QIP Course on Mechanical Behaviour of Materials

(Venue: PBCEC, VH, IITK)

30th Oct – 3rd Nov, 2018

	9:00-10:30		10:45-12:15		13:30-15:00		15:30-17:00
Day 1 (Oct 30th)	Inauguration (CSU)	Coffee Break	Elasticity + Plasticity (NPG)	Lunch Break	Dislocation Theory (ShS)	Coffee Break	**Lab session** Tension and Compression testing
Day 2 (Oct 31st)	Slip and twinning (NPG)		Fracture (JJ)		Fatigue (JJ)		**Lab session** Hardness and Impact testing
Day 3 (Nov 1st)	Strengthening mechanisms (SSS)		Processing Map (SM)		Formability (SM)		**Lab session** Fatigue testing
Day 4 (Nov 2nd)	Strengthening mechanisms (SSS)		Creep (RSD)		Superplasticity (RSD)		**Lab session** Nano-indentation
Day 5 (Nov 3rd)	Modeling aspects in Deformation behavior (AS)		Micro-mechanical testing (KaB)		High strain rate deformation (PV)		Interaction Session + Certificate Distribution

CSU: Prof. C. S. Upadhyaya **PV:** Prof. P. Venkitanarayanan **NPG:** Prof. N. P. Gurao **ShS:** Prof. Shashank Shekhar

SSS: Prof. Sudhanshu S. Singh **KB:** Prof. Kantesh Balani, **SM**: Prof. Sushil Mishra (IITB)

RSK: R.S. Kottada (IITM) **JJ:** Prof. Jayant Jain (IITD) **AS :** Prof. Anandh Subramaniam

The lab session will focus on data collection and data analysis. Emphasis will be on correct procedures to carry out materials testing and understanding hardware software interface to obtain high quality data.