

SYLLABUS :-

Advanced Al Alloys: High temperature and high strength Al alloys such as Al-Fe-V-Si, nanocrystalline Al alloys, etc.; Ti based Alloys: Advances in Ti based Alloys; Superalloys: Ni base and Co base superalloys; Shape Memory Alloys: physical metallurgy, properties, etc.; Advanced Composites: in situ composites, nanocomposites, etc.; Intermetallics; Aluminides, Silicides, borides, Nitrides and Carbides.; Nanocrystalline Materials: Synthesis, Structure and Properties.; Amorphous Materials; Metallic glasses, Glass forming ability, Thermodynamics and kinetics of glass formation, Bulk Metallic Glasses, Properties; Quasicrystalline Materials; Structure, Synthesis, Properties; Advanced Processes: Rapid solidification processing, Laser surface Modification, Mechanical Alloying, Rapid prototyping, Self propagating High temperature synthesis, inert gas condensation etc.