

付 属 資 料

1. アセアン科技協／シンガポール国 構造物腐食研究 運営委員会議事録
2. The 3rd Asean Science & Technology Week (TASTW) Working Committee on Materials Science & Technology 「MINUTES」

アセアン科技協/シンガポール国・構造物腐食研究

運営委員会議事録

14th Management Committee Meeting
ASEAN-Japan Materials Science and Technology Programme
Corrosion Prevention of Port and Harbour Structures
10.50 am Friday, 6 Mar '92, NSTB

Present

A/Prof Tam Chat Tim, NUS (Chairman)
Dr Wee Tiong Huan, NUS
Dr Ting Seng Kiong, NUS
Mr Shigeo Kaneshiro, JICA
Mr Akio Ikegami, Long Term Expert
Mr Tan Gak Peng, PSA
Mr Tatsu Hoshi, JICA
Ms Chin Kiat Pein, NSTB
Mrs Doris Teo, NSTB

Absent with apologies

Mr Ng Gock Kwee, PSA

Action by

1. Welcome

1.1 The Chairman welcomed Mr Hoshi to the Meeting.

2. Confirmation of the Minutes for the last Meeting

2.1 The Minutes of the last Meeting were passed without any amendments.

3. Budget

3.1 Following Mr Kaneshiro's meeting with JICA headquarters, it is confirmed that the budget for FY 92 is about S\$250,000.

4. Final Report

4.1 The first draft of the final report, which may not include all the results, should be readied by June 92 and all results must be ready by July 92. All experiments, analysis of results and summary of reports etc should be completed by the end of July 92, and the finalised report by August 92.

4.2 The coming of the short term expert to collate materials for the final report has not been confirmed.

5. Progress Report/Review Team

5.1 NSTB will prepare a cover for the progress report which is being prepared for presentation to the review team.

5.2 A/P Tam reminded project coordinators to give him their progress reports by 12 March 92 so that he can collate the information.

5.3 The programme for the review team visit was tabled for discussion.

NSTB

5.2 A/P Tam reminded project coordinators to give him their progress reports by 12 March 92 so that he can collate the information.

5.3 The programme for the review team visit was tabled for discussion.

6. Video Production

6.1 The first draft of the script and concept for the Video Production has been prepared by Mr Tan Gak Peng and vetted by A/P Tam.

6.2 Mr Kaneshiro will obtain quotations for the shooting of the video.

Kaneshiro

7. Third ASEAN Science and Technology Week

7.1 It was agreed that 8 experts from Japan (one related to each of Singapore's subproject and one each related to the other ASEAN subprojects) will be invited to speak at the conference.

7.2 A/P Tam tabled a tentative schedule for the technical sessions for discussion. A general session will be held for presentation of papers which do not fit into any of the specific topics.

7.3 The Joint Meeting with the Japanese delegation to the conference will be held on Tuesday, 22 September 92, immediately after the last technical session for the day.

7.4 A/P Tam informed the committee that the main committee will provide 150 copies of proceedings at 100 pages as part of the registration fee. The committee has to subsidise extra pages, at approximately 5 cents per page per copy.

7.5 The committee would like to sponsor at least 5 participants and other local participants to the conference if budget permits.

8. Multilateral Activities

8.1 Mr Ng Geok Kwee from PSA and Mr Lim Huay Bak from NUS have been nominated to attend the Training on "Cathodic Protection" in Japan. The other nominee is from Malaysia. NSTB will send a letter of acceptance to the Malaysian delegate.

NSTB

8.2 Prof T C Tan will be speaking and presenting papers at the Workshop/Seminar in Philippines on "Corrosion of Metals".

8.3 The 2 nominations received for the Second Symposium on Polymers in Indonesia were found to be unsuitable. It was suggested that Mr Pok from Singapore Polytechnic, who will be attending a workshop prior to the symposium, be asked to prepare a paper for the symposium.

NSTB

8.4 The Committee expressed appreciation to Mr Radhakrishnan for his contribution to the project and the time he served on the Committee as a representative of PSA. He has since left PSA to set up his own consultancy firm.

9. AOB

9.1 NSTB will enquire about the cost of hiring temporary support staff from CEMS for the Subcommittee Meeting to be held during TASTW.

NSTB

9.2 A/P Tam, Dr Fukute, Mr Ikegami and a representative from PSA will be visiting Brunei, Indonesia and Philippines for a Technical Tour from 14 - 24 June 1992.

9.3 The next meeting is scheduled for 9am on 10 April 92, at NSTB.

10. There being no other business, the meeting adjourned at 12.35pm.

13th Management Committee Meeting
 ASEAN-Japan Materials Science and Technology Programme
 Corrosion Prevention of Port and Harbour Structures
 10.00 am day, 17 Jan '92, NSTB

Present

Prof Tam Chat Tim, NUS (Chairman)
 Dr Wee Tiong Huan, NUS
 Dr Ting Seng Kiong, NUS
 Mr Shigeo Kaneshiro, JICA
 Mr Akio Ikegami, Long Term Expert
 Mr Tan Gak Peng, PSA
 Mr Khoo Lian Len, HDB
 Ms Chin Kiat Pein, NSTB

Absent with apologies

Mr Ng Geok Kwee, PSA

	<u>Action by</u>
1. <u>Confirmation of the Minutes for the last Meeting</u>	
1.1. The minutes of the last meeting was passed without any amendments.	
2. <u>Budget</u>	
2.1. The meeting reviewed the budget for the equipment list of FY 1992. Prof Tam informed the meeting of a need to cut down the cost by about S\$100,000 in order to fit into the allocated budget of S\$250,000. As such, Mr Ikegami and NUS will look into the list for priority selection of equipment.	Ikegami/NUS
3. <u>Final Report</u>	
3.1. Mr Kaneshiro informed the meeting that the draft Final Report must be ready by the middle of June so that it can be sent to Japan for review.	
3.2. A suggestion was made to ask for a short-term expert to come in April/May to assist in collating the data collected in preparation for the Final Report.	Ikegami
4. <u>Video Production</u>	
4.1. The meeting agreed to go ahead with the video production of the second phase.	
4.2. Mr Kaneshiro will make arrangements with Business Communication for the video production.	Kaneshiro
4.3. Prof Tam will prepare the script by the end of March '92, before the arrival of the short-term expert.	Prof Tam
4.4. A technical schedule of the video production was proposed by Prof Tam as follows:	
Overall Concept and Script	End of March '92
Narration	June/July '92
Final Commentary	End of June '92
Final Product	September '92

5 Third ASEAN Science and Technology Week (TASTW)

5.1 It was agreed that 7 experts (one related to each sub-project) from Japan be invited to speak at the conference. Requests were made for the abstracts to reach the organisers by end of March '92 so that they can be included in the final announcement.

5.2 Prof Tam suggested holding a Joint Meeting with the Japanese Delegation to the conference as well as a meeting of the ACMST on one of the evenings of the conference. An additional \$500 was being requested from JICA to fund this meeting.

