



Curriculum Vitae

Dr. Jaafar bin Jantan

Associate Professor of Physics

UITM Staff No.: 103952

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IC No. (New): 610621-04-5251



Positions: Associate Professor, Universiti Teknologi MARA (UiTM)

- ✓ Vice-Chair, Asian Physics Education Network (ASPEN), UNESCO, 2007-2012.
- ✓ Chair, Asian Physics Education Network (ASPEN), Malaysia, 2007-2012
- ✓ Consultant, Master Trainer and Facilitator, Outcome Based Education and Active Learning, UiTM. 2007-present.
- ✓ Chair, Outcome Based Education Committee, FSG, UiTM, 2007-2010.
- ✓ Coordinator, Research & Consultancy Unit, FSG, UiTM, 2000-2001.
- ✓ Coordinator, International and External Relations, ITM, 1996-1997.




Koichiro Matsura
Director General of
UNESCO. 1999-2009

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Education:

Year	Degree	Place	Major/Field
1991-1994	PhD	Kansas St. Univ., Manhattan, KS, USA	Physics (Physics Education)
1983-1985	M.Sc.	Kansas St. Univ., Manhattan, KS, USA	Physics (Condensed Matter – Low Temperature Magnetism)
1980-1983	B.Sc.	Kansas St. Univ., Manhattan, KS, USA	Physics



Professor Dean
Zollman, my PhD
supervisor & mentor
thru my years at KSU



Professional Certification

Post Graduate Teaching Certificate, Temenggung Ibrahim Teaching College, Johor Bahru, Johor, Malaysia, Jan - Dec 1986.

Awards

- *Recipient of the Anugerah Akademik Negara kategori Pengajaran (Academic Award for Excellence in Teaching) 2010 at UiTM level awarded by Universiti Teknologi MARA. Award presentation was made by Dato' Sri Mohamed Khaled Nordin, Minister of Higher Education. This qualifies me to compete for the same award at the national level. 12th February, 2011.*
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- *Certificate of Excellence in Services, 2007. Awarded by Universiti Teknologi MARA for excellence in services including teaching, research and other contributions to the faculty and university. October, 2008.*
 - *Nominated by Universiti Teknologi MARA (UiTM) for the Jon Amos Comenius Medal, UNESCO's most prestigious awards, intended to acknowledge the work of those educators who have made a significant contribution to the development or renewal of education. More precisely, it is designed to reward outstanding achievements in the fields of educational research and innovation and exceptional examples of personal devotion to education and the ideals of UNESCO demonstrated throughout an important part of one's life, UiTM, April 2008*
 - *Nominated by Universiti Teknologi MARA (UiTM) for Anugerah Akademik Negara (AAN) Kategori Pengajaran (Institute of Higher Learning) for using creative instructional methods to produce effective learning, UiTM, March 2007*
 - *Bronze Medal, Poster Session, Expo Penyelidikan & Inovasi, UPSI, (22 Jan 2007).*
 - *Nominated by Universiti Teknologi MARA (UiTM) for the National Council for Scientific Research & Development (NCSRD/MPKSN) Award 2002 for Increasing Public Awareness on Science & Technology, UiTM, January 2003.*
 - *Best Lecturer Award, awarded by students of Diploma in Chemistry, at Faculty of Applied Sciences, UiTM, 2001 and 2002.*
 - *Nominated by UiTM for the Kalinga Prize for the Popularization of Science (UNESCO), UiTM, March 2002 .*
 - *Best Lecturer Award, awarded by students of Bachelor in Applied Chemistry, at Faculty of Applied Sciences, UiTM, 2001.*
 - *Certificate of Excellence in Services, 1999. Awarded by Universiti Teknologi MARA for excellence in services including teaching, research and other contributions to the faculty and university.*



Teaching Portfolio:

<http://drjj.uitm.edu.my/DRJJ/AAN-DRJJ-2011/DrJJ-Teaching%20Philosophy-18012011.pdf>

Experiences:

1. Assoc. Prof., Universiti Teknologi MARA, Shah Alam, Selangor; 2001-present.
2. Senior Lecturer, Universiti Teknologi MARA, Shah Alam, Selangor; 1996-2001.
3. Lecturer, Universiti Teknologi MARA, Shah Alam, Selangor; 1995-1996.
4. Graduate Research Assistant, Kansas State University; Manhattan; 1992-1994.
5. Graduate Teaching Assistant, Kansas State University; Manhattan; 1991.
6. Lecturer, Universiti Teknologi MARA, Shah Alam, Selangor; 1987-1991.
7. Graduate Teaching Assistant, Kansas State University; Manhattan; 1983-1985.
8. Lab Assistant, Kansas State University, Manhattan; 1982-1983.

Professional Societies:

- i) American Association of Physics Teachers (AAPT), USA (membership needs yearly renewal)
- ii) National Science Teachers Association (NSTA), USA (membership needs yearly renewal)
- iii) Asian Physics Education Network (AsPEN), Malaysia, under the auspices of UNESCO Education.

Teaching Experiences

Basic Physics 1987-1990, 1995

This is about the foundations of physics covering topics of mechanics, heat and thermodynamics, waves and sound, electricity and magnetism and atomic and nuclear physics which are taught to students graduating with diplomas in science (two-and-a-half-year program) and to those graduating in diplomas in engineering (four year program). It is also taught in 1995 to students graduating with diploma in applied sciences (three to four year program)

Thermodynamics 1996-2003

This course is taught using the cooperative learning & utilizing ICT for receiving and sending of assignments to students graduating in Industrial Chemistry (DIC) for the diploma program, in Applied Chemistry (BSAC – Honours) and the Chemical Engineering degree programs. Students are introduced to and engaged with the concepts and laws of thermodynamics following which extensive discussions on its applications to heat engines and the related engineering devices. Students also experience to take leadership roles as facilitators twice during the semester to lead discussions regarding topic of the week while in other weeks they are active team members. Textbook: Yunus A. Cengel and Michael A. Boles; Thermodynamic, An Engineering Approach; Third & Fourth Edition, McGraw-Hill, Inc. copyright ©2002, 1994,1989. All power point notes, self-assessment materials and other



form of summative assessment examples are made available on Dr. J.J.'s website.

Environmental Assessment Jul 1999

This course is taught in collaboration with another lecturer. Students are given the opportunities to discover the properties of noise and its impact on human's social behaviour. The physics of sound, sound propagation and the parameters that affect the sound intensity are introduced. Methods to measure sound intensity by using the Sound Level Meter (SLM) are discussed and students had the opportunity to make some measurements using the portable SLM. Aside from sound pollution, radiation effects, sources of radiation and its health hazards were also probed and discussed. Other forms of pollution and risk management were taught by another colleague.

