

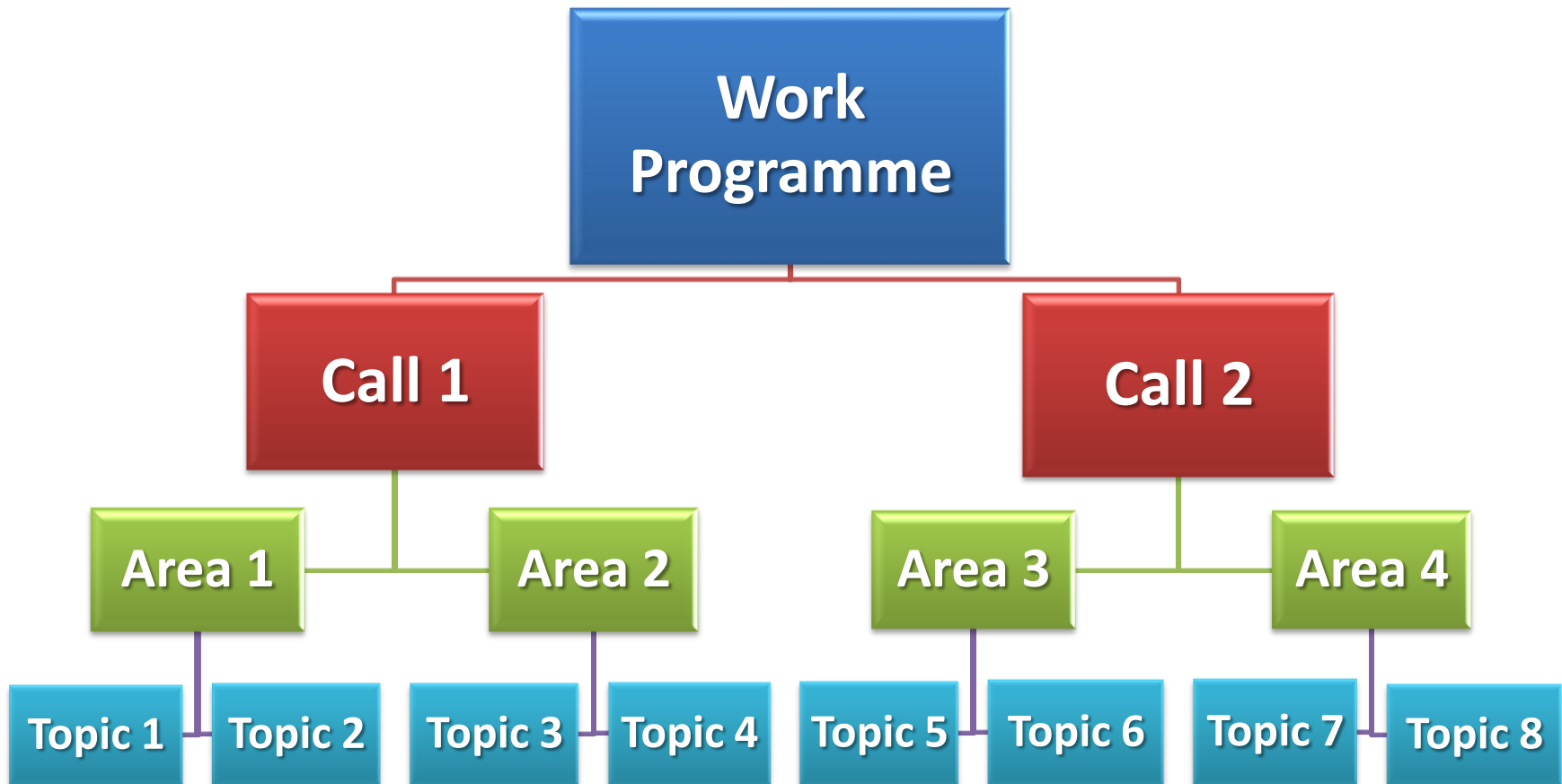
Horizon 2020

CALLS 2015

Napoli, 03.03.2015
Sede INFN-NA

Dr. Pierluigi Riviaccio
Consorzio Technapoli/APRE Campania

Work Programme, calls and topics



Excellent Science

- **European Research Council**
 - Frontier research by the best individual teams
- **Future and Emerging Technologies**
 - Collaborative research to open new fields of innovation
- **Marie Skłodowska Curie actions**
 - Opportunities for training and career development
- **Research infrastructures** (including e-infrastructure)
 - Ensuring access to world-class facilities

