

C O N T E N T S

Foreword	3
Preface	5
1. Anke M., Glei M., Dorn W., Illing-Günther Heike, Holzinger Sylvia, Jaritz M., Anke Sabine, Arnhold W., Hartmann Esther, Lösch Edda, Gottschalk Babett, Latunde-Dada Oluyemisi – Biological essentiality and transfer of chromium in the food chain – does chromium deficiency exist in Europe? (Jena, Germany)	7
2. Haiduc I. – Organometallic compounds in the environment, medicine and biology (Cluj-Napoca, Roumania)	19
3. Rietz B. – The determination of platinum and gold in the air of Copenhagen city using instrumental neutron activation analysis (Roskilde, Denmark)	23
4. Drăgan P., Garban Z., Holban Șt. – Clinical aspects and biochemical pathology in cystinic urolithiasis - peculiarities of the metallic composition (Timișoara, Roumania)	27
5. Maksimovic Z., Djujic Ivana – Forteen years of research of selenium deficiency in Serbia (Belgrade, Yugoslavia)	35
6. Ghergariu S. – Trace element induced clinical conditions in animals, as models for the human medicine (Cluj-Napoca, Roumania)	43
7. Stefanovits-Banyai Eva, Kerepesi Ildiko, Sardi Eva, Pais I. – Effects of Ti -ascorbate on heavy metal induced carbohydrate metabolism in wheat seedlings (Budapest, Hungary)	49
8. Benga Gh. – Survey on the effects of Hg on the water permeability of red blood cells from various species (Cluj-Napoca, Roumania)	57
9. Kiss A.S., Galbacs Z., Do Quy Hai, Matkovics B., Galbacs G. – Deuterium concentration of the cultivation medium affects the redox system of Bryophyllum Daigremontianum (Szeged, Hungary)	61
10. Garban Z., Avacovici Adina – Applications of circular dichroism in the study of the interaction between DNA and metal ions of some trace elements (Timișoara, Roumania)	65
11. Andronie Ioana, Andronie V., Curcă D. – Pollution of natural water basins with heavy metals in a zone with nonferrous metallurgical industry (București, Roumania)	71

12. Avram J., Tudose N., Cadariu Florentina, Murariu M., Miculescu N., Morariu M., Igna Victoria, Avram I.O., Răduică Mirela, Drugă L., Dinu Sofia, Teodorescu Rodica – Ti-6Al-4 ELI and Co-Cr-Mo Biodur Alloys Biocompatibility: Results of an experimental study (Timișoara, Roumania)	75
13. Balla A., Vogel Katalin, Kozma G., Kozma Melinda, Lörinczi Cs., Marton Ildiko, Naray M. – The role of “Kondi” tablets in diminishing plumbemia (Odorheiu Secuiesc, Roumania)	79
14. Berinde Lia, Popa I., Boangiu Daniela – Rickets and hypomagnesemia (Timisoara, Roumania)	83
15. Bizerea Spiridon Otilia, Julean I. - CDSE based CD – isme and its applications in determining cadmium in the environment (Timișoara, Roumania)	89
16. Bobkova Svetlana, Turta C., Moldovan L., Protopop S. – Pesticides influence on the electronic structure of haemoglobin active center – experimental study (Chișinău, Moldavia)	95
17. Borcean I., Borcean A., Goian M., Șuveți Simona – A possible valorification of mine steril from copper mines (Timișoara, Roumania)	99
18. Busuioc Gabriela, Gorghiu Gabriel, Vincu Mirela - Mathematics relation between transitional metals and some oxidase activity (Târgoviște, Roumania)	103
19. Cheverry Cl., Stefan V. - Storage of metallic trace elements with potential toxicity in soils: from pedogenesis to cotamination (Rennes, France)	107
20. Ciuleanu T. E., Ghilezan N., Todor N., Ciuleanu Elisabeta, Cebotaru Cristina – Cisplatin: the first 25 years. Note I: Germ cell tumors (Cluj-Napoca, Roumania)	111
21. Ciuleanu T. E., Ghilezan N., Todor N., Ciuleanu Elisabeta, Cebotaru Cristina – Cisplatin: the first 25 years. Note II: Undifferentiated carcinoma of the nasopharynx (Cluj-Napoca, Roumania)	121
22. Contrea M., Abraham L., Contrea A. - Effects of the day administration in prophylaxis and therapy of iron deficiency anaemia piglets with iron-dextran preparations (Timișoara, Roumania)	127
23. Csikkel-Szolnoki Anna, Kiss A.S. – Changes in the calcium and magnesium contents of wheat, rye and triticale grains depending on the varieties (Szeged, Hungary)	133
24. Daranyi Gabriela – Food supplements with metallic bioelements (Timișoara, Roumania)	137