Computer Science Laboratory Jul 1999

This course was taught as part of the requirement for the lecture course. It introduced the students to the basics of Microsoft Office such as the Microsoft Word and Excel. Students were given the exposure and the practice to use Word for writing scientific reports and using Excel to analyse data and transform the data to graphs. In addition, students were required to browse the internet and practised sending emails with attachments.

Project and Thesis Supervision (Diploma & Degree with honours)

This course was designed for students to be involved with the process of writing proposals, plan and execute mini –projects which can be of any topic but related to industrial chemistry or applied chemistry. Pollution such as sound and noise, radiation pollution, chemical spraying and its affect, pesticide use and its effect are some of the topics that students ventured into to make the students aware and be more sensitive to the environment. The following titles are the projects completed so far.

Degree in Applied Chemistry (Honours)

- ✓ “Determining if Chilli and Kailan Sold at the Wet and Dry Markets is Pesticide-Free”, April 2001.
- ✓ “Determination of Ethylenebisdithiocarbamate in Chilli and Kailan from Wet and Dry Market by Using the Headspace Gas Chromatography”, April 2001.
- ✓ “The Natural Radioactivity and Its Sources in Sediments from the Malacca Straits (Selangor Areas)”, April 2001.
- ✓ “Persistence of Prothiofos in Red Chilli and Kailan”, October 2000.
- ✓ “Noise Pollution in the Vicinity of An Industrial Area in Shah Alam”, October 2000.
- ✓ “Noise pollution around the Vicinity of Public Areas in Shah Alam”, May 2000.

Diploma in Industrial Chemistry

- ✓ “The Effectiveness of Sunscreens with different SPF Values for Two Most Commercially Available Brand Names of Sunscreens”, May 2000.
- ✓ “Analysis of the Nutritional Components in Liquid Milk (Cow’s Milk and Goat’s Milk)”, Nov 1999.
- ✓ “Analyzing the Minerals Present in Commercialized Mineral Water, Mineral Pot and “Air Zam-Zam”, Nov 1999.



Thermodynamics (for Physics program) 2003-2004

The course engaged students in an active learning environment in the learning of the concepts, laws and theories in the area of thermodynamics. Collaborative learning was used to enhance understanding of concepts and its applications in thermodynamic devices. The use of ICT to download & email self-assessment on the conceptual understanding and the achievement of lesson outcomes was utilized to gauge any cognitive changes before and after collaborative learning. All power point notes, self-assessment materials and other form of summative assessment examples are made available on Dr. JJ's website.

Basic Physics II (for Material Technology program) 2005-present

The course engaged students in an active learning environment in the learning of the concepts, laws and theories in the area of electrostatics, electricity, magnetism, electricity & magnetism and introductory modern physics. Students predict outcomes of an investigation perform simulations, actively discuss the predictions and results of investigations produce a model a the relationship of physical quantities and compare to the existing scientific model and laws. All power point notes, self-assessment materials and other form of summative assessment examples are made available on Dr. JJ's website.

Philosophy of Science (for all FSG degree programs) 2006-May 2010

The course engaged students to the meaning, similarity and differences between data, information, knowing, belief, truth and knowledge. Students engage with their peers and with the facilitator on the examples provided to utilize the tools of philosophy (the art of arguing and verbal reasoning) in identifying and confirming their existing knowledge and understanding on the scientific method, laws and theories. Students also try to persuade and convince their peers on their thoughts and ideas through teamwork in a debate while their values and ethics in science and its impact on the environment and society are expressed through terms papers they have to write and submit for assessment. At the end of every semester, a Premiere Debate session is held where the best debaters identified from session debates will argue out their case in front of distinguished judges ranging from Program Heads, Deputy Deans, Deans, Assistant Vice Chancellors and Deputy Vice Chancellors to the Chairman for UiTM's Board of Directors. All power point notes, self-assessment materials and other form of summative assessment examples are made available on Dr. J.J.'s website.

Graduate Students & Referee to Journal Article

- External Examiner for M.Sc. in Physics Education; Faculty of Science & Technology, UPSI. Dec 2008.
- Referee to a science journal article for the Faculty of Science & Technology, UPSI. Oct. 2008.
- Referee to a science journal article for the Faculty of Science (FIZIK), UKM. Oct. 2008.
- PhD in Chemical Education at FSG, UiTM. (still finishing the writing-up) 2003-2008
- Referee to a science journal article for IRDC, UiTM. 2006.
- External Examiner for M.Sc. in Physics Education; Faculty of Science & Technology, UPSI. 2003.
- External Examiner for M.Sc. in Physics Education; Physics Dept., UKM. 1999.



Present and Future Research

- “Mapping The Level Of Scientific Reasoning and Thinking Skills To Instructional Methodologies Among Science-Math-Technology Undergraduates in Asian Universities”. University Mobility in Asia and the Pacific (UMAP) research proposal, a collaboration between UiTM, UPSI and two other UMAP universities to be named. Grant submitted by end of February 20th 2009 to UMAP (grants to UiTM/UPSI & FRGS will follow soon).
- “Learning Styles of the Staff and Students at the Faculty of Applied Sciences: Real-Time Identification and Its Implication on Classroom Teaching Instructional Techniques”. *Funds will be from the University Grant, Aug 2002 (Partial data has been collected). A real-time scoring of the learning styles (Felder’s) using Microsoft Excel is now available. Up to 40 samples can be accommodated by the worksheet through the use of Visual Basic Editor.*
- “Industrial Chemistry and Applied Chemistry Students’ Views of Chemistry Obtained Using the Views about Science Survey (VASS) Instrument”. *University Grant, Aug. 2001 – Jul 2002.*
- “Common-sense Beliefs about Force and Motion among the Engineering and Applied Science First Semester Students at Universiti Teknologi MARA.” *University Grant, Aug. 2000 – Jul 2001. A real-time scoring of the FCI using Microsoft Excel is now available. Up to 40 samples can be accommodated by the worksheet through the use of Visual Basic Editor.*
- “The Effectiveness of Mechanics Classes for the First Semester Engineering and Applied Science Students at University Teknologi MARA in Replacing Students’ Common-sense Beliefs about Force and Motion.” *University Grant, Dec 2001 – Nov 2002 (to be submitted but data has already been collected).*
- “Peer-Facilitating Learning Cycle for Effective Learning of Thermodynamics at Faculty of Applied Sciences, Universiti Teknologi MARA.” *(Partially funded by Faculty of Applied Sciences, April 2001. (Development of self-assessment materials is complete and can be viewed from my website. The documents are password-protected and those interested need to send email to me to obtain the password.)*
- “Progress in Learning about Force and Motion among Physics and Science Education Students at Selected Universities in Malaysia”. *Partially funded by Faculty of Applied Sciences, Aug 99-present. (Data for UPM, UKM and USM has been collected. Results of this research were first presented at the Workshop for Matriculation Lecturers, Kota Kinabalu, July, 2002.)*

Publications

PROCEEDINGS

- “The Teaching of Science and Mathematics in English. A Roundtable Discussion for Politicians, NGOs, Educators and Stakeholders in Deciding the Fate of PPSMI in Malaysian Education System”. Ministry of Education, Putrajaya Convention Center, 21



October 2008.

