

# PLASTICITY CONTROL & MATERIALS ELECTROCHEMISTRY LABORATORY



School of Materials Science and Engineering, Yeungnam University, South Korea

#### Introduction

Plasticity Control & Materials Electrochemistry Laboratory (PCMEL) has focused mainly on both the fundamental issue and advanced breakthrough of light metal hierarchies for various industrial implementations. The current research combines the novel expertise in governing the electrochemical and mechanical responses by means of the cutting-edge technologies, such as differential speed rolling methods plasma electrolytic oxidation and. In addition, this research group takes a shot at developing the exceptional heat treatments that have been unexplored yet in the world. Thus, our vision is put beyond the world-class level, leading our promising graduate students to attend the international conferences as well as to publish the research results in highly-impacted journals.

### Supervisor



PositionProfessorCareerPOSTECH / MITPublication125 SCI international journalsCitation2123 (by Google Scholar)Patent18 patentsProject5 national projectsPresentation230 times

## **Project/Funding**





## **Research topic**

- Fabrication of bulk nanostructured materials via advanced plastic forming
- Novel heat treatment for ferrous alloys with ultra-high strength and suitable ductility
- Structural and functional matters of protective metals via plasma electrolytic oxidation
- Development of hybrid organic-inorganic assembly for super-high performance coating

#### Researcher







Yong Hwan Lee Yeungnam University

울산테크노파크

Ulsan Technopark



Yeungnam University

**KITECH** 

# How to join

#### **Master/Combined/Doctoral-degree courses**

Major in Chemistry, Metallurgy, Physics, Engineering, etc. TOEIC 800 / TOEFL PBT 590 / TOEFL IBT 95 / IELTS 7

For promising candidates who are interested in joining, please contact *Nisa Nashrah* (nisanashrah@ynu.ac.kr)

#### Online Application : 4 Oct. ~ 30 Oct. 2018 !!



APSMR 2015 Sun Moon Lake (Taiwan)



Campus life (Winter 2018) Gyeongsan (Korea)



IWAM 2016 Gyeongsan (Korea)



ISMANAM 2018 Rome (Italy)



Membership Training 2017 Jeju (Korea)



Membership Training 2018 Pohang (Korea)