

UNIVERSITI MALAYA RESEARCH EXCELLENCE GRANT (UMREG) 2025

PROF. CHM DR. JUAN JOON CHING

Pusat Dana Penyelidikan
(formerly known as Research Cluster)

14 March 2025 (Friday)

Home of the Bright, Land of the Brave
Di Sini Bermulanya Pintar, Tanah Tumpahnya Berani



**UNIVERSITI
MALAYA**

UMREG 2025

The Universiti Malaya Research Excellence Grant (UMREG) 2025 aims to drive and empower the quality of research. This grant is designed to **boost impactful, excellent and indexed publications; contributes to human capital development; and encourage external collaboration to strengthen strategic research partnerships.**

Objectives:

- 1) To encourage impactful research and publication
- 2) To foster and strengthen collaboration with the industry or other institutions

NICHE AREA & RESEARCH SCOPES

Each proposed research project must be **based on the respective CoE niche area & research scope which also support the ten (10) strategic thrust areas of UM:**

Rare Earth Elements

1. Sustainable Exploration and Extraction of Rare Earth Elements (REEs) in Malaysia
2. Advanced REE Separation Technologies and Magnet Development for High-Purity Applications
3. Policy, Economic Impact, and Social Sustainability of the REE Industry in Malaysia

Quantum Information Science & Technology

1. Healthcare - Quantum Technology in Natural Products, AI-Powered mRNA Therapeutics, Quantum Machine Learning
2. Environment - Integrating Blockchain, AI, and Quantum Computing for Advanced Air Pollution Monitoring and Mitigation
3. Materials - Advancing Sustainable Catalysis: Mechanisms of Magnetic Regulation of Spin Dynamics in Rare-Earth Orthoferrites (RFeO₃)

Aerospace Innovation

1. Leveraging Digital Transformation for Sustainable Aerospace Manufacturing
2. Future Aerial Drone System – Advanced Propulsion and Robust Payload Integration
3. Enhancing Business Resilience in the Aerospace Industry Through Supply Chain Optimization

NICHE AREA & RESEARCH SCOPES

Each proposed research project must be **based on the respective CoE niche area & research scope which also support the ten (10) strategic thrust areas of UM:**

Smart Mobility

1. Digital Transformation in Transportation - such as developing app and system for better mobility service (ride-sharing, e-hailing etc)
2. Urban mobility and community - such as first last mile connectivity, public transport study etc.
3. Connected and Intelligent Transportation System - such as real-time traffic management study, V2X communication, smart infrastructure etc.
4. AI in transportation management - such as using big data and AI model to improve transportation planning and operations etc.

Micro, Small and Medium Enterprise (MSME)

1. Regulatory and Policy Frameworks in promoting MSME growth and resilience
2. Sustainability and Green Practices for MSME
3. Digital Transformation and Innovation in MSME
4. Entrepreneurship and Social Equity in MSME development.

Environmental, Social and Governance

1. Regulations and Standard related to ESG
2. Biodiversity and climate change
3. Financial initiatives for ESG

THEMES OF RESEARCH

Each proposed research project must be **based on the respective CoE niche area & research scope, which also support the ten (10) strategic thrust areas of UM:**

1. Nuclear energy and new energy transition
2. Food sustainability and security
3. Semiconductor and chips
4. Nanotechnology and quantum exploration
5. Artificial Intelligence and digital robotic realms
6. Space science and new engineering spectrum
7. Defense and security assets and inventory innovation and creation
8. Rare earths and critical minerals
9. Comprehensive medical and health spectrum excellence
10. Social Science Advancement in Economic, Smart Finance, Societal, International Norms and Law, and Geopolitical Spectrum for the Nation and the World

TERMS & CONDITIONS

General

- Open to all **UM academic staff** with **permanent** or **contract** status except Professor.
- Proposed research project – based on the **the respective CoE niche area & research scope** and **align with the 10 strategic thrust areas** of UM.
- Only **1** application per applicant.

Duration

- Option 1: RM 50,000.00 (Maximum 24 months)
- Option 2: > RM 50,000.00 - RM 75,000.00
(24 months or 36 months)
- Option 3: > RM 75,000.00 - RM 100,000.00
(24 months or 36 months)

Note:

Extension: One (1) time with a maximum period of six (6) months only.

Grant Ceiling

RM100,000.00

- Option 1: RM 50,000.00
- Option 2: > RM 50,000.00 - RM 75,000.00
- Option 3: > RM 75,000.00 - RM 100,000.00

Note:

- Phase 2 funding will be disbursed after Phase 1 output targets is achieved and utilizing at least 75% of the funding.**
- Maximum period** to achieve Phase 1 output targets:
 - Maximum **18 months** for a 24-month project.
 - Maximum **24 months** for a 36-month project.

