30 Years of the Journal Technische Mechanik

In 1980 Technische Mechanik started being published as a new scientific journal after long and complicated negotiations with the authorities of the former GDR. The most powerful argument at the time was that mechanics research could contribute significantly to technological and industrial development within mechanical and process engineering, shipbuilding, civil engineering, etc. Improvements in structural and material design, stability and durability, and life-time prediction were expected to lead to savings of material, and better protection of natural resources and the environment, and would, thus, have a more positive impact on the economic strength of the country.

In the former GDR the potential for research in the field of solid and fluid mechanics had been embodied into long-term science policies. By embedding the research programs within larger research projects, it was intended that more effort could be focused on the most important topics. Special emphasis was put on cooperation between the research institutes of the universities, the academy of science and the academy of architecture (Bauakademie). The creation of a special curriculum of Applied Mechanics at the University of Technology Magdeburg, and later on at other technical universities, led to further implementation of mechanics within the industrial world.

By issuing a new journal it was intended to support all these aims. The first board of editors consisted of experts in solid mechanics, including civil engineers, and fluid mechanics from the universities of Magdeburg, Dresden, Karl-Marx-Stadt (now Chemnitz) and Weimar, from the Academy of Science and of the Bauakademie under the coordination of Johannes Altenbach. It was motivated by the intention to cover technical mechanics in a broad sense, including analytical, numerical, and experimental methods.

Historically, the decade of the eighties was a critical period for the GDR, just as it was as for the whole Eastern Bloc. It culminated in the collapse of the socialist system, the fall of the iron curtain in 1989, and finally in the re-unification of Germany in 1990. Fundamental transformation of both the governmental and economic system had significant consequences on the national academic system. From 1980 to 1989 the editor of the journal was the Minister of Higher and Professional Education and Sciences of the GDR. In 1990 this role was transferred to the University of Magdeburg. However, restructuring of the educational system involved financial restrictions and changes of the engineering faculty which led to the journal ceasing publication at the beginning of 1992.

Fortunately, however, this was not the definite end of the journal. After Friedrich Rimrott retired from his professorship at the University of Toronto, he became in 1993 a visiting professor at the University of Magdeburg for five years. During this period, Rimrott did his best to breathe new life into the journal. In 1994 it was started again with 4 regular issues per year. Rimrott formed a new scientific board, a team of well-known international experts. Since the university could not be the editor of a journal for legal reasons, the Magdeburger Verein für Technische Mechanik was founded and formally took over the role of editor, continuing still today.

After a short but nevertheless successful period in Magdeburg, Rimrott returned in 1997 to his wife and home in Toronto, where he passed away in 2003.

In 1998 Siegfried Kozcyk from the Institute of Mechanics of the University of Magdeburg took over as Editor-in-Chief of the journal. Unfortunately, this period did not last too long either, being halted in 1999 by the sudden and unexpected death of Kozcyk. This led to Albrecht Bertram, Johannes Altenbach’s successor on the Chair of Strength of Materials, taking over as Editor-in-Chief of the journal.

Ever since 1994, it has been the intention of the editors to turn Technische Mechanik into an international scientific journal. Towards this aim, the scientific board was reorganized in order to attract younger members with broad expertise from different countries. From then onwards, as a rule, all papers have been reviewed by at least one peer.

New information technologies like the Internet have made it necessary to find more adequate ways to distribute our articles. Since 2007 all papers are not only printed, but also published on our website, so that anybody worldwide can freely download them.
The reader will notice that the authors of our articles come from all corners of the globe, and the official language of all articles is now exclusively English (except for reviews of German books). But our traditional strong links with the eastern European scientific communities are still being maintained.

It is important to have such journals which are made by scientists for scientists and, thus, be able to avoid commercial publishers whose intention is to make a profit rather than support science. To this aim, our journal is as strong as the authors that support it. We are thus grateful to all those who have contributed to the journal, either as authors or as reviewers or as editorial board members, as well as to the University of Magdeburg for its personal, technical, and financial support.

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Johannes Altenbach

Albrecht Bertram