[The UMP Edge 2/2020]





UMP Maintains Position on the QS World University Rankings 2

Universiti Malaysia Pahang (UMP) maintained its position in the QS World University Rankings 2021 ev
ranking agency QS Quacquarelli Symonds on 10 June 2020.

The QS World University Rankings 2021 edition examined 1,604 institutions from all over the world and b
which are academic reputation, employer reputation, citations per faculty, faculty/student ratio, internationa
This ranking witnessed UMP in the top 64% in the QS World University Rankings compared to last year's a
UMP as the best university among the Malaysian Technical University Network (MTUN) and sits in

Information on the QS World University Rankings 2020 edition — published by Quacquarelli Symonds, g
accessed through topuniversities.com.

By Puan Hazlina Faizal, Rankings & Branding Unit, Centre of Corporate & Qua



7 UMP Subjects Listed in World's Ranking

A total of seven subjects of Universiti Malaysia Pahang (UMP) joined the list of world's elite universities
World University Rankings by Subjects 2020.

The listed subjects are Engineering and Technology (386), Chemical Engineering (151–200), Electrical
Mechanical, Aeronautical and Manufacturing Engineering (351–400), Pure Science (Chemistry) (451–500),
and Social Sciences and Management (Business and Management Studies

The Deputy Vice-Chancellor (Academic & International), Professor Ts. Dr. Mohd. Rosli Hainin said that
performance of four indicators, namely academic reputation, employer reputation, the number of indexed a
from Scopus.

According to the President of the Students' Representative Council (MPP) 2019/2020, Mohd Fitri Zulkaffli

in the QS World University Rankings by Subject this year proves that this university is on the right track in university by 2050.

Meanwhile, Ahmad Rifqi Mohd. Jerome Rinjes, the Vice President (Communications and Corporate) Engineering, also felt proud with all the subjects listed in the QS World University R

Credit to Pekan Review



CITREX 401 Products Flourish Innovation Culture

The 10th edition of Creation, Innovation, Technology & Research Exposition (CITREx) 2020 saw Universiti encouraging and nurturing the innovation culture among the researchers including academicians and stu Malaysian Technological University Network (MTUN), Kolej Poly-Tech MARA, Advanced Technology Tr education institutions (HEI) across the country.

The exposition was held on 12 and 13 February 2020, involving 401 entries that included participation fr initiative supports the university's aspiration in communitising technology through the encouragemer

A total of 218 entries involving UMP staff, eight from MTUN, four from local public universities including Malaysia (UPM), Universiti Teknologi MARA (UiTM) and Universiti Perguruan Sultan Idris (UPSI), as well remaining came from UMP students (129 entries) and secondary and primary sc

Also held was the exchange of Memorandum of Understanding (MoU) between UMP and NanoMalaysia Be
with PlaTCOM Ventures Sdn. Bhd. (PlaTCOM) relating to the promotion of technology commercialisation ac
centralised in the East Coast of Peninsular Malaysia.

The event witnessed the Deputy Vice-Chancellor (Research & Innovation), Professor Dr. Kamal Zuhairi Z
Executive Officer (CEO) of NanoMalaysia, Dr. Rezal Khairi Ahmad, while PlaTCOM was represented by L
the company.

Also present were the Chairman of the UMP Board of Directors, Dato' Sri Ibrahim Ahmad, Deputy Vice-
Zainuddin, and Deputy Vice-Chancellor (Academic & International), Professor Ts

Credit to Pekan Review



UMP Bags 10 Medals and the Best Award for Consumer Electro

A highly efficient light-emitting diode (LED) system known as MP-Rediac LED Stick was awarded a gold m
Consumer Electronics" in the Malaysia Technology Expo (MTE) 2020 which was held for three days from
Center (PWTC), Kuala Lumpur.

This product was invented by Ts. Ikram Mohd Rashid from the Faculty of Electrical & Electronic Engineerin
a unique feature where it does not produce heat at high temperature and does not require heat sink

The efficiency of the LED UMP Rediac system is high at 157 lm/W. This LED system can be applied not on floodlights, street lights and other LED applications. This product can also solve the problems faced by nigh users to obtain a light source at night. This product is mobile and does not require a pow

The other three gold medals were won by Dr. Chin Siew Choo from the Faculty of Civil Engineering Techr Sustainable Building Materials, Ts. Dr. Waheb Abdul Jabbar Shaif Abdullah from the Faculty of Electric (Project: NB-IoT-FMWS) and Nor Azhar Ahmad from the Faculty of Computing (Project: HeDoo Space Analysis Modules & Generic Circuit Board).