Kaneshiro

6. Other Matters

6.1 The meeting noted the satisfactory completion of the audit team to Singapore from 17 - 18 Dec '91.

6.2 The next meeting is scheduled for 10.00 am on 6 Mar '92, at NSTB.

NUS/PSA

6.3 There being no other business, the meeting adjourned at 12.45 pm.

12th Management Committee Meeting
ASEAN-Japan Materials Science and Technology Programme
Corrosion Prevention of Port and Harbour Structures
10.00 am day, 20 Nov '91, NSTB

Present

Prof Tam Chat Tim, NUS (Chairman)
Dr Wee Tiong Huan, NUS
Dr Ting Seng Kiong, NUS
Mr Ng Geok Kwee, PSA
Mr Shigeo Kaneshiro, JICA
Mr Akio Ikegami, Long Term Expert
Ms Sim Su Lin, NSTB

Absent with apologies

Mr Tan Gak Peng, PSA

	<u>Action by</u>
1. <u>Confirmation of the Minutes for the last Meeting</u>	
1.1. The minutes of the last meeting was passed without any amendments.	
2. <u>Budget</u>	
2.1 Mr Kaneshiro requested the committee to submit the budget for the equipment list for next financial year. Mr Ikegami will be submitting the budget on equipment for corrosion while Dr Loo will worked out the budget on carbonation.	Ikegami/NUS
2.2. <u>Training in Japan</u>	
2.1 Three places have been allocated to undergo the training in Japan for next financial year. Mr Lim Huay Bak from NUS has been selected to attend the first quarter training from May - June '92 period whereas Mr Ng Geok Kwee from PSA will attend the second quarter training from July - Aug '92. In addition to PSA's nomination, an ASEAN candidate will be invited to take up the 2nd allocation for the July to Aug '92 quarter.	
3. <u>Final Report</u>	
3.1 The Meeting agreed that there will be two volumes of the Final Report. Volume 1 will be the Executive Summary and Volume 2 will focus on the Phase 2 Project.	
3.2 In connection with the TASTW, Prof Tam suggested printing a 20 coloured page brochure for the APPCS project. NSTB will assist in estimating the cost for the printing of the brochure.	NSTB
4. <u>Other Business</u>	
4.1 The Evaluation Team visit that was schedule to arrive in early Jan 92, will be re-scheduled to the middle of March '92.	
4.2 Mr Kaneshiro informed the Meeting that the Audit Team will be	

visiting Singapore from 17 - 18 Dec '92 . To prepare for the team visit, Mr Kaneshiro suggested the project team to know where the equipment that were bought under this project.

NUS/PSA

4.3 The next Meeting is scheduled on Friday 20 Dec 91 at 10.00am in NSTB.

4.4 There being no other business the Meeting concluded at 1.00 pm.

11th Management Committee Meeting
ASEAN-Japan Materials Science and Technology Programme
Corrosion Prevention of Port and Harbour Structures
10.00 am Friday, 18 Oct '91, NSTB

Present

Prof Tam Chat Tim, NUS (Chairman)
Dr Wee Tiong Huan, NUS
Mr Tan Gak Peng, PSA
Mr Shigeo Kaneshiro, JICA
Mr Akio Ikegami, Long Term Expert
Ms Chin Kiat Pein
Ms Sim Su Lin, NSTB

Absent with apologies

Mr Ng Geok Kwee, PSA
Dr Ting Seng Kiong, NUS

1. Confirmation of the Minutes for the last Meeting

1.1. The minutes of the last meeting was passed without any amendments.

2. Multilateral Activities

2.1. Collaborative Research in Singapore

The Meeting considered the applications from the 4 nominees submitted for the collaborative research programme as follows:

Indonesia	-	Ms Rochanti Dachlan
Philippines	-	Mr Manuel M. Navarro Mr Jose Luis S. Gamboa
Thailand	-	Dr Somkiat Rungthongbaisuree

2.2. After deliberating on the submission the meeting agreed that Ms Dachlan from Indonesia & Mr Gamboa from Philippine best qualify for the attachments. However, both have indicated preferences to undertake the same project on Carbonation during the Jan-Mar '92 period. A/Prof Tam suggested to write to both Indonesia and Philippines candidates to determine if they would like to take up the project on 'Study on Pore Structure of Carbonated Cementitious Materials' and 'Corrosion Test on Samples from Exposure and Accelerated Environment Tests' respectively. Depending on the response of the two candidates, appropriate following up action would be taken.

3. Short Term Experts

3.1 The Meeting was informed that three short term experts will arrive from 23 Oct to 3 Nov 91. They are as follows:

i) Mr Toshikazu Minematsu
ii) Mr Hidenori Hamada
iii) Mr Yosio Sinoda

Action by

NSTB

4. Research Assistant

4.1 As for the employment of research assistant, NUS shortlisted a candidate from Philippines and an offer has been made to that candidate. Pending response from Philippines followup actions would be taken.

NUS

5. Budget

5.1 Mr Kaneshiro informed the meeting that the estimated budget for equipment for next financial year has been approved. As the project will end by September 1992, no collaborative research programme or training will be scheduled. However, a budget for the next ASEAN Technical Exchange Tour to Brunei, Indonesia and Philippines will be set aside. For this Technical Exchange Tour in May '92, a programme similar to the last tour will be proposed.

6. Training in Japan

6.1 Three places have been allocated to undergo the training in Japan for next financial year. The first candidate from NUS will attend the first quarter training from May - June '92 period whereas the nominee from PSA will attend the second quarter training from July - Aug '92. In addition to PSA's nomination, an ASEAN candidate will be invited to take up the 2nd allocation for the July to Aug '92 quarter. The invitation for this nomination should be out by early April 92.

NSTB

7. Third Asean Science and Technology Week (TASTW)

7.1 In preparation for the TASTW, the meeting agreed to set up a Organising Committee and a Working Committee. In the Organising Committee, 6 ASEAN country coordinators and 6 Japanese experts will be involved. As for the Working Committee the following organisations would be involved:

A/Prof Tam Chat Tim (Chairman)
1 from HDB (to be identified)
1 from SISIR (to be identified)
2 from PSA (Mr Tan Gak Peng & Mr Tan Geok Kwee)
2 from NUS (Dr Wee Tiong Huan & Dr Ting Seng Kiong)
2 Long Term Expert (Mr Kaneshiro and Mr Ikegami)
1 representative from CEMS
2 from NSTB (Ms Ching Kiat Pein and Ms Sim Su Lin)

7.2 The First Working Committee Meeting has been scheduled to meet on Saturday 16 November 91 at 10.00 am at the NSTB boardroom. In the meantime, NSTB would be writing to these organisations for nominations.

NSTB

8. Other Business

8.1 In conjunction with the visit of the Evaluation Team sometime in early Jan 92, A/Prof Tam propose to submit the Progress Report to the Project Committee for reviewing by December Meeting.

