



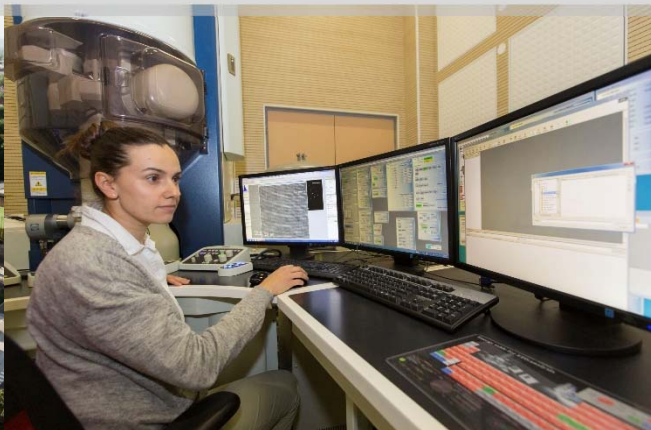
NATIONAL INSTITUTE
OF CHEMISTRY

Slovenia

The benefits for the EU R&I Ecosystem

Dr. Barbara Tišler

Head of the project office

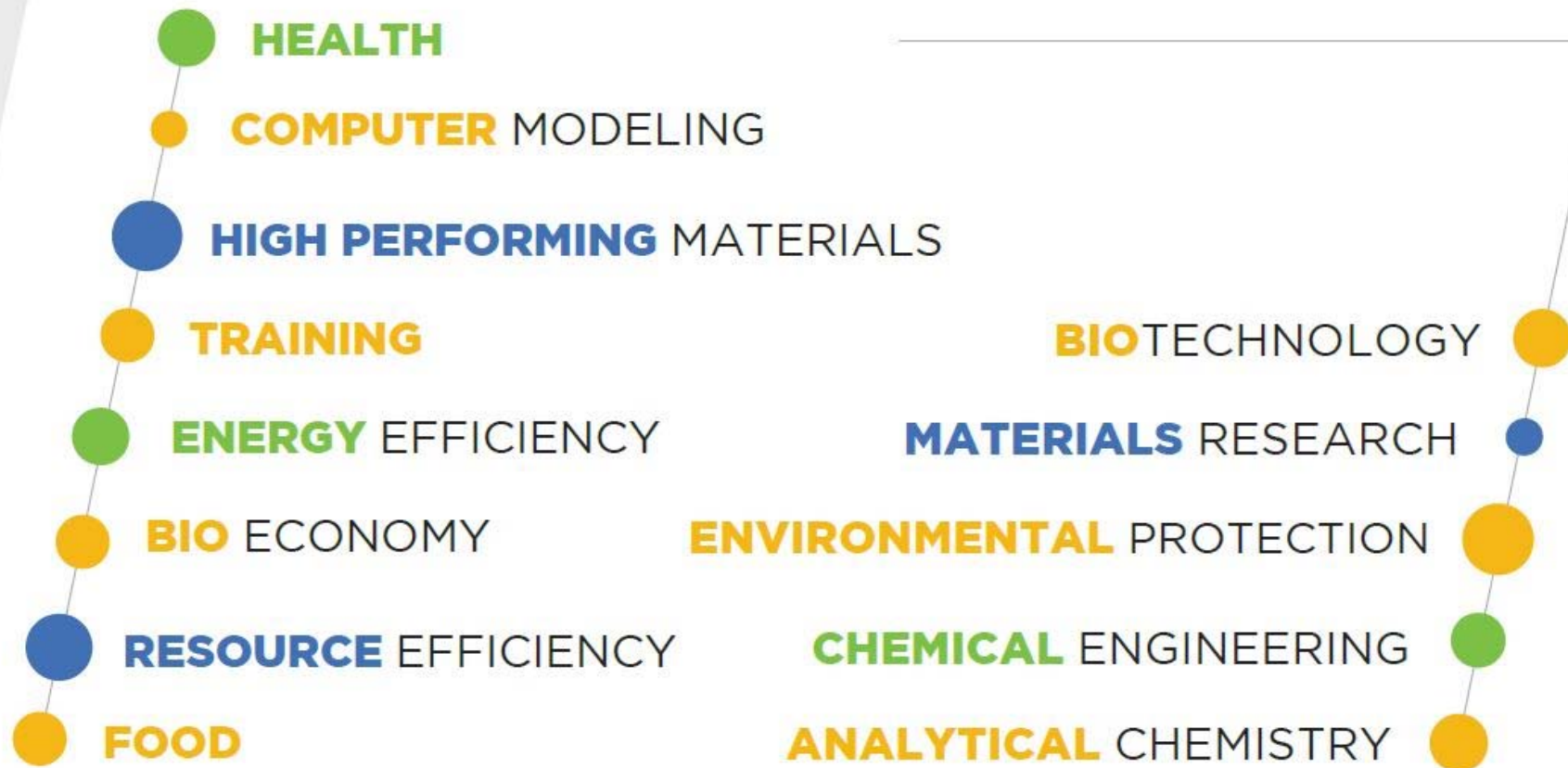


EuroNanoForum 2019, Bucharest, 14 June 2019



NATIONAL INSTITUTE
OF CHEMISTRY

10 Departments
330 Employees
66 PhD students



European Research Council
Established by the European Commission
Supporting top researchers
from anywhere in the world

2



26



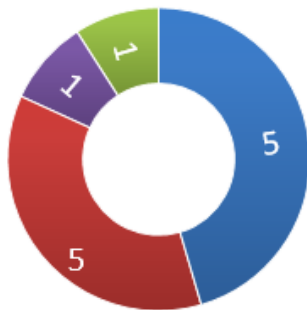
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Big jump to Horizon 2020

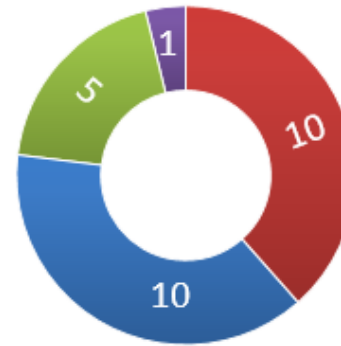
FP7 - No. of projects



■ 1 Excellent science ■ 2 Industrial leadership ■ 3 Societal challenge
■ 4 Widening ■ 5 Science for society

Total: 12 projects
3 mio EUR

Horizon 2020 - No. of projects



■ 1 Excellent science ■ 2 Industrial leadership ■ 3 Societal challenge
■ 4 Widening ■ 5 Science for society

Total: 26 projects
15 mio EUR

Active involvement into EU R&I landscape



11 Horizon 2020: Energy related projects


Acronym	Title	Scheme
BATTERY 2030+	BATTERY 2030+ At the heart of a connected green society	H2020- FET- 2018
LiRichFCC	A new class of powerful materials for electrochemical energy storage: Lithium-rich oxyfluorides with cubic dense packing	H2020-FET-2015
OBELICS	Optimization of scalaBle rEaltime modeLs and functlional testing for e-drive ConceptS	H2020-GV-2017
