



## **UNITEN Research Excellence**

RMC for Researchers: Maximizing Research Impact

23 NOV 2023 | MYRMA-UNITEN

Assoc. Prof. Ts. Dr. Normy Norfiza Abdul Razak Director, Innovation and Research Management



#### The Genius in You



#### **Innovation and Research Management**





#### PRESENTATION FLOW

## Understanding scientific research performance is important as it aids in decision making and to propel ourselves

**UNITEN Research Performance** 

**UNITEN Research Roadmap** 

**UNITEN Research Aspiration** 

WHERE WE ARE • WHAT WE WANT TO DO • WHERE WE WANT TO BE

#### 10 YEAR STRATEGIC PLANNING



**Building Opportunities, Living Dreams 2025** 

## Globally Competitive Energy-Focused University | Internationalizing and Industrializing the University |

## Teaching & Learning Excellence

### **Enhanced Enrolment**

- 1 Local Market Growth
- 2 International Market Growth
- Oigital & Flexible Learning

#### Research Excellence

#### Breakthrough Research

- (4) Global Ranking Recognition
- 5 Research to Wealth
- (6) Centre of Excellence

## Financial Sustainability

## Operational Efficiency

- 7 KSHAS Campus Optimization
- 8 Putrajaya Campus Optimization
- 9 Endowment Fundraising

## 3 STRATEGIC GOALS

- 3 STRATEGIC OBJECTIVES
- STRATEGIC INITIATIVES

#### High performing staff & board

10 Organization & Capabilities

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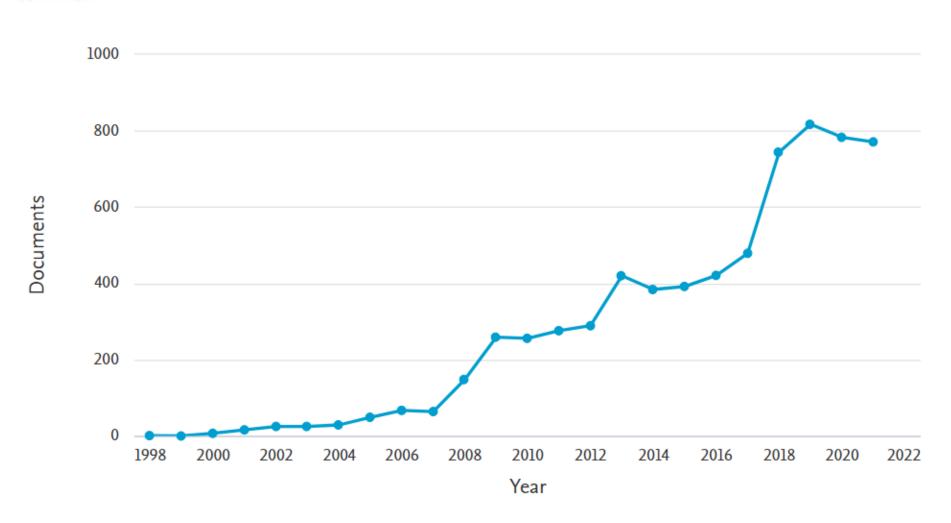
# UNITEN RESEARCH PERFORMANCE



