



# NUCLEAR SCIENCE & ENGINEERING

MALAYSIAN AGENCY NUCLEAR





#### RECOGNITION

















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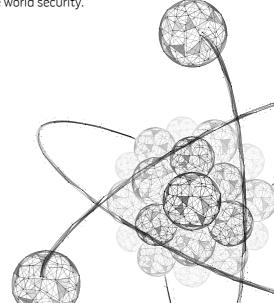
# NUCLEAR SCIENCE ENGINEERING

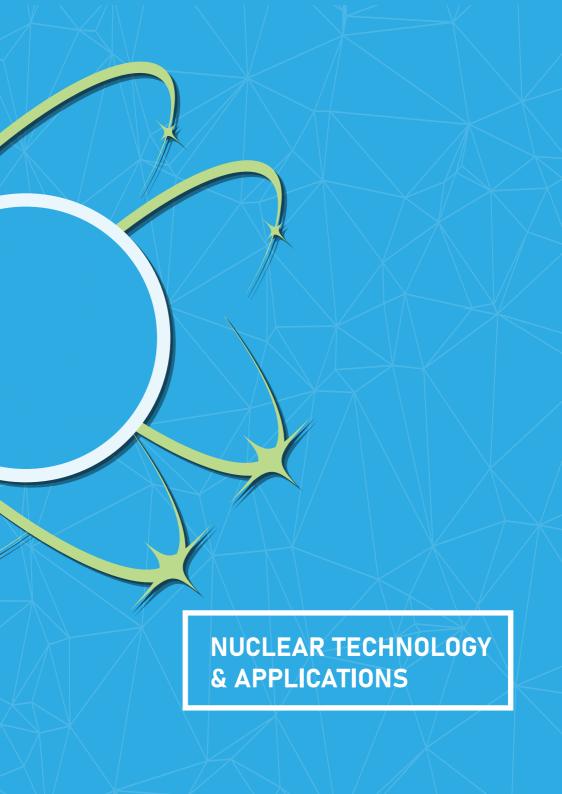
Nuclear safety is defined by the International Atomic Energy Agency (IAEA) as the achievement of proper operating conditions, prevention of accidents or mitigation of accident consequences, resulting in protection of workers, the public and the environment from undue radiation hazards. The IAEA defines nuclear security as the prevention and detection of and response to, theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear material, other radioactive substances or their associated facilities. This covers all nuclear facilities, the transportation of nuclear materials, and the use and storage of nuclear materials for medical, power, industry, and military uses.

Nuclear materials and technologies find various peaceful applications like radiation therapy, food processing, and industrial applications. However nuclear materials and other radioactive substances can harm the people and the environment if used by non-authorized persons as this would be a serious threat for the world security.











#### BASICS OF REACTOR TECHNOLOGY

Kursus Asas Reaktor Nuklear

#### INTRODUCTION 3 Days

CEP (AELB-2 Points)

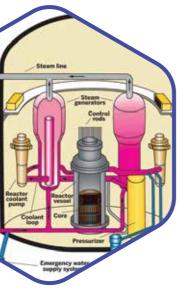
The engineering of nuclear systems has a key concepts such as neutron flux and diffusion to demonstrate multiplication and criticality in nuclear reactor. Various reactor shapes are analysed and the use of reflectors is discussed. The neutron life cycle in thermal reactors is described along with fast and delayed neutron production. Effects such as doubling times, reactivity feedback mechanisms. power and temperature coefficients and Xenon poisoning are included in the course. This course is designed to provide understanding on the key elements of nuclear reactor physics. Participants will be able to perform analyses on simple reactor geometries and describe the main reactivity feedback mechanism, and their significance on reactor design and control.

#### Learning **Objectives**

- ▶ To understand basics of nuclear reactor
- ▶ To understand the principle of nuclear energy system
- ▶ To enhance the capabilities, improve skills and knowledge in nuclear reactor

#### **Target Audience**

University students, lecturers. operators, regulator, radiation safety officers, radiation protection officers from operating organization, regulatory body, academia, research institute.



#### **Course Outline**

Module	Topics	Methodology
Module 1	Basics of Nuclear Physics	Classroom
Module 2	Basics of Nuclear Thermodynamic	Classroom
Module 3	Nuclear Reactor System	Classroom
Module 4	Management of Nuclear Safety	Classroom
Module 5	Experiments on Nuclear Shielding Material	Practical
Module 6	Experiments on Radiation Safety	Practical
Module 7	Tour to PUSPATI TRIGA Reactor	Facility Visit
Foos		

**Course Fees** 

RM

Single Registration per pax

#### Team Registration

(2 or more registration from the same organization)

#### INTRODUCTION TO REACTOR TECHNOLOGY SAFETY

Pengenalan kepada Keselamatan Teknologi Reaktor



#### **Learning Objectives**

- To introduce the philosophy of nuclear reactor engineering and safety
- ▶ To understand the nuclear energy technology
- To enhance the capabilities, improve skills and knowledge in nuclear reactor engineering studies

#### **Target Audience**

University students, lecturers, nuclear operators, regulator, radiation safety officers, radiation protection officers from the operating organization, regulatory body, academia, research institute.

#### INTRODUCTION 3 Days

This course provides participants with an overview of the contemporary nuclear energy technology with emphasis on nuclear fission as an energy source. Starting with the basic physics of the nuclear fission process, the course includes discussions on reactor control thermal hydraulics, fuel production and spent fuel management for various types of reactors as well as analysis using computer code modelling exercise. This course is designed to provide nuclear reactor engineering education to participants who have minimal knowledge and background in nuclear subjects especially for those who has interested in certain area of nuclear reactor engineering and need to acquire additional information in this area of studies.

#### **Course Outline**

Topics	Methodology
Radiation Physics	Classroom
Radiation Shielding	Classroom
Handling of Survey Meter	Practical
Nuclear Reactor Physics	Classroom
Nuclear Reactor Kinetics	Classroom
Reactor Thermal Hydraulics	Classroom
Material Engineering	Classroom
Nuclear Fuel Cycle	Classroom
Radioactive Waste Management	Classroom
Nuclear Plant Safety	Classroom
Nuclear Reactor Experiments	Practical
Computer Code Modeling Exercise	Practical
	Radiation Physics Radiation Shielding Handling of Survey Meter Nuclear Reactor Physics Nuclear Reactor Kinetics Reactor Thermal Hydraulics Material Engineering Nuclear Fuel Cycle Radioactive Waste Management Nuclear Plant Safety Nuclear Reactor Experiments

Fees	
Course Fees	RM
Single Registration per pax	
Team Registration (2 or more registration from the same organization)	





#### BASIC KNOWLEDGE FOR RADIATION CURABLE COATING TECHOLOGY

Pengetahuan Asas bagi Teknologi Salutan Pematangan Sinaran

#### INTRODUCTION 2 Days

UV/EB radiation curing technology is utilized extensively in green coatings manufacturing because of its high demand and economic worth. A coating is a thin layer of film applied to the surface of a substrate or object to modify its surface properties to protect, improve or bbs functionality to the object's surface. This course introduces the basics and principles of coating technology, the coating manufacturing process various application in industrial fields utilizing nuclear technology. This course also covers the safety concerns regarding coating material preparation and processing and the irradiation equipment in coating work. After completing this course, participants will have a fundamental understanding of coating technology, the radiation curing process, the components of radiation curing, aspects of safety and quality assurance and exposure to the application of coatings in diverse industries such as automotive, medical. electronics, construction, ship building, defense, aerospace and consumer products.

