Accepted Manuscript

Title: A review on the Biosynthesis of metallic Nanoparticles (Gold and Silver) using Bio-components of microalgae: Formation Mechanism and Applications

Author: P. Dheeban Shankar Sutha Shobana Indira Karuppusamy Arivalagan Pugazhendhi Vijayan Sri Ramkumar Sundaram Arvindnarayan Gopalakrishnan Kumar

PII: S0141-0229(16)30213-7

DOI: http://dx.doi.org/doi:10.1016/j.enzmictec.2016.10.015

Reference: EMT 9002

To appear in: Enzyme and Microbial Technology

Received date: 10-5-2016 Revised date: 19-9-2016 Accepted date: 22-10-2016

Please cite this article as: Shankar P Dheeban, Shobana Sutha, Karuppusamy Pugazhendhi Arivalagan, Ramkumar Vijayan Sri, Arvindnarayan Sundaram, Kumar Gopalakrishnan. A review on the Biosynthesis of metallic and Bio-components Nanoparticles (Gold Silver) using microalgae: Formation Mechanism and Applications. Enzyme and Microbial Technology http://dx.doi.org/10.1016/j.enzmictec.2016.10.015

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 proof before it is published in its final 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.



ACCEPTED MANUSCRIPT

A review on the Biosynthesis of metallic Nanoparticles (Gold and Silver) using Biocomponents of microalgae: Formation Mechanism and Applications

P. Dheeban Shankar ^a, Sutha Shobana ^b, Indira Karuppusamy ^c, Arivalagan Pugazhendhi ^d,

Vijayan Sri Ramkumar ^e, Sundaram Arvindnarayan ^f, Gopalakrishnan Kumar ^{g, h*}

^a Department of Biotechnology, Nandha Arts and Science College, Erode, Tamilnadu, India

^b Department of Chemistry and Research Centre, Aditanar College of Arts and Science,

Tirchendur, Tamil Nadu, India

^c Research Centre for Stratergic Materials, Corrosion Resistant Steel Group, National Institute for Materials Science (NIMS), Tsukuba, Japan

^d Department of Environmental Engineering, Daegu University, South Korea

^e Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, India

^f Department of Mechanical Engineering, Rohini College of Engineering & Technology, Kanyakumari, Tamil Nadu, India

⁸ Sustainable Management of Natural Resources and Environment, Faculty of Environmental and Labour Safety, Ton Duc Thang University, Ho Chi Minh City, Vietnam

^h Center for Materials Cycles and Waste Management Research, National Institute for Environmental Studies (NIES), Tsukuba, Japan

*Corresponding Author: Dr. Gopalakrishnan Kumar, National Institute for Environmental Studies, 16-2, Tsukuba, Ibaraki 305-8506, Japan. Tel.: +81 29 850 2400; fax: +81 29 850 2560. Sustainable Management of Natural Resources and Environment, Faculty of Environment and Labour Safety, Ton Duc Thang University, Ho Chi Minh City, Vietnam.

Corresponding author's e-mail: gopalakrishnanchml@gmail.com,

gopalakrishnankumar@tdt.edu.vn

Download English Version:

https://daneshyari.com/en/article/4752795

Download Persian Version:

https://daneshyari.com/article/4752795

<u>Daneshyari.com</u>