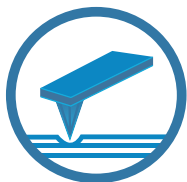




**METHODOLOGICAL ASPECTS  
OF SCANNING PROBE  
MICROSCOPY (BySPM-2012)**  
10th International Conference  
13–16 November 2012, Minsk, Belarus

## CONFERENCE PROGRAMME



Minsk 2012

### PROGRAM COMMITTEE

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Potenko S.S., HTMI NASB  
Syroezkin S.V., HTMI NASB  
Roshchina S.P., HTMI NASB

The conference is held at the A.V. Luikov Heat and Mass Transfer Institute of the NAS of Belarus.  
Address: 15, P. Brovki str., Minsk, Conference Hall.  
Organizing Committee phone/fax +37517-284-10-60.  
E-mail: [byspm@mail.ru](mailto:byspm@mail.ru)

Theater program: the opera of G. Verdi "Aida", the National Academic Bolshoi Opera and Ballet Theatre of Belarus. 1 Paris Commune pl., travel to subway station "Nemiga", then 1 stop (buses 24, 38, 57, 91, trolleybuses 12, 29, 37, 40, 46,53) to the stop "Oporny teatr".  
Paid by the conference organizers.

Excursion and conference dinner: Museum "Dudutki", 40 km from Minsk, the banquet at a restaurant of ethnic cuisine. Estimated cost: 390 000 BYR.

Visit to the Institute of Arts, Ethnography and Folklore: Museum of Ancient Culture. 1 Surganova str., Bldg. 2. Free entrance.

10th International Conference  
 “Methodological Aspects of Scanning Probe Microscopy”  
 Conference Programme

November 13, 2012

9.00 – 10.30 Registration

10.30 Opening ceremony

10.30 – 17.10 PLENARY SECTION. Chair: S. A. Chizhik

10.30 – 11.10	<u>Swiridenok A.I.</u>	<i>Grogn, Belarus</i>	RESOURCES OF NANOTECHNOLOGY DEVELOPMENT OF BELARUS
11.10 – 11.50	<u>Bukharaev A.A.</u> , <u>Bizjaev D.A.</u> , <u>Nurgazizov N.I.</u> , <u>Khanipov T.F.</u>	<i>Kazan, Russia</i>	FORMATION AND INVESTIGATION OF PLANAR MAGNETIC NANOSTRUCTURES WITH SPM METHODS
11.50 – 12.30	<u>Chizhik S.A.</u>	<i>Minsk, Belarus</i>	TRENDS OF SCANNING PROBE MICROSCOPY IN BELARUS

12.30 – 13.30 Break for lunch

13.30 – 14.10	<u>Mironov V.L.</u> , <u>Ermolaeva O.L.</u>	<i>N. Novgorod, Russia</i>	MAGNETIC FORCE MICROSCOPY OF DOMAIN WALLS IN FERROMAGNETIC NANOWIRES
14.10 – 14.50	<u>Sukhanova T.E.</u> , <u>Vylegzhaniina M.E.</u> , <u>Valueva S.V.</u> , <u>Sokolova M.P.</u> , <u>Kutin A.A.</u> , <u>Volkov A. Ya.</u> , <u>Borovikova L.N.</u> , <u>Gelfond M.L.</u>	<i>St. Petersburg, Russia</i>	ATOMIC FORCE MICROSCOPY OF NANOSTRUCTURES FOR PHOTODYNAMIC THERAPY
14.50 – 15.30	<u>Vo Thanh Tung</u> , <u>Nguyen Trong Tinh</u> , <u>Nguyen Hoang Yen</u> , <u>Ton That Dung</u>	<i>Hue city, Vietnam</i>	MEASURING THE FERROELECTRIC HYSTERESIS USING RT66A SYSTEM AND THE SAWYER-TOWER CIRCUIT

