

**ASEAN University Network /
Southeast Asia Engineering Education Development Network**

AUN/SEED-Net

**Implementation Guidelines and
Application Form
for**

**Collaborative Research Program with Industry
(C R I)**

For Japanese Fiscal Year 2015

AUN/SEED-Net Project

As of August 2014



1. Project Background

Due to the need for sustainable development after a severe economic turndown in the ASEAN region in 1997, AUN/SEED-Net was established officially in 2001 from leaders' initiatives derived at the earlier ASEAN - Japan Summit and the ASEAN + 3 Summit. Full operation of the AUN/SEED-Net Project however started in 2003 with main support from the Japanese Government through Japan International Cooperation Agency (JICA) and partially by ASEAN Foundation, member institutions and member countries. Activities of the Project shall be approved in principle by the AUN/SEED-Net Steering Committee and implemented by the member institutions and the AUN/SEED-Net Secretariat with support from the JICA Project for AUN/SEED-Net. The network of AUN/SEED-Net is composed of 26 member institutions from 10 ASEAN countries with academic support from 14 leading Japanese supporting universities.

Based on these remarkable achievements, the ASEAN Member Countries, MIs, Government of Japan and JICA have a strong intention to continue AUN/SEED-Net aiming to bring about larger impacts not only to other universities in the region and Japan, but also to industry and community by making more direct contribution to the socio-economic development in the region and Japan. After continuous discussion, all parties agreed to implement the Phase 3 Project of AUN/SEED-Net with these following objectives:

- (1) Contribution to advancement and globalization of regional industry
- (2) Contribution to solution of regional common issues in Asia
- (3) Establishment of human resource development platform in science and technology in Asia

2. Program Concept

Conforming to the main objectives of Project in Phase 3, **Collaborative Research Program with Industry (CRI)**, which was firstly launched in JFY 2011, continues to further improve academic and research capability of MIs with industrial linkage by providing opportunity for faculty staff of MIs to conduct research collaboration with the industries in ASEAN countries, as well as universities in Japan. Through activities of CRI, research capability of the faculty staff can be improved and that enables the faculty staff to respond directly to the need of industries. Besides, the activities of CRI can help reinforce the linkage between universities and industries in ASEAN and Japan that consequently facilitate a solid foundation of research collaboration with industries.

3. Objectives

- (1) To address and respond to the needs of industry and common critical issues that is beneficial to ASEAN region.
- (2) To strengthen academic network among MIs, JSUs and industries.
- (3) To create and promote joint research activities among MIs, JSUs and industries.
- (4) To develop human resources through involvement of young researchers and graduate students in ASEAN and Japan.

4. Applicant Eligibility

An applicant must be a full-time faculty member of MIs (except Singapore and Brunei) who assumes full responsibility for project implementation.



5. Persons Involved

The research project shall be an integration of different parties as listed below.

Requirement	Persons Involved	Description	No. of person
Compulsory	Principal Investigator (Applicant)	Full-time faculty member of MI	1
	Co-investigator	Full-time faculty member of JSU	1
Optional	Co-researcher (MI)	Other full-time faculty member(s) of any MI	No ceiling
	Co-researcher (other)	Faculty member(s) of non-MI institutions, JSU and member of industrial, governmental or community sector	No ceiling
	Research Assistant	Graduate or postgraduate student at MI or JSU	No ceiling

