

Oral presentations

1. **R. Botchorishvili** – (Mathematics)
2. **L.Mirtskhulava** - The Role of Mobile Computing in Climate protection (Computer Science)
3. **A. Shengelaya** - Condensed Matter Physics and Nanotechnology at TSU: superconducting, semiconducting and magnetic materials (Physics)
4. **D. Kakulia, G. Ghvedashvili, K.Tavzarshvili, R. Zaridze, D.Karkashadze, F. Subitidze** - The method of auxiliary sources and its applications (Electronics)
5. **B. Chankvetadze** - Nano liquid chromatography, capillary electrophoresis and capillary electrochromatography for separation of enantiomers (Chemistry)
6. **K.Chubinidze, E. Davitashvili, N. Koshoridze, G. Petriashvili** - Gold and Silver Nanoparticle Doped Liquid Crystal and Polymer Nanocomposite: Application in Biology and Drug Delivery Systems (Biology)

Poster presentations

Mathematics

1. **Antonio Di Nola, Revaz Grigolia, Nunu Mitskevich** - Logical and relational analysis of immune system
2. **Davitashvili, H. Meladze, I. Meladze** - On One Generalization of Contact Problem for Poisson's Equation in Rectangular Area
3. **D.Gordeziani, T.Davitashvili, T.Davitashvili** - On one Mathematical Model for Water Basin Pollution by Harmful Substances
4. **Nana Odishelidze** - The problems of stresses optimal distribution in an elastic body
5. **A. Kipiani** -Some combinatorial problems concerning with infinite mono-unary algebras
6. **T. Vepkhvadze** - Number of representations of a positive integer by a binary quadratic form
7. **K. Shavgulidze** - On the space of spherical polynomial with quadratic forms of five variables
8. **G. Sokhadze, P.Babilua, E.Nadaraya** - On the maximum likelihood estimation in an infinite dimensional space
9. **O. Purtukhia, B.Dochviri** - Martingale integral representation and its application in financial mathematics
10. **T.Akhobadze** - On the summability of Fourier series
11. **Z. Khechinashvili** - Forecasting of risky asset price in the model with Gaussian martingale
12. **N.Chinchaladze** - Biofilms occupying thin prismatic domains
13. **I. Tavkhelidze** - About structure and some geometric characteristic of the bulk links which appear after cutting of generalized mobius-listings bodies

14. **T.S.Vashakmadze, U. K., Mehmet A. Guler** - Application of new mathematical models for design and analysis of some thin-walled flexible composite structures applicable to high altitude unmanned air vehicles
15. **T. Kiseliova, M. Fandoeva, A. Sikharulidze** - Comparison of heat waves in Tbilisi and Paris in August 2003 using fuzzy methods
16. **M. M. Svanadze** - Potential method in the theory of thermoviscoelasticity for Kelvin-Voigt materials with voids
17. **G. Chelidze** Weakly independent random elements, Gaussian case

Computer Science

1. **A. Gamkrelidze, G. Hotz and L.Varamashvili** New Invariants for the Graph Isomorphism Problem
2. **M.Bakuradze, A.r Gamkrelidzeb and J. Gubeladze** New Invariants for the Graph Isomorphism Problem
3. **I. Khutsishvili, G. Sirbiladze** Case Based Reasoning approach for prediction of the possibility of earthquake occurrence
4. **M. Khachidze, M. Tsintsadze, G.besiaSvili, M. Archuadze** Pollutants Revealing Nano sensor Systems Planning using Environmental Assessment Concepts
5. **M. Mostafavia, A. Tadjeddinea, C. Humberta, P. Kervalishvili, T. Bzhalava, T. Berberashvili** Nonlinear Optical Spectroscopy of Nano Bio Materials
6. **P. J. Kervalishvili, M. G. Khachidze** Spin qubits based model of quantum information nanosystem

