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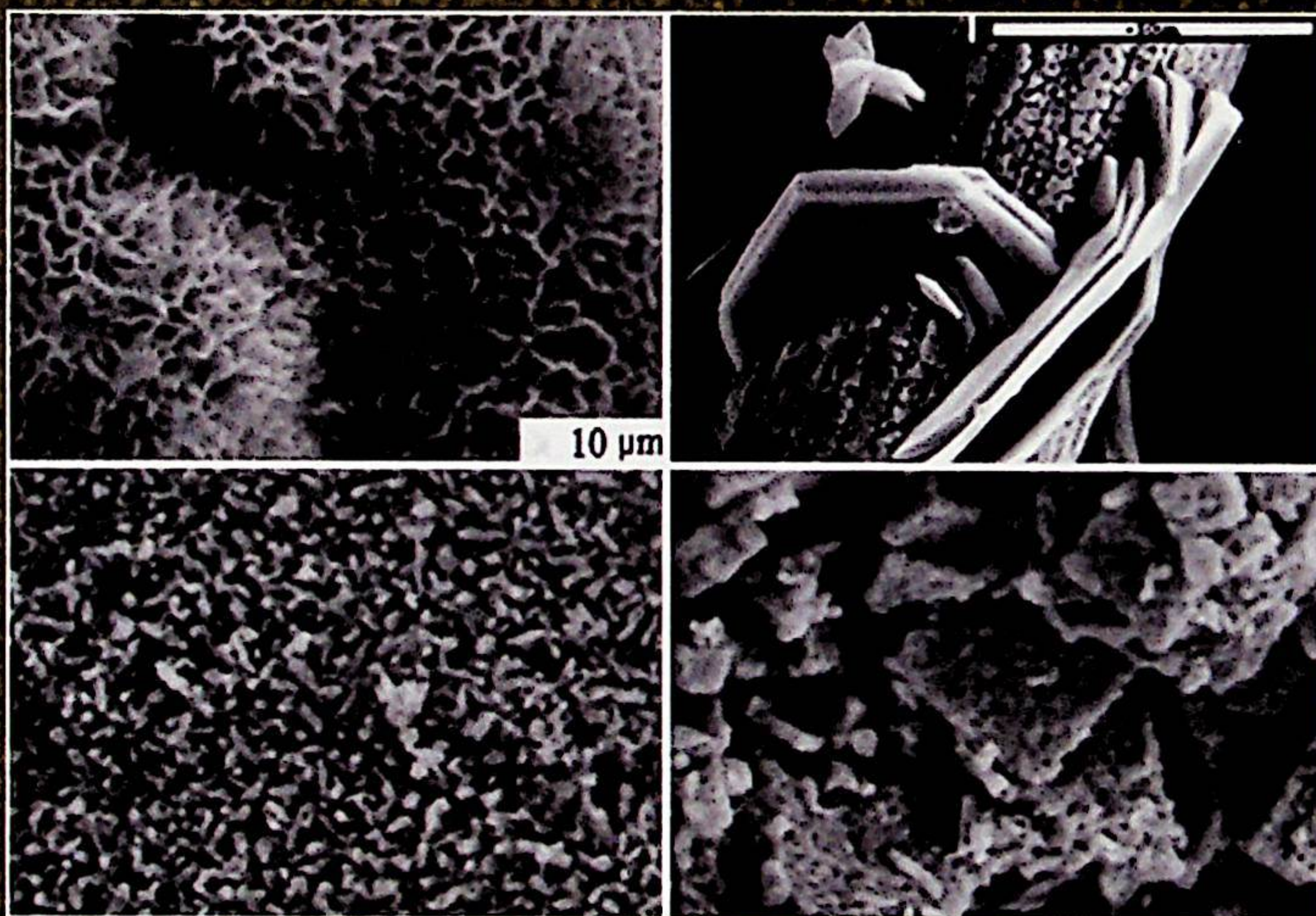


Education and Science of Ukraine

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Vanadium-oxide compounds synthesized by electrolysis for lithium batteries



Monograph

Vanadium oxides and heterogeneous oxide compounds are obtained by electrolysis from metavanadate and vanadyl sulfate solutions in thin-layer electrodes and in powder form. Their structural features, surface morphology, thermal stability were determined, and aspects of interaction with lithium were considered with a view to further use in miniature lithium batteries with non-aqueous electrolyte. Mathematical models of the intercalation of lithium in a partially discharged thin-layer V_2O_5 -electrode are proposed.

For developers of lithium batteries, supercapacitors, electrochromic devices, scientific and pedagogical workers, graduate students, doctoral students, students of higher educational institutions who specialize in the field of technological electrochemistry, in particular, the development of chemical current sources.

Bibliography – 314, illustrations – 143, tables – 7.

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