Title: Novel Ca_xMnO_y/TiO_2 Composites for Efficient Photocatalytic Degradation of Methylene Blue and the Herbicide Imazapyr in Aqueous Solution under Visible Light Irradiation

Authors: Salma Bougarrani, Karl Skadell, Robert Arndt, Mohammed El Azzouzi, Roger Gläser

PII: S2213-3437(18)30098-8
DOI: https://doi.org/10.1016/j.jece.2018.02.026
Reference: JECE 2218

To appear in:

Received date: 14-12-2017
Revised date: 7-2-2018
Accepted date: 15-2-2018

Please cite this article as: Salma Bougarrani, Karl Skadell, Robert Arndt, Mohammed El Azzouzi, Roger Gläser, Novel CaxMnOy/TiO2 Composites for Efficient Photocatalytic Degradation of Methylene Blue and the Herbicide Imazapyr in Aqueous Solution under Visible Light Irradiation, Journal of Environmental Chemical Engineering https://doi.org/10.1016/j.jece.2018.02.026

Novel Ca_xMnO_y/TiO_2 Composites for Efficient Photocatalytic Degradation of Methylene Blue and the Herbicide Imazapyr in Aqueous Solution under Visible Light Irradiation

Salma Bougarrani[a*], Karl Skadell[b], Robert Arndt[b], Mohammed El Azzouzi [a], Roger Gläser[b]

[a], *Laboratory of Spectroscopy, Molecular Modeling, Materials, Nanomaterials, Water and Environment (LS3MN2E), center: CERN2DFaculty of Sciences, University Med V , Avenue Ibn Battouta, BP 1014, Agdal, Rabat, Morocco*

[b],*Institute of Chemical Technology, Universität Leipzig, Linnéstr. 3, 04103 Leipzig, Germany*

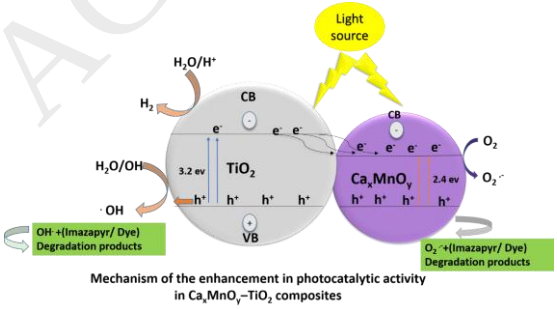
Correspondence:

Salma Bougarrani, Laboratory of Spectroscopy, Molecular Modeling, Materials, Nanomaterials, Water and Environment, Med V University, BP 1014, Agdal, Rabat, Morocco

Tel: +212660425050; Fax: +212 537 774 261

E-mail:salma.bougarrani@gmail.com

Graphical abstract



Mechanism of the enhancement in photocatalytic activity in Ca_xMnO_y–TiO_2 composites