

Back To Basics Back To Basics Back To Basics Back To Basics Back To Basics Back To Basics

The skyline of Kuala Lumpur City projects an array of landmarks with technological excellence where MATERIALS play a pivotal role in ensuring stability, integrity and endurance. MATERIALS and their fabrication techniques are increasingly critical in this age of rapid technological advancement where the virtual ICT world has taken strides. The human race must not forget that the solid MATERIALS around us are REAL and have to be appreciated and be given due respect.



*The IMM wishes all its members Merry Christmas, Selamat Hari Raya Aidil Fitri,
Happy New Year and Gong Xi Fa Cai*

SECRETARIAT ADDRESS

INSTITUTE OF MATERIALS, MALAYSIA

LOT 1908, BATU 7, JALAN BUKIT KEMUNING, 40460 SHAH ALAM, SELANGOR D.E., MALAYSIA.

TEL: 03-5218228, DL/FAX: 03-5226352, FAX: 03-5216116/03-5219413

E-MAIL: iomm@po.jaring.my WEBSITE: www.iomm.org.my

CONTACT PERSON: PUAN ROHAYA RAHIM (ADMIN/TRAINING EXC.) OR (MS. ELAINE TAN)

(Note : Change of new post code)

EDITORIAL LINE-UP

EXECUTIVE EDITOR

Dr. Che Husna Azhari

EDITORS

Dr. Samad Solbai

Ir. Ong Chong Hup

Dr. A. Rahim Mohd Nor

Dr. Teh Ser Kok

Dr. Samad Solbai

IMM Immediate Past President

c/o Superlative Material Sdn Bhd

22, USJ 17/7C, Subang Jaya,

Selangor D.E., Malaysia

Tel: 03-7245688 Fax: 03-7244464

E-mail: drsamad@pd.jaring.my

Dr. A. Rahim Bin Mohd. Nor

IMM President

c/o Petronas Research & Scientific Services SB.

Lot 3288 & 3289, Off Jalan Ayer Hitam,

Kawasan Institusi Bangi,

43000 Kajang, Selangor DE, M'sia.

Tel: 03-89252731 Fax: 03-89258821

Email: rahimnr@petronas.com.my

Ir. Mohd Suradi Yasin

IMM Hon Treasurer

c/o Petronas

Technology Resources Management

Level 44 Petronas Twin Tower 1

Kuala Lumpur City Centre

50088 Kuala Lumpur, Malaysia.

Tel: 03-5814960 Fax: 03-2073194

E-mail: suradi@petronas.com.my

COUNCIL MEMBERS FOR 2000-2002 SESSION

- Dato' Dr. Ong Eng Long (Malaysian Rubber Board)
- Dr. Teh Ser Kok (Universiti Malaya)
- Ir. Mohd Raziff Embi (Teknik Janakuasa)
- En. Hamizan Mohd Derus (Teknikspek)
- Ir. Chong Chien Fatt (Ancom Berhad)
- Mr. David Lim Chee Cheong (EPMI)
- Mr. Kang Kim Ang (VCI)
- Dr. Che Husna Azhari (Universiti Kebangsaan Malaysia)
- Puan Maimunah Ismail (Sarawak Shell Berhad)
- Dr. Esah Hamzah (Universiti Teknologi Malaysia)
- Ir. Tee Yin Tiong (Muhibbah Engineering)
- Mr. Harry Woon (Bredero Price(M) Sdn Bhd)
- Dr. Lim Ching Liang (METACOS)

INTERNAL AUDITORS (2000-2001)

En. Noor Hisham Ab. Hamid – Universiti Teknologi Malaysia

Mr. Alexander Gabriel – Guardian Composites Sdn Bhd

EXTERNAL AUDITORS (2000-2001)

Er & Associates

EDITORIAL ADDRESS

Dr. Che Husna Azhari

c/o Pusat Pembangunan Akademik

Bangunan Pentadbiran

Universiti Kebangsaan Malaysia

43600 B. B. Bangi, Selangor D.Ehsan, Malaysia

Tel: 03-89293885 Fax: 03-89264816

E-mail: mek@vlsi.eng.ukm.my

Dato' Dr. Haji Mohd. Mansor Salleh

IMM ADVISOR

c/o Hicom Die Casting Sdn Bhd

PT 5011, Jalan Pendamar (27/90)

Section 27, 40000 Shah Alam, Selangor D.E., M'sia

Tel: 03-5112589 Fax: 03-5112587

E-mail: mamabahasa@hotmail.com

En. Zainuddin Ishak

IMM Deputy President

c/o Petronas Gas Bhd

Km.10, Lebuhraya Segamat-Kuantan

85000 Segamat, Johor D. Ta'zim

Tel: 07-9310266 Fax: 07-9316521,

E-mail: zain@petronas.com.my

Ir. Ong Chong Hup

IMM Hon. Secretary

c/o MPE Lindung Sdn Bhd

Lot 1908, Batu 7, Jalan Bukit Kemuning,

40460 Shah Alam, Selangor D.E., Malaysia

Tel: 03-5218228 Fax: 03-5216116 / 5219413

E-mail: maxong@pc.jaring.my

PRESIDENT'S CORNER

Message from

President of the Institute of Materials, MALAYSIA

DR. RAHIM NOR

Over the last four years, IMM has grown quite rapidly to its current membership of 230. (Our membership register shows over 400 members, unfortunately many have not renewed their annual subscriptions). The growth is a direct consequence of our tight working relationship between Council Members, Committee Members and Ordinary Members. I would like to congratulate the IMM Committees and Subcommittees on the work that they are undertaking to promote IMM and on the successful program of seminars, conferences, training courses and industrial networking activities that they have undertaken over the past year. We have come a long way to be where we are today. The achievements that we have made, have given us a great sense of satisfaction. So, our continued support, commitment and sacrifices are vital to ensure the continued success of IMM.

To ensure our growth in the future, we will continue to seek new activities and opportunities either within our traditional competency development program i.e. seminars, courses etc. or pursue for growth through providing more diversified membership services. With full of expertise imbedded in our members' minds we should be able to create more value to industry and contribute more to the development of our country. Let us act in our traditional way "**work together**" and pull the strengths from outside by being more aggressive in persuading our colleagues to join IMM.

I would like to take this opportunity to extend my best wishes to all Council Members, Committee members and members of IMM who will celebrate Hari Raya, Christmas, Chinese New Year and the New Year .

Dr. A. Rahim Mohd Nor

President

SECRETARIAT NEWS

APPROVAL OF AMENDMENTS TO IMM RULES

The Registrar of Societies (ROS) had approved the proposed amendments to Clause 2 of the IMM Rules on "Memberships". The revised clauses have been incorporated in the membership application form.

2000 & 2001 ANNUAL MEMBERSHIP FEES

Many members have yet to pay their 2000 annual membership fees. Please send in your cheques now for both the 2000 and 2001 annual membership fees.

IMM PUBLICATION COMMITTEE

EDITOR'S COLUMN

The IMM Publication Committee is pleased to announce that the Journal Institute of Materials Vol 1 No 2 will see the light of day soon and will be circulated to members after it comes out of the printing press. The delay was due to two factors, getting the ISSN which was quite easy and also to wait for the replies of two very eminent gentlemen in materials to be on the editorial committee, they are Prof Malcolm Mackley from Cambridge University and Prof Craig Davies from University of London. We urge members to keep contributing. The instructions to authors for potential contributors shown below for reference :-

NOTES FOR AUTHORS

SUBMISSION

Manuscripts (two copies) should be typed using double spacing on one side of an A4 paper and submitted either in hard copy accompanied by a diskette in Word for Windows. **Alternatively authors are encouraged to submit articles to the Chief Editor at the e-mail address. Zip files are encouraged.** Authors must clearly state the section they wish to place their contributions in. The typescript should proceed in the order, title page, name of author (s) and address, abstract, text, nomenclature, references, acknowledgements and the appendices. Figures, photographs, micrographs and tables should follow after this if they are not already formatted into the text (which is highly encouraged)

Title page

The title page should contain the name(s) of the author(s) and the establishment where the work was carried out as well as the place where the authors have since moved if they have a different permanent address.

Abstract

All submissions must be accompanied by an abstract of not more than 150 words.

Keywords

A list of key words of not more than 10 words must be supplied with each submission

Text

Clear differentiation must exist between headings. Each major heading must be placed in the middle of the text and be given in capitals. Minor headings need be capitalised but be flush with the left margin. All equations should be written using Microsoft Equation 2.0 or 3.0. Equations and Tables should be numbered serially 1, 2, 3 and so forth. Footnotes in the text are not encouraged. SI units should be used.

Figures and photographs, including micrographs may be scanned and submitted in diskettes or electronically. Tables should be labelled on top of the table and Figures at the bottom.

References

The reference list should be typed single space, although separated from one another by an extra line of space. The reference cited in the text as Author(s), Year and listed in the Reference Section as

Journals: Author(s). Year. *Journal*. Vol(no): First page-last page

Books; Author (s). Year. *Title*. City: Publisher.