Meanwhile, UMP bagged six silver medals through Associate Professor Dr. Agus Geter Edy Sutjipto (Fac Development of Inert Ceramic for Industrial Application), Dr. Mohd Shaiful Zaidi Mat Desa (Faculty of Che Development of Improved Durability and Low-Cost Solid Ankle-Cushion Heel [SACH] Prosthetic Foot), Dr Engineering Technology, MD Solution: MD Compact Unit for Industrial Wastewater Treatment), Associate Computing, Efficient Distributed Database Replication Systems for Online Selling Website), Dr. Wan Isn Enhancement of Single Path to Multipath Clustering in Wireless Sensor Network for Energy Conservatio (Faculty of Computing, Rex-Chain: Root Exploit Detection and Blocko

The participation and success obtained by UMP is a positive sign and a proud moment when the research participation also opens collaboration opportunities with the industries including small and medium enterp ultimately benefits the public, in parallel with the UMP tagline, Communitising

Credit to Pekan Review



UMP Targets 4 Strategic Objectives towards the Best Technological University by 2050

Universiti Malaysia Pahang (UMP) has laid the foundation in achieving excellence for UMP Strategic P
objectives, which are (1) producing holistic community-driven graduates through high-level Technical and
(2) communitising technology, (3) generating new advanced technologies via research initiatives and (4
sustainability.

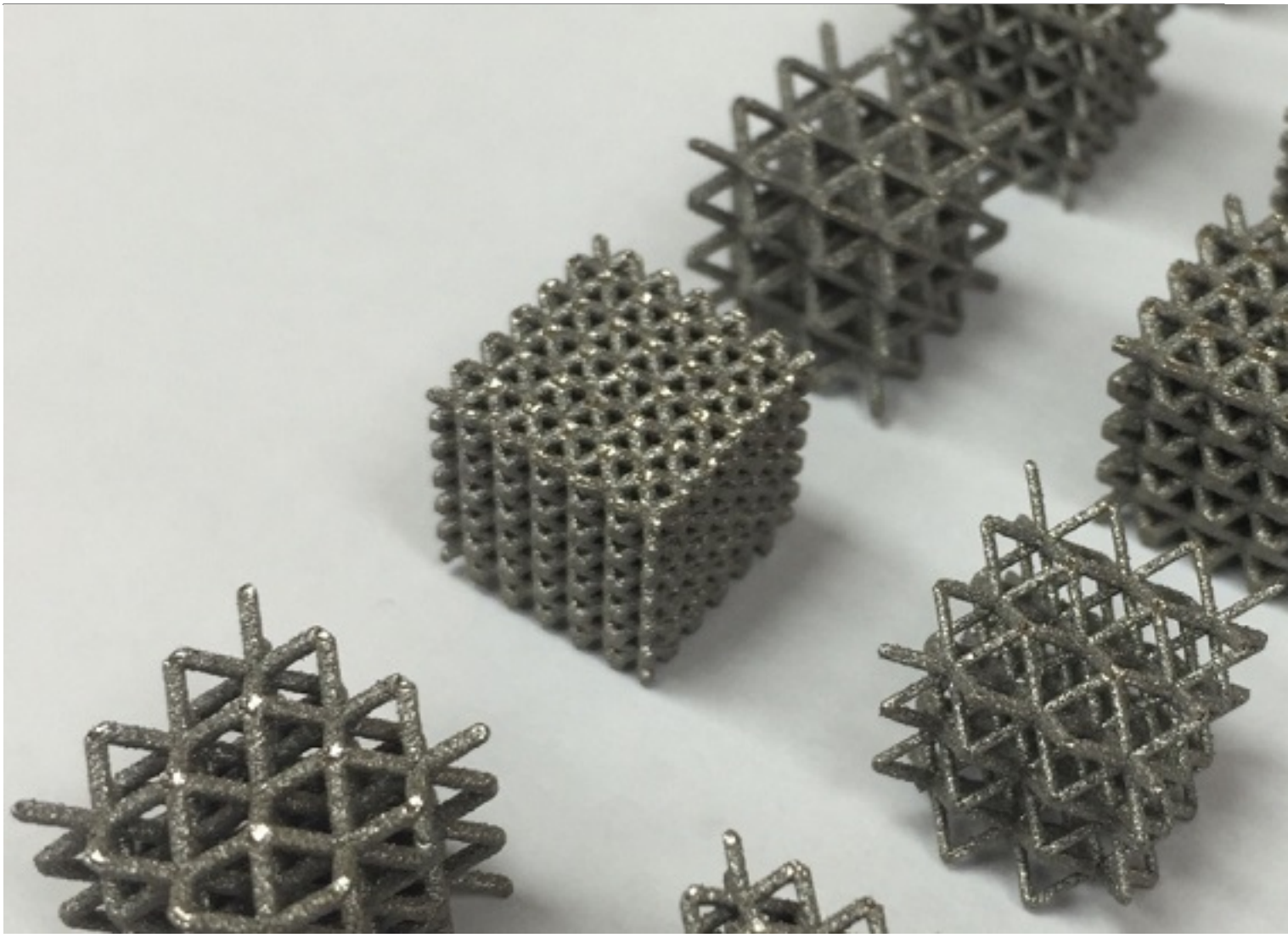
In line with the UMP vision of becoming the best technological university by 2050, the UMP Vice-Chancello
emphasised that the university must have the world-class characteristics and most importantly is to have
autonomous status.