#### Learning Objectives

- To understand the basic knowledge of coating and radiation curing.
- ▶ To understand the implementation of radiation safety compliance in coating processing.
- To raise awareness about coating technology in the industry and its current and future potential.
- To visit the irradiation curing facility.
- To do hands-on radiation coating processing experiments.

#### **Target Audience**

Radiation protection officer (RPO), radiation protection supervisor (RPS), safety officer, radiation worker, technicians, laboratory assistant, suppliers and those who are involved and interested of coating technology and the radiation curing process in diverse industries such as automotive, medical, electronics, construction, shipbuilding, defense, aerospace and consumer products.

#### Course Outline

Module	Topics	Methodology
Module 1	Introduction to Coatings & Radiation Curing	Practical
Module 2	Radiation Curing Fundamental	Practical
Module 3	Components of Radiation Curable Coatings	Practical
Module 4	Application Techniques, Safety & Quality Control	Practical
Module 5	Practical Applications and Industry Context	Lecture
Module 6	Practical Applications and Industry Contex	Hands-on



#### Fees

Course Fees	RM
Single Registration per pax	RM 1,025.00
Team Registration (2 or more registration from the same organization)	RM 968.00

#### PYTHON & AI FOR OFFICE AUTOMATION

Python & Al untuk pengautomasian Pejabat



#### **Learning Objectives**

- ▶ To understand the fundamentals of Python and how it can be applied to automate office tasks.
- ▶ To develop proficiency in using Python for data processing, including file manipulation, math operations and regular expressions.
- To learn how to automate tasks such as web scraping, sending automated email notifications and generating reports using Python.

#### **Target Audience**

This course ideal for is professionals. data analysts. personals, researchers, students and anyone interested in automating office tasks routine to increase efficiency and productivity. No prior programming experience is required, although basic computer literacy is expected.

#### INTRODUCTION 3 Days

Python is an invaluable tool for automating routine office tasks, offering significant benefits like increased productivity, reduced manual errors and time savings. Its versatility and ease of use allow automation of various process, from simple data entry to complex data analysis. This course is designed to introduce participants to the powerful capabilities of Python in automating routine office tasks. Participants will learn how to utilize Python's capabilities in data processing, report generation, web scraping and email notifications. Through hands-on practice. participants will discover ways to streamline tasks, enhancing workflow efficiency and effectiveness. By the end of this course, participants will be equipped to use Python to optimize daily operations and improve overall office productivity.

#### **Course Outline**

Module	Topics	Methodology
Module 1	Introduction to Python	Lecture
Module 2	Python Basic	Lecture
Module 3	Module and Function	Lecture
Module 4	Math	Lecture
Module 5	Regular Expression	Lecture
Module 6	File Processing	Lecture
Module 7	Web Scraping	Lecture
Module 8	Email Notification	Lecture
Module 9	Report Generation	Lecture

#### Fees

Course Fees	RM
Single Registration per pax	RM1,025.00
Team Registration (2 or more registration from the same organization)	RM968.00





#### NUCLEAR REACTOR TECHNOLOGY APPLICATION

Aplikasi Teknologi Reaktor Nuklear

#### INTRODUCTION 5 Days

CEP (AELB-15 Points)

The course develops an understanding of atomic nucleus based macroscopic and microscopic models. Assessing success and limitations of various models used to describe the many facets of atomic nuclei as well as their excitations and decays is a key learning outcome of the course.

Generic quantum mechanical concepts are being exemplified on behalf of atomic nuclei. Supported by the experimental part, participant will understand the origin and relevance of nuclear radiation and detection in science and society.

This 3-days course is designed to Nuclear Physics and Reactor Application to participants who have minimal knowledge and background in nuclear subjects especially for those who has interested in certain area of reactor engineering and need to acquire additional information in this area of studies.

#### **Learning Objectives**

- To understand basics of nuclear physics.
- To understand the principle of nuclear reactors and its associated systems.
- To enhance the capabilities, improve skills and knowledge in nuclear physics and reactor application.



#### **Target Audience**

University students, lecturers, nuclear operators, regulator, radiation safety officers, radiation protection officers from the operating organization, regulatory body, academia, research institute

#### Course Outline

Topics Methodology
vsics Classroom
etics Classroom
rmodynamics Classroom
l & material engineeriing Classroom
waste Classroom
c safety assessment Classroom
Fees
r

**Course Fees** 

RM

Single Registration per pax

Team Registration (2 or more registration from the same organization)

#### NUCLEAR REACTOR ENGINEERING EXPERIMENTS

Python & Al untuk pengautomasian Pejabat

#### **Learning Objectives**

- To experience TRIGA reactor operation.
- ▶ To hands-on the reactor physic experiments.
- To enhance the capabilities, improve skills and knowledge in nuclear physics and reactor application.

#### **Target Audience**

University students, lecturers, nuclear operators, regulator, radiation safety officers, radiation protection officers from operating organization, regulatory body. academia, research institute.



#### Course Outline

#### INTRODUCTION 5 Days

CEP (AELB-8 Points)

The course is held at the Reactor TRIGA PUSPATI which is operated by Malaysian Nuclear Agency. The education and training within the model is oriented to the reactor physics, dosimetry, nuclear safety, and operation of nuclear reactor. The participants actively take part in all experiments, independently evaluate acquired data. Principles of neutron detection, importance of delayed neutrons and their properties, reactor neutronics and dynamics are studied and demonstrated during various reactor experiments and measurements. An understanding of the reactor instrumentation and control and safety aspects of reactor operation are gained through hands-on reactor control.

The objective of the course is to provide hands-on reactor experiment using current research reactor experiment using current research reactor as an introduction to reactor physics in nuclear engineering curriculum to university students, lecturers, nuclear operators, regulator, radiation safety officers, and radiation protection officers.