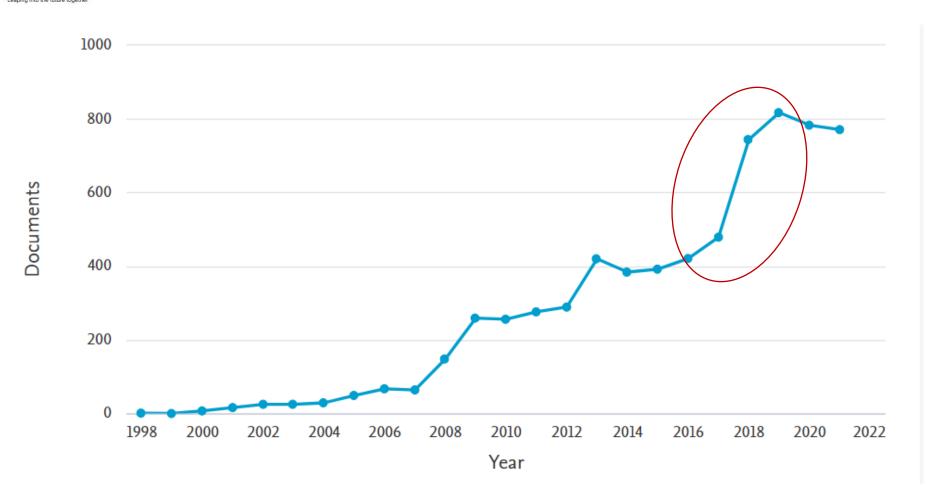




#### **UNITEN INDEX PUBLICATION**



#### UNITEN INDEX PUBLICATION



In tandem with BOLD2025 kickoff in 2016, there was a steady growth.

The sharp increase is reflective of our initiatives undertaken as the champion through:

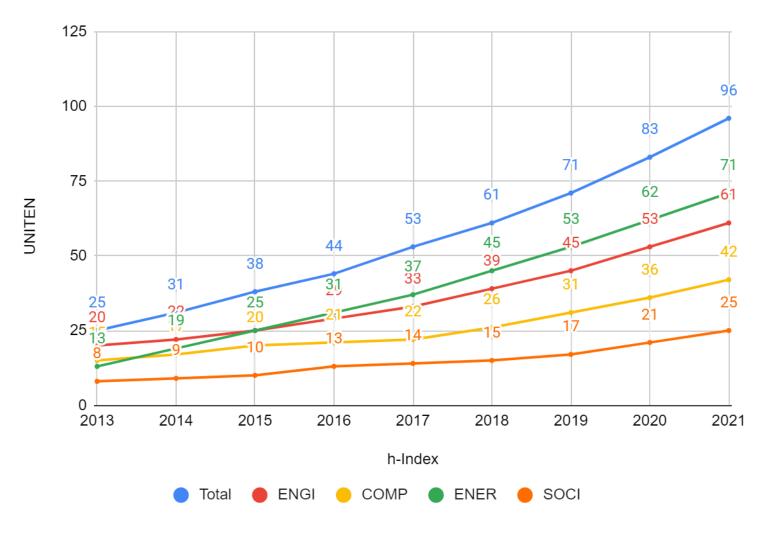
Prominent Professors, Postdoctorals, Grants, Publication Fund

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Source from Scopus Date of Extraction 31 July 2023

#### H-INDEX EVOLUTION

UNITEN

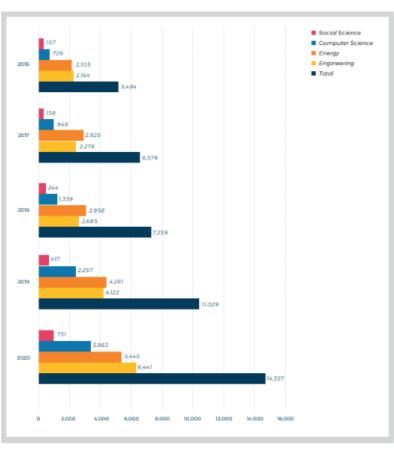


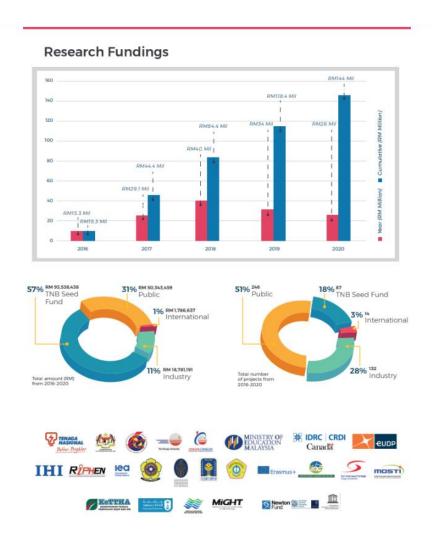
In the span of 5 years from 2016, UNITEN doubled our H-Index which took 16 years to reach 44. Noteworthy, the gradient beginning 2018 with BOLD2025 is steeper indicating faster growth.