Industrial Technologies

- **Leadership in enabling and industrial technologies**
 - Information and Communication Technologies (ICT), nanotechnologies, materials, biotechnology, manufacturing, space
- **Access to risk finance**
 - Leveraging private finance and venture capital for research and innovation
- **Innovation in SMEs**
 - Fostering all forms of innovation in all types of SMEs

Societal Challenges

- **Health, demographic change and wellbeing**
- **Food security, sustainable agriculture, marine and maritime research & the bioeconomy**
- **Secure, clean and efficient energy**
- **Smart, green and integrated transport**
- **Climate action, resource efficiency and raw materials**
- **Inclusive, innovative and reflective societies**
- **Security society**

European Institute of Innovation and Technology (EIT)

Spreading Excellence and Widening Participation

Science with and for society

Joint Research Center (JRC)

Work Programme, calls and topics

HORIZON 2020 – WORK PROGRAMME 2014-2015
 Health, demographic change and wellbeing

Personalising health and care	7
Understanding health, ageing and disease	7
➔ PHC 1 – 2014: Understanding health, ageing and disease: determinants, risk factors and pathways	7
➔ PHC 2 – 2015: Understanding diseases: systems medicine	8
➔ PHC 3 - 2015: Understanding common mechanisms of diseases and their relevance in co-morbidities.....	9
Effective health promotion, disease prevention, preparedness and screening	10
➔ PHC 4 – 2015: Health promotion and disease prevention: improved inter-sector co-operation for environment and health based interventions	10

Understanding the call topics: example

PHC 2 – 2015: Understanding diseases: systems

Specific challenge: The development of new improved understanding of the often very complex (bio) medicine approaches have the potential to transform a variety of biological and medical research data. A collaborative approach is required to assemble the biology, medicine, mathematics, computational and medicine approaches.

Scope: Proposals should focus on new avenues phenotypes in multifactorial diseases and/or development/optimisation and/or application of use of biomedical and clinical data to produce or refine computational and mathematical approaches. The validated in well-phenotyped patient cohorts, take potential thoroughly investigated.

The Commission considers that proposals requesting EUR 4 and 6 million would allow this specific. Nonetheless, this does not preclude submission amounts.

Expected impact: This will provide:

- Leverage of existing investments in Europe
- New directions for better disease detection
- Systems medicine tools and approaches that which represent an improvement over existing

Type of action: Research and Innovation action

- 'PHC 2 – 2015'
- 'Specific challenge'
- 'Scope'
- 'Expected impact'
- 'Type of action'

Horizon 2020

Il nuovo Participant Portal



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Funding Opportunities

FUNDING GUIDE

Find the European Union funding opportunities and search for new or closed calls, grouped by the following programmes:

- Horizon 2020 - EU research funding from 2014
- Seventh Framework Programme (FP7)
- Competitiveness and Innovation Framework Programme (CIP)
- other research and innovation programmes

Horizon 2020

Horizon 2020 is the new EU funding programme for research and innovation running from 2014 to 2020 with a €70 billion budget. The first calls for proposals for Horizon 2020 are envisaged for **December 2013**. Its simplified rules and submission and grant management tools should facilitate participants' tasks. For practical guidance, see the [H2020 Funding Guide](#).

H2020 supports [SMEs](#) with a new instrument that runs throughout various funded research and innovation fields, so it should be easy for SMEs to find opportunities in many calls.

H2020 also aims to enhance EU [international research cooperation](#) so there are more opportunities for Third Country participation.

Having built H2020 around the main societal challenges like an ageing population, food security, energy efficiency, the EU attaches high importance to embed [socio-economic sciences and humanities](#) into the work programme.

