

Kata-kata Aluan

Assalamualaikum dan Salam Sejahtera,

Alhamdulillah, setinggi-tinggi kesyukuran kepada Allah s.w.t kerana dengan izinNYA Buletin MARPA Isu No. 13, 2017 ini berjaya diterbitkan. Penerbitan buletin ini adalah sangat penting sebagai salah satu platform perkongsian maklumat berkenaan aktiviti-aktiviti yang telah dan akan dianjurkan oleh MARPA sepanjang sesi 2016/2017.

Sesi 2016/2017 telah menyaksikan kejayaan MARPA dalam penganjuran tiga acara besar iaitu Persidangan Perlindungan Sinaran&Bengkel 2016, Seminar Keselamatan Makanan 2017 dan Special Seminar on Advanced NDT Technologies 2017. Selain itu, MARPA turut menyumbang kepada Pertandingan Menulis Esei Sains dan Teknologi Nuklear Peringkat kebangsaan 2016. Saya berharap aktiviti-aktiviti anjuran dan kerjasama MARPA ini telah dapat memberi manfaat kepada ahli MARPA khususnya dan rakyat Malaysia secara amnya. Sebagai penghargaan kepada semua ahli, MARPA akan mengedarkan kad keahlian dengan fungsi Touch n Go kepada semua ahlinya seramai 595 orang ahlinya secara berperingkat bermula April 2017.

Akhir kata, saya mewakili MARPA sentiasa mengalu-alukan sebarang cadangan dan komen daripada ahli-ahli MARPA bagi mempertingkatkan keupayaan MARPA supaya terus menjadi organisasi yang sentiasa relevan kepada pihak industri, kerajaan dan orang awam dalam bidang perlindungan sinaran di Malaysia.

Prof. Dr. Amran bin Ab Majid
Presiden MARPA



Sidang editor

Penaung:
Prof. Dr. Amran bin Ab Majid

Penyelaras:
Dr. Wan Saffiey bin Wan Abdullah
Norhasfalina binti Saidin
Norhayati binti Abdullah

Kandungan

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- ❑ Makmal Perubatan Nuklear Standard Sekunder Pertama di Malaysia
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► Occupational Radiation Protection Appraisal Service (ORPAS) Mission in Malaysia

On 15th to 23rd May 2017, Malaysia received a team of nine senior regulatory experts from nine International Atomic Energy Agency (IAEA) member states to conduct a full mission of Occupational Radiation Protection Appraisal Service (ORPAS), to assess the regulatory and practical implementation of the occupational radiation protection arrangements in Malaysia. As requested by the government of Malaysia, the ORPAS team carried out the full mission to assess the application of occupational radiation protection for a total of thirteen organisations from four different sectors including two regulators, three technical support organisations, seven end users and one training centre.



The experts team and the organization participants of Malaysian ORPAS Mission.

The ORPAS team members were:

- ❖ Stephen Andrew **LONG** (Australia)
- ❖ Aayda **AHMED AL SHEHHI** (UAE)
- ❖ Hasanuddin **ISHAK** (Indonesia)
- ❖ Ichiro **YAMAGUCHI** (Japan)
- ❖ Rungdham **TAKAM** (Thailand)
- ❖ Matjaž **STEPIŠNIK** (Slovenia)
- ❖ Mohammad Said **AL-MASRI** (Syrian Arab Republic)
- ❖ Abdur **REHMAN** (Pakistan)
- ❖ H. Burçin **OKYAR** (IAEA)

► Occupational Radiation Protection Appraisal Service (ORPAS) Mission in Malaysia (cont...)

Nuclear Malaysia act as a national coordinator for the mission.

The methodology used in the mission were the, meeting and interview the participants and review the relevant records and documents observation to the facilities.



The participating organisations in the mission were:

REGULATORS

- Atomic Energy Licensing Board (AELB)
- Medical Radiation Surveillance Division, Ministry of Health (MoH)

TECHNICAL SUPPORT ORGANISATIONS

- APM Nuclear Technology Sdn. Bhd. (participated with TSO and end-user capacity), Asia Lab (Malaysia) Sdn. Bhd. (participated with TSO and end-user capacity) and Nuklear Malaysia (Secondary Standard Dosimetry Laboratory (SSDL) and Whole Body Counting Laboratory (WBCL))

END-USERS

- Care Ion Technologist Sdn. Bhd., Huntsman Tioxide Sdn.Bhd. (now operating as Venator), National Cancer Institute, Nuklear Malaysia (Radioisotope Production Laboratory and PUSPATI TRIGA Mark II Research Reactor (RTP)), Petronas Carigali Sdn.Bhd. ,Prince Court Medical Centre and UKM Medical Centre (National University of Malaysia)

TRAINING CENTRE

- Nuclear Malaysia Training Centre

Through the mission's findings, generally, the system of occupational radiation protection in Malaysia is robust which comply with the IAEA Safety Standards and General Safety Requirements Part 3 (GSR Part 3).

Good practices identified during the mission are the following;

- ✓ Requirement for all testing and calibration service providers to be certified to the MS ISO/IEC 17025
- ✓ The national regulatory authorities have similar comprehensive arrangements for the health surveillance of radiation workers.



