

CV

Mike Otieno, PhD

Senior Lecturer in Construction Materials

PhD, MSc(Eng), BSc(Civil Eng), PG Dip(HE), Candidate Engineer ECSA, AM-SAICE

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1 Personal details

Nationality: Kenyan

Year of Birth: 1981

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2 Academic qualifications

Qualification	Year completed	Institution
PGDipEd(HE) – Postgraduate Diploma in Education (in Higher Education), <i>with Distinction</i>	2017	University of the Witwatersrand, Johannesburg
PhD , civil engineering	2014	University of Cape Town
MSc(Eng) , civil engineering	2008	University of Cape Town
BSc(Civil Eng) , <i>First Class Honours</i>	2006	University of Nairobi

2.1 Academic achievements and awards

2018, 2017, 2016: *School Research Award*

2012: *Wason Bronze Medal for Materials Research*

2011: *Carnegie Doctoral Scholarship*

2010: *"Green Talents"*

2010: University of Cape Town *Research Associateship* award

2008: *Golden Key Award*

2006: *Best overall Civil Engineering student (First Class Honours)* – University of Nairobi, Kenya.

3 Professional / technical associations (membership)

Body	Membership	
	Type	Number
ECSA: Engineering Council of South Africa (www.ecsa.co.za)	Candidate Engineer	201550135
EBK: Engineers Board of Kenya (www.ebk.or.ke)	Graduate Engineer	B6973
SAICE: South African Institution of Civil Engineers (www.saice.org.za)	Associate member	201400767
CSSA: Concrete Society of Southern Africa (www.concretesociety.co.za)	Member (Academic)	AC002
RILEM: International Union of Laboratories and Experts in Construction Materials, Systems and Structures (www.rilem.org)	Member	8346
FIB: International Federation for Structural Concrete (www.fib-international.org)	Corresponding member	N/A

4 Teaching (summary)

Course	Class size	Institution
Undergraduate courses		
CIVN2009: Materials and Structures II	150-250	WITS*
CIVN3001: Construction Materials I (course co-ordinator)	150-180	
CIVN4000: Construction Materials II (course co-ordinator)	70-115	

CIVN4013: Civil Engineering Theory IIIB, Construction Management students (course co-ordinator)	30-40	
CIV1006S: Building Science I (offered to Construction Economics students)	61	UCT**
CIV1004W: Engineering I	>100[#]	
CIV2011F: Mechanics of Materials	~60[#]	
CIV2031S: Structural Engineering I	~80[#]	
CIV3035S: Structural Engineering III	~75[#]	
CIV4044S: Research Project	5	
Postgraduate courses		
CIVN7064: Advanced Concrete Technology (course co-ordinator)	30-50	WITS
CIV5002Z: Structural concrete properties and practice	16	UCT
CIV5116Z: Durability and condition assessment of concrete structures	10	
CIV5120Z: Repair and rehabilitation of concrete structures	21	

*: University of the Witwatersrand, Johannesburg, **: University of Cape Town, #: Approximate numbers

5 Research and supervision

5.1.1 Research output (summary)

Category of publication	Number			
	In preparation	Submitted (under review)	Accepted	Published (print & online)
Peer reviewed journal papers	1	–	–	21
Peer reviewed international conference/workshop/symposia	–	–	–	22
Chapters in books	–	–	2	5
Keynote presentations	–	–	–	2
Invited conference / seminar/workshop presentations	–	–	–	3
Discussion papers / abstract-only submissions	–	–	–	4
Non-peer reviewed journals and magazines	–	–	–	2
Research monographs	–	–	–	1

Research output statistics		
Statistic	Google Scholar (as on 15 th Aug 2020)	Scopus (as on 15 th Aug 2020)
h-index	11	9
i10-index	12	–
Citations	778	483

5.2 Postgraduate supervision (summary)

Level of study	Number		
	Ongoing	Submitted	Graduated
PhD	4	1	1
MSc(Eng) – 50/50	3	5	11
MSc(Eng) – Full Research	1	–	–
MEng	–	–	3

6 Academic citizenship

6.1 Professional / Technical associations (activities)

Duration	Organization	Role
2018 to present	RILEM	• Deputy Chairperson and member: <i>TC AMC</i> : Use of agro-based materials as cementitious additions in concrete and cement-based materials
2018 to present	RILEM	• Member of <i>Technical Committee AMC</i> : Use of agro-based materials as cementitious additions in concrete and cement-based materials
2016 to present	RILEM	• Member of <i>Technical Committee 262</i> : Characteristics of the steel/concrete interface and their effect on initiation of chloride-induced reinforcement corrosion
2016 to present	SAICE	• Member, Joint Structural Division
2014 to present	CoMSIRU	• Research advisory committee member
2015 to 2017	CSSA	• Treasurer, Inland branch committee
2010 to 2016	RILEM	• Member of <i>Technical Committee 230</i> : Performance-based specifications and control of concrete durability
2012 to 2015	fib	• Member of <i>FIB Commission 5</i> : Structural service life aspects

