##### Korea-Sweden Joint Research Program 2024

###### - Proposal Guidelines and Application Form-

**February 2024**

**National Research Foundation of Korea (NRF)**

**Swedish Foundation for Strategic Research (SSF)**

**1. Guidelines for the Proposals**

**A. General Information**

1. Project Title

Please enter the full title of your proposed project

2. Research Field

Please enter the research area in the research proposal among the following 12 strategic research technology fields : Semiconductor and display; Secondary battery cell; Leading-edge mobility; Next generation nuclear energy; Leading edge bio; Aerospace and marine; Hydrogen; Cybersecurity; AI; Next generation communications; Leading edge robotics and manufacture; and quantum;

3. Sub-Research Field

Please enter the sub-research field in the research proposal. This will enable us to allocate the application to the

most appropriate assessment panel.

4. Research Duration

**The beginning of the joint research project is November 1, 2024.**

Enter the estimated duration of the project in years. Additionally, indicate both the start and end dates of the project, using the following format: MMDDYYYY.

5 Applicants Information

Enter all items in both the Korean Principal Investigator (KPI) and Swedish Principal Investigator (SPI)(s) columns. Names should be in the following order: last name, first name. In the telephone column, enter both the office and mobile phone numbers. You can adjust the formatting of the cover-sheet and charts as long as the contents remain within the 1 page limit.

6. Budget Description

Enter the estimated annual budget and the total budget requested by KPI and SPI(s) for the entire project period. The full duration of the award is three years. The maximum value of the award available from NRF is 200 Million KRW per year. The full duration of the award is three years

7. Authentication and Commitment

The proposal must be signed by both the KPI and the authorized representative of the host institution.

8. Summary of Project

Please provide a summary of your proposed project. Please briefly describe the objectives, research contents and approach and explain the potential impact or wider benefits to society of your research. The summary should not exceed one page.

**B. Research Plan**

For the evaluation of your application, please complete all parts of this section in full detail. Proposals should be written in an informative yet concise manner in order to give the reviewers a good basis for a measured and appropriate evaluation.

1. Research Background and Objectives of the Project

Please provide the research motivation and background pertaining to the project. This should encompass an exploration of the national and international landscape, highlighting existing conditions, challenges, and prospects relevant to the research initiative. Emphasize the necessity for collaborative international research efforts and elucidate the specific areas where such collaboration is crucial. Illustrate the necessity for funding in advancing this project and clearly articulate the objectives of the project. Please indicate the current state of your preliminary work and point out in which areas you intend to make a unique, innovative, promising contribution.

2. Technical description of the project including research methodology

Please elaborate on the planned investigations and/or experiments, outlining the rationale behind the project. Describe the proposed research methodologies that will be employed to achieve the specified aims, emphasizing the strategic approach to advancing the work.

Explain the added value, or synergistic benefits, derived from fostering new collaborations with international partners. Illuminate how these partnerships will enhance the project's overall impact and contribute to its success. Provide insights into the data collection methods and any other pertinent aspects integral to the research.

3. Research Structure

Please establish an organizational structure for the project. Please give details of the organizational concept, such as how and by whom the project will be organized; how the project participants will be integrated into the organization.

With regard to the research structure addressed above, it should include the following items:

a. Framework of the Research Project

- Draw the structure of project teams and the division of roles between the KRI and SPI

b. Division of Roles

- The project should entail research activities that include significant and specific contributions (e.g., expertise, facilities, sites, data, different approaches/methods/models, educational opportunities, etc.) between KPI and SPI. Applicants are encouraged to describe how the partnership will contribute to producing synergies of the complementary expertise and further developing international collaboration between Korea and Sweden.

c. Handling of research data

- If your project uses, generates and / or processes data, use this section to record key information on handling of this data (and any underlying objects).

d. Others

4. Plan of the Work

Please give a detailed account of the steps planned during the proposed funding period. A research schedule detailing all planned experiments and a plan to exchange researchers and information should be included. Please specify how to carry out the project jointly and to share the research outputs. The quality of the work program is critical to the success of a funding proposal. The tasks to be performed within the work program should correspond to the funds requested. The work program should therefore indicate and justify what types of funding will be needed and how the funds will be used, providing details on the individual items requested where applicable.

