Accepted Manuscript

Title: Phytic acid doped polyaniline containing epoxy coatings for corrosion protection of Q235 carbon steel

Authors: Yongsheng Hao, Luqman Abdullahi Sani, Tiejun Ge, Qinghong Fang

PII: S0169-4332(17)31391-0

DOI: http://dx.doi.org/doi:10.1016/j.apsusc.2017.05.079

Reference: APSUSC 36014

To appear in: APSUSC

Received date: 20-1-2017 Revised date: 8-5-2017 Accepted date: 9-5-2017

Please cite this article as: Yongsheng Hao, Luqman Abdullahi Sani, Tiejun Ge, Qinghong Fang, Phytic acid doped polyaniline containing epoxy coatings for corrosion protection of Q235 carbon steel, Applied Surface Sciencehttp://dx.doi.org/10.1016/j.apsusc.2017.05.079

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

Phytic acid doped polyaniline containing epoxy coatings for corrosion protection of Q235 carbon steel

Yongsheng Hao*, Luqman Abdullahi Sani, Tiejun Ge, Qinghong Fang

School of Materials Science and Engineering, Shenyang University of Chemical

Technology, No.11 Street, Shenyang Economic-Technological Development Area,

Shenyang, Liaoning, 110142, China

*Corresponding author: Yongsheng Hao(Y. S. Hao), E-mail: yshao@ciac.ac.cn Tel: +86 24 89388092, Fax: +86-24-89388153

The research highlights of this work are as follows:

- (1) PANI-PA can be synthesized in phytic acid solution directly
- (2) PANI-PA has a good thermostability.
- (3) 2 wt.% PANI-PA can obtain an a better inhibiting effect than other concentrations
- (4) Epoxy coating blended with PANI-PA particles possesses a self-healing function.

Download English Version:

https://daneshyari.com/en/article/5346958

Download Persian Version:

https://daneshyari.com/article/5346958

<u>Daneshyari.com</u>