- “Learning Chemistry;The Human Perspective”, Proceedings of the Young Researchers Conference on Applied Sciences. Hyatt Saujana, Subang, 2006
- “Matching Chemistry Perception to Learning Preferences on Chemistry-based Students at UiTM”, Proceedings of the Symposium Kimia Analisis Malaysia XVII, , Hyatt Regency, Johor Bahru, Johor 2004.
- “Determination Of Night Time Sound Pressure Level Inside Uncle Chilli’s Grill And Bar, Hilton PJ”, Proceedings of the Symposium Kimia Analisis Malaysia XVII, Hyatt Regency, Johor Bahru, Johor 2004.
- “Research In Creativity for Science and Mathematics Education.” (with Dr. Sheila Tobias) Proceedings of the Second International Conference on Primary and Secondary Schools Science and Mathematics Education, Kuala Lumpur 2004.
- “Matching Teaching Methods To Learning Preferences of Industrial Chemistry Students at UiTM”, Proceedings of the Symposium Kimia Analisis Malaysia XVI, Kucing, Sarawak 2003.
- “Probing the Perception about Chemistry on Industrial Chemistry Students at Universiti Teknologi MARA.” Proceedings of the Symposium Kimia Analisis Malaysia XVI, Kucing, Sarawak 2003.
- "University Physics Education for the 21st Century", Group Editor, Proceedings of ASPEN Conference 1997, Sinaran Bros. Sdn. Bhd., Penang, Malaysia, 1999.
- “Pre-Science Modules in Chemistry, Physics and Mathematics”, UiTM, Shah Alam, 1999
- “Physics InfoMall Users’ Guide”, The Learning Team, Armonk, New York, 1996.

CD-ROM

- "Physics InfoMall" (part of the team with Prof. Dean Zollman and Prof. R. G. Fuller), The Learning Team, Armonk, New York, 1996.
- “Physics InfoMall Users’ Guide”, The Learning Team, Armonk, New York, 1996.
- Doctoral Degree Dissertation
- “Differences and Similarities in Teachers’ Information Strategies for Lesson Planning Using the Physics InfoMall – A Large Physics Database on CD-ROM”, Nov 1994.

JOURNAL ARTICLES

- “The Relationship between UPSI Lecturers' Perceptions of their Teaching Practices and Students' Conceptions of Force and Motion”, The International Journal of Learning (Common Ground), Volume 14, 2007.



- “Matching Chemistry Perception to Learning Preferences on Chemistry-based Students at UiTM”, The Malaysian Journal of Analytical Sciences Volume 9, Number 1&2, 2005.
- “Determination Of Night Time Sound Pressure Level Inside Uncle Chilli’s Grill And Bar, Hilton PJ”, The Malaysian Journal of Analytical Sciences Volume 9, Number 1&2, 2005.
- “Double transitions in Gd-Mn and Gd-Ni glasses”, *Jour. of Magnetism & Magn. Mat.* (Netherlands) Nov 1988

UNPUBLISHED MATERIALS & ORIGINAL TEMPLATE USED FOR MY OUTCOMES-BASED TALKS & WORKSHOP

- EXCEL curriculum mapping template used by Universiti Teknologi MARA, Universiti Sains Islam Malaysia & Malacca Naval Academy. **(Original-2009)**
- EXCEL template to determine Student Learning Time for a course & for a program. (shared - 2009)
- EXCEL templates for scoring and evaluating data from the learning inventories including Force Concept Inventory, Conceptual Survey of Electricity & Magnetism, Index of Learning Styles and Views of Scientific Survey. **(Original-2003)**
- Translated versions of the inventories, Force Concept Inventory (FCI) & Mechanics Baseline Test (MBT) (both are available at the University of Arizona website and at my website but are password-protected). (Translated- 1998)
- Translated version of the Lawson’s Classroom Test Science Reasoning Skills (CTSRS) Inventory. (translated - 2008)
- Generic Program Educational Objectives and Program Learning Outcomes at all levels of study. (Original–2009)
- Example of Course Learning Outcomes and Course Information (syllabus-2009). **(Original-2009)**
- Examples of Lesson Learning Outcomes for Learning Areas in First Year Physics. **(Original-2009)**
- A Brief Guide to LOKI (containing verbs for writing learning outcomes)-with permission from Universiti Putra Malaysia. (2009)
- Compilation of articles for meaningful and active teaching & learning activities. (2010)
- Compilation of articles for assessing course and program outcomes. (2010)
- All of my OBTL power-point presentations. **(Original-2008)**
- All of my Action Research power-point presentations and compiled articles (2009).
- All of my physics & philosophy of science class power-point presentations.(original-since 1997)
- All of the laboratory manual for my physics classes. **(Original-since 2005)**
- All of the Concept Maps used for my classes and OBTL workshops. **(Original-since 2000)**

All materials are made available on my website. <http://drjj.uitm.edu.my>



Talks, Workshops & Judging

Guest Lectures, Invited Talks and Workshops at National and International Meetings:

2011

- **Workshop Facilitator.** *“Improving the LOKI Outcomes-Based Curriculum Design”*. Participants are 80 managers including Deputy Vice Chancellor (Academics & Internatolisation), Deans, Deputy Deans, Program Heads and Heads of Units from Universiti Sains Islam Malaysia (USIM). 10th Jan 2011.
- **Invited Lectures & Workshop Facilitator.** *“Outcomes-Based Curriculum Design and the LOKI (Learning Outcomes Kemahiran Insaniah) Curriculum Mapping”*. Participants are 80 lecturers from Universiti Teknologi Mara. 13th Jan 2011.
- **Workshop Facilitator.** *“Outcomes-Based Curriculum Design and the LOKI (Learning Outcomes Kemahiran Insaniah) Curriculum Mapping”*. Participants are 20 executives from National Institute of Occupational & Safety Hazards (NIOSH) including the CEO. 14th Jan 2011.
- **Invited Lectures & Workshop Facilitator.** *“Understanding the LOKI Curriculum Mapping and Producing Constructively Aligned Teaching & Learning Activities and Assessment Tasks”*. Participants are 70 lecturers from Faculty of Applied Sciences, Universiti Teknologi Mara. 1st – 2nd Feb 2011.