Physics

1. **A. Bibilashvili, Z. Kushitashvili** R&D of GaAs oxide with stimulated UV plasma anodizing
2. **T. Tchelidze, T. Kereselidze, T. Nadareishvili** Analysis of hole conductivity in ZnO quantum structures
3. **M. Eliashvilia, G. I. Japaridze and G. Tsitsishvilia** The quantum group and the structure of Bloch eigenstates on a honeycomb lattice
4. **M. Eliashvilia, G. I. Japaridze and G. Tsitsishvilia** The quantum group and the structure of Bloch eigenstates on a honeycomb lattice
5. **A.Ugulava, S.Chkhaidze** Determination of the magnetic nanoaterials anisotropy constant using measurements of the heat capacity
6. **Ugulava, S. Chkhaidze, D. Daraselia, D. Japaridze** Theory of Magnetization of Supermagnetics. Curie Law for Magnetic Fluid
7. **T. Kereselidze, G. Chkadua** Hydrogen atom problem in prolate spheroidal coordinates
8. **A. Barnaveli, N. L. Shatashvili,** Unified generalized model of Dynamo and transient flow generation in Stellar Atmospheres

9. **L. Poniatowski and A. G. Tevzadze** Local linear stability of rheological protoplanetary disk flow with granular viscosity
10. **T.Mdzinarashvili,b, M.Khvedelidze, E.Shekiladzea,, L.Cheishvilia** The new technology of preparing nanosized complex phospholipids
11. **D.E. Khoshtariyaa, T. D. Dolidzeb, T.Tretyakova, M.I Shushanyanb, J. Weic, D. H. Waldeckd and R. van Eldike** Fundamental studies of charge transfer mechanisms within the interfacial biomimetic nanodevices intended for nanotechnological applications
12. Dislocations in LiF Crystals
13. **N. Sapojnikova, J. Monaselidze, G. Nemsadze, N. Asatiani, M. Abuladze, T. Kartvelishvili, L. Asanishvili, I. Kalandadze, M. Gorgoshidze, D. Khachidze, M. Kiladze, E. Lomidze, N. Gogelia, Sh. Barbakadze** Monitoring of biomarkers by biochemical and thermodynamic approaches

Electronics

1. **Ts. Gavasheli, G. Mamniashvili, T. Gegechkori, G. Ghvedashvili, Z. Shermadinib D.Daraseliaa, D.Japaridze** Stimulated domain acoustic echo possessing the long term memory in magnetite powders
2. **K. Tavzarashvili, G. Kajaiaa, G. Ghvedashvili, T. Gogua** Computational analysis of plasmonic nano antennas
3. **L.Shoshiashvili, A.Lomia, B.Baratashvili, G.Chaganava, F. Shubitidze** SAR and Temperature rise during magnetic nanoparticle hyperthermia therapy

Chemistry

1. **M. Rukhadze** - Reverse microemulsions as nanoreactors for nanoparticles synthesis: Study of structural changes of the water droplets under the influence of kosmotropic and chaotropic additives
2. **G. Jibuti, T.Farkas, B.Chankvetadze** - Optimization of enantioseparations in high performance liquid chromatography using polysaccharide based chiral selectors
3. **R. Kakava, M.L. Konjaria, N. Shashviashvili, A. Volonterio, B. Chankvetadze** - Synthesis of novel chiral sulfoxides and study of structure-retention and structure-enantioselectivity relationships in high-performance liquid chromatography
4. **O. Mukbaniani, J. Aneli, G. Buzaladze, E. Markarashvili, T. Tatrishvili** - Wood polymer composites based on the renewable raw materials
5. **A. A. Koridze** - Dehydrogenation of alkanes and alcohols by iridium pincer complexes
6. Study of the Behaviour of Fluorescent pI Markers and Fluorescent Proteins
7. **N. Kokiashvili, G. Vigh, M. Li** - Study of the Behaviour of Fluorescent pI Markers and Fluorescent Proteins Using a Newly Designed Isoelectric Focusing Method
8. **N. Karchava; Sh. Samsoniya; N. Targamadze; I. Chikvaidze** - Synthesis of some Bisindolic Potential Intercalating Agents

