

# Kuan Ying Tseng

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## **EDUCATION**

Sep. 2014 - present	<b>B.S. of Material Science and Engineering</b> National Chiao Tung University, Hsinchu, Taiwan.
Sep. 2013- Aug. 2014	<b>B.S. of Civil and Engineering</b> National Chiao Tung University, Hsinchu, Taiwan.
Sep. 2010 - Aug. 2013	<b>Third Education Program</b> Taichung Second Senior High School, Taichung, Taiwan

## **UNDERGRADUATE RESEARCH PROJECT**

July. 2017 - Present	<i>Mechanical Behavior Study of Additive Manufacturing Ti6Al4V Implants using In-Situ Synchrotron Transmission X-ray Microscopy and Self-Consistent Modeling</i>
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## **EXTRACURRICULAR EXPERIENCES**

July. 2015	General Convener, the Association of National Chiao Tung University (NCTU) Civil Camp
Aug. 2016 - Aug. 2017	English tutoring for a junior high school student
Sep. 2016 - June.2017	Captain of the department basketball team

## **CONFERENCES**

[1] **Kuan-Ying Tseng (曾冠穎)**, E-wen Huang (黃爾文), Chun-Chieh Wang (王俊杰), Pei-Yi Tsai (蔡佩宜), and Shin-Yi Huang (黃馨怡), "Multi-scale Mapping By Fluorescence Microscopy & X-ray Diffraction for Biological Apatite Examination", 2017 Taiwan Neutron Science Society Annual Meeting, National Chiao Tung University, Hsinchu, Sep. 2~4, 2017

[2] **Kuan-Ying Tseng (曾冠穎)**, E-wen Huang (黃爾文), Chun-Chieh Wang (王俊杰), Pei-Yi Tsai (蔡佩宜), and Shin-Yi Huang (黃馨怡), "Multi-scale Mapping By Fluorescence Microscopy & X-ray Diffraction for Biological Apatite Examination", Materials Chemistry, NSRRC - 23<sup>rd</sup> Users' Meeting & Workshops, National Synchrotron Radiation Research Center, Hsinchu, Sep. 5~8, 2017

## **AWARDS and HONORS**

- College Student Research Scholarship, National Science Council Research Scholarship, TW
- First prize of 2017 Material Innovation Award

## **EXPERIMENTAL EXPERIENCES (INSTRUMENTS)**

### **► Undergraduate Research Project**

- **Measuring P(VDF-TrFE) Films by Coupling In-situ Tensile Testing with X-ray Diffraction**

Instruments: Tensile Testing Machine, Superconducting Wavelength Shifter (SWLS) – X-ray Powder Diffraction 01C2 Beamline, National Synchrotron Radiation Research Center (NSRRC)

- **Residual Strain Examination of Hydroxyapatite**

Instrument: Superconducting Wavelength Shifter (SWLS) - X-ray Powder Diffraction 01C2 Beamline, National Synchrotron Radiation Research Center (NSRRC)

- **Using TXM Images to Replace Traditional Methods of Detecting Bones**

Instrument: Superconducting Wavelength Shifter (SWLS) – X-ray Microscopy 01B1 Beamline, National Synchrotron Radiation Research Center (NSRRC)

### **► Undergraduate Laboratory Training Courses**

- **Observation on Polymerization of Poly(Methyl Methacrylate) (PMMA)**

Instruments: Fourier Transform Infrared Spectroscopy (FTIR), Differential Scanning Calorimetry (DSC)

- **Density Investigation of Lead Zirconate Titanate (PZT) Sintered at Different Temperature**

Instruments: Isostatic Pressing Machine, Ball Milling Machine

- **Micro-structure and Mechanical Properties Investigation of Different Metals**

Instruments: Cold Rolling Machine, Optical Microscope, Grinding & Polishing Machine

- **P-N Diode Fabrication and Electrical Properties Measurement**

Instruments: Spin coater, Photoresist Developing Machine

## **PROFESSIONAL COMPUTER SKILLS**

➤ <b>Crystallography Diffraction Profile Analysis</b>	❖ General Structure Analysis System (GSAS) ❖ PowderCell ❖ GSAS II
➤ <b>Graphing &amp; Statistics</b>	❖ OriginPro 8
➤ <b>Image Analysis</b>	❖ Image J
➤ <b>Microsoft Office Suite</b>	❖ Microsoft Word, Excel, PowerPoint
➤ <b>Reference Citation</b>	❖ Endnote X7