

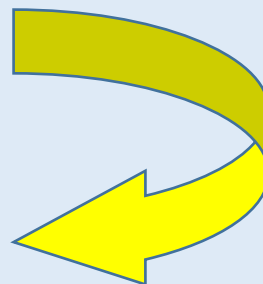
A series of short course & workshop for professional development and continuing education of practicing chemists and laboratory personnel

INSTITUT KIMIA
IKM PROFESSIONAL CENTRE
TRAINING CALENDAR
2018
MALAYSIA

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OUR COURSES IS





IKM PROFESSIONAL CENTRE, TTDI

TRAINING CALENDAR 2018

as at 11/01/2018

No	Dates	Courses	Trainers	Courses Code
1	Mar, 20 - 21 (Tue & Wed)	MS ISO/IEC 17025:2017 Management Systems Internal Auditing	Mr Pua Hiang	IAT22
2	Mar, 27 - 28 (Tue & Wed)	Understanding the Elements of MS ISO/IEC 17025:2017	Mdm Ng Pui Wan	ISO34
3	Apr, 03 - 04 (Tue & Wed)	General QA/QC Procedures for Testing Laboratories	Mr Pua Hiang	QAQC31
4	Apr, 07 - 08 (Sat & Sun)	Measurement Uncertainty in Chemical Analysis	Mr Chang Hon Fong	MU30
5	Apr, 21 - 22 (Sat & Sun)	Basic Laboratory Skills & Techniques	SAMM Technical Assessor	BSLT6
6	Apr, 24 - 25 (Tue & Wed)	Management of Chemicals & Chemical/Lab Wastes	En Mohammed Arif Baba	MCCW20
7	May, 05 - 06 (Sat & Sun)	Statistical Methods for Chemists	SAMM Technical Assessor	BSM19
8	May, 08 - 09 (Tue & Wed)	Chromatography Techniques	Prof Dr Tan Guan Huat	CHRO4
9	May, 12 - 13 (Sat & Sun)	Procedures of Method Validation & Verification	Mr Chang Hon Fong	MVV31
10	Aug, 11 - 12 (Sat & Sun)	Measurement Uncertainty in Chemical Analysis	Mr Chang Hon Fong	MU31
11	Aug, 14 - 15 (Tue & Wed)	Elemental Analysis with Atomic Absorption, Emission & Fluorescence Techniques	Prof Dr Lee Yook Heng	ATS4
12	Sept, 25 - 26 (Tue & Wed)	Understanding the Elements of MS ISO/IEC 17025:2017	Mdm Ng Pui Wan	ISO35
13	Oct, 02 - 03 (Tue & Wed)	Management of Chemicals & Chemical/Lab Wastes	En Mohammed Arif Baba	MCCW21
14	Oct, 09 - 10 (Tue & Wed)	General QA/QC Procedures for Testing Laboratories	Mr Pua Hiang	QAQC32
15	Oct, 13 - 14 (Sat & Sun)	Procedures of Method Validation & Verification	Mr Chang Hon Fong	MVV32
16	Oct, 16 - 17 (Tue & Wed)	MS ISO/IEC 17025:2017 Management Systems Internal Auditing	Mr Pua Hiang	IAT23

All courses dates as shown are correct when uploaded time but subject to change. Kindly visit our website www.ikm.org.my for the latest updates



Laboratory Quality Management

Laboratory Safety and Health Management

Instrumental Techniques of Analysis

It has been long recognized that many practicing chemists and analysts, young or old alike, realize the urgent need to equip themselves better in terms of knowledge of good laboratory management, particularly in the aspects of quality management.

In 2002, IKM set up its Professional Centre at the IKM Building in Taman Tun Dr Ismail, Kuala Lumpur. The objective of this centre is to encourage our professional chemists and analysts to undertake continuing learning as a life long educational process to prepare themselves for career advancement and to achieve greater heights for professional excellence. Courses conducted at IKM Professional Centre are HRDF claimable.