2010

- **Invited Lectures & Workshop Facilitator.** *“Outcomes-Based Curriculum Design & Constructive Alignment”*. Participants are 30 new lecturers from Universiti Teknologi MARA (UiTM). Faculty of Applied Sciences (FSG). 29th Dec 2010.
- **Invited Lectures & Workshop Facilitator.** *“Outcomes-Based Curriculum Design & Constructive Alignment”*. Participants are 100 lecturers from Universiti Teknologi MARA (UiTM). Segamat Campus. 27th-28th Dec 2010.
- **Invited Lecture.** *“Emotional Vs Intellectual Quotients”*. Leadership, Creative & Innovative Program for Public Higher Education Institutes New Lecturers. Organised by AKEPT, Ministry of Higher Learning (MOHE); 9th Dec 2010. - ISTANA Hotel, KL.
- **Invited Lectures & Workshop Facilitator.** *“Outcomes-Based Curriculum Design & Constructive Alignment”*. Participants are 70 lecturers program heads from Faculty of Electrical Engineering, Universiti Malaysia Pahang (UMP). 2nd-3rd Nov 2010.
- **Invited Lectures & Workshop Facilitator.** *“Outcomes-Based Curriculum Design & Constructive Alignment”*. Naval Academy Melaka (ALAM).
 - ✓ Participants are 60 lecturers and heads of units from ALAM Malacca Campus. 2nd Nov 2010.
 - ✓ Participants are 50 lecturers and all top management team of Batu Rakit Campus, Terengganu. 26th-27th Nov 2010.



- **Invited Lecture.** “*Overview of Outcomes-Based Teaching & Constructive Alignment*”. Participants are 70 lecturers and management team of the Kuliyyah of Engineering, International Islamic Universiti Malaysia (IIUM). 11th Dec 2010.
- Workshop Participant (Chairman of ASPEN Malaysia). “Restructuring the Roles & Aligning the Existing MOSTI’s Permanent Science Committees. Organised by National Commission of UNESCO Malaysia (SKUM) & the International Division, Ministry of Science Technology & Innovation (MOSTI). Cherengin Hill Resort, Janda Baik, Pahang. 8th – 10th November, 2010.
- **Invited Lectures** for “*Kursus Asas Pengajaran*”. “Overview of Outcomes-Based Curriculum Design”. Participants are new lecturers from Universiti Teknologi MARA (UiTM). Organised by Institute of Leadership Quality Management (ILQaM).
 - ✓ More than 100 participants. Southern Zone. Melaka City Campus. 19th May 2010.
 - ✓ More than 100 participants, Northern Zone, Penang. 21st May 2010.
 - ✓ More than 100 participants Central Zone, Shah Alam 07th Oct 2010.
 - ✓ More than 100 participants. Central Zone, Shah Alam. 24th Nov 2010.
 - ✓ More than 100 participants. Central Zone, Shah Alam. 25th Nov 2010.
 - ✓ More than 100 participants. Eastern Zone, Kelantan. 1st Dec 2010.
- **Invited Lectures** for “*Kursus Asas Pengajaran*” attended by New Lecturers. “Overview of Outcomes-Based Assessment & Preparing Examination Questions”. Participants are new lecturers from Universiti Teknologi MARA (UiTM). Organised by Institute of Leadership Quality Management (ILQaM).
 - ✓ More than 100 participants. Southern Zone. Melaka City Campus. 19th May 2010.
 - ✓ More than 100 participants. Northern Zone, Penang. 21st May 2010.
 - ✓ More than 100 participants. Central Zone, Shah Alam 07th Oct 2010.
 - ✓ More than 100 participants. Central Zone, Shah Alam. 24th Nov 2010.
 - ✓ More than 100 participants. Central Zone, Shah Alam. 25th Nov 2010.
 - ✓ More than 100 participants. Eastern Zone, Kelantan. 1st Dec 2010.
- **Permanent Judge** for Physics Category, **Overall Judge** for the Competition & **Scoring Designer for Evaluation** (Original & Enhanced Scoring Template by Dr JJ) INTEL-ICEF International Science & Engineering Fair /Competition for MARA Junior College, 4th – 6th October 2010; - MRSM, Pengkalan Chepa, Kelantan
- **Invited Lectures.** “*Overview of Outcomes-Based Curriculum Design & Outcomes-Based Assessment*”. Participants are all of Malaysian Qualification Agency (MQA) staff, Petaling Jaya. 2nd Sept 2010.
- **Invited Lecture.** “*Overview of Outcomes-Based Curriculum Design & Constructive Alignment*”. Participants are more than 40 MEDEC faculty members from Universiti Teknologi MARA (UiTM). Malaysian Entrepreneurial Development Centre (MEDEC), UiTM, Shah Alam. 2nd Aug 2010.
- **Invited Lectures & Workshop Facilitator.** Outcomes-Based Teaching & Learning for staff of the training & assessment arm of Security Commission Malaysia. (SIDC, SC). Participants are about 30 SIDC staff.
 - ✓ Designing Backwards. Security Commission. Bukit Kiara. 2rd April 2010.



- ✓ Student Learning Time (SLT). Security Commission. Bukit Kiara. 9th April 2010.
 - ✓ Outcomes-Based Teaching & Learning Activities (OBTLAs). Security Commission. Bukit Kiara. 23rd April 2010.
 - ✓ Outcomes-Based Assessment & Grading. (OBA & OBG). Security Commission. Bukit Kiara. 23rd June 2010.
- **Invited Lectures & Workshop Facilitator.** “*Outcomes-Based Assessment & Constructive Alignment*”. Participants are more than 60 lecturers from Faculty of Applied Science, Universiti Teknologi MARA (UiTM) & organised by ILQaM. Nilai. 1st – 2nd July 2010.
 - **Invited Lectures & Workshop Facilitator.** “*Outcomes-Based Curriculum Design & Constructive Alignment*”. Participants are more than 60 lecturers from Faculty of Science & Technology (FST), Universiti Sains Islam Malaysia (USIM). Nilai. 29th – 30th June 2010.
 - **Invited Lectures & Workshop Facilitator.** “*Outcomes-Based Curriculum Design & Aligning the Teaching and Learning Activities*”. Participants are more than 100 lecturers and management team from Faculty of Applied Sciences (FSG), Universiti Teknologi MARA (UiTM), Shah Alam. 7th – 8th June 2010.
 - **Invited Lectures & Workshop Facilitator.** “*Outcomes-Based Curriculum Assessment & Constructive Alignment*”. Participants are more than 100 Deans, Deputy Deans and heads of Program & Units from Universiti Sains Islam Malaysia (USIM). Nilai. 1st – 3rd June 2010.
 - **Invited Lectures & Workshop Facilitator.** “*Outcomes-Based Curriculum Design & Aligning the Teaching and Learning Activities*”. Participants are more than 100 Deans, Deputy Deans and heads of Program & Units from Universiti Sains Islam Malaysia (USIM). Universiti Sains Islam Malaysia (USIM). Nilai. 24th – 26th May 2010.
 - **Invited Lectures & Workshop Facilitator.** “*Outcomes-Based Curriculum Design – Designing Backwards*”. Participants are more than 80 lecturers of Universiti Teknologi MARA (UiTM). Organised by Institute of Leadership Quality Management (ILQaM).
 - ✓ Shah Alam. 27th Mar 2010.
 - ✓ Shah Alam. 27th May 2010.
 - **Invited Lecture & workshop Facilitator.** *CLASSROOM ACTION RESEARCH* workshop. Participants are more than 80 lecturers of the Gopeng Matriculation Centre, Ministry of Education (MOE). Gopeng, Perak. 5th-6th Feb 2010.
 - **Rapporteur / Moderator.** *NATIONAL SCIENCE & MATHEMATICS EDUCATION WORKSHOP FOR STAKE-HOLDERS 2010* organised by ASM, MOE, PETROSAINS & MARA; Intekma Resort 2nd-4th Feb 2010.

