



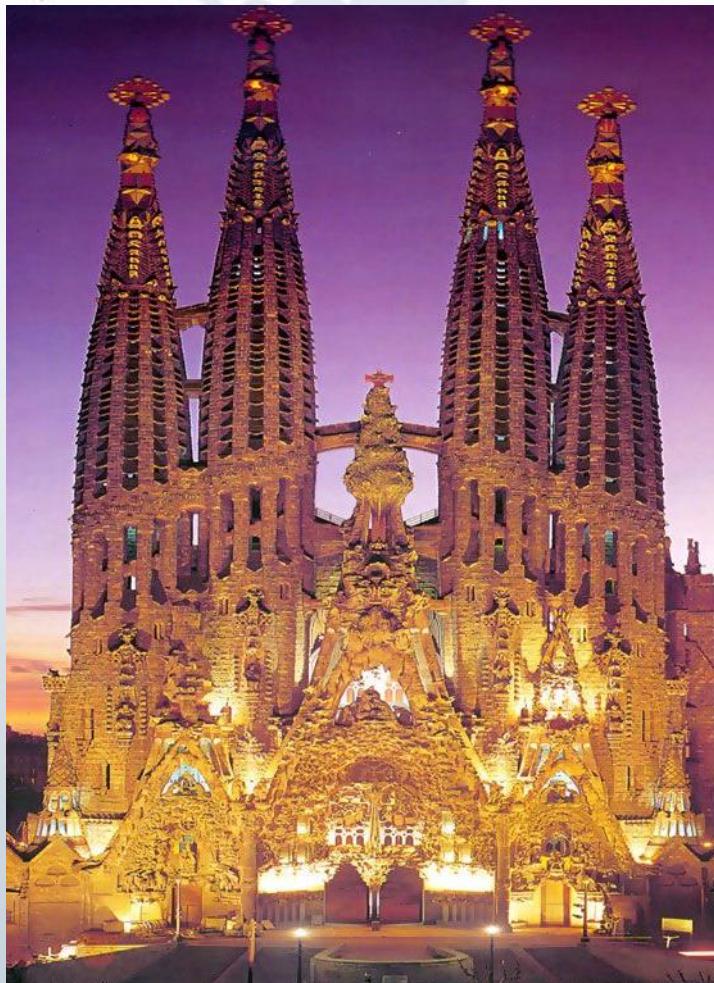
Ciclo virtual en H2020

Area Temática: Nanotecnologías

Expositor: M.Carmen Margelí



ALCUE NET has received funding from the European Unions Seventh Framework Programme for research, technological development and demonstration under grant agreement No 311953



Eurecat es el gran Centro Tecnológico de Catalunya resultante de la integración de Ascamm, Barcelona Media, BDigital, Cetemmsa y CTM.

Eurecat ofrece Productos y Servicios innovadores a las empresas, mediante la investigación aplicada y la transferencia de tecnología.

- 1000 clientes
- 8 spin off
- Gestión de 100 proyectos de R&D&i
- 36 patentes internacionales
- 8 sedes en Catalunya
- 1 sede en Sud América: Brasil





Estructura y Presupuesto

HORIZONTE 2020

77.028

I. Prioridad «Ciencia excelente»	24.441
1. El Consejo Europeo de Investigación (CEI)	13.095
2. Las Tecnologías Futuras y Emergentes (FET)	2.696
3. Las acciones Marie Skłodowska-Curie	6.162
4. Las infraestructuras de investigación	2.488
II. Prioridad «Liderazgo industrial»	17.016
1. Liderazgo en tecnologías industriales y de capacitación:	13.557
1.1 Tecnologías de la información y la comunicación (TIC)	7.711
1.2 Nanotecnologías, 1.3 Materiales avanzados y 1.5 Fabricación y transformación avanzadas	3.851
1.4 Biotecnología	516
1.6 Espacio	1.479
2. Acceso a la financiación de riesgo	2.842
3. Innovación en las PYME	616
III. Prioridad «Retos de la sociedad»	29.679
1. Salud, cambio demográfico y bienestar	7.472
2. Seguridad alimentaria, agricultura y silvicultura sostenibles, investigación marina, marítima y de aguas interiores y Bioeconomía	3.851
3. Energía segura, limpia y eficiente	5.931
4. Transporte inteligente, ecológico e integrado	6.339
5. Acción por el clima, medio ambiente, eficiencia de los recursos y materias primas	3.081
6. Europa en un mundo cambiante – Sociedades inclusivas, innovadoras y reflexivas	1.309
7. Sociedades seguras – Proteger la libertad y la seguridad de Europa y de sus ciudadanos	1.695
Difundir la excelencia y ampliar la participación	816
Ciencia con y para la sociedad	462
Instituto Europeo de Innovación y Tecnología (EIT)	2.711
Acciones directas no nucleares del Centro Común de Investigación (JRC)	1.903