List of universities that can be involved in CRI Project

AUN/SEED-Net Member Institutions (MIs)	Japanese Supporting Universities (JSUs)
Institute of Technology of Cambodia (ITC)	Hokkaido University
Institut Teknologi Bandung (ITB-INA)	Keio University
Institut Teknologi Sepuluh Nopember (ITS)	Kyoto University
Universitas Gadjah Mada (UGM)	Kyushu University
Universitas Indonesia (UI)	Nagoya University
National University of Laos (NUOL)	National Graduate Institute for Policy Studie
Universiti Malaya (UM)	Osaka University
Universiti Putra Malaysia (UPM)	Shibaura Intitute of Technology
Universiti Sains Malaysia (USM)	Tohoku University
Universiti Teknologi Malaysia (UTM)	Tokai University
University of Yangon (UY)	Tokyo Institute of Technology
Yangon Technological University (YTU)	Toyohashi University of Technology
De La Salle University (DLSU)	University of Tokyo
Mindanao State University - Iligan Institute of Technology (MSU-IIT)	Waseda University
University of the Philippines – Diliman (UPD)	
Burapha University (BUU)	
Chulalongkorn University (CU)	
Kasetsart University (KU)	
King Mongkut's Institute of Technology Ladkrabang (KMITL)	
Thammasat University (TU)	
Hanoi University of Science and Technology (HUST)	
Ho Chi Minh City University of Technology (HCMUT)	
Institut Teknologi Brunei (ITB-BRU)*	
Universiti Brunei Darussalam (UBD)*	
National University of Singapore (NUS)*	
Nanyang Technological University (NTU)*	

(*) MIs that can be involved in research activity as a co-researcher but are not eligible to apply for the program.

6. Research Areas

- (1) Chemical Engineering (ChE)
- (2) Civil Engineering (CE)
- (3) Computer and Information Engineering (CIE)
- (4) Electrical and Electronics Engineering (EEE)
- (5) Geological and Geo-Resource Engineering (GeoE)
- (6) Materials Engineering (MatE)
- (7) Mechanical and Manufacturing Engineering (ME/ManuE)
- (8) Energy Engineering (EneE)



- (9) Environmental Engineering (EnvE)
- (10) Natural Disaster (ND)

7. Research Period

Start: 1 April 2015 or contract signing date
End: 15 March 2017

8. Research Fund Supported by AUN/SEED-Net

- (1) Number of funded projects: 8
- (2) Ceiling fund: US\$50,000 per project for the whole research period
- (3) Support items

a) Project expenses (within US\$50,000)

Only Principal Investigator, Co-researcher(s) and Research Assistant(s) from MIs (except Singapore and Brunei) are eligible to utilize the research fund. Expenses recurring from the Dispatches of Japanese Professors are prohibited from this fund.

Table 1: List of supported items

Item	Sub-item	Supported Item	Detail	Remark
Trip expense	International trip in ASEAN and Japan	Air ticket	Discounted economy	1. Trip expenses cannot exceed 25% of total budget (US\$12,500) 2. Maximum supporting period of 30 days for international trip to Japan 3. Trip information, consists of traveller(s) name, dates, destination, purposes and relation to CRI, must be filed to AUN/SEED-Net for approval 4. Spending eligibility is limited to those listed in project proposal as research team members. Any changes must be informed to AUN/SEED-Net in writing.
		Daily allowance	Please refer to <i>Table 2</i> for rate	
		Accommodation	Follow each institution's rate but not exceed AUN/SEED-Net rate shown in <i>Table 2</i>	
	Domestic trip	Transportation* daily allowance & accommodation	Please refer to <i>Table 2</i> for rate of daily allowance & accommodation	
Research expenses	Equipment & spare parts			1. Research expenses cannot exceed 50% of total budget (US\$25,000) 2. Unit cost ceiling: US\$3,000 3. 2 quotations are required for an item that costs more than US\$1,000 to purchase the cheaper one



				4. Expenditure shall not be incurred inside Japan
	Consumables			
	Commissioned Work			<ol style="list-style-type: none"> 1. Expenditure shall not be paid to those listed as research team members 2. Written contract must be presented if hiring duration is longer than 30 days 3. Contract details must include unit rate, workload and work content/description 4. 2 quotations are required for the commissioned work that costs more than US\$1,000.
	Others (please specify)			

***Remark: Unsupported items include fuel meals, overhead fee, honorarium, souvenirs, entertainment and language service fee. For more information, please study latest Financial Guideline**

Table 2: Maximum rate for the trip allowance under AUN/SEED-Net

(Unit=US\$)

