

## **2<sup>nd</sup> Spark Fund Call**

### **The Materials Lab Incubator**

#### **Background**

The Materials Lab Incubator empowers founding teams in the area of advanced materials to innovate products with high value. The Materials Lab Incubator combines material sciences with modern methods of biotechnology and biocompatible as well as scalable production technologies to become the leading materials deep tech science incubator in Europe.

The Materials Lab Incubator is funded with a total of €11 million as part of the bioeconomy model region in the Rhenish mining area to generate future-oriented jobs in the area of advanced materials and valuable compounds and thereby contribute to an economically, ecologically, and socially sustainable bioeconomy as part of a biotransformed climate-neutral circular economy.

The Materials Lab Incubator is thematically linked to the sister project, the Bio4MatPro competence center, and builds on the RWTH Excellence Start-Up Center (ESC) in order to recruit excellent start-up teams. Start-up teams funded by The Material Lab Incubator are early-on guided by VC investors, who participate in the project selection process, in order to direct and speed up the development of innovative and high-value products. Spark Fund projects should envision value creation in at least one of the three Focus topic areas stated below and build on renewable (ideally locally available) resources with the potential to replace petrochemical-based products.

In detail, the themes of The Materials Lab comprise the following three Focus topic areas:

- From renewable resources to valuable materials and compounds,
- Enabling platform technologies leading to sustainable materials innovations and/or scalable/biocompatible production technologies
- Sustainable materials and coatings for the biological transformation of industries.

## The 2<sup>nd</sup> Materials Lab Incubator Spark Fund Call

The Spark Fund is intended for founding teams to incubate their envisioned product idea in The Materials Lab Incubator located in Baesweiler, to develop and validate their respective business model, and prepare a pitch/reading deck to present the technology/idea, the product, and the team in front of an evaluation panel composed of investors and experts. In case of success, teams can apply for a subsequent Warp-Speed Fund with a mentoring investor or directly establish a start-up company.

The **2<sup>nd</sup> Materials Lab Incubator Spark Fund Call** addresses **all three Focus topic areas**.

The scientific content of the three Focus topic areas is described in the ANNEX in chapter “I. Scientific requirements and content”.

In the ANNEX chapter II. “Quality and funding criteria for the 1st Spark Fund application” outlines the funding scope and selection criteria in more detail.

Applications should be submitted via the [online application form](#). Application templates and the “Application management in the scope of The Materials Lab Spark Fund (“Guideline”), including further information regarding the selection procedure (evaluation form), can be downloaded from the [website](#).

**Duration of Spark fund** regularly encloses 8 months after the start of a working contract at RWTH Aachen University, solely for the Spark Fund.

**Employment** through RWTH Aachen is a prerequisite.

**Workplace:** S1-Labs of The Materials Lab Incubator will be provided in Baesweiler for all funded teams. In order to enter the S1-labs employment through RWTH Aachen is a prerequisite. The workplace will be located at the *its* Baesweiler and the RWTH Aachen University

**IP regulation:** IP regulation complies with the RWTH Innovation guidelines for IP regulation. [The guidelines](#) can be found on the [RWTH Innovation website](#). If you have any further questions, please contact the head office ([info@materials-lab-incubator.com](mailto:info@materials-lab-incubator.com)).

**Application deadline for the 2<sup>nd</sup> Spark Fund Call:**

**15.01.2026**

Please submit complete electronic proposals at the [F6S questionnaire](#), including all [appendices](#) (5-slider, financial plan)

## **ANNEX to the 2<sup>nd</sup> Spark Fund –Call**

### **I. Scientific requirements and content**

The 2<sup>nd</sup> Spark Fund call covers **all three Focus topic areas** of the Materials Lab Incubator. Examples of topics within the three Focus topic areas are listed below, and successful applications have to at least one of the Focus topic areas.

#### **Focus topic area 1: *From renewable resources to valuable compounds and materials***

The biological transformation of industries requires a shift from oil-based to renewable resources. Successful examples to synthesize from, ideally, local renewable resources, valuable molecules, polymers, materials, or material systems are within the core scope of The Materials Lab Incubator. Functional materials or materials systems can include, but are not limited to, e.g., fibers, textiles, hydrogels, particles, or complex polymer systems. Programmable properties, such as but not limited to programmed degradation or stimuli that provide novel/sustainable solutions or substitute harmful molecules/materials across all industries, fit the Focus topic area 1.

**Important:** Focus topic area 1 does not cover work that purely focuses on the production of biomass or bulk chemicals, the use of biomass for energy production, or includes processes that employ pyrolysis.

