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Profile

Prof. Titus Bitek Watmon (PhD) is an experienced engineer and academic with a broad background in practical work, management, and teaching from significant roles in industry and academia. His career includes working as a quality engineer at Senior Tube in Olbury, West Midlands (1998-2000), and as a project engineer at Europressings Limited, Cardiff, UK. At Europressings, he developed real-time fault monitoring systems using Acoustic Emissions to detect debris, broken punches, and cracked dies on press tools. Titus has proven skills in solving complex engineering issues, leading multidisciplinary teams, and completing projects on time and within budget. He has supervised 15 postgraduate dissertations and taught manufacturing strategy, operations management, statistics, engineering metrology, CAD/CAM, quantitative methods, engineering economics, and earthmoving machinery at Kyambogo University (2004–2021) and at Busitema University, where he is currently a member of the Department of Agricultural Mechanisation and Irrigation Engineering. He also served as a research associate at Cardiff University from 2000 to 2002. His research has been published in peer-reviewed journals, presented at international conferences, included in conference proceedings, featured in a book chapter with the American Institute of Physics, and in the textbook "*Metal Cutting: Performance Characteristics of a Surface Modified Tool*" (ISBN: 978-3-659-96713-0), which he authored. Furthermore, he has served on editorial boards and received a $90,000 World Bank grant to deliver specialised industrial training in Uganda's steel-rolling sector.

He served as chair of the Nakawa Vocational Training Institute's board of governors for three years during community outreach. Following the institute's transition to college status, he served as chair of the Nakawa Vocational Training College's first governing council for 4 years.

Motivation Statement

Prof. Titus Bitek Watmon is committed to enhancing engineering education and practice by integrating theoretical knowledge with real-world applications. He emphasizes that solutions should be practical, sustainable, and aligned with societal needs. Drawing on his experience in both academia and industry, he seeks to bridge the gap between classroom learning and the practical skills required in the workplace, preparing students for contemporary challenges. His motivation includes developing human capacity through mentoring, supervising postgraduate research, and training technical staff. Supervising teams and apprentices has deepened his dedication to knowledge transfer, skill development, and encouraging innovation. Ultimately, he aims for excellence across engineering education, research, and practice, with a focus on empowering individuals, strengthening institutions, and supporting sustainable development.

PUBLICATIONS

Book Chapter / Text Book

Watmon T B., (2010), Coated Tools with Crater-Like Surface Structures Have Enhanced Performance (AIP Proceedings, 2010), p.279. ISBN: 978-0-7354-0839-5 /ISSN: 0094-243X. https://doi.org/10.1063/1.3510554

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Musaazi, P., & Watmon, T. B. (2016). *Project Dissertation Writing Guidelines for Researchers*. Kyambogo University, LAP LAMBERT Academic Publishing, ISBN-13 : 978-3659978142

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Journal and Conference Proceedings

Watmon, T.B., and Anthony C. Ijhe (2010) *Coating Cutting Tools with Hard Substance Lowers Friction Coefficient and Improves Tool Life* -A Review, Proceedings of the International MultiConference of Engineers and Computer Scientists 2010 Vol III, IMECS 2010, Hong Kong. ISBN: 978-988-18210-5-8 / ISSN: 2078-0966 (Online)

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Ampumuza, G. J., Okaka, W., Obanda, P. W., & Watmon, T. B. (2020), Assessing Decentralized Contract Life Cycle Management Issues and Challenges**,** *Journal of Human, Earth and Future*, 1(1), 20–29, https://doi.org/10.28991/HEF-2020-01-01-03

Watmon, T. B., Niringiyimana, E., Ologe DH, Engiro, M., Kasule, B., Guleson, AT.,Zirete D., Iramu, AE., Ogen, M & Ogire, J., (2026), Nutrient Removal Efficiency of Constructed Wetlands Planted with Tropical Macrophytes: *Implications for Decentralised Wastewater Treatment***,** *(Preprint – Research Square)*, https://doi.org/10.21203/rs.3.rs-8885085/v1

Anthony .C. Ijeh, David .S. Preston, Chris .O. Imafidon, Titus .B. Watmon, Annette .O. Uwaechie, Martin Cooke, Peter Lancaster, Andy Widdess, Mojisola Soremekun, (2010), *Geofencing Security Engineering,* Proceedings of the International MultiConference of Engineers and Computer Scientists 2010 Vol III, IMECS 2010, Hong Kong. ISBN: 978-988-18210-5-8 / ISSN: 2078-0966 (Online)

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Anthony C. Ijeh, David S. Preston, Chris O. Imafidon, Titus B. Watmon, Johnnes Arreymbi, Annette O. Uwaechie, *Data for Geofencing Security Strategy Model,* Proceedings of the International MultiConference of Engineers and Computer Scientists 2010 Vol III, IMECS 2010, Hong Kong. ISBN: 978-988-18210-5-8 / ISSN: 2078-0966 (Online)

Watmon, T. B., Xiao, D., & Okello-Obeli, P. (2016), Finite element analysis of orthogonal metal machining**.** *International Journal of Scientific Research and Innovative Technology (IJSRIT)*, February 2016.

Watmon, T. B., & Xiao, D. (2016), Coated Tool Inserts with Crater-Like Surface Topography Last Longer**,** *International Journal of Scientific Research and Innovative Technology*, 3(2). https://doi.org//10.60682/74ys-3r91

Watmon, T. B., Xiao, D., & Kagimu, T (2016), Performance of Coated Tool Having Undulating Surface Structures, *IJSRIT* Vol. 3(2)**.**

Watmon, T. B., Okello-Obeli, P., & Otim, J. F. (2016). *Gouging–Abrasive Wear Conditions in Turning Operations*. Journal of Scientific and Engineering Research, 3(5), 166–173. ISSN: 2394-2630.