Queries

Any queries on the format and presentation may be addressed to the Chief Editor at the Editorial Address or at the e-mail address given

Dr. Che Husna Azhari

Executive Editor &

Chairman, Publications Committee

c/o Pusat Pembangunan Akademik

Bangunan Pentadbiran, Universiti Kebangsaan Malaysia

43600 B. B. Bangi, Selangor D.Ehsan, Malaysia

Tel: 03-89293885 Fax: 03-89264816

E-mail: mek@vlsi.eng.ukm.my

MOU SIGNED BETWEEN IMM AND IoM

A memorandum of understanding (MOU) between the Institute of Materials Malaysia (IMM) and the Institute of Materials United Kingdom (IoM) was signed on October 2, 2000 in a brief but historic ceremony at the IoM headquarters in London. Dr Ken Strafford, Technical Director, IOM Communications Ltd was also present to witness the signing. IMM was represented by its Immediate Past President and IoM was represented by its Program Director Mrs June Hawkins. The signing of the MOU was the culmination of a number of discussions and numerous exchanges of communications between the two institutes over the past six months. In March, 22nd this year Mrs June Hawkins was in Kuala Lumpur and it was during her visit that the framework of the MOU was laid down.

The MOU promises greater cooperation between the two institutes in essentially all areas concerning the promotion of the science, technology and profession of Materials Science and Engineering. Amongst the promised cooperation was in the area of conferences, seminar, courses and other joint programs - all in the interest of Materials. However, we must underline the reality that such cooperation and promotion of joint initiatives and activities shall be much dependent on the initiative of the members of the two institutes. In Malaysia, the Materials Science and Engineering Profession is still in its infancy and we should learn from the more established country like the United Kingdom on how the profession can achieve the same recognition. Perhaps, the MOU is a very good start.



Signing of the M.O.U. between the IMM and the Institute of Materials U.K. Picture shows Mrs. June Hawkins representing the Institute of Materials U.K. and Dr. Samad Solbai representing the IMM



INSTITUT BAHAN MALAYSIA
Institute of Materials, Malaysia
(ROS-4146/87)

Date : 1st December 2000

To All IMM Members,

RE : ANNUAL SUBSCRIPTION FOR YEAR 2001

Your annual subscription will be due on 1st January 2001.

Please tick the appropriate box according to your membership grade.

Annual Subscription Rates are as follows :-

- Ordinary : RM 20.00
- Company : RM200.00
- Student : RM 5.00
- Associate Member (A.I.M.M.) : RM 30.00
- Professional Member (M.I.M.M.): RM 50.00
- Fellow : RM 70.00

Please issue your payment by cheque/money order/bank draft to "Institute of Materials, Malaysia" and include 50 sen for outstation cheques. Please mail it to the above address with this notice.

Thank you.

Yours sincerely,

ONG CHONG HUP
Hon. Secretary

ROHAYA RAHIM
Admin/Training Executive

N.B : Please ignore this notice if you have recently paid your annual subscription

REPLY SLIP

Paid by : Cheque..... Amount (RM).....

Name : Membership No.....

Date :



INSTITUT BAHAN MALAYSIA

Institute of Materials, Malaysia

(ROS-4146/87)

TO ALL MEMBERS

NOTICE OF ANNUAL GENERAL MEETING

Notice is hereby given that the 11th Annual General Meeting of the IMM will be held at :-

Venue : Kelab Golf Sultan Abdul Aziz Shah
(Behind Shah Alam Stadium)
No. 1, 13/6, 40708 Shah Alam
Selangor D.E.
(Tel: 03-55105872 Fax: 03-55105860)

Date : 15th March 2001, Thursday
Time : 11:30 a.m.

AGENDA

1. To approve the Minutes of the 10th Annual General Meeting.
2. To receive and adopt the Report of the Council for the year 2000 presented by the President.
3. To receive and adopt the Statement of Accounts for the year 2000 presented by the Honorary Treasurer.
4. Tabling the appointment of external auditors for 2001 by the Hon. Treasurer.
5. Appointment of two Internal Auditors for 2001.
6. Any other matter.

By order of the Council

Ong Chong Hup
Hon. Secretary

Date : 2nd January 2001

REPLY SLIP

I, hereby confirm that I will be able/not able * to attend the above AGM.

SIGNATURE : _____

NAME : _____

COMPANY NAME : _____

MEMBERSHIP NO : _____

DATE : _____

PLEASE FAX YOUR REPLY TO 03-5226352/5219413/5216116 by **08-03-2001**.

* Delete whichever not applicable.

ANNUAL GENERAL MEETING PROXY VOTING FORM

I _____ (please print name in full) IMM Membership no. _____

wish to record my apologies for absence and hereby appoint _____

_____ (please print name in full) IMM Membership no. _____ (or, failing him/her, the
Chairman of the Meeting) to act as my proxy at the 11th Annual General Meeting.

Signed : _____ Date : _____

This form of proxy should be returned to the IMM office no later than 12:00 noon on 8th March 2001.



11TH A.G.M. SEMINAR

DATE : Thursday 15th March, 2001
 TIME : 8:00 a.m. – 1:00 p.m.
 VENUE : Kelab Golf Sultan Abdul Aziz Shah
 Persiaran Sukan (Behind Shah Alam Stadium)
 Shah Alam, Selangor D.E.
 Tel: 03-55105872/73

SEMINAR FEES :- (CLOSING DATE : 8 MARCH 2001)
 IMM MEMBERS : ADVANCE REGISTRATION (FREE-OF-CHARGE)
 NON-MEMBERS : RM50.00 PER PERSON (JOIN NOW AS A MEMBER AND
 REGISTER FREE-OF-CHARGE BEFORE 8 MARCH, 2001)
 ALL CHEQUES PAYABLE TO "INSTITUTE OF MATERIALS, MALAYSIA"

PROGRAMME:

- 8:00 a.m. : Registration of participants
- 9:00 a.m. : Fouling Control System – A Biocide-free Alternative To Conventional Antifouling by International Coatings Sdn. Bhd.
- 9:30 a.m. : Microbial Corrosion – A New Phenomenon by Enviropeel (Asia)
- 10:00a.m. : Tea/Coffee
- 10:15a.m. : Ceramic Coating Technology by Guardian Composites Sdn. Bhd.
- 10:45a.m. : Thermal Spray Coatings for Corrosion Protection by MPE Lindung
- 11:15a.m. : Short break
- 11:30a.m. : 11th IMM Annual General Meeting**
- 12:00noon : Lunch
- 1:00 p.m. : ADJOURN

WE ARE PLEASED TO REGISTER THE FOLLOWING:-

Item	Name	Designation	M'ship No	RM

Contact Name: _____

Address: _____

Tel: _____ Fax: _____ Email: _____

SIGNATURE : DATE :

SEND REGISTRATIONS TO INSTITUTE OF MATERIALS, MALAYSIA
 Lot 1908, Batu 7, Jalan Bukit Kemuning, 40460 Shah Alam, Selangor D.E.
 Tel: 03-5218228 Fax: 03-5219413/5226352 Attention : Puan Rohaya

Corrosion Conference & Exhibition 2000

Year 2000 IMM Corrosion Conference and Exhibition was titled "Breakthrough in Corrosion Protection and Its Control!" with the objective to encourage the exchange of ideas and information to bring about awareness on materials protection. The event was co-organised by the Corrosion Committee and the East Coast Committee

The 2 days Conference and Exhibition was held for the first time in the beautiful East Coast State of Malaysia, Kuantan, Pahang on November 1 & 2, 2000 at Hotel MS Garden (Holiday Inn). It was indeed a great honour for the Institute of Materials, Malaysia, as the conference and exhibition was officiated by YAB Dato' Seri Adnan bin Yaakob, Menteri Besar Pahang. Also in attendance during the opening ceremony are YB Dato' Zainal Abidin bin Haji Mat Said, Setiausaha Kerajaan Pahang, YB Dato' Kan Tong Leong, Pengerusi Jawatan Kuasa Kerajaan Tempatan, Alam Sekitar dan Pembangunan Perbandaran and YH Dato' Mohamad bin Said, Yang DiPertua Majlis Perbandaran Kuantan (MPK). After the opening ceremony, the Menteri Besar also spent time meeting and talking to some of the conference delegates and also visited all the 15 exhibition booths, indicating that the State Government of Pahang is in support of this event.

A total of 16 papers (representations from United Kingdom, Canada, India, South Africa and Malaysia) related to corrosion protection technology plus a joint paper on e-maintenance concept and internet security risk were presented over the two days conference. As we move towards a Knowledge Base Economy (KBE), it is important that we continue to leverage on each other's knowledge collectively and ultimately, that will bring wealth and success to our Malaysian industries. This is again proven, as more than 150 delegates attended the two days conference and many more visited the exhibition that was held in conjunction with the corrosion conference.

In summary, the conference was a great success, especially with the support that was received from the Pahang State government, the public and the private sectors. As we journey forward to the next millennium, the Corrosion Committee will continue to look into various innovative and challenging opportunities to steer towards a "knowledge base economy" related to corrosion control of materials.

Lastly, the Corrosion Committee wish to express its deepest gratitude for the support, co-operation and assistance from the Pahang State government, PETRONAS, ESSO, all sponsors, delegates, exhibitors, invited guests, presenters and the Conference Organising committee members. A special "Terima Kasih" to YAB Dato' Seri Adnan bin Yaakob, for officiating the IMM 2000 Conference & Exhibition.

