

Contacts and overall information about institution

Name of Organisation:	Vasyl Stefanyk Precarpathian National University		
City	Ivano-Frankivsk	Zip Code:	76018
Street	Shevchenka, 57		
Status of Organisation:	Higher education establishmen (University, etc.)		
Name of Research Unit:	Science&Educational Centre "Nanomaterials in Accumulation and Generation Energy		
S & T Activity Fields:			
FP7 Priorities	Nano Sciences, Nano Technologies, Materials and New Production Technologies		
Frascati classification	1. Natural Sciences		
Description of activities	<p>In accordance with the general usage of structural signs the most suitable for the intercalated processes of current-generating are materials that have specific, namely the layer structure.</p> <p>Known among such materials are a graphitizing carbon, natural and synthetic talc, chalcogenide metals.</p> <p>At the search of more cheap and ecologically safe for a man and environment of electrode materials comes into on itself a notice $Mg(OH)_2$ – magnesium hydroxide in other words milk magnesia that has the layer structure also.</p>		
Website:			
Overall Description of Institute (Research Unit)	<p>For improvement of supercondensers characteristics it was spent additional activation of received material (chemical, laser, thermal). The way of chemical updating for electrochemical condensers had been spent processing by nitric acid that has given the chance to raise specific capacity of condensers on 5-20 % through clearing of material surface from different sort of not supervised impurity, and also through to occurrence of superficial functional groups which improve contact carbon/electrolyte.</p> <p>It has been received, that the capacity essentially depends on modes thermal annealing and reaches the maximum at annealing temperature 773 K and time of endurance 80 minutes at application of water electrolyte) and 873 K at time of endurance 90 minutes for organic electrolyte. It testifies that at the specified parameters of process (time, temperature) of high-temperature annealing is formed porous system with an optimum parity between volume parts of different diameter both for water, and for organic electrolytes.</p>		
Head of Research Unit:	Name:	Prof. Ivan Myronyuk	
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Contact Person of Research Unit :	Name:		
Work Phone:		Other Phone:	
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Resources and international Activities

Number of Researchers in Unit:

15

Research Facilities:

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Number of International Projects:

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Name and Number of major Publications:

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Participation in 7th Framework Programme:

Food, Agriculture, Fisheries and Biotechnology:

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Energy:

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Environment (Including Climate Change):

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Health:

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Information and Communication Technologies:

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Nano Sciences, Nano Technologies, Materials and New Production Technologies:

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Security

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Socio-economic Sciences and the Humanities

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Space

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Transport (Including Aeronautics)

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Capacities

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Other international project experience:

Project CRDF (USA) # UKX2-9200-IF-08 "Creation and functioning on the base of Vasyl Stefanyk PreCarpathian National University Science&Education Centre «Nanomaterials in accumulation and generation of energy devices»" (2009-2011)