He also said that UMP currently has over 86 percent of lecturers with PhD and in realising the target by 2
field specialists in inventing new technologies and developing an efficient, effective and respected manage
the university.

In increasing the number of collaborations with international universities especially in Germany and China
addition to the partnership with the Karlsruhe University of Applied Science (HsKA) Germany, the collabora
Ltd. in Shenyang, China, as well as educational institutions in China allows students to complete two yea
another year for industrial training in SIASUN.

According to Professor Ir. Dr. Wan Azhar, UMP is clustered under the Malaysian Technological University
capabilities of the country through high-level TVET programmes

Credit to Pekan Review



The Trend of 3D Printing In Higher Level TVET Skill

Additive manufacturing is a recent trend in production processes owing to its many benefits around the g producing parts through the deposition of material in a layer-by-layer technique. It has been the most searc to Frost and Sullivan, the value of additive manufacturing is expected to grow at a rate of 15 percent from in 2025. The industries that are going to contribute 51 percent by 2025 are aerospace, autom

The 2015 Wohler report stated that a lot of new technology had been evolved in material production for m with plastics. SmarTech Markets Publishing reported that metal printing machines sales grew a significant manufacturers turn to three-dimensional (3D) printing.

To accommodate the recent trend, UMP collaborates with Qatar University to secure a grant on Qatar Na RM3.2 million, and UMP obtained RM160,000 from the award. The main objective of the project was to inv lightweight titanium alloy femoral stems that can be manufactured using direct metal laser sintering (DML graded design was utilised to develop a novel pore cellular structure with compressive properties

A 3D finite element model was developed to study and compare the load transfer to the periprosthetic fe offering different stiffness configurations. Also, fatigue and static tests were done on the fabricated design fatigue loadings. Factors affecting the manufacturability and production of the femoral stem through D arthroplasty (THA) is a common hip replacement procedure. Due to material stiffness mismatch between t is possible, and many patients had to redo the surgery because of the excru

As such, novel material design for the hip femoral stem is needed to reduce material stiffness mismatch thr
manufacturing will give the surgeon the freedom to customize the hip femoral implant based on the patient's
project is essential to produce a printing implant for the patient. The current trend shows an increase in th
completed successfully, and it is a stepping stone for UMP to involve in additive

Credit to Pekan Review



UMP Contributes 600 Hand Sanitisers for Frontliners

As an effort to assist the frontliners to curb the spread of the Covid-19 outbreak, Universiti Malaysia Paha
sanitisers: triUMPH (1 L) and hand-carry Germs Free Hand Sanitizer (30 mL). Senior Executive from t
Saharudin Ramli presented the contribution to Senior Private Secretary of Pahang Menteri Besar, Dato' Ha
2020.

Also attended were the General Manager of UMP Technology Sdn. Bhd., Muhamad Nizam Abdul Rashid a
Services Division of the Office of Pahang Menteri Besar in Kuantan. This triUMPH product is the innovation
MNR Multitech Sdn. Bhd., which are the wholly-owned subsidiaries of UMP Holdings

Germs Free Hand Sanitizer is a product of UMP Renal Care Sdn. Bhd., a UMP spin-off company. Acc
formulated according to the standard of the World Health Organization

According to Saharudin, the contribution was one of the social responsibility initiatives to the community du
the frontliners who are working hard to break the virus chain.

In addition to hand sanitisers, UMP Renal Care Sdn. Bhd. Also produces food vinegar-based high-level
surface disinfectant for public housing areas, housing interiors, schools, offices and hospitals. In an effo
tirelessly to fight the outbreak, UMPH has also launched triUMPH Frontliners Fund to collect

Credit to Pekan Review

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