NUS/PSA

8.1 The next Meeting is scheduled on Friday 22 Nov 91 at 10.00am in NSTB.

8.2 There being no other business the Meeting concluded at 1.30 pm.

10th Management Committee Meeting
ASEAN-Japan Materials Science and Technology Programme
Corrosion Prevention of Port and Harbour Structures
10.00 am Friday, 30 August '91, NSTB

Present

Prof Tam Chat Tim, NUS (Chairman)
Mr Tan Gak Peng, PSA
Mr Ng Geok Kwee, PSA
Mr Shigeo Kaneshiro, JICA
Mr Akio Ikegami, Long Term Expert
Ms Sim Su Lin, NSTB

Absent with apologies

Dr Wee Tiong Huan, NUS
Dr Ting Seng Kiong, NUS

	<u>Action by</u>
1. <u>Confirmation of the Minutes for the last Meeting</u>	
1.1. The minutes of the last meeting was passed without any amendments.	
2. <u>Multilateral Activities</u>	
2.1. The Meeting noted the following nominations for the multilateral activities:	
a) <u>Training in Japan</u>	
In addition to Mr Tan Gak Peng's nomination, Mr Awangku Menddin PLW Pengiran Hj Yussof from Brunei have been selected as the second participant to undergo training in Japan from 10 - 30 Nov 91. Brunei will be instructed to forward the A2-3 Form to Japan direct.	NSTB
3. <u>Research Assitant</u>	
3.1. As for the employment of a research assistant, NUS is still looking for a suitable person.	NUS
4. <u>Other Business</u>	
4.1. The next Meeting is scheduled on Friday 18 Oct 91 at 10.00am in NSTB.	
4.2. There being no other business the Meeting concluded at 12.45pm.	

9th Management Committee Meeting
ASEAN-Japan Materials Science and Technology Programme
Corrosion Prevention of Port and Harbour Structures
10.00 am Friday, 26 July '91, NSTB

Present

Prof Tam Chat Tim, NUS (Chairman)
Mr Tan Gak Peng, PSA
Dr Ting Seng Kiong, NUS
Mr R. Radhakrishnan, PSA
Mr Ng Geok Kwee, PSA
Mr Shigeo Kaneshiro, JICA
Mr Akio Ikegami, Long Term Expert
Koh Guat Wah, NSTB
Ms Sim Su Lin, NSTB

Absent with apologies

Dr Wee Tiong Huan, NUS

1. Confirmation of the Minutes for the last Meeting

1.1. The minutes of the last meeting was passed without any amendments.

2. Multilateral Activities

2.1. The Meeting noted the following nominations for the respective multilateral activities:

a) Malaysia

Following invitation for a 3rd participant by Malaysia to attend the seminar in Oct 91, the meeting agreed that A/Prof Tam will represent Singapore as the 3rd participant.

2. Short Term Expert

2.1 The next short term expert visit which was scheduled for mid July '91 has been postponed.

2.2 As for Prof Daimon visit, he has been scheduled to arrive from 4 - 10 August '91. The proposed schedule for his visit is enclosed in Annex 1.

3. Fourth Joint Meeting in Philippines

3.1 The Fourth Sub-Committee Meeting will be held from 2 to 6 September 91 in Philippines. A/Prof Tam, Mr Akio Ikegami and Mr Ng Geok Kwee will be attending the said meeting. In preparation for the forthcoming Meeting, PSA submitted the progress report on cathodic protection studies, whilst NUS would be submitting the progress report on the carbonation test. NSTB will however, assist to collate a list of the multilateral activities which Singapore had participated.

Dr Ting/
Dr Wee/
NSTB

4. Other Business

4.1 The next Meeting is scheduled on Friday 30 Aug 91 at 10.00am in NSTB.

4.2 There being no other business the Meeting concluded at 12.45pm.

Approved by JICA	- 5 Aug
Announcement to ASEAN member countries	- 12 Aug
Receipt of Project proposal from applicants	- 14 Sept
Confirmation of ASEAN participants	- 30 Sept
Submission of final planning paper	- 1 Oct
Commencement of attachment	- 1 Jan '92

NSTB

2.3 ASEAN Tour

The ASEAN Technical Exchange Tour which was held from 16 to 22 June '91 to Malaysia and Thailand was a successful one. A/Prof Tam proposed similar tours to Indonesia, Brunei and Philippines sometime next year.

3. Short Term Expert

3.1 The next short term expert visit has been scheduled for mid July '91 to help in the maintenance of equipment which was installed at NUS.

3.2 As for Prof Daimon visit, he has been scheduled to arrive from 4 -10 August '91.

4. Equipment for FY91

4.1 Mr Ikegami presented a revised draft list of equipment (see Annex 1) to be purchased locally for this financial year.

Mr Ikegami

5. Fourth Joint Meeting in Philippines

5.1 In preparation for the forthcoming Sub-Committee Meeting scheduled for September in Philippines, A/Prof Tam proposed the submission of the Singapore budget and the progress reports of the carbonation & cathodic test to the Meeting. They should be ready by July.

Dr Ting/
Dr Wee

6. Third ASEAN Science and Technology Week (TASTW)

6.1 The planning paper (Annex 2) which include the estimated budget for the TASTW was discussed and confirmed for submission to Dr Arjuno Brojonegoro, Indonesia for his necessary followup with JICA.

Prof Tam/NST

7. Other Business

7.1 The next Meeting is scheduled on Friday 26 July 91 at 10.00am in NSTB.

7.2 There being no other business the Meeting concluded at 12.30pm.

Secret Management Committee Meeting
ASEAN-Japan Materials Science and Technology Programme
Corrosion Prevention of Port and Harbour Structures
10.00 am Monday, 27 May '91, NSTB

Present

Prof Tam Chat Tim, NUS (Chairman)
Mr R Radhakrishnan, PSA
Mr Tan Gak Peng, PSA
Dr Ting Seng Kiong, NUS
Mr Shigeo Kaneshiro, JICA
Mr Akio Ikegami, Long Term Expert
Ms Sim Su Lin, NSTB

Absent with apologies

Dr Wee Ting Huan, NUS

1. Confirmation of the Minutes for the last Meeting

1.1. The minutes of the last meeting was passed with the following amendments:

In Para 4.1 the next visit of the short term expert should be amended to read end June '91 instead of July 91.

In Para 8.1 (c) Dr Minematsu - Sumitomo Cement should be amended as Dr Toshikazu Minematsu - Sumitomo Cement.

2. Multilateral Activities

2.1. The Meeting noted the following nominations for the respective multilateral activities:

	<u>Member countries</u>	<u>Activities</u>
a)	<u>Brunei</u> Mr Tan Teck Hoe	Training on corrosion of R. C. Structures in Japan
b)	<u>Malaysia</u> Mr Lee Chong Gek	Training on Characterisation of Fine Ceramics, 12 May - 12 June '91
	Mr Khor Khiam Aik) Ms Chua Gaik Khuan)	Seminar on Fine Ceramics, 1 - 2 Oct '91

NSTB

3. Short Term Expert

3.1. The Meeting noted that the next visit of the short term expert will be scheduled between 9 - 21 December '91 for the Cathodic Protection project following Prof Daimon's visit in mid-August '91.

3.2 With regards to the Evaluation team visit, the Meeting proposed to schedule their arrival sometime in January or February the next year.

4. Equipment for FY91

4.1. Mr Ikegami presented a draft list of equipment (see Annex 1) to be purchased locally for this financial year. However, due to the high cost of the equipment, he suggested that one should set priorities on the purchase. This discussion will be made after prior consultation with Dr Wee.

Mr Ikegami/
Dr Wee

5. Research Assistant

5.1 A/Prof Tam informed the Meeting that he had reactivated the previous RA account and proposed that the salary of the new RA employed should be less than what was budgeted. This is to ensure there will be sufficient funds to extend his attachment longer than the official period budgeted for.

