# **Curriculum Vitae**

## PERSONAL INFORMATION

Name Peng-Fei ZHANG

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## **EDUCATIONAL BACKGROUND**

Physical Science and Engineering Division, King Abdulla University of Science and 2021.01-Present Technology (KAUST). Major in chemical science. KAUST Catalysis Center (KCC)

2016.09-2020.06 International School of Advanced Materials, South China University of Technology (SCUT)

GPA: 3.64/4.00; Major in materials science and engineering, minor in finance

## STANDARD TESTS PERFORMANCES

**IELTS: 7.5** Reading: 8.5, Listening: 8.5, Writing: 6.5, Speaking: 6.0

Quantitative Reasoning: 169/170, Verbal Reasoning: 148/170, Analytical Writing: 3.0/6.0 GRE: 317+3.0

#### ACADEMIC EXPERIENCE

2021.01-Present Research for Poly(lactide) Stereocomplex (Supervisor: Prof. Nikos Hadjichristidis, distinguished professor)

Synthesizing complex architecture of poly(lactide) stereocomplex and test their properties

Mechanism calculation of catalytic polymerization process by DFT

2019.07-2021.07 Research for Polymer Synthesis Methodology & Mechanisms: Anionic Metal-Free Ring-Opening Polymerization (ROP) (Supervisor: Prof. Junpeng Zhao, full professor)

Synthesized esterified polyether and polyurethane, degradation, and mechanism calculation

Conducted several DFT calculation work (e.g. transition state search)

Ye Chen, Pengfei Zhang, Junpeng Zhao et al. ACS Macro Lett. 2021, 10, 6, 737-743

2019.01-2019.05 Exchange in University of California, Berkeley

> Took C 178 Polymer Science & Technology, MSE 104 Materials Characterization and MSE 215 Computational Materials (Performed DFT calculations by VASP® and Python; Predicted materials properties by Machine Leaning)

Project on Polymer Synthesis: Self-Healing Elastomer & Ionic Conducting Elastomer (South China Advanced Institute for Soft Matter Science and Technology)

Functionalized poly(dimethyl siloxane) with phenylboronic acid then fabricated respective self-healing elastomers, tested their mechanical and healing properties

Team Leader of a three-member research group funded by Ministry of Education



University Outstanding Undergraduate Thesis (Top 2%, by SCUT)

Asia and Pacific Mathematical Contest in Modelling, Third Price (by APMCM Committee)

University Second-Class Scholarship (Top 8%, by SCUT)

2017 SCUT Undergraduate Physicists' Tournament, Second Prize (Top 3%, by SCUT)

Sheng-Yi Enterprise Scholarship (Top 5%, by SCUT & Sheng-Yi Technology Co., Ltd)

**SKILLS** 

Schlenk Technique, Column Separation Technique

Operation of NMR, GPC, FTIR, XRD, MALDI-TOF MS, QCM-D (Quartz Crystal

Microbalance with Dissipation), etc. and results analysis

Gaussian 16<sup>®</sup>, Quantum ESPRESSO, ChemDraw<sup>®</sup>, MestReNova<sup>®</sup>, OriginLab<sup>®</sup>, etc.