► Makmal Perubatan Nuklear Standard Sekunder Pertama di Malaysia

Norhayati Abdullah, Agensi Nuklear Malaysia

Makmal standard sekunder perubatan nuklear yang pertama di Malaysia telah dibangunkan pada tahun 2007. Sehingga kini, makmal ini merupakan satu-satunya makmal di Malaysia yang menawarkan perkhidmatan tentukuran peralatan perubatan nuklear seperti *dose calibrator* dan *thyroid counter*. Pada tahun 2008, makmal ini telah berjaya mewujudkan khidmat tentukuran *dose calibrator* dengan tawaran harga sepuluh kali lebih rendah berbanding tentukuran di luar negara. Harga yang ditawarkan oleh makmal ini ialah RM 1450 per unit *dose calibrator* berbanding RM 14 000 oleh makmal di luar negara. Di Malaysia, *dose calibrator* telah digunakan di pusat-pusat perubatan nuklear untuk tujuan diagnosis dan terapi sejak tahun 1985. Sebelum tahun 2008, semua *dose calibrator* yang terdapat di 16 pusat perubatan nuklear di Malaysia tidak pernah ditentukur kerana tiada servis seumpamanya ditawarkan di Malaysia. Kesannya, kejituan dan kebolehpercayaan radioaktiviti bahan radiofarmaseutikal yang disuntik kepada pesakit tidak dapat ditentukan. Hal ini akan memberi kesan kepada amalan pengoptimuman dos kepada pesakit dan pekerja sinaran.

Alat rujukan standard kebangsaan yang diguna dalam tentukuran ini ialah penentukur dos standard sekunder Fidelis yang mempunyai kebolehesanan kepada *National Physical Laboratory* (NPL), United Kingdom. Alat ini diselenggara secara rutin bagi memastikan bacaan adalah konsisten dan boleh dipercayai dalam julat $\pm 2\%$.

Tentukuran *dose calibrator* melibatkan 6 parameter iaitu:

- 1 Penentuan aras cemar pada *dipper* dan *well liner*
- 2 Ujian kestabilan sistem
- 3 Kejituan pengukuran radioaktiviti menggunakan punca standard iaitu Cobalt-57, Barium-133, Caesium-137 dan Cobalt-60
- 4 Kemalaran dan kepersisan pengukuran radioaktiviti
- 5 Kelinearan pengukuran radioaktiviti menggunakan Technetium-99m
- 6 Kesan perubahan posisi dan isipadu punca terhadap pengukuran radioaktiviti



► Makmal Perubatan Nuklear Standard Sekunder Pertama di Malaysia (cont...)

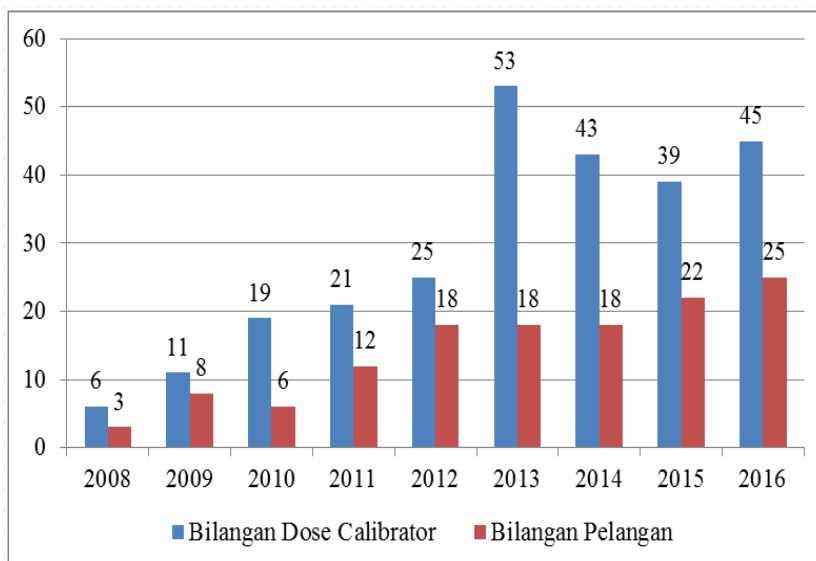
Norhayati Abdullah, Agensi Nuklear Malaysia

Prosedur tentukuran dan had toleransi yang dibenarkan untuk tentukuran alat ini adalah berdasarkan siri laporan teknikal No.454: 2006 yang dibangunkan oleh Agensi Tenaga Atom Antarabangsa (IAEA).



Aktiviti tentukuran dose calibrator di Agensi Nuklear Malaysia.

Bermula tahun 2008 hingga 2013, permintaan khidmat tentukuran *dose calibrator* telah meningkat dengan drastik daripada 6 unit kepada 53 unit *dose calibrator* setahun. Keadaan ini disebabkan oleh penguatkuasaan peraturan tentukuran *dose calibrator* oleh Kementerian Kesihatan Malaysia, kesedaran pengguna tentang keperluan tentukuran dan pertambahan pusat-pusat perubatan nuklear di malaysia. Selepas tahun 2013, permintaan terhadap khidmat tentukuran dose calibrator dijangka mengalami perubahan yang kecil dengan purata *dose calibrator* yang ditentukur setiap tahun ialah 45 unit dan melibatkan 21 pelanggan tetap.



Bilangan dose calibrator yang telah ditentukur dan bilangan pelanggan yang telah mendapatkan khidmat daripada Agensi Nuklear Malaysia bermula tahun 2008 hingga 2016.

