

**Session Program**

**5-7 Oct 2021**

**9th International Conference on Modeling  
and Simulation of Metallurgical Processes in  
Steelmaking - STEELSIM2021**

***T\_8 Metal forming, rolling and thermo-  
mechanics***

Virtual Conference

## Tuesday 5 October

15:10

### T\_8 Metal forming, rolling and thermo-mechanics

**Session** | **Location:** Room 3 | **Convener:** Prof. Lukasz Madej

15:10–15:30

#### **Steel strip hot runout table simulation and high temperature electromagnetic measurement for phase transformation monitoring**

**Speaker**

Dr Russell Hall

15:30–15:45

#### **Flow stress modelling considering dislocation density and recrystallization kinetics during hot deformation of API X70 pipeline steel**

**Speaker**

Dr Nabi Allah Razani

15:45–16:00

#### **Bolt forging process optimisation using simulation software with applied Avrami model for recrystallisation**

**Speaker**

Mr Michal Filipowicz

16:00–16:15

#### **Use of damage theory to improve material model and predict potential failures in a hot rolling simulation system**

**Speaker**

Dr Umut Hanoglu

16:15–16:30

#### **Recrystallization simulation and double-hit compression tests of microalloyed steel**

**Speaker**

Ms Evelyn Sobotka

16:30

# Wednesday 6 October

10:20

## T\_8 Metal forming, rolling and thermo-mechanics

**Session** | **Location:** Room 3 | **Convener:** Prof. Lukasz Madej

10:20-10:35

### Identification of the 3D cellular automata model of static recrystallization based on the inverse analysis

**Speaker**

Dr Mateusz Sitko

**Location**

Room 3

10:40-10:55

### Digital Process and Product Twin for hot rolling

**Speaker**

Dr Markus Widder

**Location**

Room 3

10:55-11:10

### DEVELOPMENT OF A THICK STEEL PLATE MANUFACTURING ROUTE

**Speaker**

Dr Jean-Christophe Gebelin

**Location**

Room 3

11:10-11:25

### Effect of sample geometry on strain uniformity and double hit compression tests for recrystallisation kinetics determination

**Speaker**

Dr Nusrat Tamanna

**Location**

Room 3

11:25-11:40

### Automatic unstructured quadrilateral mesh generator based on a direct method

**Speaker**

Dr Filippo Avellino

**Location**

Room 3

11:55