Joint Event

## Robotics and Automation & Biomaterials and Nanomaterials

Welfare robotics in elderly care homes

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The pressure caused by the demographic development in Western European countries allows for easily creating very good business models for the application of so called "welfare robots" in care institutions for the elderly. In my talk, I will give an overview of current developments in welfare robotics in the elderly care sector, the technical problems that still need to be addressed and the applications to be expected within the next decade. In particular, I will talk about the SMOOTH project (smooth-robot.dk) which stands for "Seamless human-robot

interaction for the support of elderly people". In the SMOOTH project, we focus on repetitive tasks that do not involved manipulation such as transport of laundry, offering beverages and guidance. To make such applications technically feasible, it was important that the design of the robot simplifies a lot of the technical problems involved. I will in particular talk about the process that led to the design of SMOOTH robot that is currently built by a Danish start-up company.

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