Today’s Panelists

• Xuanhong Cheng
  Professor and Director, MSE Grad program

• Lesley Chow
  Assistant Professor

• Lisa Arechiga
  Graduate Coordinator

• Mari-Therese Burton
  PhD student

• Michael Pires
  PhD student

• Vamseed Vemuri
  PhD student
Located in Pennsylvania's beautiful Lehigh Valley, Lehigh is one of the most distinguished private research universities in the U.S. Through academic rigor, an entrepreneurial mindset, and collaborative opportunities, we challenge our students to become the leaders of the future. With five distinguished colleges and an ideal student-to-faculty ratio, Lehigh offers world-class academic opportunities on one of the nation’s most beautiful campuses. [lehigh.edu]
Rossin College: A Snapshot

• 140 tenure track faculty in 8 academic departments
• 2,200 undergraduates, 850 graduate students
• The Rossin College generates >50% of Lehigh’s Ph.D. graduates, journal publications, and research expenditures.
• 30% of current engineering faculty members are NSF CAREER Award recipients
• 31% of Lehigh engineering students are female (versus the 18% national average)
Department of Materials Science and Engineering

- Founded in 1891; accredited since 1936
- 2020 *US News and World Report* top 30 (graduate programs in materials science)
- Current research pillars
  - Sustainable materials and manufacturing
  - Materials for advancing human health
  - Advanced characterization using machine learning

LEHIGH UNIVERSITY | Materials Science and Engineering
Graduate degrees in Materials Science

- PhD in Materials Science & Engineering
- MS/MEng in Materials Science & Engineering
- PhD/MS/ME in Polymer Science and Engineering
- Graduate-level certificates in
  - Nanotechnology
  - Polymer Science and Engineering
Graduate Admissions

- Deadline for consideration of financial support: Jan. 15
- Final deadline for fall admission: Jul. 15
- GRE not required for 2021 admission

For international students:

Minimum TOEFL
- Reading: 20
- Listening: 20
- Speaking: 23
- Writing: 22
- COMPOSITE: 85

Minimum IELTS
- Reading: 6.5
- Listening: 6.5
- Speaking: 7.0
- Writing: 6.0
- OVERALL: 6.5

Minimum ITP
- Reading: 56
- Listening: 54
- Writing: 53
- OVERALL: 543
PhD Student support

• **First-year support**
  • Presidential Fellowships (~1)
  • University Fellowships (~1)
  • Rossin Teaching Fellowships (~4)

• **Subsequent support**
  • Research contracts
  • Teaching Assistantships
  • Other Fellowships
Research activities

• **Sustainable Materials and Manufacturing**
  • Material Synthesis
  • Energy Conversion
  • Additive Manufacturing and Joining

• **Materials for Advancing Human Health**
  • Biomaterials
  • Biodevices

• **Advanced Characterization Using Machine Learning**
  • Data Science
  • Materials Characterization
PhD requirements

• Minimum of 72 credit hours after BS degree, or 48 credit hours after MS degree
• Three core courses
• TA Requirement: 1-2 full time TA (20 hrs/week)
• Research with a professor
MS/MEng requirements

• 30 credits of graduate work, including a 15-credit core in materials, electrical engineering, and physics

• At least 24 credit hours of 300- and 400-level coursework (18 at the 400-level)

• At least 18 credit hours in the major field (15 credit hours at the 400-level)

• One Year MS/MEng Option
Where do our students go?

- Industry
  - 3M
  - ARKEMA
  - DYNALENE
  - DUPONT
  - BETTIS
  - ExxonMobil
  - CARPENTER
  - ALCOA
  - CORNING

- Academia
  - University of Illinois
  - University of Maryland
  - UC San Diego

- Gov’t labs
  - APL (Applied Physics Laboratory)
  - NIST
  - Sandia National Laboratories
  - Oak Ridge National Laboratory
Questions?