► Seminar Keselamatan Makanan 2017

Agensi Nuklear Malaysia dengan kerjasama Malaysian Radiation Protection Association (MARPA) telah menganjurkan Seminar Keselamatan Makanan 2017 bertempat di Hotel Le Meridien, Putrajaya pada 23 hingga 24 Mei 2017. Seminar pada tahun ini bertemakan “Strengthening Food Industries through Food Safety” dan telah dihadiri oleh seramai lebih kurang 90 peserta yang terdiri daripada kakitangan kerajaan dan swasta. Sebanyak 13 kertas yang terdiri daripada satu ucapan tema, dua kertas ucapan tema dan sepuluh kertas kerja telah dibentangkan dalam seminar dua hari ini.



Seminar on FOOD SAFETY 2017

“Strengthening Food Industries through Food Safety”

Day
1 23 May 2017, Tuesday

- 08:30 Registration
- 09:00 VIP Arrival
- 09:15 Welcoming Remarks
- 09:20 Official Opening
YBhg. Dr. Mohd Ashhar bin Hj. Khalid
Director General of Malaysian Nuclear Agency
- 09:45 Coffee Break
- 10:00 Theme Speech :
“Strengthening Food Industries through Food Safety”
Ms. Nooraini binti Dato’ Mohd Othman
Senior Director, Food Safety and Quality Division
Ministry of Health

Session 1 : Food Safety Moderator: Dr. Hadijah binti Hassan, MARDI

- 11:00 Keynote 1
Food Irradiation: Social and Economic Benefits
Dr. Ahmad Zainuri bin Mohd. Dzomir
Research Officer, Agrotechnology and Bioscience Division
Malaysian Nuclear Agency
- 12:00 Paper 1
Requirements and Issues on Food Safety
Ms. Ayesha binti Ahmad Mustaza
Food Safety Officer, Food Safety and Quality Program
Ministry of Health
- 13:00 Lunch/Networking Time

Session 2 : Food Quality & Authenticity Moderator: Dr. Ahmad Zainuri bin Mohd. Dzomir, Malaysian Nuclear Agency

- 14:00 Paper 2
Bioaccessibility of Polycyclic Aromatic Hydrocarbons (PAHs)
Prof Madya Dr. Ahmad Faizal bin Abdull Razis
Lecturer, Faculty of Food Safety and Technology
Universiti Putra Malaysia (UPM)
- 15:00 Paper 3
Food Chain Integrity
Mr. Mohd Roslan bin Saludin
General Manager, Department of Shariah & Halal Compliance,
QSR Brands (M) Holding Sdn Bhd
- 16:00 Paper 4
Addressing Food Authenticity Challenges
Dr. Hadijah binti Hassan
Deputy Director, Security and Food Forensic Program,
Food Science Technology Research, MARDI
- 17:00 End of Day 1

Day
2 24 May 2017, Wednesday

Session 3 : Food Treatment & Process Moderator: Mr. Mohd Safzan bin Mohd Mukhtar, JAKIM

- 08:30 Keynote 2
Confronting Public Anxiety over Food Safety
Ms. Ayesha binti Ahmad Mustaza
Food Safety Officer, Food Safety & Quality Program
Ministry of Health
- 09:30 Paper 5
Food Residue and Contaminants: Emerging Challenges to Global Food Security
Mr. Wan Sulong bin Wan Omar
Section Head, Food Section Environmental Health Division
Department of Chemistry Malaysia
- 10:30 Coffee Break
- 10:45 Paper 6
Malaysian National Quality Infrastructure in Assuring Food Safety
Ms. Sabariah binti Abdul Talib
Senior Assistant Director, Strategic Planning Division
Standards Malaysia
- 11:45 Paper 7
Food Safety: Accuracy of Nutrition Label in Malaysia
Prof. Madya Dr. Che Wan Jasimah binti Wan Mohamed Radzi
Head, Department of Science and Technology Studies, Faculty of Science
Universiti Malaysia
- 12:45 Lunch/Networking Time

Session 4 : Food Sustainability & Traceability Moderator: Mr. Wan Sulong bin Wan Omar, Department of Chemistry Malaysia

- 14:00 Paper 8
Halal Standard Compliance
Mr. Mohd Safzan bin Mohd Mukhtar
Assistant Director, Halal Hub Division, Strategic Planning Branch
JAKIM
- 15:00 Paper 9
Global Halal Market: Taking Halal Industry Forward
Mr. Mohamad Romzi bin Sulaiman
Senior Manager, Global Halal Support Centre
Halal Industry Development Corporation (HDC)
- 16:00 Paper 10
Nuclear Techniques in Food Authenticity
Ms. Nazaratul Ashifa binti Abdullah Salim
Research Officer, Environmental and Waste Technology Division
Malaysian Nuclear Agency
- 17:00 THE END

► Special Seminar on Advanced NDT Technologies

Special Seminar on Advanced NDT Technologies merupakan seminar anjuran MARPA dengan kerjasama Agensi Nuklear Malaysia telah diadakan pada 1 hingga 2 Ogos 2017 bertempat di M.S. Garden Hotel, Kuantan, Pahang. Seminar ini diadakan bagi memenuhi kehendak industri semasa dan akan datang terhadap perkembangan teknologi ujian tanpa musnah (non-destructive testing - NDT) termaju. Sebanyak 4 ucapan tama dan 12 kertas kerja yang berkaitan aplikasi NDT dalam industri minyak dan gas, aero angkasa, laluan kereta api dan jana kuasa elektrik telah dibentangkan dalam seminar ini.

