



CALL FOR PROPOSALS 2020

Resilience and Sustainability for the Industry of the Future

1. About the German-French Academy for the Industry of the Future

The German-French Academy for the Industry of the Future (GFA) is a bilateral initiative created and officialized during the German-French digital conference on October 27, 2015.

TUM and IMT have been appointed to convert the political wish expressed by both our governments, which is to enhance the competitiveness of our economies, foster the French-German cooperation, and address the digital transformation of our industry. In order to pursue these objectives, the GFA acts in three areas: research, education and innovation.

On a research level, the Academy has funded 11 TUM/IMT research tandem projects since 2017.

2. Context of the Call for Proposals

The extreme spread of the coronavirus SARS-CoV-2 caused an unprecedented crisis that has highlighted the weaknesses and interdependence of global economic markets. It has strongly impacted not only our lifestyles but also our industry. In areas such as healthcare, education, transportation, environment and agriculture, short-term solutions were developed by governments, companies and civil society in order to react to this and future emergencies. However, there is a need for long-term solutions, and disruptive innovation.

As expressed through the French-German recovery initiative announced on May 18, 2020 by French President Emmanuel Macron and German Chancellor Angela Merkel, solidarity and cooperation between the European countries are more than ever crucial to enhance our resilience and competitiveness, and to converge towards a common strategy to strengthen the self-reliance of the European economy.

Beyond governmental incentives, academic institutions such as IMT and TUM should add value and play a major role in developing long-term solutions to anticipate and overcome such crises by bringing international talents together, educating future engineers, and exploring innovative technologies.

For this reason, the GFA, as a key instrument of the French-German cooperation in research, education and innovation between academia and industry, launches a Call for Proposals for research projects focused on resilience and sustainability in times of crises and digitization.

3. Objectives of the Call for Proposals

The call is dedicated to fund initial project phases of 6 up to 9 months. Carried out jointly by researchers from IMT and TUM, this initial or “seed phase” addresses technological and structural issues of industry in challenging situations by outlining resilient, sustainable and innovative solutions with a strong potential for third-party acquisition and technology transfer.

Expected outcomes of the seed phase can be:

- a proof of concept,
- a design of a new methodology,
- a fully detailed proposal towards third-party funding (e.g.: Horizon Europe or ANR-DFG call) or maturation phase funding within the GFA framework (a limited number of proposals will be eligible for a maturation phase),
- a White Paper or a position paper,
- joint publications,
- a scientific workshop or conference, summer or winter schools,
- a dedicated event to share the outcomes and know-how to the community.

4. Topics and Collaboration Areas

With the help of our scientific community, we have identified several relevant topics to be addressed. **Though not limited to the identified and listed topics**, the GFA intends to promote interdisciplinary approaches and push forward the following fields in the context of resilience and crises:

- Advanced manufacturing
- Applied artificial intelligence
- Virtual reality and augmented reality
- Management and governance of industry
- Logistics and supply chains
- Health
- Safety and security

The projects must involve at least one TUM researcher and one IMT researcher.

5. Funding

The maximal allocated funding per project is 40.000€ for both TUM and IMT parties. The funding is equally split between TUM and IMT and is subject to terms and conditions of use specific to each institution.

The funding is allocated for a period of 6 up to 9 months. The GFA will fund up to 7 seed projects according to the available budget and quality of the proposals.

This funding mainly aims at covering the following expenses: travel, workshops and events organization, relevant material and equipment, and limited human resources.

6. Framework of the Proposals

The proposals should be submitted in accordance with the **template added in the appendix of this document**. Proposals must include:

- a description of the project including objectives
- a detailed project roadmap and time frame
- information about the human resources involved
- a financial plan within the maximal funding allocated

The final proposals must be sent by ~~Friday, June 26, 2020~~, **Friday, July 3, 2020** by e-mail to: paul-guilhem.meunier@imt.fr and to morwenna.joubin@tum.de

7. Evaluation Criteria

The proposals will be reviewed by the steering committee of the German-French Academy. The following criteria will be taken into consideration for the evaluation:

- Scientific expertise and possible complementarity of the involved teams
- Potential for scientific and innovative breakthroughs of the project
- Systematic approach of the project
- Fulfilment methods of the project objectives
- Coherence of the financial plan and the project roadmap
- Value of the project outcomes
- Impact on academia, industry and society
- Potential of acquiring third-party funding from public stakeholders and/or industry
- Financial sustainability of the project and perspectives beyond the seed phase

8. Time Frame

Launch of the call: **Friday, May 29, 2020**

Deadline for submissions: ~~Friday, June 26, 2020~~ **Friday, July 3, 2020**

Evaluation Committee: **Friday, July 10, 2020**

Notification of the selected projects: **July 15, 2020**

Kick-off of the seed phase: **September 2020**

The GFA intends to highlight all the submitted proposals to this call and to present them later at a special event to demonstrate a comprehensive and cross-cutting approach to resilience and sustainability of the industry.

9. Contact

Please contact the project managers of the GFA should you need any further information and help in identifying researchers at the partner institution and experts from the industry.

- Morwenna Joubin: morwenna.joubin@tum.de
- Paul-Guilhem Meunier: paul-guilhem.meunier@imt.fr