MINISTRY OF HUMAN RESOURCES

HRDF
MALAYSIA

This is to certify that

Prof Dr Hussain H. Al-Kayiem

I.C/Passport :A10356601

is exempted from attending

PSMB TRAIN THE TRAINER (TTT) PROGRAMME

Pembangunan Sumber Manusia Berhad
Date: 09/08/2021

Certificate No: 9639

UNIVERSITI
TEKNOLOGI
PETRONAS

Ref : UTP/TED-CAPE/2023_184
Date : 23 August 2023

Dr Hussain H. Jaafer Al Kayiem

Dear Dr Hussain H. Jaafer Al Kayiem,

APPOINTMENT AS TRAINER FOR CENTRE FOR ADVANCED AND PROFESSIONAL EDUCATION (CAPE), UNIVERSITI TEKNOLOGI PETRONAS

On behalf of Centre for Advanced and Professional Education (CAPE), it is my pleasure to offer you a Trainer for the Fundamentals of Renewable Energy Application. After reviewing your credentials and professionalism, we've determined that you've brought with you a vast wealth of experience, which will aid us in reaching the pinnacle of success. The following is an outline of the training schedule:

Course Name: Fundamentals of Renewable Energy Application
Date: 12-14 September 2023
Platform : Face to face

This offer is valid for three (3) days, from 12-14 September 2023. All training-related Terms of References have been appended to this letter for future reference.

To authenticate this appointment process, please confirm your acceptance of the position by signing and returning the acceptance form no later than **1 September 2023.**

As a CAPE trainer, you will be responsible for facilitating learning solutions, preparing plans based on Course Learning Outcomes (CLO), and creating an interactive, high-impact environment. You may also be responsible for developing and implementing a curriculum for learning that is in line with current trends and best practises.

You will assign to Puan Yusmiza binti Abdul Jabar (yusmiza_ajabar@utp.edu.my). She will assist you with any questions or concerns you may have.

UNIVERSITI
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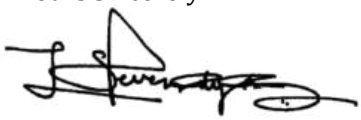
PETRONAS

We eagerly anticipate your dedication and commitment to achieving UTP's vision and mission.

Thank you.

Yours sincerely



Prof. Ir Dr Mohd Shahir Liew
Deputy Vice Chancellor
Research, Innovation and Commercialization

UNIVERSITI
TEKNOLOGI
PETRONAS

Term of Reference

a. Provide the competent subject matter expert (SME) for the course
b. Prepare the training materials for the course to be given in softcopy to CAPE prior course
c. Prepare the live video for the hands-on session (if any)
d. Conduct the requested training online on the mutually agreed date at the mutually agreed platform (if any)
e. The online delivery platform will be arranged by CAPE via Microsoft Teams for the online course (if any)
f. Follow Universiti Teknologi PETRONAS (UTP) rules and regulation and standard operating procedure (SOP) from time to time while delivering the professional short course

ACKNOWLEDGEMENT

UNIVERSITI TEKNOLOGI PETRONAS
INSTITUTE OF TECHNOLOGY PETRONAS SDN. BHD.
(Company No : 352875U) Wholly owned subsidiary of PETRONAS

32610 Seri Iskandar, Perak Darul Ridzuan, Malaysia.
Tel : 1 300 22 8887 Fax : 605-365 4075 Website : www.utp.edu.my

UNIVERSITI TEKNOLOGI PETRONAS

A 1-Day Short Course on

SOLAR ENERGY APPLICATIONS IN THE INDUSTRY

HRDF CLAIMABLE

Organized by Centre for Advanced and Professional Education (CAPE)

Universiti Teknologi PETRONAS

(HRDF Registered Training Provider as Institute of Technology PETRONAS Sdn Bhd (ITPSB)-352875U)

CPD Points Application from IEM is in Progress

INTRODUCTION

Fossil fuels are non-renewable energy which affects the environment. Solar energy as a renewable energy, can provide an important part of the industry-needed-energy in order to reduce the pollution effects of fossil fuels. This course provides an overview on the practical solar energy applications in the industry and investigates its opportunities and barriers.

