EU FUNDING OPPORTUNITIES

Ana Palanca
R&D DEPARTMENT AIMPLAS
apalanca@aimplas.es
About AIMPLAS
- Presentation
- R&D Lines

EU Funding Opportunities
- Key Concepts
- H2020
- Other funding opportunities

Successful EU Funded Projects
- BISIGODOS
- BIOREFINE-2G
What is AIMPLAS?

AIMPLAS is a **Technology Centre** with more than 20 years of experience helping companies in the plastic sector.
Resources

We are a team of more than 110 highly qualified professionals.

Over 8,500 m² facilities with state-of-the-art equipment and instrumentation.
More than 20 pilot plants for plastic material Processing:

<table>
<thead>
<tr>
<th>THERMOPLASTICS</th>
<th>COMPOUNDING</th>
<th>CO-ROTATING TWIN SCREW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>COUNTER-ROTATING TWIN SCREW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PLANETARY ROLLER EXTRUDER</td>
</tr>
<tr>
<td></td>
<td>EXTRUSION</td>
<td>FILM BLOWING</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FLAT SHEET</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FOAMS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PIPE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROFILE</td>
</tr>
<tr>
<td></td>
<td>INJECTION</td>
<td>CONVENTIONAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MULTICOMPONENT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MICRO-INJECTION</td>
</tr>
<tr>
<td></td>
<td>BLOW MOULDING</td>
<td>EXTRUSION BLOW MOULDING</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PREFORM BLOWING</td>
</tr>
<tr>
<td></td>
<td>COMPRESSION</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RECYCLING</td>
<td>PULTRUSION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RTM - INFUSION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PU FOAMING RIM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SOLID SURFACE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MICROWAVE CURING</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>COMPRESSION</td>
</tr>
</tbody>
</table>
Global expertise across the whole plastics value chain:

1. Production and/or distribution of plastic raw materials
2. Production and/or commercialization of semi-manufactured raw materials “COMPOUNDING”
3. Manufacturing / Processing
4. End users
5. Recovery of plastic waste
R&D Lines

1. Development of polymeric materials
2. Improving transformation processes
3. Product development
101 R&D projects

35 European
66 National

260 Companies
191 SMEs

Over €6.8 million economic return to companies

2013 DATA
KEY CONCEPTS EU FUNDING

• Problems resolution
• Transnational EU Impact
• Excellence - Impact - Innovation - Competitiveness - Value Chain - Partnership
• Novelty - Progress beyond the state-of-the-art
• Shared Resources and Knowledge
• Business Model > Exploitation Plan
• SME oriented
## OVERVIEW

<table>
<thead>
<tr>
<th>1. <strong>H2020</strong></th>
<th>€ 77,028m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Other funding opportunities</strong></td>
<td></td>
</tr>
<tr>
<td>2.1 Co-funded activities (ERA-NETs; European Joint Programmes)</td>
<td></td>
</tr>
<tr>
<td>2.2 European Institute of Innovation and Technology (EIT)</td>
<td></td>
</tr>
<tr>
<td>2.3 EUREKA-funding for technology projects</td>
<td></td>
</tr>
<tr>
<td>2.4 COST-funding for R&amp;I networking</td>
<td></td>
</tr>
<tr>
<td>2.5 LIFE+</td>
<td></td>
</tr>
</tbody>
</table>
1. What is Horizon 2020?

Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over 7 years (2014 to 2020) – in addition to the private investment that this money will attract. It promises more breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market.
Three Pillar Structure

Biannual work programmes

HORIZON 2020
€70.2 billion

Excellent Science
- ERC
- FET
- MSCA
- ERI

Industrial Leadership
- Enabling and industrial technologies
- Access to risk finance
- Innovation in SMEs

Societal Challenges
- Health
- Food
- Energy
- Transport
- Climate and resources
- Inclusive society

European Institute of Innovation and Technology (EIT)

Non-nuclear direct actions of the Joint Research Centre (JRC)
### Three Pillar Structure - Budget

