

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