



Experiment title: X-ray Excited Optical Luminescence (XEOL) -detected XAFS investigation of novel luminescent copper clusters confined in SAPOs microporous frameworks		Experiment number: CH-6247
Beamline: BM08	Date of experiment: from: 01/03/2022 to: 07/03/2022	Date of report:
Shifts: 15	Local contact(s): Dr. Francesco d'Acapito	<i>Received at ESRF:</i>
Names and affiliations of applicants (* indicates experimentalists): Dr. Grandjean Didier*, QSP, KU Leuven Romolini Giacomo*, KU Leuven Prof. Johan Hofkens, KU Leuven Prof. Peter Lievens, KU Leuven Dr. Francesco d'Acapito,* BM8@ESRF		

Report:

We collected simultaneously the XEOL- and transmission-detected XAFS of eleven copper-based luminescent samples at the Cu-K edge. Six were measured in capillaries due to their air sensitivity, and the remaining five stable samples were measured as pellets.

No particular difficulties or technical issues were encountered during this experiment. The collected data has been analysed and is currently being included in a manuscript and a PhD thesis.

Representative transmission- and XEOL-detected XANES spectra for a Cu zeolite with different contents pointing out the good quality of the recorded data are presented in Fig. 1.

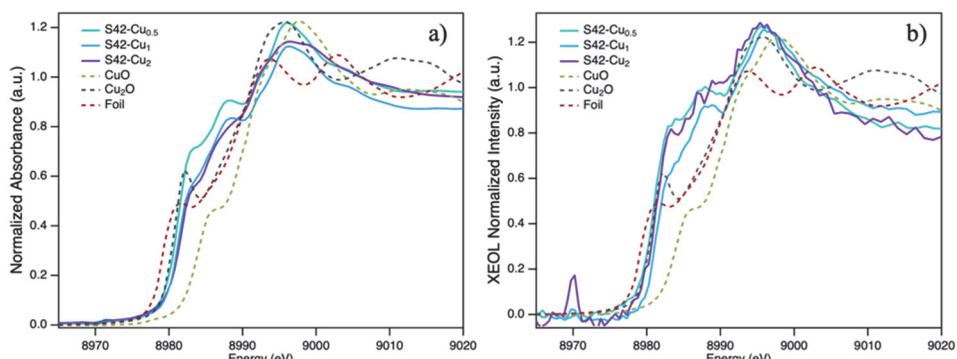


Figure 1: XANES spectra of Cu-zeolite; transmission detected (a); XEOL-detected (b)