

Olanipekun, A. T., Oluwabunmi, K. E., Abioye, A. A., Rominiyi, A. L., Balogun, O. P., Sanusi, K. O. and Faola, A. E. (2017) Inventing a New Africa through Discovery and Innovations in Computational Material Science. *European Journal of Applied Engineering and Scientific Research*, 5(2), pp. 14-19.

Penrose, O. and Fife, P. C. (1990) Thermodynamically consistent models of phase-field type for the kinetic of phase transitions. *Physica D: Nonlinear Phenomena*, 43(1), pp. 44-62.

Biographies

Olanipekun Ayorinde, currently having his PhD research at the University of Johannesburg, Mechanical Engineering Department. He has a lot of experience in computational material science analysis, phase field modeling, Finite Element Analysis, Data science, Quantum Machine Learning. He also has worked for 7 years' in an Engineering research institute, where he learnt most of his computational skills.

Timothy Laseinde has a PhD in Mechanical Engineering. He currently holds a position of Senior lecturer at Mechanical and Industrial Engineering Department, University of Johannesburg, South Africa. His research interests include manufacturing, simulation, optimization, Virtual learning, Fourth Industrial Revolution, and Machine Design, a registered member of "The south African Institution of Mechanical Engineering (SAIMechE)".

Madindwa Mashinini Currently sits as the Head of Department of Mechanical and Industrial Engineering Department, University of Johannesburg. He has a lot of experience in material testing and structural evaluation (macro and micro analysis). Also, his research interests are in material processing and manufacturing techniques. Material processing is on friction stir processing and laser beam welding of light metals which include but not limited to Titanium and Aluminium alloys. He has presented his research work both locally and in an international conference, also published in various ISI journals. A registered member of "The south African Institution of Mechanical Engineering (SAIMechE)".