Organizing Committee:

YM Tengku Yusof bin T.A. Shahrudin Chairman
Mr. Vincent Owi Deputy Chairman
Tuan Hj. Alais bin Mohd Yunos - Advisor
Ir. Mohd Suradi Yasin Treasurer
Ir. Ong Chong Hup
Tuan Haji Abdul Rahim Mohd
Mr. David Lim Chee Cheong
Ir. Mohd Raziff Embi
En. Junaidy Abdullah
Mr. Harry Woon
Mr. V. Krishnamurthy
Mr. Terence Tan
Mr. Garry Toft
Mr. John Tang
Mr. Roland Fong
Mr. KS Lim

Prepared by David Lim (IMM Corrosion Committee Chairman)



Opening address by Menteri Besar of Pahang



Dato' Seri Adnan with Dr. A. Rahim Md. Nor (IMM President) and Mr. David Lim (Corrosion Committee Chairman) visiting exhibition booths



Conference delegates concentrating on the presentations



Menteri Besar of Pahang with State officials and IMM officials meeting conference delegates and exhibitors



Conference Banquet Dinner attended by Pahang State officials, IMM officials and conference delegates

IMM CORROSION COMMITTEE

CATHODIC PROTECTION SUB-COMMITTEE'S REPORT

The CP Sub-committee is currently drafting a new CP Training and Certification Scheme for CP practitioners. The IMM sees the justification to develop and implement this Certification Scheme in order to meet the local industry's (mainly oil and gas) need to standardize and hence ensure quality in the skill assessment process in cathodic protection technology.

This 3-level scheme which includes hands-on, practical exercises and examination will consist of:

1. CP Training and Certification Scheme for Technicians – Level 1
2. CP Training and Certification Scheme for Technicians – Level 2
3. CP Training and Certification Scheme for Engineers – Level 3

There will be a 5-day-course for each Level and each Level will come with it's own recommended prerequisites

The course outline for Level 1 and 2 is expected to be as follows:

Corrosion Fundamentals
 Cathodic Protection Fundamentals
 Field Measurements
 Stray Current Identification
 Cathodic Protection Components Installation
 Cathodic Protection Equipment and Materials Inspection
 Troubleshooting
 Written Examination
 Practical Examination

It is envisaged that Level 1 and 2 will be launched in early 2001. Level 3 will however be launched later upon IMM council and CP Sub-committee's satisfaction with the quality of Levels 1 and 2.

COATINGS SUB-COMMITTEE'S REPORT

IMM TRAIN THE TRAINER SESSION IN KL

IMM Coating Sub-committee has conducted the Train The Trainer Session (3T) for the Blaster & Painter Certification Scheme on 15th Nov 2000. About 20 Trainers from Peninsula Malaysia attended the session. Based on the feedback from all parties involved in the scheme since IMM started the scheme two year ago, we have made some changes to the scheme during the 3T session. These changes will be effective from the day after the 3T session. Among the changes are: -

1. Trainers will also act as assessors, they will give morning lectures, conduct practical assessment, assist invigilators in the theory exam, and will issue mark for the practical exam.
2. Invigilators will take charge of exam papers and check the candidates' record (to ensure the actual candidate is present). Invigilator will hand out the theory exam paper and conduct the oral explanation or translation of the questions and objective answers with the assistance of the Trainer. The invigilator will collect all answers scripts and return to IMM Secretariat.
3. The Certificate and I.D. Card of the successful candidate will carry only the candidate's name and not the company's name anymore.
4. A trainer/invigilator is not allowed to conduct training/exam for candidates from the company he is currently employed.
5. One training session will allow a minimum of 6 and a maximum of 12 candidates.
6. Candidates who lose their Certificate or I.D. Card can obtain replacements at RM200.00 per set (this high fee is to discourage the convenient loss of the Certificate which can lead to fraudulent intentions).
7. Trainers must come from those who have attended the Train The Trainer Session and they have to register for their Trainer's Certificate with I.D.
8. The existing overhead slides shall be revised to improve the content of the presentation.
9. A revised set of Notes in Bahasa Malaysia will be produced and distribute to candidates when ready.

The IMM Sarawak Committee and Coating Sub-committee will conduct another 3T Session in East Malaysia. We hope these changes will help to produce more competent and higher quality blasters and painters for our industry towards our Vision 2020.

Chairman

Mr. David Lim Chee Cheong
 Esso Production Malaysia Inc
 23rd Floor, Menara Esso
 Off Jalan Kia Peng
 50450 Kuala Lumpur
 Tel: 03-3802908
 Fax: 03-3803453
 E-mail: dlcc@tm.net.my /
David.c.lim@exxon.sprint.com

Deputy Chairman

Ir. Mohd Raziff Embi
 Teknik Janakuasa Sdn Bhd
 6th Floor, Block B,
 Wisma Semantan,
 12, Jalan Gelangan,
 Damansara Heights,
 50490 Kuala Lumpur
 Tel:03-2523388
 Fax:03-2548757
 E-mail: raziff@malakoff.com.my

Secretary/Treasurer

En.Junaidy Abdullah
 MPE Lindung Sdn Bhd
 Lot 1908, Batu 7,
 Jalan Bukit Kemuning
 42450 Shah Alam, Selangor D.E.
 Tel: 03-5218228
 Fax:03-5216116
 E-mail: mpe@tm.net.my



Call for Papers Call for Papers

IMM 3RD REGIONAL MATERIALS CONFERENCE

Theme:

**" FABRICATION TECHNOLOGY EXPERIENCES &
CHALLENGES "**

**TENTATIVE DATE : AUGUST , 2001
Kuala Lumpur**

Interested authors please submit your abstract and bio-data to :-

**Institute of Materials, Malaysia
Lot 1908, Batu 7, Jalan Bukit Kemuning,
40460 Shah Alam, Selangor Darul Ehsan
Malaysia
Tel: 03-5218228 Fax: 03-5226352/5219413
E-mail : iomm@po.jaring.my**

Or contact the following Conference Organizing Committee Members:-

		Tel:	Fax	E-mail
Conference Organizing Chairman:	Dr. Lim Ching Liang (Metacos)	03-7450730	03-7450739	metalim@pc.jaring.my metacos@po.jaring.my
Deputy Chairman :	Dr. Teh Ser Kok (Universiti Malaya)	03-79595265	03-79595265	tsk@fk.um.edu.my

IMM FABRICATION TECHNOLOGY COMMITTEE

The Fabrication Technology Committee for 2000 – 2002 sessions comprises of the following members :-

Chairman :	Ir. Mohd. Suradi Yasin (Petronas, Technology Resources Management)
Deputy Chairman :	Ir. Tee Yin Tiong (Muhibbah Engineering Bhd)
Secretary/Treasurer :	En. Hasri Mohd. Derus (Teknispek Sdn Bhd)
Committee Members :	Ir. Sia Han See (CIDB)
	Dr. Lim Chee Liang (Metacos Sdn Bhd)
	Dr. Teh Ser Kok (Universiti Malaya)
	Ir. Ong Chong Hup (MPE Lindung Sdn Bhd)
	En. Hamizan Mohd. Derus (Teknispek Sdn Bhd)
	Mr. Lorganaden Varathan (Esso Production (M) Inc)
	En. Hasbullah Abu Hassan (Petronas Carigali Sdn Bhd)
	En. Johari Ramly (Shell Refining Co. P.D.)
	En. Omar Isa (Sime Sembcorp Sdn Bhd)
	En. Zainuddin Ishak (Petronas Gas Bhd)
	Mr. David Lim Chee Cheong (Esso Production (M) Inc)

The 3rd Regional Materials Conference will be held in August 2000. The theme of the conference is "Fabrication Technology : Experiences and Challenges". Individuals or companies wish to take part in the conference as speaker or participant are welcomed. Nominations have been received from experts in industry to present papers in the conference. This conference will network people from various organisations and experiences to share with you on subject matter.

The committee is also interested to gather experts from scaffolding and abseiling industries to join this committee. We can work wonders together with your little contributions.

<u>Chairman</u>	<u>Deputy Chairman</u>	<u>Secretary/Treasurer</u>
Ir. Mohd. Suradi Yasin Petronas Technology Resources Management Level 44, Petronas TwinTower 1 Kuala Lumpur City Centre 50088 Kuala Lumpur Tel: 03-5814960 Fax: 03-2073194 E-mail :suradi@petronas.com.my	Ir. Tee Yin Tiong Muhibbah Engineering Bhd Lot 586 & 579, 2 nd Mile, Jln Batu Tiga Lama, 41300 Klang, Selangor Tel : 03-33424322 Fax:03-33424327 E-mail: yintiong@tm.net.my	En. Hasri Mohd. Derus Teknispek Sdn Bhd No. 60, Jalan Penyair (U1/44) Taman Temasya Industrial Park 40150 Shah Alam, Selangor Tel : 03-5195600 Fax: 5194073

POINTS TO PONDER.....

Yesterday natural resources define power. Today KNOWLEDGE IS POWER.
Yesterday hierarchy was the model. Today SNERGY IS THE MANDATE.
Yesterday leaders commanded and controlled. Today LEADERS EMPOWERS AND COACH.
Yesterday leaders are warriors. Today LEADERS ARE FACILITATORS.
Yesterday leaders demand respect. Today LEADERS ENCOURAGE SELF-RESPECT.
Yesterday shareholders come first. Today CUSTOMERS COMES FIRST.
Yesterday managers directed. Today MANAGERS DELEGATE.
Yesterday supervisors flourished. Today SUPERVISORS VANISH.
Yesterday employees took orders. Today TEAMS MAKE DECISION.
Yesterday seniority signified status. Today CREATIVITY DRIVES PROCESS.
Yesterday production determined availability. Today QUALITY DETERMINES DEMAND.
Yesterday value was an extra. Today VALUE IS EVERYTHING.
Yesterday everyone was a competitor. Today EVERYONE IS A CUSTOMER.
Yesterday profits are earned through expediency. Today PROFITS ARE EARNED THROUGH INTEGRITY.





