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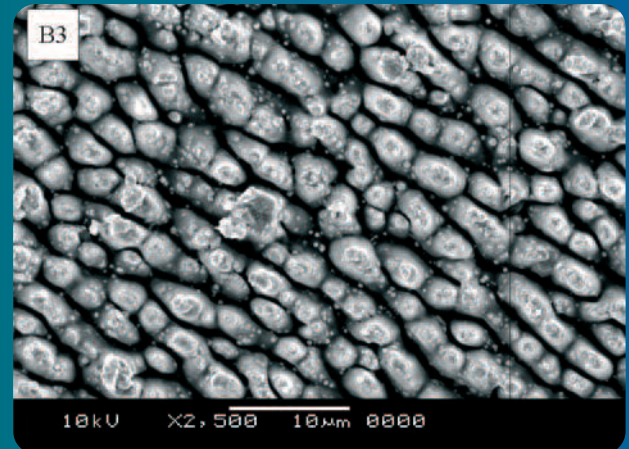


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The research paper made by P. Rytlewski and M. Żenkiewicz on "Applications of lasers in metallization of thermoplastic and thermosetting polymers" on a **page 59** describes the chemical and physical changes induced by ArF-laser irradiation leading to formation of surfaces catalytically highly active and fully prepared for the direct electroless metallization for the case of thermoplastic and thermosetting polymer composites. The only pretreatment method for surface to be activated was laser irradiation. There are compared two polymer composites: thermoplastic and thermosetting with the same qualitative and quantitative contents of the selected copper compounds. Additionally, a wide context of laser applications in electroless metallization of polymeric materials is presented. The composites contained the same amount of copper(II) oxide (CuO) and copper(II) acetoacetate Cu(acac)₂, while varied with the type of polymer matrix. Polyamide 6 as thermoplastic and polyurethane resin as thermosetting polymer matrixes was chosen. The composites were irradiated with various numbers of ArF excimer laser pulses ($\lambda = 193$ nm) at constant fluence of 100 mJ/cm². The metallization procedure of the laser-irradiated samples was performed by use of a commercial metallization bath and formaldehyde as a reducing agent. The samples were examined using FTIR, contact angle measurement and SEM techniques. Suitable condition for laser irradiation of the composites associated with the best catalytic properties were proposed. Better catalytic properties were achieved for thermoplastic than thermosetting composite. It was found out that laser irradiation induce catalytic properties in the studied composites. However, better catalytic properties were achieved for the thermoplastic than thermosetting polymer composites. The comparison of new thermoplastic and thermosetting polymer composites intended for laser direct electroless metallization is firstly reported in the paper.



Dear Readers,

Today I am going to invite you to Brazil where in the period of 20th–24th May 2013 the subsequent 7th Brazilian Congress on Manufacturing Engineering COBEF. COBEF which became a proper forum, in which people from industrials and academicals sectors discuss topics of their technological and scientific interests in agreement with the Brazilian and Global realities will take place. This idea was further explored during the 15th Brazilian Congress of Mechanical Engineering – COBEM, in November 1999, held at guas de Lindia – Sao Paulo. The official support from the Board of Directors of the Brazilian Society of Engineering and Mechanical Sciences (ABCM) and the beginning of a National Manufacturing Engineering Committee became fundamental motivations for the organization of the first congress. Since its first edition, organized at Curitiba in 2001, the COBEF has become the most important Brazilian congress on Manufacturing Engineering, promoted at different Brazil locations, namely, Uberlândia – MG, (2003), Joinville – SC (2005), guas de Sao Pedro – SP(2007), Belo Horizonte – MG (2009) and Caxias do Sul – RS (2011). The 7th COBEF edition will be organized at Penedo, Itatiaia, Rio de Janeiro state, at the Convention and Congress Centre of the City Park Hotel. Penedo is located at the South-Fluminense 150 km from Rio de Janeiro city, region in which is placed an important Industrial Manufacturing Pole of the Rio de Janeiro State with emphasize on companies of the steel and automotive sectors. In this context, it is possible to encourage the participation of professionals from the industry as well as organize technical tours and promote fruitful discussion of common interest topics during the organization of COBEF. Besides, the region of Itatiaia has beautiful touristic appeals with highlight to the Region of " Pico das Agulhas Negras" (seen on the cover), where are located natural parks, rivers and waterfalls. Pico das Agulhas Negras is the fifth highest mountain in Brazil, standing at 2,791 metres above sea level, making it one of the highest in the Brazilian Highlands. Its name means Black Needles Pick, because of the sharp dark rocks on its top, which give it a distinctive shape. The peak's massif is known as Itatiaia, which means "stone with many sharp points", in the Serra da Mantiqueira range, on the border of Rio de Janeiro and Minas Gerais states. Therefore, I invite to participate in this interesting scientific event and to get acquainted with its scientific achievements. Congress delegates are invited to publish their works in our Journal Achievements in Materials and Manufacturing Engineering. Moreover, I invite PT Readers to read the new issue and PT Authors, as usual, to publish their achievements in the following Issues.

Gliwice, in March 2013

Prof. Leszek A. Dobrzanski M Dr hc
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