Mercoledì **2 ottobre 2024** alle ore **14:30** presso l'aula F

il **Dr Federico Grillo**

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terrà il seminario dal titolo:

Adsorption of N-heterocyclic molecules on copper surfaces

The functionalization of metal surfaces with organic molecules can bestow surfaces with particular properties, for example enhancing their resistance to aggressive media. Amongst many heterocyclic molecules, (functionalized) triazoles have emerged as the top-class compounds as surface passivators for copper and its alloys [1, 2]. In this respect, more recently great potential has been shown by N-heterocyclic carbenes (NHCs) [3].

In this seminar, several aspects of the interactions of the prototypical corrosion inhibitor for copper, benzotriazole (BTAH), and selected NHCs with undoped [4-9] and doped [10] copper surfaces will be presented, in the attempt to rationalize their action as surface passivators. A structural and morphological characterization in an ultra-high vacuum environment [4-9], will be followed by reactivity tests at realistic conditions [10, 11].

References

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Il Direttore del Dipartimento
Stefano Mammi

Prof. Stefano Agnoli