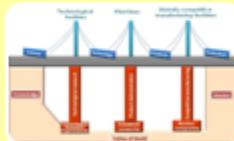
Precios corrientes en M€



NMP – Objetivo, Estructura y Presupuesto

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Programa Marco de Investigación e Innovación (2014-2020)



Excellent Science

European Research Council (ERC)

Future and Emerging Technologies (FET)

Marie Skłodowska-Curie actions on skills, training and career development

European research infrastructures

Industrial Leadership

ICT

Nanotechnology

Biotechnology

Advanced Materials

Advanced Manufacturing & Processing

Space

Access to Risk Finance

Innovation in SMEs

Societal Challenges

Health, demographic change and wellbeing

Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy;

Secure, clean and efficient energy;

Smart, green and integrated transport;

Climate action, environment, resource efficiency and raw materials

Europe in a changing world-Inclusive, innovative and reflexive societies

Secure Societies: Protecting freedom and security of Europe and its citizens

LEIT

División
Programas de la UE

3

(12/06/2015)



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Tipos de acción

- ❖ Research and Innovation actions = RIA (100% funding)
- ❖ Innovation actions = IA (70% funding)
- ❖ Coordination and Support Actions = CSA (100%)
- ❖ SME instrument = SME(Phase 1: 50.000€/ Phase 2: 70%)
- ❖ Fast Track to Innovation = FTI (70%)
- ❖ Pre-Commercial Procurement = PCP (70%)
- ❖ Public Procurement of Innovative Solutions = PPI (20%)
- ❖ ERA-NET (33%)
- ❖ Prizes (0,5 M€)





NMP – Objetivo, Estructura y Presupuesto

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Estimación Presupuesto NMBP

M€	2014	2015	2016	2017	2018	2019	2020	H2020 NMBP
Total	495	518	520	564	588	605	648	3.940
SME I. Call	26	27	40	43	45	46	49	276
Contr. FTI		10	10	10				31
NMBP Call	469	481	470	511	543	559	598	3.633

Budget (M€)	TRS	NMP	ENE	ICT	ENV	Total H2020	Total PPP*
Green Car	600	70		80		750	1.500
EeB		400	75+75		50	600	1.200
FoF		700		450		1150	2.300
SPIRE		700	50+50		100	900	1.800



División
Programas de la UE

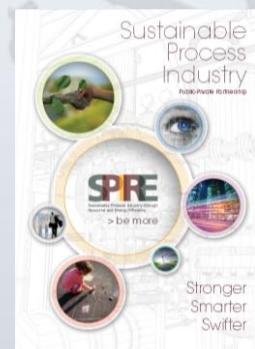
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(12/06/2015)



CDTI
Centro para el
Desarrollo
Tecnológico
Industrial

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TRL - Technology readiness level

TRL 9	System ready for full scale deployment
TRL 8	System incorporated in commercial design
TRL 7	Integrated pilot system demonstrated
TRL 6	Prototype system verified
TRL 5	Laboratory testing of integrated system
TRL 4	Laboratory testing of prototype component or process
TRL 3	Critical function: proof of concept established
TRL 2	Technology concept and/or application formulated
TRL 1	Basic principles observed and reported





Lista de países

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- ❖ Argentina
- ❖ Bolivia
- ❖ Chile
- ❖ Colombia
- ❖ Costa Rica
- ❖ Cuba
- ❖ Republica Dominicana
- ❖ Ecuador
- ❖ El Salvador
- ❖ Guatemala
- ❖ Honduras
- ❖ Jamaica
- ❖ Nicaragua
- ❖ Panamá
- ❖ Paraguay
- ❖ Perú
- ❖ Uruguay
- ❖ Venezuela



Work Programme 2016-2017 NMBP

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Process

2014

16 Oct	Discussion with PC strategic configuration on overarching strategic document
From 17 Oct until start Dec	Discussions with PC thematic configurations

2015

Jan-July	Preparation of detailed work programme 2016/17 content
Summer	Opinions of Programme Committee configurations
Third quarter	Adoption of work programme ; publication of calls for 2016

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Research
and
Innovation



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Topic list - summary



74 topics
(2016: 36 + 2017: 38)

- 36 topics RIA (17+19)
- 22 topics IA (10+12)
- 13 topics CSA (7+6)
- 3 topics ERANET (2+1)



3-5 – 5 topics (RIA)
4-6 – 31 topics (RIA)
5-7 – 22 topics (IA)



ETPs, cPPP Partnership boards
Gap analysis of WP 2014-15
Following scoping paper structure