The courses conducted at IKM Professional Centre have been very popular and widely attended. The Centre will constantly review the current course content or add-in new courses to meet the training needs of the chemistry profession. Our pool of highly qualified and experienced trainers are always eager to share their knowledge and practical experience with the participants.

No Siri: GOV100913699



HRDF
MALAYSIA

SIJIL PENDAFTARAN PENYEDIA LATIHAN
AKTA PEMBANGUNAN SUMBER MANUSIA BERHAD, 2001

INSTITUT KIMIA MALAYSIA (MALAYSIA INSTITUTE OF CHEMISTRY)

adalah dengan ini didaftarkan sebagai penyedia latihan di bawah
Kumpulan Wang Pembangunan Sumber Manusia

Tarikh Diluluskan	Tarikh Tamat
29/09/2015	28/09/2018

22/09/2015
Tarikh Dikeluarkan

Pembangunan Sumber Manusia Berhad

The venue of IKM Professional Centre which is

one floor below the IKM Office at :

No. 127A, Jalan Aminuddin Baki,

Taman Tun Dr Ismail, Kuala Lumpur

03 – 7728 3272

Registration Fee	
2 Days Course without hands-on	
IKM Member	RM689
Non IKM Member	RM901

*** inclusive of 6% of GST



IKM PROFESSIONAL CENTRE (TRAINERS PROFILE)

MR CHANG HON FONG

Mr. Chang Hon Fong holds a M.Sc degree in analytical chemistry from University of Bristol, United Kingdom, and has more than 36 years of working experience as a government chemist. He joined the Department of Chemistry (DOC), Malaysia in 1978 and promoted to the post of Deputy Director General (DDG, Operations) in 2011 before his retirement in 2014. Prior to his appointment as the DDG (Operations), he was the Director of Industry and Trade Tariff Classification Division (2006-2010), and the Director of Environmental Health Division (2010-2011). His experience covers all aspects of analytical chemistry with specialisations in quality system management, instrumental techniques of analysis and chemical metrology. During his 36 years of service as a government chemist, he has contributed significantly to the development and advancement of DOC as a leading government laboratory. Among the contributions are the implementation of DOC's proficiency testing scheme according to ISO 17043 standards and requirements; and development of analytical methods using advanced instruments.

Mr. Chang was first elected to the Council of Malaysian Institute of Chemistry (IKM) in 2005, and was re-elected in 2008, 2011 and 2014. He was admitted as a Fellow of IKM in 2009 and received the IKM Gold Medal Award in 2013 for his contributions in the development of chemistry profession in Malaysia. He is currently the Honorary Secretary of IKM.

Over the last 15 years, Mr. Chang has conducted numerous training courses and delivered many papers on topics relating to chemical metrology such as method validation and measurement uncertainty. In addition, he is also a qualified lead assessor for ISO 17025 laboratory accreditation scheme since 1997. He served as chairman of many committees in organising seminar/workshops or in activities for promoting valid analytical measurements.

He also represented DOC and IKM in various committees or councils at national level. He was a member of the National Measurement Council from 2008-2011, the chairman of SIRIM ISC B, Technical Committee on General Purpose Chemicals 2005 – 2011 for development of national standards. Since 2011, he represents IKM serving as a member of the Malaysia Accreditation Council (MyNAC) and Malaysia Standard Council (MyNSC).

MADAM NG PUI WAN

Ms. Ng Pui Wan retired from Jabatan Kimia Malaysia in October 1999. She is currently working as a Contact Lead and Technical Assessor with the Department of Standards Malaysia (DSM) in the accreditation programmes (SMM – ISO/IEC 17025, ISO 15189, Accreditation of Certifying Bodies – ISO/IEC Guide 61, 65, 66). She has been involved in accreditation activities since 1994.

She is associated with Synhrosoft Sdn Bhd, an IT company dealing with customized software and laboratory quality system. She has acted as a quality consultant to laboratories on the setting up and implementing of laboratory management system that comply with ISO/IEC 17025.

