

## **List of publications of Natalia Chubar for August 28, 2008**

### *INTERNATIONAL (REFEREED) JOURNALS :*

1. Natalia Chubar, Thilo Behrends and Philippe Van Cappellen. (2008) Biosorption of metals ( $\text{Cu}^{2+}$ ,  $\text{Zn}^{2+}$ ) and anions ( $\text{F}^-$ ,  $\text{H}_2\text{PO}_4^-$ ) by viable and autoclaved cells of the Gram-negative bacterium *Shewanella putrefaciens*. *Colloids and Surfaces: B*. **65**, 126-133.
2. Chubar N.I., Kouts V.S., Samanidou V.F., Gallios G.G., Kanibolotskiy V.A., Strelko V.V. (2005) Sorption of fluoride, bromide, bromate and chloride ions on the novel ion exchangers. *Journal of Colloid and Interface Science*. 291, 1, 67-74.
3. Chubar N.I., Carvalho, J.M.R., Correia M.J.N. (2004) Heavy metals biosorption on cork biomass: effect of pretreatment. *Colloids and Surfaces: A*. 238, 1-3, 51-58.
4. Psareva, T.S., Zakutevskyy, O., Chubar, N.I., Strelko V.V., Shaposhnikova, T.O., Rodrigues de Carvalho, J.M., Neiva Correia, J.M. (2005) Uranium sorption on cork biomass. *Colloids and Surfaces: A*. 252, 2-3, 231-236.
5. Chubar N.I., Kanibolotskiy V.A., Strelko V.V., Shaposhnikova T.O., Milgrandt V.G., Zhuravlev I.Z., Gallios G.G., Samanidou V.F. (2005) Sorption of phosphate ions on the hydrous oxides. *Colloids and Surfaces: A*, 255, 1-3, 55-63.
6. Chubar N.I., Carvalho, J.M.R., Correia M.J.N. (2003) Cork biomass as biosorbent for copper, zinc and nickel. *Colloids and Surfaces: A*, 230, 57-66.
7. Chubar N.I., Linnik P.M. (1999) Physico-chemical state of chromium and iron in natural water (review). *Ecological Chemistry*. 4, 4, 424-428.
8. Linnik P.N., Chubar N.I. (1995) Physico-chemical state of chromium in the Dnieper reservoirs. *Ecological Chemistry*. 4, 4, 267-272.
9. Linnik P.N., Chubar N.I. (1996) The content and the migration forms of iron in the Dnieper reservoirs. *Ecological Chemistry*. 4, 4, 249-254.

### INTERNATIONAL (REFEREED) BOOKS:

10. Chubar N.I., Kouts V.S., Kanibolotskiy V.A., Strelko V.V. (2006) Adsorption of anions onto sol-gel generated hydrous oxides. Chapter in The NATO ARW series book "*Viable methods of soil and water pollution monitoring, protection and remediation: development and use*". Editor Prof. Dr. Irena Twardowska. October 2006. pages 323-338, volume 69. Kluwer Publisher, The Netherlands.
11. Chubar N.I., Machado R., M.J. Neiva Correia, J.M. Rodrigeus de Carvalho. (2003) Biosorption of copper, zinc and nickel by grape- stalks and cork biomasses. In The NATO Science Series: IV: Earth and Environmental Sciences "*Role of Interfaces in Environmental Protection*". Editor Prof. Dr. Sandor Barany. November, 2003. Kluwer Publisher, The Netherlands. 339-353.

### NATIONAL (REFEREED) JOURNALS :

12. Linnik P.N., Nabivanets J.B., Iskra I.V., Chubar N.I. (1994) Complexing ability of dissolved organic matter of surface water as constituent part of "buffer capacity" of aquatic ecosystems. *Hydrobiological Journal*. 30, 5, 87-100.
13. Linnik P.N., Chubar N.I. (1996) Organic complexes of chromium and iron in the Dnieper reservoirs. *Hydrobiological Journal*. 32, 6, 32-40.
14. Strelko V.V., Chubar N.I. Arsenic and the main methods of its removal (review) (2000) *Water chemistry and technology*. 1, 78-90.
15. Chubar, Natália I., Strelko, V.V., Carvalho, Jorge, Correia, M. Joana Neiva (2003), *Sorption of color metals on biomass of oak tree*, *Water Chemistry and Technology*, V 25, nº1, 33-38.

