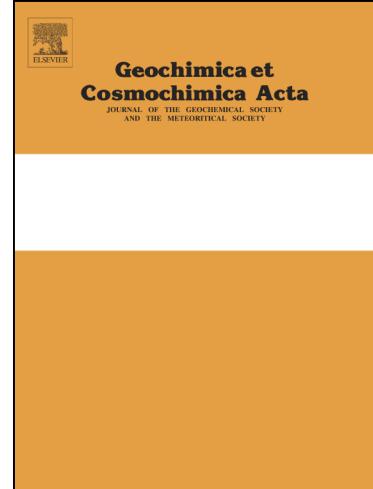


# Accepted Manuscript



Geochemical control on the reduction of U(VI) to mononuclear U(IV) species in lacustrine sediments

L. Stetten, A. Mangeret, J. Brest, M. Seder-Colomina, P. Le Pape, M. Ikogou, N. Zeyen, A. Thouvenot, A. Julien, G. Alcalde, J.L. Reyss, B. Bombled, C. Rabouille, L. Olivi, O. Proux, C. Cazala, G. Morin

PII: S0016-7037(17)30689-0

DOI: <https://doi.org/10.1016/j.gca.2017.10.026>

Reference: GCA 10531

To appear in: *Geochimica et Cosmochimica Acta*

Received Date: 20 January 2017

Accepted Date: 22 October 2017

Please cite this article as: Stetten, L., Mangeret, A., Brest, J., Seder-Colomina, M., Le Pape, P., Ikogou, M., Zeyen, N., Thouvenot, A., Julien, A., Alcalde, G., Reyss, J.L., Bombled, B., Rabouille, C., Olivi, L., Proux, O., Cazala, C., Morin, G., Geochemical control on the reduction of U(VI) to mononuclear U(IV) species in lacustrine sediments, *Geochimica et Cosmochimica Acta* (2017), doi: <https://doi.org/10.1016/j.gca.2017.10.026>

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.

# Geochemical control on the reduction of U(VI) to mononuclear U(IV) species in lacustrine sediments

Stetten L.<sup>1,2</sup>, Mangeret A.<sup>2</sup>, Brest J.<sup>1</sup>, Seder-Colomina M.<sup>2</sup>, Le Pape P.<sup>1</sup>, Ikogou M.<sup>1</sup>,  
 Zeyen N.<sup>1</sup>, Thouvenot A.<sup>3</sup>, Julien A.<sup>2</sup>, Alcalde, G.<sup>2</sup>, Reyss J.L.<sup>4</sup>, Bombled B.<sup>4</sup>,  
 Rabouille C.<sup>4</sup>, Olivi L.<sup>5</sup>, Proux O.<sup>6</sup>, Cazala C.<sup>2</sup>, Morin G.<sup>1,\*</sup>

<sup>1</sup> Institut de Minéralogie, de Physique des Matériaux et de Cosmochimie (IMPMC), UMR 7590  
 CNRS-UPMC-IRD-MNHN, case 115, 4 place Jussieu, 75252 Paris Cedex 5, France

<sup>2</sup> Institut de Radioprotection et de Sûreté Nucléaire, IRSN, PRP-DGE, 31 avenue de la Division  
 Leclerc, 92262 Fontenay-aux-Roses, France

<sup>3</sup> Université de Clermont Ferrand, Athos Environment, 63171 Aubière, France

<sup>4</sup> Laboratoire des Sciences du Climat et de l'Environnement, LSCE/IPSL, CEA-CNRS-UVSQ,  
 Université Paris-Saclay, F-91198, Gif-sur-Yvette, France

<sup>5</sup> Sincrotrone Trieste ELETTRA, I-34012 Trieste, Italy

<sup>6</sup> Observatoire des Sciences de l'Univers de Grenoble (OSUG), UMR CNRS 832, Université  
 Grenoble-Alpes, F-38041 Grenoble Cedex 9, France - BM30B/CRG-FAME, ESRF, Polygone  
 scientifique Louis Néel, 71 avenue des Martyrs, 38000 Grenoble, France.

Second revised version to be submitted to

*Geochimica et Cosmochimica Acta*

\* Corresponding author, Email: [guillaume.morin@impmc.upmc.fr](mailto:guillaume.morin@impmc.upmc.fr)

Tel: +33 1 44 27 75 04; Fax: +33 1 44 27 37 85

Download English Version:

<https://daneshyari.com/en/article/8910938>

Download Persian Version:

<https://daneshyari.com/article/8910938>

[Daneshyari.com](https://daneshyari.com)