6. Sub-Committee Meeting

6.1 In preparation for the forthcoming Sub-Committee Meeting which is scheduled in Philippines in August, A/Prof Tam proposed to submit the Singapore budget and other requirements to the Meeting. It should be ready by July. As for the TASTW, A/Prof Tam suggested that we would pursue this discussion further in the next Meeting.

NSTB/
Dr Ting/
A/Prof Tam

7. Other Business

7.1 Mr R. Radhakrishnan presented to the Meeting an abstract of a paper on the "Corrosion Prevention and Repairs of Concrete Port Structures" which is planned to be presented at a PIANC Seminar in Surabaya, Indonesia, 2 - 7 March 1992. The paper enclosed as Annex 2 will be co-authored by Mr R. Radhakrishnan, Dr T. Fukute, Mr Ikegami and A/Prof Tam.

7.2 A/Prof Tam informed the Meeting that the APPCS Project was featured in an article in the May issue of the Engineering Faculty News. The article is attached in Annex 3.

7.3 The next Meeting is scheduled on Saturday 29 June 91 at 10.00am in NSTB.

7.4 There being no other business the Meeting concluded at 12.20pm.

Sixth Management Committee Meeting
ASEAN-Japan Materials Science and Technology Programme
Corrosion Prevention of Port and Harbour Structures
10.00 am Monday, 29 April '91, NSTB

Present

Prof Tam Chat Tim, NUS (Chairman)
Mr R Radhakrishnan, PSA
Mr Tan Gek Peng, PSA
Dr Wee Tiong Huan, NUS
Dr Ting Seng Kiong, NUS
Mr Shigeo Kaneshiro, JICA
Mr Akio Ikegami, Long Term Expert
Ms Sim Su Lin, NSTB

1. Confirmation of the Minutes for the last Meeting

1.1. The minutes of the last meeting was passed with the following amendment:

In Para 7.1 the period should be amended to read 1 Oct '91 - 31 Mar '91 instead of 1 Oct '91 - 31 Mar '92.

2. Training in Japan

2.1. The tentative programme for training that is scheduled for 10-30 November '91 was submitted by Ikegami during the Meeting. The Meeting agreed to proceed to follow the schedule that was agreed in the last Meeting :

Invitation to member countries	-	May '91
Nomination received by	-	30 June '91
Selection of candidates	-	31 August '91
Announcement of successful candidates	-	September '91

The meeting agreed that the candidate selected to participate in the training should preferably be a civil engineer intimately involve in maintenance and repair from the port authorities or port/harbour research institutions of member countries. In addition, he should also be familiar in the field of cathodic protection.

NSTB

3. Multilateral Activities

3.1. The Meeting noted the participation in the multilateral activities for FY 90/91 which is enclosed as Annex 1.

NSTB

4. Short Term Expert

4.1. The Meeting noted that the next visit of the short term expert will be scheduled end July '91 to help in the maintenance of the Carbonation Chamber in NUS. Subsequent to this will be Prof Daimon's visit in mid-August '91.

5. ASEAN Tour

5.1. The proposed regional tour which was initially confirmed as 9 - 15 June '91 to Malaysia and Thailand would be rescheduled to 16 - 22 June '91. The Chairman proposed that he would be drafting a letter to Malaysia and

Thailand coordinator to propose a forum with engineers and to visit port facilities.

Prof Tam

6. Local Cost

6.1. PSA, NSTB and NUS submitted information on the in-kind contribution towards the programme for the period 1 Oct '90-31 Mar '91. This is attached in Annex 2, Annex 3 and Annex 4.

7. Equipment for FY91

7.1. Mr Ikegami informed the Meeting that the revised listing for the equipment purchase would be made available by the next management meeting. Due to the high cost of the equipment, he suggested that one should set priorities on the purchase.

Mr Ikegami

8. Other Business

8.1. Mr Ikegami informed the meeting that the paper on "A study on Cathodic Protection Method for Port & Harbour Concrete Structures in Tropical Region " will be presented in the 16th JSCE Conference in Sept '91 in Japan. This is attached in Annex 5. The co-authors are as follows :

- | | |
|------------------------|--|
| a. Dr Tsutomu Fukute | - Port & Harbour Research Institute, Min. of Transport |
| b. A/Prof Tam Chat Tim | - National University of Singapore |
| c. Mr A. Ikegami | - Sumitomo Cement |
| Dr Toshikazu | - Sumitomo Cement |
| Dr Minematsu | - Sumitomo Cement |
| d. Mr Yoshio Shinoda | - Nakagawa Corrosion Protecting Co. Ltd |

9. There being no other business the Meeting concluded at 12.20pm.

Fifth Management Committee Meeting
ASEAN-Japan Materials Science and Technology Programme
Corrosion Prevention of Port and Harbour Structures
10.00 am Saturday, 30 March '91, NSTB

Present

Prof Tam-Chat Tim, NUS (Chairman)
Mr R Radhakrishnan, PSA
Dr Wee Tiong Huan, NUS
Dr Ting Seng Kiong, NUS
Mr Shigeo Kaneshiro, JICA
Mr Akio Ikegami, Long Term Expert
Ms Koh Guat Wah, NSTB

1. Confirmation of the Minutes for the last Meeting

1.1. The minutes of the last meeting was passed with the following amendment:

Para 2.1 should be amended to read : Mr Ikegami informed the Meeting that JICA's approval for the APPCS Project Schedule is pending. This is attached as Annex I.

2. Training in Japan

2.1. Copies of the application forms A 2-3 to be submitted to the NSTB for Dr Wee's participation in the forthcoming training will also be transmitted to the PSD and Japan embassy.

NSTB

2.2. For the proposed training scheduled for 10-30 November '91, Mr Ikegami informed the Meeting that Dr Fukute has been requested to plan the tentative programme. This should be available by the next management committee meeting at the end of April to enable the following schedule to proceed:

Mr Ikegami

Invitation to member countries	-	May '91
Nomination received by	-	30 June '91
Selection of candidates	-	31 August '91
Announcement of successful candidates	-	September '91

The meeting agreed that the candidate selected to participate in the training should preferably be a civil engineer intimately involve in maintenance and repair from the port authorities or port/harbour research institutions of member countries.

2.3. To facilitate arrangements, all nominations received by NSTB for participation in future training/seminars should be copied to Mr Kaneshiro.

NSTB

3. Collaborative Research

3.1. The Meeting noted that the trainees from Brunei and Thailand have completed their collaborative research programme. The Meeting agreed that copies of the final report should be submitted where feedback on their experience in the training could be obtained. The evaluation report by the supervisors should also be made available as soon as possible for transmission to JICA.

Dr Wee/
Dr Ting

3.2. Based on the outcome of this recently concluded collaborative research

exercise, a preliminary collaborative research programme for the next financial year could be planned. It was agreed that the next collaborative research programme be scheduled for January - March 1992. The Meeting agreed that the outline for the preliminary programme should be available by August '91 for announcement to member countries at the next subcommittee meeting in Philippines.

Dr Wee/
Dr Ting

3.3. Chairman informed the Meeting that Singapore has not been participating in the collaborative research programmes to the fullest extent in view of difficulties in identifying suitable nominees. In this respect, he will extend our apology and explain the situation to the programme coordinators of member countries at the forthcoming meeting in August '91.

