


JUNBA2009



Welcome to CRC

Combine the knowledge, and something new will happen!

Collaborative Research Center

Hiroshima University

Hiroshima University Research Seeds Database “Himawari”

JUNBA2009

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Collaborative Research Center



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Where is Hiroshima?



Flower Festival in May (Hiroshima City Center)



Peace Memorial Park & A-Bomb Dome



Miyajima Island





HIROSHIMA UNIVERSITY

In-no-shima Bridge



International Industry-Academia Collaboration Division
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Higashi-Hiroshima city,
where HU is located, is
very famous for **SAKE**.



Profile of Hiroshima University (1)



Land
3,176,000m²
Buildings
604,000m²



- One of the largest universities in Japan.
- Also reputed as the top university in Chu-shikoku region concerning a variety of aspects!¹⁰

Faculty of Engineering



Collaborative Research Center



Library



International Industry-Academia Collaboration Division
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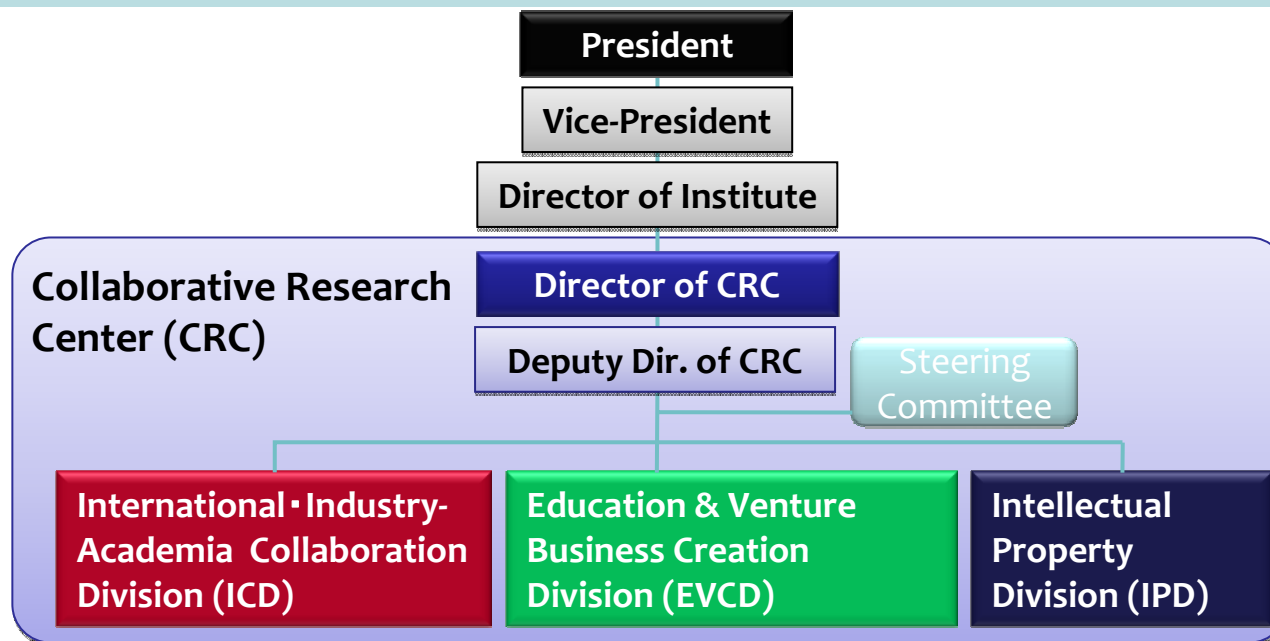
Profile of Hiroshima University (2)

- Formally founded in **1929** as a university (Former body was originally founded in **1874**)
- 11 Faculties & 12 Graduate Schools** (Science, Engineering, Bio-tech, Education, Social Sciences, Medicine etc.)
- 1 Research Institutes & 20 Research Centers** (Higher Education, Collaborative Research, A-bomb Effect Research, etc.)
- Students** : Undergraduate: 11,145
 Master course: 2,509
 Doctor course: 1,749

About **15,000** students

(Foreign student 755 from 57 countries) (as of May 1st, 2007)
- Staffs**: Academic position 1,832
 Office & technicians 1,440 **(total 3,281)**

Collaborative Research Center



ICD

- Industry-academia collaboration
- International collaborations & technology transfer

EVCD

- Education on Management of Technology (MOT)
- Creation of Venture Businesses & Support
- Research projects to create seeds for VB

IPD

- Management of intellectual properties
- Education and research on intellectual properties

International Industry-Academia Collaboration Division's Roles

Promotion of :

- Collaborative researches with industries
- Research projects funded by government and foundations
- International collaborations & technology transfer

HU Liaison Fair

Professors and young researchers of HU show and explain about their Original works to industry/business people at the fair which would attract company/engineers' interests.



