

## Poster Session 1

1. Kirilova, S., The use of bibliometric indicators for the measurement of impact and visibility of Bulgarian research performance in natural sciences
2. Tzvetkov, V., Chemistry teachers training from skills perspective
3. Georgieva, B., Electrochemical monitoring of platinum(II) coordination reactions in water solutions
4. Mladenova, E., Analytical procedure for Sr and Rb isotopes determination in traditional Bulgarian wines
5. Dakova, I., Speciation analysis of chromium in surface waters using ionic liquid-functionalized polymer gel
6. Dakova, I., Synthesis and application of Fe(II)-imprinted polymer gels for Fe(II)/Fe(III) speciation in surface waters
7. Yotova, G., Determination of geochemical background and threshold values for potentially toxic elements in the Bulgarian soil quality monitoring network
8. Zlateva, B., Comparison of P-XRF spectrometers for archaeological research: a case study for analysis of tin-rich archaeological bronzes
9. Kovacheva, P., Mechanochemically induced synthesis of thermally stable U-La mixed Oxide
10. Velcheva, V., A case study on the solution behavior of platinum(IV) complexes designed as potential antiproliferative agents
11. Dimitrova, R., Gd(III) complex of Monensin: synthesis, spectral characterization and biological activity
12. Yordanova, T., Non-chromatographic speciation analysis of mercury in surface waters supported by core-shell nanocomposites
13. Voyslavov, Tz., Assessment the level of self-cleaning of the soil around former metallurgical plant - Kremikovtsi, Bulgaria
14. Lyubomirova, V., Quantification strategy for LA-ICP-MS analysis of plant samples
15. Mihaylova, V., Bioaccessibility of essential and potentially toxic elements in apples using enzymolysis approach
16. Dimitrov, D. Chemometric expertise of clinical monitoring data of prolactinoma patients
17. Dimitrov, D., Chemometric assessment of ecotoxicity of silver nanoparticles
18. Naneva, L., Creating a model for the prediction of allergenic food proteins using Discriminant Analysis
19. Donkova, B., Mechanoactivation of ZnO photocatalyst

20. Kircheva, V., Preparation, characterization and activity evaluation of nickel oxide/  
G-C<sub>3</sub>N<sub>4</sub> photocatalyst
21. Hristov, H., Polymer-borate hybrids films – theoretical and experimental  
determination of the structure
22. Hristov, H., Borosilicate hybrid materials and nanocomposites: synthetic, structural  
and statistical approach
23. Getsova, M., Temperature-dependence of luminescence properties of Tb<sup>3+</sup> doped  
zinc orthosilicate synthesized by polymerized complex method
24. Angelova, N., Potential vaccine adjuvants of nanostructured iron(III)  
hydroxyphosphates: preparation and physicochemical characterization
25. Vasileva, P., Green synthesis of silver nanoparticles and their analytical application  
as LSPR-based sensor in speciation analysis of chromium and iron
26. Zlatanova, Z., Bernessite as a structural matrix for intercalation of lithium

## Poster Session 2

27. Koleva, A., Keto-enol and nitro-aci-nitro tautomerism in 3,3',4,4'-tetrahydro-3,3'-  
disubstituted-4,4'-biscoumarins
28. Lyapchev, R., Synthesis of imidazoquinolinium salts and their respective  
palladium NHC-complexes
29. Kandinska, M., Synthesis and photophysical properties of novel fluorogenic  
asymmetric squarilium dyes – nonspecific protein bridges
30. Stoyanov, S., Naphthalimides with fused N-B-N bridge: a new class of boron  
containing fluorophores
31. Yordanova, S., Synthesis, photophysical characteristic and microbiological  
activity of new PAMAM tripod and its cuprum complex
32. Zagryanarski, Y., Water-soluble NIR-absorbing rylene chromophores for  
visualization of cellular organelles
33. Mihaylova, V., Simple synthesis of diaryl substituted pyrrolidine-2-carbonitriles  
from enones
34. Topov, D., Polyzwitterionic gels as polymer electrolytes for lithium ion batteries
35. Christov, L., Azeotropy in multi-component copolymerization: existence and  
stability
36. Simeonov, M., Copolymer hydrogels of poly(acrylic acid) and polyacrylamide:  
synthesis, characterization and revealing their potential as transdermal delivery  
system for quercetin

37. Mircheva, K., Enzymatic hydrolysis of monomolecular film of dilauroylphosphatidylcholine by Vipoxin and its separated components
38. Garcés, J. L., Influence of charge regulation on conformational, ionization and stretching properties of polyelectrolytes
39. Katev, V., Albendazole solution formulation via vesicle-to-micelle transition of phospholipid-surfactant aggregates
40. Gazolu, D., Emulsification by rotor-stator homogenizer: comparison of experimental and predicted drop sizes
41. Mustan, F., Role of surface rheological properties for the kinetics of bubble Ostwald ripening in saponin-stabilized foams
42. Georgieva, G., Synergistic micellar growth in mixed surfactant solutions: rheology and cryo-TEM imaging
43. Radulova, G., Rheology of adsorption layers from the protein hydrophobin and its mixtures with other proteins: experiment and theoretical model
44. Dimitrova, L., Effects of salt and fragrance-like molecules on formulation rheology
45. Hristova, M., Role of Pickering stabilization and bulk gelation for the preparation and properties of solid silica foams
46. Politova, N., Self-regulation of foam volume and bubble size during foaming via shear mixing
47. Stanimirova, R., Sulfonated methyl esters, linear alkylbenzene sulfonates and their mixed solutions: micellization and effect of calcium ions
48. Anachkov, S., Particle detachment from liquid interfaces: theory vs experiments
49. Simeonova, S., Implementing atomic force microscopy for characterization of silver nanoparticles
50. Georgiev, P., Implementing atomic force microscopy for characterization gold nanoparticle
51. Dudev, T., Determinants of  $\text{Fe}^{2+}$  over  $\text{M}^{2+}$  ( $\text{M} = \text{Mg}, \text{Mn}, \text{Zn}$ ) selectivity in non-heme iron proteins
52. Ilieva, S., Competition between abiogenic  $\text{Al}^{3+}$  and native  $\text{Mg}^{2+}$ ,  $\text{Fe}^{2+}$  and  $\text{Zn}^{2+}$  ions in protein binding sites: implications for aluminium toxicity
53. Cheshmedzhieva, D., Hyperconjugative effects in  $\pi$ -hydrogen bonding: theory and experiment
54. Petrova, J., Multilipid bilayer with an embedded receptor – selection of a thermodynamic ensemble

55. Nedyalkova, M., Predicting partition coefficients by first principles calculations of organic solvents with implicit solvent model
56. Petkov, P., Molecular dynamic simulation of proton transfer in functionalized PAF