National benchmark in 2017 is 35

#### **UNITEN STRENGTHS**

#### Research Citations 5-Year Citation by Field





UNITEN managed to increase citations by leap and bounds and as of today the 5 year citation is already above 35k.

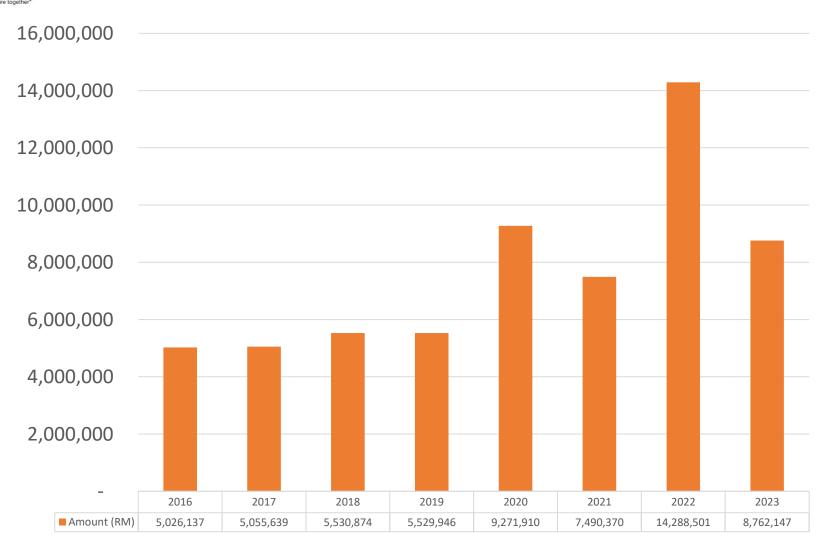
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#### UNITEN PRINCIPAL INVESTIGATORS



#### **UNITEN EXTERNAL GRANTS in RMC**





#### **DIVERSE POSTDOCTORAL RESEARCHERS**

"Leaping into the future together"

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#### UNITEN EARS 1997 - 2022 "Leaping into the future together"

#### **BEST SCIENTIFIC MINDS**



IRMC office have received more than 1300 cvs and interviewed over 300 postdoctoral candidates to be attached to NEC. These would be the talents of best scientific minds along with researchers.

#### **BOLD2025**







An initiative Research Management Centre to support researchers. With our strategic planning UNITEN researchers have abundant opportunities to conduct research.



#### **RESEARCH INITIATIVES 2023**













All this initiatives have been rolled out to increase research visibility of UNITEN, through international matching grants that address quintuple helix.



# YEARS 1997 - 2022 "Leaping into the future together"

#### **NATIONAL ENERGY CENTRE**



This is a RM120M building in UNITEN, the National Energy Centre.





#### A National One Stop Energy Centre

Engaged in innovating the future of energy, a melting pot of facilities and labs working together as engines of inventions and discoveries

#### A Leading Instituition

A think-tank of expertise transforming energy through research, development and commercialization

#### Capacity building

Contributes to Malaysia's socio-economic goals benefitting public, government, regulators, industry and academia

#### MINISTRY OF HIGHER EDUCATION AND NEC



With the Minister of Higher Education when we presented on NEC together with UNITEN's management team.

#### MINISTRY OF FINANCE AND NEC



Visit from Agensi LAKSANA (Unit Pelaksanaan dan Koordinasi Stimulus Ekonomi Antara Agensi Nasional) under MOF to NEC on 8 August 2023.

