

## Professor Akinlabi, Esther Titilayo

### A. Educational qualifications

- Dec. 2018 University of Johannesburg, Johannesburg, South Africa.
  - **PGD LL.**- Postgraduate Diploma in Labour Law
- April 2011 Nelson Mandela University, Port Elizabeth, South Africa. (Formerly Nelson Mandela Metropolitan University, Port Elizabeth, South Africa).
  - **PhD.** - Mechanical Engineering.
- July 2003 University of Port Harcourt, Port Harcourt, Rivers State, Nigeria.
  - **M. Eng.** - Mechanical Engineering.
- Dec. 1997 Federal University of Technology, Akure, Ondo State, Nigeria.
  - **B. Eng.** – Agricultural Engineering (*Distinction – 80.2%*).  
(*Recipient of the best graduating student award*)

### Technical Expertise and skills

- Additive Manufacturing (AM) & 3D Printing
- Welding processes: Friction Stir Welding and Processing
- Metal Matrix and Fiber Crimp Composites
- Characterizations and Mechanical testing of Metallic and Non-metallic Materials
- Design and Process Optimization of Energy systems, renewable energy, biogas production and maintenance, mechanical and manufacturing systems
- Advanced coating technologies, thin films, and surface engineering
- MS Project, Office 365 and Power BI
- Utilizing Artificial Intelligence as a Practical Tool
- Fundamentals of Machine Learning and Artificial Intelligence!

### Professional Development Skills

- Leadership and Administration
- Excellent verbal and written communication
- Presentation and Training Skill
- Workshop facilitation
- Mentorship and Coaching

### Consultancy services completed

- South Africa Agency for Science and Technology Advancement (SAASTA)
- Vikinduku Engineering and Projects
- Siemens South Africa

### Fellowships, Recognitions, Memberships and awards

- Chartered Engineer, United Kingdom (C.Eng.).
- Professional Engineer, South Africa (Pr. Eng.).
- Fellow, African Academy of Science (FAAS).
- Fellow, Nigerian Academy of Science (FAS).
- Member, Institution of Mechanical Engineers, United Kingdom (MIMechE).
- Member, South African Institution of Mechanical Engineers (MSAIMechE).
- Member, American Society of Mechanical Engineers (ASME), USA. (2017 to date).
- Organisation for Women in Science for the Developing World (OWSD) 2018.
- National award: Winner of the 2016 Women in Science Awards, South Africa.

### Appointments held (in reverse chronological order):

1<sup>st</sup> April 2025 – till date

Professor of Mechanical Engineering  
Department of Mechanical Engineering  
Walter Scott Jr. College of Engineering  
Colorado State University  
Fort Collins  
(Alamosa Campus)

### **Key Performance Areas**

1. Teaching
2. Research
3. Administration

### **1<sup>st</sup> August 2022 – 31<sup>st</sup> March 2025**

Professor of Mechanical Engineering & Deputy Faculty Pro Vice Chancellor,  
(Research and Knowledge Exchange)  
Faculty of Engineering and Environment,  
Northumbria University, Newcastle, United Kingdom.

### **Key Performance Areas**

1. Positively promote and represented the Faculty and University internally and externally, building and maintaining strategic networks with organizations within and beyond Higher Education.
2. Responsible, with other members of the Faculty Executive, for the overall strategic leadership and delivery of Vision 2030, the University's Strategy and supporting plans.
3. Responsible for oversight and driving the performance of the faculty, including all aspects of research and knowledge exchange, including the quality of research outputs and income generation, staff engagement and performance.
4. Responsible for Equality, Diversity, and Inclusion within the Faculty.
5. Provided oversight for Health, Safety, Risk assessments, Mitigations and Well-being within the Faculty.
6. Responsible for the provision of strategic leadership for workforce planning to ensure that the Faculty workforce could deliver ambitious research targets.
7. Responsible for embedding University policies, procedures and practices in areas such as financial management, budget, workforce planning, academic recruitment, and workload allocation.
8. Alongside the Faculty Pro Vice-Chancellor (FPVC), led, supported, and mentored colleagues towards achieving the vision for the faculty's academic departments as well as promoting cross University collaborations.
9. Led and promoted cross-departmental working and led as appropriate cross-faculty and cross-University projects and initiatives in line with the Strategy and Vision 2030.
10. Worked with the Heads of Department and reported to the FPVC to support the management of the long-term financial sustainability of the faculty, adopting a commercial approach and appropriate financial management, consistent with the University's commitment to quality.
11. Worked with the FPVC, implemented, and evaluated Departmental plans which align with the faculty plans.
12. Provided oversight on workforce development and planning initiatives, including research and analysis, socio-economic and demographic trends, employment market, business opportunities and continuous improvement initiatives, with support from relevant University Services.
13. Chair relevant Faculty, recruitment, University groups and various committees.