OBJECTIVES

Upon completion of this course, participants will be able to :

- Be familiar with the solar thermal energy application and photovoltaic system application in the industry
- Conduct economic analysis for solar energy applications
- Assess the challenges and opportunities of solar energy application in industry

COURSE CONTENT

- **Solar thermal energy application**: This part analyzes the potential and the state -of-the-art of solar heat for industrial processes. Majority of the applications are in the industries like drying, food, textile, paper, automobile and in the industries using thermal energy with temperatures less than 250°C.
- **Photovoltaic system application**: Lighting, water pumping, Cathode protection of gas, oil pipelines and other types of piping; provision of power, in particular for limited electric charges (in the order of a few kW) always in the areas far from the grid or where power is unreliable (discontinuous electrical supply) are investigated in this section.
- **Economic analysis**: Generally, high initial investment and very low operating costs are characteristics of solar systems. The investment reduces fuel bill and environmental effect to our energy system. Determination of the size of the solar system in combination with auxiliary system that gives the cost is highly important. For economic analysis evaluations, some methods will be discussed.
- **Challenges and opportunities**: High increasing energy demand, Technological advancement, suitable regulatory policies, Feed-in tariff, tax rebates, efficiency improvement in consequence to R&D efforts are some of the opportunities and high initial investment, intermittency of the source and energy storage problems are the barriers of solar energy systems utilization. This section will cover the investigation of these opportunities and challenges.

DATE: **16th October 2017** TIME: **9.00am - 5.00pm**

VENUE: **Level 16, Menara 2, Menara Kembar Bank Rakyat, Jalan Travers, 50470 Kuala Lumpur.**

UNIVERSITI TEKNOLOGI PETRONAS

A 1-Day Short Course on

SOLAR ENERGY APPLICATIONS IN THE INDUSTRY

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Universiti Teknologi PETRONAS

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6.5 CPD Hours from IEM

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DATE: **24th September 2018** TIME: **9.00am - 5.00pm**

VENUE: **Level 16, Menara 2, Menara Kembar Bank Rakyat, Jalan Travers, 50470 Kuala Lumpur.**

COURSE INSTRUCTORS

Assoc.Prof. Dr. Morteza Khalaji Assadi is an Associate Professor in the Department of Mechanical Engineering, Universiti Teknologi PETRONAS. He has 33 years of experience as a researcher, head of solar energy department and director of renewable research and development center of Iran. He was a Project manager of a 100 MW wind farm in Iran and with an 8 years of experience as the head of Energy Engineering Department, Islamic Azad University of Iran. He has supervised more than 90 PhD and MSc students and published more than 90 articles and papers in international and national journals and conferences. His areas of specialization are Solar Energy, Wind Energy, Other renewable energies, Energy Management and Energy Efficiency .

Assoc.Prof. Dr Syed Ihtsham-ul-Haq Gilani has been working as an Associate Professor in the Mechanical Engineering Department, Universiti Teknologi PETRONAS, Malaysia. He received his bachelor degree in Mechanical Engineering from the University of Engineering & Technology, Taxila, Pakistan and a PhD in 1992 from Birmingham University, UK, in the area of energy monitoring and assessment. With more than 14 years of industrial experience in mechanical component/system designing and 14 years of teaching experience, he has authored more than 70 research publications in the areas of energy, gas district cooling, cogeneration, and many more .

Prof. Dr. Hussain H. Al-Kayiem has been in the research and academia since 1978. He is professor of thermofluids in Universiti Teknologi PETRONAS since 2006. He has supervised and graduated more than 50 PhD and MSc students and published more than 220 technical and research papers in journals and conferences.