INSTITUTE OF MATERIALS, MALAYSIA
(Formerly the Malaysian Materials Science & Technology Society)

The Malaysian Materials Science & Technology Society (MMS) was registered with the Registrar of Societies on 6th November, 1987. The MMS was actively promoting the awareness of Materials in Malaysia since 1988. In 1996, with a newly-elected Council, the change of name to the Institute of Materials, Malaysia (IMM) was submitted to the Registrar of Societies and approved on 16th June 1997. The new name was to be synergistic with the rest of the world. For example in the case of the United Kingdom, The Institute of Metals, The Institute of Ceramics and The Plastics & Rubber Institute were merged into a single Institute of Materials in 1992 where its Members are recognised as professionals with the status of a Chartered Engineer (C.Eng).

Membership to the IMM is open to all individuals and companies interested in developing the contribution of Materials science, technology and engineering towards industrial growth in Malaysia. The technology of Materials is advancing day-by-day throughout the world. We, in Malaysia, must keep up with the pace of technological advancement.

The objectives of the IMM include the training and development of individuals and companies in Malaysia to attain professional recognition in various fields of Materials science, technology and engineering. Materials cover a very wide field such as metals, polymers, rubber, wood, concrete, ceramics, semiconductors, advanced materials, cellulose, textiles, etc. Membership to the IMM will enable networking and exchange of knowledge from a very wide variety of specialized areas of expertise.

The longterm objective of the IMM is to attain professional status for its members in line with that which is accorded to the other disciplines of engineering.

The IMM is also committed to seeking affiliations with overseas Materials and Engineering/Scientific professional institutions to gain access to technological developments worldwide. This will ensure that we, in Malaysia, will not be left behind.

MEMBERSHIP APPLICATION FORM
(Confidential)

AFFIX
PHOTO
HERE

APPLICATION FOR COMPANY MEMBER/ORDINARY MEMBER/STUDENT MEMBER*
*(Only Ordinary Members can apply for upgrade to Associate Member/Professional Member/Fellow Member.
Please request for the relevant application form from the IMM Secretariat)*

(I) FOR ORDINARY MEMBERSHIP (STUDENT MEMBERS ALSO TO FILL UP THIS PART)

PERSONAL PARTICULARS (photocopy of I.C./Passport to be submitted)

NAME IN FULL (MR/MS/DR/.....): _____
(BLOCKS LETTERS)

RESIDENCE/POSTAL ADDRESS : _____

TELEPHONE NO : HOUSE _____ HANDPHONE NO: _____

PLACE OF BIRTH : _____ DATE OF BIRTH : _____

NATIONALITY : _____ PASSPORT/I.C. NO : _____

=====

NAME OF EMPLOYER/COMPANY

TITLE OR POSITION : _____

ADDRESS : _____

TELEPHONE NO _____ FAX NO : _____ E-mail : _____

=====

(II) COMPANY MEMBERSHIP (COMPANY PARTICULARS)

COMPANY NAME: _____

COMPANY REGISTRATION NUMBER: _____

ADDRESS : _____

TELEPHONE NO : _____ FAX NO: _____ E-mail NO : _____

PRINCIPAL REPRESENTATIVE (MR/MS/DR/.....) :

AFFIX PHOTO HERE

ALTERNATE REPRESENTATIVE (MR/MS/DR/....) :

AFFIX PHOTO HERE

POSITION: _____

POSITION: _____

(III) FOR STUDENT MEMBERSHIP ONLY

COURSE OF STUDY : _____ YEAR OF STUDY : _____

NAME OF UNIVERSITY/COLLEGE : _____

ADDRESS : _____

TELEPHONE NO _____ FAX NO: _____

The above student is allowed to join the Institute

Signed : _____

Name : _____

Designation : _____

University/College Chop

Date: _____

INDICATE INDUSTRY INVOLVED OR INTERESTED IN :-

- | | | | |
|---------------------|-----|-------------------------|-------|
| METALLURGY | () | CORROSION PROTECTION | () |
| MATERIALS FAILURE | () | COMPOSITE MATERIALS | () |
| MATERIALS DESIGN | () | CONCRETE TECHNOLOGY | () |
| MATERIALS RESEARCH | () | WOOD TECHNOLOGY | () |
| POLYMER TECHNOLOGY | () | EDUCATIONAL INSTITUTION | () |
| CERAMICS TECHNOLOGY | () | OTHERS (SPECIFY) | _____ |
| WELDING | () | | |

I/We hereby accept responsibility for the accuracy of the particulars contained in this application form.

Date : _____

Signature : _____
(and Company Stamp)

Proposer : _____
Name : _____

Secunder : _____
Name: _____

Membership Grade & No: _____ Membership Grade & No: _____

* Delete whichever not applicable.

NB: If proposer and secunder cannot be sourced, mail this form to the Secretariat for assistance.

ENCLOSED IS MY/OUR CHEQUE/BANK DRAFT/MONEY ORDER NO: _____
FROM BANK _____ FOR THE AMOUNT OF
RM _____

**Institute Bahan Malaysia
(Institute Of Materials, Malaysia)
General Rules on Memberships**

The Council shall establish a Memberships Committee which will be responsible for review of applications for transfer of membership grades. The Memberships Committee shall recommend transfers for Council approval at Council Meetings. All grades of memberships are awarded at the discretion of the Council and may be withheld or withdrawn in the event of conduct likely to prejudice the standing of the Institute. Every member shall receive a membership certificate.

The Memberships Committee shall be responsible for drafting the "Regulations Governing Admission and Transfer of Member Grades" for Council approval. Such regulations may be changed from time to time subject to Council approval.

Every application for membership shall be proposed and seconded according to these regulations and shall be forwarded to the Honorary Secretary who shall, at the first convenient opportunity, submit it to the Council for approval. The Council may at its discretion reject any application without assigning any reason thereof.

Each company on admission shall be entitled to nominate one representative to exercise all rights of membership. Only representatives of Company membership, Fellows (F.I.M.M.), Professional Members (M.I.M.M.), and Ordinary members shall have the right to vote and to hold office in IMM.

Only Malaysian Citizens, and Blue Identity Card Holders can become Ordinary Members, Associate Members (A.M.I.M.M.), Professional Members (M.I.M.M.) and Fellow Members (F.I.M.M.) with voting rights. Foreigners and Red Identity Card Holders can join similar grades but shall have no voting rights.

Grades

Honorary Fellow (Hon. F.I.M.M.)

The Council shall have the power to elect Honorary Fellows who shall be persons of eminence in science or industry. The election shall be based on a majority vote within the Council. Honorary Fellows shall enjoy such privileges as may from time to time be determined by the Council.

Fellow (F.I.M.M.)

A person at least 35 years of age with approved academic qualifications, training and 8 years relevant responsible experience who has made significant contributions to the science and practice of profession of Materials Science and Engineering or has given distinguished service to industry or education.

Professional Member (M.I.M.M.)

A person at least 25 years of age, with approved academic qualifications and training, having at least 3 years responsible experience in Materials Science and Engineering. OR A person at least 40 years of age, with at least 15 years of experience with practical responsibility, as demonstrated by thesis/dissertation or report and interview.

Associate Member (A.M.I.M.M.)

A person at least 25 years of age, who possesses an interest in Materials Science and Engineering but have not acquired the necessary experience or obtained the qualifications governing entry to Member grade. An Associate Member, on obtaining the necessary qualifications, may apply for transfer to Member grade.

Company Member

Any company that is involved or has interest in Materials Science and Engineering will be qualified to join as a company member.

Ordinary Member

Any person above the age of 18 years engaged in activities related to research, development and applications in Materials Science and Engineering shall qualify for Ordinary Membership. Only Ordinary Members who meet the necessary minimum requirements may apply for transfer to membership grades of Fellow, Member and Associate Member and may use the abbreviated titles upon transfer.

Student Member

A student member shall be a person not under 17 years of age who at the time of application satisfies the Council that he has received a good general education and is studying subjects related to Materials Science or Engineering. A student member shall transfer to the grade of Ordinary Member after graduation provided he or she is suitably qualified and as soon as he or she is earning a full-time salary. A Student shall not become a member of the IMM without the prior approval of the Vice-Chancellor or Head of Department of the university or relevant authority concerned.

Certificate of Membership

Every member shall receive a membership certificate.

Every application for membership shall be proposed and seconded by two existing ordinary members and shall be forwarded to the Honorary Secretary who shall, at the first convenient opportunity, submit it to the Council for approval. The Council may at its discretion reject any application without assigning any reason thereof.

Each company on admission shall be entitled to nominate one representative to exercise all rights of membership. Only representatives of Company membership and Ordinary members shall have the right to vote and to hold office in IMM.

SCHEDULE OF FEES

	Entrance Fee	Processing Fee	Transfer Fee	Annual Subscription
Company Member	RM50.00	-	-	RM200.00
Ordinary Member	RM20.00	-	-	RM 20.00
Fellow (F.I.M.M.)	-	RM300.00	RM10.00	RM 70.00
Member (M.I.M.M.)	-	RM150.00	RM10.00	RM 50.00
Associate Member (A.M.I.M.M.)	-	RM150.00	RM10.00	RM 30.00
Student Member	RM10.00	-	-	RM 5.00

NB : ALL PAYMENT TO BE MADE OUT BY CROSSED CHEQUE, BANK DRAFT, OR MONEY ORDER TO "INSTITUTE OF MATERIALS, MALAYSIA". ALL APPLICATIONS MUST BE ACCOMPANIED BY THE APPROPRIATE PAYMENTS. APPLICATIONS MADE BETWEEN JULY AND DECEMBER NEED TO PAY 50% OF THE ANNUAL SUBSCRIPTION.

Annual subscriptions shall be payable in advance on 1st January of each year. Any person who is admitted into the IMM between 1st July and 31st December in any year shall pay only half the annual subscription.

