



## PhD position in Materials Science at GPM :

## "Influence of Fe doping on the MagnetISm of ThERmoelectric sulfide compounds" (MISTER project)

This PhD subject focuses on the study of iron-based thermoelectric sulfide compounds in the search for new materials for energy hardvesting. The objectives are to investigate the influence of iron doping, magnetism, but also chemical disorder on the thermoelectric efficiency of these compounds. For this purpose, several characterization techniques of the structural and physical properties will be used, including SQUID measurements and <sup>57</sup>Fe Mössbauer spectrometry as a local probe of the chemical, electrical and magnetic environments of iron sites. The results obtained at various temperatures and external magnetic fields should provide a better understanding of the thermoelectric properties to optimize them for applications.

The work will be made in close collaboration with the CRISMAT laboratory in Caen in the framework of Labex "COVATIS", Réseau d'Intérêt Normand "TEMPO" and Institut Carnot "MASTER" research programs.

**This full-time position is funded** by the « Région Normandie » and the European Union. Europe invests in Normandy with the European Regional Development Fund (ERDF).

**Research laboratory**: Groupe de Physique des Matériaux (GPM), Université de Rouen Normandie, France. Website : <u>http://gpm.univ-rouen.fr/en</u>

**Dates:** The PhD thesis will start on October 1<sup>st</sup>, 2018 for a duration of 3 years.

**Requirements:** We are looking for highly motivated candidates with outstanding or excellent Master's degree in Physics, Materials Science or related field.

Contact : Dr. Jean Juraszek email : jean.juraszek@univ-rouen.fr

Closing date for application: May 4<sup>th</sup>, 2018

**Submissions of applications** (in English or in French) should include a letter of motivation, CV, diplomas with transcripts, and letters of two academic staff for recommendation.