Presentation at the fair.

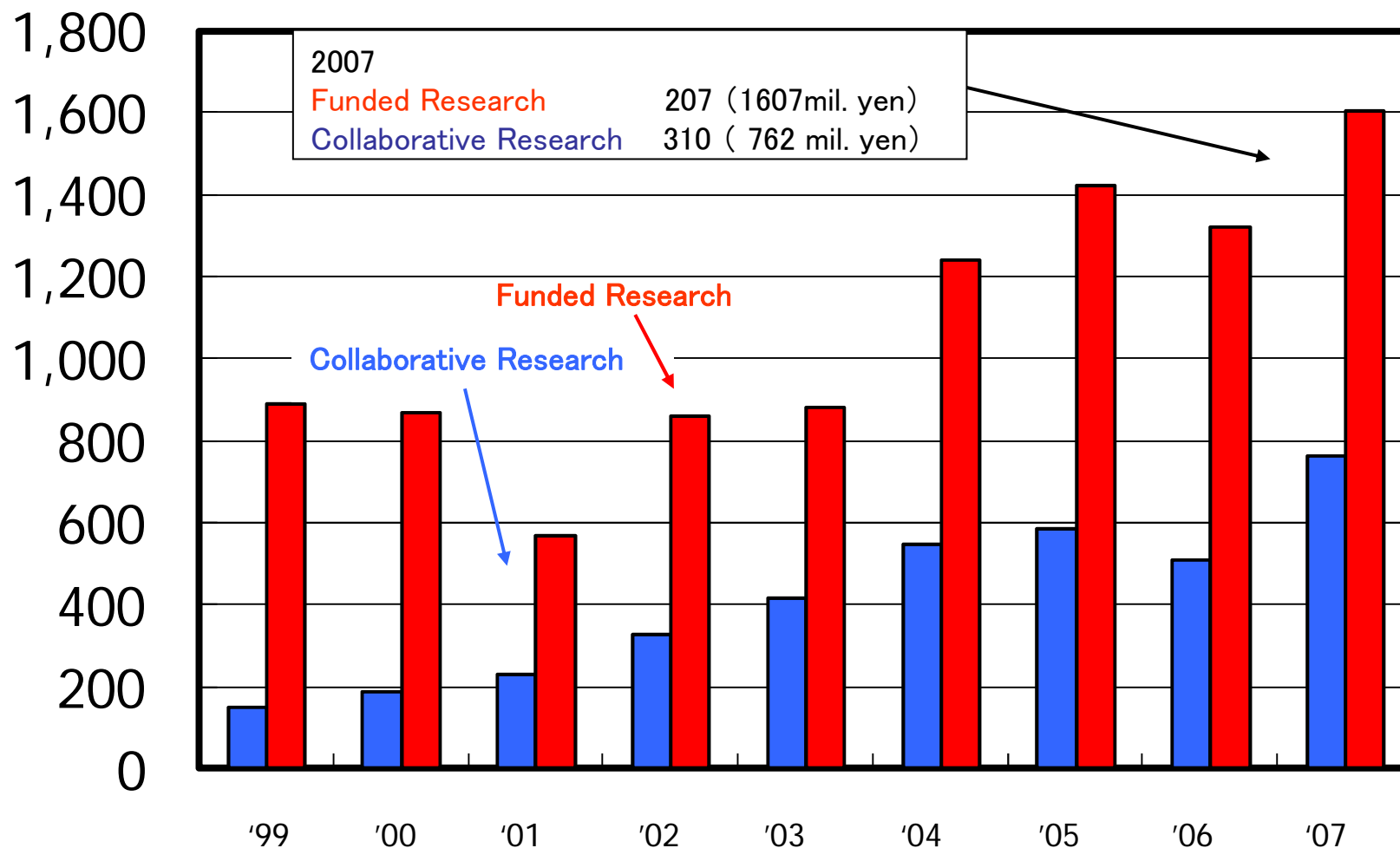
Tokyo	10
Beijing	1
Hiroshima	7
<u>total</u>	<u>18</u>



Banquet after the fair.

