

## Author's Accepted Manuscript

Comparative study of surface properties determination of colored pearl-oyster-shell-derived filler using inverse gas chromatography method and contact angle measurements

Zhitong Yao, Daidai Wu, Jerry Y.Y. Heng, Senentxu Lanceros-Méndez, Eftychios Hadjittofis, Weiping Su, Junhong Tang, Hongting Zhao, Weihong Wu



PII: S0143-7496(17)30120-3  
DOI: <http://dx.doi.org/10.1016/j.ijadhadh.2017.06.018>  
Reference: JAAD2031

To appear in: *International Journal of Adhesion and Adhesives*

Received date: 28 September 2016  
Accepted date: 17 May 2017

Cite this article as: Zhitong Yao, Daidai Wu, Jerry Y.Y. Heng, Senentxu Lanceros-Méndez, Eftychios Hadjittofis, Weiping Su, Junhong Tang, Hongting Zhao and Weihong Wu, Comparative study of surface properties determination of colored pearl-oyster-shell-derived filler using inverse gas chromatography method and contact angle measurements, *International Journal of Adhesion and Adhesives*, <http://dx.doi.org/10.1016/j.ijadhadh.2017.06.018>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain

# Comparative study of surface properties determination of colored pearl-oyster-shell-derived filler using inverse gas chromatography method and contact angle measurements

Zhitong Yao <sup>1,\*</sup>, Daidai Wu <sup>2</sup>, Jerry Y. Y. Heng <sup>3</sup>, Senentxu Lanceros-Méndez <sup>4</sup>, Eftychios Hadjittofis <sup>3</sup>, Weiping Su <sup>1</sup>, Junhong Tang <sup>1</sup>, Hongting Zhao <sup>1</sup>, Weihong Wu <sup>1,\*</sup>

<sup>1</sup>College of Materials Science and Environmental Engineering, Hangzhou Dianzi University, Hangzhou 310018, China

<sup>2</sup>Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, Guangzhou 510640, China

<sup>3</sup>Department of Chemical Engineering, Imperial College London, South Kensington Campus, London SW7 2AZ, United Kingdom

<sup>4</sup>Centro/Departamento de Física, Universidade do Minho, 4710-057 Braga, Portugal

sxyzt@126.com

jchwwh@163.com

\*Corresponding authors. Tel./fax: +86 571 86919158

## ABSTRACT

Mollusk shells, such as clam, mussel, oyster and pearl oyster shells, are potential candidates for commercial calcium carbonate-based fillers. In this work, the surface properties of colored pearl-oyster-shell-derived filler (CMF) were investigated with comparison to those of pearl oyster shell powder (MSP), using an inverse gas chromatography (IGC) method and contact angle measurements. A developed computational model for the interpretation of surface free energy heterogeneity distributions was applied to both samples. The contact angle measurements revealed

Download English Version:

<https://daneshyari.com/en/article/5014764>

Download Persian Version:

<https://daneshyari.com/article/5014764>

[Daneshyari.com](https://daneshyari.com)