



Solid-liquid thermoelectric systems with uncorrelated properties

Fact Sheet

Project Information

UncorrelaTEd

Grant agreement ID: 863222

[Project website](#) 

DOI

[10.3030/863222](https://doi.org/10.3030/863222) 

Project closed

EC signature date

4 September 2019

Start date

1 January 2020

End date

30 June 2024

Funded under

EXCELLENT SCIENCE - Future and Emerging Technologies (FET)

Total cost

€ 2 543 322,50

EU contribution

€ 2 543 322,50

Coordinated by

UNIVERSITAT JAUME I DE CASTELLON



Spain

Project description

A powerful factor for enhanced thermoelectric power generation

Thermoelectrics, which can be used to recover energy from waste heat, is a niche technology with considerable growth potential that is limited by low efficiency. To improve the efficiency of thermal to electrical energy conversion, the EU-funded UncorrelaTEd project will develop a new paradigm involving a properly designed hybrid system. This system is formed by a porous thermoelectric solid permeated by a liquid electrolyte that is already showing great promise with unprecedented improvements in power factor. Project outcomes will enable thermoelectric

technology to be implemented in numerous areas, such as the realm of self-powered sensors. Realisation will reduce the demand for batteries, textiles, factories, power plants and combustion engines that have a high carbon footprint.

Keywords

[Thermoelectrics](#)

[electrochemistry](#)

[energy harvesting](#)

[electrolytes](#)

[ionic liquids](#)

Programme(s)

[H2020-EU.1.2. - EXCELLENT SCIENCE - Future and Emerging Technologies \(FET\)](#)

MAIN PROGRAMME

[H2020-EU.1.2.1. - FET Open](#)

Topic(s)

[FETOPEN-01-2018-2019-2020 - FET-Open Challenging Current Thinking](#)

Call for proposal

[H2020-FETOPEN-2018-2020](#)

[See other projects for this call](#)

Sub call

H2020-FETOPEN-2018-2019-2020-01

Funding Scheme

[RIA - Research and Innovation action](#)

Coordinator



UNIVERSITAT JAUME I DE CASTELLON

Net EU contribution

€ 856 853,65

Total cost

€ 856 853,65

Address

AVENIDA VICENT SOS BAYNAT S/N

12006 Castellon De La Plana

 **Spain** 

Region

Este > Comunitat Valenciana > Castellón/Castelló

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Participants (6)



FUNDACIO INSTITUT DE RECERCA DE L'ENERGIA DE CATALUNYA

 **Spain**

Net EU contribution

€ 266 205,69

Address

C/ JARDINS DE LES DONES DE NEGRE 1

08930 Sant Adria De Besos 

Region

Este > Catalunya > Barcelona

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 266 205,69



KUNGLIGA TEKNISKA HOEGSKOLAN

 Sweden

Net EU contribution

€ 374 177,30

Address

BRINELLVAGEN 8
100 44 Stockholm 

Region

Östra Sverige > Stockholm > Stockholms län

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 374 177,30



UNIVERSITY OF WARWICK

 United Kingdom

Net EU contribution

€ 500 609,48

Address

KIRBY CORNER ROAD UNIVERSITY HOUSE
CV4 8UW COVENTRY 

Region

West Midlands (England) > West Midlands > Coventry

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

Total cost
€ 500 609,48



SOLVIONIC

 France
Net EU contribution
€ 410 597,63

Address
11 CHE DES SILOS
31100 Toulouse 

SME 
Yes

Region
Occitanie > Midi-Pyrénées > Haute-Garonne

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
[Contact the organisation](#)  [Website](#) 
[Participation in EU R&I programmes](#) 
[HORIZON collaboration network](#) 

Total cost
€ 410 597,63



INTENANOMAT SL

 Spain
Net EU contribution
€ 0,00

Address
CALLE CATEDRATICO JOSE BELTRAN 2
46980 Paterna 

SME 
Yes

Region

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

- [Contact the organisation](#)
- [Participation in EU R&I programmes](#)
- [HORIZON collaboration network](#)

Total cost

No data



SPECIFIC POLYMERS

France

Net EU contribution

€ 134 878,75

Address

AVENUE DES COCARDIERES 150 ZAC VIA DOMITIA
34160 Castries

SME

Yes

Region

Occitanie > Languedoc-Roussillon > Hérault

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

- [Contact the organisation](#) [Website](#)
- [Participation in EU R&I programmes](#)
- [HORIZON collaboration network](#)

Total cost

€ 134 878,75

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