



Towards a tighter symbiosis of natural sciences and engineering

Contemporary science is gradually moving from an interdisciplinary to a multidisciplinary pathway. These changes are reflected also in the traditions of scientific publication. A growing number of studies are addressing our world more widely, bringing together the knowledge, approaches, techniques, and competence from seemingly distinct fields. This trend has also influenced the *Proceedings of the Estonian Academy of Sciences*, where the peer-reviewed articles from mathematics and physics up to life sciences and social sciences are published in multidisciplinary volumes. All these papers are freely available in the electronic form in the Internet and indexed by the leading scientific databases. This has enormously facilitated rapid and worldwide distribution of published scientific information and removed restrictions that are specific to printed copies. All these changes can be clearly followed in the history of the *Proceedings of the Estonian Academy of Sciences* [1].

The described changes mirror a substantial alteration of the policy of electing new members into the Estonian Academy of Sciences. Since 2010 more than 20 new national members and 4 foreign members have enriched and strengthened the Academy. Ever since the birth of modern academies in the 17th century, it has been both a privilege and a must for the members of the academies to publish their findings in the academies' publications. We expect that both parts of this tradition will be strongly supported also in the future. As the true strength of the academic community lies in the multitude of views and opinions, the associated challenge for this Journal is to accommodate highlights from the gradually widening pool of research fields covered by the members of the Academy.

Following the changes in the contemporary world and in the Academy, the decision has been taken to publish in this Journal more papers from various fields of engineering. It must be stressed that among many interdisciplinary research fields, engineering sciences intrinsically belong to the most multidisciplinary ones. This is simply because contemporary engineering, from classical civil or mechanical engineering up to environmental, coastal, or bioengineering, inherently involves

inputs from a multitude of disciplines and may lead to impacts on another multitude of aspects, from geological features up to socio-economic consequences. In this context, it is natural that publications in engineering sciences form a strong pillar of any multidisciplinary journal, especially of those that are somewhat biased towards natural sciences.

Starting from this issue papers addressing various aspects of engineering will play a much more important role in the portfolio of the *Proceedings of the Estonian Academy of Sciences*, into which the *Estonian Journal of Engineering* is merging together with the pool of experienced editorial staff and the local and international community of authors. Some of these authors have already published with the *Proceedings of the Estonian Academy of Sciences*, and some of these papers are currently among the most cited ones in this Journal. We expect that this process will not only strengthen the engineering dimension of the *Proceedings of the Estonian Academy of Sciences* but will also increase the number of submissions, improve the peer-review quality, and shorten the editing process and publication time. We also intend to take over the traditions of the *Estonian Journal of Engineering* to publish specialized issues under the guidance of invited guest editors.

References

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Jaak Järv
Editor-in-Chief of the Proceedings of the Estonian
Academy of Sciences

Jüri Engelbrecht
Vice-President of the Estonian Academy of Sciences

Tarmo Soomere
Head of Division of Informatics and Engineering at the
Estonian Academy of Sciences