



Department of Mechanical Engineering  
In association with  
IIM- Indian Institute of Metals

**“Seminar on Energy Assisted Forming Process”**

**Resource Person:** Dr.K.Hariharan, Assistant Professor,  
Department of Mechanical Engineering, IIT Madras.

**Venue:** Digital Room, AVIT

**Date & Time:** 30/08/2019 - 11.00 am to 12.30 pm

**Seminar - Content:**

- Introduction to Energy assisted metal forming process.
- Metal forming technology / Advanced topics in metal forming
- Concept of stress and strain, Hydrostatic and deviatoric stresses
- Flow curve Yield criteria for ductile materials, plastic stress strain relationships
- Yielding and ductility during instability, Effect of strain rate and temperature on flow properties

**Guest Profile:**

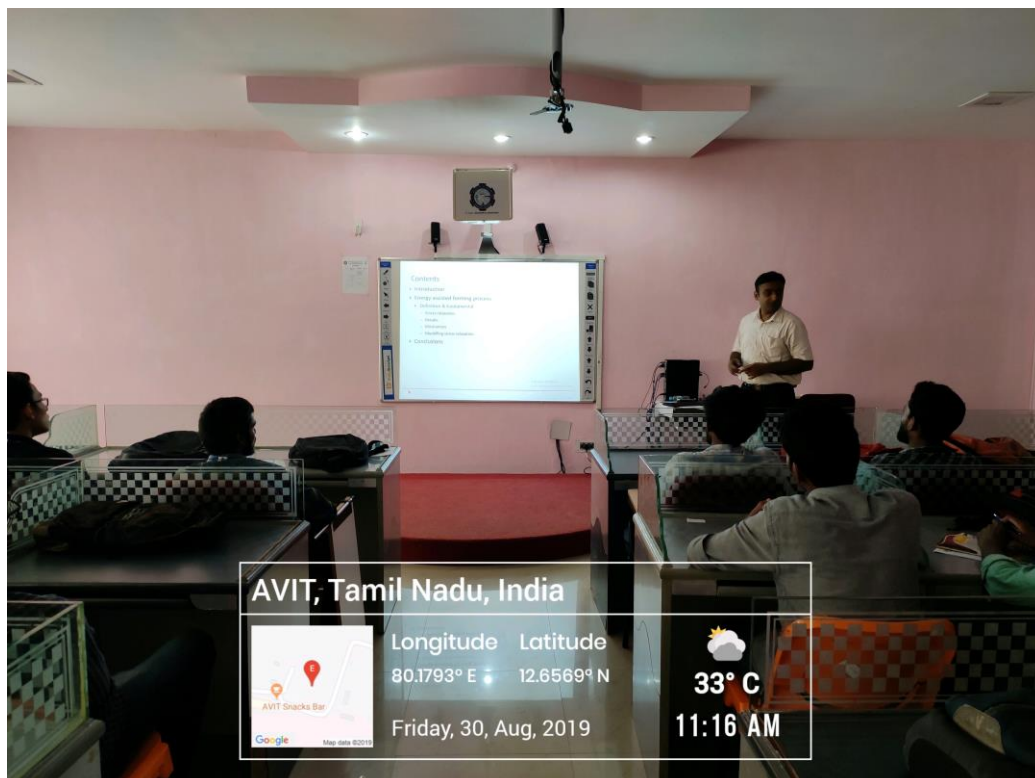
- Dr. Hariharan K is an Assistant Professor in the department of Mechanical Engineering at IIT Madras since Jan 2017. He received his PhD from IIT Madras in 2012 and B.E. from university of Madras.
- Prior to joining IIT Madras, he was an Assistant Professor in the department of Mechanical Engineering at IIT Delhi, Earlier he has worked as a post-doc researcher in Graduate Institute of Ferrous Technology (GIFT), POSTECH, South Korea (2012 to 2014) and in the research department of Ashok Leyland Ltd, Chennai, India (2004 to 2012).

**About the Seminar:** The Department of Mechanical Engineering in association with IIM – Indian Institute of Metals has organized the seminar for the students and nearly around 45 students participated. The students gained knowledge about the science and technology of different forming processes. Most of the metallic objects undergo at least one of the metal forming operations, except the cast ones. Understanding basic principles of metal forming and further being applied by engineers and metallurgists directly contribute towards improvement in production in the industries.

**Seminar Photos: Special Address by HOD: Prof.L.Prabhu /Mechanical**



**Seminar Photos: “Seminar on Energy Assisted Forming Process” by  
Dr.K.Hariharan, Assistant Professor, Department of Mechanical Engineering, IIT  
Madras**



**Seminar Photos: Welcome Speech by Student Coordinator:  
Rohan Kumar/IV year B Sec /Mech**