### Others:

#### INVITED TALKS:

16. Chubar N., Kanibolotski V., Strelko V., Shaposhnikova. (2006) New inorganic ion exchangers for anionic forms xenobiotics removal. Oral presentation at the Meeting of COST Action 636 "*Xenobiotics in the Urban water*". Vienna, 25-27 September 2006 (<http://COST636Xenobiotics.er.dtu.dk>)
17. Chubar N.I., Kouts V.S., Kanibolotskiy V.A., Strelko V.V. (2005) The novel adsorptive materials for environment and human health protection. NATO Advanced Research Workshop "*Viable methods of soil and water pollution monitoring, protection and remediation: development and use*". Krakow, Poland, June 26 - July 1, 2005.

18. Chubar N.I., Machado R., Neiva Correia, M.J., Rodrigueus de Carvalho, J.M. (2002) Biosorption of copper, zinc and nickel by grape- stalks and cork biomasses. The NATO ARW "*Interfaces against pollution*". May 27- 30, 2002, Miskolc, Hungary.

#### CHAPTER IN BOOK:

19. Chubar N.I., Kanibolotskiy V.A., Strelko V.V., Shaposhnikova T.O. Adsorption of anions onto inorganic ion exchangers. In book: "*Selective sorption and catalysis onto active carbons and inorganic ion exchangers*". Editor Volodymyr Strelko. Naukova Dumka. Kiev. Second book. 2008.

#### PAPERS IN PROCEEDINGS:

20. Chubar.N., Meleshevich S., Strelko V., Kanibolotsky V., Zhuravlev I., Yakovlev V. (2000) Sorbents for removing anionic forms of heavy metals. *Fifth International Symposium and Exhibition on Environmental Contamination in Central and Eastern Europe*. 12-14 Sept. 2000, Prague Marriot Hotel, Prague, Czech Republic, Abstracts book. p. 160. (talk); PRAGUE 2000 PROCEEDINGS (CD-room), prepared by the Institute for International Cooperative Environmental Research Florida State University. Web: [www.iicer.fsu.edu](http://www.iicer.fsu.edu)

21. Chubar N.I. (1998) Complexing Ability of Dissolved Organic Substances to Chromium (III) and Iron(III) in Water of the Kyiv Reservoir. *Fourth International Symposium And Exhibition on Environmental Contamination in Central and Eastern Europe*, Sept. 15-1, 1998, Warsaw Marriott Hotel, Warsaw, Poland, -p. 109. WARSAW-1988, PROCEEDINGS (CD-room).

22. Chubar N.I., Linnik P.N. (1997) Migration forms of chromium and iron in the Dnieper reservoir. *Proceedings of the 7<sup>th</sup> International Conferences on Lakes Conservation and Management*, 26- 31 October 1997. San Martin de las Andes, Argentina, 66-71.

23. Linnik P.N., Chubar N.I. (1996) Speciation of chromium and iron in the Dnieper reservoirs. *Proceeding of the Third International Symposium and Exhibition on Environmental Contamination in Central and Eastern Europe*, September 10-13, 1996, Warsaw, Poland: Warsaw, 1996, 930-932.

24. Linnik P.N., Chubar N.I. (1997) Role of dissolved organic matter in chromium (III) and iron (III) migration in Ukrainian surface water. *Proceeding of IAWQ-IWSA Joint Spec. Conference*, 19-23 May 1997, Prague. Czech Rep., Print: Tiscarna Josef Posecany, Czeske Budejovice, Czech. Rep., Vol. 1, 1024-1028.

25. Linnik P.N., Iskra I.V., Chubar N.I. (1995) Heavy metals as an important component of chemical pollution of the Dnieper. *Proceeding of 6<sup>th</sup> International Conference*. Japan. Vol. 2, 1024-1028.

