

Vuthyra (Teera) Yong

811 N Tioga St., Ithaca, NY 14850 | (650) 390-3870 | vy46@cornell.edu | [Linkedin.com/in/vuthyra-yong](https://www.linkedin.com/in/vuthyra-yong)

EDUCATION

Cornell University, College of Human Ecology, Ithaca, NY
Master of Fiber Science, **GPA: 3.97/4.3**

August 2021

University of California, Davis, College of Engineering, Davis, CA
Bachelor of Science in Materials Science and Engineering, **GPA: 3.44/4.0**

August 2018

Relevant Coursework: Mechanics of Composite Structures • Properties of Solid Polymers • Mechanics of Fibrous Assembly • Structure and Characterization of Engineering Materials • Thermodynamic of Materials • Mechanical Behavior of Materials • Electrical, Optical, and Magnetic Properties of Materials • Materials in Engineering Design

SPECIALIZED SKILLS

Equipment: Raman Spectroscopy, DSC, TGA, ATR-FTIR, NMR, UV-Vis, SEM, Optical Microscope, Rheometer, CLSM, Instron, Macbeth Color Check, XRD, Autoclave, Hydraulic Hot Press

Software and Programming Language: OriginLab, ThermoCalc, CES Edupack, ImageJ, Nanohub, Microsoft Office, Assembly Language, R Program, C++, MATLAB, Adobe Illustrator, CATIA, Fusion 360, AutoCAD, Ansys

Language: Khmer (native), English (professionally fluent)

RESEARCH EXPERIENCE

Green Materials Group, *Cornell University, Ithaca, NY*
Research Assistant

September 2021 – Present

- Fabricated rice straw/jute hybrid green composites using a hydraulic hot press
- Conducted full characterization: mechanical (tensile, flexural, lab shear, adhesion, and screw testing) and thermal (TGA, DSC)
- Designed a scalable green composite production line that offers low cost, easy, and fast processing
- Led two undergrad researchers to meet the weekly plan

Green Materials Group, *Cornell University, Ithaca, NY*
Graduate Researcher

September 2019 – August 2021

- Synthesized green crosslinkers from soy flour and sugars and developed green thermoset resins from soy protein
- Spun epoxidized natural rubber microfibers via electrospinning for toughening green thermoset resins
- Synthesized and characterized high aspect ratio microcapsules for self-healing resins
- Characterized mechanical (tensile and fatigue crack growth testing) and thermal properties (TGA & DSC)

Textile Research Group, *UC Davis, CA*
Undergraduate Researcher

August 2018 – February 2019

- Characterized electrospun PAN/P4VP nanofiber membranes for fumigants detoxification applications

Amorphous Research Group, *UC Davis, CA*
Undergraduate Researcher

August 2017 – June 2018

- Collected DSC data for the Si-Se glass system
- Derived fictive temperature and fragility index of the glass system

RELEVANT ACADEMIC PROJECTS

Senior Design Project, *UC Davis, CA*

September 2017 – June 2018

- Utilized a spark plasma sintering technique to bond a sapphire fiber on an alumina substrate for optical sensor applications
- Implemented optical testing to relate energy loss to the bonding integrity via Hughes HeNe laser
- Conducted cost-benefit analysis and market value of the project

OTHER EXPERIENCE

Formula Racing Club, *Composite Team, UC Davis, CA*

August 2016 – April 2017

- Collaborated with a team of 3 to fabricate fiberglass composites for the body cover and nosecone of the E-vehicle