

OLUKAYODE I. IMOLE



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- Education**
- Doctor of Philosophy** March 2014
Discrete element simulations and experiments: towards applications for cohesive powders
University of Twente, The Netherlands
- Master of Science**, Quality, Safety and Environment March 2010
Otto-von-Guericke University, Magdeburg, Germany
Thesis: Investigation of the disintegration process during the sol-gel synthesis of titania nanoparticles
- Bachelor of Engineering**, Mechanical Engineering December 2005
University of Ado-Ekiti, Nigeria
Thesis: Experimental study of steady natural convection in a rectangular enclosure.
- Work experience**
- Post-doctoral Researcher**, Multi-Scale Mechanics, University of Twente April. '14 – present
DEM, micro-macro transition and FEA Implementation for packings
- Marie Curie PhD Researcher, University of Twente Aug. '10 – March. '14
- Secondment to Nestle Product Technology Center, Orbe, Switzerland March–May. '11, Feb. '12
Flowability, oedometric and application tests on cohesive food powders
- KPMG, Nigeria – Associate Oct. '07–July '08
Audit and financial advisory services
- Seven-up Bottling Company PLC, Nigeria – Intern May – Nov '04
Worked with a team of mechanical process engineers to keep process plants at maximum efficiency
- Selected Journal publications**
- O.I. Imole**, N. Kumar, V. Magnanimo and S. Luding, “Hydrostatic and shear behavior of frictionless granular assemblies under different deformation paths”, *KONA*, **30**, 84-108, 2013
- O.I. Imole**, M. Wojtkowski, V. Magnanimo and S. Luding, “Micro-macro correlations and anisotropy in frictional granular assemblies under uniaxial deformation”, *Phys. Rev. E.*, Accepted, 2014
- N. Kumar, **O.I. Imole**, V. Magnanimo and S. Luding, “Effects of polydispersity on the micro-macro behavior of granular assemblies under different deformation paths”, *Particucology*, In press, 2013
- O.I. Imole**, T. Weinhart, D. Krijgsman, E. Chavez, M. Ramaioli and S. Luding, “Experiments and discrete element simulation of the dosing of cohesive powders in a simplified canister”, *In preparation*, 2014
- O.I. Imole**, M. Paulick, V. Magnanimo, E.C. Montes, M. Ramaioli, A. Kwade and S. Luding, “An experimental and theoretical investigation of the time-dependent relaxation behavior of cohesive powders”, *In preparation*, 2014
- Refereed Proceedings**
- O.I. Imole**, M. Wojtkowski, V. Magnanimo and S. Luding, “Force correlations, anisotropy, and friction mobilization in granular assemblies under uniaxial deformation”, In A. Yu and S. Luding, editors *Powders and Grains, AIP Conf. Proc.*, **1542**, 601-604, 2013
- N. Kumar, **O.I. Imole**, V. Magnanimo and S. Luding, “Evolution of the Effective Moduli for Anisotropic Granular Materials during Shear.”, In A. Yu and S. Luding, editors *Powders and Grains, AIP Conf. Proc.*, **1542**, 1238-1241, 2013
- M. Wojtkowski, **O.I. Imole**, V. Magnanimo and S. Luding, “Force correlations, anisotropy, and friction mobilization in granular assemblies under uniaxial deformation”, In A. Yu and S. Luding, editors *Powders and Grains, AIP Conf. Proc.*, **1542**, 983-986, 2013
- Non-Refereed Proceedings**
- O.I. Imole**, N. Kumar, and S. Luding, “Deformation modes of packings of frictionless polydisperse spheres”, *Particulate Systems Analysis Conference Proceedings*, 1-6, 2011

N. Kumar, **O.I. Imole**, V. Magnanimo and S. Luding, “Deformation Modes for Assemblies of Frictionless Polydisperse Spheres,” *Advanced Materials Research*, **508**, 160-165, 2012

O.I. Imole, N. Kumar and S. Luding, “Element test experiments and simulations: from dry towards cohesive powders”, In E. Oate and D. R. J. Owen, editors *II International Conference on Particle-based Methods - Fundamentals and Applications*, 1-10, ICNME Barcelona 2011

S.C. Thakur, **O.I. Imole**, M. B. Wojtkowski, V. Magnanimo, E. C. Montes, M. Ramaioli, H. Ahmadian, and J. Y. Ooi, “Characterization of cohesive powders for bulk handling and DEM modelling”, In M. Bischoff, E. Oate, D. R. J. Owen, E. Ramm, and P. Wriggers, editors *III International Conference on Particle-based Methods - Fundamentals and Applications*, 1-12, ICNME Stuttgart 2013.

A. R. Thornton, D. Krijgsman, A. T. Voortwis, V. Ogarko, R. Fransen, S. Gonzalez, O. Bokhove **O.I. Imole**, T. Weinhart, and S. Luding, “A review of recent work on the Discrete Particle Method at the University of Twente: An introduction to the open-source package MercuryDPM”, *DEM6 Conference Proceedings*, 1-6, Golden, Colorado 2013.

Other Scientific Contributions	PARDEM State of the Art Work Package Report: DEM Model Validation Experiments, pages 1-86, 2011. PARDEM Work Package Report: Characterization for Calibration of DEM datasets, pages 1-53, 2011. PARDEM Work Package Report: Data Mining in DEM datasets, pages 1-53, 2011.
Languages	Dutch (CEF-A2) English: Native German: A1
Teaching/Other Services	Programming in Engineering (PiE), University of Twente May–July 2011, '12 Reviewer for scientific journals: Granular Matter (GM), International Journal of Solids and Structures (IJSS), Journal of Nanoparticle Research
Academic achievements	Marie Curie Fellowship for Doctoral Research, University of Twente Aug. '10 - '13 DAAD full Scholarship Award, for M.Sc, Ott-von-Guericke University, Germany Oct. '08 - '09 Top Graduating Student, Dept. of Mechanical Engineering, University of Ado-Ekiti, Nigeria Dec. '05 Best presentation award, discrete and particle methods workshop, 16th Engineering Mechanics Symposium, Lunteren, The Netherlands Oct. '13
Proficiencies/Skills	Languages: Basic C, C++, AWK Software: MATLAB, EDEM, MercuryDPM OS Platforms: Linux (Debian and Ubuntu), Windows 7 Applications: LaTeX, IMAGEJ, Inkscape
Workshops/Trainings	Introduction to the Process Industry, BASF Sept. 2012 Image Analysis training, Lausanne Jan. 2012 Complimentary Skills–Networking and Collaboration, Vienna Aug. 2010 Software Training–EDEM and PFC, Vienna Aug. 2010
Hobbies	Soccer, piano, violin, peer-educator trainer
References	Prof. dr. Stefan Luding, Chair, Multi-Scale Mechanics, University of Twente. Email: s.luding@utwente.nl Dr. Edgar Chavez, Nestlè Product Technology Center, Orbe, Switzerland Email: BrunoEdgar.ChavezMontes@rdor.nestle.com Dr. Vanessa Magnanimo, Asst. Professor, Multi-Scale Mechanics, University of Twente. Email: v.magnanimo@utwente.nl