CSSA: Concrete society of Southern Africa

SAICE: South African Institute of Civil Engineers

RILEM: International Union of Laboratories and Experts in Construction Materials, Systems and Structures

CoMSIRU: Concrete Materials and Structural Integrity Research Unit, Department of civil engineering, University of Cape Town

fib: International Federation for Structural Concrete

6.2 Technical advisory capacity

I am a member of the following advisory committees in the named universities:

1. Concrete Materials and Structural Integrity Research Unit (CoMSIRU), Department of civil engineering, University of Cape Town (**UCT**) – since 2014
2. Department of civil engineering and building, Vaal University of Technology (**VUT**) – since 2015
3. I also actively served as a technical committee member in South African Bureau of Standards committees that worked towards introducing the concrete durability testing standards named below which are now in use:
 1. SANS3001-CO3-1: Concrete durability index testing – Preparation of test specimens
 2. SANS3001-CO3-2: Concrete durability index testing – Oxygen permeability test
 3. SANS3001-CO3-3: Concrete durability index testing – Chloride conductivity test

6.3 Peer review work (NRF, journals and conferences)

1. South African National Research Foundation (NRF) – Reviewer for Rating and Research proposals
2. I am an active peer reviewer in the following local and internal journals:
 - Cement and concrete research (international)
 - Construction and building materials (international)
 - Materials and Structures (international)
 - American Concrete Institute's Materials journal (international)
 - Cement and concrete composites (international)
 - SAICE Journal (local, South African)
 - Concrete Beton (local, South African)
3. I have also served as a member of scientific and/or organizing committees in a number of international conferences.

7 Work experience

2016 (Oct) – present	University of the Witwatersrand, Johannesburg School of Civil and Environmental Engineering	
	Position: Senior Lecturer	
		<ul style="list-style-type: none"> ♦ Teaching and guiding undergraduate and postgraduate courses <ul style="list-style-type: none"> – Strength / Mechanics of Materials (undergraduate) – Theory of Structures (undergraduate) – Construction Materials (undergraduate) – Advanced Concrete Technology (postgraduate) ♦ Supervision of postgraduate students (masters and doctoral) ♦ Representing the school in faculty committees <ul style="list-style-type: none"> – Faculty Research Committee
2014 (Mar) – 2016 (Sept)	University of the Witwatersrand, Johannesburg School of Civil and Environmental Engineering	
	Position: Lecturer	
		<ul style="list-style-type: none"> ♦ Teaching undergraduate and postgraduate courses <ul style="list-style-type: none"> – Strength / Mechanics of Materials (undergraduate) – Theory of Structures (undergraduate) – Construction Materials (undergraduate) – Advanced Concrete Technology (postgraduate) ♦ Supervision of postgraduate students (masters and doctoral) ♦ Representing the school in faculty committees <ul style="list-style-type: none"> – Teaching and Learning Committee – Faculty Research Committee
2009 (Aug) - 2014	Concrete Materials and Structural Integrity Research Unit (University of Cape Town)	
	Position: PhD Candidate	
	Duties:	<ul style="list-style-type: none"> ♦ Assisting in the teaching and assessment of both undergraduate and MSc courses in the field of structures and concrete ♦ Co-supervision of both undergraduate and postgraduate students ♦ Laboratory testing of concrete and cement-based materials ♦ Advising on the acquisition of concrete-related laboratory equipment ♦ Condition assessment of deteriorated reinforced concrete structures ♦ Forensic investigations
2009 (Jan - June):-	GHD Pty Ltd (Consulting Engineers, Environmental Scientists & Planners, Project Managers) – Perth, Western Australia, Australia	
	Position: Graduate Materials Engineer	
	Duties:	<p>Provide advice on:</p> <ul style="list-style-type: none"> ♦ Design and specification of materials appropriate for their intended service life, environment and loads. ♦ Engineering management to achieve the design life of structures/plant and their construction materials. ♦ Engineering of remedial measures for deteriorated structures appropriate to their operating requirements and intended future service life.
2006 (Sep. - Dec.):-	Ochieng Abuodha and Associates (Consulting Civil and Structural Engineers) – Nairobi, Kenya	
	Position: Assistant Graduate Engineer	
	Duties:	<ul style="list-style-type: none"> ♦ Structural and Civil Engineering Design. ♦ Structural and Civil engineering AutoCAD drawings and production

		<ul style="list-style-type: none"> ♦ Site inspection ♦ Preparation of proposals and Tender documents.
2006 (April - June):-	Goro Consultants (Civil, Structural, Geotechnical, Electrical, Mechanical and Project Management Consultants) – Nairobi, Kenya	
	Position: Research Assistant	
	Duties:	<ul style="list-style-type: none"> ♦ Carrying out tests on concrete using a new concrete superplasticizer in the Kenyan construction industry. ♦ Analysis, interpretation of the test results and report writing.