### **13<sup>th</sup> July 2020 – 31<sup>st</sup> July 2022**

#### **Director**

Pan African University for Life and Earth Sciences  
Ibadan,

Nigeria

**Employer:** African Union Commission (AUC), Addis Ababa, Ethiopia

**Key Performance Areas**

1. Played a leadership role in liaising between the Host country, Host University, the PAU Rectorate, and the African Union Commission (AUC) to ensure effective coordination between Coordinators of all Programme departments and centres under the institute.
2. Presided over the monthly Project Management Team and the Coordinators of the Institute to draw up reports of the Institute for consideration and decision by the PAU Council.
3. Prepared and submitted activity reports to the Rectorate on the work of the institute regularly and generated annual reports.
4. Implemented the PAU multi-annual strategic development plan at the level of the institute and programme departments.
5. Provided oversight and leadership in the research activities and publications of the institute.
6. Prepared the budgets and the financial reports of the institute.
7. Ensured timely release of funds from the African Union Commission and served as the authorizing officer for the institute.
8. With the approval of the Rector, signed agreements on behalf of the institute.
9. Ensured accurate records of the academic progress of the students and made recommendations to the PAU Senate for appropriate actions where necessary.
10. Provided overall oversight and leadership in the activities of the examiners including the appointment of Boards of Examiners for postgraduate theses, dissertations, and seminars.
11. Supervised the planning and the development of academic programs, policies procedures and guidelines.
12. Provided overall oversight and leadership in the Teaching and Learning activities of the Institute – Conducted evaluation and review of all academic programs and the curriculum.
13. Liaised with national, regional, continental, and international accreditation and quality assurance agencies/bodies.
14. Coordinated the recruitment processes of hiring faculty and support staff members.
15. Participated as a member of the PAU Council and Senate.

**August 2018 to 31<sup>st</sup> May 2020: Full Professor**

Department of Mechanical Engineering Science,  
University of Johannesburg

**Key Performance Areas: Teaching, Research and Administration**

**May 2017 – August 2018** - University of Johannesburg, Auckland Park Kingsway Campus, Auckland Park Kingsway Campus, Johannesburg

**Vice Dean: Teaching and Learning, Faculty of Engineering, and the Built Environment.**

**Key Performance Areas as Vice Dean:**

1. Responsible for continuous quality Assurance of all fourteen undergraduate programmes offered within the multi-campus faculty.
2. Provided oversight on accreditations – accreditations of 14 programs in the faculty were conducted with successful outcomes during my tenure.
3. Strategically managed the cohort analysis, throughput, dropout, and graduation rate.
4. Provided oversight on scholarship of Teaching and Learning in Engineering Education.
5. Provided oversight on enrolment planning and management.
6. Provided oversight on First Year and Senior Year Experiences during the Orientation week.
7. Provided oversight on undergraduate Open days.
8. Provided oversight on the use of teaching and learning platform/interface - Blackboard.

9. Provided oversight on the use of handheld devices, e-books and the library.
10. Managed students' mobility.
11. Provided oversight on the management of the online platforms.
12. Provided oversight on improving instruction and enhancing student experiences.
13. Responsible for budgeting and financial management of expenditures relating to Teaching and Learning portfolio.
14. Provided oversight on curriculum review and development.

**May 2016 – 31<sup>st</sup> May 2020** University of Johannesburg, Auckland Park Kingsway Campus, Auckland Park Kingsway Campus, Johannesburg.

