Conference Programme





Welcome and Conference Overview 08:30-9:00 Prof Dr ir Bram Vanderborght 09:00 -12:30 **Presentation of SMART ESRs:** Marwa Eldiwiny Nonlinear multi-material architectures for functional soft robotics Seyedreza Kashef Tabrizian Enabling autonomous healing in soft robots by assistive and intelligent mechanisms **Leone Costi** Sensorized, Self-Regulated, Self-Healing Universal Gripper for Resilient Manipulation Syeda Shadab Zehra Zaidi Soft sensing of low-cost manipulation robots **Muhammad Sunny Nazeer** The Power of Two: Variable Stiffness and Self-Healing for Next-Generation Soft Robots Somashree Mondal Control and behaviour of self-healing soft robots using machine learning Francesca Furia Environmentally-Adaptive Structural Health Monitoring for Hydrokinetic Turbines Aleix Costa Additive manufacturing of self-healing materials 12:30-13:30 Lunch break at the VUB Cafeteria 13:30-17:30 Presentation of SMART ESRs (continued) Johannes von Szczepanski Sustainability and creep resistance. The last frontiers for self-healing materials in real-world applications **Usman Shaukat** Anisotropic Motions and Structures Through Ion-Controlled Hydrogel Actuation **Pedram Tootoonchian** A deeper look into magnetoactive soft elastomers Maria Pozo Functional Silicones for Advanced Stretchable Electronics **Huijiang Wang** Development of stimuli responsive materials with DLP 3D-printing. The development of reversibly switchable vitrimers for 3D printing Roman Korotkov Tough to soft: a screening of supramolecular self-healing materials 17:30 Closure