

## CONTENTS

Study of tetracycline adsorption by Zn-Al mixed oxides and layered double hydroxides <i>Starukh G.M.</i> .....	169
XPS and TPR study of sol-gel derived M/TiO <sub>2</sub> powders (M=Co, Cu, Mn, Ni) <i>Petrik I.S., Krylova G.V., Kelyp O.O., Lutsenko L.V., Smirnova N.P., Oleksenko L.P.</i> .....	179
Synthesis, morphology and electrochemical properties of TiO <sub>2</sub> microspheres <i>Lesnichaya T.V., Terikovskaya T.E., Kosilov V.V., Kirillov S.A.</i> .....	190
Thermochemical and catalytic properties of modified bentonites <i>Rakitskaya T.L., Kiose T.A., Oleksenko L.P., Djiga A.M., Volkova V.Y.</i> .....	196
Influence of metal and non-metal ions doping on the structural and photocatalytic properties of titania films <i>Shestopal N.A., Linnik O.P., Smirnova N.P.</i> .....	203
Theoretical study on the pressure-induced phase transition in vanadium dioxide <i>Grebenyuk A.G., Kaurkovskaya V.N., Lobanov V.V.</i> .....	211
TGA-DSC-MS analysis of silicon carbide and of its carbon-silica precursor <i>Tishchenko I.Yu., Ilchenko O.O., Kuzema P.O.</i> .....	216
Thione-thiol tautomerism of thiourea ligands on silica surface <i>Smirnova O.V., Grebenyuk A.G., Nazarchuk G.I., Zub Yu.L.</i> .....	224
Electrophysical properties of heterostructures CuS/ZnS and PCTFE–CuS/ZnS system <i>Prokopenko S.L., Gunja G.M., Makhno S.N., Gorbyk P.P.</i> .....	234
Template synthesis of nanostructured zinc oxide <i>Dubrovin I.V., Gorbik P.P., Kashin G.N.</i> .....	239
Temperature behavior of water and <i>n</i> -decane bound to nanosilica or poly(methylsiloxane) <i>Turov V.V., Krupskaya T.V., Tsapko M.D., Gun'ko V.M.</i> .....	244
Square-wave voltammetric trace determination of aminophylline in urine – application for pharmaceutical formulation <i>Al-Imam M.M., Sulaiman S.T.</i> .....	256
Quantumchemical calculation of <sup>29</sup> Si NMR spectrum of silicon dioxide fullerene-like molecules <i>Filonenko O.V., Kuts V.S., Terebinska M.I., Lobanov V.V.</i> .....	263