

H2020 MEGA Project

Model of Implementation

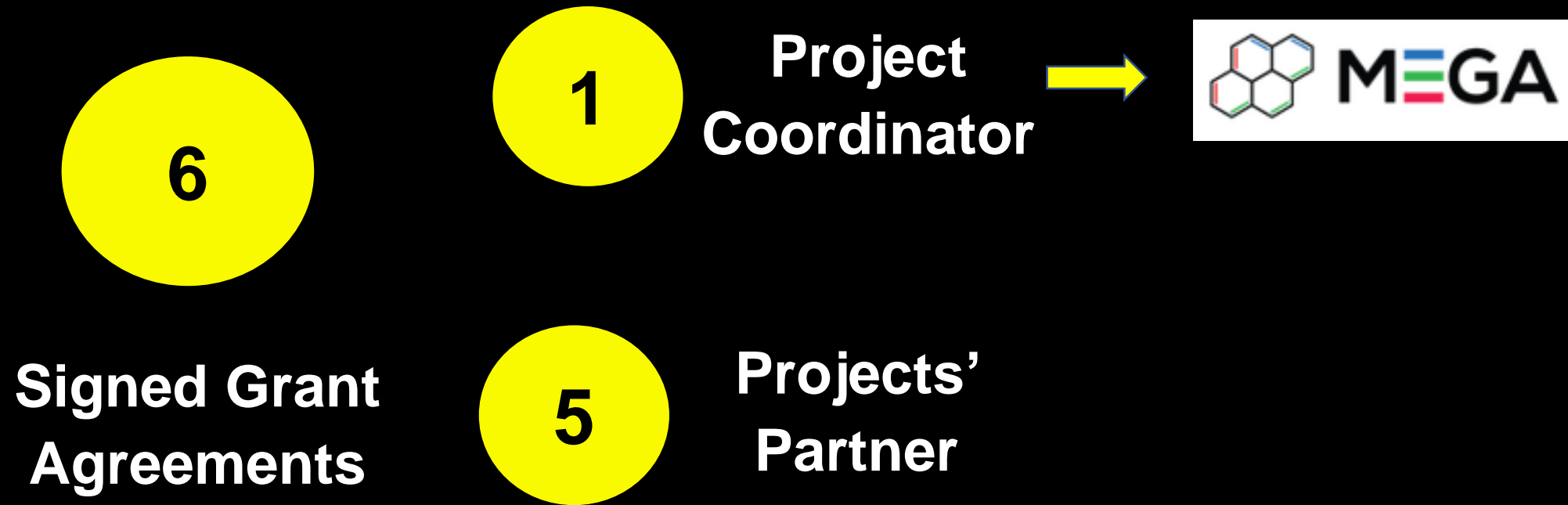
Dr. Oksana Palekienė
KTU Research and Innovation Projects Centre
21/10/2022



This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under the Marie Skłodowska-Curie Grant Agreement No 823720

H2020 MSCA-RISE PROJECTS AT KTU, 2014 – 2022

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Source: <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon-dashboard>,

21/10/2022

MEGA – Heavy metal free emitters for new-generation light (823720)

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Overall goal is to develop heavy metal free emitters for new-generation light sources.

Objective 1

Screen compounds with TADF or lasing properties by means of molecular modelling

Objective 2

Synthesise most promising compounds with TADF or lasing properties

Objective 3

Characterise most promising compounds with TADF or lasing properties

Objective 4

Test materials in device structures to meet industry requirements

[H2020 MEGA Project Video >>>](#)

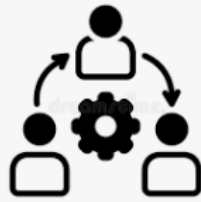


MEGA Legal Project Information

START DATE
01/01/2019

GRANT AMOUNT
1.633.000 EUR

END DATE
31/12/2023



From the 01/01/2019:


10 Beneficiaries from 6 EC/AC +
2 Partner Organisations from TCs (BY, TW)

At the moment:

11 Beneficiaries from 7 EC/AC +
2 Partner Organisations from TCs (TW, ML)

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Amendments


 Lithuania


 Germany

 Ukraine


 Taiwan

 France

 Luxembourg

 United Kingdom

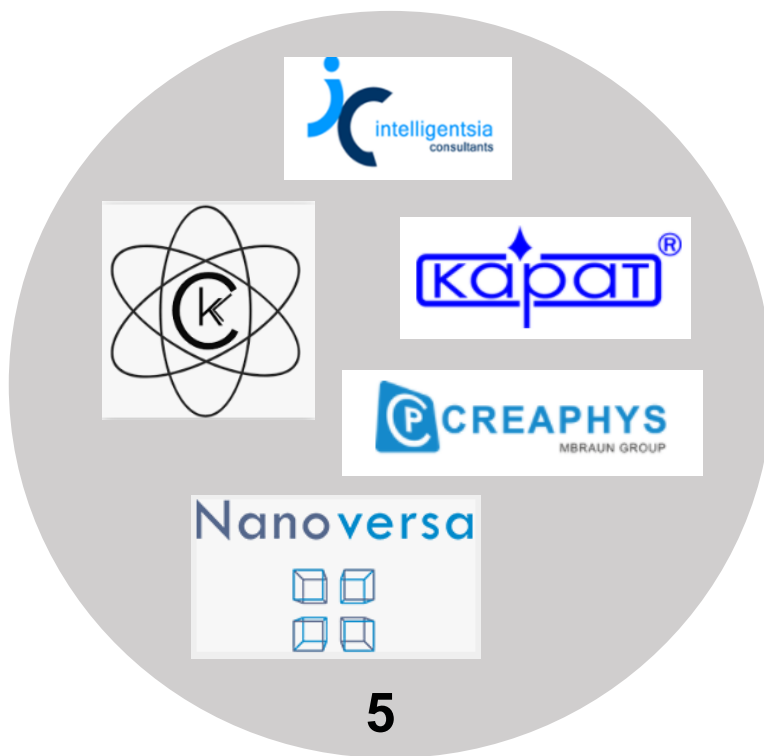
 Armenia

 Malaysia

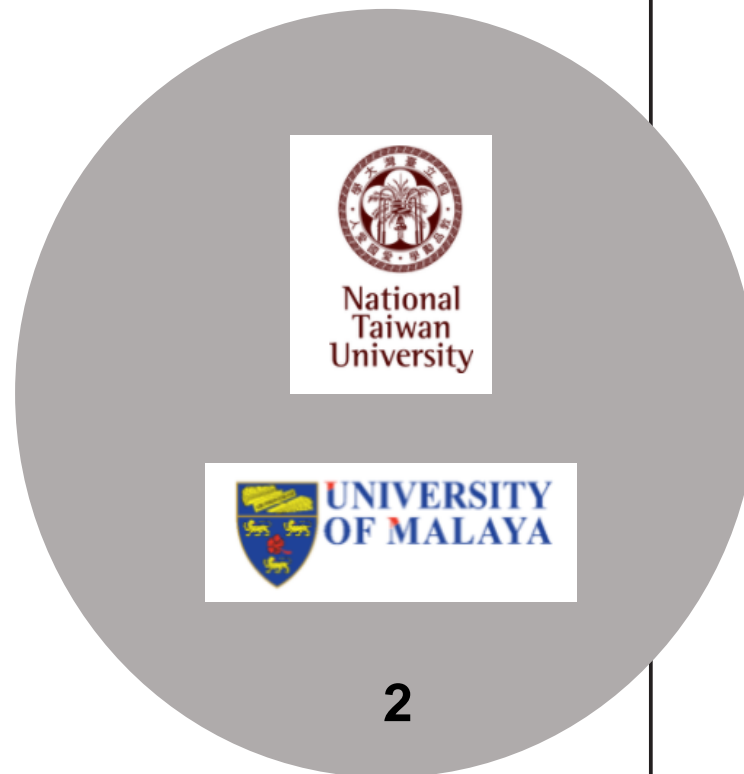
ACADEMIC SECTOR



NON-ACADEMIC / INDUSTRIAL SECTOR



PARTNERS' ORGANISATIONS FROM THIRD COUNTRIES



MEGA: KNOWLEDE TRANSFER

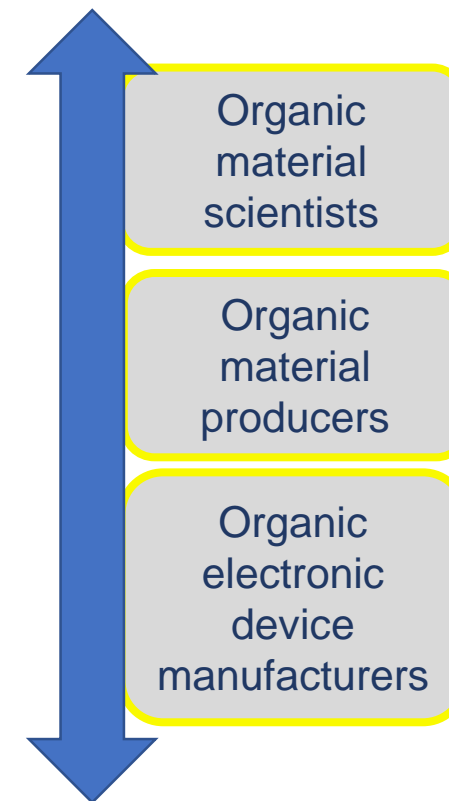
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Key objective – to develop **international** and **intersectoral** pathways for the transfer of **knowledge** to enable the production of heavy metal free emitters for new-generation light sources.