Ms Ng has conducted training in laboratory quality subjects including Management of Laboratory Quality System; ISO/IEC 17025; Measurement of Uncertainty based on Eurachem Guide and the IANZ document; Internal Auditing, etc. Currently she is trainer for the Institut Kimia Malaysia (IKM) on the ISO/IEC 17025 Module.

EN MOHAMMED ARIF BABA

Mohammed Arif Baba graduated from University Sains Malaysia (USM) with BSc (Hons). He joined Chemistry Department in Petaling Jaya and served many Divisions. Among them are the Industrial Hygiene section, Training unit, Environmental Health Division and the Analytical Division. During his service, he obtained vast experience in Chemical analysis as well as training lab assistants and scientific officers. Prior to his retirement, he was awarded “Khidmat Cermerlang” by the Department of Chemistry. He was also given the opportunity to undergo training in United States (AAS) and Japan (Wet and Dry Deposition) in the relevant field.

In May 2000, he joined National Institute of Occupational Safety and Health (NIOSH), in Bangi and was attached to Industrial Hygiene Division (NIOSH) as Assistant Manager. He was a qualified Registered Assessor (CHRA) and also Hygiene Technician (Chemical Monitoring). Besides doing consultancy services, he also delivered training (in-house and scheduled courses) on topics relating to Industrial Hygiene, Chemical Risk Assessment and Safety in the Laboratory.

PROF DR TAN GUAN HUAT

Prof Dr Tan Guan Huat is Professor in Analytical Chemistry at the Department of Chemistry, University of Malaya. He has been a lecturer in Analytical Chemistry at the University of Malaya after graduating from Duke University in Durham, North Carolina and was promoted to Professor in 2003.

He has supervised eight PhD and six MSc students and many thesis projects on environmental analysis of organic chemical pollutants in Malaysian waterways and pesticides in fruits and vegetables by using techniques such as GC, GC-MS, HPLC and LC-MS. He is currently supervising two PhD and one MSc student for their theses.

His current research interests focus on the environmental pollution problems in Malaysian waterways as a result of industrialisation and increasing agricultural production in this country. He is also currently doing studies on developing microextraction techniques for analysis of pesticide residues in food matrices such fruits and vegetables coupled to chromatographic techniques.

He has taught many courses on GC, HPLC, GCMS, LCMS and Food Analysis during his career at UM.

IKM PROFESSIONAL CENTRE (TRAINERS PROFILE)

PROF DR LEE YOOK HENG

Prof Dr Lee Yook Heng obtained his Ph. D on sensor/biosensor for metal analysis as well as his M. Sc. From Cambridge University, U.K. He also obtained a First Class Honours from UKM Sabah. Prof Lee is currently a Professor at UKM School of Chemical Sciences and Food Technology and his field of expertise is analytical and bioanalytical chemistry. He has conducted various courses on Techniques of AAS/ICP – ES, GC Techniques, Laboratory Research Skills, Principles of Instrumental Analysis, Chemical Instrumentation, Water Chemistry, Air and Water Quality, etc.

Prof Lee has completed several environmental chemistry research projects as well as research and bioanalytical chemistry and biotechnology. He has received various research awards comprising bronze, silver and gold medals from UKM, MOSTI and ITEX. Prof Lee's research has been published in refereed Journals.

MR PUA HIANG

Mr. Pua Hiang is a qualified person in the Laboratory Quality Management System as well as the Occupational Safety and Health Management System. He is currently, a Lead Assessor as well as a Technical Assessor appointed by the Department of Standards Malaysia for the MS ISO/IEC 17025 accreditation scheme and a registered assessor for chemical health risk assessment with the Department of Occupational Safety and Health Malaysia. He is also an Inspector for the American Society of Crime Laboratory Directors / Laboratory Accreditation Board. Mr. Pua has been chairman as well as member of the SAMM Laboratory Accreditation Evaluation Panel.