#### CONFERENCES/ABSTRACTS

26. Chubar N., Behrends T. and Van Cappellen P. (2006) Assessment of adsorptive and ion exchange properties of *Shewanella putrefaciens*. NATO ASI "*Overexploitation and Contamination of Shared Grounwater Resources: Management, (Bio)technological, and Political Approaches to Avoid Conflicts* » 1-10 October, 2006, Varna, Bulgaria. (talk)

27. Chubar N., Behrends T. and Van Cappellen P. Long-term kinetics of Zn<sup>2+</sup>, Cu<sup>2+</sup> and Mn<sup>2+</sup> sorption by live and dead *Shewanella putrefaciens*. Geochemistry Seminars, Symposia van de Paleobiologische Kring, Amsterdam, The Netherlands. Dec. 6, 2007. (poster)

28. Chubar N., Behrends T. and Van Cappellen P. **Particularities of Mn<sup>2+</sup> uptake by living and dead *Shewanella putrefaciens***. 17<sup>th</sup> Goldschmidt Conference, 19-24 August, 2007. Cologne, Germany. (poster)

29. Chubar N., Behrends T. and Van Cappellen P. **Mn<sup>2+</sup> sorption by live and dead cells of *Shewanella putrefaciens***. 233rd American Chemical Society National Meeting & Exposition. **March 24-29, 2007**, Chicago, IL (oral presentation)

30. Chubar N., Behrends T. and Van Cappellen P. **Assessment of ion exchange, surface and adsorptive properties of live and heat-killed *Shewanella putrefaciens***. The Geochimica Actie - Geochemistry Seminar, Faculty of Geosciences, Utrecht University. November 9, 2006. (<http://www.geo.uu.nl/Research/Geochemistry/>) (a talk)

31. Chubar N., Behrends T. and Van Cappellen P. **Assessment of the surface and adsorptive of *Shewanella putrefaciens***. Presented during a seminar organized within the framework of the Marie Curie Excellence grant "Trends in Environmental Biotechnology", Wageningen, The Netherlands (June 15, 2006) (poster)

32. Chubar N., Behrends T. and Van Cappellen P. **Adsorption of Mn(II) by live and inactivated *Shewanella putrefaciens***. Landscape Ecology Conference, Utrecht University. November 31, 2006. (poster)

33. Chubar N., Behrends T. and Van Cappellen P. **The role of adsorption in geochemistry and treatment technology**. Earth Sciences Dutch Congress, Eindhoven, The Netherlands. May, 2006. (poster)