2009

- **UiTM Invited Speaker and/or Workshop Facilitator for OBE curriculum design.** Participants in each case range between 50 to 150 from the management team and lecturers of the respective faculties or campuses.
 - ✓ Faculty of Mechanical Engineering. 60 participants. Shah Alam. 7th-9th Dec 2009
 - ✓ Faculty of Civil Engineering . 60 participants. Shah Alam. 2nd Sept 2009.



- ✓ Kuala Pilah Campus (MATH). 30 participants. Kuala Pilah. 29th-30th Aug 2009.
 - ✓ Faculty of Applied Sciences. 80 participants. Shah Alam. 21st Aug 2009.
 - ✓ Faculty of Hotel & Tourism Management. 30 participants. Shah Alam. 8th-9th Aug 2009.
 - ✓ Faculty of Hotel & Tourism Management. 30 participants. Shah Alam. 30th Jul 2009.
 - ✓ Faculty of Accountancy. 30 participants. Shah Alam. Jul 24th, 29th Jul 2009.
 - ✓ Faculty of Business Management. 60 participants. 29th - 30th June 2009.
 - ✓ Faculty of Electrical Eng. 60 participants. Dungun Campus, Terengganu. 19th June 2009.
 - ✓ Faculty of Business Management. 150 participants. Blue Wave, Shah Alam. 1st - 3rd June 2009.
 - ✓ Faculty of Comm. & Media Studies. 30 participants. Shah Alam. 26th - 27th May 2009.
 - ✓ Faculty of Health Science. 60 participants. Petaling Jaya. 25th Apr 2009.
 - ✓ Faculty of Comp. & Math. Science. 60 participants. Shah Alam. 18th May 2009.
 - ✓ Faculty of Business Management. 100 participants. Shah Alam. 23rd - 24th Apr 2009.
 - ✓ Faculty of Medicine (Lecture only). 40 participants. Shah Alam. 16th Apr 2009.
 - ✓ Faculty of Dentistry (lecture only). 30 participants. Shah Alam. 6th Apr 2009.
 - ✓ FSG (Perlis campus). 40 participants. Penang. 3rd - 5th Apr 2009.
 - ✓ FSG Pre-Science. 60 participants. Seremban. 20th - 22nd Mar 2009.
 - ✓ FSG (Perlis campus). 40 participants. Universiti Utara Malaysia. 6th - 8th Mar 2009.
 - ✓ UiTM OBE Facilitators. 80 participants. Port Dickson. 1st - 3rd Mar 2009.
 - ✓ FSG (Jengka+DIS All campuses). 100 participants. Kuantan. 27th Feb- Mar 1st 2009.
 - ✓ FSG (Shah Alam). 100 participants. Shah Alam. 29th -30th Jan 2009.
- **Invited Speaker.** “*Designing Physics Curriculum of the 21st Century at Universiti Teknologi MARA*”. International Conference Physics Education (ICPE), Sofitel Centara Grand Bangkok. , Organized by Chulalongkorn Univ. and supported by IUPAP and ASPEN (UNESCO) 18th - 24th Oct 2009.
 - **Permanent Judge** for Physics. Tunas Saintis Program to select the best three science projects from MRSM schools in Malaysia that will represent Malaysia to the INTEL ISEF in USA. MRSM Balik Pulau, Pulau Pinang. 5th - 7th Oct 2009.
 - **Invited Speaker.** “*Driving Physics & Science Teachers' Competencies in Teaching & Learning Through Outcome Based Education*”. Simposium Halatuju Pendidikan Fizik Di Malaysia Persatuan Mahasiswa Sains UPSI. 3rd Oct 2009.
 - **Working Committee for Academy Science Malaysia.** “EMPOWERING SOCIETY THROUGH STI FOR SUSTAINABLE DEVELOPMENT” for Ministry of Science Technology & Innovation (MOSTI) Strategic and Action Plan (2010-2020). ASM-MOSTI. May - July 2009.
 - **Invited (Featured) Speaker.** “*Structuring the Thinking and Understanding of University Physics Courses Using Concept Maps*”. International Conference on Thinking (ICOT), KLCC, Organized by UPM. 22nd - 26th June 2009.
 - **Invited Speaker.** “*Intellectual Discourse: Instructional Strategies in Learning HOW to LEARN: The Evolution*”. **S**(scholar) **A**(agent of change) **T**(teaching & learning) **R**(research) **I**(innovator) **A**(administrator) month, UPM. , Organized by the CAde, UPM. 9th April 2009.
 - **Invited Speaker/Workshop Facilitator** for OBE curriculum design. Universiti Tun Abdul Razak (UNITAR). 10th-11th Apr 2009.



- **JUDGE**, Malaysian Matriculation Creativity Competition. Organized by Matriculation, Ministry of Education (MOE). 20th - 22nd Feb 2009.
- **Chief Facilitator** for the Matriculation Engineering/Technical Curriculum Review Workshop (Physics Subject) organized by the Matriculation Division, MOE.
 - ✓ Kajang, Cheras. 4th - 6th Feb 2009.
 - ✓ Quality Inn, KL. 21st-23rd Jan 2009.
- **JUDGE**, Innovative Invention Design (IID), UiTM. Organized by Research Management Institute (RMI). 13th Jan 2009.

