



# Dr. MAHMOUD SODANGI

Associate Professor

## Personal Data

Nationality | Nigerian  
Date of Birth | May 29, 1979  
Department | Civil & Construction Engineering  
Official IAU Email | misodangi@iau.edu.sa

## Language Proficiency

Language	Read	Write	Speak
Arabic	Basic	Basic	Basic
English	Fluent	Fluent	fluent
Others			

## Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
21.10.2012	PhD Civil Engineering	Universiti Teknologi PETORNAS	Bandar Seri Iskandar, Tronoh, Perak, Malaysia
15.08.2009	M.Sc. Construction Contracts Management	Universiti Teknologi Malaysia	Skudai, Johor Bahru, Malaysia
17.11.2004	B.Sc. Quantity Surveying	Ahmadu Bello University	Zaria, Kaduna State, Nigeria

## PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	Development of maintenance management framework for the conservation of heritage buildings in Malaysia
Master	Legal effect of breach of warranty in construction insurance in Malaysia



**Professional Record: (Beginning with the most recent)**

<b>Job Rank</b>	<b>Place and Address of Work</b>			<b>Date</b>
Associate Professor	Imam Abdulrahman Bin Faisal University	Dammam	Saudi Arabia	15.06.2021 - Date
Assistant Professor	Imam Abdulrahman Bin Faisal University	Dammam	Saudi Arabia	25.09.2013 – 14.06.2021
Post Doctoral Researcher	Offshore Engineering Centre – Universiti Teknologi PETRONAS	Tronoh, Perak	Malaysia	25.02.2013 – 03.08.2013
Graduate Assistant	Department of Civil & Environmental Engineering, Universiti Teknologi PETRONAS	Tronoh, Perak	Malaysia	21.07.2009 – 24.02.2013
Teaching Assistant	Department of Quantity Surveying, College of Built Environment and Surveying, Universiti Teknologi Malaysia	Skudai, Johor	Malaysia	01.07.2008 – 28.07.2009
Quantity Surveyor	Works & Housing Department, Ministry of Lands & Housing.	Ilorin, Kwara State,	Nigeria.	10.03.2005 - 09.03.2006
Quantity Surveyor	Project Management Unit, Banu Salihu Construction	Kaduna,	Nigeria.	01.04.2006 - 30.06.2008
Banking Assistant	FirstBank	Kawo, Kaduna.	Nigeria	04.06.2006 – 02.06.2008

**Administrative Positions Held: (Beginning with the most recent)**

<b>Administrative Position</b>	<b>Office</b>	<b>Date</b>
Site Manager	Ministry of Lands & Housing, Ilorin, Nigeria.	15.04.2005 - 30.01.2006
Project Manager	Banu Salihu Construction, Kaduna, nigeria	01.04.2006 - 30.06.2008



## Scientific Achievements

### Published Refereed Scientific Researches

(In Chronological Order Beginning with the Most Recent)

