

**THE USE OF ADVANCED BIBLIOMETRIC ANALYSIS IN
RESEARCH PERFORMANCE ASSESSMENT AND
MONITORING AT UNIVERSITI MALAYSIA TERENGGANU**

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**FACULTY OF COMPUTER SCIENCE AND
INFORMATION TECHNOLOGY
UNIVERSITY OF MALAYA
KUALA LUMPUR
2021**

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HARISOM ANIDA BINTI MUSA

**RESEARCH PROJECT SUBMITTED TO THE
FACULTY OF COMPUTER SCIENCE AND
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**FACULTY OF COMPUTER SCIENCE AND
INFORMATION TECHNOLOGY
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ORIGINAL LITERARY WORK DECLARATION

Name of Candidate: Harisom Anida Musa

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Name of Degree: Master of Library and Information Science

Title of Project Paper/Research Report/Dissertation/Thesis ("this Work"):

The Use of Advanced Bibliometric Analysis in Research Performance Assessment and Monitoring at Universiti Malaysia Terengganu.

Field of Study:

Information, Library and Society

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**THE USE OF ADVANCED BIBLIOMETRIC ANALYSIS IN RESEARCH
PERFORMANCE ASSESSMENT AND MONITORING AT UNIVERSITI
MALAYSIA TERENGGANU**

ABSTRACT

Institutions of higher learning worldwide are involved with the world-class university ranking and rating system because it is believed to represent the academic excellence and reputation of the institution. In most university rankings such as Times Higher Education (THE) and QS World University Ranking, research output is one of the important criteria used in making the ranking assessment. Quality of academic programs, research and publication has been at the forefront of the debate on measuring the performance of universities. Realizing that the value of publishing can affect the rating system, then an institution of higher learning uses publication information or bibliometric analysis as an indicator to evaluate the contribution and rating of the institution. The research project therefore provides an overview of advanced bibliometric methods for the assessment of research performances at UMT and for monitoring interdisciplinary scientific development. The study employed a query search on the Universiti Malaysia Terengganu affiliation using Scopus and WoS database for a comprehensive research performance overview within year 2015-2019. Results shown, the massive increment volume of publication among UMT researcher with number of publications 3805 and was publish highest in journal WoS - Q1 (29%) and Scopus - Q2 (25%). Universiti Kebangsaan Malaysia (UKM) is the highest national and institutional collaborating with UMT.

Keywords: research assessment; bibliometrics; citation analysis; university rankings; Universiti Malaysia Terengganu;

**PENGGUNAAN ANALISIS BIBLIOMETRIK LANJUTAN DALAM
PENILAIAN DAN PEMANTAUAN PRESTASI PENYELIDIKAN DI
UNIVERSITI MALAYSIA TERENGGANU**

ABSTRAK

Institusi pengajian tinggi di seluruh dunia terlibat dengan sistem penilaian dan penarafan universiti bertaraf dunia kerana dipercayai mewakili kecemerlangan akademik dan reputasi institusi tersebut. Di kebanyakan peringkat universiti seperti *Times Higher Education (THE)* dan *QS World University Ranking*, hasil penyelidikan adalah salah satu kriteria penting yang digunakan dalam membuat penilaian peringkat. Kualiti program akademik, penyelidikan dan penerbitan telah menjadi barisan hadapan perbincangan untuk mengukur prestasi universiti. Menyedari bahawa nilai penerbitan dapat mempengaruhi sistem penilaian, maka institusi pengajian tinggi menggunakan maklumat penerbitan atau analisis bibliometrik sebagai petunjuk untuk menilai sumbangan dan penilaian institusi tersebut. Oleh itu, kajian ini bertujuan untuk memberikan gambaran keseluruhan kaedah bibliometrik lanjutan untuk penilaian prestasi penyelidikan di UMT dan dijadikan panduan untuk memantau perkembangan saintifik antara disiplin. Kajian ini menggunakan carian kata kunci afiliasi Universiti Malaysia Terengganu dan menggunakan pangkalan data Scopus dan WoS dari tahun 2015-2019. Hasil yang ditunjukkan, terdapat peningkatan ketara dalam jumlah penerbitan di kalangan penyelidik UMT dengan jumlah penerbitan sebanyak 3085 dan diterbitkan dalam impak jurnal WoS - Q1 (29%) dan Scopus - Q2 (25%). Universiti Kebangsaan Malaysia (UKM) merupakan institusi tertinggi yang berkolaborasi dengan UMT.

Keywords: penilaian penyelidikan; bibliometrik; analisis sitasi; penarafan universiti; Universiti Malaysia Terengganu;