Yearly Progress of HU Collaborative Research & Funded Research

amount
in milion yen



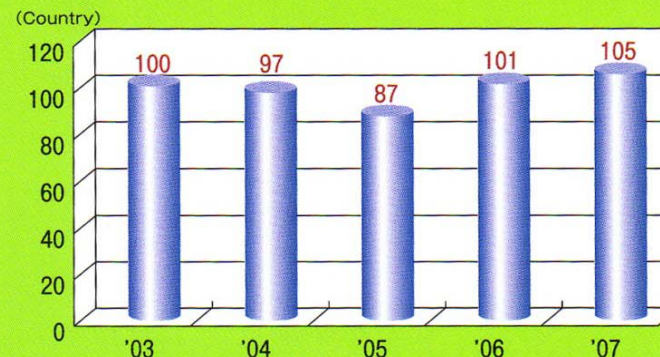


Technology Transfer – Actual Results

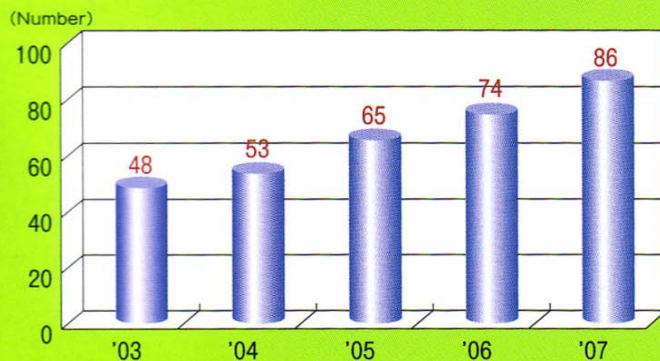
Patent applications in Japan



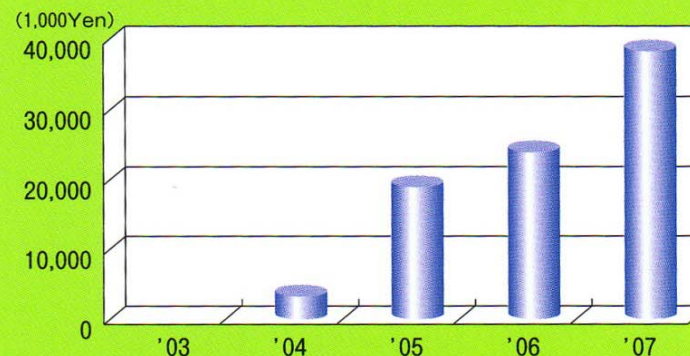
Granted Patent Rights in foreign Country



Granted Patent Rights in Japan



Gross income from technology transfer



Profile of HU's International Collaborative Research Service

- HU initiated an international collaborative research service, that is **the only university** among all the universities in Chugoku-shikoku region.
- Since HU has a strategy to strengthen a network among universities in the region in terms of collaboration with industry and HU also tries to reach the mutual goal with local governments in regional development, HU's international collaborative research service may get **coherent with the strategy of local governments and other universities in the region** and may have a synergy effect in the quality/quantity of research seeds in the future.




Introduction of Himawari

- **Himawari is the Japanese name of "sunflower".**

Sunflower grows fast toward the sun and bears flowers which are full up with seeds for the future. Therefore, the database is named "Himawari" so that the seeds created by researchers in Hiroshima University may grow like Himawari.

- We call the seeds for collaboration with industry "Research seeds", not "Technology seeds" as HU CRC deals with not only basic/applied science, but also social science, and so on. It is because HU is a comprehensive university.