5. Track Records and Research Capability of the KPI and SPI(s) and their teams

The academic research career of the KPI and SPI(s), and the participants in the project should be described under this section.

Your proposal should include the following information about both the Korean and Swedish research teams:

1. Introduction of the expertise of KPI and SPI(s) in the proposed research field of work by citing a total of ten (10) best publications, other achievements and the ongoing/completed national/international projects during last five (5) years. (Do not exceed two (2) pages for each PI)

※ Please attach documentation to certify the above achievements. The attached files (PDF) are not counted toward the page limit. (Do not exceed ten (10) pages for the attached files)

1. Number of participating researchers and research assistants who will be directly involved in the project from both countries
2. Research facilities and equipment
3. Networking with national and international S&T communities (including a list of researchers with whom you have agreed to collaborate on this project) (if any)
4. Collaboration with industries (if any)
5. Cultivation of researchers
6. Others

6. Expected impact and contributions to science and society

Please state how you expect the research results to contribute to society, industry and international S&T communities. More specifically, describe in detail the expected outcomes, scientific importance and impact from the project on research, training and teaching in your field. If your application concerns use-inspired research, please indicate whether and to what extent the proposed project will have a broader impact and what this impact will be. Explain how you will share these findings with stakeholders and the community. Address the potential for knowledge transfer to industry (if applicable) and how you will share intellectual property rights between KPI and SPI(s).

7. Budget Plan

Enter the estimated annual budget and the total budget requested for the entire project period.

Applicants should provide an overview of the proposed research budget and budget details for the project. For Korean applicants, the principal cost includes direct costs, and indirect costs. Research equipment and materials include the costs for equipment, materials & commodities and costs for pilot products. Research Activities can include costs for organizing meetings, seminars, exchange of researchers, miscellaneous expenses, etc. Indirect costs include overhead, intellectual property, etc. Indirect cost for Korean applicants is allocated within 5% of the total budget. Please refer to the National Research and Development Innovation Act for more information.

All amounts must be given in KRW and SEK.

8. Ethical, Safety and regulatory issues

Please state whether the proposed research project raise ethical, safety or regulatory issues. If yes, please describe how you deal with them.

9. Declaration from KPI and SPI(s)

Please state if you have submitted the identical proposal elsewhere and if so, please provide information in detail. Otherwise, you must certify as follows:

**“No funding proposal for this project has been made elsewhere. If any such proposal should be submitted, NRF/SSF will be informed immediately.”**

10, Other Information

Please include any other information, not described in this guideline, which may assist us in your evaluation.

11, Layout of Application Form

- Layout of the cover sheet and other pages is flexible

- The project proposal **must not exceed a total of 20 pages** including Cover Sheet, Summary and Research plan. **Contents exceeding 20 pages are excluded from the evaluation.**

- Use 12-point Times New Romans type, printed on A4 paper with “1cm” margins all around.

- Use single-spacing between the sentences throughout the document.

- Number every page including tables, appendices, etc.

**Application Form : Korea-Sweden Joint Research Program 2024 between NRF and SSF**

**Part I. General Information (Cover Sheet)**

|  |  |  |  |
| --- | --- | --- | --- |
| **1. Project Title**: |  | | |
|  |  | | |
| **2. Research Field** |  | **3. Sub-Research**  **Field** |  |
| **4. Research Duration** | From(MM.DD.YYYY)  To(MM.DD.YYYY) ( Years) |

**5. Applicant Information**

|  |  |  |  |
| --- | --- | --- | --- |
| Korean Principal Investigator (KPI) | | Swedish Principal Investigator (SPI) | |
| Full Name  (in Korean, in English) | Gil dong, Hong | Full Name |  |
| Date of Birth |  | Date of Birth |  |
| Nationality |  | Nationality |  |
| Affiliation  (department) |  | Affiliation (department) |  |
| Position |  | Position |  |
| Telephone | (Office)  (Mobile) | Telephone | (Office)  (Mobile) |
| E-mail |  | E-mail |  |
| Address |  | Address |  |