#### **NEC SOFTLAUNCH**



Launched in June 2022 and officiated by the Deputy Minister of Energy and Natural Resources (KeTSA) and the Deputy Minister of the Ministry of Science, Technology and Innovation (MOSTI), the National Energy Centre (NEC) was established as a national centre of excellence to deepen aspects of the energy transition, covering issues of climate change, sustainable development and renewable energy.

#### LEAD UNIVERSITY IN SUSTAINABLE ENERGY



# UNITEN RESEARCH INTERNATIONAL & NATIONAL RECOGNITION





#### MeQAR- Malaysia Qatar, Malaysia Rusia

MALAYSIA - QATAR - RUSSIA STRATEGIC COOPERATION RELATIONS FRAMEWORK (MeQAR)



Strategic Framework presented to Minister of Higher Education for a program between Malaysia Qatar and Malaysia Rusia.

#### UNITEN YEARS 1997 - 2022 "Leaping into the future together"

#### **NiiSA National Project**

NATIONAL INTELLIGENT DIGITAL SHARE LAB / MAKMAL PERKONGSIAN CERDAS NASIONAL/NEGARA (NIISA)



Figure 1: Conceptualisation of National Intelligent Digital Share Lab (NiiSA)

Strategic Framework presented to Minister of Higher Education for a National Intelligent Digital Share Lab

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#### UNITEN-ITPLN JAKARTA

## Institut Teknologi PLN Menerima Delegasi Asesor UNITEN Malaysia

May 22, 2023

Comments: 0

Posted by: Humas



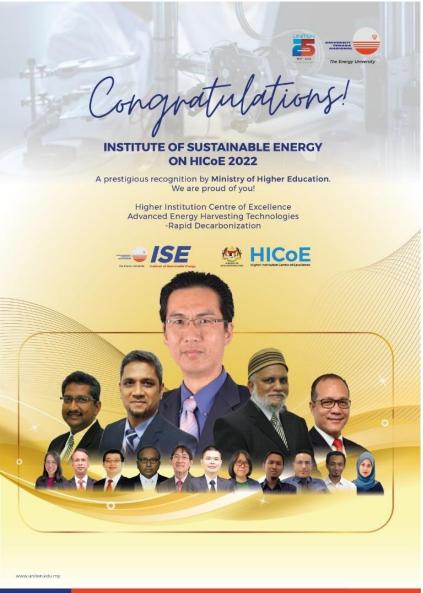
Tim Asesor dari University Tenaga Nasional (UNITEN) Malaysia melakukan asesmen terhadap Institut Teknologi PLN (ITPLN) pada hari Senin – Selasa 22 – 23 Mei 2023. Asesmen dilakukan untuk memotret kondisi terkini dari ITPLN dalam rangka melakukan perbaikan proses akademis menuju Perguruan Tinggi berkelas Internasional. ITPLN dan UNITEN saat ini sedang dalam proses untuk menjadi sister university. Tim asesor yang hadir ke ITPLN terdiri dari Prof Ramesh Singh selaku Deputi Vice Chancellor Bidang Akademik dan International, Prof Hanim Salleh selaku Head of Quality Assurance, Assoc. Prof. Dr. Normy Norfiza selaku Head of Research Management Centre dan Dr. Abreeza Noorlina selaku Research Coordinator.

Hadir pada pembukaan asesmen Rektor ITPLN Prof. Dr. Ir. Iwa Garniwa M K, MT. beserta seluruh Wakil Rektor, Kepala Rektorat, Para Dekan dan Wakil Dekan, Kepala Program Studi dan Manajer Bagian terkait. Asesmen tersebut dilakukan secara menyeluruh meliputi penyusunan kurikulum, pengembangan riset, mencari dana riset, kompetensi-kompetensi dosen, mahasiswa internasional, dosen internasional, publikasi internasional, dan lain-lain.

RMC part of UNITEN assessor for research in an institution in Jakarta, Indonesia ITPLN.



