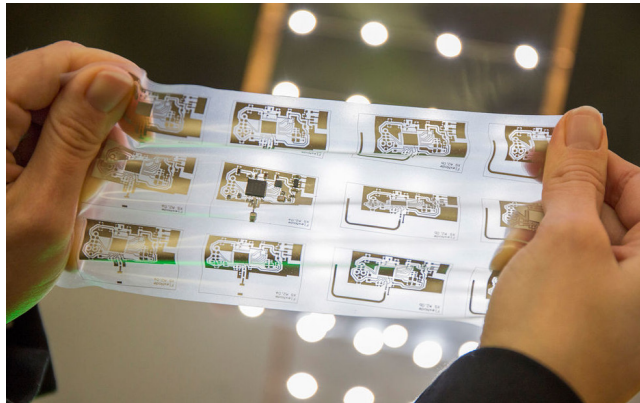


## Integration of electronic components in textiles

The integration of electronic components in textiles requires special assembly and connection techniques, which are to be researched and evaluated in this thesis.

Two practical tasks should be solved:

1. Embedding a pressure-measuring mat in a textile seat cushion.
2. Integration of inertial sensors in a shirt



Picture: LOPEC/OE-A



Picture: Saltex MesseDornbirn 2016

### Your tasks:

- Research for seat cushion with integrated electronics, e.g. Occupancy recognition in car seats
- Construction of a seat cushion with integrated pressure measuring mat for the wheelchair
- Research on the integration of electronics in textiles, e.g. stretchable PCBs, conductive yarns
- Construction of a shirt with sensors and conducting paths
- Documentation

### Your profile:

- Experience in researching scientific documents
- Affinity to electronics and textiles (soldering, sewing, embroidery, gluing)
- Independent and structured way of working and enjoyment of experimenting

### **If you are interested, please contact:**

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