Module	Topics	Methodology
Module 1	Reactor Start-up Operational Procedures	Classroom / Praction
Module 2	Core Excess and Shutdown Margin	Classroom / Praction
Module 3	Reactor Shutdown Procedures	Practical
Module 4	Control Rod Calibration	Practical
Module 5	Power Calibration	Practical
Module 6	Reactor Simulator – Normal Operation	Practical
Module 7	Reactor Simulator – Case Study	Practical
Module 8	Dose Measurement	Practical
Module 9	Neutron Flux / Spectrum Measurement	Practical

#### **Fees**

Course Fees	RM
Single Registration per pax	RM1,025.00
Team Registration (2 or more registration from the same organization)	RM968.00





#### RADIATION CURABLE COATING TECHNOLOGY

Teknologi Salutan Pematangan Sinaran

#### INTRODUCTION 2 Days

Coating technology is a subfield of surface engineering that focuses on protecting, modifying and improving the properties and functions of coating materials on an object's surface to improve its stability, durability and lifespan. This course covers the theory and principles of radiation curing chemistry as they apply to coating technology. Topics covered include coating material composition, UV and EB radiation source principles, radiation processing parameters, radiation processes and reactions and coating techniques. This course also covers polymer coating testing methodologies and quality control procedures for coating products. Participants can also learn about the processing techniques used in coating materials production using nuclear technology, how to determine the quality assurance of coatings and the safety aspects of handling irradiation equipment in coating work. This course additionally discusses the application of coatings with various excellent properties and characteristics like superhydrophobic, anti-fouling, anti-microbial and corrosion resistance. as well as intelligent coatings such as self-healing that can control their reaction to the environment and apply numerous industries such as automotive, medical, electronics, construction, shipbuilding, defense. aerospace, and consumer products.

Fees	
Course Fees	RM
Single Registration per pax	RM 1,025.00
Team Registration (2 or more registration from the same organization)	RM 968.00

#### **Learning Objectives**

- To enhance the capabilities and improve skills and knowledge in radiation curing chemistry and coating technology.
- To understand the compliance of safety aspects during the coating process-related tasks.
- To understand the requirements for quality assurance testing and identify problems and solution techniques in production.
- To do hands-on radiation coating processing experiments and coating property assessments.
- ▶ To visit the irradiation facilities and understand about the irradiation process in the industrial manufacturing sector.

#### Target Audience

Radiation protection officer (RPO), radiation protection supervisor (RPS), safety officer, radiation worker, technicians, laboratory assistant, suppliers and those who are involved and interested of coating technology and the radiation curing process in diverse industries such as automotive, medical, electronics, construction, shipbuilding, defense, aerospace, and consumer products.

#### Course Outline

Module	Topics	Methodology
Module 1	Introduction to Radiation Curable Coatings	Practical
Module 2	Chemistry of Radiation Curable Coatings	Practical
Module 3	Formulation of Radiation Curable Coatings	Practical
Module 4	Application Techniques & Process Control	Practical
Module 5	Application Techniques Safety & Quality Control	Practical
Module 6	Practical Applications and Industry Context	Lecture
Module 7	Practical Applications and Industry Context	Hands-on

#### NUCLEAR COMMUNICATION FOR RADIATION PROTECTION OFFICER

Komunikasi Nuklear untuk Pegawai Perlindungan Sinaran



#### **Learning Objectives**

- To understand why public communication is important.
- ▶ To describe the range of public communication and information activities nη nuclear safety.
- To deal with the public, media and community relations.

#### **Target Audience**

University students, lecturers, nuclear operators, regulator, radiation safety officers, radiation protection officers the operating organization, regulatory body, academia. research institute.

#### INTRODUCTION 3 Days

CEP (AELB-15 Points

Nuclear communications are a specialized field that provides communicators the knowledge on how poorly managed communications contribute to lower level of safety and to an antagonistic environment in which nuclear professionals lose their most important resource in the trust of their constituents, including political authorities and the public. Communicators will be able to use a variety of specialized media, including various forms of writing, speaking to the public, media relations, publishing and community relations. The training course also aimed to facilitate collaboration and cooperation between the various government agencies tasked to respond in case a nuclear or radiological emergency in the country especially to communicators who have interested in certain area. of nuclear communications and need to acquire additional information in this area of studies.



#### Course Outline

Module	Topics	Methodology
Module 1	Basic Radiation	Lecture
Module 2	Nuclear/Radiological	Lecture
Module 3	Incidents Nuclear Safety Culture	Lecture
Module 4	Risk Communication	Lecture
Module 5	Building A Public Communication Program	Lecture
Module 6	Conducting Press Conferences	Practical
Module 7	Choosing and Training Agency Spokepersons	Lecture
Module 8	Handling Interviews	Practical
Module 9	Writing Press Releases	Practicall

#### Fees

Course Fees

RM

Single Registration per pax

Team Registration (2 or more registration from the same organization)



#### RADIATION PROCESSING TECHNOLOGY

Teknologi Pemprosesan Sinaran

#### INTRODUCTION 2 Days

Radiation processing technology is an advanced technology that uses ionizing radiation for numerous industrial applications, including sterilization. cross-linking, and material modification in general. Radiation processing technology fosters innovation and enhances the performance and safety of polymer products while advancing industrial and environmental practices. This comprehensive course will provide a solid understanding of radiation processing principles, their applications and safety aspects of ionizing radiation, as well as the practical skills necessary for working with radiation-processed polymers. This course includes theory-based lectures. laboratory experiment sessions, and case studies that enable participants to understand the interaction between matter and ionizing radiation. The principles and applications of radiation processing on the modification and enhancement of polymeric materials will be thoroughly discussed, including its benefits and industrial uses. The characterization techniques for analyzing the properties of radiation-processed polymers will be introduced, allowing participants to apply the knowledge and skills acquired throughout the course in a controlled and real-world setting. The radiation safety practices were also discussed to ensure a safe working environment when handling radiation.

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Course Fees	RM
Single Registration per pax	RM 1,025.00
Team Registration (2 or more registration from the same organization)	RM 968.00

#### **Learning Objectives**

- To understand the basic knowledge of radiation processing technology for polymer materials.
- To understand the fundamental principles and mechanisms of radiation processing in numerous fields, including industrial, environmental, agricultural, and healthcare.
- To understand the compliance of safety aspects in the handling of works related to ionizing radiation.
- To do hands-on radiation processing technology experiments and evaluation of the properties of radiation-processed materials.
- To visit the irradiation facilities and understand about the irradiation process in the industrial manufacturing sector.

#### **Target Audience**

Radiation protection officer (RPO), radiation protection supervisor (RPS), safety officer, radiation worker, technicians, laboratory assistant, suppliers and those who are involved and interested of radiation processing technology for polymer materials in numerous fields. including industrial, environmental, agricultural and healthcare.

#### Course Outline

Module	Topics	Methodology
Module 1	Introduction to Radiation Processing Technology	Classroom
Module 2	Principle of Radiation Safety	Classroom
Module 3	Application of Radiation Processing on Polymers in Industry	Practical
Module 4	Characterizations of Radiation Processed Polymeric Materials	Classroom
Module 5	Demonstration & Hands-on Training	Classroom





#### INSIDER THREATS AT NUCLEAR AND ASSOCIATED FACILITY

Ancaman Dalaman di Fasiliti Nuklear

#### INTRODUCTION 3 Days

CEP (AELB-2 Points)

The purpose of this introductory course is to familiarize participants with nuclear security measures that address insider threats, including the unauthorized removal of nuclear and radioactive materials (theft) and sabotage at facilities containing nuclear and radioactive material.

