

ELECTROLYTIC FABRICATION OF ZINC OXIDE NANOPARTICLES

*V.R. Gaevs'kyi¹, B.D. Nechyporuk²,
N.Yu. Novoselets'kyi², B.P. Rudyk¹*

¹National University of Water Management
and Nature Resources Use

*(11, Soborna Str., Rivne 33028, Ukraine;
e-mail: rexismundi@gmail.com)*

²Rivne State Humanitarian University
(31, Ostafova Str., Rivne 33028, Ukraine)

S u m m a r y

A possibility of electrolytic fabrication of zinc oxide nanocrystals with the use of zinc electrodes and the aqueous solution of sodium chloride as an electrolyte has been demonstrated. The x-ray analysis of obtained nanoparticles shows that their size is of the order of 30 nm. The researches of the electrolyte transmission spectra registered after the main experiment has been terminated show that the energy gap width in ZnO nanoparticles is 3.35 eV, which agrees with the corresponding value for ZnO single crystals.