



Topic of the Speech:

Research on the Sorting System of Used Textiles Based on Near Infrared Spectroscopy

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Prof. Zhu Yaolin is the Director of the Office for Senior Talents at Xi'an Polytechnic University, a distinguished scholar with profound expertise in intelligent textile technology and information systems. He obtained his Ph.D. in Communication and Information Systems from Shanghai University in 2007, followed by postdoctoral research at Northwestern Polytechnical University, where he further refined his interdisciplinary research capabilities. He also served as a visiting scholar at the University of Reutlingen, fostering international academic exchanges and collaborative insights.

Currently, Prof. Zhu holds key roles including Council Member of Shaanxi Provincial Association for Science and Technology and Chief Scientist of Yulin's "Qin Chuang Yuan" Scientist-Engineer Team. With a career dedicated to bridging academia and industry, he has led over 20 provincial-level research projects, driving innovations in intelligent textile inspection, communication network optimization, and digital fiber characterization. His research achievements have been widely recognized, earning him three provincial and municipal science and technology awards. He has also published more than 20 papers indexed in SCI/EI and holds 10 patents, reflecting his significant contributions to technical advancement and knowledge dissemination.

Prof. Zhu's recent work focuses on near-infrared spectroscopy-based fiber identification, addressing critical industry challenges such as the authentication of modified wool and cashmere. His innovative hybrid algorithms and chemometric methodologies have achieved high-precision non-destructive detection, providing reliable tools for combating textile adulteration. As a keynote speaker, he brings a wealth of academic rigor and practical experience, offering valuable perspectives on the integration of advanced sensing technologies and intelligent algorithms in textile recycling and quality control.