2008

- **Invited Panel Speaker** for the ASTRO Awani Television Show , the “Sudut Pandang Programme” televised live at 8:30 pm. Topic of Discussion: “TIMSS and the role of PPSMI in placing Malaysia in the top 10 of TIMSS.” 17th Dec. 2008.
- **Guest** for the 5th Round Table Discussion on “Teaching of Science & Math in English (PPSMI), organized by the Quality and Inspectorate Division MOE for politicians and NGO’s, Putrajaya Convention Center, 16th Dec. 2008.
- **Chief Facilitator** for the Matriculation Engineering/Technical Curriculum Review Workshop (Physics Subject) organized by the Matriculation Division, MOE. Casuarina Impiana, IPOH. 24th-26th Nov. 2008.
- **Invited Speaker** for the 4th Round Table Discussion on “Teaching of Science & Math in English (PPSMI), organized by the Quality and Inspectorate Division MOE for politicians and NGO’s, Putrajaya Convention Center, 21st Oct. 2008.
- **Permanent Judge** for Physics. Tunas Saintis Program to select the best three science projects from MRSM schools in Malaysia that will represent Malaysia to the INTEL ISEF in USA. 29th – 31st July 2008. Jasin, Melaka.
- **Facilitator** for the Active Learning Workshop (ALW) at Swineburne University of Technology, Sarawak Campus.. Training lecturers of Swineburne, Asian Physics Education Network university representatives, and lecturers from the Asian region on how to implement Active Teaching & Learning activities for physics & engineering courses. 7th-10th July 2008
- Science content **Judge** in the finals for the ACTOLOGY program, PETROSAINS. 8th July 2008.
- **Invited Speaker & Master Facilitator** for the “Outcome Based Education (OBE)” Workshop at FSG. OBE Stage 1 Workshop: Training the Program Heads, Coordinators & **ALL Lecturers** of FSG at the Shah Alam, Kuala Pilah, Penang and Jengka campus for all programs at all certification levels on the writing of Program Educational Objectives, Program Outcomes, Course Outcomes, and the matrix showing how each of them address the MOHE learning outcomes and how they address each other. 1st May -30th June 2008

2007



- **Invited Speaker, Master Facilitator & Chairman** for the “Outcome Based Education” Workshop at FSG.. OBE Stage 1 Workshop: Training the Program Heads & Coordinators of FSG on the writing of Program Educational Objectives, Program Outcomes, Course Outcomes, and the matrix showing the how each of them address the MOHE learning outcomes and how they address each other. 17th-18th Dec 2007.
- **Invited Speaker, Master Facilitator & Chairman** for the “*Outcome Based Education*” Workshop at FSG. Training the OBE Facilitators of FSG on the writing of Program Educational Objectives, Program Outcomes, Course Outcomes, and the matrix showing the how each of them address the MOHE learning outcomes and how they address each other. 27th-28th Nov 2007
- **Invited Speaker.** “*Students’ Learning Preferences and The Need for Concept Mapping.*” **Master Facilitator** for the workshop, “*Constructing Concept Map in Physics by Using the IHMC Software*”. “International Conference on Physics Education (ICPE)” at Universiti Cadi Ayyad, Marrakech, Morocco. 11th-16th Nov 2007.
- **Panel** for the **Round Table Discussion.** *Identifying the strength & weaknesses of the “Teaching of Science & Math in English” program at the primary and secondary schools in Malaysia.* Ministry of Education, PUTRAJAYA. 8th Nov 2007.
- **Represented Malaysia** to the “General Assembly UNESCO” on Asian Physics Education. “5th Asian Physics Education Network General Assembly and Active Learning Workshop” at Ateneo De Manila University, Quezon City, Phillipines. 20-27th Oct 2007.
- **Invited Speaker.** “*Science Exploration in Electrostatics Via the Physics Education Technology (PhET) simulations.*” “5th Asian Physics Education Network General Assembly and Active Learning Workshop” at the Ateneo De Manila University, Quezon City, Phillipines. 20th-27th Oct 2007.
- **Physics Specialist Consultant** on the role of physics & physical laws on driving & road safety. A Malaysian television program, KMJ, aired live on prime time TV1, 4th Oct & 11th Oct 2007.
- **Physics Specialist Consultant** on the role of physics & physical laws on driving & road safety A Malaysian television program, KMJ, aired on prime time TV1, 20th Sept & 27th Sept 2007.
- **Physics Specialist Consultant** on the role of physics & physical laws on driving & road safety. A Malaysian television program, KMJ, aired on prime time TV1, 23rd Aug 2007.
- **Invited Speaker** “*Visualizing Mathematics: The Hierarchical Concept Map Approach*”. Convention for the Negeri Sembilan Additional Math Teachers 5th-8th Aug 2007.
- **Permanent Judge** for Physics. Tunas Saintis Program to select the best three science projects from MRSM schools in Malaysia that will represent Malaysia to the INTEL ISEF in USA. Kuantan, Pahang. 21st -23rd July 2007.



- **Invited Speaker** “*Writing Students’ Behavioral Intended Learning Objectives/Outcomes*” and **Chief Facilitator** for the Workshop to train lecturers of the Physics & Material Science in producing measurable learning & lesson outcomes. FSG. 28th June 2007.
- **Invited Speaker** “*Academy Science Malaysia’s PORTAL Content Development.*” **Workshop Facilitator** to assist practical students placed at Academy Science Malaysia to produce content for the Academy Science PORTAL. 21st May 2007.
- **Invited Speaker** “*I See I Remember, I do I understand: Visualizing Your Knowledge Using Hierarchical Concept Map.*” & **Workshop Facilitator** to assist science matriculation students at Londang, Masjid Tanah to producing concept maps as evidence in conceptual understanding of physics. 17th-18th March 2007.

2006

- **Invited Speaker and Workshop Facilitator.** *The Concept Map in Understanding Sciences*, Matriculation Perak (Gopeng). Dec 2006.
- **Physics Specialist Consultant** on the role of physics & physical laws on driving & road safety. A Malaysian television program, KMJ, aired on prime time TV1, Fridays at 8:45 pm beginning Oct 2006.
- **Member** of Active Learning Workshop (ALOP Asia) at Univ. of New Delhi sponsored by UNESCO. Nov 2006.
- **Invited Speaker**, FRONTPAGE program organised by RTM to motivate financially handicapped form 5 students in Selangor to perform better in their SPM physics. June 2006.
- **Workshop Facilitator along with Dr. Khodoori from MOE (Assessment)**, Workshop on Assessment and Preparing Effective Exam Questions, Physics Program, FSG. June 2006.
- **Invited Speaker and Workshop Facilitator**, “Effective Instructional Methods”, FSG Lecturers at the Perlis Campus. June 2006.
- **Invited Speaker**, Academy Science Malaysia Workshop at THE MINES RESORT to identify and plan programs for the jobless graduates. May 2006.
- **Invited Speaker and Workshop Facilitator & Consultant** for INED UiTM. Training of UiTM’s Franchise Lecturers in Effective Teaching & Learning, July -October 2005.
- **Invited Speaker** “Mapping Your Science Knowledge Using The Concept Map”, Professional Course for the Negeri Sembilan Secondary Schools Science & Math Department Heads. May 2005.
- **Invited Speaker** “Mapping Your Science Knowledge Using The Concept Map”, Perlis Matriculation College. 5th Mar 2005.
- **Invited Speaker** “Mastering Physics: Why My Teaching is Not Effective in Producing Meaningful Learners”, Kedah Matriculation College. 3rd – 5th Feb 2005