Prof Tam

4. Progress Reports

4.1. The Meeting agreed that the progress reports for the carbonation and cathodic protection studies should be finalised and made available by August '91. The results from the collaborative research of the carbonation studies undertaken recently could be incorporated into this progress reports.

Project
Investigators

5. Short Term Expert

5.1. The Meeting noted that the next visit of the short term expert will be in September '91 since the testing procedure is scheduled for late September '91. Subsequent to this will be the interim evaluation team's visit in October '91.

6. ASEAN Tour

6.1. It was agreed that the proposed regional tour would initially be confined to two countries i.e. Malaysia and Thailand. The visit to these two countries was agreed as 2 - 9 June '91 where the local team comprising two representatives from the NUS and PSA would be participating in the visit. Mr Kaneshiro informed the Meeting that approval for the local team to participate should not be a problem whilst Dr Fukute's participation is subject to the endorsement of JICA. However it was agreed that the visit can proceed even if Dr Fukute is unable to join the local team.

6.2. Chairman informed the Meeting that the objectives of the proposed visit is as follows:

- a) Promote the Phase I
- b) Establish liaison with port and harbour authorities and counterparts of member countries and identify interested parties for possible collaboration in a proposed Phase II.

6.3. Mr Kaneshiro informed Chairman that the planning paper for the proposed visit should be submitted by the first week of April for transmission to JICA for formal approval.

Prof Tam

7. Local Cost

7.1. Mr Kaneshiro requested for information on the in-kind contribution provided by counterpart institutions/agencies towards the programme for the period 1 Oct '91-31 Mar '92.

NSTB/NUS
/PSA

8. Research Assistant Budget

8.1. Mr Kaneshiro informed the Meeting that JICA's approval of the

proposed salary for the employment of the research assistant is still pending.

9. Equipment for FY91

9.1. Mr Ikegami informed the Meeting that the listing for the equipment purchase would be revised in view of procurements already made and which costed much less than what it was originally budgeted. The revised list would be made available by the next management meeting tentatively scheduled for end April '91.

Mr Ikegami

10. There being no other business the Meeting concluded at 12.00pm.

Fourth Management Committee Meeting
 ASEAN-Japan Materials Science & Technology Programme
 Corrosion Prevention of Port & Harbour Structures
 10.00am Monday, 20 Feb'91
 Library, NSTB

Present

A/Prof Tam Chat Tim, NUS - Chairman
 Mr Tan Gek Peng, PSA
 Dr Wee Tiong Huan, NUS
 Dr Ting Seng Kiong, NUS
 Mr Shigeo Kaneshiro, JICA
 Mr Akio Ikegami, Long Term Expert
 Ms Clara Tan, NSTB

	<u>Action by</u>
1. <u>Minutes of the last Meeting</u> 1.1. The minutes for the last Meeting was passed with the following amendments: 1.1.1 Para 8.2. was amended to read : Prof Tam will write to counterparts to inform them of any submission of papers for publication.	
2. <u>Revised Schedule</u> 2.1 Mr Ikegami informed the Meeting that the APPCS Project Schedule has been approved by JICA. This is attached as <u>Annex I</u> . 2.2 The Meeting took note of the revision in the schedule for the Cathodic Protection test due to the delay in the arrival of both the equipment and materials. This revised schedule is attached as <u>Annex II</u> . Mr Ikegami proposed that we this revised schedule should be used for future reference.	Project Investigators
3. <u>Training in Japan FY91</u> 3.1 NSTB will be formally writing to Dr Wee from NUS to attend the training in Japan scheduled to be held during the first quarter (April- June 91). 3.2 As for training in the second quarter (Oct - Nov 91), PSA will submit 1 nomination while the ASEAN countries will be invited to nominate 1 person to take up the 2nd place allocated for the ASEAN countries. In the meantime JICA will provide the confirmed date, programme and objectives of the training before extending invitation for nominations to ASEAN countries. The invitation should be sent out by mid June to ASEAN coordinators, where the selection of suitable candidates would be held in August by the management committee.	NSTB Mr Kaneshiro
4. <u>Video Show</u> 4.1 Mr Kaneshiro informed the Meeting that the videos for the APPCS project have been completed and are available for dissemination to the following organisations :	

1PSA
1 NUS
1 NSTB

10 Japan
1 JICA (Singapore)
5 ASEAN Countries

NSTB/
Mr Kaneshiro

4.2 Prof Tam proposed for the allocation of a budget to engage a professional video agency to record and take footage of the progress of the current APPCS project in various stages.

5. Salary of Research Assistant

5.1 Mr Kaneshiro informed the Meeting that the approved salary from JICA for the research assistant would be US\$1,800 per month including bonuses (approx. US \$21,000 per year). As for payment of salary, it is similar to the previous arrangement whereby the NUS bursar will first make payment to the research assistant and JICA will then reimburse NUS bursar through NSTB.

6. Arrival of Short Term Expert

6.1 Mr Kaneshiro informed the meeting on the arrival of the following 3 short term experts who will be arriving as follows:

- a) Tashikazu Minematsu 28 Feb - 21 Mar 91
- b) Mr Ysio Shinoda 7 Mar - 14 Mar 91
- c) Dr Fukute 17 Mar - 21 Mar 91

7. Other Matters

7.1 The Fifth Management Committee Meeting is scheduled on Saturday 30 March 91 at 10.00am in NSTB.

7.2 There being no other business, the Meeting concluded at 1.00pm.

Third Management Committee Meeting
ASEAN-Japan Materials Science & Technology Programme
Corrosion Prevention of Port & Harbour Structures
3.00pm Monday, 7 Jan'90
Meeting Room, NUS Faculty Club

Present

A/Prof Tam Chat Tim, NUS - Chairman
Mr R. Radhakrishnan, PSA
Dr Wee Tiong Huan, NUS
Mr Shigeo Kaneshiro, JICA
Mr Akio Ikegami, Long Term Expert
Mr Y. Ishida, JICA
Ms Sim Su Lin, SCS

1. <u>Minutes of the last Meeting</u>	<u>Action by</u>
1.1. The minutes for the last Meeting was passed without amendments.	
2. <u>Matters Arising</u>	
2.1 In regards to the multilateral activities organised by the Philippines, the meeting noted that Dr S. Jana from NTI will be presenting the following paper at the seminar :	
<i>"Exfoliation Susceptibility of Several Aluminium Alloys"</i>	
3. <u>Cathodic Protection/ Carbonation Test Schedule</u>	
3.1 Mr Ikegami informed the Meeting that the amount of \$83,372.25 has been allocated for local expenses for the Cathodic Protection and Carbonation test.	
3.2 The Meeting noted the respective sections of the report entitled "ASEAN Project Prevention on Corrosion of Structures - 1990 -1992" from the project investigators have been submitted to the NSTB for consolidation. The draft report will be compiled and presented for discussion at next Meeting.	Project Investigators
5. <u>Equipment for current FY</u>	
5.1. The Meeting took note of the list of equipment for purchase in Singapore in FY 91 and FY 92(Annex 1). Since some equipment is available in Singapore, it was proposed that these equipment could be obtained from a local agent here.	
6. <u>APPCS Video</u>	
6.1. The Meeting was informed that the first addition of the video will be available sometime at the end of January.	
7. <u>Training in Japan for FY 91</u>	
7.1. Formal submission of A2 & A3 forms for training in the first quarter (April-June 91) should be in by end of March 91. However, PSA will submit	Dr Wee/Mr Radhakrishnan

nominations by June for training in the second quarter(Oct- Nov 91).