<table>
<thead>
<tr>
<th>I. Excellent Science:</th>
<th>31.73 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. European Research Council</td>
<td>17.00</td>
</tr>
<tr>
<td>2. Future and Emerging Technologies</td>
<td>3.50</td>
</tr>
<tr>
<td>3. Marie Curie actions</td>
<td>8.00</td>
</tr>
<tr>
<td>4. Research infrastructures</td>
<td>3.23</td>
</tr>
<tr>
<td><strong>II. Industrial Leadership:</strong></td>
<td>22.09 %</td>
</tr>
<tr>
<td>1. Leadership in enabling and industrial technologies</td>
<td>17.60</td>
</tr>
<tr>
<td>2. Access to risk finance</td>
<td>3.69</td>
</tr>
<tr>
<td>3. Innovative small and medium-size enterprises</td>
<td>0.80</td>
</tr>
<tr>
<td><strong>III. Societal Challenges:</strong></td>
<td>38.53 %</td>
</tr>
<tr>
<td>1. Health, demographic change and wellbeing</td>
<td>9.70</td>
</tr>
<tr>
<td>2. Food quality and marine research</td>
<td>5.00</td>
</tr>
<tr>
<td>3. Energy</td>
<td>7.70</td>
</tr>
<tr>
<td>4. Transport</td>
<td>8.23</td>
</tr>
<tr>
<td>5. Climate action, resources and raw materials</td>
<td>4.00</td>
</tr>
<tr>
<td>6. Inclusive societies</td>
<td>1.70</td>
</tr>
<tr>
<td>7. Secure societies</td>
<td>2.20</td>
</tr>
<tr>
<td>Spreading excellence and widening participation</td>
<td>1.06 %</td>
</tr>
<tr>
<td>Science with and for society</td>
<td>0.60 %</td>
</tr>
<tr>
<td>European Institute of Innovation and Technology (EIT)</td>
<td>3.52 %</td>
</tr>
<tr>
<td>Joint Research Centre: non-nuclear direct actions</td>
<td>2.47 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100 %</td>
</tr>
</tbody>
</table>
Rules for participation

1. A single set of rules: Covering all research programmes and funding bodies

2. Eligible costs rate 70-100% of the total (Indirect eligible costs: a flat rate of 20% of direct eligible costs)


4. International participation: facilitated but better protecting EU interests
General Information - Work Programmes


Sustainable Food Security

H2020-SFS-2015-2

Opening Date: 25-07-2014
Publication date: 11-12-2013
Deadline Date: 03-02-2015 17:00:00 (Brussels local time)
Stage 2: 11-06-2015 17:00:00 (Brussels local time)
Main Pillar: Societal Challenges
OJ reference: C361 of 11 December 2013

Total Call Budget: €104,000,000
Status: Open

Topic: Biological contamination of crops and the food chain

Specific challenge: The occurrence of biological contamination in various crops is of major concern as it has major implications for food and feed safety, food security and international trade. Worldwide, it is estimated that mycotoxins are responsible for losses of up to 5-10% of crop production. Contaminations are due to a series of events including weather conditions, possible climate change effects, land use, crop management and varieties as well as harvest and post-harvest techniques. Integrated approaches rather than isolated solutions are required to effectively control the incidence of mycotoxins in crops and reduce contamination throughout the feed and food chains.
General Information- Work Programmes

SPECIFIC CHALLENGE

SCOPE: **TRL / BUDGET**

EXPECTED IMPACT: **QUANTIFIED**

<table>
<thead>
<tr>
<th>ACTION</th>
<th>FUNDING RATE</th>
<th>DURATION</th>
<th>AIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIA</td>
<td>100%</td>
<td>36-48 months</td>
<td>Collaborative</td>
</tr>
<tr>
<td>IA</td>
<td>70%</td>
<td>30-36 months</td>
<td>Produce plans</td>
</tr>
<tr>
<td>CSA</td>
<td>100%</td>
<td>12-30 months</td>
<td>No research</td>
</tr>
</tbody>
</table>
| SME    | -Lump sum €50k/ 6 months  
-1-2.5€ / 1-2 years (70% )  
-No funding | 24-36 months | Demo + Market replication |
| FTI    | 70%          | 24-36 months   | Advanced validation     |
Fast track to innovation (pilot in 2015)

• Provides funding to close-to-market innovation activities in any area of technology or application

• Total budget of €200 million (2015-2016)

• Project profile
  • 3 to 5 participants
  • Minimum 3 countries involved
  • 2-3 years duration

• Industry involvement:
  – At least 60% of the budget to industry participants
  – Or 2 industry participants in a consortium of 3-4 partners, or 3 industry participants in a consortium of 5 partners.

• Deadlines: 29th April, 1st September, 1st December 2015
SME Instrument

- Provides funding to close-to-market activities in the different topics described in the Work Programme

- Total budget of €2800 million (2014-2020)

- Project profile
  - Phase 1: Business Plan. Lump Sum 50k€
  - Phase 2: 1-2.5€
  - Phase 3: Access to risk finance
  - Only SMEs (subcontracting allowed)
  - Topics detailed in the WP

- Deadlines: 17th June, 17th September, 16th December 2015
2. Other funding opportunities:
2.1 ERA-NET ACTIONS

• ERA-NET actions aim at coordinating national and regional research programmes by developing joint activities co-funded under H2020

• As a research institute, enterprise or individual you can find funding opportunities in these transnational calls.

