



MINISTRY OF HIGHER EDUCATION

APPLICATION FORM – FULL PROPOSAL  
LONG TERM RESEARCH GRANT SCHEME-  
JEJAK SARJANA ULUNG (LRGS-JSU)  
*Skim Geran Penyelidikan Jangka Panjang-  
Jejak Sarjana Ulung (LRGS-JSU)*  
(Version 1/2021)

JABATAN PENDIDIKAN TINGGI  
KEMENTERIAN PENGAJIAN TINGGI MALAYSIA

A. Application Details	
A(i). Selected Grant Scheme	LRGS-JSU TAHUN 2021
A(ii). Title of Proposed Research Project	
A(iii). Total Proposed Budget (RM)	
A(iv). Keywords	

B. Details of Project Leader	
B(i). Name	
B(ii). Nationality	
B(iii). IC/Passport No.	
B(iv). Age	
B(v). Position	
B(vi). Institution	
B(vii). Faculty/Centre	
B(viii). Unit/Department	
B(ix). Office Phone No.	
B(x). Handphone No.	
B(xi). E-mail Address	
B(xii). Date of First Appointment with this Institution	
B(xiii). Type of Service (Permanent/Contract)	
B(xiv). Scopus H-Index	
B(xv). No. of Citation	

## C. Research Information

### C(i). Research Priority Area

Research Priority Area (Please choose one (1) only):

- Physics
- Chemistry
- Physiology and Medicine
- Economic Science
- Knowledge and Discovery of Frontiers

### C(ii). Research Domain

Research Domain (Please choose one (1) only):

- Pure and Applied Sciences
- Technology and Engineering
- Clinical and Health Sciences
- Social Sciences
- Arts and Applied Arts
- Natural and Cultural Heritage
- Information and Communication Technology

### C(iii). Research Cluster

Research Cluster (Please choose one (1) only):

- Food Safety and Security
- Basic Infrastructure
- Climate Change and Environment
- Health
- Education and Knowledgeable Civil Society
- National Security
- Social and Economic Wellbeing
- Frontier Technologies and Advanced Manufacturing

### C(iv). 10-10 Malaysian Science, Technology, Innovation and Economy (MySTIE) – based on 10 Socio-Economic Drivers

MySTIE Socio-Economic Driver (Please choose one (1) only):

- Energy
- Business and Financial Services
- Culture, Arts and Tourism
- Medical and Healthcare
- Smart Technology and Systems (Next Generation Engineering and Manufacturing)
- Smart Cities and Transportation
- Water and Food
- Agriculture and Forestry
- Education
- Environment and Biodiversity

## C(v). Shared Prosperity Vision 2030 (SPV 2030)

Shared Prosperity Vision (Please choose one (1) only):

- Islamic Finance Hub 2.0
- Digital Economy
- Industrial Revolution 4.0
- Content Industry
- ASEAN Hub
- Halal and Food Hub
- Commodity Malaysia 2.0
- Logistic, Transportation and Sustainable Mobility
- Coastal and Maritime Economy
- Centres of Excellence
- Renewable Energy
- Green Economy
- Smart and High Value Agriculture
- Advanced and Modern Services
- Malaysia Truly Asia

## C(vi). Sustainable Development Goals (SDGs)

SDG (Please choose one (1) only):

- No Poverty
- Zero Hunger
- Good Health and Well-being
- Quality Education
- Gender Equality
- Clean Water and Sanitation
- Affordable and Clean Energy
- Decent Work and Economic Growth
- Industry, Innovation and Infrastructure
- Reduced Inequalities
- Sustainable Cities and Communities
- Responsible Consumption and Production
- Climate Action
- Life below Water
- Life on Land
- Peace, Justice and Strong Institutions
- Partnerships for the Goals
- Societal Harmony and Happiness

## C(vii). Location of Research

Location

**C(viii). Duration of this Research**

From	1 <sup>st</sup> October 2021
To	
Duration	

**C(ix). Research projects (national) that have been completed or are on-going by project leader in the last five years**

Title	Grant Name	Role (Leader/Member)	Progress (%)	Status	Duration	Start Date	End Date

**C(x). International grants that have been received by the project leader**

Title	Grant Name	Role (Leader/Member)	Progress (%)	Status	Duration	Start Date	End Date

**C(xi). Academic publications that have been published in the high-impact journal (Top 1%/Top 10% in Science Citation Index-Expanded (SCIE) or Social Science Citation Index (SSCI)) by the project leader in the last five years**

Title	Main Author/Corresponding Author/Co-Author	Name of Journal	Year	Quartile (Top)

Please provide three (3) journal articles as evidence

**C(xii). International collaborations that have been engaged by the project leader**

Collaboration might be in the form of co-authorship, co-researcher or any other significant and relevant collaborations

International Research Laboratories/Agency/Institution	Form of Collaboration	Details of Publication/Research/etc	Role (Leader/Member)

**C(xiii). Mentor / Co-Mentor**

Name	IC/Passport Number	Faculty/School/Centre/Unit/Department	Position	Area of Expertise	Role (Mentor/Co-Mentor)

**C(xiv). Research projects (national and international) that have been completed or are on-going by Mentor and Co-Mentor (if any) in the last five years**

Title	Grant Name	Role (Leader/Member)	Progress (%)	Status	Duration	Start Date	End Date

