

International Cooperation in the Thematic Areas: «Food Security & Biotechnology»

Dr. Irina SHAROVA
Russian National Contact Point on
«Food, Agriculture and Biotechnology»
Research Center of Biotechnology RAS,
Moscow, Russia



NCP «Food security»

<http://bio-economy.ru/>



A.N. BACH
INSTITUTE OF
BIOCHEMISTRY
RAS (INBI)



- Russian NCP was established by the Russian Ministry of Education and Science on the basis of A.N. Bach Institute of Biochemistry of Russian Academy of Sciences in May 2003
- The main objective is promotion of Russian science integration into the European Research Area through participation in the Framework Programme
- Full name NCP in the European research framework programme Horizon 2020 (2014-2020): «**Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bioeconomy**»

NCP structure



- Human recourses (project managers)
INTAS, TESIS, FP6/7 ACTIVITIES
- **Technology Platforms**, expert groups –
International cooperation Working Group of **Russian Technology Platform “Bio-industry and Bio-resources”** (BioTech2030)
- **Working Group**
- **Database** of Potential Participants
- Dissemination System - **NEWS letters**
- **Information materials** (Flyer, Poster, Leaflet)
- **Regions** Information points
- **Website** in English and in the Russian
- **International Symposium** , **Forums**
- **Training seminars**, **INFO-days**

Societal challenges

Proposed funding
(million EUR, 2014-2020)*



Health, demographic change and wellbeing	7 472
Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy	3 851
Secure, clean and efficient energy *	5 931
Smart, green and integrated transport	6 339
Climate action, environment, resource efficiency and raw materials	3 081
Inclusive, innovative and reflective societies	1 310
Secure societies	1 695
<i>Science with and for society</i>	462
<i>Spreading excellence and widening participation</i>	816

Horizon 2020 Calls:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/index.html>



Horizon 2020



Societal Challenge covers three calls for proposals under which projects can apply for funding:

- Sustainable Food Security
- Blue Growth
- Innovative Sustainable and Inclusive Bioeconomy

In addition, the call under **Leadership** in enabling and industrial technologies will also be presented:

- LEIT - Biotechnology

Horizon 2020 work programme for 2016-2017 published



The Horizon 2020 Work Programmes 2016-2017 are now available in pdf on the Participant Portal under the folder Work Programmes/2016-17 at:

http://ec.europa.eu/research/participants/portal/desktop/en/funding/reference_docs.html#h2020-work-programmes-2016-17

Societal Challenge 2

Four Calls 2016-17



**Sustainable
food
security**

**Blue
Growth**

**Rural
Renaissance**

**Bio-based
innovation for
sustainable
goods and
services**



CALL Sustainable Food Security (SFS)



Putting nature-based and resource-efficient approaches and a research investments



Focusing on climate smart agro-food chains



Putting nutritious and healthy food from land and seas on our plates



Going global: joint actions with Africa and China

Sustainable food security

TOPICS summary



Resilient, resource-efficient value chains

- Abiotic stresses
- Biotic stresses
- Operationalising the resilience concept
- Optimising use of critical inputs
- Specific actions for organic farming
- Sustainable fisheries and aquaculture
- ERANETS/ SCAR

25 topics 206 M€

Environment Climate-smart primary production

- Carbon and nitrogen cycling in agro-ecosystems
- Specific production systems
- Ecosystem services
- Socio-economics, demography and resilience of farms

7 topics 64 M€

Competitive food industry

- Resilient, sustainable and transparent value chains
- Food losses
- Resource efficient processes in food chain
- Food packaging; labelling

3 topics 24 M€

Healthy food and diets for all

- One Health co-fund (zoonoses)
- Dietary choices of children; consumers and food safety;
- Diet/impulsivity /compulsivity; obesity; sweeteners

5 topics 85,5M€

Blue Growth TOPICS summary



Boosting innovation for emerging Blue Growth activities

- Large-scale integrated algae bio-refineries
- High value-added specialised vessel concepts
- Multi-use of the oceans marine space, offshore and near-shore:
 - Legal and environmental issues
 - Enabling technologies
- ERANET cofund on Marine technologies

5 topics 57 M€

Linking healthy oceans and seas with healthy people

- Interaction between people, oceans and seas:
- Blue green innovation for clean coasts and seas
- Innovative sustainable solutions for improving the safety and dietary properties of seafood