#	Name of investigator(s), year of publication, research title, and title of journals
1	Kazmi, Z.A., Konagai, K., Maqsoom, A., Sodangi, M., Qureshi, M.U., Abuhajar, O. Co-seismic stress changes and triggering mechanism of earthquake-induced landslides: a case of 2005 Kashmir earthquake. <i>Arabian Journal of Geosciences</i> , 14 (11), pp.1-11. <a href="https://doi.org/10.1007/s12517-021-08514-0">https://doi.org/10.1007/s12517-021-08514-0</a>
2	Kazmi, Z.A., Sodangi, M. (2021). Integrated Analysis of the Geotechnical Factors Impeding Sustainable Building Construction—The Case of the Eastern Province of Saudi Arabia. <i>Sustainability</i> , 13 (12), 6531. <a href="https://doi.org/10.3390/su13126531">https://doi.org/10.3390/su13126531</a>
3	Sodangi, M., Kazmi, ZA, Salman, A., Bakri, MH, Anwar, F. (2021). Towards Promoting Efficient Management Of Mass-Housing Reconstruction Schemes. <i>International Journal of Built Environment and Sustainability</i> , 8(1), 121-129. DOI: <a href="https://doi.org/10.11113/ijbes.v8.n1.670">https://doi.org/10.11113/ijbes.v8.n1.670</a>
4	Islam, ABMS., Sodangi, M. (2020). Rubber bearing isolation for structures prone to earthquake - a cost effectiveness analysis. <i>Earthquakes and Structures</i> , 19(4), 261-272. DOI: <a href="http://dx.doi.org/10.12989/eas.2020.19.4.261">http://dx.doi.org/10.12989/eas.2020.19.4.261</a>
5	Sodangi, M., Kazmi, Z.A. (2020). Integrated Evaluation of the Impediments to the Adoption of Coconut Palm Wood as a Sustainable Material for Building Construction. <i>Sustainability</i> , 12, 7676. doi:10.3390/su12187676
6	Sodangi, M. and Kazmi, Z.A. (2020). Seismic performance of South Nias traditional timber houses: A priority ranking based condition assessment. <i>Earthquakes and Structures</i> , 18 (6), 731-742. DOI: <a href="https://doi.org/10.12989/eas.2020.18.6.731">https://doi.org/10.12989/eas.2020.18.6.731</a>
7	Maqsoom, A., Aslam, B., Hassan, U., Kazmi, Z.A., Sodangi, M., Tufail, R.F., Farooq, D. (2020). Geospatial Assessment of Soil Erosion Intensity and Sediment Yield Using the Revised Universal Soil Loss Equation (RUSLE) Model. <i>ISPRS International Journal of Geo-Information</i> , 9, 356. DOI:10.3390/ijgi9060356
8	Aslam, B., Maqsoom, A., Kazmi, Z.A., Sodangi, M., Anwar, F., Bakri, M.H. (2020). Effects of Landscape Changes on Soil Erosion in the Built Environment: Application of Geospatial-Based RUSLE Technique. <i>Sustainability</i> , 12 (15), 5898. DOI: 10.3390/su12155898
9	Sodangi, M. (2019) Overcoming the Constraints to the Adoption of Sustainable Civil Engineering Practices. <i>International Journal of Construction Management</i> . DOI: 10.1080/15623599.2019.1569815.
10	Sodangi, M. (2019). Social sustainability efficacy of construction projects in the pre-construction phase. <i>Proceedings of the Institution of Civil Engineers - Engineering Sustainability</i> , 172 (2), 57-67.
11	Kazmi, Z.A., Sodangi, M. (2018). The 2005 Kashmir Earthquake – devastation of infrastructures. <i>Proceedings of the Institution of Civil Engineers - Structures and Buildings</i> . <a href="https://doi.org/10.1680/jstbu.17.00069">https://doi.org/10.1680/jstbu.17.00069</a> .
12	Sodangi, M., Salman, A.F., and Saleem, M. (2017). Building Information Modeling - Awareness and Readiness across Subcontracting Sector of Saudi Arabian Construction