## UNITEN RECEIVES HIGHER INSTITUTION CENTRE OF EXCELLENCE RECOGNITION





JABATAN PENDIDIKAN TINGGI KEMENTERIAN PENDIDIKAN TINGGI Bahagian Kecemerlangan Penyelidikan IPT Aras 7, No.2, Menara 2, Jalan P50, Presint 5 62200 PUTRAJAYA



Tel: 603-88706961 Faks: 603-88706867 Portal Rasmi: http://jpt.mohe.gov.my

. Kami : JPT.S(BPKI)2000/016/018/015 Jld. 4(3)

Tarikh : 20 Julai 2023

#### YBrs. Prof. Madya Ts. Dr. Normy Norfiza binti Abdul Razak

Pengarah

Pusat Inovasi dan Pengurusan Penyelidikan Universiti Tenaga Nasional (UNITEN) 43009 Kajang

SELANGOR

YBrs. Dr.,

#### MAKLUMAN BERKAITAN PERMOHONAN PUSAT KECEMERLANGAN PENDIDIKAN TINGGI (HICOE) TAHUN 2023

Dengan segala hormatnya perkara di atas adalah dirujuk.

- 2. Dimaklumkan bahawa Jabatan Pendidikan Tinggi (JPT) telah menerima permohonan Institute of Energy Infrastructure (IEI) bagi penarafan Pusat Kecemerlangan Pendidikan Tinggi (HICoE) Tahun 2023. Susulan itu, satu sesi penilaian data dan dokumen bagi permohonan tersebut telah diadakan oleh pihak Jabatan dan dimaklumkan bahawa IEI telah melepasi pemarkahan minimum untuk ke peringkat penilaian seterusnya iaitu penilaian tapak.
- 3. Justeru itu, satu Sesi Penilaian Tapak bagi Permohonan HICoE Tahun 2023 ke IEI, UNITEN akan diadakan pada ketetapan yang berikut:

Tarikh : 25 Julai 2023 (Selasa) Masa : 9.00 pagi – 5.00 petang

Tempat : Institute of Energy Infrastructure (IEI)

Universiti Tenaga Nasional (UNITEN)

Putrajaya Campus Jalan IKRAM-UNITEN 43000 Kajang, Selangor

Tentatif : Rujuk Lampiran A

 Sehubungan itu, kerjasama YBrs. Dr. adalah dipohon untuk memaklumkan perkara ini kepada pihak IEI bagi membuat persediaan semasa penilaian tapak



HICoE 2022- the sole recipient in Malaysia

**HICOE SITE AUDIT 2023** 

#### **HICoE ACTION PLAN 4 SEPT**



25 July 2023 Site Audit. We are the final 2 centre of excellences that made the cut to Site Audit by Ministry of Higher Education.

70 submissions nationwide applied.

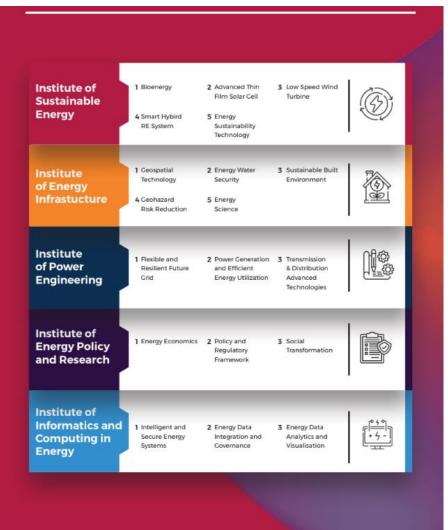
This is also a promise as a Research Champion, to ensure institutes in UNITEN achieve a HICoE Status. This will be the 2<sup>nd</sup> HICoE if we were successful.



#### **UNITEN RESEARCH ROADMAP 2021-2025**

"Leaping into the future together"







#### PRESENTING UNITEN RESEARCH ROADMAP TO MAHATHIR



## YEARS 1997 - 2022 "Leaping into the future together"

#### UNITEN STRENGTHS

#### **Research Chairs**



Research Institutes are supported by chairs from government and industry.

