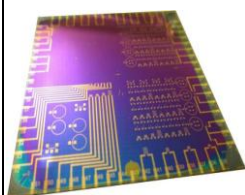
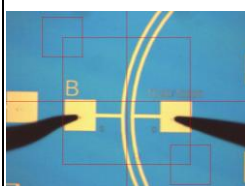
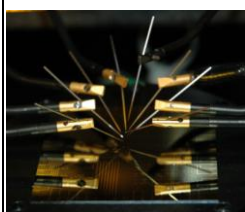


**Fact Sheet: Round Robin Test for OTFTs****Implementing a standard for OTFT characterization in the European scientific landscape**

The round robin testing covers what is considered necessary for a complete and meaningful characterisation of organic semiconductors used in field-effect devices.



There are currently a number of centres in Europe using different methods and substrates for OTFT characterisation. However, it is not easy, and in some cases even impossible, to compare the results from different laboratories. Therefore, standardised test structures and standardised measurement protocols for round robin testing are being developed in the project FlexNet. This is an important step towards a standardised measurement protocol, which intends complementing the existing IEEE 1620-2004™ standard. This standard is essentially inspired by MOSFET physics and requires modification if it is to be applied to (organic) thin-film transistors.

**Bringing all FlexNet partners and other European projects to the status quo**

The results of the first round robin tests are a standardised measurement protocol and a standard OTFT test structure that could be spread widely in Europe via all partners of the network of excellence FlexNet. During the second round a flexible test substrate is tested. Discussion and exchange with other European consortia concerning the testing of organic devices will be emphasized in order to achieve harmonization towards possible development of standards.

All FlexNet members implement the standard measurement protocol using the standard OTFT test structure. All members will thereby achieve the status quo in OTFT characterization in their laboratories.

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## About FlexNet

In the Network of Excellence (NoE) FlexNet, 17 participants from eleven European countries work together in order to support Europe in becoming the world leader in the field of Flexible, Organic and Large Area Electronics (FOLAE). FlexNet aims at interlinking Europe's FOLAE-expertise in the domains of science, technology development, components, devices and systems integration technologies.

Accordingly, FlexNet is structured in three platforms:

- FOLAE Materials and Devices Integration,
- Systems Integration and
- Knowledge, Dissemination and Transfer to industry

The knowledge associated with these topics is being actively made available to European stakeholders from research and industry, especially SMEs in Southern and Eastern Europe. This makes FlexNet a bi-directional catalyst for information transfer in the FOLAE area between West-Central- and South-Eastern Europe. It also enables FlexNet to promote the commercial exploitation of the existing scientific excellence in the field of FOLAE all across Europe.



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