	Experiment title: High Resolution Powder Diffraction in metal alkanoates (copper(II), cobalt(II), manganese(II), lithium, ...) in the crystal phase and in different phases at higher temperature	**Experiment number**: 25-01-927
Beamline: BM25A	**Date of experiment**: from: 25/06/2014 to: 01/07/2014	**Date of report**: 10/12/2014
Shifts: 18	**Local contact(s)**: Eduardo Salas Colera	*Received at ESRF:*

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Report:

The experiment consisted in the measurement of samples (metal alkanoates) by powder diffraction.
Around 30 samples were measured in total. The metal alkanoates are organic salts from organic acids and different metals. Thus, copper(II) alkanoates were analyzed (from octanoate to pentadecanoate), potassium alkanoates (from pentanoate to dodecanoate), lithium ones (from octanoate to tetradecanoate), etc.

The samples were placed in capillaries and measured in the branchA of BM25, using a point detector ans scanning 2 Theta. Each measurement took about 3 hours (measuring from 0 to 40º aprox.).

The experiment was succesful and more 22 new structures have been able to be solved from these data. Some of them have been already be published already:

- Ramos Riesco, M.; Martínez-Casado, F. J.; Rodríguez Cheda, J. A.; Redondo Yélamos, M. I.; Fernández-Martínez, A.; López de Andrés, S. *Cryst. Growth Des*. **2015**, *15*, 497 - 509.

- Ramos Riesco, M.; Martínez-Casado, F. J.; Rodríguez Cheda, J. A.; Redondo Yélamos, M. I.; da Silva, I.; Plivelic, T. S.; López de Andrés, S.; Ferloni, P. *Cryst. Growth Des*. **2015**, (ACCEPTED)

Two more papers, at least, are going to be written containing the data from this experiment. So our evaluation of the beamtime, staff and help recieved and is really positive