He has also been members of several Technical Working Groups formed by the Department of Standards Malaysia. Mr. Pua was the Head of Forensic Criminalistics Laboratory of the Department of Chemistry Malaysia when he retired from the department. He is now a senior fellow at the National University of Malaysia (Universiti Kebangsaan Malaysia) lecturing in forensic Science.

UNDERSTANDING THE ELEMENTS MS ISO IEC 17025:2017

- 1) 27 & 28 MARCH 2018 (ISO34)
- 2) 25 & 26 SEPTEMBER 2018 (ISO35)

- Introduction
- General requirements
- Structural requirements
- Resource requirements
- Process requirements
- Management systems requirements

MEASUREMENT UNCERTAINTY IN CHEMICAL ANALYSIS

- 1) 07 & 08 APRIL 2018 (MU30)
- 2) 11 & 12 AUGUST 2018 (MU31)

- Introduction & basic statistical concepts in relation to MU
- Sampling statistics
- General Procedures of Estimation Uncertainties in Chemical Measurements by the GUM & the EURACHEM principles
- Basic Procedures for MU with worked examples & exercises
- Worked examples of MU by component-by-component approach
- Strategy in implementing MU in Chemical Laboratory
- Recent International Development of MU for Chemical Analysis

**MS ISO/IEC 17025:2017 MANAGEMENT SYSTEMS
INTERNAL AUDITING**

- 1) 20 & 21 MARCH 2018 (IAT22)
- 2) 16 & 17 OCTOBER 2018 (IAT23)

- Introduction to Internal Auditing
- SAMM Requirements for Internal Audit
- Overview of the Internal Audit Process
- Audit Schedule
- Audit Planning
- Development of auditor skills
- Conducting an Audit
- The Audit Report and Follow-up

IKM PROFESSIONAL CENTRE (COURSE CONTENTS)

PROCEDURES OF METHOD VALIDATION & VERIFICATION

- 1) 12 & 13 MAY 2018 (MVV31)**
 - 2) 13 & 14 OCTOBER 2018 (MVV32)**
- Differences between method validation and method verification
 - Steps for method validation
 - Specificity
 - Sensitivity
 - Precision
 - Accuracy
 - Linearity and range
 - Method detection limit
 - Robustness
 - Uncertainty of measurements
 - Report writing
 - Monitoring

GENERAL QA/QC PROCEDURES FOR TESTING LABORATORIES

- 1) 03 & 04 APRIL 2018 (QAQC31)**
 - 2) 09 & 10 OCTOBER 2018 (QAQC 32)**
- General QA principles in accreditation
 - ✓ Introduction to QA and QC for laboratories
 - ✓ Personnel qualifications and training
 - ✓ Internal quality audits and quality review
 - ✓ Reference materials and traceability
 - ✓ Method validation and verification
 - ✓ Proficiency testing
 - ✓ Measurement uncertainty
 - General QC procedures in testing
 - ✓ Replicate analysis
 - ✓ Spike recovery analysis with certified reference materials
 - ✓ Instrument performance and calibration
 - ✓ Use of control charts

CHROMATOGRAPHY TECHNIQUES

- 1) 08 & 09 MAY 2018 (CHRO4)**
- Basic theory and principles of GC and HPLC
 - Instrumentation
 - Various types of detectors
 - Quantitative technique
 - Trouble shooting
 - Basic care and maintenance of chromatography instruments
 - Examples of applications

MANAGEMENT OF CHEMICALS & CHEMICAL/LAB WASTES

- 1) 24 & 25 APRIL 2018 (MCCW20)
- 2) 02 & 03 OCTOBER 2018 (MCCW21)

