FILMS & SURFACES

Optical
UV/VIS-absorption, photoluminescence, (confocal) microscopy, Raman, ellipsometry, color coordinates

Chemical
Elemental composition, electronic states

Tactile
Profilometry, atomic-force microscopy (AFM), scanning electron microscopy (SEM)

DEVICES & ENCAPSULATION

Devices
Voltage/current characteristic of light-emitting diodes, solar cells and transistors

Lifetime
Barrier properties (water vapor, oxygen), 85/85 climate tests

INKS
Rheology, wetting, surface tension

Analytical Services

COPT Center
Luxemburger Straße 90
50939 Cologne
Germany

Contact
Dr. Stephan Kirchmeyer
Tel +49 (0)221 9337 1014
Mail info@copt-zentrum.de

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EUROPÄISCHE UNION
Innovation in unsere Zukunft
Europäischer Fonds
für regionale Entwicklung
**FILMS & SURFACES**

Characterize your materials and thin films to optimize your processes and products:

- How is it composed, does it contain impurities?
- How thick is it and is it sufficiently smooth or too rough?
- Is it crystalline or amorphous?
- Does it emit light?
- Where does it absorb?
- What are its electronic states?

*We support you* with state-of-the-art analytical methods to answer your questions; with resolution down to the nanometer regime.

**DEVICES & ENCAPSULATION**

Qualify your electronic devices and make them last:

- How efficient is my solar cell?
- Can I use my material in a transistor?
- Does the emission spectrum of my (organic) LED fit the acceptance criteria?
- How does my cell layout impact device lifetime?
- Does my barrier shield against water?
- What is the device lifetime upon exposure to humidity and high temperature?

*We support you* with high-performing methods to characterize films and devices.

**INKS**

Formulate your inks to achieve high-quality thin films:

- Is it suitable for screen, inkjet and gravure printing?
- Is it necessary to increase or lower its viscosity?
- Can it be printed on paper, plastic or glass?
- How can I improve its adhesion?
- Did my surface activation help?
- How can I optimize the drying process?

*We support you* to qualify your ink before you start to print.

**Light-current-voltage (LIV) characteristics and CIE-coordinates of an OLED device fabricated at COPT Center.**

**Measurement of surface topography using atomic force microscopy.**

**Contact angle measurement of an ink on an untreated (left) and pretreated (right) substrate.**