Collaboration

Researchers must collaborate with at least **1 international institution / organization or industry.**

In addition, researchers are encouraged to collaborate with higher education institutions, government agencies or non-governmental organizations at the national level.

TERMS & CONDITIONS

Principal Investigation (PI)

- UM academic staff with permanent or contract status:
 - a) Associate Professor,
 - b) Senior Lecturer, or
 - c) Lecturer
- **Permanent staff** – minimum duration of **three (3) years** before the date of retirement.
- **Contract staff** – a remaining minimum appointment period of **two (2) years**.
- Not a PI of any internal or external active grant

Next Appointed Leader (NAL)

- UM academic staff with permanent or contract status:
 - a) Associate Professor,
 - b) Senior Lecturer, or
 - c) Lecturer
- **Permanent staff** – minimum duration of **three (3) years** before the date of retirement.
- **Contract staff** – a remaining minimum appointment period of **two (2) years**.

Co-Researcher(s)

- Academic staff at all levels and are required to define their roles
- At least **one (1) permanent academic staff**.
- At least **one (1) senior academic staff** (Professor/Associate Professor).
- The project research team must consist at least of **five (5) members**.
- **Head of CoE** will be appointed as one of the research member of the approved project.

OUTPUTS

All outputs are compulsory to be fulfilled within the project period

Output to fulfill	Amount Requested	Field	Phase 1	Phase 2
Journal Publication	RM 50,000.00 Note: At least one (1) of the two (2) publications must be joint publications with international/ industry collaborator(s).	Science & Technology	One (1) Q1/Q2 Web of Science-indexed publications.	One (1) Q1/Q2 Web of Science-indexed publications
		Social Sciences, Arts and Humanities	One (1) Q1/Q2 Web of Science-indexed publications / Scopus-indexed publications	One (1) Q1/Q2 Web of Science-indexed publications / Scopus-indexed publications
	> RM 50,000.00 – RM 75,000.00 Note: At least one (2) of the three (3) publications must be joint publications with international/ industry collaborator(s).	Science & Technology	Two (2) Q1/Q2 Web of Science-indexed publications.	One (1) Q1/Q2 Web of Science-indexed publications.
		Social Sciences, Arts and Humanities	Two (2) Q1/Q2 Web of Science-indexed publications / Scopus-indexed publications	One (1) Q1/Q2 Web of Science-indexed publications / Scopus-indexed publications
	> RM 75,000.00 – RM 100,000.00 Note: At least two (2) of the four (4) publications must be joint publications with international/ industry collaborator(s).	Science & Technology	Two (2) Q1/Q2 Web of Science-indexed publications	Two (2) Q1/Q2 Web of Science-indexed publications
		Social Sciences, Arts and Humanities	Two (2) Q1/Q2 Web of Science-indexed publications / Scopus-indexed publications	Two (2) Q1/Q2 Web of Science-indexed publications / Scopus-indexed publications

OUTPUTS

All outputs are compulsory to be fulfilled within the project period

Output to fulfill	Details
Human Capital Development	One (1) postgraduate student in full-time research mode as a Graduate Research Assistant (GRA).
Others	One (1) MoA/LoA/Research Agreement. *The MoA must be signed and stamped (by LHDN).

IMPORTANT

- The project outputs are the shared responsibility of all researchers listed in the submitted proposal.

HIGHLIGHTS

1. **Announcement** call for proposal is on **17.03.2025** via UMinfo. All related documents for your reference can be downloaded from Ms. 365 SharePoint at the following link: (**Documents:** [CLICK HERE](#)).
2. **IMPORTANT:** Please read the guidelines carefully. Pay close attention to crucial information e.g. terms & conditions, eligibility, specific type of expenses permitted / not permitted, required documentation, application deadline etc. **Incomplete and / or late applications can result in immediate disqualification.**
3. **Budget** – Please **plan the budget for each vote wisely and provide specific details / breakdown / justification** e.g. details of fieldwork activities (location, transportation use, number of days, number of people involve, etc.); list of research material & supplies etc.
4. **Allocation**
 - a) Vote 11000 – to employ / pay Graduate Research Assistants (**GRAs**).
 - b) Vote 21000 – **covers** travel for **fieldwork ONLY**. Does **not cover** expenses related to attachment/visit to any institution or conference/symposium attendance. (Refer to page 7)
 - c) Vote 27000 – **only research-related** expenses are **allowed**. Purchases of stationery supplies, electronic devices and other ICT equipment, e.g. laptop / desktop / printer / external hard disk / etc., are **not permitted**.
 - d) Vote 29000 – **not cover conference fees/proofreading** service; **can allocate** up to a maximum of total RM20,000.00 (RM10,000 each phase) per project **for the page charge** & researchers are **encouraged** to apply for the **JPP Page Charge Fund** ([UM Research Website](#)). (Refer to page 8)

HIGHLIGHTS

5. List of document / evidence:

- a) Checklist form.
- b) Application form.
- c) Research graphical abstract.
- d) Research flow chart.
- e) Research Gantt chart & milestone.
- g) Breakdown of budget
- h) Budget quotation (if any).
- i) Contract academic staff – a supporting document e.g. offer letter / letter of assurance from *PTj*.
- j) Collaborator(s) – letter of Intent from external collaborator.