**6. Budget Description**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Requested Budget by KPI | | Requested Budget by SPI | | Total budget |
| 1st year(2024) | 000 million KRW | 1st year(2024) | 000 million SEK | 000 million KRW  000 million SEK |
| 2nd year(2025) | 000 million KRW | 2nd year(2025) | 000 million SEK | 000 million KRW  000 million SEK |
| 3rd year(2026) | 000 million KRW | 3rd year(2026) | 000 million SEK | 000 million KRW  000 million SEK |

**7. Authentication and Commitment**

|  |
| --- |
| I am hereby aware that this proposal is submitted for consideration for inclusion in the Korea-Sweden Joint Research Program (K-SJRP). I will faithfully observe and conduct research in accordance with the regulations of NRF. |
| Signature of the Korean Principal Investigator (KPI):  Name: signature: date: MM.DD. YYYY |
| Signature of the Head of the Korean Host Institution:  Name: signature: date: MM.DD. YYYY |

**8. Summary of Proposal**

|  |  |  |  |
| --- | --- | --- | --- |
| Keywords |  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Objectives |  | | |
| Research Contents and Methodologies |  | | |
| Expected Research Outputs |  | | |

**PartⅡ. RESEARCH PLAN**

**1. Research Background and Objectives of the Project**

a. Research Background

b. Necessity for international joint research

c. Objectives of the project

d. Others

**2. Technical description of the project including research methodologies**

**3. Research structure**

**3.1. Research Framework**

**3.2. Division of Roles between Korean and Swedish research teams**

Please indicate how you plan to divide the work among the two partners.

[Example]

|  |  |  |
| --- | --- | --- |
| Timeline | Responsibilities of Korean team | Responsibilities of Swedish team |
| 1st Year  (yyyy) |  |  |
| 2nd Year  (yyyy) |  |  |
| 3rd Year  (yyyy) |  |  |

**4. Plan of the Work**

4.1. Research Schedule

Note : Please outline the activities planned by the KPI(Korean Principal Investigator) and SPI(s) (Swedish Principal Investigator(s)) for the project. Each stage of the research should be defined within a specific time-frame; the concluding date of each stage is called a "milestone." The conclusion of each stage should be marked by the production of an output. Stage outputs must be deliverable, quantitative, or at least subject to judgment as proof of completion of stage activities. Examples of such legitimate outputs are: a feasibility study report, the draft of a manuscript to be submitted to a journal, etc. In addition to the text, the research schedule should be presented graphically in a Gantt chart. Explanatory notes should be appended to the chart, explaining the nature of activities in each stage and its expected outputs. (This note may be omitted in the proposal.)

[Example]:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Stage | Month  0 3 6 9 12 | | | |
| 1st  year | xxxx | x---------------- | ---x |  |  |
| 2nd  year | xxxx | x-------- | -----------x |  |  |
| 3rd  year | xxxx |  | x--- | -------x |  |

4.2. Plans to exchange researchers and information; and to carry out the project jointly and share the research outputs.

4.3. Development and utilization of human resources

4.4. Others

**5. Track Records and Research Capability of KPI and SPI**(s) **and Their Teams**

**※ Describe the expertise of the PIs in the proposed field of work by listing a total of ten (10) best scientific publications, other achievements and research performance during last 5 years. Do not exceed two pages A4 size for each PI.**

5.1. Research Outputs of the KPI (key achievements for the last five years)

1. Publications in international journals

[Example]:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Publication year | Title | Author | | | Journal  (ISSN No.) | Vol.  /Page |
| First  Author | Corresponding Author | Co-Author |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Note: Please write ***the KPI’s name in bold letters***. (This Note may be omitted in the proposal.)

1. Other achievements (Patents, Awards, Books, etc.)

##### Research performance (Career) of the KPI

[Example]:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Title | Role Code | Total No. of Researchers | Funding Organization | Start Date | Budget  (KRW) |
| Program Title | End Date |
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Note: (This Note may be omitted in the proposal.)