Class	Japan		Singapore		Other ASEAN countries		Domestic trip		Remark
	Daily allowance	Accom	Daily allowance	Accom	Daily allowance	Accom	Daily allowance	Accom	
1	35	120	35	120	30	90	15	70	Professor/ Associate Professor/ Assistant Professor/ Lecturer
2	20	100	20	100	20	70	15	70	Student/ Lab technician
3	--	100	--	100	--	70	15	70	AUN/SEED-Net ongoing student

Remarks: Daily allowance is paid by a number of days while Accommodation is paid by a number of nights.

b) Japanese Professor Dispatch (**not included in US\$50,000**)

- Principal Investigator can invite the aforementioned persons involved from Japan (Co-Investigator/ Co-researcher/ Japanese graduate / postgraduate student from JSUs and AUN/SEED-Net PhD Japan student as Research Assistant) for a maximum of **4 trips** per project during the whole research period
- All trips are arranged and funded by JICA



- Maximum period per dispatch: 3 weeks
- Request should be made to AUN/SEED-Net at least 2 months before the expected dispatch period
- Application for Japanese Professor Dispatch is as attached as ATTACHMENT 2
- For more information, please study Japanese Professor Dispatch Guidelines which is available on www.seed-net.org

9. Counter Budget from Industry

- (1) Counter budget of at least 20% of the total approved CRI budget is provided by industry in form of cash only, not in-kind support
- (2) Industry involved can be Japanese company in ASEAN, local company, or others such as governmental sector, any other foreign company, or communities
- (3) Counter budget should be managed by Principal Investigator and separately from CRI budget supported by AUN/SEED-Net

10. Project Contract and Financial Management

- (1) The Project Contract is signed TWICE at the beginning of Japanese Fiscal Year (JFY) 2015 and 2016.
- (2) The Project Contract period approved in JFY 2015 is from 1 April 2015 or contract signing date to 15 March 2016.
- (3) The Project Contract for JFY 2015 is signed under the condition that previous budget and research activity are spent and conducted properly.
- (4) Only official bank account of the university to which the Principal Investigator belongs, or equivalent, is applicable. The budget should be managed by Principal Investigator.
- (5) Carryover of funds (surplus or deficit) from JFY 2015 to JFY 2016 is not permitted.
- (6) Expenditure incurred before the contract signing date and/or after the contract end date is unacceptable.
- (7) Financial Management must be fully compliant with latest AUN/SEED-Net Financial Guideline.

11. Intellectual Property Rights (IPRs)

A written agreement shall be made between the MI to which the Principal Investigator belongs with other concerned parties who are involved in the CRI Project to agree on the following:

- (1) Rights and ownership to all intellectual property generated by the Project, such as patents, trade secrets and copyrights, shall be vested on the MI and other concerned parties involved.
- (2) AUN/SEED-Net has rights to freely use these IPRs for academic and network purposes.
- (3) The MI and other concerned parties are expected to contribute a part of income generated by the IPRs resulting from the research fund to AUN/SEED-Net. Details shall be discussed and agreed on among concerned parties.
- (4) The MI shall bear full responsibility to make sure that any part of the Project activities or the outputs produced by the Project does not infringe IPRs of other parties. In this regard, AUN/SEED-Net shall bear no responsibility for any disputes or claims on IPRs related to the Project.



12. Obligations

- (1) At the time of CRI application, Principal Investigator (applicant) may not apply for the following supports from AUN/SEED-Net:
 - a) Collaborative Research Program for Alumni Members (CRA)
 - b) Collaborative Research Program for Common Regional Issues (CRC)
 - c) Research Fellowship for Postdoctoral Study (RF)
- (2) During the 2-year research period, Principal Investigator is entitled to CRI support and not the other supports mentioned above.
- (3) Principal Investigator awarded in previous year may not apply for CRI, CRC, CRA and RF support in following year.
- (4) Within 1 year after the Project period completes, publication of the final output in “ASEAN Engineering Journal” (<http://www.seed-net.org/journal.html>) or other peer-review journals is encouraged.
- (5) Principal Investigator is required to submit the following reports to AUN/SEED-Net at the end of each JFY. Failure of submission will result in withholding next disbursement or affecting the Principal Investigator’s future applications for AUN/SEED-Net programs.**

