Material Advantage Meeting
Meeting Minutes
November 29, 2021

Agenda:
Guest Speaker: Arda Gozen
  ● Arda Gozen
    ○ Mechanical Engineering Professor
      ■ Background & research in manufacturing
      ■ ME 312, 348, 401, 471
      ■ Post-Doc: Soft material research
  ● Research he is doing now
    ○ Three material directions
      ■ Polymer nano-composites
        ● Using 3D printing
      ■ Metallic material for 3D printing in nanoscale
      ■ Organization of nano-particles/fibers in composites
      ■ Rheology of nanocomposites
      ■ Mixing of metal powders to 3D print alloys and addressing thermo issues (thermal stresses)
      ■ Printing with biological materials
        ● Cartilage tissues and bio-constructs that mimic that mechanical properties of these tissues
  ● Research based career
    ○ Graduate school would be the best option
    ○ Grad school does not warrant more debt
    ○ Not recommended to do it if money is your only motivation. Understanding that grad school is very difficult.
    ○ Prerequisite: Be excited for it. Seeking intellectual challenge.
  ● Industrial based career
    ○ Leads to greater managerial positions