

# Advanced Technologies for Safety Detection and Quality Control of Grain, Oil and Food

Ensuring the quality and safety of food and food products stands as a paramount concern for both the state and its citizens. In modern society, the demand for food transcends mere sustenance; it extends to encompassing aspects like quality, safety, and nutrition. However, the safety of staple foods such as grains, oil, and food products faces numerous challenges. Agricultural production grapples with issues such as soil pollution and the improper use of pesticides and fertilizers, while in the circulation and consumption phase, problems like food adulteration, counterfeiting, and irregularities in storage and transportation persist. Hence, there's an urgent need for rapid testing methods to ensure the safety of grains, oil, and food. This workshop aims to bolster the quality and safety of grain, oil, and food by introducing advanced testing technologies and methodologies. These include electromagnetic analysis technology, non-destructive detection techniques, advanced sensor technology, among others. By implementing rapid, non-destructive, and precise testing of grain, oil, and food, we can further guarantee their quality and safety.

## Workshop Topics:

The workshop will cover, but is not limited to, the following topics:

1. Electromagnetic Detection and Analysis
2. Advanced Sensing Technologies
3. Non-destructive Testing
4. Terahertz Spectroscopy and Imaging
5. Smart Metamaterials
6. Deep Learning

## Workshop Organizers:

*Hongyi Ge* is an Associate Professor and Doctoral Supervisor at the School of Information Science and Engineering, Henan University of Technology. He obtained his Ph.D. in information and signal processing from the University of Chinese Academy of Sciences in 2015. His research focuses on several areas including the detection of grain quality using THz technology, spectral analysis, machine learning, and signal and information processing.

## Program committee members:

*Yuan Zhang*, Key Laboratory of Grain Information Processing and Control, Henan University of Technology, Ministry of Education, Zhengzhou, China

*Yuying Jiang*, School of Artificial Intelligence and Big Data, Henan University of Technology, Zhengzhou, China

## Important Dates:

- Workshop Paper Submission Deadline: September 15, 2024
- Notification of Acceptance: October 15, 2024

Papers are to be submitted as PDF via the site: <https://edas.info/N32633>.

Please select the corresponding workshop when submitting your paper.