Report Type	Submission Deadline	Remark
Technical Report	<ul style="list-style-type: none"> • March 31, 2016 • March 31, 2017 	<p>The report must describe actual progress in comparison to the schedule planned for in the application proposal.</p> <p>The format of technical report will be forwarded to each Principal Investigator after the signing of Project Contract.</p>
Financial Report	<ul style="list-style-type: none"> • March 31, 2016 • March 31, 2017 	<p>The Financial Report Guidelines will be forwarded to each Principal Investigator after the signing of Project Contract.</p>

- (6) Principal investigator and research team agree to the condition that AUN/SEED-Net has the right to use photos of the persons engaged in AUN/SEED-Net activities for advertising or promotional purposes of PR and reporting without consent for each individual case.

13. Application Requirements and Deadline

- (1) Application and required documents
 - a) Application Part 1
 - b) Application Part 2
 - c) Cover letter signed by Dean or a representative of the MI to which applicant belongs
 - d) Letter, e-mail, or any evidence showing the commitment of Japanese Co-investigator
 - e) Letter from industry certifying collaboration and counter budget of at least 20% of total budget
 - f) Curriculum vitae of the applicant



- g) Curriculum vitae of Co-investigator
- h) Curriculum vitae of other Co-researchers (if applicable)

(2) Application review

Submitted applications are reviewed by reviewing committee members who are experts in the particular engineering fields assigned by AUN/SEED-Net based on following review criteria:

- a) Originality
 - The research nature is original and beneficial in the engineering aspect or industrial practice.
 - The research purpose and topic are timely and useful.
- b) Relevancy and feasibility
 - The research purpose and topic are relevant with the purpose of CRI.
 - The research method is relevant to the purpose and expected output of the research.
 - Necessary data, facilities and equipment are well defined and prepared.
 - The budget proposal is reasonable and corresponds to the research nature.
 - The research findings have great potential of application, use or development, or can be put into practice.
- c) Research organization
 - The members of the research are adequate and the roles are clearly assigned to each member.

Important tips to improve quality of proposals:

- Appropriately address how a project is relevant to the concept and the objective of Collaborative Research Program with Industry (CRI)
- Clearly describe purposes of the researches in relation with the social needs and contribution to the future technological evolution
- Elaborate research methodology with realistic and feasible schedules
- Logically structure research methodology with concrete planning
- Clearly define solid cost estimation

(3) Application deadline

Applications including all “Supporting Documents”, in soft copies, should be submitted to AUN/SEED-Net (support@aun-seed.net) by 15 November 2014.



APPLICATION FORM
Collaborative Research Program with Industry (CRI)
2015
INSTRUCTION

To fill in the application form, it is advised to study the Program Guideline of Collaborative Research Program with Industry 2015.

To fill in the application form, please print or type all entries. Handwritten application is prohibited.

The application form of "Collaborative Research Program with Industry 2015" or "CRI 2015" is consisted of **TWO parts**.

Part 1, in Microsoft Word format, contains 4 sections

- Once completed, you may convert Part 1 into either Microsoft Word or PDF

Part 2, in Microsoft Excel format, contains 7 sections

- In each section, applicants must strictly follow the instructions
- Once completed, **DO NOT** convert Part 2 into any other file type other than **Microsoft Excel**

In addition to the two parts, following "Supporting Documents" are required.

1. Cover letter signed by Dean or a representative of the MI to which applicant belongs
2. Letter, e-mail, or any evidence showing the commitment of Co-investigator
3. Letter from industry certifying collaboration and counter budget of at least 20% of total budget
4. Curriculum vitae of the applicant (form is as attached as Attachment 1)
5. Curriculum vitae of Co-investigator (form is as attached as Attachment 1)
6. Curriculum vitae of other Co-researchers (if applicable, form is as attached as Attachment 1)

Both parts, including "Supporting Documents" must be emailed to support@ aun-seed.net with subject line "Application: CRI 2015"