# UNITEN RESEARCH HIGHLIGHTS















Assoc. Prof. Ts. Dr. Normy Norfiza Abdul Razak

International Visiting Scholar Program Shanghai Open University

Representing Malaysia 16-28 October, 2023

www.uniten.edu.my

facebook.com/uniten



#### **RESEARCH HIGHLIGHTS 2023**





#### **RESEARCH HIGHLIGHTS 2023**



The success of UNITEN researchers in securing international grants



### **ITPLN INDONESIA-UNITEN 2023**





#### **RESEARCH HIGHLIGHTS**



Each and every achievement to appreciate and to aspire other researchers.

# YEARS 1997 - 2022 "Leaping into the future together"

#### **RESEARCH HIGHLIGHTS**



### YEARS 1997 - 2022 "Leaping into the future together"

### **UNITEN STARS**



**UNITEN-TELCOM University Matching Grant** 

### UNITEN YEARS 1997 - 2022 "Leaping into the future together"

www.uniten.edu.my

#### **UNITEN STARS**



## 1997 - 2022 "Leaping into the future together"

### **UNITEN STARS**







# Jongrafufations!



Prof. Dr. M A Hannan Institute of Sustainable Energy



Prof. Dr. Nowshad Amin Institute of Sustainable Energy



Dr. Al Mahfoodh Ali Najah Ahmed Institute of Energy Infrastructure



Prof. Ts. Dr. Saifuddin bin Hj. M. Normanbay Institute of Sustainable Energy



Dr. Wong Leong Sing Institute of Sustainable Energy



Dr. Ker Pin Jern Institute of Sustainable Energy



Prof. Ir. Dr. Vigna Kumaran Ramachandaramurthy Institute of Power Engineering

### UNITEN researchers ranked on WORLD'S TOP 2% SCIENTISTS 2022

Congratulations for an exceptional research performance with recognition by Elsevier.



#### **UNITEN Inventors**

### ongrafulations!



**Special Award** 

Mdm. Azieyanti Nurain Binti Azmin Institute of Sustainable Energy

**Project Title:** Waste Plastic Bottle into Solid Adsorbents for Green **Energy Production** 









Outstanding **Innovation Awards** 

Dr. Firas Basim Ismail Institute of Power Engineering

Project Title: A Novel Footstep Power Generator using Magnetic Repulsion for Public Areas



Dr. Firas Basim Ismail Institute of Power Engineering

A Novel Footstep Power Generator using Magnetic Repulsion for Public Areas



Mdm. Azieyanti Nurain Binti Azmin Institute of Sustainable Energy

Waste Plastic Bottle into Solid Adsorbents for Green Energy Production



Gs. Ts. Nazirul Mubin Bin Zahari Institute of Energy Infrastucture

Smart On-Site Floating Controlled Water Quality Monitoring Device for Aquaculture Application



Ts. Dr. Ing Zarina Binti Itam Institute of Energy Infrastucture

MyCeno Lightweight Cenosphere Tiles



Ts. Dr. Salmia Binti Beddu Institute of Energy Infrastucture

Bottom Ash Self-Compacting Brick (BASCO-B)



Ts. Dr. Hassan Bin Mohamed Institute of Sustainable Energy

Triple Sans - Banknote Disinfection System (Sanitizing Solution, Ultraviolet Light and Heater)



Ms. Alicia A/P Philip Institute of Energy Policy & Research

Creating an Engaging Learning through Visually Aesthetic Notes Design

www.uniten.edu.my facebook.com/uniten



### Renewable Energy Chair

1997 - 2022

Me with the chair holder and institute director after presenting our progress at the Ministry of Energy and Natural Resources.

### UNITEN RESEARCH ASPIRATION





## 1997 - 2022 "Leeping into the futur

#### **UNITEN ASPIRATION**

### **UNITEN by 2025**