**C(xv). Academic publications that have been published by the Mentor and Co-Mentor (if any) in the last five years (top 20 articles (Top 1%/Top 10%/Highly-cited))**

Title	Main Author/Corresponding Author/Co-Author	Name of Journal	Year

**C(xvi). Other Researchers (Limited to six (6) project members including Co-Mentor, if any)**

Name	IC Number	Faculty/School/ Centre/Unit/Department & Institutions	Position	Area(s) of Expertise

**C(xvii). Executive Summary of Research Proposal**

(Please include elements of breakthrough research, problem statement, objectives, research methodology, expected output/outcomes/implication, and significance of output from the research project)

**C(xviii). Detail Planning**

**(a) Research Background**

**1. Problem Statement**

---

**2 Elements of Breakthrough Research**

---

**3. Hypothesis**

---

**4. Research Questions**

---

**5. Literature Reviews**

---

**6. Relevance to Government Policy (if any)**

---

**(b) References**

**(c) Objective(s) of the Research**

**(d) Methodology**

**1. Description of Methodology**

---

**2. Data Sharing Plan**

---

**3. Flow Chart of Research Activities**

[Flowchart.pdf](#)

#### 4. Research Activities

Activity	Start Date	End Date

#### 5. Milestones

Description	Date	Cumulative Project Completion Percentage (%)

#### 6. Gantt Chart of Research Activities with Milestones

##### (e) Expected Results/Research Output/Benefit

##### 1. Breakthrough Research/Novel Theories/New Findings/Knowledge

##### 2. Impact Statement on Quintuple Helix (please delineate/describe expected research deliverables on Society, Academia, Government, Industry and Environment)

##### 3. Research Publications (Number of articles to be published in high-impact journals (Q1 Web of Science (WoS) or Top 1% in Science Citation Index-Expanded (SCIE) or Social Science Citation Index (SSCI)). The total number of publications must commensurate with the research scope).

Total Number of Publications:

Indexing Body	Number of Publications	Name of Journal
	Indexed Journal	
<input type="checkbox"/> Q1 WoS		
<input type="checkbox"/> SCIE		
<input type="checkbox"/> SSCI		



**4. Talent Development (by research)**

Total Number of Postdoctoral (by research):

Total Number of PhD Student(s) (by research):

Remark (if any):

**5. International Collaborations**

**6. Specific or Potential Applications of the Research Findings (if any)**

Description:

**7. Intellectual Properties (IPs) (if any)**

Total Number of Proposed IPs:

**D. Access to Equipment(s) & Material(s)**

Type	Description	Owner	Location	Address

## E. Budget

Budget Type	Description	Year 1	Year 2	Year 3	Year 4	Grand Total
11000 – Allowance						
	Postdoctoral (Full-time Research Mode)					
	GRA PhD (Full-time Research Mode)					
Vot-Total						
21000 - Travelling and Transportation (40%)						
Local	Local Conferences					
Sub-Total						
Overseas	Attachment Program (once a year for one person only)					
Sub-Total						
Field work						
Sub-Total						
Vot-Total						
24000 - Rental						
Vot-Total						
27000 - Research Materials and Supplies						
Vot-Total						
28000 - Maintenance and Minor Repair Services						
Vot-Total						
29000 - Professional Services						
Services/Consultancy	Editing and Proofreading Articles					
	Journal Page Charges (WoS/SCIE/SSCI)					
Sub-Total						
Short term course (5%)						
Sub-Total						
Vot-Total						
35000 - Accessories and Equipment (40%)						
Vot-Total						
Grand Total						

**F(i). Patent Search (describe how your research output shall produce an innovative idea or technology that has the potential to be a solution for stakeholders (community, industry, government etc.) and offers a unique proposition)**

*To identify if the researcher is able to coherently present a compelling argument for his/her proposal in light of the IP landscape and factors identified in the (Yes/No) Section. The answer would reflect an understanding of the applicant's research advantage and limitations.*

**F(ii). Research Collaborator**

- International Research Laboratories (Collaboration might be in the form of co-authorship, co-researcher or any other significant and relevant collaborations)
- International Agency/Organization (Please identify all agencies/organisations collaborating in the project, and describe their role/contribution to the project)
- Industrial Linkages (Please identify any industry or end-user group involved in the project, and describe its role/contribution to the project) (if any)

**F(iii). Risk Assessment (Please describe factors that may cause delays in, or prevent implementation of, the project as proposed above; estimate also the degree of risk and delineate whether this is a high risk research)**

Please consider an appropriate approach to working in the current conditions (pandemic, travel ban, social distancing etc.)

Risk	Low	Medium	High
1. Technical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Timing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Budget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Description of risk assessment

**G. Declaration**

I declare that:

- All details provided in this application are accurate. KPT has the right to reject or to cancel the offer without prior notice if there is any inaccurate information given.
- This proposal is not currently considered for any other research grant(s).
- The exact proposed work has not been funded through other research grant(s).
- Necessary approvals from relevant bodies (i.e.: Ethics Committee) are granted before related research activities commence.

Name:

Signature:

Date:

Approved By:

Signature:

RMC

Date:

## Appendix

Appendix	Name	File Name
1	CV of Project Leader	
2	CV of Project Mentor	
3	Evidence of 3 Articles in High Impact Journal	
4	Evidence of Collaboration with International Research Laboratories/Agencies/Organizations	
5	Patent Search Form	
6	Flow Chart of Research Activities	