Another important priority of the Commission is to ensure [gender](#) is embedded in the design of Horizon 2020 project proposals.

COSME

Programme for the Competitiveness of Enterprises and SMEs (COSME) will run from 2014 to 2020, with a planned budget of €2.3bn. It will facilitate SME access to finance, create supportive environment for business creation, help small businesses operate outside their home countries and improve their access to markets.

Other calls

This page lists additional research activities, initiatives executed by several Member States or joint programmes, co-funded calls, thematic opportunities, and intergovernmental actions.

Call updates

The page displays the latest updates to the calls, like change of deadlines.

ec.europa.eu/research/participants/portal

- Stay informed
- RSS feed ⓘ
 - iCal ⓘ
 - Email notification ⓘ

FP7 and CIP are previous instruments to fund research and innovation activities in Europe for the period 2007 to 2013. You can view closed calls information of these programmes.

relevant to your activities.



RESEARCH & INNOVATION

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SEARCH TOPICS

FUNDING GUIDE

Search keywords:

Search

Horizon 2020 predefined criteria:

[Cross-cutting Key-Enabling Technologies \(KETs\)](#) ⓘ

[International cooperation](#) ⓘ

[ERA-NET](#) ⓘ

[SME Instrument](#) ⓘ

[Gender](#) ⓘ

[Socio-economic science and Humanities](#) ⓘ

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SEARCH TOPICS

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Search keywords:

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- [Cross-cutting Key-Enabling Technologies \(KETs\)](#)
- [International cooperation](#)
- [ERA-NET](#)
- [SME Instrument](#)
- [Gender](#)
- [Socio-economic science and Humanities](#)

3 results

Filter options:

- Open calls
- Closed calls
- Forthcoming calls

Sort by:

- Publication date
- Deadline
- Title
- Call ID

Topic: [SFS 7 - 2014: Optimising external nutrient inputs in intensive crop production systems in Europe](#)
European crop production is facing more and more difficulties in remaining competitive in the global market for many reasons. One of these reasons is certainly the high cost of external nutrient inputs necessary [More...](#)

Call title: Sustainable Food Security **Status:** Open

Call identifier: [H2020-SFS-2014/2015](#) **Deadline:** 2014-03-18

Topic: [WATER 2 – 2014/2015: Integrated approaches to water and climate change](#)
The rising demands of a growing world population for food, water, materials and energy will put increasing pressures on land use, water resources and ecosystems. Energy consumption is expected to increase, [More...](#)

Call title: Water Innovation: Boosting its value for Europe **Status:** Open

Call identifier: [H2020-WATER-2014/2015](#) **Deadline:** 2014-03-18

Topic: [WATER 5 – 2014/2015: Strengthening international R&I cooperation in the field of water](#)
Developing countries, especially in Africa, are facing serious challenges for sustaining its development. Sustainable water supply and sanitation is fundamental to the food security, health, survival [More...](#)

Call title: Water Innovation: Boosting its value for Europe **Status:** Open

Call identifier: [H2020-WATER-2014/2015](#) **Deadline:** 2014-03-18

Stay informed

RSS feed

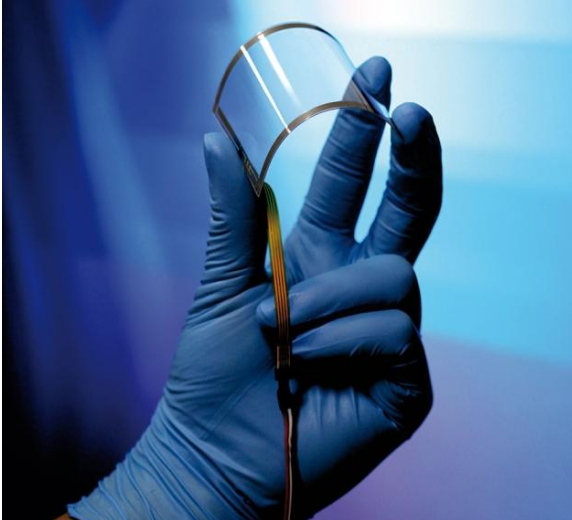
iCal

Email notification

Finding calls 2015

1. Future and Emerging Technologies
2. Leadership in enabling and industrial technologies
3. EURATOM

1. Future and Emerging Technologies (LEIT):



Excellent Science

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Excellent Science budget



22.274 M €

	EC	EP	Compromise - Current -
European Research Council	15.008	13.268	13.095
Future and Emerging Technologies	3.505	3.100	2.696
Marie Skłodowska-Curie Actions	6.503	5.572	6.162
Research Infrastructures	2.802	2.478	2.488

