



Welcome to the DMK—Dresdner Maschinenelemente Kolloquium

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The DMK—Dresdner Maschinenelemente Kolloquium has been addressing challenges and innovations in machine elements and drive systems throughout various industries since 2003. The first conferences on these topics were held in Dresden back in the 1960s under the direction of Prof. Dr.-Ing. Stefan Fronius and in later years under Prof. Dr.-Ing. habil. Heinz Linke.

As in previous years, the 51 presentations from Research and Industry will report on the latest developments in the field of machine elements and drive systems in mechanical, plant and vehicle engineering on land, on water and in the air.

A special focus of this year's DMK which was organized by the Chair of Machine Elements of TU Dresden together with DriveConcepts and took place in Dresden on May 14th to 15th, 2024 is on the combination of classic machine elements with state-of-the-art sensor technology to create "Sensor-integrating Machine Elements". Research groups in Dresden and at 9 other universities in Germany have been working on the development of this topic since the German Research Foundation (DFG) launched a six-year priority program on this subject at the beginning of 2022.

In addition to the complete arrangement of proceedings of the presentations during the Dresdner Maschinenelemente Kolloquium 2024 within a special "Conference Proceedings Book", you will find 19 thoroughly selected and

reviewed full papers within this Special Issue "DMK 2024". Thanks to the support of the guest editors Prof. Dr.-Ing. Eckhard Kirchner and Prof. Dr.-Ing. Burkhard Pinnekamp, who facilitated a double-blind peer review process with renowned international experts from industry and academia.

We hope to see you all again soon and look forward to meeting you at the DMK 2026 in Dresden.

Stay healthy and stay with us, best regards
Prof. Dr.-Ing. Berthold Schlecht

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