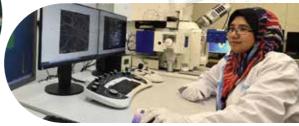
#### **Learning Objectives**

- ▶ To describe the importance of studying the insider.
- ▶ To describe the responsibility of the government, competent authority and licensee with regards to insider protection.
- To raise awareness for the participants regarding to the potential insider threat.



#### **Target Audience**

Researcher, Regulator, Lecturer, Policy Maker, OBTL, RPO, RPS and Radiation Workers



#### Course Outline

Module	Topics	Methodology
Module 1	Insider Definition and Motivation	Lecture
Module 2	National and International legal framework for nuclear security	Lecture
Module 3	Insider characterization	Lecture
Module 4	Preventive measure	Lecture
Module 5	Protective measure	Lecture
Module 6	Contingency plan	Lecture

#### Fees

Course Fees	RM
Single Registration per pax	RM 1,025.00
Team Registration (2 or more registration from the same organization)	RM 968.00

#### RADIOLOGICAL SECURITY PLAN PROGRAMME

Program Pelan Sekuriti Radiologikal



#### **Learning Objectives**

- To understand the new requirement for the preparation of Radiological Security Plan.
- To create awareness on nuclear security culture in practice.
- ▶ To implement applicable system for ensuring the secure management, use and storage of radioactive source.

#### INTRODUCTION 3 Days

The purpose of this course is to provide a basic understanding on the nuclear security which is fundamental in the management of nuclear technologies and in its applications where the radioactive materials is used or transported. It also gives guidance for developing and implementing applicable system for ensuring the secure management, use and storage of radioactive source.

#### **Target Audience**

Safety officer, RPO, RPS, radiologist, manager, supervisor, lecturer, technologist, and those who are involved and interested in the application of ionising radiation in various sectors-industry, engineering, petroleum and gas, medical, manufacturing, etc and those who are responsible for the safe use of ionising radiation in various activities.

#### Course Outline

Module	Торісѕ	Methodology
Module 1	Radiation of Radiation Protection	Lecture
Module 2	Defining the Threat	Lecture
Module 3	Radioactive Source Location	Lecture
Module 4	Security of Radioactive Materials and Radiation Sources	Lecture
Module 5	Radioactive Source Security Plan Requirement Under Atomic	Lecture
Module 6	Energy Licensing Act 1984	Lecture
Module 7	Security Control at Premise (General, Storage, Usage & Field Work)	Lecture
Module 8	Interface between Safety and Security	Lecture
Module 9	RadiationDetectionEquipmentandDemonstration	Lecture
Module 10	Physical Protection System (PPS) Principles Transport Security	Lecture
Module 11	Hypothetical Facility for the Evaluation of Physical Protection System	Lecture
Module 12	Site Survey and Target Folder	Lecture
Module 13	Intrusion Detection and Assessment	Lecture
Module 14	Tabletop Exercise on Response Assessment	Exercise

#### **Fees**

Course Fees	RM
Single Registration per pax	RM 1,540.00
Team Registration	RM 1,463.00
(2 or more registration from the same organization)	



# WORKSHOP ON CYBER SECURITY FOR NUCLEAR AND ASSOCIATED FACILITIES

Bengkel Sekuriti Siber untuk Fasiliti Nuklear

#### INTRODUCTION 2 Days

The purpose of the course is to discuss in theory and practical the Cyber Security aspect of Nuclear Security and industry good practices on protecting information, computers including industrial controls systems (ICS), and corresponding networks in nuclear and other radioactive material facilities, as well as associated facilities, with focus on sabotage and the insider threat.

#### Learning Objectives

- ▶ To raise awareness of the importance of information and computer security interfaces with other elements of nuclear security.
- ▶ To assist practitioners identify threats and risks associated with information and computer systems that are relevant to nuclear and associated facilities.
- ➤ To guide organizations refine their information and computer security goals, policies and programme implementation.
- ▶ To identify and promulgate international best practices specific to facilities that handle nuclear and other radioactive material, as well as to associated facilities.

#### **Target Audience**

Engineers, Researchers, Regulators, IT Personnel O&M Operators, Plant Managers.

#### **Course Outline**

Team Registration

(2 or more registration from the same organization)

Module	Topics	Methodology
Module 1	Computer Security Rules, Law and Regulation	Lecture
Module 2	Industrial Control System (ICS) Overview	Lecture
Module 3	Threat and Consequence Awareness	Lecture
Module 4	Cyber Threat Scenarios	Lecture
Module 5	Threat Assessment	Practical
Module 6	Detection of Computer Security Incident and Containment	Practical
Module 7	Analysis of Computer Security Incidents	Practical
Module 8	Computer Security Incident Response Planning	Practical
Module 9	Conducting Computer Security Exercises	Practical
Fees		
	Course Fees	RM
Single Registration per pax		RM935.00

RM890 00



#### SAFETY, SECURITY & SAFEGUARDS

Program Pelan Sekuriti Radiologikal



#### **Learning Objectives**

- ▶ To identify and understand the interfaces and synergies between the three areas of safety, security and safeguards as well as the challenges involved (i.e. possible conflicting requirements).
- ▶ To provides an overview of the basic principles, relevant international legal instrument, and the implementation of nuclear safety, security and safeguards and allow participants to improve their knowledge of various interfaces.

#### INTRODUCTION 3 Days

Days CEP (AELB-2 Points)

This course develops an awareness of the planning and regulations related to nuclear safety and security. Participants will gain an understanding of theories and practical skills necessary to be responsible for the design, analysis and evaluation of Nuclear Safety and Security systems.

#### **Target Audience**

Researchers, Regulators, Lectures, Policy Makers RPO, RPS and Radiation Workers.

#### **Course Outline**

Module	Topics	Methodology
Module 1	Legal & Regulatory Framework Lecture for Safety, Security and Safeguards	Lecture
Module 2	Overview of Physical	Lecture
Module 3	Facility Characterization	Lecture
Module 4	Target Identification	Lecture
Module 5	Overview of Safety Concepts	Lecture
Module 6	Threat Assessment	Lecture
Module 7	Design of PPS	Lecture
Module 8	Sabotage Consequences & Protection (Case Study)	Case Study
Module 9	Detect, Access Delay & Response	Lecture
Module 10	Communication on security level	Lecture
Module 11	The interface between Safety, Security and Safeguards	Lecture
Module 12	Nuclear non-proliferation	Lecture
Module 13	Physical Protection System Effectiveness Evaluation (participant presentation)	Practical

#### **Fees**

Course Fees	RM
Single Registration per pax	RM1,540.00
Team Registration (2 or more registration from the same organization)	RM1,463.00





### MANAGEMENT & MAINTENANCE OF SURVEY METER

Pengurusan & Penyelenggaraan Meter Tinjau



#### INTRODUCTION 2 Days

The survey meter is the most significant resource a radiation worker has to determine the presence and intensity of radiation. A review of incident and over exposure reports indicate that a majority of these type of events occurred when a worker did not have or did not use a survey meter. Nevertheless, all radiation sources used shall be maintained and verified appropriately, at least once a year and only trained and authorized persons are allowed to maintain. calibrate and verify the performance and safety of the equipment.

