

## PARTNERS



Nanotechnology Lab LTFN  
- Aristotle University of  
Thessaloniki (AUTH), Greece



National Physical Labora-  
tory, UK



University of Surrey, UK



Organic Electronics  
Technologies P.C., Greece



University of Ioannina,  
Greece



Centro Ricerche FIAT, Italy



APEVA, Germany



Granta Design, UK



Fluxim, Switzerland



Hellenic Organic & Printed  
Electronics Association,  
Greece

## PROJECT INFORMATION

Call: H2020-NMBP-07-2017

Type of action: Research & Innovation  
Action

Acronym: CORNET

Topic: Systems of materials characteri-  
zation for model, product and process  
optimization

Duration: 39 months (1/2018-3/2021)

## CONTACT US

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MULTISCALE  
MODELLING AND  
CHARACTERIZATION  
TO OPTIMIZE THE  
MANUFACTURING  
PROCESSES OF  
ORGANIC ELECTRONICS  
MATERIALS & DEVICES

[www.cornet-project.eu](http://www.cornet-project.eu)



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# ABOUT

CORNET will develop a unique EU Open Innovation Environment (OIE) covering the triangle of manufacturing, modelling and experimentation.

CORNET will optimize the Organic/ Large Area Electronic materials, materials' behaviour and nano-devices' manufacturing processes by linking the nanostructure features with the macroscopic functionality through multiscale characterization and modelling.

This will strongly impact the fast and reliable development of new materials, devices and will enable control of the related production processes to fabricate tailored OE devices and systems for industrial applications.



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# OBJECTIVES

- Development of an effective OIE connecting world-class industrial, academic & research experts in Manufacturing, Multiscale Characterization & Modelling, for optimization of OE materials, materials behaviour and process optimization and for reliable database, citable protocols and contribution to standards.
- Multiscale Characterization & Modelling to optimize OE materials & devices fabrication and validation of materials models for faster development cycle



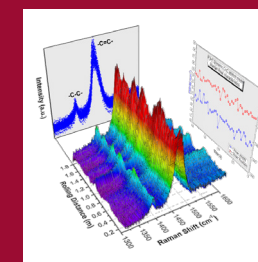
## Multiscale Characterization

*Optical, Electrical, Surface, Structure, Mechanical, Barrier, Thickness*

## Multiscale Modelling

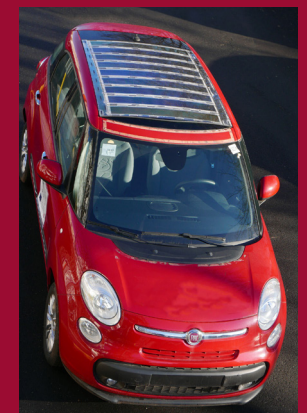
*DFT, Molecular Dynamics, Mesoscopic, Compact Modelling, Simulation*

- and time-to-market. Optimization of the fabrication of OPV, PPV and OLED Devices by R2R Printing and OVPD Manufacturing Processes.
- Efficient large scale Fabrication of tailored (OPV, PPV, OLED) nano-devices by R2R printing and OVPD processes and Demonstration to Industrial



## Large Scale Manufacturing

*R2R Printing, OVPD*



DATABASE  
&  
STANDARDS