

# European Chemistry Congress

June 16-18, 2016 Rome, Italy

## Gemini surfactants corrosion inhibitors

Brycki B, Kaczerewska O, Drgas M, Materna P and Kowalczyk I

Adam Mickiewicz University Poznan, Poland

The inhibitory action of surfactants in aqueous solutions is due to a physical adsorption or chemisorption of surfactant molecules onto the metal surface, depending on the charge on the solid surface and the free energy change of transferring a hydrocarbon chain from water to the solid surface. The adsorption of a surfactant markedly changes the corrosion resisting property of a metal thus the study of the correlation between the adsorption and degree of a corrosion inhibition are of a considerable importance. Gemini surfactants are multifunctional surfactants which have two amphiphilic groups connected by a spacer. Spacer can be hydrophobic or hydrophilic, flexible or rigid, can contain heteroatoms (oxygen, nitrogen, sulphur) or groups with  $\pi$ -electrons. These compounds have attracted considerable interest in recent decades because of their exceptional structural feature and versatile applicability. Gemini surfactants exhibit properties superior to those of conventional surfactants (cmc,  $\gamma$ , MIC, solubility). During recent years, an increasing interest has been focused on the investigation of the corrosion inhibition behavior of gemini surfactants in various aggressive media. In the present paper, the efficiency of three novel gemini cationic surfactants as potential corrosion inhibitors were investigated by electrochemical methods.

## Biography

Brycki B is an Associate Professor in Department of Chemistry at the Adam Mickiewicz University in Poznan. He has completed his PhD and habilitation from Adam Mickiewicz University in Poznan. He is the Head of Laboratory of Microbiocides of Chemistry in Faculty of Chemistry. He has published more than 90 papers in reputed journals.

[brycki@amu.edu.pl](mailto:brycki@amu.edu.pl)

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