



## **Support R&D Consortia to Catalyze Discovery, Invention and Innovation in three priority areas**

Directorate General of Science and Technology,  
Government of Khyber Pakhtunkhwa

### **Guidance Brief**

Version 1.2

#### **What is Support to R&D Consortia in three priority areas?**

The R&D projects under this Programme will be undertaken by consortia of different scientific and technical leaders and co-leaders who come together and apply in response to a call for proposals. These leaders and co-leaders are referred to as principal investigators (PIs) and co-principal investigators (Co-PIs) and should ideally come from a variety of backgrounds (academia, startups, industry, non-profits and NGOs and research institutions, both public and private, national and international) and must bring unique and complementary strengths to the project proposal. Each participating institution or organization in the consortium will have one PI only and may have more than one Co-PIs. Each consortium will have one Corresponding PI (Domiciled in KP) who will be responsible for reporting and communication purposes with the Directorate General.

#### **Three Priority areas**

##### **1. Advanced Materials**

- a. Nanoparticles and its applications
- b. Photovoltaic (solar) cells and renewable energy applications
- c. New composite materials for industrial applications such as low-cost nano- and micro-fibre materials.

##### **2. Biomedicine and Bio-manufacturing**

- a. Molecular, Genomic and Precision Medicine
- b. Lab-scale or pilot-scale engineering of important compounds
- c. Medical solutions based on genomics, proteomics, metabolomics, and other omics
- d. Manufacturing of enzymes, antibodies, antibiotics, other APIs and vaccines

##### **3. Space Sciences**

- a. Astronomy
- b. Geological studies of the lunar and Martian surface
- c. Study of meteorites and other extraterrestrial rocks
- d. Astrobiology and Space Health research and applications
- e. Development of CubeSats and other satellites.

***Mechanism of Implementation:***

- The grants for R&D projects will be awarded in two cycles happening in Year 1 and Year 2. Each cycle will award grants, at least 01 in each priority area.
- The Technical Evaluation Committee (TEC), which is responsible for all assessments, will be notified at least two weeks before the closing of the call for EOIs for the first round of applications.

***The minimum eligibility criteria will be the following:***

- At least one PI will be domiciled in KP.
- All physical activities of the project have to be undertaken within the province Khyber Pakhtunkhwa.
- The project should identify at least 5 novel scientific developments, inventions (prototype) or innovations (solutions or products) as end-of-term milestones. These will be further broken down into KPIs.

***Key Performance Indicators (KPIs) for the Component***

- Number of national collaborations
- Number of world-class international collaborations
- Number of breakthrough results or discoveries
- Number of top-class papers and peer-reviewed conference appearances
- Number of products/prototypes
- Number of startups spun out
- At least 3 stories getting coverage in international outlets and scientific journals on any consortium or their work as a validation of their potential impact.