**Full Professor, Department of Mechanical Engineering Science**

**Activities: Teaching, Research and Administration.**

**January 2015 – April 2017** University of Johannesburg, Auckland Park Kingsway Campus, Auckland Park, Johannesburg.

**Head of Department- Department of Mechanical Engineering Science**

**Key Performance Areas as HOD:**

1. Strategically provided general administration of the Department.
2. Provided oversight on the general operations of the department.
3. Provided oversight on quality assurance, curriculum review and programme accreditation.
4. Responsible for budgets and financial management.
5. Provided oversight on student planning and enrolment.
6. Provided oversight on research productivity and submission of funding proposals.
7. Responsible for managing people – academic, technical, and administrative personnel and conflict resolutions.
8. Coordinated and managed vendors and suppliers.
9. Responsible for general infrastructure and facility management of the department – laboratories, lecture venues and equipment.

**June 2014 – 30<sup>th</sup> April 2016**, University of Johannesburg, Auckland Park Kingsway Campus, Auckland Park, Johannesburg.

**Associate Professor, Department of Mechanical Engineering Science**

**Activities: Teaching, Research and Administration.**

**Nov. 2011 – May 2014**, University of Johannesburg, Auckland Park Kingsway Campus, Auckland Park, Johannesburg.

**Senior Lecturer, Department of Mechanical Engineering Science**

**Activities: Teaching, Research and Administration.**

**Nov. 2010 – Nov 2011**, University of Johannesburg, Auckland Park Kingsway Campus, Auckland Park, Johannesburg

**Lecturer, Department of Mechanical Engineering Science**

**Activities: Teaching, Research and Administration.**

## **B. Research footprints**

### **i. Research profiles**

Scopus ID: 48561117900

>700 Publications on Scopus

H-Index = 44

Google Scholar, H-Index = 57

ORCID ID: <http://orcid.org/0000-0002-9680-5510>

Google Scholar link: <https://scholar.google.co.za/citations?user=873wuPYAAAAJ&hl=en>

**ii. Mentorship, Postdoctoral Fellows hosted and Supervision of Postgraduate students**

Research Associates hosted: 6

Postdoctoral fellows hosted: 15

Postgraduate students supervised to completion:

Doctorate 42

Masters: 44

Total: 86

**Registered Doctorate Students (Current): 7**

**iii. Supervision of Final Year Research and Design Projects:**

From the 2011 academic year till 31<sup>st</sup> May 2020, I supervised an average of twelve (12) final-year Research Investigations and Design Projects on an annual basis.

**iv. International inbound students hosted: >20**

**C. Academic Citizenship**

**i. Reviewer's activities and appointments**

Over twenty reputable journals

**ii. Invited / Keynote speaker >50 (Nationally and Internationally)**

**iii. Conferences/Workshops Attended/organized: >50**

**iv. Postgraduate external examinations conducted:**

a. Master's dissertations: Over 20

b. PhD Theses: Over 40

**v. International Undergraduate External Examination**

Appointed as the international external examiner to Mechanical Engineering Department, Faculty of Engineering, University of Zambia, Lusaka, Zambia. 2015 – 2017.

vi. Served as an expert for checking integrity of patent applications submitted to the Technology Transfer Office (TTO) at the University of Johannesburg, South Africa from 2014 – 2020.

vii. Served on several panels for proposals and calls for research funding in South Africa, United Kingdom, Switzerland, and many European countries.

viii. Board membership of the following:

a. Women Leadership Group at the University of Johannesburg, South Africa, August 2020 till date.

b. St Barnabas Secondary School, Kabba, Kogi State, Nigeria. July 2020 till date.

c. Green Skills training, Northumbria University, United Kingdom from November 2023 to March 2025.

**D. Teaching and learning**

- Taught various courses in undergraduate and master's levels in the field of Mechanical and Materials Engineering in the last 20 years. In particular: Strength of Materials, Manufacturing and Materials Science, Additive Manufacturing.

- **Academic curriculum development**

Developed curriculum for College of Science, Engineering and Technology, School of Engineering, Department of Mechanical and Industrial Engineering, University of South Africa (UNISA) 2011 and 2016.