#### **Focus topic area 2: *Enabling platform technologies leading to sustainable materials innovations and/or scalable/biocompatible production technologies***

The design of products for recycling requires novel concepts, materials, and recycling processes. Enabling technology platforms such as (a) switchable glues that enable bonding and/or debonding on demand, (b) materials with biointegrated and programmable properties, or other (c) key enabling technologies that are used for product development are in the core of Focus topic area 2. The envisioned products of the founding teams should include a concept for a scalable production with a biotransformative impact. Novel scalable and biocompatible production technologies, especially for multi-layered products, which lead to new and improved recyclability, are also in the core of Focus topic area 2.

**Important:** Focus topic area 2 does not cover work on biobased composite materials, which cannot be recycled, as well as incremental improvements of established recycling or production processes.

### **Focus topic area 3: *Sustainable materials and coatings for the biological transformation across industries***

The transformation of industries toward sustainable materials and coatings that contribute to a climate-neutral circular economy is of high economic and societal interest. Therefore, high-value and sustainable products such as, but not limited to, functional textile-, lightweight construction-, paper-, chemical- or food industry, functionalized medical, as well as machine manufacturing are funding themes in Focus topic area 3. Sustainability of products can also be achieved through biobased or sustainable functional coatings or finishes in order to improve existing materials or material systems. Improvements are, for instance, but not limited to, replacing toxic chemicals or enabling recyclability.

**Important:** Focus topic area 3 does not cover work on materials or composites that cannot be recycled. Research on pharmacological compounds or drugs is in contrast to devices not covered within Focus topic area 3.

## **II. Quality and funding criteria for the 1<sup>st</sup> Spark Fund application**

### **2.1 Questionnaire and formal review**

It is recommended that the questions defined in the questionnaire are answered as precisely and completely as possible to ensure that all formal criteria for funding eligibility are met. The formal criteria that will be reviewed after submission are as follows:

- Constitution of the applying team and availability during the funding period.
- Valid work permission in Germany during the funding period.
- Non-founded status of a legal entity of the applying team before and during the funding period. If a legal entity was already found before the funding period, the company cannot be economically active, e.g., selling products, or having any other active income.
- Exclusion of public double funding.
- Connection to at least one of the three Focus topic areas within the scope of The Materials Lab Incubator.
- Financial plan in place for the funding period.

### **2.2 5-Slider**

The application deck needs to be submitted via our [online application tool](#) along with the financial plan. Your submitted deck must compile a minimum of 5 slides (including a title slide of personal choice/design) and a maximum of 10 slides in total. Applicants are advised to focus on quality and clarity, set a clear focus, and effectively communicate the essential aspects of their project within the slide limit.

Quality of the 5-slider will be evaluated by the industrial committee according to the following criteria:

1. Motivation & Executive Summary
  - Team motivation & passion
  - Summarizing graphic
2. Business Idea
  - Plausibility of the idea origin
  - Novelty, differentiation & envisioned impact
  - Preliminary work and state of the art
  - Problem definition & value proposition
  - Working plan to
    - a. specify the research needs
    - b. present the focus on translational work towards a market-ready product.
3. Team & Network
  - Competences/roles in the founding team
  - Network/support awareness
  - GAP analysis & self-awareness
  - Overall team potential (impression)
4. Market & Competitors
  - Awareness of potential market/need
  - Identification of initial target customer
  - Awareness of alternatives/competition
  - Product solution
  - Weaknesses & strengths vs. chances & risks
5. Overall Impression & Formal Aspects
  - Overall clarity & professionalism
  - Conciseness & focus
  - Adherence to guidelines
  - Logical flow
  - Use of visuals

### **2.3 Quality criteria for further application process**

Concerning funding eligibility, the following quality criteria have to be considered in the team applications. All of the criteria below need to be addressed by the application and will be evaluated by our VC-focused jury during the application process:

- Compliance with at least one of the three Focus topic areas.
- Use of renewable resources (ideally locally available) in particular.
- Potential for scalable production of bio-functionalized materials.
- Potential for the realization of a marketable product or a Start-Up business in the Rhenish Mining Area.
- Potential to generate jobs (in addition to the applying team members).

In addition, the envisioned impact of the business idea on the market and society should be mentioned in brief. (Can be mentioned in the 5-slider)

Other criteria to be considered for the success of a Spark Fund application are:

- Expression of interest/participation of industrial partners (e.g., by a letter of intent).
- Contribution to the preservation of livelihoods in a sustainable circular economy.

For further information about the application process, please check the [application guidelines](#) and the [online application form](#).

### **III. Eligible applicants**

Eligible applicants are founding teams of 1 or more team members that are not founded by another public entity. A prerequisite for applicants is a valid working permit for Germany, since applicants of the Spark fund are employed through RWTH Aachen University for the period of funding. It is expected that the translation work is mainly performed by at least one team member in Aachen/Baesweiler and that all team members participate in the personalized team coaching.