- **Invited Speaker** “Meaningful Science Learning: Knowing Yourself”, Polytechnic Port Dickson. 25th Feb 2005.
- **Invited Speaker** “Meaningful Learning: Understanding Your Client & Adapting Your Teaching”, Strategy College, Taman Permata, Kuala Lumpur 19th Feb 2005.
- **Keynote Speaker** “Creativity and Innovation in Teaching Physics and Engineering: The Human Dimension.” ASPEN 2004 Seminar and Workshop, Regency Hotel, Port Dickson, 13th Dec 2004.
- **Invited Speaker** “Learning Preferences’ Role in Promoting Meaningful Learning in Science.” Hari Kecemerlangan Fakulti Sains Gunaan, Blue Waves, Shah Alam. Nov 2004.
- **Invited Speaker** “Leading Super Learning of Sciences by Capitalizing on Research Findings and Technology For Learning.” Convention on Leadership, Science and Technology from the Islamic Perspective, Yayasan Saad, Air Keroh, Melaka, October 2004.
- **Invited Speaker** “Assessment: Testing, Measurement and Evaluation”. Kursus Penilaian Tahap Kecekapan TK3 dan TK4, October 2004.
- **Invited Speaker a)** *"Tools For Lifelong Meaningful Learning: They Are Not Dumb, Just Different."*, b) *"Tools For Lifelong Meaningful Learning: Concept Mapping."* UiTM Students’ Development Program For Year 2 students, Universiti Teknologi MARA, Shah Alam, July 2004.
- **Workshop Chief Facilitator (with Dr. Sheila Tobias)** “*Learning Preferences, Concept Mapping and Practices That Works in Promoting Creativity and Innovation in a Physics Classroom.*” Second International Conference on Primary and Secondary Schools Science and Mathematics Education, Legend Hotel, Kuala Lumpur, Malaysia. 16th – 18th June 2004.
- **Keynote Speaker (with Dr. Sheila Tobias)** “*Research In Creativity for Science and Mathematics Education.*” Second International Conference on Primary and Secondary Schools Science and Mathematics Education, Legend Hotel, Kuala Lumpur, Malaysia. 16th– 18th June 2004.
- **Invited Speaker** “*Curriculum, Instruction and Effective Teaching.*” Kursus Penilaian Tahap Kecekapan TK3 dan TK4. Nov 2003. **Invited Speaker** “Testing & Measurement.” Kursus Penilaian Tahap Kecekapan, Nov 2003.
- **Contributed Speaker a)** *"Probing the Perception About Chemistry on Industrial Chemistry Students at UiTM."*. (b) *"Matching Teaching Methods to Learning Preferences of Industrial Chemistry Students at UiTM."* 16th Chemical Analysis Symposium, Universiti Malaysia Sarawak. 9th-11th Sept 2003.
- **Invited Speaker** *"Tools for Effective Learning: Graphical Knowledge Representation."*: Motivational Week & Techniques of Answering for the PMR/SPM, Sekolah Menengah Kebangsaan Seksyen 11, Shah Alam, Selangor. 16th Apr 2003.



- **Invited Plenary Speaker** "*ICT in Science Teaching. Is it Really Worth The Effort?*:" Convention on Application of Information & Communication Technology in Education. Sri Negeri Auditorium, Air Keroh, Melaka; 12th Mar 2003.
- **Invited Speaker** "*The Role of Learning Styles To Foster Meaningful Learning.*" MARA Secondary Education Section. Meeting for School Enrichment Program, MARA Headquarters, KL. 5th Mar 2003.
- **Invited Plenary Speaker** "*Incorporating ICT to Promote Deep Learning in Thermodynamics*", 2nd International Physics Conference, Karachi Pakistan. 7th – 9th Feb 2003.
- **Invited Workshop Facilitator** "*Developing Concept Maps*", 2nd International Physics Conference, Karachi Pakistan. 7th – 9th Feb 2003.
- **Guest Lecture** "Pedagogical Aspects of Teaching Physics – A Series of Guest Lecture" at Fakulti Sains & Teknologi, Universiti Pendidikan Sultan Idris, Tg. Malim, Perak. Jan 2003.
- **Invited Lecture and Workshop Facilitator** "*Meaningful Learning: The Role of Concept Maps*". Science Week Program, Perlis Matriculation Centre, Arau, Perlis, Malaysia. 21st Oct 2002.
- **Invited Workshop Facilitator** "*Making Science Learning Fun*". for Women in Science Lecture and Workshop Program, National Science Centre, Bukit Kiara, Kuala Lumpur, Malaysia. 22nd – 25th July 2002.
- **Guest Lecture and Chief Workshop Facilitator** "*Developing Classroom Formative Assessment*". National Workshop for Matriculation Lecturers in Malaysia organized by Matriculation Colleges, Labuan, Sabah, at the Promenade Hotel, Kota Kinabalu, Sabah, Malaysia. 15th -18th July 2002.
- **Guest Lecture and Chief Facilitator** (workshop assisted by Prof. Khalijah Salleh of Univ. Kebangsaan Malaysia) "*Formative Assessment Using Concept Maps and Lickert-type Scale Specific Operational Objectives Self-Assessment Technique in a Typical Physics Classroom*"., at the National ASPEN Malaysia 2002 Seminar and Workshop held at Yayasan Pelajaran MARA, Kuantan, Pahang, Malaysia. 27th – 30th May 2002.
- **Keynote Address** "*Bridging the Learning Concerns of Yesterday and Challenges of Today through the use of Multimedia*". given at the Seminar and Workshop on Multimedia Approach in Learning Physics and Engineering, University Tenaga Nasional, Bangi, Selangor, Malaysia. 12th – 14th June 2001.
- **Speaker** "*Crossover into the Newtonian Beliefs-A Preliminary Study on the First Semester Engineering Students at Universiti Teknologi MARA,*" Physics Seminar 2000, Conference at Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia. 6th – 9th Nov 2000.
- **Guest Lecture** "*The Success Rate in Removing Common-sense Beliefs About Force and Motion among First Semester Engineering Students at Universiti Teknologi MARA*", Science Faculty, UiTM, Shah Alam, Selangor, Malaysia. July 2000.