FET in Horizon 2020

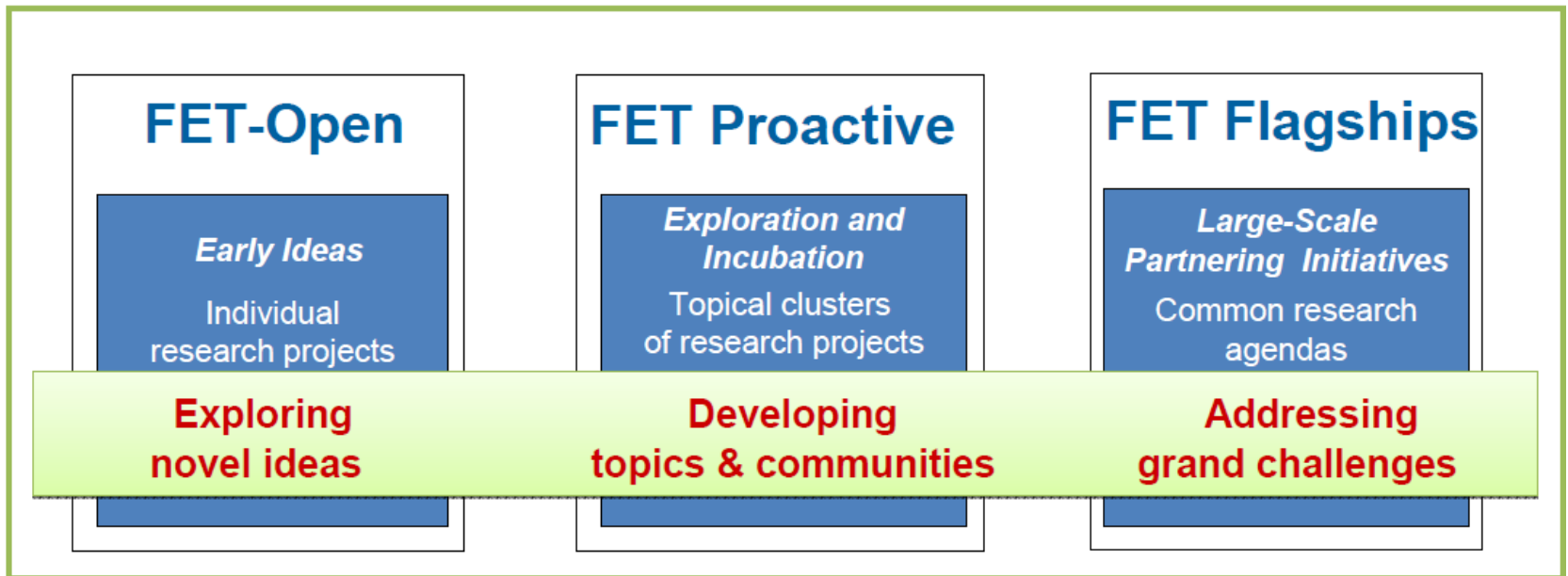
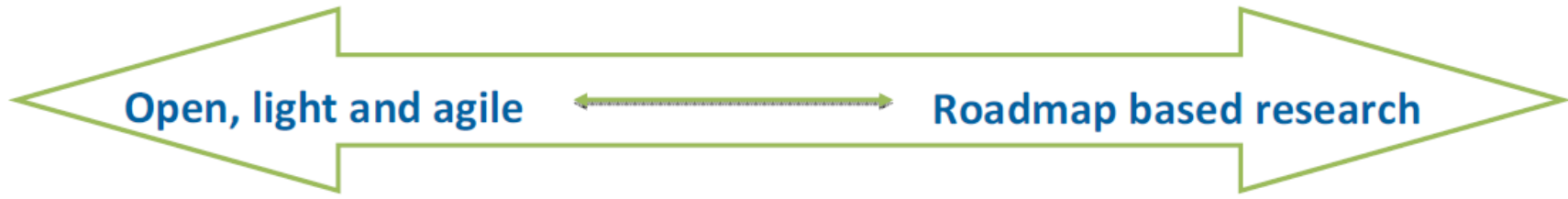
"Future and emerging technologies shall support collaborative research in order to extend Europe's capacity for advanced and paradigm-changing innovation. It shall foster scientific collaboration across disciplines on radically new, high-risk ideas and accelerate development of the most promising emerging areas of science and technology as well as the Union wide structuring of the corresponding scientific communities."