IMM SOUTHERN REGION COMMITTEE

The Southern Region Committee has formed a new committee for session 2000–2002. They are as follows :-

Chairman : Assoc. Prof. Dr. Esah Hamzah –(UTM)
 Deputy Chairman : En. Effendy Salim – (CP Tech)
 Secretary/Treasurer : Engku Mohd. Nazim Engku Abu Bakar (UTM)

Members :

Social Activities Committee - En .M.Aniq Nagin Abdullah- (Sime-SemCorp)
 Social Activities Committee - Mr. Micheal Fong – (IC)
 Seminar & Courses Committee - Assoc. Prof. Dr. Ahmad Mahir Mokhtar - UTM
 Seminar & Courses Committee - Ms. Astuty Amrin –UTM)
 Seminar & Courses Committee - En. Noor Hisham Ab. Hamid(UTM)
 Membership Committee- Mr. Harold Lim(SBN)
 Membership Committee - Mr. Peyser Beh Pang Keat(Pasifik Cekap)
 Membership Committee – Mr. Leong Weng Onn (Metonmas)

Activities planned by the committee for year 2001 include a short course on materials (June 2001) , seminar/conference (August 2001) and social activities such as bowling tournament and fishing competition. As for Golf Tournament, we will leave it to IMM main committee to organise it.

IMM members especially those from Johor, Negeri Sembilan and Melaka may contact any of the committee members for further information.

<u>Chairman</u>	<u>Deputy Chairman</u>	<u>Secretary/Treasurer</u>
Assoc. Prof. Dr. Esah Hamzah Head Dept of Materials Eng. Faculty of Mechanical Engineering Universiti Teknologi Malaysia 81310 UTM, Skudai, Johor	En/ Effendy Salim Cathodic Protection Technology (Johor) Sdn Bhd PLO 126, Kaw. Perindustrian Senai 81400 Senai , Johor	Engku Mohd. Nazim Engku Abu Bakar Faculty of Mechanical Engineering Universiti Teknologi Skudai, 81310 UTM, Skudai, Johor
Tel: 07-5504562 Fax: 07-5566159 E-mail : esah@fkm.utm.my	Tel : 07-5988000 Fax:07-5988110 E-mail: catholic@po.jaring.my	Tel : 07-5504688 Fax:07-5566159 E-mail:nazim@fkm.utm.my

IMM WELDING COMMITTEE

Committee Members:-

Dr. Lim Ching Liang (Metacos)
 Dr. Teh Ser Kok (Universiti Malaya)
 Mr. Garry Toft (Enviropeel)
 Mr. Lim Soon Hua (Titan Polymers)
 Mr. Derek Yeoh (ABS)
 Mr. Lorganaden Varathan (EPMI)
 Ir. Ong Chong Hup (MPE)

Mr. Tee Kim Tsew (LOTT Inspection)
 En. Hasbullah Abu Hassan (Petronas Carigali)
 Mr. Doon Sooi Leng (OIS)
 En. Zaaba Abdullah (Petronas Gas)
 Mr. Kang Kim Ang (VCI)
 Dr. Edwin Jong (Sarawak Shell)
 Ir. Mohd Suradi Yasin (Petronas)

The first Welding Inspector (WI) examination in March 2001 is still the main task of the committee presently. It is the result of combined effort by two subcommittees i.e. Certification Management Board (CMB) (formerly known as Certification subcommittee) and Training subcommittee.

In order to ensure the WI scheme become reality, CMB met in November 2000 to ensure the scheme will be reputable like CSWIP and AWS to fulfill local needs and later on , recognised internationally. This can be achieved through local industry support, continuous promotional road shows and Quality Audit programmes.

The Welding committee also met on 13th Nov 2000. The lay out of prospectus for the Welding Inspector scheme was deliberated and effort is planned to make the prospectus available by early 2001 for distribution.

<u>Chairman</u>	<u>Deputy Chairman</u>	<u>Secretary/Treasurer</u>
En. Zainuddin Ishak Petronas Gas Bhd KM 10, Lebuhraya Segamat-Kuantan, 85000 Segamat, Johor Tel: 07-9310266 Fax: 07-9316521 E-mail : zain@petronas.com.my	Dr. Lim Ching Liang Metacos Sdn Bhd 20, Jalan U5/17(PS) Sekasyen U5 (Panasuria), 40150 Shah Alam, Selangor Tel:03-7450730 Fax: 03-7450739 metalim@pc.jaring.my	Mr. Tee Kim Tsew Lott Inspection Sdn Bhd 40, Jalan Anggerik Mokara 31/64 Kota Kemuning, Seksyen 31 40706 Shah Alam, Selangor Tel: 03-5240736 Fax:03-5240734

IMM EDUCATION & CAREER COMMITTEE

A road show is being scheduled to introduce IMM to local education institutions which offer materials related courses. The road show aims to explain career opportunities to materials graduates in Malaysia. The road show will also introduce the role of IMM in helping/guiding materials practitioners in Malaysia to develop their careers.

The committee has also received requests from local university students to establish an "IMM Student Chapter" in the universities. This request will be brought to the IMM Council for consideration at its next meeting in February 2001.

As the Institute has now established its own website and e-mail address, students are encourage to forward their queries directly to the Institute, attentioned to the Education & Career Development Committee, the committee that has been entrusted to establish link with the local Education Institution.

<u>Chairman</u>	<u>Deputy Chairman</u>	<u>Secretary/Treasurer</u>
Kang Kim Ang VCI (M) Sdn Bhd No. 48, Jalan TPJ 10 Taman Perindustrian Jaya 47200 Subang, Selangor Tel: 03-7450448 Fax: 03-7450418 E-mail :kangka@tm.net.jaring		

IMM/GADING INSTITUTE COURSES SCHEDULE FOR THE YEAR 2001

ITEM	NAME OF COURSE	DATES	LOCATION
1.	IMM COATINGS INSPECTOR CERTIFICATION SCHEME	19-22 Feb 2001	KL/PJ
		16-19 April 2001	Pasir Gudang/JB
		16-19 July 2001	KL/PJ
		10-13 Sept 2001	Paka/Kuantan
2.	IMM CORROSION CONTROL BY PROTECTIVE PAINTS	19-20 Feb 2001	KL/PJ
		16-17 April 2001	JB
		16-17 July	KL/PJ
		10-11 Sept 2001	Kuantan
3.	IMM BLASTING & PAINTING SUPERVISOR COURSE	23-24 Feb 2001	KL/PJ
		20-21 April 2001	P. Gudang/JN
		20-21 July 2001	KL/PJ
		14-15 Sept 2001	Kuantan
4.	CATHODIC PROTECTION (CP Technician Level 1)	19-23 Mar 2001	KL
		17-21 Sept 2001	KL
5.	CATHODIC PROTECTION (CP Technician Level 2)	14-18 Mar 2001	KL
		5-9 Nov 2001	KL
6.	IMM POWER SYSTEM GROUNDING & ELECTROMAGNETIC INTERFERENCE ANALYSIS	6 Aug 2001	KL
8.	SENIOR COATINGS INSPECTOR	23-27 July 2001	KL
9.	RE-CERTIFICATION OF COATINGS INSPECTOR	1 Mar 2001	KL
		1 Sept 2001	KL

IMM SARAWAK COMMITTEE

IMM Sarawak Committee signed a temporary Memorandum of Agreement with an Activity Organiser, Mdm Teresa Lipah, on 5th September, 2000. The temporary arrangement is put in place until a suitable Company is identified.

To date about 10 companies, in Miri, Bintulu and Kuching, had participated in the Blasters & Painters Certification programme. About 99 participants had been certified to date. The Companies are:

- 1) **A & P Engineering/UEC Engineering**
- 2) **Sabadi Sdn Bhd, Bintulu**
- 3) **Foster Link Sdn.Bhd., Bintulu**
- 4) **Velosi Sd.Bhd., Miri**
- 5) **Sarku Engineering, Miri**
- 6) **Enersafe Sd.Bhd., Miri**
- 7) **Brooke Dockyard, Kuching**
- 8) **Litak Engineering, Miri**
- 9) **Dayang Enterprise, Miri**
- 10) **Syarikat Bersaudara. Lutong**

IMM Sarawak Committee had their 3rd Annual Dinner on 25th November, Saturday at Dynasty Hotel. It was well attended by about 110 people. The Guests of Honour were the Deputy Chairman of the Miri Municipal Council (MMC), Tuan Hj. Razali Alision, the Technical Service Manager of Petronas Carigali (Sarawak Operations), Encik Ahmad Hussin, the General Manager of Technical Services Unit (Shell Malaysia, E&P), Mr. Paul Ching, and the Maintenance Manager for Sarawak Business Unit (Shell Malaysia E&P), Encik Raja Ahmad Murad Raja Baharin.

In his speech the Deputy Chairman of MMC mentioned that IMM could play a big role in the QC of Recycling project that MMC is undertaking. He also encourages participation of IMM in the various MMC projects.

The IMM Sarawak Committee had their last committee meeting on 1st December. The main agenda was to review this year's performance & achievements and to identify future direction. Amongst the item discussed was the proposal from the Ministry of Tourism for IMM Sarawak Committee to organise an International Conference, to expose the overseas participants to the state. This will be discussed in detail next meeting.

