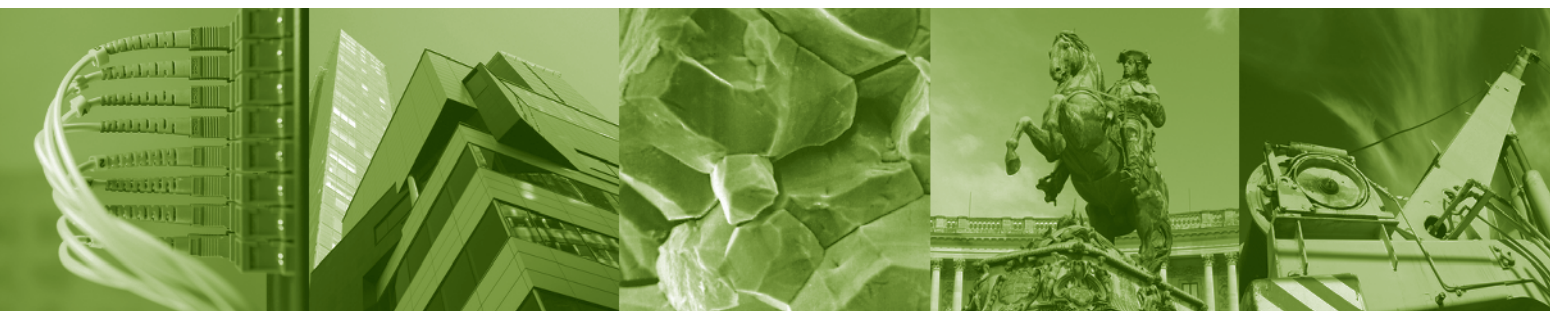




Volume 63
Issue 2
October 2013
Pages 49-96

Published since 1978
formerly as Archives of Materials Science
or Archiwum Nauki o Materiałach (in Polish)

Archives of Materials Science and Engineering



Editor-in-Chief Prof. Leszek A. Dobrzański

International Scientific Journal published monthly
by the World Academy of Materials
and Manufacturing Engineering

<http://www.archivesmse.org>



PUBLISHED SINCE 1978 – formerly as Archives of Materials Science or Archiwum Nauki o Materiałach (in Polish)

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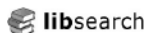
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and Surface Engineering

Financial support

The efforts to achieve the financial support of the Journal in 2013 from the Ministry of Science and Higher Education in Poland have begun.

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Journal Registration

The Journal is registered by the 1st Civil Department of the District Court in Gliwice, Poland at number 278.

Publisher



INTERNATIONAL
OCSCO
WORLD PRESS

International OCSCO World Press
ul. Jagiellońska 21
44-100 Gliwice, Poland

e-mail: info@archivesmse.org

Bank account: Stowarzyszenie Komputerowej Nauki o Materiałach i Inżynierii Powierzchni

Bank name: ING Bank Śląski

Bank address: ul. Zwycięstwa 28, 44-100 Gliwice, Poland

Account number/IBAN CODE: PL76105012981000002300809767

Swift code: INGBPLPW

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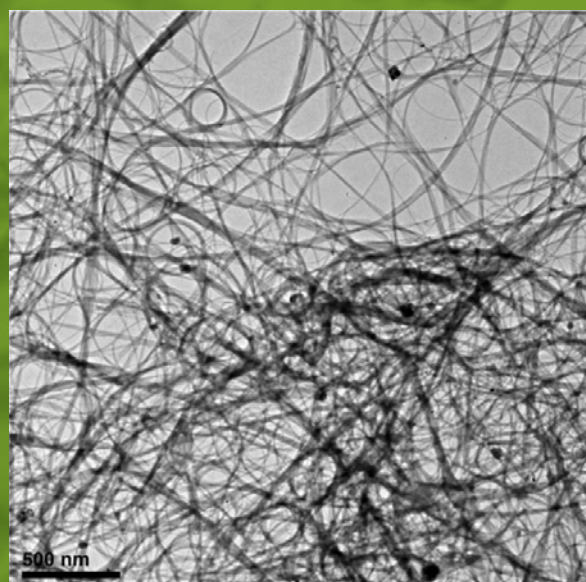
Professor

Leszek A. Dobrzanski M Dr hc
Editor-in-Chief of the AMSE
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Dear Readers,

On 2 September 2013 the Association of Computational Materials Science and Surface Engineering changed its seat and began its activity without the patronage of the Silesian University of Technology in Gliwice, Poland. As usual we hand over a few next interesting scientific papers and we wish a nice reading.



The paper entitled "Transmission electron microscope studies on carbon nanostructured materials" by M. Pawlyta on a page 58 presents the carbon nanostructured materials who are important and still not satisfactorily recognised products. Structure can be investigated with sufficient resolution using transmission electron microscopy but main difficulties are connected with low scattering of electrons by carbon atoms and destruction by knock-on damage caused by collisions of high energy electrons with specimen atoms. Scanning/transmission electron microscopy (S/TEM) delivers a chance to improve the quality of performed investigations. BF, DF and HAADF detectors were applied for various carbon materials: carbon nanotubes, nano-onions, nanodiamonds and graphitized carbon black. Sample preparation is crucial for performed investigations. Because of ionization damage caused by collisions of high energy electrons, results obtained with high-voltage TEM have to be analysed with caution, hence low-voltage electron microscopy is strongly recommended. New and not commonly used techniques were applied for carbon nanostructured materials studies. Advantages and disadvantages of them were compared. Obtained results confirmed the usefulness of applied microscopy techniques.