**Modules developed for online delivery:**

Mechanical Manufacturing Engineering I

Mechanical Manufacturing Engineering II

*(Resources developed include study guides, study materials, examination question papers and memoranda; and tutorials).*

**E. Leadership and/or management roles**

- Programme Director, ASU-CSU Mechanical Engineering Partnership Programme. 1<sup>st</sup> July 2025 – till date.
- Deputy Faculty Pro Vice Chancellor for Research and Knowledge Exchange August 2022 – March 2025).
- Director, Pan African University Life and Earth Sciences Institute, Ibadan, Nigeria. July 2020 – July 2022.
- Vice Dean for Teaching and Learning, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa. 1 May 2017 to 31 August 2018.
- Head of Department, Department of Mechanical Engineering Science, University of Johannesburg. 1<sup>st</sup> January 2015 – April 2017.
- Research Team Leader, Modern and Advanced Manufacturing Systems Group. Focusing on Friction Stir Welding, Laser Material Processing and reconfiguration of manufacturing Systems, Department of Mechanical Engineering Science, UJ. January 2011 – till date. (Currently comprises of over sixty members – Postdoctoral fellows, Masters, and Doctorate Candidates)

**F. Outreach and public engagements**

1. STEM advocacies – Over many years. Delivering seminars and workshops.
2. NUSTEM Ambassador, Northumbria University, Newcastle Upon Tyne. September 2022 – March 2025.
3. Coordinator of Young Adult Connect Group: Westgate Baptist Church, Newcastle Upon Tyne. September 2023 – March 2025.
4. Member of Governance Board, Alumni Association of St. Barnabas Secondary School, Kabba, Kogi State Nigeria. May 2020 – till date.
5. Member of Advisory Board, University of Johannesburg Women leadership programme. July 2020 – till date.
6. Matron of PAULESI Ladies Forum, Ibadan Nigeria. August 2020 – till date.
7. Team Leader for Engenius programme in collaboration with the Engineering Council of South Africa, 2013 to 2020.
8. Mentor to Student body of Women in Engineering and the Built Environment, UJ. February 2012 – 31<sup>st</sup> May 2020.

**G. Details of grants awarded**

**Grants total > \$1,000 000.00**

1. British Council, UK – Kenya Partnerships: Learning and Design Labs. £40 000. April 2025.
2. British Council-International Association of Universities Consolidation Grant of £50 000, a consortium of Investigators from PAULESI, CCHUB, De Montfort University, UK and Northumbria University. January 2023. Co-PI
3. British Council-International Association of Universities Research Grant £60 000, a consortium of Investigators from PAULESI, CCHUB and De Montfort University, UK. September 2021. Co-PI.
4. Association of Commonwealth Universities, Wighton Fellow. £5 000.00 August 2019. PI