<u>Chairman</u>	<u>Deputy Chairman</u>	<u>Secretary</u>
Puan Maimunah Ismail EPT-MCI Sarawak Shell Berhad Locked Bag No. 1 98007 Miri, Sarawak Tel: 085-454686 Fax: 085-454959 E-mail :MAIMUNAH M. Ismail @ssb.shell.com.my	En. Zamri Zakaria Velosi (M) Sdn Bhd Lot 2102/2103, Yakin Commercial Centre, Off Jln Jee Foh 5, 98000 Miri, Sarawak Tel:085-435980 Fax:085-435997	En. Jeffery N. Uvang MPE Lindung Sdn Bhd Lot 3070, Morsjaya Commercial Centre, Mile 3, Miri-Bintulu Road, 98000 Miri, Sarawak Tel : 085-439346 Fax: 085-439348 E-mail:jeffmpe@tm.net.my

IMM EAST COAST COMMITTEE

COMMITTEE MEMBERS

Harry Woon
 Vincent Owi
 Abdul Menim Shakir
 Senu Mohd Noor
 Mohd Zuhaimi Mohd Zubir

Mohd Sulastry Salleh
 Woo Kok Low
 Wan Mahusain Wan Man
 K.Y. Shum

The annual IMM Corrosion Conference and Exhibition 2000, held on November 1-2, 2000 was the major event of the year for IMM East Coast. Held at MS Garden, the event attracted exhibitors and attended by participants from 15200 all over Malaysia and Singapore. A total of papers presenters on corrosion technology were presented by 1721 organizations from as well. The highlight of the event was the India, United Kingdom, Canada and Malaysia gracing of the Opening Ceremony by the Menteri Besar of Pahang, Yang Berhormat Dato' Adnan bin Yaakob.

Two IMM Coatings Inspector Certification Courses were conducted during 2000, one each in Paka and Kuantan. The courses, each lasting 4 full days, were attended by a total of 41 participants. Successful candidates were presented with the IMM Coatings Inspector Certificate and a TAFE (Training And Further Education, Australia) Certificate.



Candidates learning the use of paint inspection instruments during IMM Coatings Inspector Course in Kuantan

IMM Protective Coating Technician Scheme certifications, for Blasters and Painters, were conducted upon request from organizations participating in the oil and gas projects. In 2000, a total of 4 sessions were conducted involving 48 blasters and painters. The sessions were conducted by IMM pool of trainers and invigilators. These trainers and invigilators consist of volunteers from the local oil and gas industries.

For 2001, IMM ECC is looking at broadening the participation of members, which currently consisting of volunteers from Paka, Kertih, Kemaman and Kuantan Port areas. ECC plan to enroll members from Gebeng Industrial Estate to participate actively as committee members for ECC and IMM Central.

<u>Chairman</u>	<u>Deputy Chairman</u>	<u>Secretary/Treasurer</u>
<p>Harry Woon Bredero Price (M) Sdn Bhd 16 MS, Jalan Kuantan- Kemaman, 25720 Kuantan, Pahang</p> <p>Tel: 09-5833131 Fax: 09-5833336 E-mail: harry.woon@bredero.com</p>		

CATHODIC PROTECTION Training and Certification

What does the training course fee cover?

- ☒ Exam fee
- ☒ Hands-on practicals
- ☒ Transport to site
- ☒ Written examination

What needs to be submitted before I am accepted for the course?

You shall need to submit your registration with supporting evidence of your educational and working experience for verification.

Send your registration & payment to:

The Activity Organiser

Gading Institute Sdn Bhd. (formerly Guan Institute)

(Company No. 420531-K)

85-2 & 87-2

Changkat Thamby Dollah

Off Jalan Pudu

55100 Kuala Lumpur

Tel: 03-2416 300

Fax: 03-2419 053

Email: gading99@tm.net.my

CP TECHNICIAN LEVEL 1

EMPHASIS AND APPLICABILITY

Upon successful completion, the certified person should be capable of going to the field and accomplishing the periodical surveys required by a cathodic protection (CP) programme. CP Level 1 technicians should have a basic understanding of corrosion fundamentals and sufficient troubleshooting skills to take care of minor problems within a CP system.

Course Outlines

- Corrosion Fundamentals
- Cathodic Protection Fundamentals
- Field Measurements
- Stray Current Identification

- Installing Cathodic Protection Components
- Troubleshooting
- Written Examination
- Practical Examination

Note: Above contents exclude "Design of Cathodic Protection System".

Recommended Pre-requisites

6 months cathodic protection work experience

plus

Completed SPM or its equivalent.

Please tick (✓)	INTAKE	LOCATION
	19-23 March 2001	Kuala Lumpur/Petaling Jaya
	17-21 September 2001	Kuala Lumpur/Petaling Jaya
Time	: 8.30 am – 5.00 pm	
Fee	: a) Normal fee: RM3,025.00 : b) Early bird fee: RM2,750.00 (for registration & fee received 20 days the before course commencement date. Cheques shall be made payable to the "INSTITUTE OF MATERIALS, MALAYSIA".	

REGISTRATION FORM

Name:

Company:

Address:

.....

.....

..... E-mail:

Tel: Fax:

Contact person: Designation:

Signature: Date:



CATHODIC PROTECTION Training and Certification

CP TECHNICIAN LEVEL 2

Pre-requisites

CP Level 1 Certificate or equivalent with 3 years cathodic protection work experience *or* Have attended IMM Basic CP Course with 3 years CP experience

What does the training course fee cover?

- ☒ Exam fee
- ☒ Hands-on practicals
- ☒ Transport to site
- ☒ Written examination

What needs to be submitted before I am accepted for the course?

You shall need to submit your registration with supporting evidence of your educational and working experience for verification.

Emphasis and Applicability

Upon successful completion, the certified person should have an advanced understanding of cathodic protection (CP) principles and have sufficient troubleshooting skills and experience to handle major problems within a CP system. CP Level 2 technicians should be capable of using the instruments required to accomplish advanced testing to include stray current interference, current requirement and close interval surveys. CP Level 2 technicians should be able to design and install simplistic forms of galvanic and impressed CP facilities.

Course Outlines

- ◆ Corrosion Principles
- ◆ Cathodic Protection Principles
- ◆ Basic Design of Cathodic Protection Systems
- ◆ Properties & Applications of Sacrificial Anodes & Impressed Current Anodes and Equipment

- ◆ CP Instrumentation & their Applications
- ◆ Stray Current and Cathodic Protection Interference
- ◆ Soil Resistivity Measurements, Pipe & Cable Locating & Current Requirement Testing
- ◆ CP Potential Measurements including Close Interval Potential Surveys (CIPS)
- ◆ Datalogging, Mapping with GPS & Coating Defect Surveys (DCVG/Pearson)
- ◆ Quality Assurance and Quality Control
- ◆ Safety
- ◆ Field Testing
- ◆ Record Keeping
- ◆ Written Examination
- ◆ Practical Examination

Send your registration & payment to:

The Activity Organiser

Gading Institute Sdn. Bhd.
(formerly Guan Institute)

Company No. 428531-K)

85-2 & 87-2

Changkat Thamby Dollah

Off Jalan Pudu

55100 Kuala Lumpur

Tel: 03-2416 300

Fax: 03-2419 053

Email: gading99@tm.net.my

Please tick (✓)	INTAKE	LOCATION
<input type="checkbox"/>	14-18 May 2001	Kuala Lumpur/Petaling Jaya
<input type="checkbox"/>	5-9 November 2001	Kuala Lumpur/Petaling Jaya
Time Fee	: 8.30 am – 5.00 pm : a) Normal fee: RM3,575.00 : b) Early bird fee: RM3,250.00 (for registration & fee received 20 days before course commencement date. Cheques shall be made payable to the "INSTITUTE OF MATERIALS, MALAY SIA".	

REGISTRATION FORM

Name:.....
 Company:.....
 Address:.....

 E-mail:.....
 Tel:..... Fax:.....
 Contact person:..... Designation:.....
 Signature:..... Date:.....

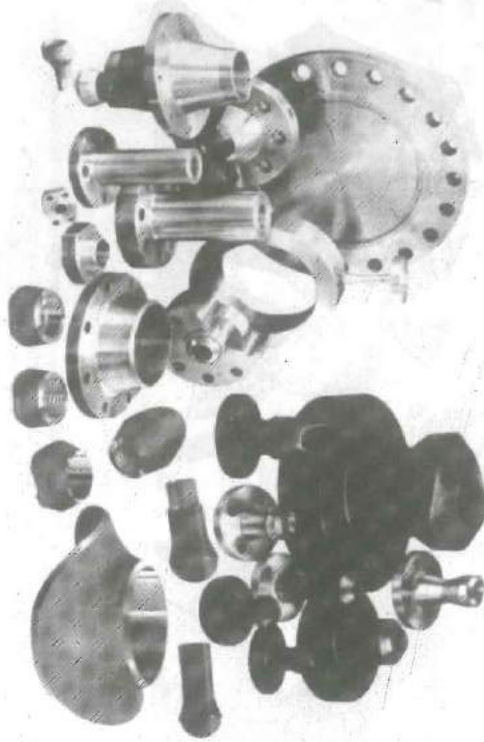
PES
M

PROMAT[®]

ESM SDN BHD
(Co. No. 359183 A)

(formerly known as Drexel Bakki-Promat (M) Sdn Bhd)

Design, manufacturer and supplier of forged
steel flanges, flanged and conventional
branch outlet fittings.



