



UNITED STATES (CHICAGO)

Period : ~ T3 2016 to T4 2017 (18 months)

LOCATION : East Chicago (Indiana, US)

Entreprise:

ArcelorMittal USA, major steel maker in North America and leader on automotive, appliance and packaging markets. ArcelorMittal East Chicago Research center (Indiana), second largest research center of ArcelorMittal group, is located at ~20 miles south from Chicago (Indiana, US).

Job description:

Lead research activities in steel rolling area, both at short (technical assistance to production plants) and mid terms (participation to research projects involving other research centers inside and outside ArcelorMittal).

Objectives

As a research engineer in the process research group of the process division of ArcelorMittal East Chicago research center (Indiana), you contribute to several research activities in the rolling area:

Project development of a non destructive Laser UltraSonic (LUS) technique to monitor in real time steel microstructure evolution (austenite grain size and recrystallization, phase transformation) during hot rolling and cooling of steels: within the project team, your role is to make the follow up of laboratory tests at high temperature performed in a research institute located in Canada to evaluate this non destructive technique. For that purpose, you coordinate and perform in our laboratory microstructural characterizations of steel samples by metallography and microscopic observations for comparison with the non-destructive technique. You also contribute to develop, validate and tune existing or new microstructural evolution models of austenite grain size and phase transformation using the measured microstructure delivered by the technique, with the final goal of developing a modelling tool to optimize microstructure on industrial hot rolling mills.

Profile:

Engineering school, strong background in mechanical and materials science, good skills in computer programming and Finite Element simulation to exploit existing or develop new models to optimize steel rolling processes, you have a certain interest in industrial applied research and have a good communication.

Conditions: candidates must be between **18 and 28 years** old and must get a **European citizenship**.

If you are interested, apply on the VIE site :<https://export.businessfrance.fr/>

For any technical question, contact: nicolas.legrand@arcelormittal.com