Prof. Hussain has been awarded at various national and international levels for his innovative achievements in the energy sector. He was the recipient for the Special Energy and Environment INNOVA2010 award – Brussels; and received a special award from the Polish Inventor and Rationalize Institute, in 2011. And for his distinguished scientific contributions, he has been appointed as a research fellow of Wessex Institute of Technology, WIT – UK; research fellow of Center of Excellence for Advanced Research in Fluid Flow, CARIFF - UMP and a research fellow in the Power Generation Research Centre, PGRC – UNITEN, and he is heading the Green Technology Working Group in Malaysia Education and Research Network, MYREN. He is an editorial board member of three international journals. For his distinguished academic achievements in 2016, Prof. Hussain has been conferred the 'Eminent Scientist Award' of Wessex Institute – UK .

HOW TO APPLY

Email to **cape@utp.edu.my** for registration **by 10th September 2018**

Seats are limited. A seat will be confirmed once the payment / LOU is received. Confirmed participants will be informed via email.

WHO SHOULD ATTEND?

◊ Energy policy makers, Engineers and Post graduate students.

COURSE FEES

* **RM 1080** (Professionals)
* **10% Discount** (UTP Alumni & Group Registration)
* **20% Discount** (Student)

Course fee is inclusive of 6% GST.

Group registration is applicable for 3 pax and above from the same company.

The fees include refreshments and the course materials.

A certificate of attendance will be issued upon successful completion of the course.

CONTACT DETAILS

Course Coordinator:
AP Dr. Morteza Khalaji Assadi
Tel: +605 - 368 7202
Email: Morteza.assadi@utp.edu.my

Course Registration:
Mr. Farhan Zulkefly
Tel: +603-2276 0136 / +60143150602
Email: farhan.zulkefly@utp.edu.my

Effective Writing and Submission of Article for Impactful Publication

LEVEL Beginner **HRDF** Claimable

23-24th April 2019

CETAL, Universiti Teknologi PETRONAS, Tronoh, Perak

9.00am – 5.00pm



INTRODUCTION

Good article that secure high chance of acceptance in indexed journal have to be prepared in a proper and identified procedure. Some authors have sufficient research findings, but they are facing problem on materializing the findings to be accepted by the editor of the journal and the reviewer.

There are main elements to be considered in a research or a review paper.

This course will enhance the capability of the participants, who are holding research or review findings, to convert these findings to a publishable article in indexed journal.

OBJECTIVES

Upon completion of this course, participants will be able to:

1. Search and cite suitable references.
2. Write introduction and literature section to address the research gap from the existing state.
3. Avoid the common mistakes in writing research/ review article.
4. Write good research or review articles.

The she short course consists of clinic for in spot submission of drafted research article, or review paper.

COURSE CONTENT

1. Main elements of journal articles.
2. Proper writing up of the literature and introduction to address the problem statement.
3. How to sub-sectioning the methodology section.
4. Attractive presentation and discussion of the results.
5. What to highlight in the conclusion

TRAINER

1 Prof. Dr. Hussain H. Al-Kayiem

Professor in Mechanical Engineering Department, Universiti Teknologi PETRONAS (UTP)

Head of Green Technology Working Group in Malaysia Education and Research Network, MYREN.

He completed his BSc, 1973 and MSc, 1981 in Mech. Eng. from University of Baghdad. After completed his PHD in University of Bradford-UK, 1989, he appointed as the head of the Mech. Eng. Dept. in the Military College of Engineering – Baghdad for the period 1990-1997. From 1999 to 2003, he headed the Mech. Eng. Dept. in Al-Mustansirya University in Baghdad. He operated as the manager of the Netherlands Engineering Consultants, NEDECO - Iraq branch 2003-2005. Prof Hussain has joint Universiti Teknologi PETRONAS in Malaysia since 2006 till recent.

He is a leader of many research groups and supervised/graduated more than 60 PG candidates. As a leader in Thermo-Fluids and Energy Technologies, he has published around 250 research papers, books and chapter in books.