BIZEOLCAT	Bifunctional Zeolite based Catalysts and Innovative process for Sustainable Hydrocarbon Transformation	H2020-NMBP-2018
REAXPRO	Software Platform for Multiscale Modelling of Reactive Materials and Processes	H2020-NMBP-2018
HELIS	High energy lithium sulphur cells and batteries	H2020-NMBP-2014
CONVERGE	CarbON Valorisation in Energy-efficient Green fuels	H2020-SPIRE-2018
MefCO2	Synthesis of methanol from captured carbon dioxide using surplus electricity	H2020-SPIRE-2014
ADREM	Adaptable Reactors for Resource- and Energy-Efficient Methane Valorisation	H2020-SPIRE-2015
POLYNSPIRE	Demonstration of Innovative Technologies towards a more Efficient and Sustainable Plastic Recycling	H2020-SPIRE-2018
FRESME	From residual steel gasses to methanol	H2020 - LCE- 2016



Partners

- EMIRI
- EIT Climate KIC
- SUSCHEM
- EERA Bioenergy
- S3 Advanced materials for batteries for electro-mobility and stationary energy storage
- SBRA- from 2014
- EARTO – just started



 Climate-KIC is supported by the EIT, a body of the European Union



Added value from partnerships



- Roadmaps

II) **EMIRI Roadmap on Clean Energy and Clean Mobility**

The roadmap chapter: it includes a theoretical introduction, an overview of technologies and their performance, market information, European SWOT, value chain players, and trends. It is addressed to a general audience.