This 2-days course is designed to provide understanding on how the equipment will continue to operate reliably and optimally which satisfy the needs for optimization of exposure in radiation protection.

#### **Learning Objectives**

- introduce To basic principle radiation, radiation detection measurements and nuclear instrumentations & maintenance.
- To be able to identify the failure and malfunction of the instruments.
- ▶ To familiarise with the instrument trouble shooting.
- ▶ To understand the maintenance and calibration of electronic instruments for accuracy and durability.

#### **Target Audience**

Radiation Protection Officer (RPO), Radiation Protection Supervisor (RPS), Safety Officer, Radiation Worker, Technicians, Laboratory Assistant, supplier of radiation equipments and those who are involved and interested in management and maintenance of survey meter.

#### Methodology

Lecture, Tutorial, Practical Demonstration

#### Course Outline

#### **Topics**

Operational Quantities for Radiation Monitoring

Biological Effect on Radiation

Principle of Radiation Protection'

Radiation Monitoring Instruments: Area Monitoring

Maintenance of Survey Meter

Calibration of Survey Meter

Testing and Troubleshooting of Survey Meter

Fees			
	Course Fees	RM	
Single Registrati	on per pax	RM 930.00	
Team Registration (2 or more registration from the same organization)		RM 880.00	





### CALIBRATION OF WORKPLACE RADIATION MONITORING INSTRUMENTS

Kalibrasi Instrumen Pemantauan Sinaran di Tempat Kerja

#### Learning Objectives

- ▶ To standardize the gamma source and x-ray beam based on ISO x-ray reference radiation.
- ▶ To learn the right procedures in calibration.
- To acquire proper techniques and procedures in dealing with radiation detectopm equipment and analysing the data measurement.
- ▶ To understand the measurement for uncertainty of calibration factors.

#### **Target Audience**

Radiation Protection Officers (RPO). Radiation Supervision Officers (RSO), Safety Officers. Radiation Worker, Technicians. Laboratory Assistant, supplies of radiaton equipments and those who are involved and interested in calibration of survey meter.

#### Methodology

Lecture, Practical, Demonstration

#### INTRODUCTION 3 Days

A calibration determines the relationship between the instrument response/reading and a quantity of interest. Organizations that use radiation survey instruments or electronic dosimeters are required by law to perform annual instrument calibration checks to ensure that they operate accurately. Periodic calibration and standardization of radiation and protection survey instruments are done to ensure correct/valid radiation readings. It is also a regulatory requirement for radiation workers to use only operable pre-calibrated survey instruments in their work with radioactive materials.

#### Course Outline

#### **Topics**

Operational Quantities fpr Radiation Monitoring

Biological Effect on Radiation.

Principles of Radiation Protection.

Radiation Monitoring Instruments: Area Monitoring

Maintenance of Survey Meter.

Calibration of Survey Meter.

Testing and Troubleshooting of Survey Meter

Quality Assurance in Calibartion Laboratory

Safety Working Procedures in dealing with Radiation Detection Equipment

Uncertainty of Calibration Measurement

Interpretation of Calibration Reports

Refrerence Standard of Radiation Sources



#### Course Fees

**RM** 

Single Registration per pax

RM 1.485.00

Team Registration

(2 or more registration from the same organization)

arda

RM 1,480.00

#### BASIC COURSE ON RADIATION DETECTIORS & MEASUREMENT Kursus Asas Pengesan Radiasi & Pengukuran



#### INTRODUCTION 2 Days

Radiation Detection and Measurement play and important role in our life. For those who work with or around radiation. one of the most important factors is and awareness of the levels of radiation around them. This is primarily accomplished through the use of radiation detectors of varying types. Its cover a wide range of applications from personnel to many applications such as x-ray scanning & security, medical, agricultural, environment and others. A basic understanding of the different types of detectors out there and how they work can go a long way both to finding the best detector for the required task and also for maximinzing the benefits of operating that detector.

#### **Learning Objectives**

- To introduce basic principle of nuclear radiation physics, radiation detection, measurements and maintenance.
- ▶ To provide knowledge and understanding on different types and functions of radiation deetectors and measurements
- To explain the physical principles operation of various detectors

#### **Target Audience**

Radiation Protection Officer (RPO), Radiation Protection Supervisor (RPS), Safety Officer, Radiation Worker, Techicians, Laboratory Assistant, supplier of radiation equipments and those who are involved and iterested in radiation detectors and measurements.

#### Methodology

Lecture, Lab Activity, Demonstration

#### **Course Outline**

#### **Topics**

Basic Nuclear Physics & Radiation Protection

Radiation Detectors

NIM Modules of Nuclear Felctronics

Selection of Radiation Detection & Measurement

Usage of Radiation Detection

Single Registration per pax

#### Fees

#### **Course Fees**

RM930.00

Team Registration (2 or more registration from the same organization) RM880.00

RM





#### NUCLEAR INSTRUMENTATION TIVE MEDANAM & MEITEXS

Sistem Instrumen Nuklear & Pengurusan

#### Learning Objectives

- ▶ To introduce overview on Nuclear Instrumentation System
- ▶ To provide a basic knowledge on how to perfom troubleshooting and failure analysis
- understand ▶ To maintenance calibration of and nuclear instrumentss for better accuracy and durability of equipment

#### **Target Audience**

Radiation Protection Officer (RPO), Radiation Protection Supervisor (RPS). Safety Officer. Radiation Worker, Technicians, Laboratory Assistant, supplier of radiation equipments and those who are involved and interested in radiation detectors and measurements.

#### Methodology

Lecture, Lab Activity, Demonstration, Practical

#### INTRODUCTION 2 Days

The performance of nuclear instruments is depended on the human factor, technical skills and realibility of the instruments. As such, technical skills of personnel must be nurtured and developeed to the fullest potential. Thus, it is equality important to have a proper knowledge on basic design, technical aspect, operating procedure and mainenance management program on nuclear instruments. This 2 days course provide designed to sound undersstanding of the fundamental concepts of basic design, technical aspect, operating procedure, and maintenance management program on nuclear instrumentss. The knowledge acquired will enhance participant operational effectiveness in basic design, technical aspect. operating procedure. maintenance management program in nuclear instrument.

