## Tips for writing strong KAKENHI proposals



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#### **About me**

- > From Germany, came to Japan in 2004.
- ➤ Since then Professor for Glacier and Ice Sheet Research at Hokkaido University's Institute of Low Temperature Science.



➤ 12-year record of both KAKENHI successes and failures in the Scientific Research (A/B/C) categories.

## Previous successful KAKENHI proposals...

FY 2016: KAKENHI A, "Projecting discharge from the Greenland ice sheet using climatic forcings derived from atmosphere-ocean models".

¥22,900,000 (4 years).

FY 2010: KAKENHI A, "Simulations of the evolution and dynamics of the Antarctic ice sheet in past and future climates". ¥28,300,000 (4 years).

FY 2006: KAKENHI B, "Induced anisotropy, fast ice flow and climate change in ice sheets".

¥10,300,000 (3 years).

## ... and failed ones ...

FY 2015: KAKENHI B, "Projecting discharge from the Greenland ice sheet using climatic forcings derived from atmosphere-ocean models".

¥16,840,000 requested (4 years).

FY 2009: KAKENHI A, "Simulations of the evolution and dynamics of the Antarctic ice sheet in past and future climates". ¥48,300,000 requested (4 years).

FY 2005: KAKENHI C, "Evolution and dynamics of the Martian polar ice caps over climate cycles".

¥4,700,000 requested (2 years).

Some patience and persistence is needed!

## **Purpose of Research section**

The first section of the proposal (Purpose of Research) is highly important

in convincing potentially non-specialist reviewers at the outset

that your proposed research is important and interesting, and that your research plan is logical and capable of succeeding.

Consider also reviewer overwork and potential fatigue...

### **Purpose of the Research**

The applicant shall indicate the **general nature of the research** and **the specific purpose of the research**, after succinctly summarizing it and providing an outline at the beginning, and with the **existing academic literature referred to where necessary**. In particular, details shall be given clearly with a focus on the following points. (...)

- 1) Scientific background for the research (e.g. domestic and overseas trends related to the research and positioning of the research; how the applicant has reached the concept based on his or her achievements in earlier research work; and details of achievements of earlier research work where the purpose of this project is to attain a greater level of knowledge in a similar area)
- 2) What will be elucidated and to what extent will it be pursued during the research period
- 3) Scientific characteristics, originality and expected results and significance of the research in the area

## **Purpose of Research section**

- Carefully read the instructions for the Purpose of Research Section and follow these instructions.
- For clarity and ease of organization, use the points listed in the instructions as section headings:
  - **Outline**
  - **Background**
  - What will be elucidated
  - Characteristics, originality and significance
- Easy to understand writing (no excessive jargon), logical, concise, attractive, with examples and diagrams...
- Include a Literature Cited (References) section (condensed!).

#### Research Plan and Methods section

#### **Research Plan and Methods**

The applicant should provide **details of the research plan and the methods** for achieving the objectives of the research ... <u>after succinctly summarizing it and providing an outline at the beginning</u>. The plan should be divided into one for FY2016 and one for from FY2017 on. The **literature should be referred to** as needed and main points focused on.

- ... indicate ... action in the event that the research does not progress as originally planned.
- ... indicate the **specific roles** of the Principal Investigator and Co-Investigators (*kenkyū-buntansha*) **of the research team** (using figures, tables and other visual aids).
- ... state the roles of Co-Investigators (*renkei-kenkyūsha*) and Research Collaborators as needed.

#### Research Plan and Methods section

**Instructions** → **recommended structuring (section headings)**:

**Outline** 

Research plan for FY2016

(Sub-items)

Research plan for FY2017 and later

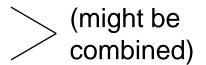
(Sub-items)

Rationale for the research group

Specific roles of the co-investigators

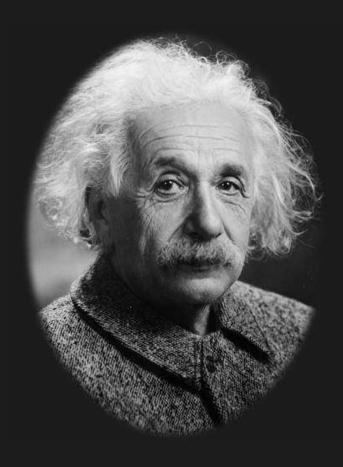
**Uncertainties and contingency plans** 

References



## **General tips**

- Carefully read the instructions and follow them!
- > Font: Times New Roman 11 pt (references can be 9 pt).
- Pleasant, harmonic overall appearance: uniform formatting, avoid large blank spaces...
- Include diagrams and tables.
- Carefully check for grammatical and spelling errors.
- Have the proposal reviewed before submission.



# Failure is success in progress

## **Preparation**

## Set aside sufficient time to create a strong proposal

Start researching and writing your proposal well in advance of the first submission deadline. This is especially true for less-experienced writers.

## Develop an idea for the proposal

What is/are the main research question(s)?

Why is the topic worth being investigated?

Which work has been done in the past? How does your work build upon it?

→ Comprehensive literature research.

How much work can realistically be done within the project time?

(interesting, ambitions ↔ don't promise too much)

## **Preparation**

### Assemble a strong team

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Principal investigator (probably you),
co-investigators (kenkyū-buntansha [with own budget],
renkei-kenkyūsha [without own budget]),
further collaborators (e.g., from abroad),
students...
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## Think about the budget

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How much money will be needed?

(Equipment, consumables, travel, personnel, publication costs...)

→ choice of KAKENHI category.
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#### **Further sections**

- State of Preparations for the Research Plan and Methods to Disseminate the Research Results to Society and Citizens
- Research Achievements
- Research Funding Received and Achievements
- Rationality and Justification of the Research Costs
- Budget:
   Costs for Equipment, Consumables, Travel Expenses etc.
- **>** ...

## Carefully read the instructions and follow them!