3 topics 21 M€

The Arctic Dimension

- An integrated Arctic observing system
- Impact of Arctic changes on the weather and climate of the Northern Hemisphere
- Climate impacts on Arctic permafrost and its socio-economic impact, with a focus on coastal areas

3 topics 40 M€

Valorising the Mediterranean Sea basin

- Towards an integrated Mediterranean Sea Observing System
- Support to the BLUEMED Initiative: Coordination of marine and maritime research and innovation activities in the Mediterranean

2 topics 11 M€

CALL Rural Renaissance (RUR)



Policies & governance

Territorial interactions: enhance synergies, adapt policies, foster cross-sectorial cooperation

- Rural-urban
- Land-sea

• **'Towards 2030': policies and decision tools for an integrated management of natural resources**

• **Economic benefits from ecosystem services:**

- Farming & drinking water
- Forest ecosystem services (IA)

5 topics 32 M€

Value chains & business models

• **Crop diversification systems for delivery of food, feed, industrial products and ecosystem services**

• **Resource-efficient and profitable industrial crops on marginal lands**

• **Demonstration of integrated logistics for food and non-food applications**

• **Business models for modern rural economies**

4 topics 47 M€

Innovation and skill development

• **Thematic networks**

• **Experimental and demonstration farms:**

• **Building a future science and education system**

• **Advisors' role in AKIS**

• **Working together in EU countries where cooperation level is low**

• **Optimising interactive innovation projects and policies for innovation**

7 topics 49 M€

Call

Bio-based innovation for sustainable goods and services (BB)



TOPICS summary

Securing Sustainable biomass supply

- Tree breeding strategies and tools
- Forest production systems
- Sustainability schemes
- Data on bio-based industries and products

- Circular economy – Potential of urban waste

Building the bio-based markets of the future

- Mobilisation and mutual learning
- Widening regional dimension

Supporting Russian participation in Horizon 2020



COUNTRY PAGE FOR THE PARTICIPANT PORTAL: RUSSIAN FEDERATION

http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_lo_calsupp_russia_en.pdf

- MES - Funding support for Russian Horizon 2020 participants in accordance with its own call procedures (Russian Federal Programme (FTP) "R&D in Priority Areas of Development of the Russian S&T Complex 2014-2020").
(Activity 2.2 **Support of R&D in the framework of cooperation with the EU countries**)
- Russian Foundation for Assistance to Small Innovative Enterprises (FASIE) may be able to support the participation of small innovative Russian enterprises in Horizon 2020 projects

Federal Targeted Program

«R&D for priority areas of the development of S&T complex of Russia» for the 2014—2020



The Ministry of Education and Science of the Russian Federation

Activity Streams

Section 2

International cooperation

Activity 2.1

Research in the framework of international multilateral and bilateral cooperation

Activity 2.2

Support of R&D in the framework of cooperation with the **EU countries**

Activity 2.3

Participation in large-scale international scientific and scientific-technological events

2.2 Support of R&D in the framework of cooperation with the EU countries



Поддержка исследований в рамках сотрудничества с государствами — членами Европейского союза

Call with EU – Supporting research in priority areas with the participation of research institutions and universities in the EU Member States in the framework of multilateral cooperation in the framework programs of the EU

Bilateral Calls - Selection of projects for research in priority areas with the participation of research institutions and universities (MES EU funding agency)

ERA NET Rus -Research in the field of nanotechnology, environment / climate change, medicine research organizations and universities in EU Member States in the framework of the ERA-NET + Rus

Horizon 2020 - Supporting research in priority areas with the participation of research institutions and universities in the EU Member States in the framework of multilateral cooperation in the “Horizon 2020 “program of the EU.

- ERA-IB 2 (Towards an ERA in Industrial Biotechnology) – <http://www.era-ib.net>



- EuroTransBio – <http://www.eurotransbio.eu>.



- ERA-SME - <http://www.era-sme.net/>



Российско-Германский форум по биоэкономике



Подписание Соглашение между
Российским и германским
кластером CLIB2021



Possible ways of cooperation



- Within the Framework Programme “Horizon 2020”- Activity 2.2 Federal Targeted Program



- ERA-NET mechanisms: ERA-IB, EuroTransBio



- Bilateral programmes



- Regional dialogue

- Cooperation between individual Universities, Research Centers, Companies, SME



- Cooperation on the level of National Technology Platforms, Clusters



Dr. Irina Sharova
sharova@inbi.ras.ru
<http://bio-economy.ru/>