#### Course Outline

#### **Topics**

Overview on Nuclear Instrumentation System

Nuclear Instrumentation System:

- Analog
- Digital
- Interfacing

Nuclear Instrumentation Management:

- Preventive Maintenance
- Corrective Maintenance

Fault Finding & Identification

Calibration



**Course Fees** 

RM

Single Registration per pax

RM 930.00

Team Registration (2 or more registration from the same organization)

RM 880.00





#### INTERNATIONAL CONFERENCE ON NUCLEAR SAFETY & SECURITY (ICNSS)

Persidangan Antarabangsa Keselamatan Sinaran & Sekuriti Nuklear

#### INTRODUCTION 2 Days

CEP (AELB-9.5 Points)

Understanding where safety, security and safeguards intersect is critical to nurturing an overarching culture of harmonized security, safety and safeguards. It is identifiable that all three disciplines (safety, security, and safeguards) intersect on nuclear materials. Both safety and security restrict physical access to nuclear materials, but the safeguards require access to nuclear materials, so conflicts do arise. At the same time, however, safety and security may synergistically benefit from the joint sharing of information collected during access to material for safeguards purposes obtained nondestructive and destructive analyses, seals, cameras, or remote radiation monitoring. Passive and inherent mechanisms could satisfy both security and safety objectives, and sharing nuclear facility process data systems could enhance the efficiency of safeguards and safety.

#### **Learning Objectives**

- ▶ To exchange information and experience in the field of occupational radiation protection and nuclear security
- To review advances, challenges and opportunities in the field of radiation protection and nuclear security
- formulate conclusions and recommendations on radiation protection and nuclear security.

#### **Target Audience**

Regulatory bodies, workers and employers involved in the use of radiation sources and in the operation of installations containing or handling radioactive materials, radiation protection experts, researchers, persons responsible occupational monitoring services, and manufacturers of radiation emitting apparatus and other radiation sources, emergency workers/emergency response organizations as well as other interested parties.

#### Course Outline

#### **Topics**

International Legally and Non-Legally Binding Instruments for Nuclear Security

National Nuclear Security Regimes

Regulatory Oversight for Nuclear Security: Practices and Challenges

Fostering a Culture of Nuclear Security

**Emerging Technologies** 

Nuclear Safety and Security Interface

Education and Training on Nuclear Security

International Cooperation Success Stories

Capacity Building, Human Resource Development and Enhancements for Nuclear Security

#### Fees

**Course Fees** RM Single Registration per pax RM900.00 RM850.00 Team Registration (2 or more registration from the same organization)



#### AGENCY BASED PROGRAM

All courses can be conducted as in company basis tailored to meet specific needs

Kesemua kursus boleh dijalankan sebagai kursus asas agensi direka bentuk mengikut keperluan organisasi.

#### **INCOMPANY FEES**

PROGRAMME (No. of Days)	FEES / RATES	CERTIFICATE
1	RM4,000.00	Statement of Attendance
2	RM 3,800.00 per day	Statement of Attendance
3	RM 3,600.00 per day	Certificate of Attendance
Above 3 days	RM 3,600.00 per day	Certificate of Attendance

Bench Fees of RM750 per day are charges for course conducted in Nuklear Malaysia

Programme conducted outside Nuklear Malaysia, additional cost for accomodation, food and travelling should be added

Fees must be paid in advance through bank draft/ money order / company cheque / local order (LO) payable to: **DIRECTOR GENERAL MALAYSIAN NUCLEAR AGENCY** 

#### **CONSORTIA**

A derived version of in-company programme, designed for a small group companies that provide the benefit of customized programme and based on cost-sharing principles.

Konsortia merupakan versi terbitan program asas agensi direka bentuk untuk sekumpulan syarikat dengan mendapat manfaat program reka khas berdasarkan prinsip perkongsian kos.

#### ONLINE TRAINING

Is an online system that allows participants to get training with the concept of 'anytime, anywhere'. Customers can study according to their suitability in "live" or video screening sessions, sit for tests and obtain certificates simultaneously.

Adalah merupakan sistem atas talian yang membolehkan peserta mendapatkan latihan dengan konsep 'setiap ketika, dimana jua'. Pelanggan boleh belajar mengikut kesesuaian masing-masing secara "live" mahu pun sesi tayangan video, menduduki ujian serta mendapatkan sijil secara serentak.



#### DR. RIDA TAJAU

Manager at the Group of Radiation Curing and Synthesis in the Division of Radiation Processing Technology Division, Malaysia Nuclear Agency. She received her Bachelor of Science Honours in Petroleum Chemistry and Master of Science in Polymer Chemistry from the University Putra Malaysia (UPM). She received her PhD (Chemical and Process Engineering) from Universiti Kebangsaan Malaysia (UKM). She was honored

as a Nuclear Scientist at Malaysia Nuclear Agency's Innovation Day in 2019. Teknologi Pemprosesan Sinaran Mengion (Ionizing Radiation Processing Technology) is her previous book (2017). Her most recent books include Palm Oil-Based Nanoparticles for Breast Cancer (2021) and Radiation Technology for Palm Oil-Based Nanoparticles (2022). She is also an assistant chief editor and reviewer for Jurnal Sains Nuklear Malaysia (JSNM, Nuclear Science Journal of Malaysia) and various indexed and impact journals. She has engaged in several institutions as a researcher, including the Japan Atomic Energy Agency (JAEA) in Takasaki, Japan, and the Institute of Applied Radiation Chemistry in Lodz, Poland.



#### DR. NAURAH MAT ISA

A researcher with over ten years of experience in dosimetry and quality control works for an electron beam facility. Holds a PhD in Polymer Engineering from Universiti Teknologi Malaysia (UTM), with a dissertation on radiation indicators based on conjugate polymers. She currently works for the Synthesis and Radiation Curing Group under the Radiation Processing Technology Division in the Malaysian Nuclear Agency.

She leads a MOSTITeD2-funded project focusing on UV-C radiation sterilization techniques to mitigate the risk of infection at hospitals. Her responsibility involves managing a characterization laboratory known as Makmal Teknologi Sinaran. The laboratory offers services on the polymer characterization of chemical, physical, and mechanical properties for researchers, industries, academicians, and students.



#### DR. MARINA TALIB

A Research Officer with more than 20 years of working experience in the radiation processing technology field. Completed her PhD in Engineering, from the University of Warwick, United Kingdom in 2012. She obtained her MSc. and BSc. (Hons) in Materials Science from Universiti Kebangsaan Malaysia (UKM) in 2002 and 1999 respectively.

At present, she holds the position of Head of the Biopolymer Group, predominantly focusing on radiation modification of biopolymers for various industries applications. Other experience and responsibilities are Technical Officer for the IAEA Collaborative Center (ICC) in Research, Development, and Training in Nuclear Science and Application: Radiation Processing of Polymers, Waste Polymers and Biocomposites and Project Leader for Radiation Processing and Polymer Modification for Agricultural, Environmental and Medical Applications in FNCA. She was Certificate IV in Training & Assessment from Human Resource Development Corporation.



#### DR. MOHD HAMZAH HARUN

A Research Officer with more than 20 years of working experience in research related to radiation curing and coatings, functionalized carbon nanomaterials, and electrical properties of conducting polymers. He obtained PhD from the University Putra Malaysia (UPM) majoring in Materials Science and conducting research in superhydrophobic coatings.

He also has a MSc in Applied Radiation and a BSc (Hons) in Instrumentation Science Physics from UPM. His field of interest is a photocurable coating, radon mitigation coating, antiviral coating, and carbon nanomaterials from the upcycling of microplastics.



