

## Preface of the publisher

### **25<sup>th</sup> Journal für Facility Management: Science meets Practice**

We are living in times of change. But this is not really new. When I read the news it remembers me on my youth. High inflation, high interest rates, danger of war or even war! However considers she or he can manage this by themselves are in my opinion wrong.

Only if we work together and act as a team bringing our strength together we can find solutions for the existing and upcoming challenges. We need the managers to set the strategic goals for example in respect of CO<sub>2</sub> reduction and set up the budgets to implement the necessary actions. We need the technicians to deliver actions plans and to implement the measurement to control the results of the actions. In addition we need research to develop new innovative approaches for CO<sub>2</sub> reduction and cost efficient ways of measurement. To give you an example: In the last Innovation challenge of Stanford University and TU Wien, students developed an OCR solution to “digitize” traditional water, gas and district heating meters. With this solution, it is not necessary to replace existing meters to smart meters, but just to add a device that digitizes the display. The new product costs less than 200 Euros a smart water meter for a large building like the Viennese Castle several thousand Euros.

This is how teams can solve the upcoming challenges - by joining forces! This issue of the Journal für Facility Management provides you with hands-on innovation for refurbishment, shows a best practise examples for FM data structures and how residents can be integrated in the improvement of green infrastructures:

- *Nachhaltige Implementierung der langfristigen Renovierungsstrategie in Bestandsgebäuden*
- *Developing a Facility Management Domain Ontology for Storing Facility Management Knowledge in the Field of Buildings' Energy Performance*
- *Sustaining Green: Quality Improvement of Green Infrastructure in Residential Facilities through Effective Maintenance and Resident Participation*

The first paper focuses on the energy-efficient refurbishments of existing buildings. In Austria, many property managers struggle with the maintenance and adaptation of existing buildings to the local and technical standards. Based on the legal provisions and standards applicable in Austria, the current maintenance and repair process of the existing building stock is outlined and analysed. Subsequently, a strategy for the increased implementation of energy-related refurbishment is derived. It is shown that the long-term renovation strategy in the future must also include the adaptation of essential safety precautions in existing buildings if the goal of increasing the energy-related renovation rate is to be achieved.

The second paper depicts that the implementation of best practice guidelines for Facility Management (FM) is crucial in minimizing the energy performance gap in buildings. The paper

confirms that many newly built and renovated facilities continue to consume more energy than initially calculated. To address this complex issue, the presented research aims to develop a digital FM domain ontology in a computable form to support the codification and storage of FM knowledge. The presented FM domain ontology serves as a classification system to systematically organize and store existing FM best practice guidelines related to buildings' energy performance. Therefore, the ontology provides a semi-legal and computable knowledge base in which FM guidelines are systematically categorized according to different FM-related aspects.

The third paper focuses on the integration of green infrastructure as an effective approach to mitigating the negative impacts of climate change, particularly the urban heat island effect. While costs such as initial investment costs and ongoing maintenance are often viewed negatively, these costs are essential for maintaining the multifunctionality of green infrastructure. In response, the researchers piloted a resident participation project and offered comprehensive maintenance guidance that differentiated between professional green space management and amateur practices to actively engage residents. The paper therefore presents a solution for how urban areas can create sustainable and vibrant environments that mitigate the effects of climate change while increasing the well-being of residents.

At this point, I want to thank all international researchers who sent us numerous abstracts and papers for the double-blind review. The decline rate was kept high with more than 50%. I also want to thank the members of the editorial and the scientific board for their terrific work. They supported me in reviewing first the abstracts and then the full papers and gave a lot of input to the authors. The high decline rate, the high reputed members of the editorial and the scientific board and the supporting universities ensure that the articles are not only highly scientifically qualified, but also that practitioners can put them into practice easily.

I also want to thank my team, especially Antonia Heil, Barbara Gurdet and Lisa Thrainer. Without their personal engagement the journal would not be available in this high quality.

I wish you all the best from Vienna, an enjoyable read, a lot of input for your research and/or for your daily work. I look forward to new striking research in the next IFM Journal and a refreshing exchange at the 17<sup>th</sup> IFM Congress 2024.

Your

Alexander Redlein

Head of Editorial Board

To my family Barbara, Caroline Sidonie und Alexander David