2. Other funding opportunities:
2.1 JTIs (Joint Technology Initiatives)

• JTIs address strategic areas where research and innovation are essential to European competitiveness.
• Independent legal entities manage research projects in an integrated way, with industry joining forces with other stakeholders

• Initiatives:


**Aeronautics and Air Transport (Clean Sky)** [www.cleansky.eu](http://www.cleansky.eu)

**Fuel Cells and Hydrogen (FCH)** [www.fch-ju.eu](http://www.fch-ju.eu)

2. Other funding opportunities: 2.2 European Institute of Innovation and Technology (EIT)

• Through the Knowledge and Innovation Communities (KICs) the EIT develops and tests a new model of how innovation is approached, managed, financed and delivered in Europe. The KICs offer an opportunity for top innovation players to be part of a highly collaborative community.

• Budget is set at 2 711.4 million (2014-2020)

• Future KICs:
  2016
  Added-value manufacturing
  Food4Future - sustainable supply chain from resources to consumers
  2018
  Urban mobility

2. Other funding opportunities:
2.3 EUREKA

- EUREKA aims to provide funding access to market-oriented new technologies through a cross-European exchange

- Budget is set at 2,711.4 million (2014-2020)

- Participants: EUREKA EU Members + EUREKA Associated countries: Canada, Republic of Korea and South Africa

- Information: National Information Points (NIPs)

- [http://www.eurekanetwork.org/calls](http://www.eurekanetwork.org/calls)
2. Other funding opportunities: 2.3 EUROSTARS

- Eurostars is a programme that supports research-performing SME

- Budget is set at €1.14 billion (National + EU funds)

- Project profile
  - 3 to 4 participants
  - 2 to 3 countries involved
  - 29 Month duration
  - 1.4M€
  - Main partner must be an R&D – performing SME

- Deadline: 17th September 2015

- Funding for Eurostars participants is provided on a country-by-country basis

- www.eurostars-eureka.eu
2. Other funding opportunities: 
2.4 COST

• COST funds European networks of researchers

• COST Action Networking tools: meetings, short-term scientific missions, training schools, dissemination and publications

• Budget is set at 300 million (2014-2020)

• 5 Minimum number of COST countries to start a COST Action


• www.cost.eu
2. Other funding opportunities: 2.5 LIFE + 2015 Call (the Financial Instrument for the Environment)

• The general objective of LIFE is to contribute to the implementation, updating and development of EU environmental and climate policy and legislation by co-financing projects with European added value.

• Multiannual work programme for 2014-2017

• Budget for the period (2014-2017) is set at €3.4 billion

• Deadline: September-October 2015

• Funding: co-financing rate is mainly 60%

Successful EU funded projects
BISIGODOS Project

High value-added chemicals and bioresins from algae biorefineries produced from CO₂ provided by industrial emissions

CONSORTIUM
AIMPLAS
BANGOR
3V TECH
PDC
PHYCOSOURCE
BECKERS
SUNCHEMICAL
CROMOGENIA
CRODA
GRUENE
CASPEO
VTT
UNIVERSITY OF WARWICK
BFS

www.bisigodos.eu

(FP7/2007-2013) under grant agreement n° [613680].
BISIGODOS Project

High value-added chemicals and bioresins from algae biorefineries produced from CO$_2$ provided by industrial emissions

Project Objectives

- Micro-algae strains optimization
- Photo-bioreactors optimization
- Reduction of CO$_2$ industrial emissions up to 65% by means of producing high-added value products
- Algae derived components production for applications such as: amino acids for food products, conductive polymer coatings, bio-resin for water-based inks, bio-surfactants for hair-care applications and bio-PU adhesives manufacturing.
The goal of the BioREFINE-2G project is to develop and demonstrate a novel 2nd generation biorefinery concept using industrial yeast as production organism for the production of diacids and diacid derived biopolymers from side and waste streams rich in C5 sugar and mixtures of C5/C6 sugars.
Development of 2\textsuperscript{nd} Generation Biorefineries
Production of Dicarboxylic Acids and Bio-based Polymers
Derived Thereof

CONSORTIUM
AIMPLAS
DTU
LUND UNIVERSITY
BORREGAARD
BIOTREND
WIP
IFU-HAMBURG
ECOPOL

www.biorefine2g.eu

FP7/2007-2013) under grant agreement n° [613771]
Thank you

Contact us: www.aimplas.net; info@aimplas.es
Phone + 34 96 136 60 40

R&D: Ana Palanca: apalanca@aimplas.es

www.linkedin.com/company/aimplas
Twitter: @aimplas