PROGRAMME OUTLINE	
DAY 1 Tuesday, 1 August	
08:30 Registration 09:00 Welcoming Address 09:05 Official Opening 09:20 Coffee Break	
SESSION I	SESSION II
09:45 Keynote 1 Advanced NDT application for Petronas - Mr Wan Abdullah Wan Hamat	14:00 Keynote 2 Advanced NDT for the competitiveness and sustainability of the industry (Malaysian Society for NDT)
10:45 Speaker 1 DIR based inspection for weldments and wall thickness measurement (Malaysian Nuclear Agency)	15:00 Speaker 4 Pulsed Eddy Current (PEC) Application for CUI, CUF, Corrosion Scabs and FAC (Eddyfi)
11:30 Speaker 2 Acoustic emission (AE) Technology and Application (Valien Systeme GmbH)	15:45 Refreshment
12:15 Speaker 3 Advanced NDT Application in Railway Industry (Keretapi Tanah Melayu Berhad)	16:00 Speaker 5 Prospective of DDA Application in Aerospace Industry (GE Technologies)
13:00 Lunch	16:45 Speaker 6 Malaysian Skills Certificate (SKM) on Advanced NDT (Department of Skills Development)
	17:30 End of day 1
DAY 2 Wednesday, 2 August	
SESSION III	SESSION IV
08:45 Keynote 3 Advanced NDT Application in Aerospace Industry (Epic Aero Engineering Sdn.Bhd)	14:00 Keynote 4 Current and Future needs of Advanced NDT in Power Generation Industry (Damask Materials Solution Sdn Bhd)
09:45 Speaker 7 Digital Industrial Radiography in Aerospace Industry (UMW Aerospace)	15:00 Speaker 10 Experience Utilizing Computed Radiography in Oil and Gas Industry (Lott Inspection Sdn Bhd)
10:30 Refreshment	15:45 Refreshment
Speaker 8 Phased Array Ultrasonic Technology (Olympus)	16:00 Speaker 11 Application of Magnetic Flux Leakage in Industry (Premier Exhibitor)
11:30 Speaker 9 Case Study on Advanced NDT Application in Power Generation Industry (TNB Research)	16:45 Speaker 12 Overview on Phased Array Ultrasonic Techniques (Malaysian Nuclear Agency)
12:20 Lunch	17:30 End of Seminar



► Persidangan Perlindungan Sinaran & Bengkel 2016

Persidangan Perlindungan Sinaran & Bengkel yang dianjurkan oleh Agensi Nuklear Malaysia dengan kerjasama Malaysian Radiation Protection Association (MARPA) telah diadakan pada 29 November hingga 1 Disember 2016 bertempat di Hotel Thistle, Johor Bahru, Johor.

Sebanyak 4 ucapan tama dan 12 kertas kerja telah dibentangkan dalam persidangan ini. Pembentang-pembentang terdiri daripada Pengerusi Jawatankuasa Kebangsaan Persijilan Pegawai Perlindungan Sinaran (JKPPS), pegawai-pegawai dari AELB, Nuklear Malaysia, Kementerian Kesihatan Malaysia, Universiti Teknologi Malaysia, Schlumberger (M) Sdn. Bhd., Lynas (M) Sdn. Bhd., Ansell NP Sdn. Bhd dan Presiden MSNT.

Persidangan pada tahun ini bertemakan “Safety and Security without Compromise” dengan memberi fokus kepada 7 isu strategik berikut:

1	Pengurusan keselamatan
2	Hala tuju dan amalan
3	Kehendak perundangan
4	Keselamatan dan sekuriti
5	Pengoptimuman dalam penggunaan sinaran mengion
6	Langkah-langkah mempromosikan budaya keselamatan
7	Meningkatkan kualiti produk dan produktiviti



Teliti nuklear sebagai sumber tenaga

Oleh AZIZI MAJID
azizimajid@utusan.com.my

■ JOHOR BAHRU 29 NOV.

KERAJAAN perlu meneliti sejauh mana keperluan dan penerimaaan awam mengenai penggunaan tenaga nuklear sebagai satu lagi sumber tenaga yang akan diguna pakai dalam campuran tenaga (energy mix) di negara ini.

Presiden Persatuan Perlindungan Sinaran Malaysia (Marspa), Prof. Dr. Amran Ab. Majid berkata, kerajaan setakat ini masih belum membuat sebarang keputusan mengenai pembangunan tenaga nuklear di negara ini.

Beliau berkata, penggunaan tenaga nuklear atau sumber tenaga lain bergantung kepada permintaan malah negara memerlukan sumber tenaga bagi mengorakkan industri domestik.

"Sekiranya sumber tenaga sedia ada tak mencukupi, barulah kerajaan perlu mempertimbangkan untuk guna tenaga nuklear, mungkin antara 10 hingga 30 peratus dalam campuran tenaga.

"(Bagaimanapun), Malaysia kena lihat kepada keperluan sama ada perlu atau tidak tenaga (nuklear) ini, berapa banyak ia diperlukan kerana kita tidak galkan penggunaannya sekiranya tiada keperluan," katanya kepada pembanta selepas majlis perasmian Bengkel dan Persidangan Pelindungan Radiasi ke-19 di sini hari ini.

Majlis disempurnakan Ketua Pengarah Agensi Nuklear Malaysia (Nuclear Malaysia), Datuk Dr. Muhamad Lebai Juri dan dihadiri Ketua Pengarah Lembaga Perlesenan Tenaga Atom (AELB), Hamrah Mohd. Ali.

