

APARM Special Session IV

Special Session Basic Information:

Session Title	Integrating Quality Design Methods and Strategic Management
Introduction and topics	
<p>Enduring quality excellence is achieved by embedding quality into the design and strategy phases. This special session therefore focuses on the integration of design-oriented methodologies for quality assurance and the strategic implications of quality-driven organizations. We invite contributions on robust design of experiments, design for six sigma principles, and reliability engineering for creating resilient products and processes. Furthermore, this session highlights the managerial frameworks essential for success, such as failure modes and effects analysis, quality function deployment, and managing the cost of quality. We seek studies that demonstrate how integrating these design and management tools can optimize systems, mitigate risks, and build a sustainable competitive advantage.</p>	

Special Session Chair(s):

	Name	Zih-Huei Wang
	Prefix	Associate Professor
	Department	Graduate Institute of Industrial Management
	Organization	National Central University,
	City/Region	Taoyuan, Taiwan

Organizer's Brief Biography

Zih-Huei Wang is an Associate Professor in the Department of Industrial Engineering and Systems Management at Feng Chia University, Taiwan. She currently serves as the Director of the Professional Master's Program for Intelligent Manufacturing and Engineering Management. She received her Ph.D. from National Tsing Hua University in 2018. Her research interests mainly focus on quality engineering, process capability analysis, design of experiments, and data analysis. She received the 2025 Distinguished Young Scholar Award from the Operations Research Society of Taiwan (ORSTW) and the 2024 Outstanding Young Industrial Engineer Award from the Chinese Institute of Industrial Engineers (CIIE). In 2017, she was a visiting scholar at Georgia Tech, collaborating with Piedmont Heart Institute to produce several conference papers and posters. She was also invited by Dr. Zhen Qian to co-author a 2020 book chapter on advanced analytical techniques for medical image analysis.