

Language

- > Chinese (Native proficiency)
- > English (Professional working proficiency)

Measure Tools

- > FTIR
- > TGA
- > DMA
- > Injection and Modelling Machine
- > Polarizing Optical Microscope
- > Single-fiber pull-out Test
- > Transient Plant Source Method

Software

- > ChemDraw
- > OriginLab
- > MS Office

Research Experience

National College Students' Innovation and Entrepreneurship Training Program , May 2016 - Apr 2017

Program Code: 201610699271

- > Research on the fabrication of modified cyanate ester resins/ high modulus poly (p-phenylene-2,6-benzobisoxazole) (HMPBO) fibers wave-transparent composite;
- > Soluble epoxy-terminated PBO precursor (epoxy-prePBO) was fabricated;
- > Wave-transparent composite with 7wt% epoxy-prePBO showed satisfactory dielectric constant (ϵ , 2.68) and dielectric loss tangent ($\tan\delta$, 0.0061) values

Study on Preparation of Dopamine-coated Boron Nitride/Polyimide (h-BN/PI) High Thermal Conductivity Composites , China Dec 2018 - Jun 2019

- > h-BN nanoparticles modified by dopamine were fabricated;
- > Thermal properties of composites with the loading of 20vol% h-BN were improved (in-plane thermal conductivity as 3.009 W/mK). Research on the fabrication of modified cyanate ester resins/ high modulus poly (p-phenylene-2,6-benzobisoxazole) (HMPBO) fibers wave-transparent composite.

Work Experience

Chemist (Full time)

Aug 2021 - Present

Evonik (SEA) Pte Ltd., Singapore

- > Collaborate with APE academic team on course preparation;
- > Research and develop new curriculum materials;
- > Travel to partner schools and teach classes required;
- > Assist academic on other curriculum development on a project basis.

Internship for Research & Development Work

July 2020 - Apr 2021

Evonik (SEA) Pte Ltd., Singapore

- > Formulate photopolymer resin and conduct 3D printing work
- > Conduct mechanical and thermal properties testing for plastic materials
- > Participate in housekeeping and research discussion
- > Analyze data and responsible for development of projects and QC of the materials

Education

Master of Science in Industrial Chemistry (Distinction)

Jul 2019 - Apr 2021

German Institute of Science and Technology, TUM-Asia, NUS, Singapore

- > NUS CAP 4.38/5
- > TUM CAP 1.3/5 (1)

Bachelor of Engineering in Polymer Science and Materials

Sep 2015 - Jul 2019

Northwestern Polytechnical University, NWPU, China

- > GPA 87/100

Awards

- > Outstanding Volunteer Award in IICC-X&NPUMUN Conference May 2018
- > Honorable Mention Award in Mathematical Contest in Modeling/Interdisciplinary Contest in Modeling (MCM/ICM) Apr 2018
- > NWPU First-class Scholarship CY 2017 – 2018
- > Second Prize in Chemistry Experiment Competition of NWPU Oct 2017
- > Distinguished Delegation Award in National MUN (NMUN-New York) Apr 2017
- > NWPU First-class Scholarship CY 2016 – 2017
- > NWPU First-class Scholarship CY 2015 – 2016

Publications

- > Junwei Gu, Wencai Dong, Yusheng Tang, Yongqiang Guo, Lin Tang, Jie Kong*, Sruthi Tadakamalla, Bin Wang and Zhanhu Guo. Journal of Materials Chemistry C, 2017, 10.1039/C7TC00222J. IF=5.066.
- > Junwei Gu, Shuang Xu, Yusheng Tang, Jie Kong, and Lin Tang. A method of the fabrication of epoxy-terminated p-phenylene-2,6-benzobisoxazole precursor. Chinese Application Number(201610887370.0) (2016-10-11), CN 106478712 A (2017-03-08).