1. UMREG 2025 Checklist Form.docx



2. UMREG 2025 Application Form.docx



3. UMREG 2025 Guideline for Graphical Abstract.pptx



4. UMREG 2025 Promised Output & Budget Details.docx



5. UMREG 2025 Guidelines.pdf

Ms. 365 SharePoint Folder

6. **Submission of the proposal via [Ms. Form 365](#) – Merge all the documents** (as mentioned above) & **submit into 1 PDF file** (converted directly from Ms. Word / Ms. PowerPoint / Ms. Excel). Submission of scanned documents will not be accepted.

7. Submission of the “**Promised Output & Budget Details**” via the same link as above – **Ms. Word format** only.

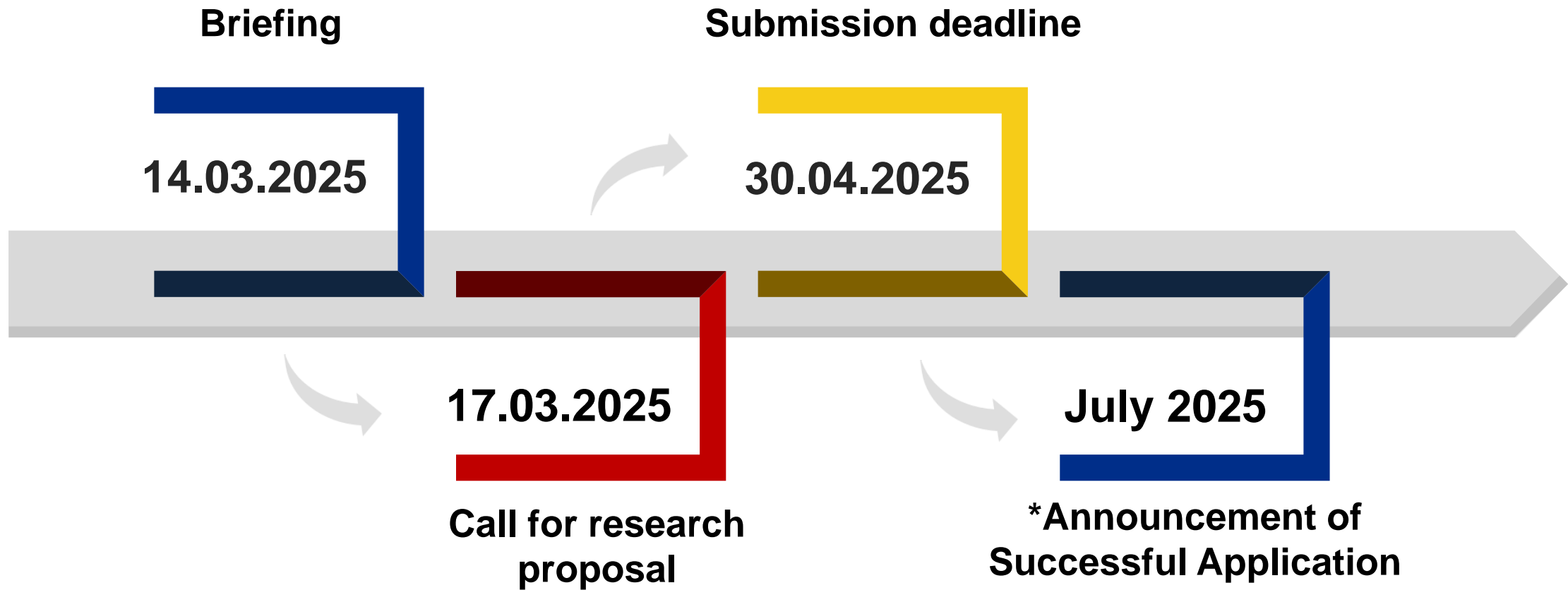
8. Deadline application: **30 April 2025 (Wednesday), 6:00 pm.**

HIGHLIGHTS

*Post-award

8. **Re-allocation / virement** – maximum 20% from the total approved for the vote.
9. **Phase 2 allocation** will be disbursed upon **achieving Phase 1 outputs** and utilizing **at least 75%** of the funding.
10. **Acknowledgement of Research Output** – must acknowledge UMREG 2025 as the primary source of funding. A maximum of three (3) grants are allowed to be acknowledged and UMREG 2025 **must be the first grant** in the sequence of acknowledgment. Only outputs produced after the grant has been awarded and directly resulting from the research work under this grant will be accepted.

TIMELINE



*Subject to changes



For enquiries, kindly contact:
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Thank you

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