

CONTENTS

Preface

<i>K.T. Stojnova, V. V. Divarova, P. V. Racheva, K. G. Bozhinova, V. D. Lekova</i> , Complex formation and liquid-liquid extraction of the ion-pair of molybdenum(VI) with 3,5-dinitrocatechol and 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl-2H-tetrazolium bromide.....	3
<i>P. E. Marinova, S. H. Tsoneva, S. A. Nikolova, I. I. Ivanov</i> , Novel complexes of N-substituted-4,5-dimethoxy-phenylethyl-2-arylketamides with metal ions.....	8
<i>P. Paunović, G. Načevski, A. Petrovski, A. Tomova, A. Grozdanov, A. T. Dimitrov</i> , Kinetic analysis of ultrasound leaching of nickel laterite ore.....	12
<i>E. Cherneva, R. Buyukliev, A. Bakalova</i> , Palladium complexes containing dithiocycloheptane-spiro-5'-hydantoin ligand. Synthesis, characterization, theoretical analysis and cytotoxic activity.....	19
<i>Kr. Nikolova, G. Gentscheva, S. Minkova, Ch. Tzvetkova</i> , Elemental composition and some optical characteristics of Bulgarian beers.....	24
<i>I. A. Shanin, E. A. Zvereva, A. V. Zherdev, T. Godjevargova, S.A. Eremin</i> , Chemical reagents for immunodetection of fluoroquinolones with determinable specificity.....	27
<i>I. D. Ivanov, S. S. Stoykova, N. T. Burdzhiev, I. N. Pantcheva, V. N. Atanasov</i> , Analytically confirmed synthetic cannabinoid 5F-ADB sprayed on “herbal mixture.....	32
<i>A. Grozdanov, A. Petrovski, M. Avella, P. Paunović, M. E. Errico, R. Avolio, G. Gentile, F. De Falco, A. T. Dimitrov</i> , Spectroscopic study of nanocomposites based on PANI and carbon nanostructures for pH sensors.....	36
<i>Z. A. Mustafa, R. S. Milina</i> , A static headspace GC-FID method for trace analysis of volatile organic compounds (VOCs) in waters.....	42
<i>E. S. Belyaev, S. V. Andreev, A. O. Ivanova, A. A. Ischenko</i> , Determination of brodifacoum, bromadiolone and difenacoum in commercial rodenticides by using high-performance liquid chromatography with UV detection.....	47
<i>D. M. Davcheva, G. K. Kirova, T. Z. Tsvetkova, D. D. Terzieva, M. T. Kiryakova, V. J. Kmetov</i> , Sample preparation and calibration optimization for ICP-MS analysis of copper, zinc, selenium, rubidium, strontium, magnesium, iron, molybdenum and barium in human serum.....	52
<i>M. T. Kiryakova, E. K. Varbanova, K. K. Simitchiev, V. J. Kmetov</i> , Nanoparticles assisted MSIS-MP-AES hydride generation determination of As and Sb.....	58
<i>V. Y. Markova, K. K. Simitchiev</i> , Assessment of different approaches for background correction in microwave plasma atomic emission spectrometry – case study for analysis of Cd, Cr, Cu, Ni, Pb and Zn in treated bio-waste.....	64
<i>E. K. Varbanova, V. M. Stefanova</i> , Determination of silver in cosmetic products by microwave plasma - atomic emission spectrometry.....	71
<i>V. M. Stefanova, L. I. Kaynarova, D. L. Georgieva</i> , General characteristics of silver nanoparticles analysis by single particle inductively coupled plasma mass spectrometry.....	77
<i>D. Georgieva, A. Ivancheva, Ts. Lazarova, V. Stefanova</i> , Magnetic assisted solid phase extraction of trace elements by APDC impregnated silica coated manganese-ferrite nanoparticles.....	85
<i>L. Dospatliev, V. Lozanov, M. Ivanova, P. Papazov, P. Sugareva</i> , Amino acids in edible wild mushroom from the Batak mountain, Bulgaria.....	92
<i>V. A. Hadjimitova, N. G. Hristova-Avakumova, B. I. Nikolova-Mladenova, E. Valcheva</i> , Suppressive effect of salicylaldehyde benzoylhydrazone derivatives on ferrous iron-induced oxidative molecular damage – evaluation of the structure-protection activity relationship via Raman spectral analysis....	97
<i>P. I. Bozov, P. N. Penchev</i> , Neo-Clerodane Diterpenoids from <i>Scutellaria velenovskyi</i> Rech. fil.....	103
<i>N. S. Todorov</i> , Surface coatings based on glycerol phase and waste polyethylene terephthalate.....	107
<i>M. H. Docheva, D. M. Kirkova, Y. G. Kochev, A. B. Stoilova</i> , Determination of carbonyl compounds in tobacco smoke and factors influence of their composition.....	113
<i>Y. Georgieva, M. Katsarova, K. Gercheva, P. Bozov, S. Dimitrova</i> , HPLC analysis of flavonoids from <i>Scutellaria altissima</i>	119
<i>Y. Stremski, D. Kirkova, S. Statkova-Abeghe, P. Angelov, I. Ivanov</i> , Multicomponent reactions for the synthesis of bis-heterocyclic pyrrole derivatives.....	124
<i>R. Khattak, I. I. Naqvi</i> , Study of the effect of structure on the kinetics and mechanism of the redox reactions of Fe(III)/Fe(II) complexes.....	129