9. **N. Ochkhikidze, T. Matitaishvili, K. Didebulidze, E. Elizbarashvili** - Non toxic new macrocyclic azo methines
10. **Z. Pachulia, E. Churgulia** - For Lignin Separation Issue
11. **T. J. Bukia, D. S. Zurabishvili, M.O. Lomidze, M. V. Trapaidze, E.N. Elizbarashvili, S. A. Samsoniya, U. Kazmaier** - Preparation of adamantene containing benzimidazoles and dipeptides
12. **A. Gurgenidze, R. Wegener, J.n Dornseiffer, J.Borchardt, S. Schmitt, A.Kiendler-Scharr, A. Wahner, B.Hoppstock, V. Lorbach** -Novel stationary GC phases prepared from nanoparticles

Biology

1. **A. Chirakadze, L. Ghurchumelia, M. Gabrichidze, G. Chiradze, Z.Buachidze** Utilization of agricultural waste through biosynthesis of the metal nano particles
2. **N. Koshoridze, Z.Kuchukashvili, N. Dachanidze, K. Menabde,G.Burjanadze** Melatonin quantitative changes and psycho emotional stress caused by isolation and circadian rhythms disorders
3. **P. Tchelidze and D. Ploton** Mapping of UBF Isoforms using Fluoronanogold and Electron Tomography: Supramolecular Organization of GFP tagged UBF during Inhibition of rRNA Synthesis
4. **T.Tufinashvili, M.Alibegashvili, L.Ramishvili, M. Gordeziani, A. Khazaradze, and N.Kotrikadze** The study of the hormonal imbalance and morphological characteristics of blood cells in women with uterine tumors
5. **M. Zarkua** Distribution of Lectin Activity in Organs of Indoor Plants Kalanchoe Diagremoniana
6. **L. Ramishvili, I. Bochorishvili, K. Artsivadze, M. Gordeziani, T.Chigogidze, A. Khazaradze and N. Kotrikadze** Laser induced fluorescence studies of blood plasma and tumor tissue of the men with prostate tumors
7. **G. Gorgiladze, R. Bukia, E. Kalandarishvili, A. Taktakishvili, M. Davitashvili, N. Gelashvili, N. Majagaladze, M.Kurasbediani** Study of the inertial Mass and cellular elements in Statocysts Distributed in Georgia's territory, some Species of the Terrestrial Gastropods during their growth and development
8. **N. Doreulee, M. Kurasbediani, R. Bukia, M. Chikovani, B.Chkhartishvili, E. Mitaishvili, Z. Beruashvili, B.Partsvania** The role of flavonoids from Saperavi in regulation of hippocampal related functions
9. **M. Alania** Extrinsic modulatory neurons for controlling feeding share similarities in model invertebrates
10. **N. Doreulee, M.Kurasbediani, B. Chkhartishvili, M. Chikovani, , G.Kutelia, T. Kapanadze, M. Alania, B. Partsvania** Effects of Orexin A on hippocampal epileptiform activity