Semalam 230 pengamal perlin-

dungan sinaran dan sektor industri di negara ini menyertai bengkel latihan. Marga dengan kerjasama Nuklear Malaysia dan AELB selama empat hari bermula hari ini.

Amran berkata, Malaysia perlu memilikikan penggunaan tenaga nuklear memandangkan semua negara termasuk negara ini menggunakan teknologi nuklear khususnya dalam bidang perubatan.

"Teknologi nuklear ini banyak digunakan dalam bidang perubatan seperti bagi imbasan X-ray, membuat diagnosis penyakit, terapi dan sebagainya.

"Semua negara menggunakan teknologi nuklear dalam perubatan, hanya adalah teknologi terbaik yang ada. Kalau nak terus maju, tetapi tidak cukup sumber tenaga, kita perlu mula memilikikan mengenainya (tenaga nuklear)," katanya.



MUHAMAD LEBAI JURU (kanan) dan Amran Ab. Majid (dua dari kanan) melihat peralatan bagi mengukur tahap radiasi pada majlis Pembukaan Rasmi Radiation Protection Conference & Workshop 2016 di Hotel Thistle, Johor Bahru, semalam.

UTUSAN MALAYSIA.RABU 30 NOVEMBER 2016

電供足夠應付需求

2030年前不建核電廠

(新山29日讯)我国现阶段发电供应还足够应付需求，因此在此2030年以前，没有建造核能发电厂的必要。

马来西亚核能机构总监拿督莫哈末勒拜里博士说，建造核电厂的问题已在国会上多次提出讨论，中央政府也宣布，建造核电厂计划将推后至2030年。

"推迟核电厂计划，主要原因是目前未有这个需要，另外是民众普遍都对核电厂安全感到担忧。"

莫哈末勒拜里博士今早为马来西亚核能机构、原子能执照局及大马辐射防护协会联合主办的防辐射工作坊主持开幕后说，不止我国提出兴建核电厂，本区域中，包括越南也有提出核电厂计划，但由于日本福岛核能泄漏事故，导致计划也被延迟。

核能成本穩定

他说，核能之所以被许多大国使用，主要原因是核能成本较其他发电资源如煤炭及石油等稳定，比起风力和太阳能等也更易保存。

"目前法国80%电力来自核能厂，美国全境也有101个核电厂；

不久前在韩国举办的国际核能大会，韩国方面宣布到了2030年，该国的30%电力将来自核能，并会再兴建3至5个核电厂。"

另外，马来西亚辐射防护协会主席安然指出，民众对核能的认知，仍停留在与辐射及污染有关。

他说，放射线技术普遍存在于民

众的日常生活中，医疗领域占了60%，工业及农业等领域则占40%。

"以X光为例，大家都知道这是一种辐射，但仍被大部分民众所接受。同样，当国家发展到一定程度，现有的能源供应已不能满足时，核能发电厂自然就会被提起或者落实。"



■莫哈末勒拜里(右起)、安然及祖基菲里参观参展单位时，使用检测辐射指数的仪器。

目前我国共有2万5000人，拥有与放射线相关领域的从业执照。

原子能执照局总监哈拉莫哈末阿里指出，所有放射线从业员及相关工业公司雇主，必须向该局注册，才可获颁发及更新执照。

他说，由于放射线从业

放射線相關領域

2萬5000人擁執照

员也算是危险工作，为了确保这些放射线从业员的安全，当局也规定在更新执照时，必须进行健康检

查，确保从业员的健康状态良好。

哈拉莫哈末阿里说，公司也必须定期向该局更新

执照，该局也会视公司获得的分数，决定更新执照的期限。

"例如，获得该局2.5分以上的公司，能更新执照最长3年期限，少过2.5的只能获得2年或最少一年，甚至被撤销执照。"

出席活动者尚有筹委会主席祖基菲里等人。

CHINA PRESS.RABU 30 NOVEMBER 2016

► Tajaan MARPA untuk Hari Pengurusan Pengetahuan (KM) Nuklear Malaysia 2016

Agensi Nuklear Malaysia telah menganjurkan Hari Pengurusan Pengetahuan (KM) Nuklear Malaysia yang telah diadakan pada 29 September 2016. Antara aktiviti yang dijalankan ialah ceramah bertajuk Petronas KM Community of Practise, sesi Perkongsian Pengetahuan : “Dari Bangi ke Vienna” oleh Dr. Noor Hasnah Bt. Mohamed Khairullah, Pegawai Penyelidik Agensi Nuklear Malaysia, pameran poster Hari KM bertemakan "Knowledge and Expertise Mapping", pertandingan subsite (sharepoint), kuiz KM dan cabutan bertuah.



Malaysian Radiation Protection Association (MARPA) turut memberi sokongan kepada aktiviti ini dengan memberi tajaan berupa lima hadiah cabutan bertuah kepada para peserta. Hadiah cabutan bertuah telah disampaikan oleh En. Norfaizal bin Mohamad, Setiausaha MARPA.



