Pengarah
Jabatan Pendidikan Negeri Johor
Wisma Pendidikan
Jalan Tun Abdul Razak
80604, Johor Bahru
Johor

Tuan/Puan,

Permohonan Jemputan untuk Para Guru/Pendidik Sains Sekolah Rendah/Menengah Untuk Menyertai Bengkel ‘Creative Teaching Aids using Local Materials’

Dengan segala hormatnya dimaklumkan bahawa SEAMEO RECSAM akan menganjurkan satu bengkel yang bertajuk ‘Creative Teaching Aids using Local Materials’.

2. Untuk makluman pihak tuan/puan bengkel ini juga akan dihadiri oleh guru-guru daripada negara-negara SEAMEO.


4. Bengkel tersebut akan diadakan pada tarikh seperti berikut:

<table>
<thead>
<tr>
<th>Tarikh</th>
<th>9 – 10 Julai 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tempat</td>
<td>SEAMEO Hall</td>
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<td></td>
<td>SEAMEO RECSAM, Pulau Pinang</td>
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<tr>
<td>Yuran</td>
<td>(Sila rujuk lampiran brosur)</td>
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<td>Tarikh Tutup</td>
<td>30 Jun 2018</td>
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<tr>
<td>Fasilitator</td>
<td>Yuji Otsuka - Japan International Cooperation Agency (JICA) Senior Volunteer, SEAMEO RECSAM</td>
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</tbody>
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Sekian.

“BERKHIDMAT UNTUK NEGARA”

Saya yang menurut perintah,

KHOR SIM SUAN
Timbalan Pengarah, Program Latihan b.p. Pengarah

SEAMEO RECSAM, Jalan Sultan Azlan Shah, 11700 Gelugor, Penang, MALAYSIA
Tel: 60 4-6522700 Fax: 60 4-6522737 Email: director@reansom.edu.my
WORKSHOP ON
Creative Teaching Aids
Using Local Materials

Facilitator:
MR. YUI OTSUKA
JICA Senior Volunteer
Training Programme Division
SEAMO RECSAM

Date:
9 & 10 July 2018

Venue:
SEAMO RECSAM, Penang, Malaysia

Target Participants:
Primary / Secondary Science Teachers and Teacher Educators

FOR ENQUIRIES:
Ms. Emiliati, Email: daadad@recessam.edu.my 04-6522741
Mr. Baharudin, Email: nabul@recessam.edu.my 04-6522743

PARTICIPATION FORM

Name: ____________________________
School / Organisation: ____________________________
Gender: Male / Female
Mobile: ____________________________
Email: ____________________________

M床: Vegetarian / Non-vegetarian

[ ] I have checked with the secretariat to confirm the availability of place.

Do you need accommodation at RECSAM International House?
[ ] Yes  [ ] No

Date of check-in: ________________
Date of check-out: ________________

Closing date for registration is 30 June 2018.

Payment Method:
[ ] Cheque / Local Order / Postal Order
[ ] Internet Banking
[ ] Other

Signature: ____________________________

(please specify)
**RATIONALE**

Learning science can be more meaningful, interesting and motivating if science concepts are made more tangible and authentic through activities and experiments. In many countries, there is a serious gap between science knowledge and corresponding practical applications. This gap can be addressed with suitable teaching materials and hands-on classroom activities. Educators/teachers can improvise useful scientific educational materials from daily and common items, such as assorted recycled plastic and metal products, fruits, and common stationeries. It can give them new and practical approaches for science education. With the least steps and tools, learners can make simple teaching materials such as Hot Air Balloon, Rubber-band Toy Car and Fuel Cell which illustrate important basic science concepts based on "STEM education". These well designed inexpensive teaching materials enable educators/teachers to conduct attractive science lessons through group or individual activities.

**ABOUT THE WORKSHOP**

This workshop will introduce participants to a number of individual and group hands-on science activities based on "STEM education". Each activity uses very common and affordable daily items to be made into useful teaching materials. Since inexpensive local materials are used, participants will be able to redesign and modify to suit their classroom science lessons. Through this workshop, participants will be able to obtain practical science skills to create effective teaching materials and how to use them in their own lessons.