HORIZON 2020 – NMBP calls



Work Programme 2016-2017 NMBP



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Año	Título topic	Instrumento	TRL
2016	SPIRE 01-2016: Systematic approaches for resource-efficient water management systems in process industries	IA	5-7
2016	NMBP 01-2016: Novel hybrid materials for heterogeneous catalysis	RIA	4-6
2016	NMBP 02-2016:Advanced materials for power electronics based on wide bandgap semiconductor devices technology	RIA	4-6
2016	NMBP 03-206: Innovative and sustainable materials solutions for the substitution of critical raw materials in the electric power system	RIA	4-6
2017	NMBP 04-2017:Architectured /Advanced material concepts for intelligent bulk material structures	RIA	4-6



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Año	Título topic	Instrumento	TRL
2017	NMBP 05-2017: Design-driven advanced materials for high added value innovative products	IA	5-7
2017	NMBP 06-2017: Improved materials durability in buildings and infrastructures, including offshore	RIA	4-6
2017	NMBP 07-2017: Systems of materials characterisation for model, product and process optimisation	RIA	4-6
2016	NMBP 11-2016: Nanoformulation of biologicals	RIA	4-6
2017	NMBP 14-2017: Regulatory science framework for assessment of risk-benefit ratio of Nanomedicines and Biomaterials	RIA	4-6



Work Programme 2016-2017 NMBP



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Año	Título topic	Instrumento	TRL
2016	NMBP 19-2016: Advanced materials solutions and architectures for high efficiency solar energy harvesting	RIA	4-6
2016	NMBP 20-2016: Advanced materials enabling the integration of storage technologies in the electricity grid	IA	5-7
2017	NMBP 21-2017: Cost-effective materials for "power to chemical" technologies	RIA	4-6
2017	NMBP 22-2017: High-performance materials for optimising CO2 capture	IA	5-7
2017	NMBP 24-2017: Business models and industrial strategies supporting novel supply chains for innovative product-services	RIA	4-6



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Año	Título topic	Instrumento	TRL
2016	NMBP 25-2016: Pilot lines for manufacturing of materials with customized thermal/electrical conductivity properties	IA	5-7
2016	NMBP 26-2016: Pilot lines for Reactive/In Situ /In process generation of nano-features	IA	5-7
2016	NMBP 27-2016: Pilot Line Manufacturing of Nanostructured Antimicrobial Surfaces using Advanced Nanosurface Functionalization Technologies	RIA	4-6
2017	NMBP 28-2017: Pilot Lines for Manufacturing of Nanotextured surfaces with enhanced mechanical properties	IA	5-7



Work Programme 2016-2017 NMBP



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Año	Título topic	Instrumento	TRL
2017	NMBP 29-2017: Open access Pilot Lines for 3D printed and/or injection moulded polymeric or ceramic microfluidic MEMS and/including biological applications	RIA	4-6
2017	NMBP 30-2017: Paper-based electronic paper	RIA	4-6
2016	NMBP 32-016: Bioconversion of non-agricultural waste into biomolecules for industrial applications	RIA	3-5
2016	NMBP 43-2016: Analytical techniques and tools in support of nanomaterial risk assessment	RIA	4-6



Work Programme 2016-2017 NMBP



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Año	Título topic	Instrumento	TRL
2016	NMBP 44-2016: Promoting safe innovation through global consolidation and networking of nanosafety centres and strengthening the European nanosafety cooperation	CSA	-
2017	NMBP 45-2017: Framework and strategies for nanomaterial characterisation, classification, grouping and read-across for risk analysis	RIA	4-6
2017	NMBP 46-2017: Advanced and realistic models and assays for nanomaterial hazard assessment	RIA	4-6
2016	NMBP 47-2016: Improving nanotechnology (KETs) skills by involving multiple stakeholders	CSA	-
2017	NMBP 51-2017: Governing innovation of nanotechnology through enhanced societal engagement	CSA	-



- ❖ European Technology Platform on Sustainable Mineral Resources – **ETP SMR** www.etpsmer.org
- ❖ Advanced Engineering Materials and Technologies – **EuMaT** www.eumat.eu
- ❖ Nanotechnologies for Medical Applications – **Nanomedicine** www.etp-nanomedicine.eu
- ❖ European Steel Technology Platform – **ESTEP** www.cordis.europa.eu/estep
- ❖ European Construction Technology Platform – **ECTP** www.ectp.org
- ❖ Sustainable Chemistry – **SusChem** www.suschem.org
- ❖ Future Manufacturing Technologies – **MANUFUTURE** www.manufuture.org





Webs de interés

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❖ Info HORIZON 2020:

<http://ec.europa.eu/programmes/horizon2020/>

www.eshorizonte2020.es

❖ Portal del Participante:

<http://ec.europa.eu/research/participants/portal>

❖ H2020 Online manual:

<https://ec.europa.eu/research/participants/portal/desktop/en/funding/guide.html>

❖ HYPERION – Consultora Proyectos Europeos:

www.hyperion.ie

❖ CORDIS:

http://cordis.europa.eu/fp7/home_en.html

❖ Finance help desk:

www.finance-helpdesk.org

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Gracias por vuestra atención

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