➤ Penganjuran bersama MARPA dalam Pertandingan Menulis Esei Sains dan Teknologi Nuklear Peringkat Kebangsaan 2016

Kementerian Sains, Teknologi dan Inovasi (MOSTI), Kementerian Pendidikan Malaysia (KPM), Malaysian Radiation Protection Association (MARPA) dan Malaysia Nuclear Power Corporation (MNPC) telah bekerjasama dalam penganjuran Pertandingan Menulis Esei Sains dan Teknologi Nuklear Peringkat Kebangsaan 2016. Pertandingan ini merupakan salah satu projek kerjasama teknikal IAEA di bawah program “Introducing Nuclear Sciences and Technology to Secondary Schools” yang bertujuan untuk memberi kesedaran dan pendedahan mengenai sains dan teknologi nuklear kepada pelajar-pelajar sekolah di Malaysia.



PEMENANG

Pemenang	Kategori Menengah Atas	Kategori Menengah Rendah
1	Chee Wai Xiong SMK Ibrahim, Sg Petani, Kedah	Nur Adawiyah Fauzi SMK Padang Pulut, Dungun, Terengganu
2	Nur Athirah Binti Fauzi SMK Tengku Intan Zaharah, Dungun, Terengganu	Serena Michelle Lade SMK Saint Elizabeth, Kilometer 3, Sibu, Sarawak.
3	Nurul Syahmina Dawood Batcha SMK Penang Free, Georgetown, Penang	Tejashree Laxmi A/P Kanthan SMK Convent Butterworth, Butterworth, Pulau Pinang

► Program-program Anjuran MARPA Tahun 2017

Seminar on Food Safety 2017

Strengthening Food Industries through Food Safety

HOTEL LE MERIDIEN PUTRAJAYA 23rd - 24th MAY 2017

REGISTRATION FORM

Name: _____

I.C. No.: _____

Passport No.: _____

Phone: _____

I.C. No.: _____

Passport No.: _____

Meal Restriction (Special Diet) (Please specify): _____

Package (Please Tick ✓)

	Registration Fee	With Accommodation
Single	☐	☐
Team	☐	☐

Payment

The fee of RM _____ (Bankdraft/Money order/Cheque/L.O. payable to Malaysian Radiation Protection Association (MARPA) is enclosed herewith).

Name of Approving Manager: _____

Designation: _____

Company Name & Address: _____

Telephone: _____ Fax: _____

Mobile: _____

Email: _____

(Please photocopy and return to participant)

Company Stamp

February 2017

www.nuclearmalaysia.gov.my

Fees

PACKAGE	FEES PER PAX	
	Fees without accommodation	Fees with accommodation
Single	RM900.00	RM1950.00
Team (2 or more registrars from the same organisation)	RM850.00	RM1900.00

*Those who need the accommodation, check-in date is on 22nd May 2017 and check-out is on 25th May 2017.

Fees are inclusive of meeting materials, certificate, luncheon and light refreshment. Fees must be paid in advance through bank draft/money order/cheque/L.O. payable to Malaysian Radiation Protection Association (MARPA).

Payment can be also made direct into MARPA account, CIMB Country Heights Branch (8002885317). Swift Code: CIBM33MY. Please retain the bank slip to be tendered during the registration day as prove of payment.

Inquiry

For further information, please contact:

DIRECTOR GENERAL
Malaysia Nuclear Agency (NUCLEAR MALAYSIA)
Bangi, 43000 Kajang, Selangor
(Attn: Nuclear Malaysia Training Centre)

+603.8911.2180

Inquiries

Sabariah/Shawani/Ibrahim

+603.8911.2000 ext. 2607 / 2610 / 2611

+6011.33893183

or

Malaysian Radiation Protection Association (MARPA)

No. Peti Surat 80002, Bandar Baru Bangi,
43657 Selangor Darul Ehsan

info@marpa.org.my / norfazzlin@nm.gov.my

601.4911.2000 ext. 1823 (Norfazzlin)

Registration

Please email the registration form to:

WhatsApp:

sabariah_brahim@nuclearmalaysia.gov.my

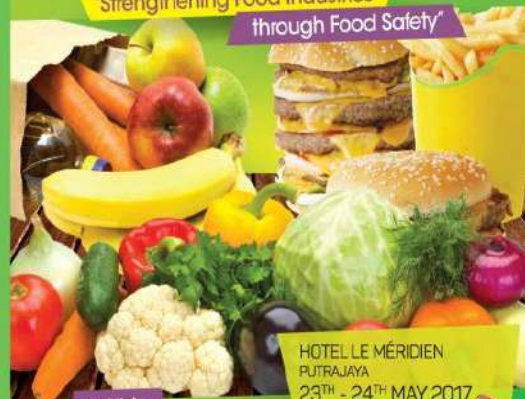
+6012.248.1988

shawani_h@nuclearmalaysia.gov.my

ibrahim_ibrahim@nuclearmalaysia.gov.my

Seminar on Food Safety 2017

Strengthening Food Industries through Food Safety



HOTEL LE MERIDIEN
PUTRAJAYA
23rd - 24th MAY 2017

Highlights

- Food Contaminant
- Food Irradiation
- Food Quality and Challenges
- Food Supply Chain
- HACCP & GMP
- Halal Related Issues
- Hygiene Management
- National Standard Compliance Program
- Product Recall - Crisis Management
- Safety Assessment and Authorisation



INQUIRY

For Seminar details, please contact:

Malaysian Radiation Protection Association (MARPA),
Suite 23005, Block 23,
Malaysian Nuclear Agency (Nuclear Malaysia),
Bangi, 43000 KAJANG, Malaysia.
(Attn: Mohd Sidek Othman)
Tel: 019 3228 139

OR **Malaysian Nuclear Agency (Nuclear Malaysia),**
Bangi, 43000 KAJANG, Malaysia.
(Attn: Syazlin / Harni / Syazwani / Hadza)

03-8911 2000 ext: 2607 / 2606 / 2601 / 2609

019-3434 122

03-8911 2180

wan_syazlin@nm.gov.my

harni@nm.gov.my

nursyazwani@cc.nm.gov.my

hadza@nm.gov.my

For exhibition detail please contact:

Secretariat
Ilham / Amry / Khairul Anuar
Malaysian Nuclear Agency (Nuclear Malaysia),
Bangi, 43000 KAJANG, Malaysia.
03-8911 2000 ext: 1231 / 1226 / 1547
mukriz@nm.gov.my
amry@nm.gov.my
khairul_anuar@nm.gov.my

Walk-in participants will also be admitted on a space available basis. Early application is welcome.