#### DR. MOHD SOFIAN ALIAS

A Research Officer with more than 15 years of working experience in surface coating modification and technology. Experience in formulating and radiation curing systems. His academic background includes an MSc in chemistry from Universiti Kebangsaan Malaysia (UKM) and a BSc. (Hons) in material Science from UKM. He is also the leader of a project focused on developing corrosion protection coatings using palm oil.

Additionally, he is a member of several other research projects, including the development of hydrophobic coatings, overprint varnish, and anti-scratch coatings. Furthermore, he was also involved in the supervision of university students for the internship programme.



#### **NURUL HUDA MUDRI**

She began her career as a Research Officer in 2010 and is now part of the Radiation Curing and Synthesis Group. She received her doctorate in Chemical Engineering from Universiti Putra Malaysia. Currently, her research focuses on the chemical modification of bio-based materials for surface coating applications, contributing to advancements in sustainable materials. Her expertise covers radiation curing methods, mechanical and

thermal properties of coatings, and standard testing of coatings that meet international standards. Overprint varnish and self-healing coating are among the end product supplications studied. Beyond her research, she serves as an Internal Auditor for ISO 9001:2015, ensuring compliance and maintaining high standards within Agensi Nuklear Malaysia.



#### SARALA SELAMBAKKANNU

A research officer at the Malaysian Nuclear Agency in Selangor with 15 years of experience in Radiation Processing Technology for Polymers. She holds a MEng. Chemical from UTM and graduated with a BSc from UMT. Her field of interest was the modification and enhancement of polymeric materials employing radiation technology and specialized materials for niche markets. Her research interest includes the continuous

development of radiation processing technology fostered by advancements in polymer science, leading to the creation of advanced materials with unique properties and applications. She was proficient in operating radiation processing equipment and interpreting characterization data to assess the performance and quality of processed materials. She also actively promotes radiation processing technology through lectures, seminars, and public engagement around the country and region.

#### DR. MOHAMMED IQBAL SHUEB

Holds a Ph.D. in Manufacturing Engineering from Universiti Teknikal Malaysia Melaka (UTeM) and a Master's degree in Polymer Engineering from Universiti Teknologi Malaysia (UTM). As a senior research officer of the Polymer Processing and Prototyping Development Group within the Radiation Processing Technology Division at Nuclear Malaysia Agency, He utilizes utmost his extensive expertise in radiation-modified polymers and

a d v a n c e d polymer processing. His work focuses on utilizing gamma, electron beam, and neutron radiation to enhance polymer composites and nanocomposites, resulting in significantly improved material properties and the development of cutting-edge technologies. He has successfully led and collaborated on numerous projects funded by IAEA, MOHE, and MOSTI, advancing the field through innovative approaches in material characterization and prototyping. His contributions continue to push

#### KHAIRUL AZHAR ABDUL HALIM

Khairul Azhar holds a Master of Engineering (Polymer) degree from Universiti Teknologi Malaysia (UTM), Skudai, Johor. He began his career as a Business Development Executive at PETRONAS Global Technical Solutions Sdn. Bhd. from 2014 to 2015 before transitioning to a Research Officer role at the Malaysian Nuclear Agency in 2015. Specializing in the synthesis and radiation curing of polymers, Khairul's current work focuses on

harnessing renewable resources, particularly palm oil-based oleochemicals, to develop water-based radiation-curable resins. His work is dedicated to advancing energy-efficient and environmentally friendly polymeric coatings. In addition to his research, Khairul has hands-on experience in the maintenance of low-voltage electron beam machines, providing valuable insights into the infrastructure necessary for radiation-curing applications.



#### **JULIA BINTI KARIM**

A Research Officer with more than 15 years of working experience in research reactor operation & maintenance, core & fuel management, reactor physics calculation and experiment. Experience in High Performance Computing System. Her academic backgrounds are Doctor of Engineering in Nuclear Engineering from Tokyo Institute of Technology, Japan, MSc. in Applied Physics from University of Malaya and BSc. (Hons) in

Computational Physics & Electronics from University of Malaya. Other experience and responsibilities Project Leader for Research Reactor Utilization in FNCA, appointed in 2019. Malaysia Focal Point for Nuclear Energy Cooperation Sub-sector Network (NECSSN) in ASEAN, appointed in 2019. Project Leader of Brain Gain Malaysia: Feasibility Study of RTP Power Upgrading Project, 2010. Lecturer for various training courses and workshops such as Reactor Engineering Training Course and Radiation Protection for Officer Training Courses



#### HASFAZILLAH BINTI HASSAN

rrently hold position as a Manager Nuclear Security Group. Hold a Bachelor's Degree, B.Sc (Nuclear Science), UKM, Bangi and Master of Science (Radiation and Nuclear Safety), UKM, Bangi. Speaker and course instructor for Nuclear Security courses, Radiation Protection Officer course and many more. Professional Qualifications are Malaysian Nuclear Safety and Health Officer recognized by the Department of Safety

and Health Jobs (DOSH), AELB-recognized Radioactive Material Leak Tester, Radiation Operators recognized by AELB, Radiation Protection Officer Consultant recognized by AELB Field of Instruction / NORM / TENORM / Radiation Facility



#### SYED ASRAF FAHLAWI WAFA BIN SYED MOHD GHAZI

Currently hold position as Head of the Radiation Safety for Radioisotope Production Facility in Nuclear Malaysia. Responsible for ensuring compliance with all regulations pertaining to nuclear and radiological safety. Involved in establishing the Radiation Protection Program for the facility as well as developing and promoting a safety culture among the radioisotope production group and other groups related to GMP. In addition he

is also a member of the Quality Assurance team for radioisotope production. Other duties and responsibilities include Radiation Protection Supervisor for Nuclear Malaysia TRIGA PUSPATI Research Reactor, Head of Logistic Squad for Nuclear Malaysia Emergency Committee and trainer/ lecturer for Radiation Protection Course for Officer Course and Lecturer for IAEA Postgraduate Educational Course in Radiation Protection & the Safety of Radiation.



#### MUHAMMAD KHAIRUL ARIFF BIN MUSTAFA

A research officer at Malaysian Nuclear Agency, Selangor. Experienced as a Safety & Health Officer (2007) certified by National Institute of Occupational Safety and Health (NIOSH). Hold a MEng. Mechanical from UKM and graduated with BSc. Nuclear Science from UKM. His field of interest are Neutronics Analysis and Reactor Experiments in TRIGA Reactor, Reactor and Shielding Calculation, TRIGA Reactor Core and Fuel

Management Nuclear Design of Fuel and Reactor Core for NPP. Involved as a training instructor/speaker for Nuclear Reactor Experiments course for UTM.