- **Guest Lecture** “*Analysing Results of the Force Concept Inventory and Mechanics Baseline Test by Universiti Kebangsaan Malaysia’s Science Education Students*”, Physics Department, Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia. May, 2000.
- “Multimedia in Education: The way forward” **Panel** discussion on “Multimedia in Science Teaching” (with Prof. Dean Zollman and Prof. Priscilla Laws), Universiti Sains Malaysia, Minden, Pulau Pinang, Malaysia. Dec 1997.
- **Guest Speaker** “*Science: An Introduction*,” Seminar for students enrolling for the degree program in Distance Learning, ITM (1997).
- **Workshop Facilitator** “The Role of Leadership and Group Cohesiveness in Organisation’s Quality Move,” Quality Camp, Port Dickson, Malaysia. (1997)
- **Invited Speaker** “Recognising Problems Within A Department Towards Inculcating a TQE Culture,” Seminar on TQE for Non-Academic Staff at the School of Information Technology and Science Computer Universiti Teknologi MARA, Malaysia, (1996).
- **Invited Speaker** “The Significance of Group Cooperation in Total Quality Education,” Seminar on TQE for non-academic staff attached to the Universiti Teknologi MARA,’s students dormitories, Langkawi, Malaysia, (1995).
- **Invited Speaker** “What They Say About Physics Lab,” Seminar on the Introduction of A New Physics Lab Concept, Universiti Teknologi MARA, Malaysia. (1995).
- **Invited Speaker** “Shopping for Physics Instructional Materials,” (with Abdul Malik Abdullah), Seminar on the Introduction of A New Physics Lab Concept, Universiti Teknologi MARA, Malaysia. 1995.
- **Workshop Facilitator** “Media and the Dissemination of Physics Knowledge,” on Physics and the Public (with AsPEN committee members), Petaling Jaya, Malaysia. 1995.
- “Physics InfoMall Field Test Version 3-What’s New in it?,” (with Prof. Dean Zollman), Section of American Association of Physics Teacher Fall Meeting, Pittsburg State University, Kansas. (1994).
- “Physics Educators’ Information-Seeking and Exploration Strategies from the Physics InfoMall,” (with Prof. Dean Zollman), American Association of Physics Teacher Summer Meeting, University of Notre Dame, Illinois. (1994).
- “Using the InfoMall Advanced Searching Features,” Facilitator for the Physics InfoMall Workshop (with Dr. R. Grabhorn), American Association of Physics Teacher Summer Meeting, University of Notre Dame, Illinois. (1994).
- “Physics Material on CD-ROM-Using the InfoMall for Preparing Physics Lesson,” Program for KATS Camp, Junction City, Kansas. (1994).
- “An Introduction to the Physics InfoMall CD-ROM,” Facilitator for the InfoMall Workshop (with Dr. R. Grabhorn), American Association of Physics Teacher Winter Meeting, San



Diego, (1993).

- “Information Retrieval and Management by Physics Educators: A Proposed Research Design Towards a Model Development,” Physics Education Seminar, Kansas State University. (1993).
- “Materials for Lesson Planning Made Richer by the Physics InfoMall-A Large Physics Database on CD-ROM,” (with Prof. Dean Zollman), Section of American Association of Physics Teacher Fall Meeting, Northeastern State University, Oklahoma. (1993).
- “Shopping the Mall: Results from the First Field Test of Physics InfoMall.” (with Prof. J.D. Spears and Prof. R. Enger), American Association of Physics Teacher Summer Meeting, Boise State University, Idaho. (1993).
- “An Introduction to the Physics InfoMall CD-ROM,” Facilitator for the InfoMall Workshop (with Dr. R. Chaudhury), American Association of Physics Teacher Summer Meeting, Boise State University, Idaho. (1993).
- “Information Retrieval and Management from the Physics InfoMall by the Physics Teachers,” Physics Education Seminar, Kansas State University, Kansas. (1993).
- “An Introduction to the Physics InfoMall CD-ROM,” Facilitator for the InfoMall Workshop (with Dr. R. Chaudhury), American Association of Physics Teacher Winter Meeting, New Orleans. (1993).
- “Physics on CD-ROM: A Tool for Under-Prepared Teachers,” (with Prof. Dean Zollman) Section of American Association of Physics Teacher Fall Meeting, University of Arkansas Fayetteville, Arkansas. (1992).
- “Teaching Physics in Malaysia,” American Association of Physics Teacher Summer Meeting, The University of Maine at Orono, Maine. (1992).
- “Introduction to the Physics Teacher’s CD-ROM Toolkit,” Facilitator for the CD-ROM Toolkit (with Prof. Dean Zollman, Prof. R. Fuller, and Dr. R. Chaudhury), American Association of Physics Teacher Summer Meeting, The University of Maine at Orono, Maine. (1992).
- “Physics Lab Structure at Universiti Teknologi MARA,” Section of American Association of Physics Teacher Fall Meeting, Fort Hays State University, Kansas. (1991).

Service to Professional Community and University

Professional Committee Activities:

- Member, Vice Chancellor Special Project, (VCSP), Flexible Academic Learning. June 2010–present.
- Member, Deputy Vice Chancellor Project, Best Practices in Teaching & Learning. I-Learn.



April 2010-present.

- Certified Coach, Heart of Transformational Coach (AKEPT-MOHE). May 2010-present.
- Member, Faculty of Applied Sciences Academic Board. New programs Curriculum Design. 2008-present.
- Vice-Chair, Asian Physics Education Network (ASPEN) UNESCO. 2007-2012.
- Chair & National Point of Contact, Asian Physics Education Network (ASPEN) Malaysia 2007-present.
- Asian Physics Education Network (AsPEN) committee member, 1995-2006.
- Asian Physics Network (ASPEN) Conference 97, Deputy Chairman, 1996-1997.
- Asian Association of Open Universities (AAOU) Annual Conference and Exhibition committee member, 1996-1997.

National Committee

- Member, Science Education Committee, Academy Science Malaysia, 2004 - present.
- Member, "National Science Challenge" Academy Science Malaysia, March 2007.
- Member, Second International Conference on Primary and Secondary Schools Science and Mathematics Education, Legend Hotel, Kuala Lumpur, Malaysia. June 16 – 18, 2004.
- Member, Seminar and Workshop AsPEN Malaysia 2002, Jan 2002 – July 2002.
- Member, The Setting-up of the National Computing Centre, Sept. 2000.
- Member, Asian Physics Education Network (AsPEN) Malaysia, since 1996.
- Member, Seminar and Workshop on Multimedia Approach in Learning Physics & Engineering, (SMILE 2001), Aug 2000 – July 2001.
- Member, AsPEN Meeting, July 1999 - April 2000.
- External examiner for a Master's Student at the Physics Dept., UKM, July 2000.
- Member, The Setting-up of the National Fundamental Science Research Centre, Nov 1999.