

Vereinigung für Allgemeine und Angewandte Mikrobiologie



16. VAAM Industry-Academia Panel

21.11.2024, 4 pm, online via Zoom

"Bacterial Cellulose - a versatile bacterial biopolymer in industrial applications"



Dr. Dana Kralisch, JeNaCell GmbH, Jena

From academic research to health care in practice – bacterial cellulose in advanced wound care

Modern wound treatment calls for hydroactive dressings. Among the variety of materials that have entered the field of wound care in recent years, bacterial or also called biosynthetic cellulose (BC) represents one of the most promising candidates. The pathway from academic BC research in the lab to health care in practice will be shared on the example of advanced wound care. It will discussed in detail, that the actual market needs and benefits for the society are as important as the science behind.



Dr. Armin Ehrenreich, Dept. of Microbiology, Technical University of Munich Genetic Analysis of Cellulose Production in Acetic Acid Bacteria

- * Marker-free gene editing systems were established for two high cellulose producing *Komagataeibacter hansenii* strains.
- * They were used to delete the cellulose synthases of all three cellulose biosynthesis operons in each strain and the phenotype of the mutants was studied.
- * A model for the function of the three operons was postulated.