15.30 – 15.50 Coffee break

15.50 – 16.30	<u>Gainutdinov R.V.</u> , <u>Lysova O.A.</u> , <u>Tojstihina A.L.</u> , <u>Yudin S.G.</u> , <u>Fridkin V.M.</u> , <u>Ducharme S.</u>	<i>Moscow, Russia</i> <i>Lincoln, USA</i>	INVESTIGATION OF GROWTH AND KINETICS OF SWITCHING OF VINYLIDENE FLUORIDE-TRIFLUOROETHYLENE COPOLYMER FERROELECTRIC NANOCRYSTALS IN AFM
16.30 – 17.10	<u>Yasinski V.M.</u> , <u>Ryzhevich A.A.</u> , <u>Smirnov A.G.</u> , <u>Shuilitki B.G.</u>	<i>Minsk, Belarus</i>	A FIBRE OPTIC SENSOR FOR NEAR-FIELD LITHOGRAPHY

November 14, 2012

9.15 – 15.00 SECTION 1. Application of the SPM methods for physical and chemical research.  
 Related problems of physics and chemistry of nanostructures, micro- and nanomechanics, micro- and nanotribology.  
 Chairs: A.A. Bukharaev, T.E. Sukhanova, V.L. Mironov

9.15 – 9.30	<u>Bondarenko M.A.</u> , <u>Yatsenko I.V.</u> , <u>Petlevanny P.V.</u> , <u>Kovalenko Yu.I.</u> , <u>Vashchenko V.A.</u>	<i>Cherkasy, Ukraine</i>	APPLICATION OF AFM METHOD TO STUDY DOMAIN AND DISSIPATIVE STRUCTURES FORMED BY PIEZOCERAMIC ELECTRON IRRADIATION
9.30 – 9.45	<u>Ahmadishina K.F.</u> , <u>Bobrinetski I.I.</u> , <u>Komarov I.A.</u> , <u>Romashkin A.V.</u>	<i>Moscow, Russia</i>	STUDY OF CONDUCTIVE COATINGS BASED ON CARBON NANOTUBES TO CREATE TRANSPARENT FLEXIBLE ELECTRONIC DEVICES USING SPM AND RAMAN SCATTERING METHODS
9.45 – 10.00	<u>Stetsura S.V.</u> , <u>Malar I.V.</u>	<i>Saratov, Russia</i>	APPLICATION OF KELVIN-PROBE METHOD TO STUDY INFLUENCE OF A POLYELECTROLYTE COATING AND LIGHTING ON SURFACE POTENTIAL OF SILICON
10.00 – 10.15	<u>Kurbatkin I.L.</u> , <u>Muravieva T.I.</u> , <u>Mezrin A.M.</u> , <u>Frolov N.N.</u>	<i>Moscow, Russia</i>	STUDY OF STRUCTURAL AND TRIBOLOGICAL PARAMETERS OF GLASS FIBER FILMS
10.15 – 10.30	<u>Komarov I.A.</u> , <u>Lavrentiev K.K.</u> , <u>Levin D.D.</u> , <u>Nevolon V.K.</u>	<i>Moscow, Russia</i>	PRODUCTION OF MULTI-GRAPHENE PACKAGES AND A METHOD FOR MEASUREMENT ITS THICKNESS USING PROBE MICROSCOPY

