CoACH – ETN

Advanced glasses, Composites And Ceramics for High growth industries

Milena Salvo
Politecnico di Torino

Marie Skłodowska-Curie Actions: Giornata Nazionale di Lancio dei Bandi 2016-17 in Horizon 2020
Strengthening the international scientific community @POLITO

Dedicated actions to attract international top professors and researchers and to promote young talented researchers

Among others:

- **Project ERC@POLITO** to support top researchers who apply for a European Research Council Grant at the Politecnico di Torino
- **starting grants** for leading international scientists moving to POLITO
- open call for experienced researchers of outstanding stature in international training and collaborative research (**Visiting Professors**)
- **Project H2020@POLITO** to enhance the participation to Horizon 2020
- dedicated funds for **transnational mobility projects** aimed at reinforcing the long-term cooperation with the best international universities
- dedicated funds for **talented young researchers** performing highly-innovative research at POLITO
- dedicated funds for **innovative laboratories for multidisciplinary research**

[COACH logo]

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POLITO most strategic mission is to create a high quality academic environment where researchers and students from all over the world can study, work and collaborate on innovative and challenging projects.

November 2013
"HR Excellence in Research"

Politecnico di Torino has been acknowledged by the European Commission for its commitment towards the implementation of the Charter and Code through the 'HR Excellence in Research' award.
Politecnico di Torino: ITNs funded in Horizon 2020

4 EUROPEAN TRAINING NETWORK
• 3 as COORDINATORS

1 EUROPEAN INDUSTRIAL DOCTORATE

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CoACH in FP7

Before CoACH …

GlaCERCo (Glass and Ceramic Composites for High Technology Applications – Initial Training Network: ended in January 2015)

> 70 papers already published in international journals, conference proceedings, a GlaCERCo special issue in AAC, 1 international patent application.

Level of satisfaction of the fellows: 94% and employment rate after the GlaCERCo training: 100% (40% in the private sector)

A new ITN project proposal with more non-academic partners: CoACH FP7-PEOPLE-2013-ITN: result 91.2/100 … reserve list

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CoACH in H2020

Re-submission: H2020-MSCA-ITN-2014

NEW template, different evaluation criteria ... we completely rewrote the proposal to adapt it to the H2020 MSCA work programme...

Result: 96.80%!

Grant Agreement n.: 642557
Start date: 01/01/2015
duration : 48 months
Total budget: 3,882,899.52
www.coach-etn.eu
## Evaluation criteria

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<thead>
<tr>
<th>Excellence</th>
<th>Impact</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of the research programme</td>
<td>• Human resources, skills, new career</td>
<td>• Work plan</td>
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<tr>
<td>• training programme</td>
<td>perspectives</td>
<td>• management</td>
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<td>• supervision</td>
<td>• doctoral training</td>
<td>• infrastructure</td>
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<tr>
<td>• interactions</td>
<td>• innovation capacity</td>
<td>• competences and complementarity</td>
</tr>
<tr>
<td>50%</td>
<td>30%</td>
<td>20%</td>
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<tr>
<td>4.9/5</td>
<td>4.7/5</td>
<td>4.9/5</td>
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</tbody>
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Excellence (4.9/5)

The quality of the research programme is excellent and its credibility very high.

The inter/multidisciplinary aspects are convincing.

Advanced materials fall within KETs
New materials for strategic thematic areas of:

**HEALTH, ENERGY, ICT and ENVIRONMENT**
Glasses, and composites for HEALTH care industries

Development, processing and characterisation of:

- Novel **glass and composite antibacterial coatings**.
- Innovative **doped glasses and glass fibres** for medical diagnostics and therapeutics in healthcare applications.
Glasses, glass-ceramics and composites for the ENERGY production and ICT industries

Development, processing and characterisation of:

- Innovative and low cost glass fibre based sensors for chemicals and new tests and modelling methods for glass fibre reinforced composites in harsh environments.
- New glass, ceramic and composite materials and synthesis routes for energy harvesting/scavenging.
- Novel glasses, glass-ceramics and ceramics for solid oxide electrolysis cell (SOEC): thin films and sealants.
Development, processing and characterisation of:

- New glass-ceramic proppants from waste for oil and gas industry
- Low cost glass, ceramic and composite materials from waste: new eco-friendly insulation materials, geopolymer based materials
The CoACH consortium

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Excellence (4.9/5)

The training programme and transferable skills are very well articulated and are of very good quality

The quality of supervision is very high

- The ESRs recruited by companies are registered for PhD at collaborating Universities
- Wide, interdisciplinary and inter-sectorial secondments plan
- Intensive complementary skills training (one of the CoACH partners provides tailored courses) → CoACH has a built-in training provision that is gradually aligned to the scientific competencies of the researchers involved and combine their scientific competency with increased business and entrepreneurial capacity

Training properly recorded and recognised

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Impact (4.7/5)

The impact of the programme on the provision of new career perspectives for ESRs is very high.

The role of the non-academic sector in the research training is very well presented and is appropriate.

- The CoACH industry-academia collaboration improves the fellows’ career prospects.
  - broad interdisciplinary and complimentary skills
  - necessary skills to work both in industry and academia.
- CoACH offers a structured high-quality research / doctoral training.
- CoACH fosters long-term collaborations between academia and non-academic sectors.
Impact (4.7/5)

The impact of the proposal to strengthen European innovation capacity is very well substantiated.

The CoACH project is based on specific needs expressed by industries → a work package lead by a company dedicated to dissemination, ToK and exploitations of results. The exploitation task is lead by a company.
Implementation (4.9/5)

The **individual projects** of the fellows are very well elaborated and are of very good quality.

The **risk management plans** and contingency measures are very well elaborated.

- Scientific outcomes for each task – deliverables!
- Risk management plan for each individual research plan
- Management structure (including financial management) well detailed

*The main weakness refers to the plans for the management of gender aspects!!*
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Lessons learned

Project structure:

- Inter/multidisciplinary research based on industrial needs
- Intensive inter-sectorial and transversal skills training → improves the fellows’ career prospects
- Detailed risk management
- Simple but effective management structure

Project proposal management:

- Ask for support during the proposal preparation (i.e. research management office and international experts)
- Slow reaction of some partners … continuous monitoring of less collaborating partners (internal deadlines)
Thank you

www.coach-etn.eu

milena.salvo@polito.it