Theoretical Methods for Better Core Level Photoelectron Spectroscopy

Fact Sheet

Project Information

THEOCORPES
Grant agreement ID: 892943

DOI
10.3030/892943

Closed project

Funded under
EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Total cost
€ 154 193,28

EU contribution
€ 154 193,28

Coordinated by
TARTU ULIKOOL
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Project description

Novel theoretical 'filtering' to manage spectral peaks and chemical signatures

Core-level spectroscopies are called so because they obtain element-specific information of the electronic structure based on the ejection of a core electron. X-ray photoelectron spectroscopy (XPS) is one of those techniques, and it is one of the most important tools for surface analysis. XPS measures the kinetic energies of photo-emitted electrons, but currently the spectral peaks produced can be difficult to interpret. Given its utility and widespread use, the EU-funded THEOCORPES project is enhancing the performance of XPS with the help of theoretical modelling to more accurately identify the chemical environment tested. The complementary modelling
will help XPS users enhance the interpretation of their experimental results in numerous fields.

Fields of science

engineering and technology > mechanical engineering > vehicle engineering > aerospace engineering > satellite technology

natural sciences > physical sciences > optics > spectroscopy

Keywords

Theoretical spectroscopy > surface analysis > computational materials science

Programme(s)

H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

H2020-EU.1.3.2. - Nurturing excellence by means of cross-border and cross-sector mobility

Topic(s)

MSCA-IF-2019 - Individual Fellowships

Call for proposal

H2020-MSCA-IF-2019

See other projects for this call

Funding Scheme

MSCA-IF - Marie Skłodowska-Curie Individual Fellowships (IF)

Coordinator

TARTU ULIKOOL
Net EU contribution
€ 154 193,28

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Region
Eesti > Eesti > Lõuna-Eesti

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 0,00

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