25. Daranyi Gabriela, Garban Z., Vincu Mirela, Popa D., Stavropoulos N. – Metal ions in nutrients and their interrelation with the metaphylaxy and prophylaxy of urolithiasis (Timișoara, Roumania)	141
26. Davidescu C.M., Popa A., Trif R. - Antibacterial activity of some quaternary phosphonium salts grafted on soluble macromolecular supports (Timișoara, Roumania)	145
27. Dămăceanu Doina, Papodopol Victoria – Mother zinc deficiency and neurological malformations of the fetus (Iași, Roumania)	149
28. Djujic Ivana, Milovac Milica, Djermanovic Verica – Selenium enrichment in crops (Belgrade, Yugoslavia)	153
29. Dogaru C., Moldovan I., Precob V., Vasiluță Viviana – Plasma and intracellular magnesium status in alcoholism and essential hypertension (Timișoara, Roumania).....	161
30. Drăgan P., Miclea F., Daranyi Gabriela, Bucurăș V. – Metallic composition of uroconcrements and crystallographic aspects (Timișoara, Roumania)	167
31. Drebickas V., Zabulyte D., Paltanaviciene A., Drulia P. – Studies on the toxicity of cadmium and benzo(a)pyrene (Vilnius, Lithuania)	171
32. Dumitru M., Motelică M., Plaxienco Doina, Alexandrescu Ariadna, Gamentă Eugenia, Prodan Ioana – Agricultural use of irradiated sewage sludge (București-Roumania).....	175
33. Ermidou-Pollet Sophie, Pollet S., Szilagyi M., Radnay G. – Influence of lithium on the lipidic composition of rat brain opioid receptor membranes after pre- and postnatal stress – role of magnesium (Athens, Greece)	183
34. Gabrus I.R., Sigartău Gr., Roman Cristina – Complex combinations of transitional metals–possible chemical models of nitrogenase (Cluj-Napoca, Roumania)	191
35. Gârban Z. – Dynamic characteristics of biological processes in relation with metallic ions (Timișoara, Roumania)	199
36. Gârban Z., Neagu Chr. , Daranyi Gabriela, Holban Nina – The role of metal ions in muscular activity – particularisation for calcium and magnesium (Timișoara, Roumania)	207
37. Gâtlan Doina Maria, Drăgănescu O., Fântână N., Precob V., Vincu Mirela, Gogoașă I. – The study of potential toxic metal content in animal feed and pork, beef, and mouffon in Timiș and Caraș county (Timișoara, Romania)	213

38. Gergen I., Lăzureanu A., Sarafolean S., Avacovici Adina, Holban Nina, Ehling Șt. – Obtainment of some stable salts of tio- and oxotiomolybdates (Timișoara, Roumania)	217
39. Grubor N., Mihaljev Z., Kljajic R., Masic Z. – Presence of toxic elements, micro- and macro-elements and total beta activity in honey (Novi Sad, Yugoslavia)	221
40. Ianoș G. – Sources and concentration of heavy metals in south west Romania (Timișoara, Romania)	225
41. Ionescu I., Gârban Z., Sărzea S., Boeriu F. – Biochemical considerations regarding Wilson's disease (Vâlcele, Roumania) ..	231
42. Iordache V., Postolache Carmen, Mihăilescu N., Neagoe Aurora, Ignat G., Cristofor S., Vadineanu A. – Distribution of patterns metals in sediments of the Lower Danube System (București, Roumania)	235
43. Jozanov-Stankov Olga, Djujic Ivana, Frim Olivera, Mandic M. – Selenium level in pathological states of population with low selenium intake (Belgrade, Yugoslavia)	243
44. Latunde-Dada Oluyemisi, Anke M. – Mineral contents and solubility from medicinal herbs (Jena, Germany)	249
45. Lăcătușu R., Kovacsóvics Beatrice, Cârstea S., Lungu Mihaela – Translocation of heavy metals from a severely polluted Brown Reddish soil into crops (București, Roumania)	253
46. Lăzărescu Marcela, Deleanu C., Croitoru Maria, Ionescu Elena – Zinc complex compounds with 1-triaryl methylbenzimidazoles (București, Roumania)	261
47. Lisai L., Tagadiuc O., Stratulat I., Midari V. – The sanguin ferroproteins in the severe mechanical trauma - in experiment (Chișinău, Moldavia)	267
48. Man E., Gergen I. – Molybdenum content of the soils of Banat: geogen background, fertilising or pollutant potential (Timișoara, Roumania)	269
49. Mandic Ljuba, Sandor Livia, Jagodic Vesna, Liric Ivana – Isoenzymic forms of N-acetyl-beta-D-glucosaminidase in the urine of the individuals exposed to mercury (Belgrade, Yugoslavia)	277
50. Mărățoiu C., Gogoașă I., Sarafolean S., Vincu M., Aumüller Corina – Applications of thin layer chromatography in the separation of some metallic cations with toxicogen potential (Cluj-Napoca, Roumania).....	283

