

**BASF**  
We create chemistry

# Coatings Matters

The global employee magazine of the Coatings division



## Customer Focus 4.0

Get closer to the customers  
thanks to digitalization

### Rethinking chemistry

EC employees become  
part of Chemovator

### Reshaping management

Interview with Patrick Zhao

### Redesigning production

First robot for EC's paint  
production



## Smart coatings:

Four hours of monotonous driving on the autobahn – today’s self-driving cars are changing what used to mean a waste of time and a good deal of stress into new possibilities and freedoms. As ex-drivers, we will spend this time doing what we want, whether it’s sleeping, reading, working or just looking out the window. This development is changing our expectations for the interior and the materials used for it, including the paint. By guest author Fabian Bartelt, user experience designer.

## From surface to interface

**T**he space inside a self-driving car is becoming a sort of extension of our own four walls, thus replacing the classic automotive interior. This area will be used differently and is therefore undergoing emotional reinterpretation. During autonomous driving, freedoms emerge that we will put to use both mentally and physically. While in the past, drivers were rigidly positioned behind the steering wheel, in the future, they will have a brand-new range of motion. Vehicle layouts can and have to be thought in a completely new way. Volumes, surfaces and materials are becoming significantly more important for providing us with an

emotional connection to and additional trust in our vehicle. The interior will also play an important role as an interface for information and interaction.

This is exactly where innovative materials such as smart coatings become relevant. We are constantly surrounded by data and information, at all times and in all places. Interaction with smartphones and other networked products has already been an integral component of our day-to-day life for a long time. While traditional automotive development emphasized the highest possible quality of the automotive interior design, in the future, designers



will primarily have to consider the way passengers will interact in this space. Our mission as designers is to broach these complex topics sensitively and empathetically and guarantee the best user experience.

### COATING AS AN INTERFACE

Interaction and geometry will merge. We will move away from the big black mirrors – the monitors and screens of today. Interfaces will be developed that are directly integrated in the interior. Content and information will be available dynamically in the vehicle and will be prepared to meet our preferences. An important focus of development will be to make information and interactive spaces visible and usable only when they are actually needed, based on the designers' principle "The best interface is no interface."

Here, coatings offer a great deal of potential. They not only seal surfaces and add aesthetic value, but can also enable complex functions related to interaction. We designers are thinking about how information can be presented interactively in the coating, how translucent areas can be used, how coating surfaces can process touch or areas can offer additional functions by means of color change and lucency. And this is just the beginning of how smart coatings and surfaces can be used to design the automotive interior of the future. Coating should be viewed not only as aesthetic surface treatment, but as an integrative part of a complete smart object.



### ABOUT THE AUTHOR

**Fabian Bartelt** is a user experience designer at the IXDS innovation agency, where he works on issues such as the ideal combination of functionality, design and user experience. IXDS is a leading agency for topics such as smart manufacturing, mobility and connected living and has studios in Berlin and Munich. More information is available at [ixds.com](http://ixds.com).