10.30 - 10.45	<u>Prokhorov V.V.</u>	<i>Moscow, Russia</i>	STUDY OF LAMELLAR NANOSTRUCTURES OF OLIGOPEPTIDES AND CYANINE DYES ON A SURFACE OF PYROLYTIC GRAPHITE BY HIGH-RESOLUTION AFM
10.45-11.00	Coffee break		
11.00 – 11.15	<u>Gubanova G.N.</u> , <u>Timpu D.</u> , <u>Korytkova E.N.</u> , <u>Vylegzhaniina M.E.</u> , <u>Sukhanova T.E.</u> , <u>Volkov A.Ya.</u> , <u>Maslennikova T.P.</u> , <u>Kononova S.V.</u>	<i>St. Petersburg, Russia</i> <i>Iassy, Romania</i>	MORPHOLOGY AND STRUCTURE OF NANOCOMPOSITES WITH BELT-CHAIN Na-Mg-SILICATES AND Mg-HYDRATED SILICATES WITH A TUBULAR STRUCTURE
11.15 – 11.30	<u>Antonuk V.S.</u> , <u>Sviridova O.V.</u> , <u>Bondarenko M.A.</u>	<i>Kiev, Ukraine</i> <i>Odessa, Ukraine</i> <i>Cherkassy, Ukraine</i>	INVESTIGATION OF WORKING SURFACE STRUCTURE OF GYROSCOPES CURRENT COLLECTORS LOW-CURRENT CONTACTS DURING THEIR OPERATION BY AFM METHOD
11.30 – 11.45	<u>Kurylionak N.A.</u> , <u>Paribok I.V.</u>	<i>Minsk, Belarus</i>	AFM STUDY OF ADHESION PROPERTIES OF FILM MEMBRANES BEFORE AND AFTER FILTRATION OF A CASEIN SOLUTION
11.45 – 12.00	<u>Baraishuk S.M.</u> , <u>Tashlykova-Bushkevich I.I.</u> , <u>Yakovenko Yu.S.</u>	<i>Minsk, Belarus</i>	SURFACE MORPHOLOGY OF RAPIDLY SOLIDIFIED FOILS OF ALUMINUM AND ITS BINARY ALLOYS
12.00 – 12.15	<u>Bugrov A.N.</u> , <u>Vylegzhaniina M.E.</u> , <u>Sukhanova T.E.</u> , <u>Almiasheva O.V.</u> , <u>Svetlichny V.M.</u>	<i>St. Petersburg, Russia</i>	AFM FOR POLYMER NANOCOMPOSITES BASED ON PM POLYIMIDE AND NANOPARTICLES OF ZIRCONIUM DIOXIDE
12.15 – 12.30	<u>Turovets A.I.</u> , <u>Tashlykov I.S.</u>	<i>Minsk, Belarus</i>	SURFACE MORPHOLOGY AND WETTABILITY OF A Mo/GLASS SUBSTRATE SYSTEM FORMED BY SIAD METHOD
12.30 – 13.30	Break for lunch		
13.30 – 13.45	<u>Bondarenko Yu Yu.</u> , <u>Bondarenko M.A.</u> , <u>Maslianyk S.V.</u>	<i>Cherkassy, Ukraine</i>	METHODOLOGICAL ASPECTS OF NANOMETER-SCALE RESEARCHES IN A DISTANCE EDUCATION
13.45 – 14.00	<u>Krasnoborodko S.Yu.</u> , <u>Sheviakov V.I.</u>	<i>Moscow, Russia</i>	METHODOLOGICAL ASPECTS OF SCANNING CONDUCTIVE AND MAGNETIC FORCE MICROSCOPY
14.00 – 14.15	<u>Borgekov D.B.</u> , <u>Zhumazhanova A.T.</u> , <u>Saifulin M.M.</u> , <u>Antonov A.Yu.</u> , <u>Gorin E.G.</u> , <u>Mashentseva A.A.</u> , <u>Zdorovets M.V.</u>	<i>Astana, Kazakhstan</i>	A COMPARATIVE ANALYSIS OF AFM AND SEM METHODS FOR INVESTIGATION OF A RADIATION-MODIFIED POLYETHYLENETEREPHTHALATE
14.15 – 14.30	<u>Dementiev P.A.</u> , <u>Dunaevski M.S.</u> , <u>Aleshin A.N.</u> , <u>Titkov A.N.</u>	<i>St. Petersburg, Russia</i>	OBSERVATION OF CHARGES KINETICS IN ORGANIC DEVICE STRUCTURES BY SCANNING KELVIN-PROBE MICROSCOPY METHODS
14.30 – 14.45	<u>Baran L.V.</u>	<i>Minsk, Belarus</i>	APPLICATION OF POWER MODULATION METHOD FOR RESEARCH OF LOCAL STIFFNESS OF Cr-FULLER-Cr FILMS
14.45 – 15.00	<u>Glukhovskoy E.G.</u> , <u>Khomutov G.B.</u> , <u>Gorbachev I.A.</u> , <u>Ermakov A.V.</u> , <u>Chumakov A.S.</u> , <u>Kim V.P.</u>	<i>Saratov, Russia</i>	STUDY OF MORPHOLOGY OF ORGANIC FILMS: LANGMUIR-BLODGETT FILMS AND LIPOSOMES MODIFIED MEMBRANES
15.00 – 15.15	<u>Rogachev A.A.</u>	<i>Gomel, Belarus</i>	APPLICATION OF AFM AND POLARIZING INFRARED SPECTROSCOPY FOR ANALYSIS OF ULTRATHIN POLYMER COATINGS
15.15 – 15.30	Coffee break		

