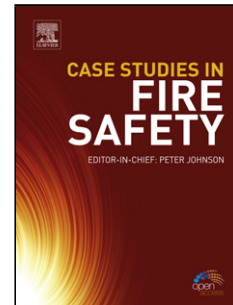


Accepted Manuscript

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PII: S0010-938X(16)31436-6
DOI: <http://dx.doi.org/doi:10.1016/j.corsci.2017.02.021>
Reference: CS 7014

To appear in:

Received date: 20-12-2016
Revised date: 10-2-2017
Accepted date: 11-2-2017

Please cite this article as: Yujie Qiang, Shengtao Zhang, Lei Guo, Xingwen Zheng, Bin Xiang, Shijin Chen, Experimental and theoretical studies of four allyl imidazolium-based ionic liquids as green inhibitors for copper corrosion in sulfuric acid, Corrosion Science <http://dx.doi.org/10.1016/j.corsci.2017.02.021>

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Experimental and theoretical studies of four allyl imidazolium-based ionic liquids as green inhibitors for copper corrosion in sulfuric acid

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Highlights

- Four allyl imidazolium-based ionic liquids are used as green inhibitors for copper corrosion in sulfuric acid.
- The inhibition efficiencies of the investigated inhibitors increase with the augment of alkyl chain length attached to the imidazolium ring.
- The order of inhibition ability obtained from EIS is in perfect agreement with the polarization results.
- Theoretical calculations provide favorable support for the experimental data.

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