Profile of Himawari

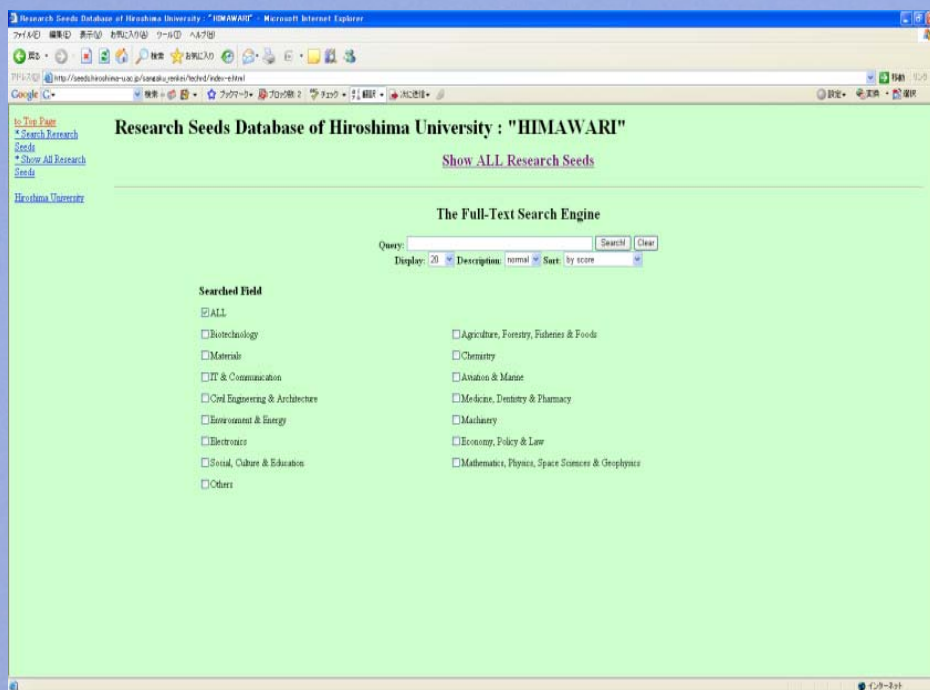
- It covers a variety of research fields.
 - The database is available in both English & Japanese.
 - Research seeds are described with common terms as much as possible for easy understanding of the seeds.
 - Making inquiries is possible through the web.
- 

Research Seeds Database

Himawari

On the Web

[http://seeds.hiroshima-u.ac.jp/
sangaku_renkei/techrd/index-e.html](http://seeds.hiroshima-u.ac.jp/sangaku_renkei/techrd/index-e.html)

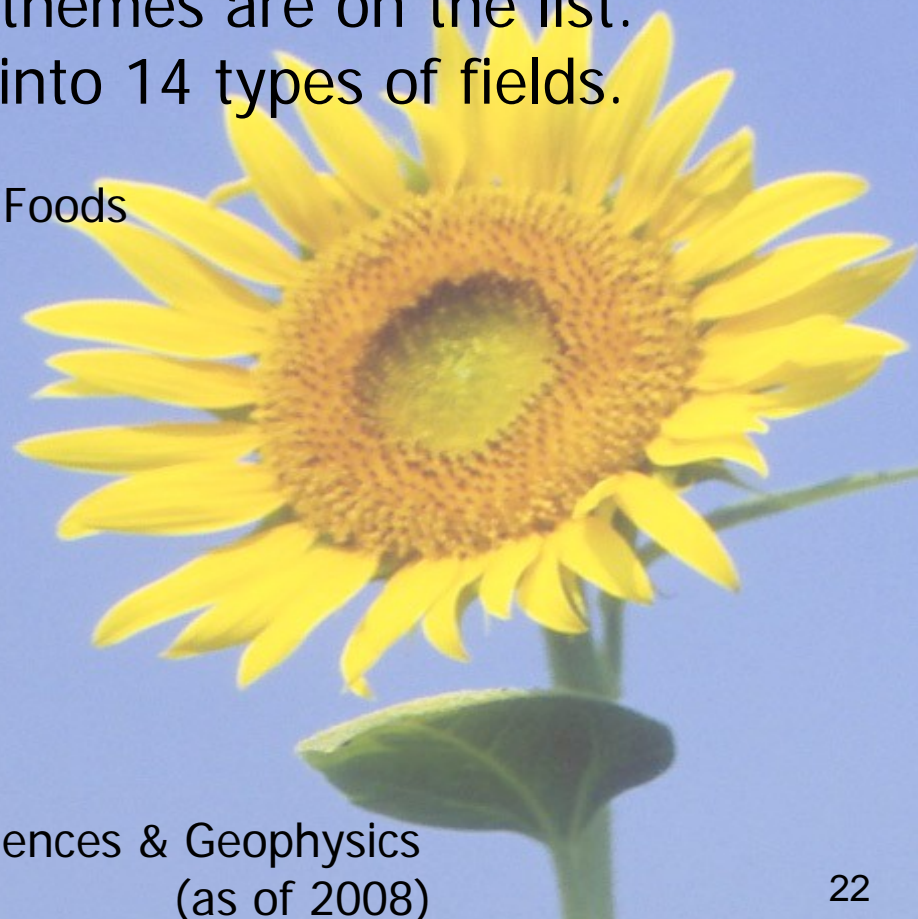


Research Seeds **Himawari** Database

On the Web

- Approximately 390 research themes are on the list.
- The themes are categorized into 14 types of fields.

