

## International Association for the Properties of Water and Steam Russian National Committee (RNC)

### Report Second Half-Year of 2012- First Half-Year of 2013

1. RNC active participation in organization of next seminars for engineers and technology specialist from Russian power engineering companies:
  - Cycle chemistry at power plants;
  - Today technologies for cycle chemistry monitoring systems;
  - Today experience of water treatment systems operation;
  - Water treatment and cycle chemistry for combine cycle power plants.
2. RNC active participation at summer school “Bioenergy and biofuels” for graduate, post-graduate students and specialists at University of Mechanical Engineering (Moscow). RNC providing seminar - “Water and waste water problems in biofuel production systems”.
3. Three meetings of RNC have been held. Current problems are investigated.

#### Publications list

1. O. Egoshina. Cycle chemistry monitoring systems. MPEI Publishing House, 2013 (text book).
2. O. Egoshina. Engineering calculations at cycle chemistry monitoring systems. MPEI Publishing House, 2013 (text book).
3. K.Orlov. Basic principles of optimization of chemical and technological processes of water treatment at thermal power plants. MPEI Publishing House, 2013 (text book).
4. P.Gotovtsev. Waste water treatment and reuse at thermal power plants. MPEI Publishing House, 2013 (text book).
5. A. Alexandrov, E. Djuraeva, V. Utenkov. Heat conductivity of aqueous solution of sodium chloride. Thermal engineering 2013, No. 3. P. 36 -40
6. A. Alexandrov, E. Djuraeva, V. Utenkov Dynamic viscosity of aqueous solution of sodium hydroxide. Vestnik MEI 2013, No. 2. P. 22 -25
7. P.Gotovtsev, V.Voronov. Mathematical Modeling of Flow-Accelerated Corrosion under Single-Phase Flow Conditions. PowerPlant Chemistry 2013, 15(2)p. 105-108
8. P.Gotovtsev, J.Tikhomirova, E.Khizova. Mathematical Modeling of Industrial Water Systems. US-China Education Review A. May 2013, Vol. 3, No. 5, 332-338 p.76 – 82
9. P.Gotovtsev, M.Lomonosova, V.Parabin, V.Butylin. Investigation of the possibility of *Chlorella SP* flocculation by different methods. Ovchinnikov bulletin of biotechnology and physical and chemical biology.2013 V9 №1 p. 37 – 43
10. P.Gotovtsev, M.Lomonosova, V.Butylin, E. Mostova, N. Perkovskaya. Today technologies of biodiesel production. Ovchinnikov bulletin of biotechnology and physical and chemical biology.2013 V9 №3 p. 35 – 42
11. B.Larin, A.Larin, E.Kozulina, A.Kolegov. Calculation of water and steam quality and analysis of current state of drum boilers. Thermal engineering 2012, No 7 p.10 – 14
12. B.Larin, A.Larin, A.Kolegov. Determination of salts in boiler water by conductivity and pH measurements. New in Russian Power Engineering. 2012 No 4

13. V.Ochkov, K.Orlov, A.Ochkov, V.Znamensky, V.Chishmakova, V.Voloshuk. "Cloud" services of properties of working fluids for cooling units. Bulletin of International could academy. №2, 2013. p. 23-28
14. V.Ochkov, K.Orlov, E.Ivanov, A.Makushin. Calculation and visual presentation of water treatment for thermal power plant's cooling system. Thermal engineering №7, 2013 , p. 10-16.
15. V.Ochkov, Joe K.K., Aung T.P.T. Templates for water treatment processes calculations. Water Purification, Water Treatment, Water Supply, № 6, 2013, p. 50-55.
16. V. Voloshchuk, V. Ochkov. Application of today information technologies for the project development of power units. Open education. № 1, 2013 p. 50-55.
17. V.Ochkov, K.Orlov, Joe K.K., D.Anochin. Mathematical functions for engineering calculations for water supply systems. Water supply and sewer systems. 2012. 9-10. P.68-74.
18. A.Ryzhenkov, N.Danilina. For the question about heat transfer units efficiency. Natural and technical sciences. №4(60).2012. - P.324-333.
19. A.Ryzhenkov, M.Morozov, O.Yurenko. Today operation condition for liquid fluids and carbohydrates transportation. Natural and technical sciences. №4(60).2012. - P.334-338.
20. P.Gotovtsev, J.Tikhomirova, E.Khizova. Mathematical modeling of industrial water systems. Hong Kong International Conference on Engineering and Applied Science. December 2012. Conference Proceedings P 252 – 260
21. P.Gotovtsev, A. Doroshin, A. Doroshina, T. Pantsyrnaya. Thermal power plants as a part of the city water reuse system. IWA Regional Conference on Waste and Wastewater Management, Science and Technology. 26-28 June 2013 Lemesos Cyprus Abstracts
22. O. Egoshina. Today cycle chemistry monitoring systems. Water treatment and cycle chemistry for thermal power plants. 21-23 May 2013, Moscow, OAO VTI p.202-210
23. A. Ryzhenkov. Characterization of fluid dynamics at tube with hydrophobic coating. Water treatment and cycle chemistry for thermal power plants. 21-23 May 2013, Moscow, OAO VTI p.6-14
24. V.Voronov, I.Nikitina, M.Repkin. Today technologies for pre-treatment systems reconstruction. Radioelectronics, electrotechnics and power engineering international conference. Moscow. MPEI. 2013. P.110
25. P.Gotovtsev, I.Nikitina, O.Braginskaya. Enchantment of water chemistry control at thermal power plants. Radioelectronics, electrotechnics and power engineering international conference. Moscow. MPEI. 2013. P.93