Prof. Hussain has been awarded in different national and international levels for his innovated achievements in the energy sector. He has been awarded the Special Energy and Environment INNOVA2010 award – Brussels; and a special award from the Polish Inventor and Rationalize Institute, in 2011. And for his distinguished scientific contributions, he has been appointed as a research fellow of Wessex Institute of Technology-UK; research fellow of Center of Excellence for Advanced Research in Fluid Flow, CARIFF-UMP and a research fellow in the Power Generation Research Centre, PGRC - UNITEN. He is editorial board member of three international journals and the editor of the Engineering journal –UTP platform.

For his distinguished academic achievements, Prof. Hussain has been conferred the 'Eminent Scientist Award' of Wessex Institute – UK.

Recently, he is professor of the Mech. Eng. – UTP; head of solar thermal advanced research center (STARC)

WHO SHOULD ATTEND?

- Postgraduate students
- Lecturers
- Researchers

MYR 930

10% Discount — UTP Alumni, PETRONAS staff, Group registration, SME

20% Discount — Students

*price is not inclusive of 6% SST

Register Now

Email to CAPE@utp.edu.my for registration before 16th April 2019.

A seat will be confirmed once the payment / LOU is received. Confirmed participants will be informed via email.

Contact Us

General Inquiry

Prof Dr Hussain H Al-Kayiem

05-368 7008

hussain_kayiem@utp.edu.my

Course Registration

Mr. Farhan Zulkefly

05-368 8993 / 0143150602

farhan.zulkefly@utp.edu.my

Visit cape.utp.edu.my for more upcoming professional short courses

Professional Short Course Organized by:

UNIVERSITI TEKNOLOGI PETRONAS

CAPE

CENTRE FOR ADVANCED AND PROFESSIONAL EDUCATION

Effective Writing and Submission of Article for Impactful Publication

Level Beginner **HRDF** Claimable

23-24th April 2019

CETAL, Universiti Teknologi PETRONAS, Tronoh, Perak

Professional Short Course Organized by:

UNIVERSITI TEKNOLOGI PETRONAS

CAPE
CENTRE FOR ADVANCED AND PROFESSIONAL EDUCATION



Course Highlight

- How to prepare materials for good journal article?
- How to prepare literature and write proper introduction/research gab/objective?
- What to prepare and How to find and submit the article to a relevant journal?
- How to respond and convince the reviewers?

Trainers: Prof. Dr. Hussain H. Al-Kayiem

MYR 930

10% Discount UTP Alumni, PETRONAS Staff Group Registration, SME

20% Discount Students

Email us at **cape@utp.edu.my** for registration and enquiries

*price is not inclusive of 6% SST

Visit cape.utp.edu.my for more upcoming professional short courses

Skills development program for postgraduate students
Department of Graduate Studies

How to acquire skills in Error Analysis?

Dr. Hasanain Adnan Abdul Wahhab
20085@uotechnology.edu.iq
Mob: 07811309446

Skills development program for postgraduate students
Department of Graduate Studies

How to acquire skills in Preparing Review Paper?

Assoc. Prof. Dr. Hasanain Adnan Abdul Wahhab

2008s@uotechnology.edu.iq

Mob: 07811309446

Skills development program for postgraduate students
Department of Graduate Studies

Acquire skills in preparing a research plan

- General information course: Research Methodology
- Credit hours: 2 hrs

Dr. Hasanain Adnan Abdul Wahhab
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Mob: 07811309446

برنامج تطوير المهارات لطلبة الدراسات العليا
قسم الدراسات العليا

How to acquire skills in Uncertainty Analysis?

Date: 31/10/2022

Dr. Hasanain Adnan Abdul Wahhab
20085@uotechnology.edu.iq
Mob: 07811309446

Skills Development Program for Researchers

Research methodology: Basics and application

- General information course: Research Methodology

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Mob: 07811309446