# James Maati Ondari – CV

Email: jamond55@gmail.com

Skype: Mufasaati

Mobile: +254-(0)708 628 596 (Kenya)

## Profile

James is a self-driven, co-operative, diligent and innovative fast learner with good leadership, communication and team-building skills. He has worked with leading Engineering Consultants in Kenya during which time he gained wide practical and theoretical experience in Structural, Public/Environmental Health and Water Resources Engineering on the general aspects of tendering, design, project implementation and construction supervision. James holds a Bachelor's degree in Civil & Construction Engineering from the University of Nairobi in Kenya and a Master's degree in Environmental Engineering from Vaal University of Technology (VUT) in South Africa. During the tenure of his Master's degree in South Africa, James also worked as a part-time lecturer in VUT's Civil Engineering Department.

# Work Experience

May 2018 – Present

Part-time Lecturer, Civil and Environmental Engineering Department, Egerton University.

- Lectured, tutored and coordinated laboratory sessions for Ground Water and Water Resources Engineering courses.
- Set and marked Continuous Assessment Tests (CATs) and Semester Examinations.

Oct. 2017 - July 2018

Design Engineering Lead, Sanivation

- Conduct Feasibility studies, Projects Appraisals, Cost-Benefit Analysis and Design of wastewater treatment facilities
- Team and Project Management
  - Hire and vet consultants and contractors
  - Manage contractors, subcontractors and consultants
  - Lead construction management and inspection
  - Maintain engineering records and key lessons learned
  - Ensure compliance with relevant laws and standards
  - Support the capacity development and training of Sanivation staff, through internal mentorship programs, one on one training, as well as identifying new talent.
- Creativity and ingenuity;
  - o Identify and evaluate new faecal sludge treatment technologies for integrating into Sanivations's operations
    - Research FSM technologies
    - Support on testing, evaluating and communicating about new technologies and prototypes.
- Partnership Building
  - o Build Sanivation's network in the civil and environmental industry as well as with local partners;

- Network building: act as ambassador for Sanivation to find the right engineering and construction partners for current and future projects
- Identify knowledge/capability gaps within a project, find outside consultants or companies to fill those gaps and manage Sanivation's relationship with consultants.

#### Aug. 2016 - Oct. 2017

Water and Sanitation Engineer, MIBP Consulting Engineers' Ltd., Kenya

- Conducted feasibility studies
- Designed potable water treatment systems and distribution networks
- Designed sewerage networks and wastewater treatment systems
- Drafted Technical Reports
- Prepared project cost estimates and Tender documents
- Supervised construction
- Prepared Master Plans of Potable Water supply and wastewater treatment systems for 20 and 30-year design horizons

#### Aug. 2011 – Dec. 2015

Lecturer, Vaal University of Technology, South Africa

- Lectured, Tutored, and Guided learners through academic, professional and extra-curricular platforms
- Set, moderated and marked semester tests and exams
- Registered learners for National Diploma and Bachelor's degree programs in Civil Engineering
- Planned, prepared and implemented practical/laboratory classes and research projects for undergraduate students in Civil and Chemical Engineering departments;
- Represented VUT's Civil Engineering Dept. in academic, social and extra-curricular activities such as Open Days, Sasol Techno-X, community outreach programs and sports;
- Acted as Patron for Building and Civil Engineering Student Society Organization (BCESSO);
- Organized academic site visits as well as community outreach programs for Civil Engineering students through BCESSO (Building and Civil Engineering Student Society Organization);
- Represented the Civil Engineering Dept. in VUT's HIV and AIDS awareness committee.

#### Sep. 2010 – Jul. 2011

Structural and Geotechnical Engineer, MIBP Consulting Engineers' Ltd., Kenya

- Conceptualized, designed and detailed Reinforced Concrete, Steel and Timber Structures.
- Assessed the properties and behavior of soil and rock formations necessary for the design of foundations and retaining walls.
- Conducted regular site visits for inspection, site meetings and work progress evaluation.
- Prepared reports describing assessment of geotechnical risks, options to mitigate the undue risks, and recommendations on design of validation tests provision during construction.

### Jul. 2009 – Oct. 2009

Inspector of Works, MIBP Consulting Engineers' Ltd., Kenya

• Inspected, monitored and reported on the general progress of work on site

- Supervised and approved the construction of 2 nr. R.C tanks, Chlorination Units, pump houses, operation offices and staff units;
- Supervised and approved the drilling of 3 nr. Boreholes along with complete pumps and meter installation;
- Audited contractual bidding documents in an effort to award contract to the most eligible bidder:
- Familiarized with the FIDIC conditions of contract;
- Supervised sub-contractors
- Prepared and developed risk assessment methodologies

### Education

Sept. 2017 - Present

PhD in Civil and Construction Engineering, University of Nairobi – Kenya.

Aug. 2011-April 2015

Master of Technology in Environmental Engineering, Vaal University of Technology – South Africa.

Oct. 2005-Sep. 2010

Bachelor of Science in Civil and Construction Engineering, Second Class Honours – Upper Division, University of Nairobi, Kenya.