Pathfinding Europe's technological future

FET's Mission

- Seeds of future industrial leadership and potential solutions for societal challenges by:
 - ✓ Fostering the emergence of radically new technology areas
 - ✓ Building innovation eco-systems around them
- To turn Europe into the best environment for research on future and emerging Technologies
 - ✓ including facilitating the wider training of researchers in new areas.

FET Funding Schemes



FET Open

- FET Open supports **early-stage joint science** and technology research around new ideas for radically new future technologies.
- It will build up a diverse portfolio of targeted projects to explore a wide range of new technological possibilities, inspired by cutting-edge science, unconventional collaborations or **new research and innovation practices**.
- Early detection of promising new areas, developments and trends, along with attracting new bold-visioned and high-potential research and innovation players will be key.
- FET-Open represents **40%** of the overall FET budget in Horizon 2020.

FET Proactive

- FET Proactive nurtures emerging themes and communities by addressing a number of promising exploratory research themes with the potential to generate a critical mass of inter-related projects that, together, make up a broad and multifaceted exploration of the themes and build a European pool of knowledge and excellence.
- Through this line of activity FET engages in the coordinated **exploration of a new theme, as well as in the consolidation of promising future technologies** to be taken up by industry and society.
- Under its proactive calls the present WP supports three themes selected from a wide bottom-up consultation and a fourth one (H2020-FETHPC) implementing part of the HPC strategy elaborated in the context of the **HPC Public-Private Partnership** by ETP4HPC3.

FET Flagships

- ***FET Flagships are highly ambitious, large-scale, long-term, science-driven, goal oriented, roadmap-based research initiatives, which will:***

- ✓ provide strong scientific, technological and IPR basis for establishing areas of European leadership and bringing substantial benefits for society
- ✓ help overcome fragmentation and increase the impact of European research and innovation efforts

- ***and which will require:***

- ✓ **cooperation** among a range of scientific communities/disciplines, with industries and with the involvement of representatives from the civil society
- ✓ **a long-term commitment** of all key stakeholders sharing a common scientific vision and under a strong leadership
- ✓ **a joint effort of EU and national programmes** to provide a large financial support (~ 100 M€/year) over a long period (~10 years)

FET

Calls 2015

FET OPEN RIA (1 Topic)

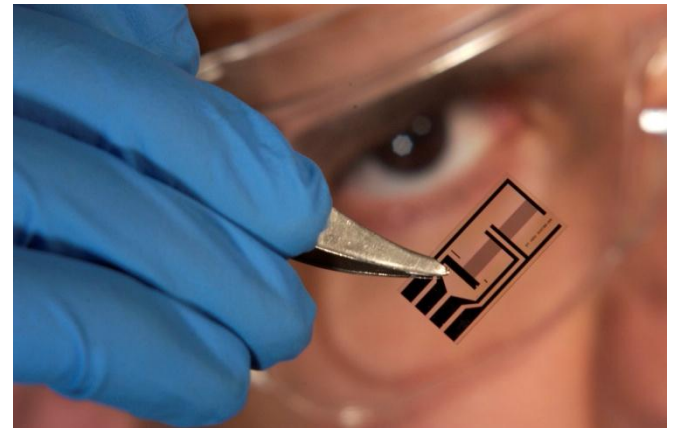
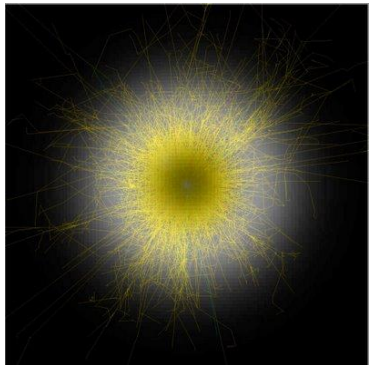
- Deadlines: 31.03.2015, 29.09.2015
- Contribution: 2 – 4 M€
- Total budget: 38.5M€ + 38.5 M€