Category of Knowledge
Organic material theory
Organic material synthesis
Organic material characterisation
OLED devices
Organic laser device componentry



Expertise Required
Quantum chemistry, mathematical optimisation
Organic structures, synthesis schemes, green chemistry methods, sublimation
NMR and IF spectroscopy, mass spectrometry, microanalysis, X-ray analysis, TGA differential scanning calorimetry, electro-optical analysis (charge mobility, energy levels), AFM, SEM
Vacuum and wet technologies, organic material handling, optical simulations for device optimisation, device characterisation (jVL, EQE, spectra, lifetime)
Theoretical simulation; deep vacuum, holographic and photolithographic techniques; device characterisation (input-output characteristic, spectra, stability)



MEGA: BENEFITS

Joint research → publications
of the results

Know-how transferal trainings
(including workshops)

Secondment based on the
on-the-job research trainings

Enhancing the potential and future career perspectives and development of the staff members (ESRs and ERs)

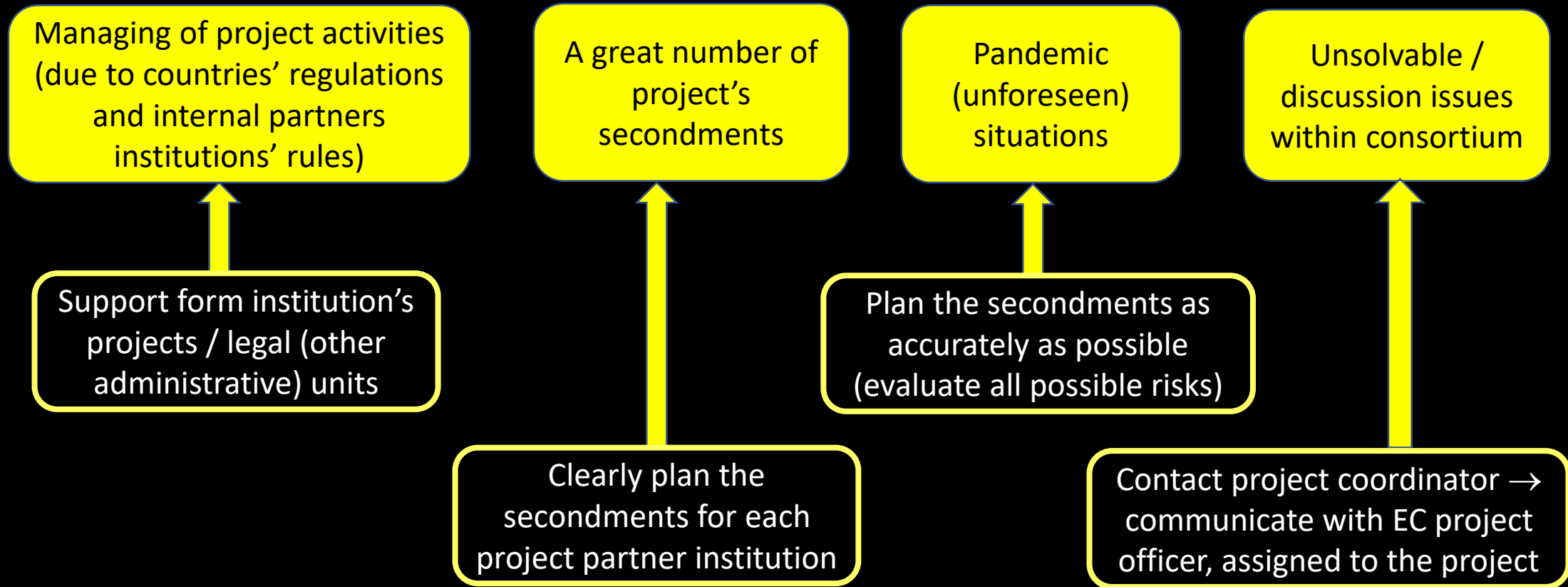
**Achieving transfer of
knowledge** between
participating institutions

**Developing new and lasting
research collaborations**

**Improving research and
innovation potential** of
participating institutions

Improving of the research and innovation potential of the Hosting and Sending institutions at the European and global levels

MEGA CHALLENGES



MEGA: SUGGESTIONS

Grant application process

To prepare the grant application in line with the appropriate Work Program, call documents and other appropriate strategic documents

Partners have the experience in implementing the EU financed projects before

Responsibly plan the secondment plan

Identify and foreseen main risks

Project implementation process

Clearly identify project management structure and responsibilities in CoA (*coordinator, admin. manager, boards, etc.*)

Focusing on project results (*Deliverables, Publications*)

Risk management

Collaboration / communication based in trust among consortium partners

MSCA – Staff Exchange (RISE) action benefits

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A platform where academia and industry interact and join forces



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