 [EMIRI Roadmap - Photovoltaic.docx](#)

 [EMIRI Roadmap - Hydrogen for Mobility - shared.docx](#)

- **The calls (Annex I):** this is the final version of the calls

 [EMIRI Roadmap - Call Tables - Hydrogen for Mobility - shared.docx](#)

 [EMIRI Roadmap - Photovoltaic.docx](#)

III) **EMIRI Roadmap on Building Energy Performance**  [EMIRI Roadmap - Building Energy performance.docx](#)

Call Tables on Building Energy Performance:  [EMIRI Roadmap - Call Tables - BEP \(1\).docx](#)

IV) **EMIRI Roadmap on Wind**  [EMIRI Roadmap - Wind Energy Harvesting.docx](#)

Call Tables on Wind  [EMIRI Roadmap - Call Tables - Wind.docx](#)

V) **EMIRI Roadmap on Hydrogen for stationary application**  [EMIRI Roadmap - Hydrogen for Stationary.docx](#)

Call Tables on Hydrogen for stationary applications  [EMIRI Roadmap - Hydrogen for Stationary.docx](#)



- Desired KPIs from industry
- Current state-of –the art
- Networking



- NIC leading the national SUSCHEM platform
- Partnership events & Brokerage
- Networking
- SRIA - Strategic Innovation and Research Agenda for sustainable chemistry
- Plastics strategic research and innovation agenda





Climate-KIC is supported by the
EIT, a body of the European Union

- Co-creation of proposals
- Partnership search
- Overview of policy led KPIs





Networking
Information providing
Representation at meetings



Permanent Representation
of Hungary
to the European Union



Inputs

- Active involvement
- Vision of scientific development in the field
- Dedicated personnel and adequate resources



Strategy of our institute

- very precise
- sets targets and ambition



Additional remuneration rules in Horizon 2020



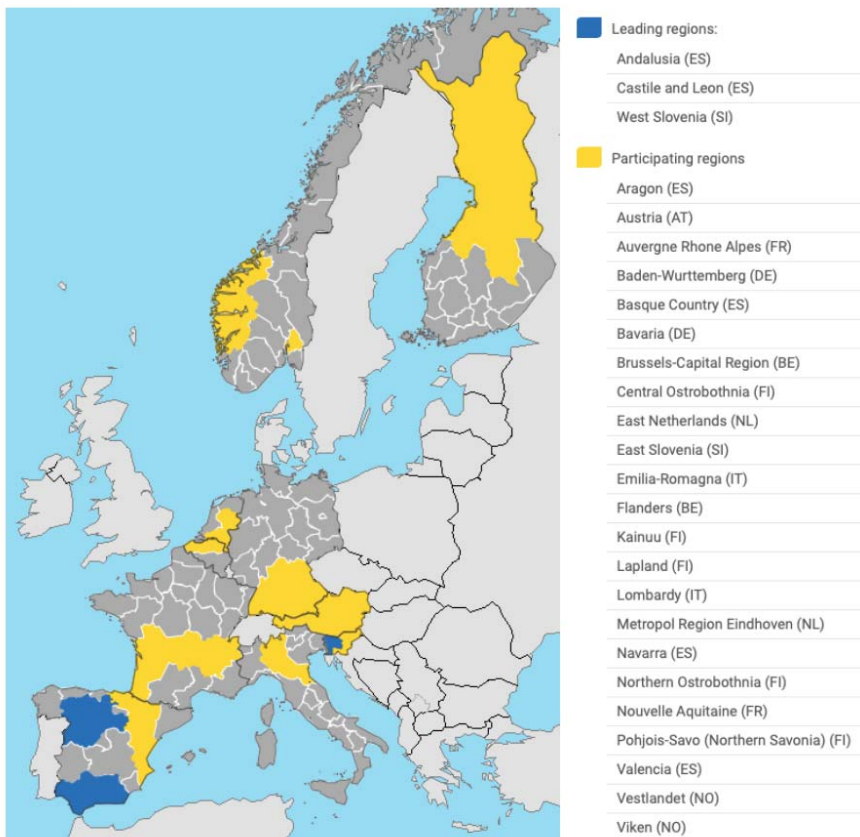
S3 Advanced materials for batteries for electro-mobility and stationary energy storage

- Co-creation of pilots



S3 Advanced materials for batteries

- **PILOT 1:** Solid state lithium-ion batteries (Generation 4) (Lead Region: Bavaria)
- **PILOT 2:** Sustainable Raw Material, Extraction and Processing (Lead Region: Castilla y León)
- **PILOT 3:** Recycling of existing Lithium Ion Batteries (Lead Region: Bavaria)
- **PILOT 4:** Liquid based-batteries (stationary) (Lead Regions: Basque/ Valencia)
- **PILOT 5:** Network of research & testing centers (Lead Region: West Slovenia)
- **PILOT 6:** Improved lithium-ion batteries (Generation 3b) (Lead Region: Auvergne Rhône Alpes)



Interest in
joining?
Contact us!



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