8. Publication of findings in Conference /Journals

8.1. In addition to what was agreed in the last Meeting, the Meeting agreed that Mr N. Shimizuguchi and Mr A. Ikegami should be added to the groups from Waters Tanks and Port and Harbour respectively.

Water Tanks

Dr Kashino

Mr N.Shimizuguchi

Mr Seow Hong Pheow, SISIR

Mr Koh Teow Boo, HDB

Port and Harbour

Dr Fukute

Mr A. Ikegami

Mr R. Radhakrishnan, PSA

Prof Tam Chat Tim, NUS

8.2. Formal invitations will be sent to these persons involved in the respective groups for submissions of reports to the publications.

A/Prof Tam

10. Other Matters

10.1. The fourth Management Committee Meeting is scheduled on Wednesday 20 February 91 at 10.00 am in NSTB.

10.2. There being no other business, the Meeting concluded at 5.00 pm.

Project Prevention on Corrosion of Structures - 1990-1992 ". All project investigators are therefore requested to submit their respective sections to Science Council for consolidation into a document.

Science
Council

5. Equipment for current FY

5.1. The Meeting took note of the list of equipment for purchase in Singapore in FY 90. Mr Ikegami informed the Meeting that items 1-8 have been approved for procurement whilst items 9-16 are pending.

5.2 The Meeting was also informed that allocations of S\$400,000 and S\$133,000 have been made for FY 91 and FY 92 respectively. For FY 91, \$280,000 of the total amount has already been budgetted for acquisition. Mr Ikegami requested that a list of proposed equipment for FY 91 and FY 92 should therefore be available by mid December and mid January respectively for submission to JICA head office for approval of use of the allocated budgets.

Project
Investigators

5.3 All project equipment are presently consigned to the Science Council instead of direct to the recipient agencies. To facilitate clearance of future equipment without payment of unnecessary warehouse storage charges, it would be advisable for the equipment to be consigned direct to the recipient agencies. JICA head office should be informed of such preferred arrangement.

Mr Kaneshiro
/Mr Ikegami

6. APPCS Video

6.1. The Meeting took note of the draft script for the video.

7. Detail Schedule for Collaborative Research

7.1. The Meeting noted the schedule for the collaborative research to be undertaken by the two trainees, Mr Hamiddon Hj Md Said and Mr Wuttipong Moungrnoi from Brunei and Thailand respectively for January to March 91.

8. Training in Japan for FY 91

8.1. Mr Ikegami informed the Meeting that an indicative programme proposal for training in the first quarter (April-June 91) should be provided by 27 December with formal submission of A2 & A3 forms by end March 91.

8.2 Formal submission for proposed training in the second quarter should however be submitted by end June 91.

9. Publication of findings in Conference /Journals

9.1. It was agreed that the final reports for the projects can serve as basis for preparation of technical papers on the projects. It was agreed that the result should be published jointly following set guidelines. It was therefore agreed that two separate groups be established for this purpose :

Water Tanks

Dr Kashino
Mr Seow Hong Pheow, SISIR
Mr Koh Teow Boo, HDB

Port and Harbour

Dr Fukute
Mr R. Radhakrishnan, PSA
Prof Tam Chat Tim, NUS

10. Other Matters

10.1. The printed copies of the final reports for the project are available for dissemination. These will be distributed in accordance to the list prepared earlier.

10.2. The third Management Committee Meeting is scheduled on Friday 4 January at 1.00 pm in Science Council.

10.3. There being no other business, the Meeting concluded at 4.30 pm.

First Management Committee Meeting
ASEAN-Japan Materials Science And Technology Programme
Corrosion Prevention of Port and Harbour Structures
Monday 29 October 90
Science Council of Singapore

Present

Prof Tam Chat Tim, NUS - Chairman
Dr Wee Tiong Huan, NUS
Mr Y. Ishida, JICA
Mr T. Hoshi, JICA
Mr Shigeo Kaneshiro, JICA
Mr Akio Ikegami, Long Term Expert
Mr Tan Gak Peng, PSA
Mrs Rosa Tan, SCS
Ms Koh Guat Wah, SCS

1. Minutes of the last Meeting

1.1. The minutes of the last meeting was passed without amendments. In view of the conclusion of the project component on "Corrosion Prevention on Drinking Water Storage Tanks" and the extension (Oct 90-Sept 92) of the project on "Corrosion Prevention of Port and Harbour Structures", this meeting will be recorded as the First Management Committee Meeting for the latter.

2. Budget (FY1990)

2.1 The Meeting noted the total FY 90 budget as S\$375,000 out which S\$137,500 is allocated for Singapore for acquisition of equipment. In this regard, Dr Wee presented to the Meeting the proposed list of equipment (see Annex 1) for procurement under this budget component.

2.2 As the purchase of all the items proposed in the list entails a total budget of S\$172,823 which far exceeds the allocated amount of S\$137,500, the meeting discussed and agreed to consider the following options:

- (a) Purchase of the Ion Chromatography can be considered as the lowest priority where its purchase can be postponed until the next financial year (FY 91).
- (b) Consider purchasing multiple units of items such as the pore solution expression apparatus and CO₂ sampler.

2.3. In spite of having derived at the above options so as to meet the allocated budget, Mr Hoshi informed the Meeting that the proposal for the purchase of all the items which carry a total budget of S\$172,823, can however be put up to JICA for consideration.

2.4. The Meeting noted that the amount of S\$12,000 for the research component for collaborative research activity has been budgetted under the allocation for multilateral activities.

3. Programme of Work

3.1. The proposed workplan for the project on carbonation was presented by Dr Wee. The studies to be undertaken in the workplan will however cover a duration of 11/2 years instead of 21/2 years as highlighted in the proposal. The Meeting took note of this change in the proposal which is attached as Annex 2.

3.2. As regards to new regimes to be tried out under the collaborative research, Prof Tam proposed that this should be discussed and further explored by Dr Ting with Dr Fukute during his visit to Japan on 29 Oct-17 Nov 90.

4. Multilateral Activity (Singapore)

4.1. Mr Kaneshiro informed the Meeting that the final planning paper on the collaborative research activities which contain the budget estimate was received from the Science Council in August. It will be despatched to JICA this week.

5. Multilateral Activities (Other Member Countries)

5.1. The status of Singapore's participation in the three components (seminar, training and collaborative research) of the multilateral activities organised by the other member countries is noted as follows:

I. Indonesia

There is no nomination for the two activities on Regional Training Programme and Collaborative Research. As for the ASEAN-Japan Symposium Programme on Polymers 6 -10 Mar 90, Bandung, the following have been nominated to present papers:

- (a) Assoc Prof L M Gan (Microlatices from Microemulsion Polymerisation)
- (b) Assoc Prof S H Goh (Effect of Structural Modification on Miscibility Behaviour of Polymethacrylates)
- (c) Dr S O Chan (Country Report on Polymer Science and Technology in Singapore)

II. Malaysia

It was noted that the announcement for the regional seminar and collaborative research activity has yet to be received. In the meantime, we

have submitted a nomination for Mr Tung Siew Kong, Department of Mechanical and Production Engineering, NUS to participate at the forthcoming Regional Training of Characterisation on Fine Ceramics, 18 Nov -15 Dec, Kuala Lumpur, Malaysia.