5. Research Grant of R324 600 awarded by the Technology Innovation Agency (TIA) of South Africa running from August 2019 to July 2021. PI
6. Research Grant of R884 150 SA (NRF) / RUSSIA (RFBR) Joint Science and Technology Research Collaboration funding running from January 2019 to December 2021. (Principal Investigator).
7. Research Grant of R999 500 Japan Society for the Promotion of Science / SA (NRF) Research Cooperation Programme funding running from January 2019 to December 2020. (Principal Investigator).
8. Research Grant of R200 000 for the NRF-sponsored Bilateral SA-France Research Project “Briquettes solar drying” running from January 2019 – December 2020. (Principal Investigator).
9. Department of Higher Education and Training (DHET) University Capacity Development Programme (UCDP) Mobility grant June 2018. R395 119. (Principal Investigator).
10. Research Grant of R598 500 for the NRF-sponsored Bilateral SA-Namibia Research Project “Laser processing of composites” running from 2017 – 2019. R199 500 per annum. (Principal Investigator)
11. Research Grant of R200 000 for the NRF-sponsored Bilateral SA-France Research Project “Briquettes solar drying” running from January 2017 – December 2018. (Principal Investigator)
12. Co-participation with Prof Hong Dong and Prof Keith Carter of the University of Leicester, UK. Grant awarded by Royal Academy of Engineering, UK for Industry-Academic Partnership Programme (Total award cost is £99 365 for two years – *This amount is not accounted for in the total grant awards as this fund was domiciled in the University of Leicester, UK*). (April 2017- March 2019).
13. \$3000 for Co-Participation with Prof Subha Kumpaty of MSOE, USA. Grant award by the National Science Foundation (NSF), USA on Laser additive manufacturing of Titanium-based composites. April 2017.
14. R1 105 000 Collaborative Postgraduate Training fund awarded by the National Research Foundation for three years consecutively (2017-2019). (Principal Investigator).
15. R35 000 Knowledge Interchange Collaboration awarded by the National Research Foundation, November 2016. (Principal Investigator).
16. \$4000 for Co-Participation with Prof Subha Kumpaty of MSOE, USA. Grant award by the National Science Foundation (NSF), USA on Laser additive manufacturing of Titanium-based composites. March 2016.
17. R300 000 University Research Committee (URC) strategic research funding. March 2016. (Principal Investigator)
18. Incentive fund of R40 000 awarded by National Research Foundation to rated researchers. January 2016. (Principal Investigator).
19. IRG - UK / South Africa Researcher Links Grants for Travel and Hosting of Scientific Events (NRF). R27, 380.00. November 2015 (Principal Investigator).
20. UJ Emerging Research Area Programme for Modern and Advanced Manufacturing Systems. R195 000 for research equipment. August 2015. (Principal Investigator).
21. UJ Emerging Research Area Programme for Modern and Advanced Manufacturing Systems. R450 000 per annum for three consecutive years (2015, 2016 and 2017). Principal investigator.
22. \$3000 for Co-Participation with Prof Subha Kumpaty of MSOE, USA. Grant award by the National Science Foundation (NSF), USA on Laser additive manufacturing of Titanium-based composites. February 2015.
23. Research Grant of R 80 000.00 from the Tertiary Education Support Programme (TESP) of Eskom, South Africa for “Friction Stir Welding of Aluminium to Copper” running between 2015-2016 (Principal Investigator).
24. Incentive fund of R40 000 awarded by National Research Foundation to rated researchers. January 2015. (Principal Investigator).
25. Research Grant of R 195 000.00 from CSIR – NLC for “Laser-based additive manufacturing of functionally graded titanium metal matrix composites” running for 2015 (Principal Investigator).
26. NRF International Research Grant for travel: R25 000.00. October 2014 (Principal Applicant).

27. NRF grant for equipment related travel and training grants: R48 813.00 August 2014 (Principal Applicant).
28. University of Johannesburg research grant (Running expenses): R110 000.00 “Friction Stir Welding”, May 2014 (Principal Investigator).
29. Seed fund of R250 000.00 awarded by the Technology Innovation Agency (TIA) South Africa for prototype development of landing gears to be manufactured from Titanium metal matrix composites. March 2014 (Principal Investigator).
30. Incentive fund of R40 000 awarded by National Research Foundation to rated researchers. March 2014. (Principal Investigator).
31. Research Grant of R120 000.00 from the Tertiary Education Support Programme (TESP) of Eskom, South Africa for “Friction Stir Welding of Aluminium to Copper” running between 2014-2015 (Principal Investigator).
32. Research Grant of R195 000.00 from CSIR – NLC for “Laser-based additive manufacturing of functionally graded titanium metal matrix composites” running for 2014 (Principal Investigator).
33. Research Grant of R155 000.00 from CSIR – NLC for “Laser-based additive manufacturing of functionally graded titanium metal matrix composites” running between 2013 (Principal Investigator).
34. Research Grant of R216 000.00 from CSIR – NLC for “Laser-based additive manufacturing of functionally graded titanium metal matrix composites” running between 2012 (Principal Investigator).
35. Research Grant of R199 200.00 for the NRF-sponsored Bilateral SA-Zambia Research Project “Laser processing of titanium alloys” running between 2012-13 (Principal Investigator).
36. Research Grant of R150 000.00 from the Tertiary Education Support Programme (TESP) of Eskom, South Africa for “Friction Stir Welding of Aluminium to Copper” running between 2012-2013. (Principal Investigator).
37. Research Grant of R150 000.00 from the Tertiary Education Support Programme (TESP) of Eskom, South Africa for “Friction Stir Welding of Aluminium to Copper” running between 2011-2012. (Principal Investigator).
38. University of Johannesburg research grant (Running expenses): R80 000.00 “Friction Stir Welding”, March 2013 (Principal Investigator).
39. University of Johannesburg equipment research grant: R150 000.00 “Friction Stir Welding”, March 2013. (Principal Investigator).
40. Travel grant R15 000.00- Knowledge Interchange Collaboration travel grant awarded by the National Research Foundation in June 2011. (Principal Investigator).
41. University of Johannesburg research grant: R80 000.00 “Friction Stir Welding”, March 2012 (Principal Investigator).
42. University of Johannesburg equipment research grant: R150 000.00 “Friction Stir Welding”, March 2012 (Principal Investigator).
43. University of Johannesburg research grant R120 000.00 “Friction Stir Welding”, March 2011 (Principal Investigator).