15.30 – 16.45 SECTION 2. Application of the SPM methods for biological research. Chair: M.V. Goltsev			
15.30 – 15.45	Longo G., Rio L.M., Trampuz A., Bizzini A., Dietler G., <u>Kasas S.</u>	Lausanne, Switzerland	EXPLORING BACTERIAL RESISTANCE TO ANTIBIOTICS BY ATOMIC FORCE MICROSCOPY
15.45 – 16.00	Perevozchikov P.A., <u>Karban O.V.</u> , Vasiliev Yu.G., Krasnoperov D.I.	Izhevsk, Russia	FEATURES OF SPM APPLICATION FOR STUDY OF NONCELLULAR STRUCTURES IN TISSUES OF INTERNAL ENVIRONMENT
16.00 – 16.15	<u>Starodubtseva M.N.</u> , Egorenkov N.I., Nikitina I.A.	Gomel, Belarus	FRICTION PROPERTIES OF BIOLOGICAL CELLS SURFACE LAYER, ESTIMATED BY LATERAL FORCE MICROSCOPY
16.15 – 16.30	<u>Ignatovski M.I.</u> , Lashkovski V.V., Sergei O.A.	Grodno, Belarus	STUDY OF CARTILAGE TISSUE PATHOLOGY USING HIGH-RESOLUTION THREE-DIMENSIONAL MICROSCOPIC IMAGES
16.30 – 16.45	<u>Drozd E.S.</u> , Shamova E.V., Bichan O.D., Gorudko I.V., Shumaev K.B., Vanin A.F., Sokolov A.V., Grudinina N.V., Bushuk S.B., Bushuk B.A., Vasiliev V.B., Panasenko O.M., Chizhik S.A., Cherenkevich C.N.	Minsk, Belarus Moscow, Russia St. Petersburg, Russia	EVALUATION OF FUNCTIONAL STATE OF PLATELET BY AFM METHODS
<b>19.00 Theater program</b>			
<b>November 15, 2012</b>			

**9.00 – 11.00 SECTION 3. New SPM techniques. Modeling micro- and nanoscale processes using SPM data.  
Chair: M.A. Bondarenko**