II. Philippines

Formal notification was received from the Philippines counterpart regarding the change in schedule for the multilateral activities. The revised schedule is noted as follows:

- i) Seminar 4 - 9 Mar 91
- ii) Collaborative Research 19 Nov 90 - 9 Mar 91
- iii) Training 6 Jan - 2 Feb 91

Following invitation to relevant institutions and agencies for participation of the above rescheduled activities, a nomination from Nanyang Technological Institute to participate in (i) was received. However Prof Tam was of the view of the that we will not confirm our participation yet in view of the current unrest situation in the Philippines.

Thailand

Prof Tam informed the Meeting that there is no nomination for the collaborative research component. For the two places allocated for ASEAN participants, three countries namely Indonesia, Philippines and Thailand have already expressed interest to participate. In regards to the regional seminar and training, the following were nominated to attend:

- i) Seminar 17-19 Oct 90
 - (a) Prof Tam Chat Tim, NUS
 - (b) Dr K H Seah, NUS (Use of Acoustic Emission in Monitoring Corrosion
 - (c) Dr S Jana, NTI (Investigation on Anti-Corrosion Paint Coatings using Salt Spray Evaluation Techniques)
- ii) Training on Atmospheric Corrosion-Organic Coatings 16 Oct-12 Nov 90
 - (a) Mr Loh Swee Heng
Executive Structural Engineer, HDB

6. Other Matters

6.1 Payments

Mr Kaneshiro enquired about the issuing of receipts for the recent payments made for the Seminar. Council however clarified that it may not be

possible to obtain all the receipts as some agencies do not normally acknowledge payment made by cheques which are paid in favour of the agencies' name.

7. Next Meeting

The Meeting agreed to tentatively schedule the next Meeting at the end of November (26-30 November). The date will be confirmed later.

There being no other matters, the Meeting concluded at 4.30 pm.

THE 3RD ASEAN SCIENCE & TECHNOLOGY WEEK (TASTW)

WORKING COMMITTEE ON MATERIALS SCIENCE

& TECHNOLOGY

MINUTES

MINUTES OF THE 1ST MATERIAL SCIENCE & TECHNOLOGY CONFERENCE
WORKING COMMITTEE MEETING HELD AT NATIONAL SCIENCE TECHNOLOGY
BOARD ON 16 NOVEMBER 1991 AT 10 AM

PRESENT : A/P Tam Chat Tim - NUS (Chairman)
Mr Seow Hong Pheow - RISIR
Mr Akio Ikegami - JICA
Mr Kaneshiro - JICA
Mr Ng Geok Kwee - PSA
Dr S K Ting - NUS
Dr Wee Tiong Huan - NUS
Ms Sim Su Lin - NSTB
Ms Chin Kiat Pein - NSTB
Ms Neo Seok Kian - CEMS
Ms Maggie Phang - CEMS

1. BACKGROUND

The Chairman briefed the meeting on the background of the Materials Science & Technology (MST) Conference. He said it was at the last September's meeting in Manila that the Japanese officially confirmed to have the MST Conference coincide with the Third Asean Science and Technology Week (TASTW).

There would be 12 members involved in the coordination work for the MST Conference. The Chairman informed that Mr Khoo had left HDB and he was hoping that HDB would nominate a replacement.

2. THEME

The Committee suggested a few themes for the conference and the following theme was adopted.

"Materials Science & Technology - Their significance to Economic Development"

3. TEXT FOR THE BROCHURE

The following text for the second announcement was adopted:

Seminar will highlight on discussion of materials research undertaken in the respective ASEAN countries. Papers presented will include results derived from the ASEAN-JAPAN Cooperation Programme on Materials Science and Technology.

The specified areas are :

- Characterization of Polymeric Materials
- Characterization of Fine Ceramics
- Atmospheric Corrosion - Metallic and Non-Metallic Coating
- Corrosion of Structures "

The Chairman requested that his telephone number to be listed in the next conference announcement be changed to 772 2102.

4. PROGRAMME

The Materials Science & Technology Conference would commence on 21 September and end on 23 September. A total of 30 - 40 papers would be presented. The papers would be contributed by the 6 ASEAN countries; 5 invited speakers from Japan; and other accepted papers. The invited speakers would be delivering keynote addresses for each of the following sessions:

- ceramics
- polymeric
- atmospheric corrosion
- corrosion of structures

5. POSTER

The Committee would only consider having poster session if the response is overwhelming.

6. PROCEEDINGS

The Chairman informed the meeting that the TASTW Technical Committee had stipulated that each committee had been allotted about 150 pages for the proceedings.

The Chairman would like to know whether there would be any additional charges if the Committee were to exceed the 150 pages allowance. Each speaker would be allowed 4 - 6 pages of text, with a maximum of 10 pages for the invited speakers.

Each TASTW Sub-Committee would be given about 150 sets of proceedings. The MST Committee decided to assign 40 copies for JICA and 80 copies for the registered delegates with the balance for NSTB.

7. BUDGET

The Chairman informed that although the Management Project Committee had set aside a budget of \$33,600 for organizing the MST Conference, certain funds would not be utilised. This is because MST conference is now part of the TASTW, NSTB had therefore allocated a budget for the organisation of the MST Conference from the registration fee.

The Secretariat confirmed that the \$8300 registration fee would cover lunches, tea breaks, a set of proceedings and 1 banquet dinner.

8. CONFERENCE ACTIVITIES DEADLINES

The Committee did not foresee any problem in adhering to the various deadlines stated by the Publicity Committee.

9. EXHIBITION

The Chairman confirmed that the Committee would be taking up 2 booths. The Chairman requested assistance from the Secretariat on the cost of renting the following:

- video recorder (continuous display of video)
- TV
- self operating slide projector (for continuous display of slides)

The Chairman would also like to know if the budget of \$10,000 for doing up the two exhibition booths was sufficient. The Secretariat advised the Committee that they would let Mr Wilson Liu who is responsible for the Exhibition to contact A/P Tam.

The Chairman felt that since MST was the first Committee to confirm two booths for the exhibition, he requested that they be given the prime locations.

10. BOOTH ATTENDANTS

The Committee decided that each participating country should nominate a representative to man the booth for each 1/2 day.

11. CALL FOR PAPER

As the Committee had already embarked on their Call for Paper, they would therefore coordinate this on their own.

12. ABSTRACTS' GUIDELINES

The Committee was advised to follow the guidelines given in the sample abstract done by the Biotechnology Committee, so as to achieve uniformity. The Chairman will take action on this matter.

13. ASEAN SUB COMMITTEE MEETING

The Chairman requested the assistance of the Secretariat to arrange for a meeting room during the 3-day conference for the ASEAN Sub Committee Meeting. He also sought the help of NSTB to provide secretariat support for the minute-writing.

14. DATE OF NEXT MEETING

The next meeting is scheduled on ^{17 January} 20 December, [✓] Friday at 9.30 am followed by the Project Management Meeting.

