



NAME: Chen Ke
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EDUCATION

Nanyang Technological University | Singapore

Master of Science in Chemical Modelling – School of Chemistry, Chemical Engineering and Biotechnology (CCEB)

Aug 2026 – Present

Yantai University | Yantai, Shandong, China

Bachelor of Engineering in Materials Science and Engineering

Sep 2019 – Jun 2023

- Laboratory Training: Completed hands-on coursework in materials preparation, mechanical testing, and routine chemical analysis.

PROJECT EXPERIENCE

Undergraduate Final Year Project | Yantai University

Preparation and Properties of BaTiO₃-Based Lead-Free NTC Thermistor Ceramic Materials

Mar 2023 – Jun 2023

- Objective: To develop lead-free NTC (Negative Temperature Coefficient) thermistor materials based on BaTiO₃ ceramics with improved temperature-sensing performance and environmental sustainability.
- Methodology: Synthesized BaTiO₃-based ceramic samples via solid-state reaction method; characterized phase composition, microstructure, and electrical properties using X-ray diffraction (XRD), scanning electron microscopy (SEM), and resistance-temperature testing.
- Outcome: Investigated the relationship between doping composition, sintering conditions, and NTC thermistor performance; identified key factors affecting material stability and temperature sensitivity.
- Skills Developed: Materials synthesis, ceramic processing, data analysis, and academic report writing.

SKILLS

- Office Tools: Familiar with Microsoft Office (Word, Excel, PowerPoint) for documentation, data organization, and basic charting.
- Laboratory Techniques: Basic materials synthesis (solid-state reaction), ceramic processing, and sample preparation.
- Languages: Chinese (Native), English (Reading and Writing).