

## UniCat Colloquium

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- Lecturer: **Prof. Juan-Carlos Fontecilla-Camps**, Groupe Metalloprotéines, Institut de Biologie Structurale - Jean-Pierre Ebel (IBS), Grenoble - Cedex 1, France
- Title: **Biological nickel: transport and catalytic properties**
- Abstract: Nickel is an unusual metal in biology. However, it is also an essential component of microbial enzymes catalyzing what are considered as "primordial" reactions in an anoxic world. These reactions include H<sub>2</sub> uptake, CO oxidation/CO<sub>2</sub> reduction and CH<sub>4</sub> production. Because nickel can be toxic for the cell, its transport from the exterior to the cytoplasm is highly controlled. Over the years we have solved the structures of four different NiFe-hydrogenases, one anaerobic acetyl-Coenzyme A synthase/Carbon monooxide dehydrogenase and a nickel transporter. Furthermore, the latter has been modified to catalyze a novel reaction. The structure/function relationships of these different proteins will be discussed during my talk.
- Date: **Wednesday, October 31, 2012**
- Time: **5:15 pm - around 6:45 pm**
- Location: **TU Berlin,  
Department of Chemistry  
Straße des 17. Juni 115,  
10623 Berlin  
Building C,  
Lecture Hall C 264**
- Organiser: **Prof. Bärbel Friedrich (HUB),  
Dr. Oliver Lenz (HUB)**

Coffee and tea will be served thirty minutes prior to the lecture start.  
**Guests are cordially invited to attend!**

Prof. Dr. Matthias Driess, Chair of the Cluster of Excellence UniCat