## **H Research Publications**

### **(a). Patents**

1. Rasheedat M. Mahamood, **Esther T. Akinlabi**, Mukul Shukla and Sisa Pityana. SA Patent No. 2014/03117. Process for manufacture of Titanium-based composites. May 2014.
2. Kyle Elsmore, **Esther T. Akinlabi**, Daniel M. Madyira and Stephen A. Akinlabi. Circumferential Tensile testing jig design. Provisional Patent filled. SA Patent No. 2014/06600- September 2014.
3. Segun Ibitoye, Rasheedat Mahamood, Tien-Chien Jen, **Esther T. Akinlabi**. Nigeria Patent No. NG/P/2022/194. Biomass densification machine. June 2022.
4. Segun Ibitoye, Rasheedat Mahamood, Tien-Chien Jen, Isaac Adigun, Toyin Raheem and **Esther T. Akinlabi**. Nigeria Patent No. NG/P/2022/196. Method and apparatus for Biomass Torrefaction.

## (b). Publications

### Authored/Co-authored Books:

1. Rasheedat M. Mahamood and **Esther T. Akinlabi**. Functionally Graded Materials. Springer Publishers. 978-3-319-53755-9. 2017.
2. **Esther Titilayo Akinlabi**, Kwame Anane-Fenin and Damenortey Richard Akwada, Bamboo: a multipurpose plant. 978-3-319-56808-9. 2017.
3. Rasheedat M. Mahamood, **Esther T. Akinlabi**. Advanced Noncontact Cutting and Joining Technologies: Micro- and Nano-manufacturing. Springer Publishers. 978-3-319-75117-7. 2018.
4. Mukuna Patrick Mubiayi, Mamookho Elizabeth Makhatha, **Esther Titilayo Akinlabi**. Current Trends in Friction Stir Welding (FSW) and Friction Stir Spot Welding (FSSW). Springer Publishers. 978-3-319-92749-7. 2018.
5. **Esther Titilayo Akinlabi**, Rasheedat Modupe Mahamood, Solid-state welding: Friction and friction stir welding process. Springer Publishers, 978-3-030-37015-2. 2020.
6. Moses Eterigho Emeterere and **Esther Titilayo Akinlabi**, Introduction to Environmental Data Analysis and Modeling. Springer Nature Switzerland AG. 978-3-030-36206-5. 2020.
7. Mwema Frederick Madaraka and **Akinlabi, Esther Titilayo**. Fused Deposition Modeling: Strategies for quality enhancement. Springer publishers. 978-3-030-48259-6, June 2020.
8. FM Mwema, **ET Akinlabi**, OP Oladijo. Sputtering Thin Films-Theory and fractal descriptions. CRC, Press, Taylor & Francis, 9780367492564 June 2021.

### Edited books/Proceedings:

1. **Esther Titilayo Akinlabi**, Rasheedat Modupe Mahamood and Stephen Akinwale Akinlabi. Advanced Manufacturing Techniques Using Laser Material Processing. IGI Publishers. ISBN13: 9781522503293. April 2016.
2. Tien-Chien Jen, Wilson Chiu and **Esther T Akinlabi**, Proceedings of International Conference on Sustainable Materials Processing and Manufacturing (SMPM 2017) held at Kruger National Park, South Africa. ISBN: 9781510834972, published by Elsevier Proceedia Manufacturing.
3. Tien-Chien Jen, **Esther T Akinlabi**, Peter Olubambi and Clinton Aigbavboa. Proceedings of International Conference on Sustainable Materials Processing and Manufacturing (SMPM 2019) held at the Sun City, South Africa. ISBN: 9781510834972, published by Elsevier Proceedia Manufacturing.