9.00 – 9.15	<u>Borshchagovski E.G.</u> , Fisher U., Shmid T., Zenobi R.	Kiev, Ukraine Muenster, Germany Zurich, Switzerland	USING OF FUNCTIONALIZED PROBES IN NEAR-FIELD MICROSCOPY
9.15 – 9.30	Aizikovich S.M., <u>Krenev L.I.</u>	Rostov-on-Don, Russia	CONSIDERING OF TEMPERATURE IN ANALYSIS OF INTERACTION OF A STAMP WITH A FUNCTIONALLY GRADED COATING
9.30 – 9.45	<u>Khudoley A.</u> , Chizhik S., Wierzcholski K., Miszczak A., Chikunov V., Shasholko D.	Minsk, Belarus Koszalin, Poland Gdynia, Poland	ESTIMATION OF THE VISCOSITY PARAMETERS FOR ULTRA THIN LAYER OF LIQUID
9.45 – 10.00	<u>Khudoley A.</u> , Kuznetsova T., Chizhik S., Wierzcholski K., Miszczak A.	Minsk, Belarus Koszalin, Poland Gdynia, Poland	PRECISION MEASUREMENTS OF SLIDING MICROBEARING RADIAL CLEARANCE AND GROOVES GEOMETRY
10.00 – 10.15	<u>Trubchik I.S.</u>	Rostov-on-Don, Russia	A CALCULATION MODEL OF DEFORMATION OF A FUNCTIONALLY GRADED WEDGE DEFORMATION
10.15 – 10.30	<u>Volkov S.S.</u> , Mitrin B.I., Fedotov I., Drozd E.S.	Rostov-on-Don, Russia Pretoria, RSA Minsk, Belarus	A METHOD FOR EVALUATION OF MECHANICAL PROPERTIES OF A SOFT IRREGULAR LAYER WITH AFM
10.30 – 10.45	<u>Abetkovskaia S.O.</u> , Chizhik S.A.	Minsk, Belarus	EVOLUTION OF MATHEMATICAL MODELS OF PROBE OSCILLATIONS IN TAPPING MODE OF AFM
10.45 – 11.00	<u>Sergeev O.V.</u> , Lacombe Yu., Chakanga K., Geizendorfer Sh., Maidel K., Agert K.	Oldenburg, Germany	INFLUENCE OF TOPOGRAPHY OF FRONT CONTACT SURFACE ON SCATTERING AND ABSORPTION PROCESSES OF LIGHT IN THIN-FILM SILICON SOLAR CELLS
11.00 – 11.15	<u>Martyniak R.M.</u> , Chumak K.A., Slobodian B.S., Chizhik S.A.	Lviv, Ukraine	SIMULATION OF ADHESIVE CONTACT OF DEFORMABLE BODIES WITH TEXTURED SURFACES

**11.15 – 11.30 Coffee break**

11.30 – 12.45 SECTION 4. Development of hardware and software for SPM. Chair: V.M. Yasinski			
11.30 – 11.45	<u>Kravchuk K.S.</u> , Gogolinski K.V., Useinov A.S., Kuznetsov A.P., Reshetov V.N., Golubev S.S.	Troitsk, Russia Moscow, Russia	THE METROLOGY SCANNING PROBE MICROSCOPE WITH LASER INTERFEROMETRY "NANOSCAN-3DI"
11.45 – 12.00	<u>Bilokon S.A.</u> , Reva I.A., Bondarenko M.A., Rud M.P.	Cherkassy, Ukraine	MATHEMATICAL MODELING OF DEFORMATION PROCESS OF AFM MEASURING SYSTEM AND COMPUTATION OF ITS OPERATION ALLOWABLE MODE
12.00 – 12.15	Komar O.M., Bondarenko A.V., <u>Kotov D.A.</u>	Minsk, Belarus	METHODS OF THE STUDY OF COPPER NANOPARTICLES SURFACE STRUCTURES
12.15 – 12.30	<u>Mikhaylov A.</u> , Notz-Pekkanen J., Dietler G.	Lausanne, Switzerland	STUDY OF DNA RELAXATION ON MICA WITH FURTHER AUTOMATIC TRACING
12.30 – 12.45	<u>Filimonenko D.S.</u> , Pustakhod D.I., Chizhevsky V.N., Yasinski V.M.	Minsk, Belarus	SCANNING NEAR-FIELD OPTICAL MICROSCOPY OF THE LUMINESCENCE OF THE NV-CENTERS IN NANODIAMOND