I. A. Hayrullina, E. A. Boruleva, I. A. Nagovitsyn, T. F. Sheshko, A. G. Cherednichenko, E. A. Sarycheva, G. K. Chudinova, The effect of bovine myoglobin on ultraviolet fluorescence of gadolinium-doped zinc oxide films.....	135
V. V. Kost, T. A. Kryuchkova, V. D. Zimina, T. F. Sheshko, A. G. Cherednichenko, V. V. Kurilkin, M. G. Safronenko, L. V. Yafarova, Catalytic performance of LnFeO ₃ complex oxides for dry reforming of methane to synthesis gas.....	138
A. A. Sharaeva, T. F. Sheshko, T. A. Kryuchkova, L. V. Yafarova, I. A. Zvereva, Effect of substitution Fe by Mn in GdFeO ₃ perovskite catalyst for CO hydrogenation.....	143
K. V. Kamarska, N. D. Dimcheva, Electrooxidation and bioelectrooxidation of L- and D-ascorbic acids	149
A. Terziyski, S. Tenev, V. Jeliaskov, N. Kochev, G. Dimitrov, N. Jeliaskova, L. Iliev, Ch. Angelov, I. Kalapov, T. Arsov, Balloon-borne measurements in the upper troposphere and lower stratosphere above Bulgaria (N41-43° E24-26°).....	153
V. V. Ivanova-Kolcheva, M. K. Stoyanova, Catalytic activation of PMS by Co ₃ O ₄ modified g-C ₃ N ₄ for oxidative degradation of the azo dye Acid Orange 7 dye in aqueous solutions.....	158
N. T. Kochev, V. H. Paskaleva, N. Jeliaskova, Automatic generation of molecular zwitterionic forms with ambit-zwitterion.....	165
N. S. Yantcheva, D. B. Karashanova, B. C. Georgieva, I. N. Vasileva, A. S. Stoyanova, P. N. Denev, R. H. Dinkova, M. H. Ognyanov, A. M. Slavov, Characterization and application of spent brewer's yeast for silver nanoparticles synthesis.....	173
N. S. Yantcheva, I. N. Vasileva, P. N. Denev, H. N. Fidan, R. S. Denkova, A. M. Slavov, Utilization of essential oil industry chamomile wastes as source of polyphenols.....	178
A. P. Hambarliiska, V. T. Dobрева, H. N. Strinska, B. Y. Zhekova, G. T. Dobrev, Isolation and purification of lipase produced from <i>Rhizopus arrhizus</i> in solid state fermentation by fractional precipitation.....	184
A. Shulga, E. A. Boruleva, T. F. Sheshko, I. A. Nagovitsyn, A. G. Cherednichenko, G. K. Chudinova, Luminescent properties of cerium (IV) -doped zinc oxide films.....	189
Y. L. Lazarova, T. M. Dodevska, A. M. Slavov, D. B. Karashanova, B. C. Georgieva, Biosynthesized silver nanoparticles: electrochemical application.....	192
G. P. Peeva, B. N. Midyurova, V. A. Nenov, Innovative treatment of livestock manure by a single – compartment microbial fuel cell with air-breathing cathode.....	198
T. M. Dodevska, I. G. Shterev, Y. L. Lazarova, Carbonaceous materials modified with iridium oxide as an electrochemical sensing platform.....	203
S. T. Tasheva, T. A. Ivanova, V. T. Popova, I. Z. Iliev, S. S. Stankov, H. N. Fidan, N. N. Mazova, A. S. Stoyanova, Coefficient of diffusion of tannins in extracts from physalis leaves (<i>Physalis peruviana</i> L.).....	209
M. D. Dimov, K. Z. Dobрева, A. S. Stoyanova, Chemical composition of the dill essential oils (<i>Anethum graveolens</i> L.) from Bulgaria.....	214
G. Uzunova, M. Perifanova-Nemaska, Zh. Petkova, St. Minkova, Kr. Nikolova, Physicochemical characteristic of chia seed oil from Peru.....	217
L. Dospatliev, M. Ivanova, P. Papazov, Fatty acids, phospholipids, health risk index and daily intake of metals in edible wild mushroom (<i>Tricholoma equestre</i>) from the Batak mountain, Bulgaria...	221
S. K. Georgieva, M. Stancheva, Zl. Peteva, Residual levels and tissue distribution of polychlorinated biphenyls (PCBs) in fish from the Danube River, Bulgaria.....	227
Z. V. Peteva, G. N. Kalinova, B. Krock, M. D. Stancheva, St. K. Georgieva, Evaluation of paralytic shellfish poisoning toxin profile of mussels from Bulgarian North Black Sea coast by HPLC-FID with post and pre-column derivatization.....	233
K. Peycheva, V. Panayotova, A. Merdzhanova, R. Stancheva, Estimation of THQ and potential health risk for metals by consumption of some black sea marine fishes and mussels in Bulgaria.....	241
D. A. Dobрева, A. Merdzhanova, V. Panayotova, Quality-related changes of biologically active lipids in bluefish muscle tissue after cooking.....	247
V. Z. Panayotova, A. V. Merdzhanova, D. A. Dobрева, R. S. Stancheva, K. Peycheva, Seasonal variation in fat-soluble vitamins, cholesterol and fatty acid profile of lipid classes of <i>Rapana venosa</i>	251
A. Merdzhanova, V. Panayotova, D. A. Dobрева, R. Stancheva, Effect of thermal stress on the biologically active lipids of <i>Mytilus galloprovincialis</i>	256
Zh. Y. Petkova, G. A. Antova, M. I. Angelova-Romova, I. Ch. Vaseva, A comparative study on chemical and lipid composition of amaranth seeds with different origin.....	262

<i>M. Y. Angelova-Romova, Zh. B. Simeonova, Zh. Y. Petkova, G. A. Antova, O. T. Teneva, Lipid composition of watermelon seed oil.....</i>	268
<i>Bl. S. Chuchkov, G. A. Antova, Composition of residual lipids isolated from salinomycin.....</i>	273
<i>Instruction about preparation of manuscripts.....</i>	277