Factory & Office: Lot 4A, Kaw. Perindustrian MIEI, Jakarta IV, 24000 Kemaman, Terengganu Darul Iman
Tel: (09) 868 4201 / 4202 Fax: (09) 868 4204 E-Mail: promat@tm.net.my / promat_esm@gmail.com

As Principal

Sasol Carbo-Tar (A Division of Sasol Chemical Industries)

2 Sturdee Avenue P.O. Box 4590
Rosebank Johannesburg 2000
Johannesburg 2196 South Africa
Telephone : +27 11 280 0000 Telefax: +27 11 880 1398
Website : www.sasol.com
e-mail : carbo-tar@sasol.com



As Agent

EASB ENGINEERING MATERIALS SDN BHD (Company No: 40630-20)
20 D (2nd Floor), Jalan SS 21/39 Damansara Utama, 47400 Petaling Jaya, Selangor Darul Ehsan
Tel : 60 - 772 666 51 Fax : 03 - 772 666 52 E-mail : emsb@ppp.nastel.net

Sasol Carbo-Tar

Sasol Limited is a multi-billion dollar South African based company, with listings on both the NASDAQ and Johannesburg Stock Exchanges. Sasol Limited comprises seven operating divisions, namely, Mining, Synthetic Fuels, Chemical Industries, Technology, Oil, Petroleum International and International Holdings.

Sasol Carbo-Tar is a division of Sasol Chemical Industries Limited and produces and markets unique premium carbon and tar products. We manufacture carbon from pitch coke and waxy oil coke, which are produced from feedstocks. The feedstocks are generated in Sasol's oil-from-coal process whereby coal is gasified and the purified synthesis gas converted into synthetic oil. Sasol is the only company in the world to make use of such proprietary technology. The feedstocks from which the two coke types are produced are very unique. The manufacturing of the feedstocks is done in accordance with ISO 9002.

Corrosorb

Corrosorb is manufactured in accordance with ISO 9002 and purely is manufactured for the Cathodic Protection industry. To further enhance the quality of the final product, reputable independent laboratories, in accordance with rigorous internationally accepted standards and test methods, have tested our product. Extremely stringent manufacturing and quality control procedures, over and above the ISO 9002 requirements, have been effected, by Sasol Carbo-Tar, in order to ensure that Corrosorb can easily compete with any of the other first world CP backfill suppliers.

Miscell

Sasol Carbo-Tar is renowned as an outstanding and reliable international manufacturer of carbon and tar products. We are leading and technologically prominent organization that transforms heavy hydrocarbon residues, fluid carbons and tar distillates into high value products.

Our primary objective is to focus this profitable and growing concern on the processing and selling of carbon and tar products and services.

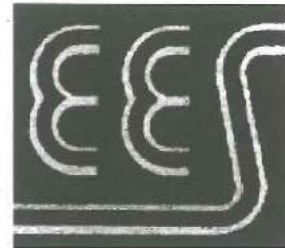
Each member of the team is a spontaneous spark in the radiance of success and like the African sun, radiates energy to guarantee our prosperity for the sake of our families, customers, suppliers, and Sasol. As mature stakeholders we do not hesitate to live up to high ethical standards.

We believe in dynamic leadership that continuously turns the challenges of changing circumstances into opportunities. Our conducts are community-supportive and environmentally responsible.

Vision

Innovative solutions for the high value global carbon markets.

With Our Best Regards



EASTERN ENERGY SERVICES SDN. BHD.

No. 21, Jalan 3/23A, Taman Danau kota, Off Jalan Genting Klang,
Setapak, 53300 KUALA LUMPUR
Tel : 603 4142 5014, 4142 5008, 4142 5499 Fax : 4143 3459, 4143 2707



DELCOM

A wholly owned Malaysian Company

F O S S I N G
New Frontiers

why our corrosion inhibitors? it's simple.

we emphasize excellence at every step of our business - from extensive product research & development to after sales support. through our team of experienced scientists and state of the art research center, delcom is your ideal partner for chemical solutions in this region.



DELCOM

in
partnership
with



**NAVDEEP
CHEMICALS PVT. LTD.**

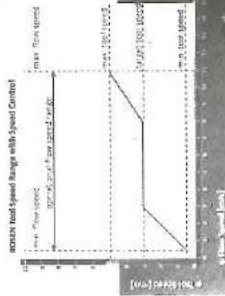
chemical solutions provider.

chemical business unit
delcom services sdn bhd
no 42 jin bangsar utama 1
bangsar utama
59000 kuala lumpur
tel: 603-22827733 fax: 603-22826330
www.delcom.com.my

Your Expectations are Our Motivation

The inspection of complex and sensitive oil and gas pipeline systems forms a considerable challenge. To meet that challenge, ROSEN offers a complete range of pipeline inspection tools, from 4" to 56". Our track record - inspecting tens of thousands of kilometers per year - is sure proof of our reliability.

To be prepared for all the challenges - today and in the future - ROSEN conducts its own extensive research and development programs. High-technology, innovation and flexibility: these are the key words by which we live.



H. Rosen Engineering GmbH
Germany
Phone +49-591-9116-0
Fax +49-591-9116-131
Info@RosenGermany.de

H. Rosen USA Inc.
USA
Phone +1-281-442-8242
Fax +1-281-442-8866
Info@RosenUSA.com

H. Rosen Engineering (M) Sdn. Bhd.
Malaysia
Phone +60-3-705 5000
Fax +60-3-705 4000
Info@RosenMalaysia.com

For more information see our website:
www.RosenMalaysia.com

- Our R&D programs establish new inspection technology standards for the full range of future industry requirements.
- Our new speed control unit is capable of carrying out extremely accurate inspections even at high gas-flow speeds.
- The all-new HiRes XYZ mapping tool indicates the exact location of pipelines.
- Our new 24"/32" dual-diameter metal loss mapping tool is an important addition to our range of dual-diameter inspection tools.
- Rosen's transverse field inspection project is improving the inspection of axially extended cracks and corrosion.
- Our research engineers are working hard to live up to the trust and expectations you place on us. ROSEN's turn-around time - from customer need to solution - is extremely short.

If you require it, we'll provide it!

HEMPEL

Protection

Nu-Chem.^{INC}

HEMPEL MALAYSIA SDN. BHD.

9, JALAN UTAS 15/7
 40200 SHAH ALAM
 SELANGOR DARUL EHSAN
 MALAYSIA

TEL : 603 5512 3037 FAX : 603 5512 3016

**VIRTUAL ENVIRONMENT
 FOR SECURE TRANSACTIONS**

iVest

WEB-BASED E-MAIL • INTRANET & EXTRANET APPLICATIONS • ONLINE SHOPPING • ONLINE BANKING • ONLINE INSURANCE
 • ONLINE STOCK TRADING • ONLINE LEARNING • BUSINESS-TO-BUSINESS TRANSACTIONS • ONLINE HEALTH CARE



TOTAL SECURITY WITH USER AUTHENTICATION

IVEST users are provided with an IVEST smart card which is used for all verification and authentication purposes. The IVEST smart card comes with a built-in Class 2 digital certificate from Digicert, Sdn Bhd, acknowledged as the superior user identification system for the internet.



COMPLETE PRIVACY WITH ENCRYPTION

To prevent security breach on the internet, IVEST utilizes full 128-bit encryption of Web data between server and browser. IVEST users are assured that all communications during each session with an IVEST server is completely secure and private.



LEGAL PROTECTION WITH DIGITAL SIGNATURE

Users can now conduct e-commerce transactions via the internet in full confidence. IVEST allows you to sign electronically - in the form of a digital signature that is in line with the requirements of the Malaysian Digital Signature Act 1997 and the Digital Signature Regulations 1998.



Internet security

don't log on without **iVest**



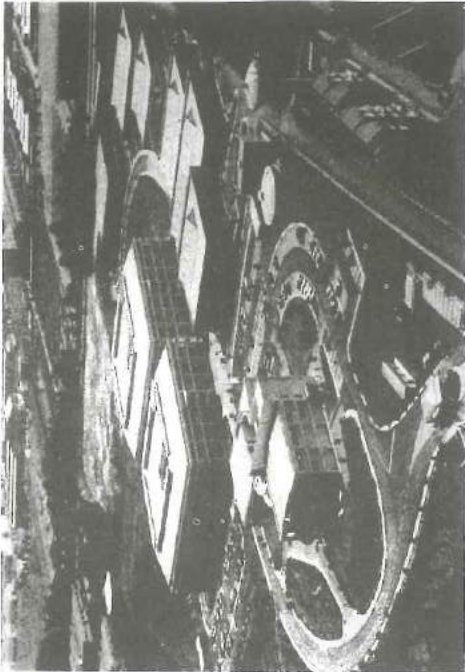
An innovation of MIMOS BERHAD

www.ivest.com.my



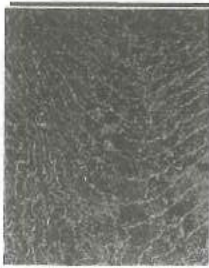
PETRONAS Research & Scientific Services Sdn Bhd

PETRONAS' wholly-owned research and development subsidiary, PETRONAS Research and Scientific Services Sdn Bhd (PRSS), was incorporated on December 8, 1992 to provide quality RESEARCH & TECHNICAL SERVICES to meet the research and technological needs of PETRONAS Group as well as other petroleum-related companies, both domestically and internationally.