#### MOHD FAZLIE BIN ABDUL RASHID

Currently hold position as Lead Radiation Protection Supervisor. Other task and responsibilities are Lead On-Scene Commander for Emergency Response and Preparedness, Perform radiation protection consultancy services, Coordinate, monitor, and analyze the area monitoring for radiological and nuclear safety. He also manages, coordinate and involve as a training instructor for radiation safety and health, radiological / nuclear

security and emergency preparedness. Hold a MSc in Radiation and Nuclear Safety from UKM and BSc in Nuclear Science (Hons.)



#### SABARIAH BINTI KADER IBRAHIMI

Graduated with BSc (Hons) in nuclear science from Universiti Kebangsaan Malaysia (UKM) in 2004. She obtained her MSc. in Nuclear Safety from Korea Advance Institute of Science and Technology (KAIST), South Korea in 2012. At present, she is heading the International Training and Nuclear Science & Engineering Sector of Nuclear Malaysia Centre of Excellence. Involves in development of national strategy for education and

training in Radiation Transport and Waste Safety. Currently involve as Academic Coordinator for IAEA Postgraduate Educational Course in Radiation Protection and The Safety of Radiation Sources (PGEC). Her research interest includes emerging technology in nuclear security, security culture and geospatial analysis. She is also actively involved in promoting radiation safety and security in the country and the region covering of lectures, workshop, seminar and public engagement.



#### **RAYMOND YAPP TZE LOONG**

A research officer at Malaysian Nuclear Agency, Selangor. Hold a Master Degree in Radiation and Nuclear Safety from UKM and graduated with BSc. Nuclear Science from UKM. His field of expertise are Radiation Protection for Officer, Nuclear and Radiological Emergency Preparedness (NREP), Nuclear Security, Occupational Radiation Protection in High Exposure Situation, Environmental Sampling and Leak Test. Involved as a speaker for Nuclear Security and Radiation Protection courses.



#### **AZIMAWATI BINTI AHMAD**

A research officer at Malaysian Nuclear Agency, Selangor. Hold a Master Degree in Radiation Protection from UKM and graduated with BSc. Nuclear Science from UKM. Attended training and workshop such as Train the trainer for radiation safety 2014, Radiation protection safety course 2015, Nuclear and radiological emergency, ITC 2012, Fundamental of Nuclear Security Workshop 2018, International Response Training (IRT)

course 2015, IAEA Seminar for Senior Official Level Officers on Nuclear Security Training: Management Ownership and Technical meeting on security of Nuclear and other radioactive material in transport 2016. Involved as a speaker for Nuclear Security and Radiation Protection courses



#### SAAIDI BIN ISMAIL

A research officer in Information Technology (IT) at Malaysian Nuclear Agency, Selangor. Responsible in ICT Infrastructural and Services Planning, Operation and Maintenance, Security Awareness Program, evaluation of IT products, feasibility study on systems and Opensource. Hold a Master Degree in Information Technology Information System from UKM. Attended training and workshop such as Certified Ethical Hackers (CEH)

Course, 2009, RTC on Computer Security for Nuclear Facilities Korea 2010, RTC for on Preventive and Protective Measure against Insider Threats , India 2013 & 2014, WatchGuard Administration Technical Training Kuala Lumpur 2014, IDC Regional Training Computer Security Indonesia 2015, Regional Workshop on the Development of National Training Programmes for Advanced Topics in Computer Security, Vietnam 2017, Log Analysis Fundamental / Advance — MAMPU- Cybersecurity 2017, T.Meeting/Wshop on Conducting Computer Security Exercises for Nuclear Security IAEA and Microsoft Server 2016 Administration Kuala Lumpur 2020



#### MOHD DZUL AIMAN BIN ASLAN

A Research Officer and ICT Security Officer at Malaysian Nuclear Agency, Selangor. His responsibilities are to Plan, manage, implement and enforce IT Security programme in Nuklear Malaysia. Involve in activities and reporting to stakeholders such as MOSTI, NC4, Cybersecurity Malaysia, IAEA and others. Hold a Master Degree in Computer Science from UPM and graduated with B.Eng Computer

Engineering from UTM. His qualification are Certified Ethical Hacker (CEH) – EC-Council, Certified Penetration Tester Specialist (CPTS) – Mile2, Certified Professional Requirement Engineering (CPRE) – IREB and Certified Information Security Awareness Manager (CISAM) – Cybersecurity Malaysia Certified Cyber Defender Associates (CCDA) - UIAM.



#### SITI NURBAHYAH BINTI HAMDAN

A Research Officer and hold position as Head of Application Group at Malaysian Nuclear Agency, Selangor. Her responsibilities are plan, manage and analyse IT development project, implement and assess IT security safeguards, coordinate the implementation of Information security managements System (ISMS) based on ISO 27001:2013 including ICT Risk Assessments and Security Awareness Program, coordinate

ICT Disaster Recovery Activities (DRP- BCMS) Hold a Master Degree in Computer Science from UPM and graduated with Bachelor in Information System from UKM. Attended training and workshop such as ITC protecting Computer Based in Nuclear Security IAEA Daejeon Korea, Technical Meeting on Managing Nuclear Safety Knowledge — Approaches and National Experiences IAEA 2017, National Workshop on Knowledge Management and on the National Nuclear Safety Knowledge platform (IAEA,

#### **How to Register**

Please send us the complete Registration Form as per next page to:

#### Official Mail Address:

Director General Malaysian Nuclear Agency (Nuclear Malaysia) Bangi, 43000 Kajang, Selangor (Attn: Centre of Nuclear Excellence)

Fax: 03-89112180

#### Email:

sabariah\_ibrahim@nm.gov.my tg\_zamzure@nm.gov.my shawani\_h@nm.gov.my

### **Online Registration**

http://eclient.nuclearmalaysia.gov.my http://trainingcentre.nuclearmalaysia.gov.my

#### **Further Information**

#### Please visit our website:

http://trainingcentre.nuclearmalaysia.gov.my

#### Inquiries, Please Call or Email:

#### Person In Charge:

Sabariah Binti Kader Ibrahim Tengku Zamzure Bin Tengku Zahid Shawani Binti Halid

Sabariah / Tengku Zamzure / Shawani

H/p: 018-3937764 / 0123971196 / 01133893183

Tel: 03-89112000 Ext: 2611 / 2610 / 2601

#### Visit our office location:

Block 57, Kompleks Jalan Dengkil, Bangi, 43000 Kajang, Selangor



Issue Date :....

# **Registration Form**

Course/Code & Title :
Date of the Course : REGISTRATION FORM
(Please photocopy for additional participants)
Name (as in I.C) / Passport (To be printed on certificate)
I.C No. Passport No.
Designation :
Meal Restriction (Special Diet) :
The registration fee of RM money order / cheque / bank draf / local order payable to <b>Director General Malaysian Nuclear Agency</b> is enclosed herewith
Name of Approving Manager :
Position :
Company Name & Address :
Signature :
Telephone:
Mobile :
Fax :
E-mail :

PUSAT KECEMERLANGAN NUKLEAR, NUCLEAR MALAYSIA CENTRE OF NUCLEAR EXCELLENCE, NUKLEAR MALAYSIA



INSPIRE DIHERS