- (1) Biotechnology
- (2) Agriculture, Forestry, Fisheries & Foods
- (3) Material
- (4) Chemistry
- (5) IT & Communication
- (6) Aviation & Marine
- (7) Civil Engineering & Architecture
- (8) Medicine, Dentistry & Pharmacy
- (9) Environment & Energy
- (10) Machinery
- (11) Electronics
- (12) Economy, Policy & Law
- (13) Mathematics, Physics, Space Sciences & Geophysics
- (14) Social, Culture & Education



(as of 2008)

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Research Seeds concerning “Environment” listed in Himawari

アドレス http://seeds.hiroshima-u.ac.jp/sangaku/renkei/techrd/index-e.html

Google

検索

ブックマーク

ブログ検索

チェック

翻訳

次へ送信

設定

変換

選択

移動

リンク

to Top Page
* Search Research Seeds
* Show All Research Seeds
Hiroshima University

Namazu: a Full-Text Search Engine for Research Seeds Database of Hiroshima University: “HIMAWARI”

Results:

References: [Environment: 126]

Total 126 documents matching your query.

1. [Evaluation of river causeway area and recovery of environment based on ecology](#) (Research Seeds Database of Hiroshima University : “HIMAWARI”) (score: 54)
The Person Responsible: Takayuki Nakatsubo
Keyword(s): River / Green / Environmental assessment / Recovery of **environment** / Vegetation control
Applicable field(s): Environmental assessment, recovery, control
2. [Development of real-time prediction simulator of oceanic environment in Hiroshima Bay](#) (Research Seeds Database of Hiroshima University : “HIMAWARI”) (score: 54)
The Person Responsible: Hidemi Mutsuda
Keyword(s): Ocean **environment** / Hiroshima Bay / Ecosystem model / Red tide
Applicable field(s):
3. [Development and utilization of pelletised compost of organic matter most suitable for preservation of environment](#) (Research Seeds Database of Hiroshima University : “HIMAWARI”) (score: 53)
The Person Responsible: Yoshikuni Masaoka
Keyword(s): Nitrogen Circulation / Nitric acid type nitrogen / Preservation of **environment** / Organic matter fertilizer / Fertilizer
Applicable field(s):
4. [Building of image database for local disaster prevention and environment by remote sensing technique](#) (Research Seeds Database of Hiroshima University : “HIMAWARI”) (score: 53)
The Person Responsible: Yuji Sakuno
Keyword(s): Remote sensing / GIS / **Environment** / Image / Disaster prevention
Applicable field(s): Disaster prevention (civil work and architecture), Information technology
5. [Studies on disaster prevention and environment variation utilizing topography and geology](#) (Research Seeds Database of Hiroshima University : “HIMAWARI”) (score: 53)
The Person Responsible: Hideaki Maemoku
Keyword(s): Diastrophism / Natural disaster / Topography / **Environment** variation / Local disaster prevention
Applicable field(s): Basic studies and evaluation of topography and geology on disaster prevention and environmental variation.
6. [Research and Analysis Related to Bryophyte-based Environmental Assessment](#) (Research Seeds Database of Hiroshima University : “HIMAWARI”) (score: 38)
The Person Responsible: Hironori Daguchi
Keyword(s): Bryophyte / Classification / Identification / **Environment** / Assessment
Applicable field(s):
7. [Practical application of technology for improving water quality and bottom sediment by using steel-making slag](#) (Research Seeds Database of Hiroshima University : “HIMAWARI”) (score: 37)
The Person Responsible: Tamiji Yamamoto
Keyword(s): slag / **Environment** / Sea / Water quality / Plankton
Applicable field(s): Improvement of water quality/bottom sediment related to public projects, aquaculture ponds for shrimp, trenches, small reservoirs, water channels, etc.
8. [Realization of a technology for improving bottom sediment by utilizing benthic microalgae](#) (Research Seeds Database of Hiroshima University : “HIMAWARI”) (score: 36)
The Person Responsible: Tamiji Yamamoto
Keyword(s): **Environment** / Sea / Algae / Pollution / Sludge
Applicable field(s): Improvement of bottom sediment related to public projects, aquaculture ponds for shrimp, trenches, small reservoirs, water channels, etc.

126 seeds were hit by search with the key word “environment”. 23

Conclusion

1. In order to initiate HU's **International** Collaborative Research Service, HU CRC developed an English version of Himawari as a fundamental tool.
2. Himawari can provide you with research seeds from a variety of aspects, even for “environment”, ie; not only from Technology/engineering aspects but also from other important aspects, such as international cooperation & development.
3. It is expected that Himawari will take a more crucial role in the future as HU strengthens its network more in Chugoku-shikoku region.

*We are looking for foreign partners
who wish to do collaborative
researches with us!*

Thank you!