FET OPEN CSA (2 Topics)

- Deadlines: 31.03.2015, 29.09.2015
- Contribution: 0.3 – 0.5 M€
- Total Budget: 1.5M€ + 1.5 M€

2. Leadership in enabling and industrial technologies (LEIT):

- Nanotechnologies, Advanced Materials and Production
- Micro and nano electronic technologies, Photonics



Nanotechnologies, Advanced Materials and Production

- This call includes topics on nanotechnologies, advanced materials, production and support actions for the deployment of KETs.
- It includes contributions to cross cutting KETs, and addresses both KETs for multiple applications, and KETs for applications in specific societal challenges or focus areas; as well as safety, outreach, structuring, business models and other innovation issues

Micro and nano electronic technologies, Photonics

- The objective is to take advantage of Europe's S&T excellence in these two ICT KETs to strengthen the competitiveness and market leadership of the related industries and develop innovative solutions to societal challenges.
- The photonics topics cover research and innovation activities under the photonics public private partnership (PPP)

Industrial Leadership *Calls 2015*

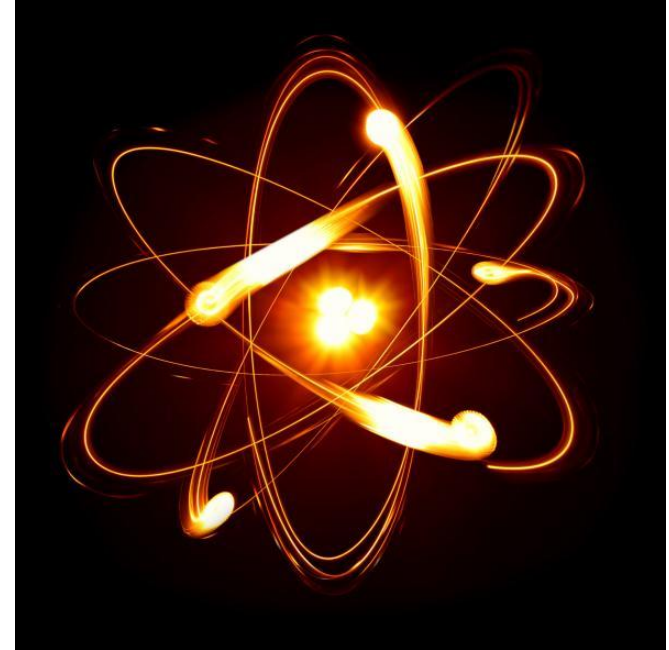
Nanotechnologies, Advanced Materials and Production

- 18 Topics
- Deadline: 26.03.2015

Micro and nano electronic technologies, Photonics

- 3 Topics
- Deadline: 14.04.2015

3. EURATOM



EURATOM

- Euratom Research and Training Programme
 - ✓ Years 2014-2018
 - ✓ Integral part of EC Horizon 2020 R&D programme
- **General objective:**
 - ✓ Improve nuclear safety, security & radiation protection
 - ✓ Contribute to the long-term decarbonisation of the energy system, in a safe, efficient and secure way

EURATOM direct actions objectives within Horizon 2020:

1. Improve nuclear safety including: reactor and fuel safety, waste management & decommissioning, and emergency preparedness;
2. Improve nuclear security
3. Raising Excellence in the nuclear science base for standardisation;
4. Foster knowledge management, education and training;
5. Support the policy of the Union on nuclear safety and security

Thanks for your attention

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