Smart Materials

The presentations will consist of the following:

Personalised Pessary

1 in 4 women have to deal with a prolapse during their lifetime. A prolapse occurs in the pelvis, where organs such as the uterus, bladder and colon rest on the pelvic floor. These organs are held in place by muscles, connective tissue and support tissue. When these muscles and tissues slacken, often after childbirth or heavy exertion, sagging may occur, and this sagging is referred to as a prolapse. To help alleviate this problem a small plastic object called a pessary can be inserted that can keep everything in place. The problem is that all women have very different internal structures and there are only a set amount of different shapes available which often results in an imperfect fit which is really uncomfortable for the user. To solve this fitting problem, we set out to use medical scanning and 3D printing technologies to create a personalised pessary shape for each person individually. Medical scanning allows for the accurate reading of measurements and 3D printing allows for mass production of personalised objects. This would mean a cost effective and efficient solution that could help a lot of women that face the problem of a prolapse.

Innovative Acoustic Textile Solutions

Colcore is an acoustic textile product designed as an underlayer for flooring, but where else could it be used? The Smart Solutions project group will present their investigations and findings regarding interior acoustic textiles and how Colcore can reach its full potential with launches in new markets.

Innovative Dressage Tailcoat

Theteam will present you the ''Tailcoat 2.0''. We now know what the perfect fit is for different type of bodies and which textiles have the best properties to use for a tailcoat.
In addition, we made a plan for the marketing to eventually sell the new tailcoat.
We looked at the requirements of the client and the consumer and did a lot of research to make the best tailcoat there is.
We're going to show you how we did it and why and what the results are.

Looking forward to seeing you all in the new year!

The future
is here