51. Măruțoiu C., Hopîrtean Ioana, Roman L., Rădulescu Gh. – Preconcentration and separation by TLC of some toxic cations from the water of river Someș (Cluj-Napoca, Roumania)	287
52. Mederle Claudia, Schneider Fr. – Oxidative stress evaluation in experimental and clinical asthma (Timișoara, Roumania)	291
53. Murariu Mirela, Igna Victoria, Potra Adriana, Tudose N., Avram J., Gyulai Mirela – “In vivo” testing of biocompatibility of titanium clips used in laparoscopic surgery (Timișoara, Roumania)	297
54. Neagoe Aurora, Preda Elena, Iordache V., Anke M. – The influence of the tar exposure on the copper content in soil, plants and human in Rositz area (Germany) (București, Roumania)	301
55. Neamțu G., Bădărău Corina, Opreanu I. – Studies regarding the fixing of tin ions (II) on pectins of the cell membrane of sugar beet (Cluj-Napoca, Roumania)	309
56. Nechifor M., Teslariu Elena, Filip Cristiana, Andrei Anca, Mîndreci I., Miftode Maria, Murariu Alina, Negru Adriana - The influence of some bivalent cations on nonsteroid antiinflamatory drugs induced gastric ulcer in rats (Iași, Roumania)	319
57. Negruțiu L. – Kinase immunodeficiency and the calcium ions transmembranal transport (Timișoara, Roumania)	325
58. Onea Ruxandra, Niță Sultana - High purity ferric citrate-obtention and characterisation (București, Roumania)	329
59. Papadopol Victoria, Dămăceanu Doina – Nutritional importance of zinc in pregnancy (Iași, Roumania)	333
60. Papadopol Victoria, Palamaru Iliana, Dămăceanu Doina, Damian Otilia – Study of the relationships between magnesium and some trace elements in a group of normal pregnant women (Iași, Roumania)	341
61. Popescu Simona, Szabadai Z., Schmidt W., Șpilca P. – The study of metallophthalocyanines thin layers exposes at chemical pollutants (Timișoara-Roumania)	345
62. Shofransky V., Paruta Lidia, Turta C. – Sulphanylamine coordinational compounds synthesis and studying with the goal of their using in medicine, veterinary medicine and plant growing (Chișinău, Moldavia)	349
63. Siska Ioana Raluca, Avram J., Crâsnic Daniela, Tănăsie Gabriela, Tatú Carmen, Bunu Carmen, Schneider Fr. – Magnesium modulates human saphenous vein smooth muscle contractility (Timișoara, Roumania)	353

64. Smetana R., Palisek-Kiss Katharina, Steurer G. – Intravenous magnesium application – new therapeutic strategies in acute myocardial infarction and prevention of reperfusion injury (Vienna, Austria)	361
65. Ștefărtă Anastasia, Piskorskaya Valentina, Șișcanu Gh., Turtă C., Bulhac I., Sofranksy V., Jovmir T. – CO ₂ – assimilation and productivity of soybean plants under low temperature stress and Fe ³⁺ -Co ²⁺ - trinuclear claster treatment (Chișinău, Moldavia)	367
66. Wojciechowska-Mazurek Maria, Brulinska-Ostrowska Elzbieta, Starska Krystyna, Karłowski K. – Lead and cadmium content in different food products in Poland (Warsaw, Poland)	373
List of participants	379
Authors index	389