ua	Hydroprocessing lab, CCPD IIP, Mohkampur- 248005- Dehradun Ph-0135- 2525842 Fax- asinha@iip.res.in
5.	Phase Transitional, diffusion processes and magnetoresistive properties of multilayer based on Fe and Pd, Pt or Ag	Prof. Ivan Protsenko Dept. of Applied Physics Sumy state University Ministry of education, science, youth and sport Sumy- 40007 Ukraine Ph- +380 542 33 56 12 Fax-+380 542 33 40 58 protsenko@aph.sumdu.edu.ua	Prof. Chetan Panchal The MS University of Baroda, Faculty of Technology and Engineering Varodara- 390001 Tel +91 265 2434188 Fax +91 265 242 3898 Cjpanchal_msu@yahoo.com
6.	Development of Antiepileptic leads to suppress hippocampal epileptic seizures	Dr Olena Isaeva Senior Research Scientist Department of General Physiology of Nervous System Bogmoletz Institute of Physiology NAS Ukraine 4 Bogomoletz Str. Kiev, 01024 Ukraine Ph- +380 44 2562 519 Fax-+380 44 2562 000 Savrasova10@gmail.com	Prof P Yogeshwari Head, Dept. of Pharmacy Birla Institute of Technology & Science- Pilani Hyderabad Campus Andhra Pradesh Tel +91 40 66303506 Fax +91 40 66303998 dsriram@bits-hyderabad.ac.in drdsriram@yahoo.com
7.	Epitaxial rare-earth substituted garnet films for quantum key distribution devices	Prof. Ihor M. Syvorotka Head of Department Scientific research company "Carat" Lviv- 79031 Ph- +380 322 2949 731, Fax-+380 322 2949 731 syvorotka@carat.lviv.ua	Prof Anil Prabhakar IIT- Madras Dept. of electrical Engineering Chennai- 600 036 Tel +91 40 2257 4425 Fax +91 40 2257 0120 anilpr@iitm.ac.in
8.	Multi wavelength observations of blazars	Prof Alexandr Vovlach Crimean Astrophysical Observatory Katsively, Yalta, Crimea Ukraine Ph- +380 654 237152 Fax-+380 654 237161- vovlach@ukrpost.ua	Dr Alok Chandra Gupta Sc " D " ARIES Manora peak Nainital, 263129 Ph-09936683176 Fax- 05942 233 439 alok@aries.res.in
9.	Development of probiotics for enhanced antioxidant availability	Dr Olexy M Dugan Dean, Faculty of Biotechnics, National Technical University of Ukraine "Kyiv Polytechnic Institute" 03056, Peremogy Ave. 37, Academy Building- 4 Kyiv- Ukraine Ph- +380 44 406 83 12 Fax-+380 44 406 83 12 biotech@fbt.ntu-kpi.kiev.ua	Dr Prasanna B D Department of chemical Engg., National Institute of Technology Karnataka Surathkal, Manglore Ph-0824 2474000 Cell 09483035265 Fax-0824 2474 033 prsnbhat@gmail

10.	Developing electrochemical and photochemical biosensors using chloroplast and enzymatic membranes	Prof. Alexei Soldatkin Head, Biomolecular electronics Laboratory Institute of Molecular Biology and genetics (IMBG) of NAS of Ukraine Kyiv 680 Ukraine Ph- +380 44 200 03 28 Fax-+380 44 526 07 59 A_soldatkin@yahoo.com A_soldatkin@imbg.org.ua	Prof. A N Mishra Dean, Faculty of Sciences Dept. of Biosci. Biotechnology Fakir Mohan University Nuapadhi Campus Balasore- 756020 Tel +91 6782 26280 Fax +91 6782 264244 misraan@yahoo.co.in
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For the Ukrainian Side



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 Science, Innovations and Informatization
 of Ukraine

For the Indian Side



DOCTOR ARABINDA MITRA
 Adviser & Head (Bilateral
 Cooperation), Department of Science
 & Technology, Government of India