**OBJECTIVES**

At the end of the workshop, the participants should be able to:

- appreciate efficiency, flexibility and possibility of low-cost and universally designed teaching materials.
- acquire the practical skills to conduct effective experiments in science lessons.
- acquire the practical skills to design simple and low cost teaching materials.

**WORKSHOP PROGRAMME**

**TIME**

<table>
<thead>
<tr>
<th>DAY 1 (9 JULY 2018, MONDAY)</th>
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<tr>
<td>8.15 – 8.30 a.m.</td>
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<td>8.30 – 10.30 a.m.</td>
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<td>10.30 – 11.00 a.m.</td>
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<td>11.00 a.m. – 1.00 p.m.</td>
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<tr>
<td>1.00 – 2.30 p.m.</td>
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<td>2.30 – 4.30 p.m.</td>
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<td>4.30 – 5.00 p.m.</td>
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**DAY 2 (10 JULY 2018, TUESDAY) |

| 8.30 – 10.30 a.m. | Plastic WORK (Science, Engineering and Technology)<br>• Water Rocket Competition (+ Launcher Making)<br>• Lang model<br>• Electrocope |
| 10.30 – 11.00 a.m. | MORNING TEA<br>Toy Work (Science and Engineering)<br>• Climbing monkey<br>• Rubber-band Toy car |
| 1.00 – 2.30 p.m. | LUNCH |
| 2.30 – 4.00 p.m. | Hot (Heat) Workshop (Science and Engineering)<br>• Steam boat (+ Making engine part)<br>• Simple Thermometer<br>• Hot Air Balloon<br>• Cotton candy |
| 4.00 – 4.30 p.m. | Q & A session<br>Closing & Certificate Presentation Ceremony |
| 4.30 – 5.00 p.m. | AFTERNOON TEA |

**METHODOLOGIES**

This is a hands-on workshop based on "STEM education". Participants will work individually or in groups of 5 or 6. Each session will introduce varieties of practical experiments and low cost teaching materials which can be used in actual lessons at school sites through step-by-step instructions.

**WORKSHOP FACILITATOR**

Yuji Otsuka is a Senior Volunteer of Japan International Cooperation Agency (JICA) serving at SEAMEO RECSAM, Penang since 2016. He has been conducting several practical science courses and workshops organized by the Centre. He was a science teacher in Japan for 30 years. He has served as a JICA Senior Volunteer on Science and Mathematics Education in the Independent State of Papua New Guinea for two years. Previously, he was engaged in Super Science High School (SSHS) project organized by the Ministry of Education, Japan as a project promotion chief. He had also conducted research on "Teaching Methods for Encouraging Motivation to Learn Science" at the Graduate School of International Development and Cooperation, Hiroshima University, Japan. He had been involved in JICA's Long-Term Expert on Science Education project for improving Science and Mathematics Education in elementary and junior high schools in the Republic of Ghana. He had been also engaged in preparatory education on physics for students of Malaya University preparing to study in Japan under the long-term teacher dispatch project organized by the Ministry of Education, Culture, Sports, Science and Technology, Japan.

**PARTICIPATION FEES**

- **Type 1:** RM 350.00 per participant (Without Accommodation)
- **Type 2:** RM 480.00 per participant (Twin Sharing at RECSAM International House)
- **Type 3:** RM 640.00 per participant (Single Occupancy at RECSAM International House)

**ACCOMMODATION AT RECSAM INTERNATIONAL HOUSE**

- Check-in: 8 July 2018, 2:00 p.m. onwards
- Check-out: 11 July 2018, by 12:00 p.m.

**FOOD**

Morning tea, lunch and afternoon tea will be provided by SEAMEO RECSAM during the workshop sessions. For stay-in participants (Type 2 & Type 3), breakfast and dinner will be provided too.

**SUBMISSION AND CLOSING DATE**

Places are limited to a maximum of 30 pax and will be given on a first come, first served basis. All participation forms are to be submitted to the following latest by 30 June 2018.

**WORKSHOP PAYMENT**

The fee includes workshop materials, certificate and meals. The fee should be made payable to SEAMEO RECSAM via Cheque / Local Order / Postal Order.

For internet banking, please make payment as below:

- Pay to: SEAMEO RECSAM
- Bank: MAYBANK GELUGOR BRANCH, PENANG
- Account Number: 5571 5700 0647

**Note:** This programme schedule may be subjected to changes without prior notice.