- Overview of Management of Chemicals
- Local Laws & Regulations on Chemical Substances
- Management of Chemicals - Cradle to Grave
 - Chemical Health Risk Assessment
 - Manufacturing and production
 - Transportation
- Management of Chemicals -.
 - Procurement (Acquisition of chemicals)
 - Receiving of chemicals
 - Safe storage of chemicals
- Management of Chemicals -
 - Safe use and handling of Chemicals
 - Hierarchy of controls
 - Chemical exposure monitoring
 - Emergency procedures & First Aid
 - Health surveillance program
 - Other control strategies
- Overview Of Chemical / Lab Wastes
- Local Laws & Regulations - Chemical / Lab Wastes
- Waste Management of Chemical / Lab Wastes

BASIC LABORATORY SKILLS & TECHNIQUES

- 1) 21 & 22 APRIL 2018 (BSLT6)
- Basic tools and operations of laboratory experiments
 - materials and reagents
 - preparations of standard solutions
 - handling and care of basic laboratory instruments -balances, volumetric glasswares, oven, etc
 - techniques in qualitative analysis
 - techniques in quantitative analysis
 - Data collection and simple statistics
 - units of measurement
 - significant figures
 - descriptive statistics
 - calibration graphs
 - quality control practices
 - Fundamental instrumental techniques of analysis
 - Ultra-violet -visible spectrophotometry
 - Atomic absorption spectrometry
 - Gas chromatography & liquid chromatography

STATISTICAL METHODS FOR CHEMISTS

1) 05 & 06 MAY 2018 (BSM19)

- Introduction
- Propagation
- Population & Means
- Probability Distribution Function
- Outliers
- Confidence Intervals for μ the student t-Distribution
- Significance Testing
- Introduction to the one-way ANOVA
- Analysis of Variance
- Linear Regression Standard Curve & its Confidence Intervals
- Statistics in Quality Control
- Detection Limits

**ELEMENTAL ANALYSIS WITH ATOMIC ABSORPTION,
EMISSION & FLUORESCENCE TECHNIQUES**

1) 14 & 15 AUGUST 2018 (ATS4)

- Theory and principle of atomic absorption spectrophotometry, inductively coupled plasma spectrometry
- Instrumentation
- Operational consideration
- Sample preparation and consideration
- Quantitative techniques in atomic spectroscopy
- Maintenance and trouble shooting



IKM Professional Centre

Registration Fee 2 Days course without hands-on	
IKM Member	RM 689.00
Non Member	RM 901.00

Price shown is inclusive of 6% of the fee for GST

***The 2 days workshop/ course fee is inclusive of Refreshments + Lunch & workshop/course materials.**

PAYMENT – TERMS & CONDITIONS

All cheques should be made payable to INSTITUT KIMIA MALAYSIA.

All fees must be paid in advance after receiving our confirmation letter.

No refunds will be given for cancellation received less than 07 days before the course.

Substitutions will be accepted at any time.

Details of the course timetable and a map will be sent to you before the course.

LIMITED REGISTRATION

To be effective, each workshop is limited to a maximum of 25 participants on a first come first served basis. Please register early. Registration for each workshop will only be accepted through on-line registration at <http://www.ikm.org.my/registration.html>.

HOW TO REGISTER

You may **ONLY** register online at www.ikm.org.my for any of the workshop/ courses, any further information required please email to ayu@ikm.org.my

All course dates shown are correct at print time but subject to change. Kindly visit our website www.ikm.org.my for the latest updates.

OTHER IMPORTANT INFORMATION

The registration fee covers lunch, refreshment and workshop/course materials.

The workshop/course materials will be given during registration on the first day of the workshop/courses.

Please advise us in advance if you are a vegetarian.

The organizer reserves the right to make changes on the programme, cancel or reschedule the workshop/courses due to unforeseen circumstances. All efforts will be made to inform registered participants of the change. The organizer will not be responsible for any damages or expenses suffered by the participants as a result of alternative arrangements made.

Kindly contact the secretariat for further information:

Tel : 03 – 7728 3272 / 7728 3858

Fax : 03 – 7728 9909

Email : ayu@ikm.org.my