

The 4-th Annual Symposium of the Department of Physical and Analytical Chemistry at Iv. Javakhishvili Tbilisi State University, December 29-30, 2014, Tbilisi, Georgia

(Dedicated to the 80-th Anniversary of Physical Chemistry Department/Chair at Tbilisi State University)

December 29, 2014

- 10.00-10.05 Opening of the symposium
- 10.05-10.15 Welcome address by the rector of Tbilisi State University, Academician Vladimer Papava
- 10.15-11.00 Salvatore Fanali
More than twenty years of chiral separations by using miniaturized techniques
- 11.00-11.45 Sibel Ozkan
Method validation in pharmaceutical and biomedical analysis
- 11.45-12.30 Alessandro Volonterio
Multifunctional aminoglycoside-based gene delivery vectors: synthesis and transfection efficiency
- 12.30-13.00 V. Barbakadze, M. Merlani, L. Gogilashvili, L. Amiranashvili, K. Mulkijanyan
Biomacromolecule from medicinal plants with anticancer activity
- 13.00-13.30 M. Merlani, T. Nakano, Y. Koyama, V. Barbakadze, B. Chankvetadze
Synthesis of poly[oxy-1-methoxycarbonyl-2-(3,4-dimethoxyphenyl)ethylene]
- 13.30-14.00 Giorgi Jibuti
Application of core-shell silica-based chiral stationary phases for separation of enantiomers in high-performance liquid chromatography
- 14.00-14.30 Symposium Photos
- 14.30-15.30 Lunch Brake
- 15.30-15.50 PhD student Rusudan Kakava

- Synthesis of chiral sulfoxides and their enantioseparation in high-performance liquid chromatography
- 15.50-16.10 PhD student Mehmet Gumustas
- Separation of enantiomers of chiral beta-agonists in capillary electrophoresis and high-performance liquid chromatography
- 16.10-16.25 BS student Mari-Luisa Konjaria
- Separation of enantiomers of chiral sulphoxides with chloro-substituted tris-phenylcarbamates of cellulose as chiral selectors in high-performance liquid chromatography
- 16.25-16.40 BS student Tamar Khatashvili
- Looking for highest possible selectivity of enantioseparations in high-performance liquid chromatography
- 16.40-16.55 BS student Anna Gogolashvili
- Separation of enantiomers of selected antimycotic drugs in capillary electrophoresis
- 16.55-17.30 Bezhan Chankvetadze
- Department of Physical and Analytical Chemistry and Institute of Physical and Analytical Chemistry in 2014
- 18.00-20.00 Symposium Dinner

December 30, 2014

- 09.00-09.30 Prof. Shota Sidamonidze
The history of the Physical Chemistry Department/Chair at Tbilisi State University
- 09.30-10.00 Prof. Armaz Shalashvili
Georgian (Kakhetian) wine as a functional food
- 10.00-10.30 Prof. Marina Rukhadze
Study of structural changes of water confined in reverse micelles
- 10.30-10.50 Prof. Giorgi Bezarashvili
The kinetics of tri-isobutylarsenite transesterification in presence of decane
- 10.50-11.10 Prof. Djumber Kereselidze
Traditional and non-traditional proton transfer mechanisms in chemical and biochemical reactions
- 11.10-11.25 Eka Tsutsqiridze
HPLC determination of polyphenols in wines and parts of cluster of autochthonous Georgian white grapes
- 11.25-11.40 Nino Beridze
HPLC determination of polyphenols in wines and parts of cluster of autochthonous Georgian red grapes
- 11.40-12.00 PhD student Natia Mzareulishvili
Study of microenvironment of Brij-30 reverse micelles by UV-VIS spectroscopic method on the basis of methyl orange as optical probe
- 12.00-12.20 PhD student Tamar Makharadze
The determination of dissociation constants of fulvic acids isolated from atmospheric precipitations (sediments)

- 12.20-12.40 PhD student Khatuna Gogaladze
Enantioseparation of selected chiral basic drugs with polysaccharide-based chiral selectors and polar-organic mobile phases in high-performance liquid chromatography
- 12.40-13.00 PhD student Manoni Kurtanidze
Investigation of water droplets structure in ionic and nonionic reverse micelles by UV-VIS spectroscopy
- 13.00-13.20 PhD student Nino Ghibradze
Enantioseparation of Fmoc amino acids with polysaccharide-based chiral stationary phases and normal-phase eluents in high-performance liquid chromatography
- 13.20-13.40 PhD student Tinatin Butkhuzi
Investigation of influence of ionic additives on the structure of water droplets of reverse micelles by IR and NMR spectroscopy
- 13.40-14.40 Lunch
- 14.40-14.55 BS student Elene Sordia
Enantioseparation of chiral dihydropyridine derivatives with polysaccharide-based chiral stationary phases and normal-phase eluents in high-performance liquid chromatography
- 14.55-15.10 BS student Lia Bezhitashvili
Separation of enantiomers of flavanone with novel core-shell-type polysaccharide-based chiral stationary phase in high-performance liquid chromatography
- 15.10-15.25 BS student Tina Elbaqidze
Enantioseparation of selected chiral weak acids (propionic acids, barbiturates) with polysaccharide-based chiral stationary phases and normal-phase eluents in high-performance liquid chromatography
- 15.25-15.40 BS student Teona Ordjonikidze (Benzoin)
Separation of enantiomers of benzoin with novel core-shell-type polysaccharide-based chiral stationary phase in high-performance liquid chromatography
- 15.40-15.55 BS student Nino Zaqashvili

Enantioseparation of selected chiral basic drugs with polysaccharide-based chiral selectors and normal-phase eluents in high-performance liquid chromatography

15.55-16.10 BS student Natia Shashviashvili

Separation of enantiomers of chiral sulphoxides with methyl- and chloro-methyl-substituted tris-phenylcarbamates of cellulose as chiral selectors in high-performance liquid chromatography

16.10-16.25 BS student Anna Bardavelidze

Separation of enantiomers of *trans*-stilbene oxide with novel core-shell-type polysaccharide-based chiral stationary phase in high-performance liquid chromatography

16.25-16.40 BS student Levan Skhirtladze

The effect of various additives on enantioseparation of selected antimycotic drugs on polysaccharide-based chiral stationary phases in HPLC with acetonitrile as a mobile phase

16.40-16.55 BS student Natia Mushkudiani

Enantioseparation of selected chiral weak acids (mandelic acid derivatives, coumarins) with polysaccharide-based chiral stationary phases and normal-phase eluents in high-performance liquid chromatography

16.55-17.10 BS student Tatia Qistauri

The effect of various additives on enantioseparation of selected antimycotic drugs on polysaccharide-based chiral stationary phases in HPLC with methanol as a mobile phase

17.10 Symposium closing