

Dear TUM friends and associates,

The standstill caused by the coronavirus crisis has ultimately brought about a renewed sense of momentum. Lockdowns made many people aware of the importance of mobility, while others benefited from not having to travel and discovered alternatives. Numerous cities around the world seized the opportunity to implement street use experiments, promoting alternative traffic concepts and creating spaces for people to meet, play and engage with culture in public areas.

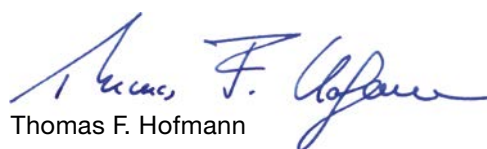
The COVID lockdowns and the global climate crisis have brought home precisely how important it is for mobility and goods transport to become more climate-friendly, low-noise, low-emitting, intelligent and connected in the future. If Germany hopes to remain a pioneer in the field of mobility, we must exploit this newfound positive spirit of forward moving dynamics! This will call for transformative approaches in the development of high-performance electric and fuel cell-based drive systems, AI-assisted communication and control systems, and new digital business models such as Mobility-as-a-Service and ride-sharing. In addition, it is vital that we embed new forms of mobility into existing infrastructures and integrate them into highly livable urban design. Ultimately, this new mobility must not be the result of a new culture of self-denial – quite the opposite, it needs to be convenient, pleasant and enjoyable!

While parked (!) and moving vehicles currently take up the major share of public space in our automobile-centered cities, the coming mobility transition must focus squarely on people, their interests and the different groups who use mobility services. We must therefore summon the courage to redraw the map and pursue a strategic culture of innovation in pursuit of our mission, bringing together leading regional stakeholders to develop a sustainable, digital mobility system unencumbered by disciplinary, institutional or ideological limitations. Policymakers must create suitable incentives; cities and municipalities need to adopt intelligent space utilization concepts; research and industry will have to develop and implement pioneering technologies – while ordinary citizens must be actively involved in every aspect.



This issue of Faszination Forschung is dedicated to the topic of smart mobility. In the TUM.Mobility research platform and the BMBF-funded Munich Cluster for the Future of Mobility in Metropolitan Regions (MCube), TUM has already concentrated its mobility-related resources to form a strategic focus. I am delighted to share some fascinating insights with you into the ideas, goals and achievements of our ingenious researchers.

Yours sincerely,



Thomas F. Hofmann
President