



10th International | 10th German-Japanese
Symposium on Nanostructures
*March 4-6, 2018
Wenden, Germany*

ottobock.



address from

Prof. Hans Georg Naeder

President of Otto Bock Health Care GmbH

for the

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The medical technology company Otto Bock HealthCare is a global market leader in Prosthetics, Orthotics, Mobility Solutions and MedicalCare with more than 6.000 employees and a history of 100 years in 2019.

Ongoing success and growth goes along with technological innovations to the benefit of our customers. As for the future strategic development projects, Ottobock's research and development focuses on:

- (a) providing mechatronic solutions for further components for auto-adaptive control where the "electronic intelligence" of the product itself helps the user by adapting to different conditions and everyday situations automatically;
- (b) further development of materials with an ongoing focus on lightweight, biocompatibility, energy storage and in vivo generation in order to increase comfort and life-quality for complex solutions such as the carbon-fibre-based feet;
- (c) achieving better osseointegration for the mounting of prosthesis systems to the long bone via implants where e. g. the risk of infection at the site where the skin is penetrated must be minimized by new coatings and materials;

All defined areas are dealing directly or are depending on materials. Thus also Nanotechnology and materials improved in functionality and properties on nanoscale are most important to Ottobock in practically all areas of future innovations. Particularly for health-care, further miniaturization, multi-functionality and sustainability are major goals to helping and supporting the human body.

In the 1950s, Ottobock was the pioneer for substituting wood for prosthetic components by polyurethane plastics and today is using myoelectrics for prostheses where low electric voltages by human muscle contracts are measured on the skin, amplified and utilized as control signals for artificial joints. For the future it can only be assumed, what new materials along with new technologies and innovations can provide to a better quality of life, more mobility or independence to the user.

In this mission we are aware of the Symposium on Nanostructures over the last years also by attending and contributing and we do welcome the impressive interdisciplinary exchange of the latest findings, ideas and visions by science and industry from almost all the world. The Symposium on Nanostructures will again make an important contribution to this. And since the upcoming event will be the 10th to be held, it is my pleasure to wishing all of the participants a good and successful event at Wenden with good interactions, many new ideas and new solutions.

gez. Prof. Näder