Jan. 2001-Nov. 2003

Kenya Certificate of Secondary Education (KCSE); Aggregate Grade, A-; Kisii High School, Kenya.

#### Publication

a. Journal Papers

Ondari, J.M., Ndege, M., Aoyi, A. 2014. Anaerobic degradation of pre-treated abattoir wastewater in an UASB reactor. *SA Innovation Journal*. 27-38.

b. Thesis

Ondari, J.M. Anaerobic co-digestion of Abattoir and Textile industry wastewater in an UASB reactor. MTech. Thesis. *Vaal University of Technology, South Africa*. 2015.

Ondari, J.M. Possible use of Sugarcane Bagasse Ash as a cement replacement material. BSc. Thesis. *University of Nairobi, Kenya.* 2010.

Conferences, Short-courses and Seminars Attended Conferences

- 16 18 September, 2014. 7th SA Innovation Conference in Cape Town Stadium, Cape Town.
- 19th November, 2013. Vaal University of Technology's Centre for Renewable Energy and Water (CREW) in Emerald Casino, Vanderbijlpark.

Short-courses and seminars

- 9th 13th November, 2015. Abacus FEA (Simulia, South Africa). 3 CPD points.
- 29<sup>th</sup> 30<sup>th</sup> July, 2014. Tutor training (VUT) in T-Block, Vanderbijlpark, South Africa.

- 17<sup>th</sup> 19<sup>th</sup> April, 2014. Cost Engineering for Capital Projects Workshop (Global Prospectus), Randburg. *2 CPD Points*.
- 8th 9th April, 2014. FIDIC, NEC3, JBCC and GCC2010 Contracts Workshop (Global Prospectus), Randburg. 2 CPD Points.
- 16th November, 2012. Autodesk University Extension Johannesburg, The Forum in Sandton.
- 15th 18th July, 2013. Civil3D Essentials (The CAD corporation), VUT.
- 19th 21st June, 2013. AutoCAD Essentials (The CAD corporation), VUT.
- 23rd 24th May, 2013. PROKON (PROKON software consultants), VUT.
- 19<sup>th</sup> 21<sup>st</sup> September, 2011. STATA 11 (Prof. Zeleke Worku), VUT.
- August October, 2011. Research Methodology programme, VUT.

# Teaching Experience

Period	Employer	Nature of Work
April 2018 to Present	Egerton University	Lecturer, Tutor and Examiner;
		<ul> <li>Ground Water Engineering (WEEN 558)</li> </ul>
		<ul> <li>Water Resources Engineering (WEEN 557)</li> </ul>
August 2011 to	Vaal University of	Lecturer, Mentor, Tutor and Examiner;
December 2015.	Technology	<ul> <li>Applied Mechanics (ECAPM1B),</li> </ul>
		<ul> <li>Engineering Drawing I (ECDRW1B),</li> </ul>
		<ul> <li>Engineering Drawing II (AutoCAD) –</li> </ul>
		ECDRW2B,
		<ul> <li>Structural Analysis II and III (ECSTA2B</li> </ul>
		& ECSTA3B),
		<ul> <li>Water Engineering II (ECWEN2B).</li> </ul>

# Professional Membership

- Engineers' Board of Kenya (EBK)
- Institution of Engineers of Kenya (IEK)
- Engineering Council of South Africa (ECSA)
- South African Institution of Civil Engineering (SAICE)
- Water Institute of South Africa (WISA)

# Computer skills and competencies

- Finite Element Analysis package; Abacus FEA.
- Expertise in drawing and design packages; AutoCAD, ArchiCAD & CorelDraw.
- Competent in the following Civil Engineering packages; PROKON, STAAD, Civil 3D & WaterCAD.
- Competent with STATA 11 statistical software.
- Competent with Microsoft Office packages.
- Basic computer Software and Hardware troubleshooting.

### REFEREES.

#### 1. Prof. Francis J. Gichaga

Department of Civil & Construction Engineering

The University of Nairobi.

P.O Box 30197 – 00100, Nairobi.

Cell Phone: +254 722 512 487

E-mail: fgichaga@uonbi.ac.ke

### 2. Prof. Peter Kuzvinetsa Dzvimbo

The Deputy Vice Chancellor (Academic and Research)

Vaal University of Technology

Andries Potgieter Blvd.

Private Bag X021 Vanderbijlpark 1900.

Email: kuzvinetsad@vut.ac.za

Tel. 016 950 9326.

Cell No.: +27 82 843 4923

### 3. Dr. Eng. Peter K. Ndiba

Senior Lecturer

Department of Civil & Construction Engineering

The University of Nairobi.

P.O Box 30197 – 00100, Nairobi.

Cell Phone: +254 716 164 122

E-mail: pkndiba@gmail.com

### 4. Eng. Manjeet Singh Bhachu

Chief Executive Officer (CEO)

Mangat, I.B Patel & Partners Consulting Engineers

Bishop Garden Towers

Bishop Road

P.O Box 48674, GPO-00100 Nairobi – Kenya.