1. The role of code is divided into four categories: PI(1), Co-PI(2), Researcher(3), Others(4)
2. Enter the start and end dates using the following format: **MMDDYYYY to MMDDYYYY**
3. Provide information on the research performance(career) of the KPI and his/her key achievements for the last five years
4. Others (number of participating researchers and research assistants, research facilities and equipment, networking with national and international S&T communities (if any), collaboration with industries (if any), cultivation of researchers, etc.)

5.2. Research Outputs of the SPI(s) (key achievements for the last five years)

a) Publications in international journals

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Publication year | Title | Author | | | Journal  (ISSN No.) | Vol.  /Page |
| First  Author | Corresponding Author | Co-Author |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Note: Please write ***the SPI’s name in bold letters***. (This Note may be omitted in the proposal.)

1. Other achievements (Patents, Awards, Books, etc.)

##### Research performance (Career) of the SPI(s)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Title | Role Code | Total No. of Researchers | Funding Organization | Start Date | Budget  (SEK) |
| Program Title | End Date |
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Note: (This Note may be omitted in the proposal.)

1. The role of code is divided into four categories: PI(1), Co-PI(2), Researcher(3), Others(4)
2. Enter the start and end dates using the following format: **MMDDYYYY to MMDDYYYY**
3. Provide information on the research performance(career) of the SPI and his/her key achievements for the last five years
4. Others (Number of participating researchers and research assistants, research facilities and equipment,

networking with national and international S&T communities (if any), collaboration with industries (if any), cultivation of researchers, etc.)

**6. Expected Impact and Contributions to Science and Society**

1. Expected research results leading to follow-up studies
2. Expected research results contributing to the promotion and activation of knowledge in the relevant research field
3. Expected research results which have ripple effects on industrial and social aspects
4. Contribution to the development of Global science and technology
5. Plan to distribute and utilize research outcomes, IPR, if any.
6. Others

**7. Budget Plan**

**7.1. Budget plan (Project Cost)– Korean side**

(1,000 KRW)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Category | Section | | 1st Financial Year | 2nd Financial year | 3rd Financial Year |
| Direct Costs | Internal Labor | Unpaid |  |  |  |
| Paid |  |  |  |
| External Labor | Unpaid |  |  |  |
| Paid |  |  |  |
| Research Equipment and Materials | |  |  |  |
| Research Activities (including mobility costs) | |  |  |  |
| Research Allowances | |  |  |  |
| Indirect Costs | | |  |  |  |
| Total | | |  |  |  |

**7.2. Budget plan (Project Cost)– Swedish side**

(1,000 SEK)

|  |  |  |  |
| --- | --- | --- | --- |
| Section | 1st Financial Year | 2nd Financial year | 3rd Financial Year |
| Staff |  |  |  |
| Equipment up to SEK 10,000, Software and Consumables |  |  |  |
| Travel Expenses(Including Swedish scientists to Korea) |  |  |  |
| Visiting researchers(Including Korean scientists to Korea) |  |  |  |
| Swedish Scientists to Korea |  |  |  |
| Korean Scientists to Sweden |  |  |  |
| Expenses for Laboratory Animals |  |  |  |
| Other Costs |  |  |  |
| Project-related Publication Expenses |  |  |  |
| Instrumentation |  |  |  |
| Total |  |  |  |

* Please quantified list out consumable items
* Full justification should be given for each budget head
* Please note that failing to provide quantified list of consumables and full justification, the support for consumables would not be considered by the Joint Evaluation Committee.

**8. Ethical, safety and regulatory issues**

Does your proposed work raise ethical, safety or regulatory issues? If yes, how will you deal with them?

Please indicate whether the proposed research includes:

|  |  |  |
| --- | --- | --- |
| Section | Korea (yes/no) | Sweden (yes/no) |
| Research on humans |  |  |
| Research on human embryonic stem cells |  |  |
| Research on animals |  |  |
| Research on GMO or pathogens |  |  |

**9. Declaration from KPI and SPI(s)**

**10. Others**