11. **Sh. Shetekauri, T. Shetekauri, A. Kvividze, O. Chaligava, T. Kalabegishvili, E.I. Kirkesali, M.V. Frontasyeva, O.E. Chepurchenko** The oss Biomonitoring technique for assessing the environmental situation in Georgia
12. **Sh.R. Jinjolia** An Electron Microscopic Study of Nucleoluses
13. **E. Tavdishvili, N. Chiladze, D. Dzidziguri** The Light influence on synchronization of biological processes of growing rats at early stage of postnatal development
14. **M. Davitashvili** Phytopathogenous bacteria phage profile and their sensitivity towards antibiotics The effect of increasing concentrations of 5 azacitidine (5 AzaC) and lenalidomide on immunogenicity of murine prostate cancer RM1 cell line and dendritic cells
15. **N. Porakishvili, T. Tsertsvadze, N.Rajakaruna, A.J Steele, N. Mitskevich, A. Nathwani, R.N Damle, E.A Clark, K. R Rai, N. Chiorazzi and P.M Lydyard** Modulation of sIgM mediated intracellular signaling pathways by CD180 toll like receptor in Chronic Lymphocytic Leukaemia
16. **N. Mitskevich, T. Tsertsvadze, N. Porakishvili, E. Goliadze, G.Guruli** The effect of increasing concentrations of 5 azacitidine (5 AzaC) and lenalidomide on immunogenicity of murine prostate cancer RM1 cell line and dendritic cells
17. **T. Sanikidze, G. Lomsadze, E. Shekiladze, S. Turabelidze, T. Gabunia, R. Sujashvili** Alterations of RBC membrane protein content in physiological and pathophysiological conditions
18. **E.Cherkezia, I.Modebadze, T.Labartkava, M.Miqava, A.Kordzadze, P.Tchelidze, D.Dzidziguri** The effect of endogenous proteins on spermatogenesis and the advantage of 3d reconstruction in evaluation of morphofunctional activity of testes
19. **G. Mosidze, I. Modebadze, E. Bakuradze, L.Rusishvili, N. Bedineishvili, M.Berulava, N. Giorgibiani, D. Dzidziguri** Action Mechanism and Function of Protein Complex Derived from Adult Rats Brain
20. **M. D. Gedevanishvili, N. I. Mushkiashvili, N. M. Gogitidze** Pharmacological Evidence of Cholinergic Counterpart in Systemic Lithium Action
21. **T. Lezhava, T. Jokhadze, J. Monaselidze, M. Gaiozishvili, T. Buadze** Nano peptide (Lys Glu) induced reactivation of “Aged” chromatin
22. **T. Kacharava** Technology Protection of Biodiversity of Medicinal, Aromatic, Spicy & Poisonous Plants
23. **D.Dzidziguri, S.Kiparoidze, E.Bakuradze, I.Modebadze, G.Nebieridze** The study of hepatocyte polyploidization using a model of cholestatic liver
24. **N. Tamarashvili, T. Gabisonia, M. Loladze, N.chakhunashvili, M.Nadiradze, M.Alibegashvili** The possibility of bacteriophage use in aerosol form for decontamination of different surfaces
25. **T. Samadashvili, G. Lekiasvili, M. Lemonjava, Z. Kuchukashvili, E. Davitashvili, M. Koshoridze, N.Koshoridze** Extraction, characteristics and in vitro biological features of different origin Saperavi wine flavonoids
26. **N. Mangaladze** The Effect of Mn on Catalase Activiti in Vegetable Plants

27. **Mariam Gaidamashvili and Eka Khurtsidze** Application of tissue culture for conservation of plant biodiversity
28. **Z. Vadachkoria, L. Dzidziguri, G.Ghibradze, E. Bakuradze, I. Modebadze, N. Oganezovi, M. Mikadze, D. Dzidziguri** The study of growth inhibitory protein complex derived from different forms of hemangioma

Geography

1. **M. Elizbarashvili, E. Elizbarashvili, M. Tatishvili, Sh. Elizbarashvili, R. Meskhia** The main features of climate change in Georgia
2. **B. Kalandadze, I. Kalandadze** Quantitative evaluation of the impact of heavy metals on soil productivity on the example of ore dressing and processing industry
3. **D. Kereselidze, V. Trapaidze, I. Megrelidze** Assessment of the catastrophic events originated in the river Vere basin
4. **L. Matchavariani, G. Metreveli, N. Tsivtsivadze** Modern methods for realization of joint problems of hydronergetic and shore protection
5. **D. Nikolaishvili, V. Trapaidze, B. Kalandadze, L. Lagidze, D. Sartania, R. Tolordava** Landscape Planning of Samtskhe Javakheti
6. **N. K. Elizbarashvili** Geo ecological features of landscapes of Georgia
7. **Z. Seperteladze, E. Davitaia, T. Aleksidze, N. Rukhadze** Landscape zoning of West Georgia for disseminate Actinidian culture
8. **G. Gavardashvili, G. Chakhaia, L. Tsulukidze, E. Kukhalashvili, R. Deakonidze, Z. Varazashvili** June 1314, 2015, Natural Disasters in Tbilisi, Analysis and Disaster Effective Measures to Regulate the River Vere Bed

Geology

1. **G. Melikadze, N. Zhukova, N. Kapanadze, T. Vitvar, L. Holko** Assessment of the role of snow in hydrological cycle of the Borjomula Gudjareti Tskali rivers basin, Georgia, using stable isotope approaches
2. **G. Melikadze, T. Vitvar** Assessment of recharge origin and flowpaths of groundwater in the Alazani Iori Shiraki basins, eastern Georgia, using isotope application