**12.45 – 13.45 Break for lunch**

**13.45 Excursion and conference dinner**

**November 16, 2012**

**9.00 – 10.45 POSTER SESSION  
Chair: A.A. Suslov**

CT 1 Brief message	<u>Mihalkovich O.M.</u> , <u>Baraishuk S.M.</u> , Tashlykov I.S.	Minsk, Belarus	STRUCTURE AND PROPERTIES OF TITANIUM-COATING/SILICON SYSTEMS, OBTAINED BY PRECIPITATION OF TITANIUM ON SILICON UNDER OWN IONS IRRADIATION
CT 2 Brief message	<u>Mit' K.A.</u>	Astana, Kazakhstan	AFM FOR TASKS OF CONTROLLING OF NANOCRYSTALS ZINC OXIDE SEED LAYER
CT 3 Brief message	<u>Muravieva T.I.</u> , Kurbatkin I.I.	Moscow, Russia	STRUCTURAL STUDIES OF GLASS-FIBER FILMS ON QUARTZ SUBSTRATE
CT 4 Brief message	Tarend' M.V., <u>Kuznetsova T.A.</u> , Chizhik S.A.	Minsk, Belarus	INVESTIGATION OF SURFACE WEAR ON MEMS SURFACES BY AFM METHOD
CT 5 Brief message	<u>Paribok I.V.</u> , Zhavnerko G.K., Agabekov V.E.	Minsk, Belarus	AFM STUDY OF ADSORPTION SPECIALTIES OF BOVINE SERUM ALBUMIN ON MICROSTRUCTURE-FILMS OF DIPALMITOYLPHOSPHATIDYLCHOLINE
CT 6 Brief message	<u>Skoptsov E.A.</u> , Zhavnerko G.K., Agabekov V.E., Tatulchenkov M.Yu., Shmanai V.V.	Minsk, Belarus	SELF-ORGANIZATION OF OLIGONUCLEOTIDES, DNA AND GOLD NANOPARTICLES ON A SURFACE
CT 7 Brief message	<u>Alpysbaeva B.E.</u> , Korobova N.E., Riaguzov A.P., Nemkaeva R.R.	Almaty, Kazakhstan	ATOMIC FORCE MICROSCOPY AS A MODERN METHOD FOR VISUALIZATION OF BIOLOGICAL OBJECTS
CT 8 Brief message	Goltsev M.V., Kukharenko L.V., Leshchenko V.G., <u>Goltseva M.V.</u> , <u>Kudritsky D.V.</u>	Minsk, Belarus	APPLICATION OF AFM AND SEM METHODS IN STUDY OF BIOLOGICAL STRUCTURES SURFACE AND SURGICAL TOOLS WITH IMPLEMENTATION TO EDUCATION PROCESS AT THE BELARUSIAN STATE MEDICAL UNIVERSITY
CT 9 Brief message	Kukharenko L.V., Chizhik S.A., Drozd E.S., Syroezhkin S.V., Goltsev M.V., Gelis L.G., Medvedeva E.A., Lazareva I.V.	Minsk, Belarus	RESEARCH OF PLATELET FUNCTION ACTIVITY BY AFM METHOD
CT 10 Brief message	Kukharenko L.V., Schimmel Th., Fuchs H., Barczewski M., Shman T.V., Tarasova A.V.	Minsk, Belarus Karlsruhe, Germany Munster, Germany	ATOMIC FORCE MICROSCOPY INVESTIGATION OF HUMAN MESENCHYMAL STEM CELLS



