

Journal of Management in **Engineering**

Guest Editors:

Dr. Rita Peihua Zhang, RMIT University, Australia, rita.zhang@rmit.edu.au Dr. Clara Cheung, The University of Manchester, United Kingdom, clara.cheung@manchester.ac.uk Dr. Alex Albert, North Carolina State University, United States, alex_albert@ncsu.edu Dr. Ruoyu Jin, London South Bank University, United Kingdom, jinr@lsbu.ac.uk

Call for Papers

Special Collection on Workforce Development and Support in the Architecture, Engineering and **Construction (AEC) Industry**



Aims & Scope

The Architecture, Engineering and Construction (AEC) industry is the economic cornerstone for many nations worldwide. The effective operation of the industry heavily relies on the supply of a sufficient and competent workforce, including both manual and professional workers. However, the AEC industry across the globe faces the challenge of skill shortages, which negatively impacts the industry's performance and productivity. Skill shortages in the AEC industry have been attributed to issues such as an aging workforce with increasing retirement rates; early retirement of workers due to illhealth and work incapacity resulting from demanding work conditions; and the difficulty of the industry in attracting and retaining new entrants due to their negative perceptions about the industry. Skill shortages are also related to skill deficiencies of the existing workforce. Research shows that problematic training systems in the industry and ineffective workplace training approaches are linked to the skills gap in the ACE industry. Additionally, the AEC industry in some countries relies on migrant workers, presenting additional challenges for developing and supporting the workforce. Workforce development has become more important than ever in the AEC industry, which is the main driver for post-COVID economic recovery with a massive pipeline of construction work planned. It is critical that the AEC industry adopts effective workforce development strategies to ensure that workers are adequately skilled to meet the increasing production demands. Additionally, the AEC industry needs to implement changes to create a supportive and healthy work environment to attract and retain skills, ensuring that the workforce is not only technically competent but also physically and psychologically fit.

Topics:

This special collection calls for studies that provide insights into strategies, measures, and practices concerning workforce development and support (at both manual and professional levels) in the AEC industry. Research topics that will be considered include, but are not limited to:



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- 1. What strategies and measures at the industry, organisational and workplace levels could ensure that workers in the ACE industry are adequately skilled and competent?
- 2. How to improve the effectiveness of workforce training (e.g., apprenticeship, work task training, on-the-job training) in the AEC industry? How do we adapt workforce training programs to serve the culturally diverse population in construction workplaces?
- 3. What is the role of technology in supporting skill development? How is the fit between individuals, tasks, technology and the environment considered in the application of technological solutions?
- 4. How to successfully attract new entrants to the AEC industry? How to support the transition of a new workforce into the industry and improve their retention?
- 5. How to support the healthy aging of older workers? What measures could be taken to enhance the well-being of the aging workforce?
- 6. How to support the skill development of migrant workers and their well-being? How to overcome specific challenges such as cultural and institutional barriers?
- 7. What changes are required at the industry, organisational and workplace levels to create a supportive environment and subsequently achieve improved well-being, work ability and productivity of the workforce in the AEC industry?

Submission Information

Interested authors should first submit extended abstracts (a maximum of 800 words) summarizing their proposed submission to the Guest Editors (by email) by **December 31, 2022**. The Guest Editors will review the submitted abstracts and invite the submissions of full manuscripts for the selected papers soon thereafter. The submission and review of the full manuscripts will be in accordance with the Journal of Management in Engineering's regular peer review processes. However, the authors can submit the abstract/full paper before the deadline as well if they wish. The paper will be published as soon as it is accepted for publication, without waiting for other papers to be published.