

Annex 1 Research Proposal

I. PROJECT IDENTIFICATION

<p>A. Programme title.</p> <p>MALYSIAN ANTARCTIC RESEARCH PROGRAM – BIOLOGICAL RESEARCH / PHYSICAL SCIENCE RESEARCH (Please indicate your research area)</p>
<p>B. Project title (Please indicate your project title)</p>
<p>C. Project leader (Please indicate the name as in NRIC of the project leader)</p> <p>Name:</p> <p>NRIC:</p>
<p>D. Organisation (Please indicate the name, address, telephone and fax of the organisation in which the project leader is based)</p>
<p>E. Key words (Please provide a maximum of 5 key words that describe the research of the project. The key words will be incorporated in a database on Malaysian research)</p>

II. OBJECTIVES OF THE PROJECT

A. **Specific objective of the project** (Please describe the measurable general and specific objectives of the project and define the expected results. Use results-oriented wording with verbs such as "to define ...", "to determine ...", "to identify ...")

B. **Research background of the project** (Please indicate if the project is new, modified or extended. Give a summary of your literature review to indicate the originality of the proposed research, and describe related research to assist in assessing the research rationale and the potential for success)

- Project status (please indicate) New Modification to previous project Extension of existing project

- Literature review summary

- Related research

C. **Type of research** (Please indicate the type of research, one only; see definition of terms in the Guidelines)

- 1. Scientific research (fundamental research)
- 2. Technology development (applied research)
- 3. Product/process development (design end engineering)
- 4. Social/policy research

III. BENEFITS OF THE PROJECT

<p>A. Direct customers/beneficiaries of the project (Please identify clearly the potential customers/beneficiaries of the research results and provide details of their relevance, eg, size, economic contribution, etc)</p>
<p>B. Outputs expected from the project (Please refer to the list of outputs in the Guidelines and give further details)</p>
<p>C. Technology transfer/diffusion approach (Please describe how the outputs of the project will be transferred to the direct beneficiaries/customers. Please also state if the project outputs are sustainable, ie, if they can be utilised without further external assistance)</p>
<p>D. Organisational outcomes expected (Please refer to the list of outcomes in the Guidelines and give further details)</p>
<p>E. Sectoral/national impacts expected (Please refer to the list of impacts in the Guidelines and give further details)</p>

IV. PROJECT STRUCTURE

A. Research organisations involved in the project (Please identify all research organisations collaborating in the project, and describe their role/contribution to the project)

B. Industry linkages (Please identify any industry or end-user group involved in the project, and describe its role/contribution to the project)

Name ¹	Organisation
Project Leader (Please provide name)	
Programme Head (Please provide name)	
Researchers (Please provide names or numbers of researchers)	
Support Staff (Please indicate how many)	
Contract Staff (Please indicate how many)	

V RESEARCH APPROACH

A. Research methodology (Please describe the research methodology to be followed. Identify specialised equipment, facilities and infrastructure which are required for the project, and indicate which are new)

B. Project activities (Please list and describe the main project activities, including those associated with the transfer of the research results to customers/beneficiaries. The timing and duration of research activities are to be shown in the Gantt chart in Form VI)

C. **Key milestones** (Please list and describe the principal milestones of the project. The timing of milestones is to be shown in the Gantt chart on Form VI. A key milestone is reached when a significant phase in the project is concluded, e.g. completion of test, review, commissioning of equipment, etc)

D. **Risks of the project** (Please describe the factors that may cause delays in, or prevent implementation of, the project as proposed above; estimate the degree of risk)

- Factors:

	Low	Medium	High
• Technical risk:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Timing risk:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Budget risk:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

E. **Duration** (State the planned starting date of the project and the elapsed time, in months, to complete this project; technology transfer activities should be excluded from elapsed time)

- Starting date
- Duration/elapsed time

VI. PROJECT SCHEDULE

Project Activities	2006												2007												2008		2009		2010		
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	S1	S2	S1	S2	S1	S2	
Technology Transfer Activities																															

I Planned milestone
 S1: First Semester
 S2: Second Semester

VII. PROJECT COSTS

A. Staff costs (Please include the yearly staff costs of the project. Numbers in parentheses refer to expense codes)						
Staff Category	Year 1 (2006.)	Year2 (2007.)	Year 3 (2008.)	Year 4 (2009)	Year5 (2010)	Total
• Temporary and contract personnel (J 400)						
Sub-total staff costs						
B. Direct project expenses (Please include the yearly direct expenses of the project. For computation, use the Direct Expenses Estimation Form in Appendix A. Numbers in parentheses refer to expense codes)						
Expense Category	Year 1 (2006)	Year2 (2007.)	Year 3 (2008)	Year 4 (2009)	Year5 (2010.)	Total
• Travel and transportation (J 500)						
• Rentals (J 600)						
• Research materials and supplies (J 700)						
• Minor modifications and repairs (J 800)						
• Special services (J 900)						
• Special equipment and accessories (J 1000)						
Sub-total direct expenses						
C. Total cost (Please add the sub-totals of A and B)						
	Year 1 (2006.)	Year2 (2007)	Year 3 (2008)	Year 4 (2009)	Year 5 (2010)	Total

VIII. PROJECT FUNDING

A. Funding sources (Please indicate funding sources for the project; see list of funding sources in the Guidelines)

Funding Sources	RM	% of Total Funding
- Academy of Science (ASM) Grant		
- Internal Funds		
- Other Sources (please specify)		
Total		100%

B. Disbursement schedule for ASM funds, by participating research organisation (Please indicate how ASM funding for the project will be allocated)

Organisation	Year 1 (2006)	Year2 (2007)	Year 3 (2008)	Year 4 (2009)	Year 5 (2010)	Total
Total ASM Grant						

APPENDIX A - DIRECT EXPENSES ESTIMATION WORKSHEET

Expense Categories and Items	Year 1 (2006)	Year2 (2007)	Year 3 (2008)	Year 4 (2009)	Year 5 (2010)
Travel and transportation (J 500)					
Rentals (J 600)					
Research materials and supplies (J 700)					
Minor modifications and repairs (J 800)					
Special services (J 900)					
Special equipment, accessories (J 1000)					
Total direct expenses					

* If major equipment, please provide description on page 2 of this appendix
 Numbers in parentheses are expense codes as shown in Form VII

Special Equipment and Accessories (Please describe and provide justification for major purchases)

1. Description

2. Justification

3. Estimated Cost

Special Equipment and Accessories (Please describe and provide justification for major purchases)

1. Description

2. Justification

3. Estimated Cost

Special Equipment and Accessories (Please describe and provide justification for major purchases)

1. Description

2. Justification

3. Estimated Cost