CT 11 Brief message	Malanchuk N.I., Chumak K.A., Martyniak R.M., Chizhik S.A.	Lviv, Ukraine	FRictional CONTACT OF ELASTIC BODIES WITH MICRO-TEXTURED SURFACES
CT 12 Brief message	Sudas M.S., Drozd E.S., Staknut' A.E., Chizhik S.A., Krasochko P.A., Struk M.S.	Minsk, Belarus	ESTIMATION OF INFLUENCE OF NANOPARTICLES ON MORPHOLOGY AND ELASTIC CHARACTERISTICS OF BIOLOGICAL CELLS
CT 13 Brief message	Sudas M.S., Drozd E.S., Chizhik S.A., Zhornik E.V., Baranova L.A., Nguyen Hoa Chau	Minsk, Belarus Hanoi, Vietnam	RESEARCH OF EFFECT OF SILVER NANOPARTICLES ON HUMAN LYMPHOCYTES
CT 14 Brief message	Alyamani A., Khudoley A., Kuznetsova T., Alfihed S., Alotaibi M.	Riyadh, Saudi Arabia Minsk, Belarus	LAYER-BY-LAYER ANALYSIS OF MULTILAYERED MATERIALS
CT 15 Brief message	Vo Thanh Tung, Nguyen Trong Tinh, Nguyen Hoang Yen, Nguyen Dai Thach, Dang Anh Tuan	Hue city, Vietnam	ANALYSING TOPOGRAPHY DATA FROM ATOMIC FORCE MICROSCOPY USING COMSOL MULTIPHYSICS
CT 16 Brief message	Arakelian S.M., Kutrovskaya S.V., Kucherik A.O., Troitskii D.P., Bykov V.A., Leesment S.I.	Vladimir, Russia Zelenograd, Russia	USE OF FRACTAL GEOMETRY METHODS FOR ANALYSIS OF REDUNDANT DATA, OBTAINED WITH AFM
CT 17 Brief message	Loktionov A.A., Argynova A.Kh., Mit' K.A., Mukhamedshina D.M.	Almaty, Kazakhstan	ANALYSIS OF CRYSTALLITES SIZE IN THIN ZnO FILMS ON DIGITAL DATA OF SPM
CT 18 Brief message	Nogtev D.S., Kutrovskaya S.V., Kucherik A.O., Bykov V.A., Leesment S.I.	Vladimir, Russia Zelenograd, Russia	USE OF FRACTAL GEOMETRY METHODS TO IMPROVE QUALITY OF AFM IMAGES
CT 19 Brief message	Abetkovskaya S.O., Chikunov V.V., Pogotskaya I.V., Chizhik S.A., Nguyen Trong Tinh, Vo Than Tung	Minsk, Belarus Hanoi, Vietnam Hue, Vietnam	AFM FOR MEASUREMENT OF ELECTRICAL AND STRENGTH PROPERTIES OF OXIDE AND ADSORBED LAYERS
CT 20 Brief message	Berezina S., Podzorova I.I., Il'icheva A.A., Alad'ev N.A., Pen'kova O.J., Shvorneva I.I.	Žilina, Slovakia Moscow, Russia	STUDY OF MICROSTRUCTURE OF MODIFIED [Ce-TZP] - [Al <sub>2</sub> O <sub>3</sub> ] CERAMICS
CT 21 Brief message	Mohammed Salem	Minsk, Belarus	PHASE CONTRAST IMAGE IN INVESTIGATION OF BIOLOGICAL OBJECTS

