

Open call for commissioned research project

Indo-Korea Science and Technology Center, Korea Institute of Science and Technology (KIST)

Control number: IKST/Research/2019-04/27112019

Indo-Korea Science and Technology Center (IKST), Bengaluru calls proposals for commissioned research project as below:

1. Classification: Research & Development (Data analytics & experimental methods)

No.	Field	Title of project	Budget	Period	Note
1	Research	Design of new functional heusler compounds using a combined approach of data analytics and experimental methods.	Rs. 16,00,000	02/03/2020 ~ 03/03/2021	

2. Qualification and application

A. Qualification for application

- ① Ph.D. degree holder in related area

B. Period of tender: 02.12.2019 (Mon) ~ 03.01.2020 (Fri)

C. Required documents

- ① Official letter (one copy, English)
② Project proposal (original two copies, English)

※ Email submission of above documents is mandatory to Mithun Suresh (+91 80 4669 7104/ 97415 38456, hr@ikst.res.in), parallel with direct or postal submission

D. Application

- Deadline: 17:30, 03.01.2020 (Fri)
- Submission (Direct or Post)

- Address: NCC Urban Windsor, 3rd Floor, New Airport Road, Near Allalasanra gate, Opposite Jakkur Aerodrome, Bengaluru, Karnataka, India 560 065

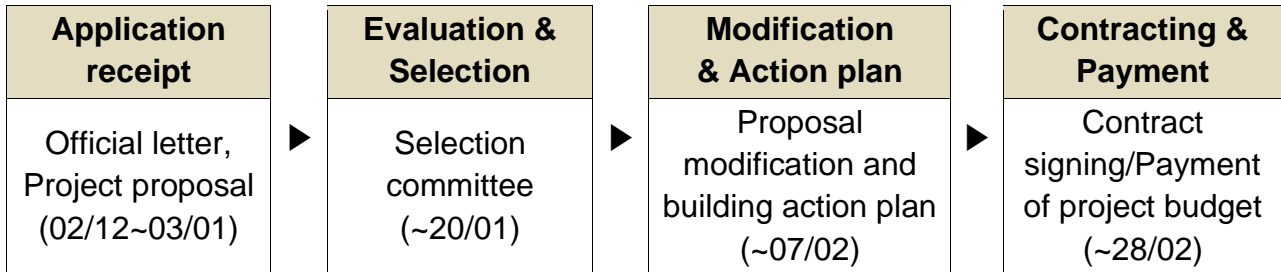
※ Please contact Mithun Suresh (+91 80 4669 7104/ 97415 38456, hr@ikst.res.in) for any inquiry

- Attachments:
1. Selection & Operation plan for research project
 2. Request for proposal
 3. Project proposal (format)
 4. Project result report (format). End.

Selection and operation plan for research project

1. Selection procedure and criteria

Selection procedure:



※ Selection procedure timeline is subject to changes depending on internal schedules

Evaluation & Selection:

Method: Written and presentation evaluation

Criteria:

- Fundamental qualification of institute and P.I.
- Clarity of objectives, differentiation of performance strategy, feasibility of research contents against the budget
- Creativity and innovativeness of objectives and contents, application availability of research results

Modification & Action plan:

- Modification and improvement of project proposal of final candidate
- Building an action plan such as interim review, regular meetings etc.

Contracting & Payment:

- Signing a commissioned survey research contract
- Major conditions/terms of contract
 - Objectives/Contents In final project proposal
 - Contract period: 02.03.2020 ~ 03.03.2021 (1 year)
 - Payment: Advance (Inclusive tax, 100% of contracted amount, payment after contracting)

2. Result report

- Result reports (original two copies) submission within two months from the last date of research period.

3. Notice

- Selection result will be announced through email to individual(s)
- Duration for presentation evaluation is for 30 minutes (20 minutes for presentation and 10 minutes for Q&A)
- No documents will be returned after submission

Request for proposal (RFP)

Design of new functional heusler compounds using a combined approach of data analytics and experimental methods.

In this project, we plan to design Co-based Heusler alloys using a combined approach of theoretical and experimental methods. The theoretical part will be carried out from the IKST where using density functional theory (DFT) and machine learning (ML) methods, stable Heusler compounds with high spin polarization will be screened. A high-throughput screening procedure, which combines ML techniques and the DFT computation methods will be used to perform the analysis of the different compositions.

On the experimental side, first, it has to be initially checked whether or not the materials referenced above could be synthesized. Then further measurements, such as spin polarization, critical temperature, etc., should be carried out. The final aim of the study is to design efficient heusler compounds for spintronic applications.

Project Proposal (Arial, Bold, 18 pt)

(Paragraph spacing 1.15)

1. Overview of project (Arial, Bold, 12pt)

- Title (Arial, 12pt)
- Period
- Budget

2. Information of P.I.

- Name:
- Affiliation: Position, Dept., Name of Institute
- Educational qualification:
- Contact
 - Tel.:
 - Mobile:
 - Email:

3. Necessity and objectives (Max. 1 page)

4. Details (Max. 3 pages)

5. Strategies, methods and system

6. Expected achievements and application plan

7. Deliverables

8. Timeline

9. List of participants and budget plan

Project Result Report (Arial, Bold, 18 pt)

(Paragraph spacing 1.15)

1. Overview of project (Arial, Bold, 12pt)

- Title (Arial, 12pt)
- Period
- Budget

2. Information of P.I.

- Name:
- Affiliation: Position, Dept., Name of Institute
- Educational qualification:
- Contact
 - Tel.:
 - Mobile:
 - Email:

3. Objectives (Max. 1 page)

4. Details (No limit of pages)

4.1 Introduction

4.2 Methods

4.3 Results

4.4 Conclusion

5. Deliverables

6. Expenses