THIS EVENT IS ALSO OPEN TO GENERAL PUBLIC

REGISTRATION FORM FOR PARTICIPANT & EXHIBITORS NDT 400

PLEASE REGISTER THE FOLLOWING NAME(S) FOR EVENT NAME
(As In I.C. or Passport, To Be Printed on Certificate)

Full Name: _____

PASSPORT No.: _____

I.C. No.: _____ NEW

Package tick ✓ ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H

Meal Restriction (Special Diet): _____

MARPA Membership Number: _____

The fee of RM _____ (Bankdraft/Money Order/Cheque/L.O. payable to MALAYSIAN RADIATION PROTECTION ASSOCIATION (MARPA) is enclosed herewith)

Name of Approving Manager: _____

Designation: _____

Company Name & Address: _____

Telephone: _____ Fax: _____

Email: _____

Please photocopy for additional participant

*Early Bird Deadline: 30th June, 2017.

Please send completed form and registration fee to:
Director General
Malaysian Nuclear Agency (Nuclear Malaysia)
Bangi, 43000 Kajang, Malaysia.
(Attn: Training Centre)

www.nuclearmalaysia.gov.my

SPECIAL SEMINAR on ADVANCED NDT TECHNOLOGIES

www.marpa.org.my

M.S Garden Hotel, Kuantan Pahang

1-2 August 2017

HIGHLIGHTS

- Advanced NDT methods and techniques
- Application of the advanced NDT
- Training, standard and Certification
- Recent professional practices



Program-program Anjuran MARPA Tahun 2017

Registration Form

RADIATION PROTECTION CONFERENCE & WORKSHOP 2017

Please enrol the following person (s) for the conference,

PARTICIPANT DETAILS

Name (as in L.C. or Passport)	L.C. No. / Passport No.	MARPA No.	Email
1.			
2.			
3.			

Special Diet (if you please select)	Package (workshop only)	T-shirt size (please select)
1.	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	S M L XL XXL XXXL
2.	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	S M L XL XXL XXXL
3.	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	S M L XL XXL XXXL

*T-shirt size is based on availability
(Please photocopy for additional participants)

The registration fee of RM _____ (money order/cheque/bank draft/local order)
payable to **Malaysian Radiation Protection Association (MARPA)** is enclosed herewith

Name of Approving Manager _____
Designation _____
Company Name & Address _____
Tel : _____ Mobile : _____
Fax : _____ Email : _____

PLEASE SEND COMPLETED FORM TO:

Director General
Malaysian Nuclear Agency (Nuclear Malaysia) Bangi,
43000 Kajang, Malaysia.
(Attn: Adila / Nurul Huda / Nurul Huda / Nurul Huda / Nurul Huda)
(Attn: Adila / Nurul Huda / Nurul Huda / Nurul Huda / Nurul Huda)
Tel : +603.8911.2000 ext : 2608/2602/2609
Fax : +603.8911.2180
www.nuclearmalaysia.gov.my

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Issue April 2017

RADIATION PROTECTION CONFERENCE & WORKSHOP 2017



27 - 30 Nov 2017, Kuantan, Pahang

Safety And Security Without Compromise

"A comprehensive programme focusing on strategic issues of the safety management, future direction and practices, legislative requirements, safety and security, optimising the use of ionising radiation, ways to promote safety culture, new learning paradigm, and enhancing product quality and productivity"

HIGHLIGHTS

- Legislation, Standards and Procedures
- Safety, Security and Safeguards
- Recent Professional Practices
- Education and Training
- Radiation Safety Monitoring and Control
- Technology, Quality and Productivity
- Safety Culture and Environment
- Performance of Equipment
- Human Talent



PREAMBLE

The economic activities using ionising radiation are widely popular due to the benefits to mankind, availability of sufficient radiation safety standards and value for money. As such, a radiation professional must be responsive to these issues and other radiation related subjects. As one knows the subject matter very well, it is duty bound to place the ionising radiation to the right perspectives. The issues must be properly addressed to strengthen safety confidence among workers and public alike. In this regards, they must keep abreast with the latest development and recent professional practices on ionising radiation both at local and international arena.

In Organisation, the task and responsibility of these professionals especially 'Person Responsible for The License' (OBT), Radiation Protection Officer (RPO) and Radiation Protection Supervisor (RPS) are not only limited to ensure the safety procedures are observed, but also improve safety performance in order to increase quality and productivity. Strict adherence to the safety procedures necessary to avoid any mishap and unwarranted accident that cost an organisation the profit, reputation and assets.