10.45 – 11.00 Coffee break

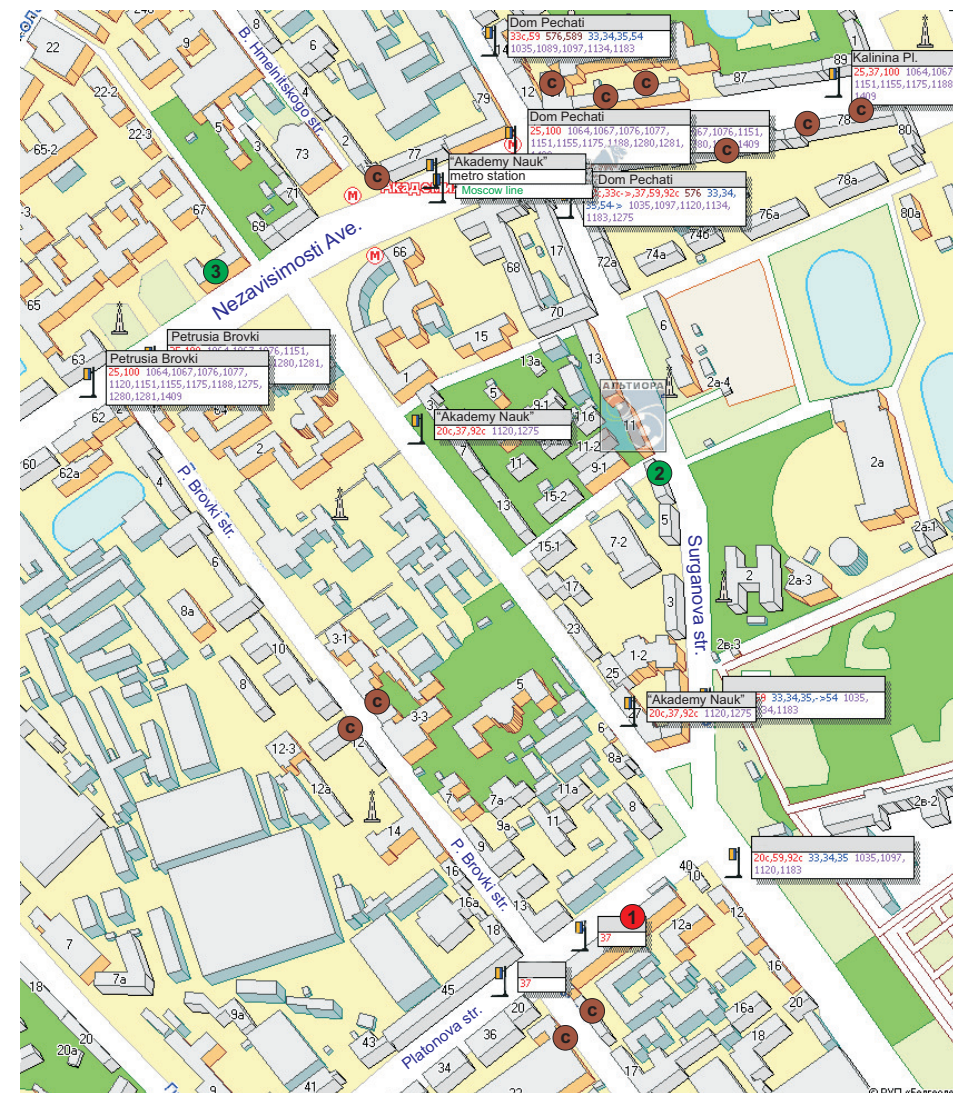
11.00 – 12.15 SECTION 5. Scanning probe microscopy in industry.  
Chair: A.L. Tolstihina

11.00 – 11.15	Golubev S.S., Golubev S.N.	Moscow, Russia	METROLOGICAL SUPPORT METHODS AND MEANS OF MEASUREMENTS WITH USE OF SPM
11.15 – 11.30	Karban' O.V., Balizh K.S., Reshetnikov S.M., Makletsov V.G.	Izhevsk, Russia Zelenograd, Russia	STUDY OF STEEL STRUCTURAL FEATURES OF LARGE ITEMS (EQUIPMENT) BY SPM METHODS
11.30 – 11.45	Chizhik S.A., Kuznetsova T.A., Khudoley A.L., Komarov A.I., Komarova V.I., Vasilenko M.S., Polevnikov V.M.	Minsk, Belarus	STUDY OF SUBSTRUCTURE OF DUCTILE CAST IRON WITH AFM
11.45 – 12.00	Kuznetsova T.A., Shiriaeva T.I., Chizhik N.V.	Minsk, Belarus	USE OF POWDER PARTICLES AS PROBE TIPS FOR SPM IN RESEARCH OF PHYSICAL AND MECHANICAL MATERIAL PROPERTIES
12.00 – 12.15	Chizhik S.A., Basalaev S.P., Pilipenko V.A., Khudoley A.L., Kuznetsova T.A., Chikunov V.V., Suslov A.A.	Minsk, Belarus	QUALITY CONTROL OF INTEGRATED CIRCUITS SUBMICRON ELEMENTS MADE ON SILICON WAFERS

12.15 – 13.00 ROUND TABLE TALK

13.00 – 14.00 Break for lunch

14.00 Visit to the Institute of Arts, Ethnography and Folklore



- 1 Location of the BySPM-2012, 15 P. Brovki str.
- 2 "Akademicheskaya" Hotel
- 3 Hotel of the BNTU
- c Cafe

A.V. Luikov Heat and Mass Transfer Institute  
The NAS of Belarus