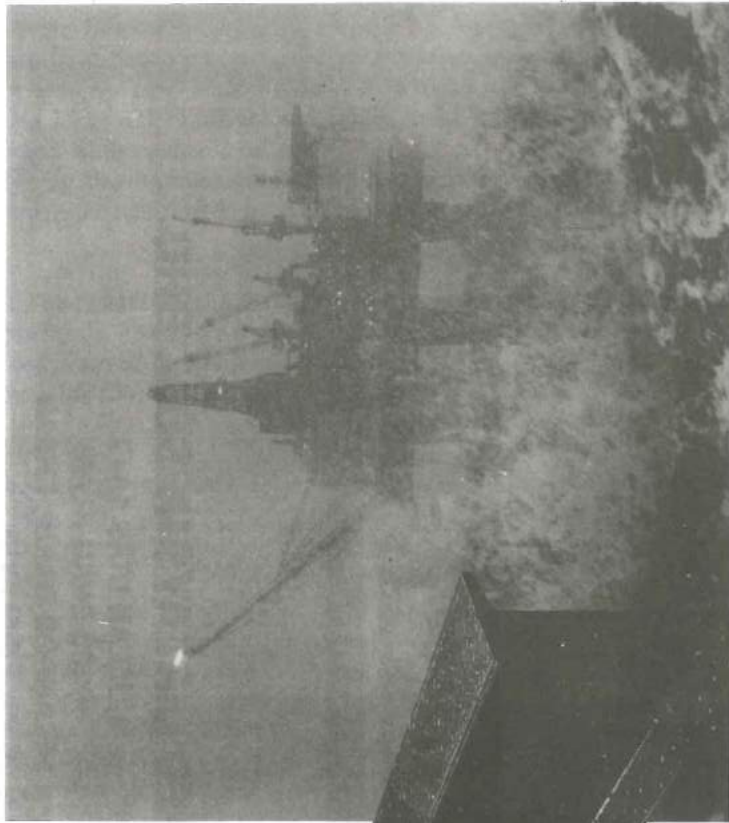
Supported by dedicated, skilful and experienced scientists and equipped with state-of-the-art equipment, PRSS' principal activities are research, technology development and consultancy services in the areas of :

- Exploration and Production
- Refining, Gas and Petrochemicals
- Product Development
- Materials and Corrosion
- Environmental management
- Digital Information Services
- Scientific Services



PRSS

Create value to your business



WaterFine System

Environmentally responsible corrosion protection

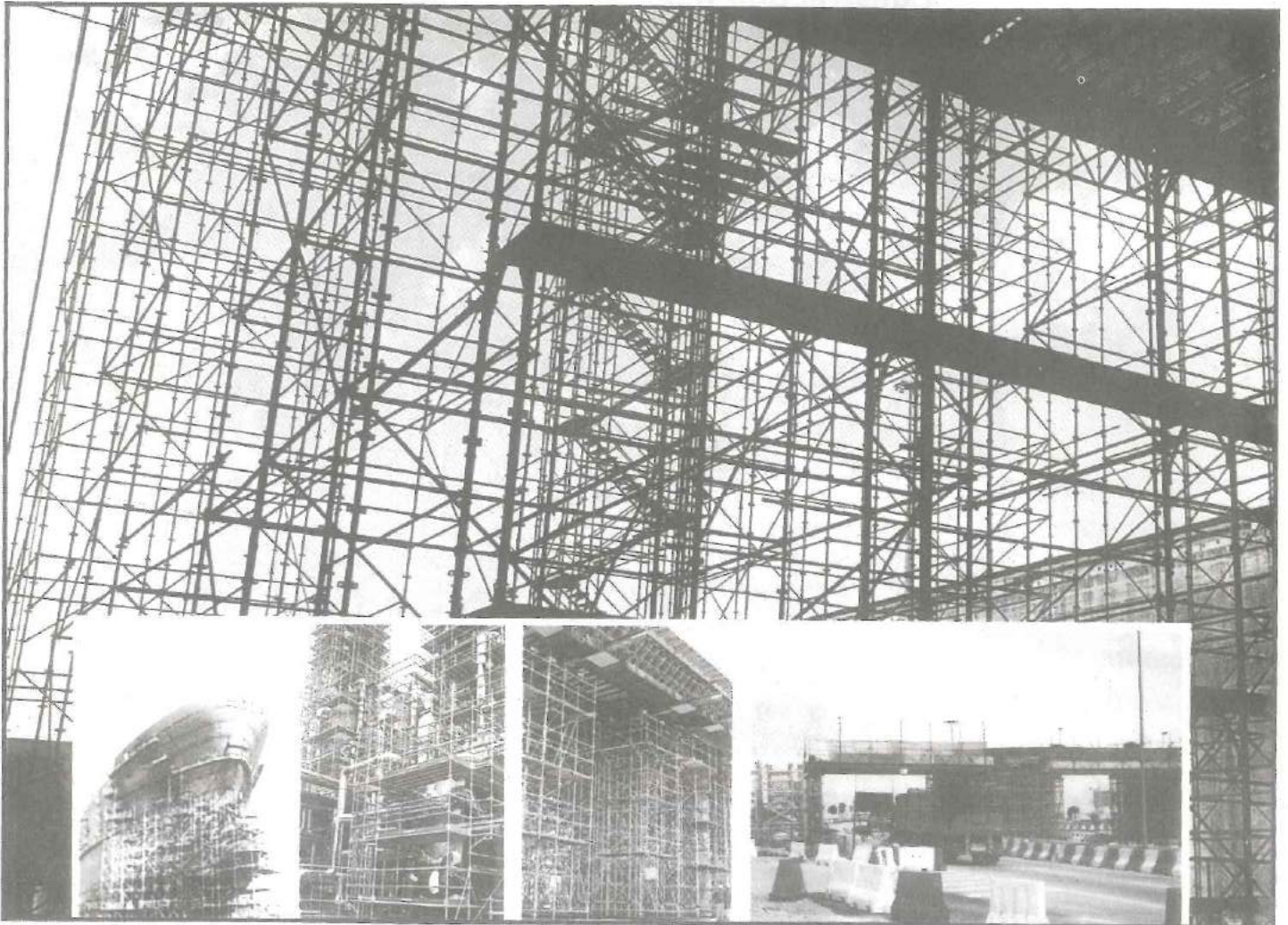
- Waterborne coatings
- Long term protection
- Very low environmental impacts

JOTUN (M) SDN. BHD. (16934-U)
Lot 7, Persiaran Perusahaan, Seksyen 23, P.O. Box 7050, 40700 Shah Alam. Tel: 03-5421150 Fax: 03-5421207
website : <http://www.jotun.com.my/>

crab[®] 25

crab[®] 60

SCAFFOLDING - SHORING A COMPREHENSIVE RANGE OF EQUIPMENT

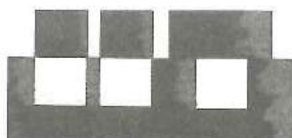


The CRAB system of scaffolding and shoring equipment is a patented design developed by Entrepouse Echafaudages of France. It is an advance system which conforms to the European Standards (HD1000) and British Standards (BS1139), and is particularly suitable for heavy industrial usage such as shoring works, shipbuilding and the oil and gas industries. The high level of safety features incorporated in the CRAB system renders it also suitable for construction sites and general industrial applications.

Others features of the CRAB system of scaffolding and shoring equipment include :

- Easy to assemble and dismantle
- Multi-levelled and multi-directional
- Support light or heavy loads
- Versatile and mobile
- Interchangeable and flexible
- Durable

Manufactured By :



HIAP TECK GROUP

SOLE LICENSED MANUFACTURER OF ENTREPOUSE CRAB SYSTEM
MALAYSIA, SINGAPORE, BRUNEI AND INDONESIA

H.T. SCAFFOLDING MANUFACTURING SDN BHD

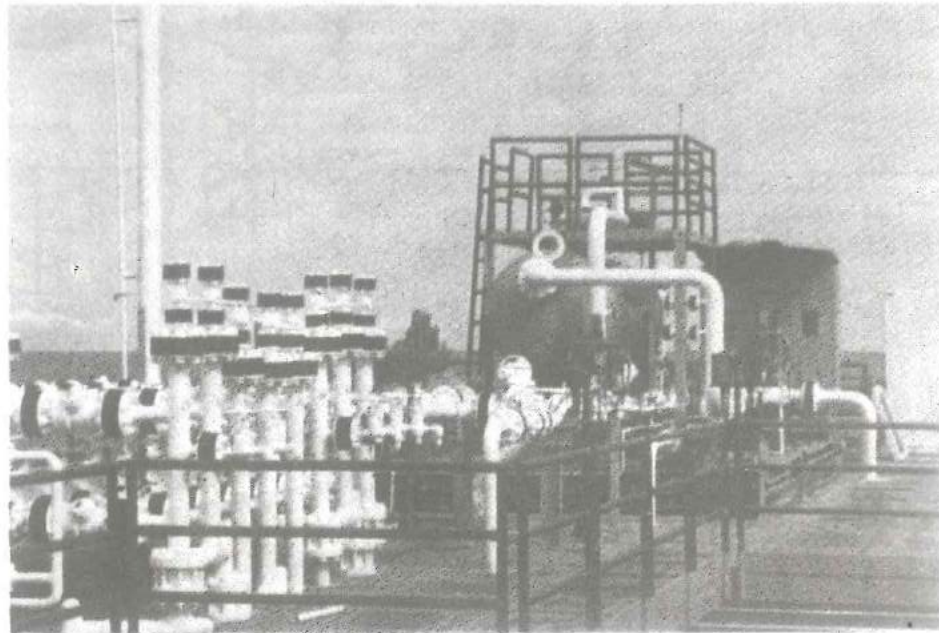
LOT 6085 JALAN HAJI ABDUL MANAN, BATU 5 1/2, JALAN MERU, 41050 KLANG, SELANGOR D.E.

TEL : 603-392 8240

FAX : 603-392 6784

BERGER PROTECTIVE COATINGS

Protective coatings to all types of industries for long term protection
Offshore Industries • Petro-Chemical Industries
Construction Industries • Refineries



BERGER
THE PAINT PROFESSIONALS

Lot 6107, Jalan Haji Salleh,
Off 5 ½ Miles, Jalan Meru,
41050 Klang, Malaysia.
Tel: 03-3926919 Fax: 03-3920839 / 3926962
www.bergeronline.com e-mail: berger@top.net.my

