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ICYS-2023

6-TH INTERNATIONAL CONFERENCE OF YOUNG SCIENTISTS

**“CHEMISTRY, AGROCHEMISTRY AND BIOLOGY:
MODERN TRENDS AND ACHIEVEMENTS”**

DEDICATED TO ANNIVERSARY OF DAVID SARAJISHVILI

PROGRAMM

**JUNE 18-21, 2023
Tbilisi, Georgia**

JUNE 19, 2023

9:30-10:30 Registration

10:30-11:00 Opening

11:00-12:00 PL1. Sulfonated aromatic ionomers for polymer electrolyte membrane fuel cells: current standing and challenges

Prof. Giorgi Titvinidze(Plenary Lecture)

12:00-12.30 Coffee Break

12:30-12:45 OP 4. Enlarging the library of degradable triazole polymers via „click“ polymerization

Teng. Kantaria, D. Makharadze, Tem. Kantaria, N. Zavadashvili, D. Tugushi, R. Katsarava

12:45-13:00 OP 3. Pseudo-protein based nanoparticles for ocular drug delivery: evaluation of drug encapsulation efficiency and drug release

Tem. Kantaria, Teng. Kantaria, P. Heiduschka, N. Eter, D. Tugushi, R. Katsarava

13:00-13:15 OP 2. Synthesis and characterization of sulfonated poly(phenylene sulfone)s incorporating non-sulfonated microblocks for improved performance
N. Dumbadze, M. Gikoshvili, G. Titvinidze

13:15-13:30 OP 6. Evaluation of the central-metal effect on anticancer activity and mechanism of action of isostructural cu(ii) and ni(ii) complexes containing pyridine-2,6-dicarboxylate
S. Khaksar

13:30-13:45 OP 13. Development of pseudoproteins modified with polyamides – poly(ester amide-co-amide)s.
A. Vanishvili, S. Kvinikadze, Teng. Kantaria, R. Katsarava

13:45-14:00 OP 7. Synthesis of new hybrid azo and spiro photochromic compounds
M. Shvelidze, B. Dgebuadze, T. Bukia, G. Petriashvili

14:00-15:00 Lunch

15:15-16:15 PL4. Approaches for elucidating fundamental questions of charge exchange processes in bioelectrochemical systems
Dr. Nikoloz Nioradze (Plenary Lecture)

16:15-16:30 OP 5. Realgar As₄S₄ quantum dots (rqds)
N. Nebunishvili G. Vacheishvili, K. Tevdorashvili, M. Gakhutishvili

16:30-16:45 OP 15. Identification and transformation of stilbenoids- derivatives of the resveratrol from saperavi grape (*vitis vinifera l.*) to wine
M. Surguladze, M. Bezhushvili

11:00-12:00 PL 2. Insights into the grape genomics and wine aromas of Georgia known as the cradle of viticulture
Prof. Ia Pipia (Plenary Lecture)

12:00-12.30 Coffee Break

12:30-13:30 PL3. Zebrafish as a model for anticancer drug research

Prof. Giorgi Zaalishvili

13:30-13:45 OP18. Virulence of entomopathogenic fungi isolated from brown marmorated stink bug - *halymorpha halys* (stål, 1855) (heteroptera: pentatomidae) populations of Georgia
N. Kharabadze, N. Tsiklauri, M. Burjanadze

13:45-14:00 OP19. In-vitro propagation of Georgian grape varieties and their conservation in gene-bank
T. Zakalashvili

14:00-15:00 Lunch

15:15-16:15 PL5. Leucine-based Pseudo-Proteins (LPPs) as Promising Biomaterials

Prof. Nina Kulikova (Plenary Lecture)

16:15-16:30 OP17. Evaluation of the synergistic potential and mechanisms of action for de novo designed cationic antimicrobial peptides

M. Karapetian, E. Alimbarashvili, B. Vishnepolsky, A. Gabrielian, A. Rosenthal, E. Hurt, M. Tar-takovsky, M. Mchedlishvili, D. Arsenadze, M. Pirtskhala, G. Zaalishvili

16:30-16:45 OP15. Anti-steatotic effect of resveratrol on experimental models of non-alcoholic fatty liver disease

T. Kachlishvili, T. Mtulishvili, M. Ksovreli, G. Zaalishvili, N. Kulikova

16:45-17:00 OP10. Natural cyclic peptides from dbaasp database

E. Alimbarashvili, N. Samsonidze, M. Grigolava, M. Pirtskhala

17:00 City tour

JUNE 20, 2023

10:00-11:00 PL6. Pseudo-proteins: design and biomedical applications

N. Zavadashvili, G. Otinashvili, M. Gverdtsiteli, M. Bedinashvili, N. Kupatadze, T. Kantaria, Tem. Kantaria, D.Tugushi and R. Katsarava

11:00-11:15 OP 8. Atom transfer radical reactions as a tool for synthesis of physiologically active carbocycles
V. Sargsyan, A. Grigoryan, A. Mikaelyan

11:15-11:45 OP 10. Reworking the ¹H NMR method for gasoline quality control to fit samples on the georgian market
B. Dgebuadze

11:45-12:00 OP 9. Investigating the photoelectrochemical behavior of bis-azo dyes
K. Kvaratskhelia, G. Kadagishvili, N. Nioradze

10:00-11:00 PL7. 3D/4D organization of r-chromatin: a multifold loop model as unraveled by volume electron microscopy of UBTF1 and UBTF2 isoforms
Prof. Pavel Tchelidze (Plenary lecture)

11:15-11:30 OP 14. Apple juice fermented by a consortium of lactic acid bacteria
E. Tkesheliadze, N. Gagelidze, T. Sadunishvili

12:00 – 12:30 Coffee Break

12:30-16:00 Poster Session

14:00-15:00 Lunch

16:00-16:30 Closing

18:00-22:00 Conference Banquet