There being no other matters, the meeting adjourned at 12 pm with a vote of thanks to the Chair.

Recorded by:

Maggie Phang
Secretariat

Vetted & Approved by:

A/P Tam Chat Tim
Chairman

22 November 1991

MINUTES OF THE 2ND MATERIAL SCIENCE & TECHNOLOGY CONFERENCE
WORKING COMMITTEE MEETING HELD AT NATIONAL SCIENCE
& TECHNOLOGY BOARD ON 17 JANUARY 1992 AT 9.35 AM

PRESENT : A/P Tam Chat Tim - NUS (Chairman)
Mr Seow Hong Pheow - SISIR
Mr Akio Ikegami - JICA
Mr Kaneshiro - JICA
Mr Tan - PSA
Dr Wee Tiong Huan - NUS
Mr Khoo Lian Len - HDB
Ms Chin Kiat Pein - NSTB

Ms Neo Seok Kian - CEMS
Ms Maggie Phang - CEMS
Ms Jennifer Lee - CEMS

ABSENT WITH APOLOGIES

Dr S K Ting - NUS

ACTION

1. MATTERS ARISING

First of all, the Chairman apologised for the delay of the meeting. He then welcomed Mr Khoo Ling Len, the new committee member from HDB.

The 2nd conference announcement and the call for abstracts were distributed.

2. POSTER SESSION

The Chairman mentioned that if the response to the conference is overwhelming, the committee could consider having poster session.

ACTION

3. EXHIBITION

The Chairman mentioned that two booths had been booked but payment can only be made after April '92. The Chairman wanted to nominate a representative from each of the participating country to act as booth attendant.

4. CALL FOR PAPERS

CEMS was told to send out 100 copies of the 2nd conference announcement to the five ASEAN countries. The names and covering letters were given to Ms Maggie Phang.

CEMS

5. ANY OTHER MATTERS

The Chairman hoped that ASEAN flags could be displayed in the conference room for his session. NSTB would check regarding the flags. If the flags are not available during the conference, the Chairman would like them displayed at least during the ASEAN sub-committee meeting.

Date of SCSA mtg?

Backdrop for the conference was also brought up and this would be discussed with NSTB.

Secretariat support for SCSA mtg?

CEMS reported on the cost of room rental at Mandarin Hotel for the committee meeting during the conference as follow:

Room only	:	\$150 nett
Room + Coffee/tea	:	\$10++ per head
Room + Coffee/tea + snacks	:	\$13++ per head

ACTION

6. DATE OF NEXT MEETING

The next meeting is scheduled for 6 March 1992, Friday at 9.30 am at National Science & Technology Board.

The meeting adjourned at 9.55 am with a vote of thanks to the Chair.

Recorded by

Jennifer Lee
Secretariat

Approved by

A/P. Tan Chai Tim
Chairman, NUS

THIRD ASEAN SCIENCE AND TECHNOLOGY WEEK
MATERIALS SCIENCE CONFERENCE

A. Brunei Darussalam

1. To be sent
2. To be sent
3. To be sent

No. of sponsored participants - 5

Hj Md Jumin bin Hj Marsal
Awg Hamiddon bin Md Said
Dayang Suzana bte Hj Awang Adenan
Ms Lee Siew Hung

Mr Yasunobu Nonaka

B. Indonesia

1. Weathering influence on polipropilen film
Anna Reani and N M Surdia

No nominations received as yet

C. Malaysia

No abstract or nominations received as yet

D. Philippines

1. Characterization and some practical uses of "Pinatubo"
pyroclastic fall deposits
Severino T Bernardo
2. Development of ceramic electrical porcelain insulators
for use in power lines/distribution transformers: an ITDI
experience
Severino T Bernardo
3. The corrosion of reinforcing bar in concrete using
volcanic ejects as aggregate
Margarita T Torre (Ms)
4. A study on the corrosion behaviour of metals exposed in
wet/dry cycle chamber and in natural environment
Cynthia R habana (Ms)
5. The characterization of corrosion products by X-ray
diffraction and ion chromatographic analysis
Aurora S Vilorio (Ms) and T Kodama

No. of sponsored participants - 5

The 4 authors above and Mr Shunichi Harada (Project Team
Leader, Japanese Side)

E. Thailand

No abstracts or nominations received as yet

F. Singapore

1. Corrosion of steel in concrete - a major cause of failures in concrete buildings
Salil Kumar Roy, Poh Kong Beng, Kueh Lip Kuang and Ang Aik Leng
2. Atmospheric corrosion of structural steels in a tropical marine environment : four case studies in Singapore
Salil K Roy, and Derek O Northwood
3. Rutting potential of asphalt mixtures by the laboratory wheel track test ^{General}
Tan Siew Ann and Fwa Tien Fang

G. Japan

8 invited speakers will be presenting papers

The revised schedules for the sessions from Monday 21 Sept to Wednesday, 23 Sept are as shown in Version 2.3 dated 2/22/92.

Monday-21 Sept (2 Invited speakers + 12 papers)

0900-1030 Opening Ceremony & Plenary Session I
1030-1100 Morning Tea
1100-1230 Technical Session I (90 min) Invited Speaker 1 + 4
1230-1400 Lunch
1400-1500 Technical Session II (60 min) Invited Speaker 2 + 2
1500-1530 Afternoon Tea
1530-1700 Technical Session III (90 min) 6 papers
1900-2230 Awards Presentation & Banquet Dinner

Tuesday-22 Sept (2 Invited speakers + 12 papers)

0900-1030 Plenary Session II
1030-1100 Morning Tea
1100-1230 Technical Session IV (90 min) Invited Speaker 3 + 4
1230-1400 Lunch
1400-1500 Technical Session V (60 min) Invited Speaker 4 + 2
1500-1530 Afternoon Tea
1530-1700 Technical Session VI (90 min) 6 papers

Wednesday-23 Sept (4 Invited speakers + 14 papers)

0900-1030 Technical Session VII (90 min) Invited Speaker 5 + 4
1030-1100 Morning Tea
1100-1230 Technical Session VIII (90 min) Invited Speaker 6+4
1230-1400 Lunch
1400-1500 Technical Session IX (60 min) Invited Speaker 7 + 2
1500-1530 Afternoon Tea
1530-1700 Technical Session X (90 min) Invited Speaker 8 + 4
& Closing of Conference

Total of 8 invited speakers with 30 min each and 38 papers with 15 min each.

Tentative distribution:

Technical Session I	- Ceramics (IS)
Technical Session II	- Polymers (IS)
TEchnical Session III	- Ceramics & Polymers
Technical Session IV	- Atmospheric Corrosion (IS)
Technical Session V	- Atmospheric Corrosion (IS)
Technical Session VI	- Atmospheric Corrosion
Technical Session VII	- Water Tank Corrosion (IS)
Technical Session VIII	- Corrosion in Buildings (IS)
Technical Session IX	- Corrosion in Port Structures (IS)
Technical Session X	- Corrosion in Port Structures (IS)

Ceramics & Polymers	- 2 + 12 papers
Atmospheric Corrosion	- 2 + 12 papers
Water Tank Corrosion	- 1 + 4 papers
Corrosion in Buildings	- 1 + 4 papers
Corrosion in Port Strut	- 2 + 6 papers

JICA