34. N. Chubar, V.Strelko, N.Sych, N.Kartel, N.Tsyba, A.Nikolaychuk (2006) Surface modification of low cost carbon for boron removal from aqueous solutions. Proceedings of 6th Intern. Symposium "*Surface heterogeneity effects in adsorption and catalysis on solids*" Poland, Zakopane 2006, 28 August-2nd September, p.287-289. (oral)
35. Chubar N.I., Kouts V.S., Strelko V.V., Kanibolotskiy V.A. (2005) The novel inorganic ion exchangers for anionic forms xenobiotics removal. *NATO ASW "Combined and hybrid adsorbents: fundamentals and applications"*. September 15-17, 2005, Kiev, Puschja-Vodytsya, Ukraine. Abstract book, p. 67. (poster)
36. Chubar N.I., Strelko V.V., Kanibolotskiy V.A., Zhuravlev I.Z., Gallios G.G. (2003) The novel adsorbents for arsenic removal. Talk at the *UNESCO Meeting « Micropollutants in Water »*. Kiev, Ukraine, 10-11 November, 2003. (oral presentation)
37. Strelko V.V., Kanibolotskiy V.A., Zhuravlev I.Z., Chubar N.I., Mardanenko V.K. (2000) Novel inorganic ion-exchangers or selective sorption of heavy metals from liquid wastes and drinking water *CERERO 2000*, abstracts book. The 3<sup>rd</sup> International Conference on Carpatian Euroregion Ecology. May 21-24, 2000. Miskolc-Lillafued, Hungary. P. 7. (oral presentation)
38. Chubar N.I. (2000) Migration regularities of chromium in the Dnieper reservoirs. Third SETAC World Congress, Brighton, United Kingdom, May 2000. "*Global Environmental Issues in the 21st century: problems, causes and solutions*". Abstracts book p.193. (poster)
39. Chubar N.I., Strelko V.V., Mardanenko V.K. (1999) Medical sorbents for Protection of Human Organism.//*NATO Advanced Study Institute "Human Monitoring after Environmental and Occupational Exposure to Chemical and Physical Agents"* September 23 – October 3, 1999. Tekirova, Antalia, Turkey. Programme – Abstracts. - P.66-67. (poster)
40. Chubar N., Strelko V.V., Zhuravlev I.Z., Kanibolotskiy V.A (1999) Sol-gel technology and producing of the novel spherical granulated inorganic adsorbents to deep purification of drinking water and waste streams from cationic and anionic heavy metal forms and radionuclides. NATO Advanced Study Institute "*Structure and Dynamics of Polymer and Colloidal Systems*", September 14-24, 1999. 74310 LES HOUCHES, France. [Http://www.cermav.cnrs.fr/polymer\\_colloid\\_99](http://www.cermav.cnrs.fr/polymer_colloid_99) (poster)
41. Chubar N.I., Linnik P.N. (1997) Role of various groups of dissolved organic matter in chromium (III) complexing in the Dnieper reservoirs. NATO Advanced Study Institute: *Bio-availability of Organic Xenobiotics*. 18-29 August 1997, Jesenic, Czech Republic. *Institute abstracts*. 1997. -p. 100. (oral)
42. Chubar N.I. (1998) Complexing as an important way of chromium detoxication in Natural water. *NATO ASI "Metal - Ligand Interactions in Chemistry, Physics and Biology"*, Cetraro, Calabria, Italy, Sept. 1-12, 1998.-p.49-50. (poster)
43. Chubar N.I., Linnik P.N. (1997) Role of complexing in chromium detoxication in the Dnieper reservoirs. *Fogarty International Centre: Environmental Research Forum*. 26-29 May, 1997, Lviv, Ukraine. Illinois: *Fogarty International Centre*, USA. 1997. p.8. (poster)
44. Linnik P.N., Chubar N.I. (1996) Chromium complexation in the Dnieper reservoirs. Sustainable development: system analysis in ecology: 2nd Practical Conference. Sevastopol, Ukraine, September 9-12, 1996. Conference Abstracts. Sevastopol: Ministry of Education of Ukraine Sevastopol Technical University. 1996. p.170-171. (oral)
45. Chubar N.I., Linnik P.N. (1996) Distribution and migration forms of iron and chromium in the Dnieper reservoirs. *Ecological aspects of contamination of environment*: International Conference, 26-28 March 1996. Kiev : Znanie. volume 2, p.140. (oral)
46. Linnik P.N., Chubar N.I. (1995) The coexisting forms of chromium in the Dnieper reservoirs. *International Symposium on Ecological Chemistry, Chisinau*, Moldova, 1-4 October, 1995. Chisinau: Bulat Art Glob Publishing Company, 1995. (Abstract book) p.48. (oral)
47. Chubar N.I., Linnik P.N. (1995) Role of complexation process in chromium migration in the Dnieper reservoirs. *All Ukrainian analytical chemistry conference* devoted to 90-anniversary of A.K.Babko's birth day, Kiev, 18-21, September, 1995: Kyiv University. 1995. p.18. (oral)

#### Manuscripts under preparation:

1. Natalia Chubar, Thilo Behrends, Tom Visser and Philippe Van Cappellen. Mn(II) adsorption by live and dead cells of *Shewanella putrefaciens*. To be submitted to "Bioresources Technology".
2. N. Chubar, M. C. Avramut, T. Behrends, T. Visser and P. van Cappellen. Long-term kinetics of Mn(II), Zn, Cu(II) sorption by living and dead *Shewanella putrefaciens*.
3. N. Chubar, M. C. Avramut, T. Visser, T. Behrends, P. van Cappellen. EXAFS, XANES and FTIR studies of the precipitates formed by *Shewanella putrefaciens* at the contact with Mn<sup>2+</sup> at different temperatures.