

**Special Session**  
**on**  
**Environment-constrained Decision Making and Evaluation in Business**  
**Operations**  
**at**  
**The 8th International Conference on Water Resources and Environment Research**  
**(ICWRER 2019), Nanjing, China, June 14th to 18th, 2019**

**Session Organizers:**

Shawei He (Nanjing University of Aeronautics and Astronautics, China, [shaweihe@nuaa.edu.cn](mailto:shaweihe@nuaa.edu.cn) )  
Yeqing Guan (Nanjing University of Aeronautics and Astronautics, China, [nuaaynx@nuaa.edu.cn](mailto:nuaaynx@nuaa.edu.cn))  
Haiyan Xu (Nanjing University of Aeronautics and Astronautics, China, [xuhaiyan@nuaa.edu.cn](mailto:xuhaiyan@nuaa.edu.cn) )

**Scope and Objectives:**

The impacts on environmental systems are paid increasing attention in business operations, such as supply chain management, manufacturing, construction, transportation management. Reasonable decisions are required for policy makers to achieve organizational goals while minimizing their impacts on the environment. As part of the decision-making process, the environmental impacts should be carefully evaluated using quantitative tools. After obtaining detailed resolutions for decision making, the effectiveness of these resolutions should be assessed. In this complete process, decision makers are facing growing challenges in tackling with realistic problems which are often dynamic, evolutionary, and ill-structured. Meanwhile, the environmental well-being should be balanced with organizational goals. To comprehensively investigate the aforementioned problems, systems thinking approaches are required, such as game theory, multiple criteria decision making (MCDM), forecasting tools, data envelopment analysis (DEA), and other linear programming methodologies.

This forum incorporates research on theoretical advances and applications regarding the decision making and evaluation in business operations by taking into account environmental impacts. Topics that may raise interests for discussions include green manufacturing, green construction, green supply chain, and carbon-constrained transportation management. Studies on current environmental issues using decision making and evaluation tools are also welcome, such as evaluation on carbon mitigation policies and environmental assessments on mega infrastructure projects. In-depth case studies with meaningful implications on relevant topics also fall within the scope of this session.