### Journal Papers – Selected recent papers (over 500 journal papers published)

1. Optimisation of printing parameters of fused filament fabrication and uniaxial compression failure analysis for four-point star shaped structures. Job Wambua, Fredrick Mwema, Stephen Akinlabi, Martin Birkett, Ben Xu, Wai Lok Woo, Mike Taverne, Daniel Ho and **Esther Akinlabi**, 20 Mar 2024, In: Rapid Prototyping Journal. DOI: 10.1108/rpj-11-2023-0415.
2. A predictive modelling strategy for warpage and shrinkage defects in plastic injection molding using fuzzy logic and pattern search optimization, Otieno, S., Wambua, J., Mwema, F., Mharakurwa, E., Jen, T., **Akinlabi, E.** 9 Mar 2024, In: Journal of Intelligent Manufacturing
3. Circular Economy Based Model for End-of-Life Tire Management in Emerging Economies, Ishola, F., Dunmade, I., Joseph, O., Okeniyi, J., **Akinlabi, E.** 7 Feb 2024, Sustainable Engineering, Cham, Switzerland, Springer
4. Effect of tool traverse speed on high strength structural AA6092/17.5 SiCp-T6 AMC friction stir welding, Acharya, U., Banik, A., Mwema, F., Akinlabi, S., **Akinlabi, E.**, Roy, B. 1 Mar 2024, In: Materials Today Communications
5. Enhanced Biogas Production from Human and Agro-Waste: Waste to Wealth Initiative, Emeterere, M., Oniha, M., Chikwendu, L., Akinyosoye, A., **Akinlabi, E.** 1 Jan 2024, In: Waste and Biomass Valorization
6. Enhancing joint performance in friction stir welding through tailored double-butt-lap geometry, Acharya, U., Choudhury, S., Sethi, D., **Akinlabi, E.**, Roy, B. 26 Feb 2024, In: Welding in the World

7. Evaluation of crude watermelon oil as lubricant in cylindrical turning of AISI 1525 steel employing Taguchi and grey relational analyses techniques, Kazeem, R., Fadare, D., Akande, I., Jen, T., Akinlabi, S., **Akinlabi, E.** 15 Feb 2024, In: Heliyon
8. Evaluation of Formulated Jatropha Oil as Cooling and Lubricating Cutting Fluids in Turning of AISI 1525 Steel Employing Taguchi-TOPSIS Technique, Kazeem, R., Jen, T., Ikumapayi, O., **Akinlabi, E.** 9 Apr 2024, In: Journal of Bio- and Tribo-Corrosion
9. Multi-response optimization of process parameters for sustainable machining of AISI 1018 steel with palm kernel oil-assisted minimum quantity lubrication technique, Kazeem, R., Aregbesola, D., Jen, T., Akande, I., Akinlabi, S., **Akinlabi, E.** 11 Jan 2024, In: International Journal on Interactive Design and Manufacturing
10. Surface morphological characterization of rf-magnetron sputtering developed inconel coated titanium, Babaremu, K., Jen, T., Oladijo, O., **Akinlabi, E.** 2024, In: Engineering Solid Mechanics
11. UIQuad I: A Low-cost and Modular Surveillance Quadcopter, Aina, E., Baiyeroju, D., Fadare, D., E. Fadare, D., Falana, A., Kazeem, R., Ikumapayi, O., Ogedengbe, T., A. Fadare, D., Jen, T., **Akinlabi, E.** 9 Jan 2024, In: International Journal of Mechanical Engineering and Robotics Research
12. An overview of biomass solid fuels: Biomass sources, processing methods, and morphological and microstructural properties, Ibitoye, S., Mahamood, R., Jen, T., Loha, C., **Akinlabi, E.** 1 Nov 2023, In: Journal of Bioresources and Bioproducts.