Rapid development in the application of ionising radiation in various sectors demand a comprehensive implementation of legislative requirements in an effort to minimise risk possibly arise from human errors, technical ability and reliability of equipment. Hence, there is a need to strategise and harmonise standards, procedures, training and implementations, so that it will address the real needs of radiation issues that lead to the development of safety culture in an organisation.

Base on recommendation from participants of previous Conferences, the same format will be retained for this year's event, taking into account the wide spectrum of participants: OBT, RPO, RPS and other related professionals.

This Radiation Protection Conference and Workshop is a good platform for radiation professionals, OBTs, RPOs, members of relevant authorities, associated professionals and other key personnel to meet, discuss, sharing thoughts and experience, and establish better networking to enhanced safety performance as well as their professionalism.

CONFERENCE OBJECTIVE

To disseminate information on the latest development, strategies and future direction for proper radiation safety practices.

To overview the current radiation practices at workplace as to confirm to the safety standard and procedures.

To keep abreast on the development of ionising radiation activities such as R&D, Education and training, produces, licensing and regulations.

To provide networking opportunity, sharing thoughts and experience with other professional colleagues towards the betterment of RPO professionalism

As a platform where radiation professional managers, trainers, academicians and those from regulatory and relevant authorities meet together to stimulate useful business link

PAPER PRESENTER

A total of 19 papers are scheduled to be presented at the Conference. The will be 4 keynote address and 15 papers delivered by notable international and local speakers covering the following aspects:

- Technology, quality and productivity
- Safety culture and environment
- Radiation safety monitoring and control
- Legislation, procedures and practices
- Education and training
- Performance and equipment
- Recent professional practices
- Safety, security and safeguard

CEP POINT

Participants who attended full Conference and Workshop are eligible to obtain CEP points subject to AELB consideration.

PAYMENT

Payment can also be made directly into MARPA account, CIMB Country Heights Branch, (Acc. No. 8002885317, Swift Code: CIMBMYKL). Please retain bank slip to be tendered during the registration day as proof of payment.

Those who are opted for the accommodation, normal check-in time is 14.00 hrs check-out time is 12.00 noon.

CLOSING DATE

Closing date for booking is 01 Nov 2017. Early registration is encouraged. The information of place will be made on 'first-come-first serve' basis.

Walk in participants with payment will also admitted on space available basis.

PROGRAMME OUTLINE DAY 1

27 Nov 2017

09.00am - 05.00pm

- Official Opening
- Conference Session I
- Conference Session II

08.00pm - 10.30pm

- Conference Dinner

DAY 2

28 Nov 2017

08.30am - 06.30pm

- Conference Session III
- Conference Session IV

DAY 3

29 Nov 2017

08.30am - 06.00pm

- Session V (Workshop)
- Interactive Round Table Discussion

DAY 4

30 Nov 2017

09.00am - 05.00pm

- Forum
- Technical Visit to Lynas (M) Sdn Bhd

INQUIRY

Malaysian Radiation Protection Association (MARPA)

No. Peti Surat 00002, Bandar Baru Bangi, 43657 Selangor Darul Ehsan
S2 : admin@marpa.org.my
T : 603.8911.2000 ext. 1823 (Norfaizal)

For further information, please contact:

Director General
Malaysian Nuclear Agency (Nuclear Malaysia)

Bangi, 43000 KAJANG
(Attn: Training Centre)
T : 603.8911.2000 ext : 2608/2602/2609
F : 603.8911.2180

✉ : nuradila@cc.nuclearmalaysia.gov.my
✉ : hadza@nm.gov.my
✉ : nora_zaini@nm.gov.my
✉ : zulakha@cc.nm.gov.my

PAHANG ATTRACTIONS



INVESTMENT

Without Accommodation - Kuantan			With Accommodation - Hotel Zenith, Kuantan		
Package	Single Registration	MARPA Member / Team Discount	Package	Single Registration	MARPA Member / Team Discount
A Conference Only (27/11/17 - 28/11/17)	RM 1495.00	RM 1445.00	D Conference Only (27/11/17 - 28/11/17) Check in : 26/11/2017 Check out : 29/11/2017 at 12 pm	RM 2545.00	RM 2495.00
B Conference & Workshop (27/11/17 - 28/11/17)	RM 1740.00	RM 1690.00	E Conference & Workshop (27/11/17 - 29/11/17) Check in : 26/11/2017 Check out : 30/11/2017	RM 3140.00	RM 3090.00
C Conference & Workshop & Technical Visit (27/11/17 - 30/11/17)	RM 1785.00	RM 1715.00	F Conference & Workshop & Technical Visit (27/11/17 - 30/11/17) Check in : 26/11/2017 Check out : 01/12/2017	RM 3735.00	RM 3685.00

* Conference fees are inclusive of conference material, lunch breaks, coffee breaks and one dinner. Payment must be done in Ringgit Malaysia (RM), paid in advance through bank draft, money order/cheque, & payable to Malaysian Radiation Protection Association (MARPA)

► Program-program Anjuran MARPA Tahun 2017

Persidangan Sinaran Tidak Mengion,
Tarikh dan tempat akan diumumkan.

Seminar Pelan Kecemasan dan Bengkel Kecemasan Radiologi dan Nuklear Tahun 2017.
Tarikh dan tempat akan diumumkan.

► Program kerjasama MARPA Tahun 2018

Fifth Asian and Oceanic Congress on Radiation Protection (AOCRP-5), 2018, Melbourne, Australia.
Log on to <http://www.aocrp-5.org/> for more info.

