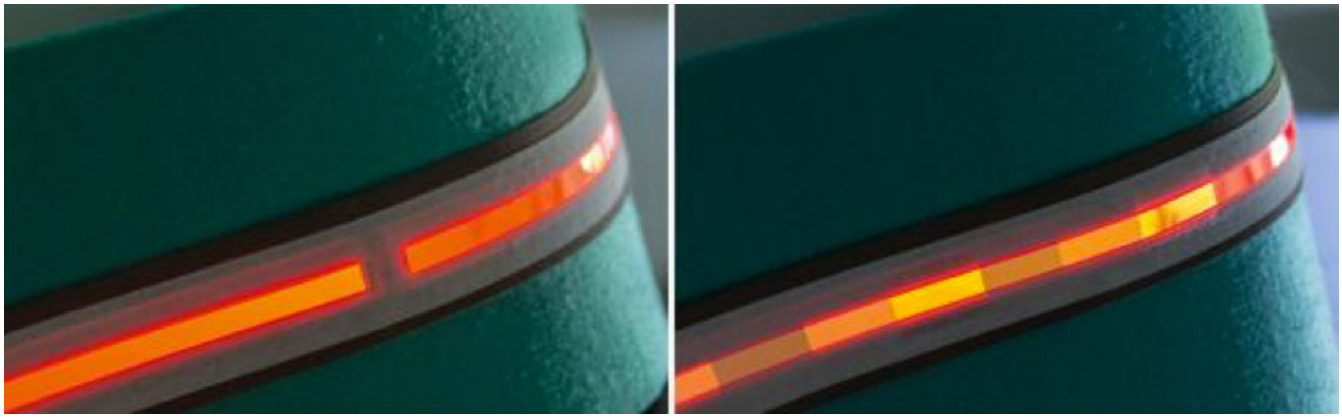
Researchers at the Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology have developed light strips from individual OLEDs, which can act like a single luminous surface without interruption.



Claudia Keibler-Willner, head of the "Sheet-to-sheet OLED Technologies" department at Fraunhofer FEP, says "We manufacture flexible OLEDs with appropriate control electronics in such a way that any number of OLED modules can be connected without creating visible interruptions to the active surface. This makes it possible to produce infinitely long OLED light strips. An additional highlight is the individual control of the segments. This allows additional lighting effects such as different dimmings or dynamic warnings to be realised".

In contrast to point-source LEDs, OLEDs are surface illuminators—homogenous by nature, so they don't need reflectors, light guides, or additional optics. And they're very thin and light in weight. That lets them achieve effects and appearances difficult or impossible with conventional LED technology.

OLED strips can be flexibly applied to curved surfaces such as car bodies. They can be transparent when switched off so that the underlying surface remains visible. Dynamic control or dimming opens up additional possibilities, such as for welcoming scenarios at the car. The scientists are now looking forward to concrete industry inquiries to develop prototypes or small series of these light strips for innovative designs and applications.