	Industry. <i>Arabian Journal for Science and Engineering</i> , Volume 43, Issue 4, pp 1807–1816 .
13	Sodangi, M., Al-Kutti W., and Al-Farraj, B. O. (2017). Prioritization of the Public Works Contract Provisions causing Dissatisfaction to Contractors. <i>Journal of Engineering and Applied Sciences</i> , Vol. 4, Issue (1), pp 8-18.
14	Sodangi M., Khamidi, M. F., Idrus, A. Olanrewaju, A. A. (2015). Development of Maintenance Cost Prediction Model for Heritage Buildings, <i>Jurnal Teknologi</i> , 74:2, 51-57.
15	Sodangi, M., Khamidi, M. F., Idrus, A., Hammad, D. B., Umar, A. A. (2014). Best Practice Criteria for Sustainable Maintenance Management of Heritage Buildings in Malaysia. <i>Procedia Engineering</i> , Vol. 77 Pp. 11-19.
16	Otairu, A., Umar, A.A., Zawawi, N. A. A., Sodangi, M. and Hammad, D. B. (2014). Slow adoption of PPP in developing countries: Survey of Nigerian Construction professionals. <i>Procedia Engineering</i> , Vol. 77, pp. 188-195.
17	Hammad, D. B., Shafiq, N., Nuruddin, M. F., and Sodangi, M. (2014). Criticality Analysis of Defects in Civil Engineering Structures: Case of Onshore Process Plant. <i>Procedia Engineering</i> , Vol. 77, pp. 53-60.
18	Sodangi, M., Khamidi, M.F., and Idrus, A. (2013). Maintenance Management Challenges for Heritage Buildings used as Royal Museums in Malaysia. <i>Journal of Applied Sciences and Environmental Sustainability</i> . Vol. 1 (1): pp. 23-28.
19	Sodangi, M. Khamidi, M.F., and Idrus, A. (2013). Towards Sustainable Heritage Building Conservation in Malaysia. <i>Journal of Applied Sciences and Environmental Sustainability</i> . Vol. 1 (1): pp. 54-61.
20	Idrus, A., Sodangi, M. and Husin, M. H. (2011). Prioritizing Project Performance Criteria within Client Perspective. <i>Research Journal of Applied Sciences Engineering and Technology</i> , 3(10): 1142-1151.
21	Idrus, A., Sodangi, M. and Amran, M. A. (2011). Decision Criteria for Selecting Main Contractors in Malaysia. <i>Research Journal of Applied Sciences Engineering and Technology</i> , 3(12): 1358-1365.
22	Idrus, A., Sodangi, M. and Yaakob, J. (2011). Legal Effect of Breach of Warranty in Construction Insurance in Malaysia. <i>Research Journal of Applied Sciences, Engineering and Technology</i> , 3(12): 1366-1373.
23	Sodangi, M., Idrus, A., Khamidi, F. and Adam, D. (2011). Environmental Factors Threatening the Survival of Heritage Buildings in Nigeria. <i>South Asian Journal for Tourism and Heritage</i> , Vol. 4, No. 2, 38-53.
24	Idrus, A., Khamidi, F. and Sodangi, M. (2010). Maintenance Management Framework for conservation of Heritage Buildings in Malaysia. <i>Journal of Modern Applied Science</i> , Vol. 4, No. 11 pp 66-77.
25	Idrus, A. and Sodangi, M. (2010). Framework for Evaluating Quality Performance of Contractors in Nigeria. <i>International Journal of Civil &amp; Environmental Engineering IJCEE-IJENS</i> Vol. 10 No. 01, 34-39.
26	Ibrahim, A.D. and Sodangi, M. (2007). An Assessment of Quality Performance in Construction using Clients' Perspectives of Contractors' Project-Level Quality Performance. <i>The Information Manager</i> , Journal published by the Department of Library and Information Science (ABU, Zaria), Vol. 7 No. 1, pp. 22-31, ISSN: 1596-5422.



### Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s), research title, conference and publication date
1	M. Sodangi, Z. A. Kazmi, M. Hassan Bakri and F. Anwar, (2020). Protection of Buildings with Historic, Architectural & Cultural Values: The Case of Royal Museum of Seri Menanti. Second International Sustainability and Resilience Conference: Technology and Innovation in Building Designs(51154), 2020, pp. 1-6, doi: 10.1109/IEEECONF51154.2020.9319987.
2	D. B. Hammad, A. G. Rishi, P. S. Yaduma, S. U. Kunya, N. Jidda and M. Sodangi, (2020). Survey of Skills Sets for the Implementation Building Information Modeling in Construction Education Body of Knowledge in Nigeria. Second International Sustainability and Resilience Conference: Technology and Innovation in Building Designs(51154), 2020, pp. 1-5, doi: 10.1109/IEEECONF51154.2020.9319931.
3	Sodangi, M. (2017). Building Information Modelling – Development and Validation of Implementation Framework for Improving Performance of Subcontractors. Global Civil Engineering Conference (GCEC2017), Universiti Putra Malaysia, 25 - 28 July, 2017.
4	Sodangi, M. (2017). Implementation of Building Information Modeling in Construction Project: How Prepared are Subcontractors in Saudi Arabia? 3rd International Conference of Science, Engineering and Social Sciences, Universiti Teknologi Malaysia 17 -18 May.
5	Sodangi, M., Salman, A.F., and Shaawat, M.E.A. (2016). Exploring the Challenges in Utilization of BIM in Maintenance Management of Mosques. Proceedings of the First International Conference on Mosque Architecture (pp.31 - 48), Saudi Arabia: University of Dammam.
6	Sodangi, M., Idrus, A. and Khamidi, F.M. Development of maintenance management framework for the conservation of heritage buildings. In Proceedings of International Conference Civil, Offshore and Environmental Engineering (ICCOEE2012), 12-14 June 2012, Kuala Lumpur Convention Center, Malaysia.
7	Sodangi, M. Bin Idrus, A. Khamidi, F.M. Examining the maintenance management practices for conservation of heritage buildings in Malaysia. National Postgraduate Conference (IEEE - NPC), vol., no., pp.1,7, 19-20 Sept. 2011.
8	Sodangi, M., Idrus, A., Khamidi, F. and Adam, D.E. Maintenance Management of National Heritage Buildings in Malaysia. 3rd International Conference on Architectural Heritage, Gaza, Palestine, 26-27 April, 2011.

### Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
	Dr Mahmoud Sodangi; Dr Ahmed Salman; Dr Muhammad Saleem	Development of Building Information Modeling (BIM) Implementation Framework for Improving Construction Subcontracting Performance	08-03-2016



Dr Mahmoud Sodangi; Dr Walid Al-Kutti; Dr Muhammad Saleem	Development of Non-Destructive Testing Method for evaluating the strength Capacity of Concrete Anchors.	01-01-2016
Dr Mahmoud Sodangi Dr Noor Amila Dr. Shahir Liew	Development of Cost Estimation Framework for Decommissioning Offshore Oil and Gas Installations in Malaysian Waters	31-07-2013
Dr Mahmoud Sodangi; Prof Arazi Idrus; Dr Noor Amila	Development of Maintenance Management Framework for the Conservation of heritage Buildings	27-07-2012

### Current Researches

#	Research Title	Name of Investigator(s)
1	Integrated framework for promoting internet of things utilization in the sustainable supply chain management practices of off-site construction organizations	Mahmoud Sodangi and Zaheer Abbas Kazmi
2	Investigations of the barriers to the safety & serviceability of infrastructure constructed on reclaimed coastal land and their improvement	Zaheer Abbas Kazmi and Mahmoud Sodangi
3	Examining the Structural Integrity of Historic Buildings in Saudi Arabia – Towards Boosting Revenue Generation from Cultural Heritage Tourism	Mahmoud Sodangi and Muhammad Saleem Sharif Hussain

### Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	Fourth International Symposium on Infrastructure Engineering in Developing Countries	Karachi, Pakistan. December 26- 28, 2013	Technical Committee Member & Reviewer,
2	International Conference Civil, Offshore and Environmental Engineering (ICCOEE2012),	Kuala Lumpur Convention Center, Malaysia, 12-14 June 2012,	Publication Committee - Reviews/Publication responsibilities
3	IEEE 2011 National Postgraduate Conference,	Universiti Teknologi PETRONAS Malaysia, 19-20 September, 2011	Organizing Committee, Event Management,
4	International Conference on Sustainable Building and Infrastructure	Kuala Lumpur Convention Centre, Malaysia, 15-17 June, 2010.	Organizing Committee, Event Managements/Logistics



### Membership of Scientific and Professional Societies and Organizations

- Malaysian Association of Facility Management, Member, December 2012.
- International Editorial Board Member, for Journal of Applied Sciences and Environmental Sustainability, 2360-8013, (since: October 2012).

### Teaching Activities

#### Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)

#### Brief Description of Undergraduate Courses Taught: (Course Title – Code: Description)

Topics in Construction Management (CONEN 523), Second Semester – Department of Civil & Construction, IAU. Lectures; Instructor.
Construction Safety & Protection (CONEN 531), First Semester – Department of Civil & Construction, IAU. Lectures; Instructor.
Senior Design Project I & II (CONEN 522 & 524), First & Second Semester - Department of Civil & Construction, IAU. Final Year Project Supervisor.
Cash Flow Forecasting & Fin. Management (CONEN 511), First Semester – Department of Civil & Construction, IAU. Lectures; Instructor.
Construction Contracts & Law (CONEN 462), Second Semester – Department of Civil & Construction, IAU. Lectures; Instructor.
Engineering Economy (ENG 412), Second Semester – Department of Civil & Construction, IAU. Lectures; Instructor.

#### Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1			
2			

#### Brief Description of Postgraduate Courses Taught: (Course Title – Code: Description)

1	Advanced Construction Engineering Economics (CONEN 605), First Semester – Department of Civil & Construction, IAU. Lectures; Instructor.
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2	Construction Procurement & Contract Administration (CONEN 602), Second Semester – Department of Civil & Construction, IAU. Lectures; Instructor.
3	Construction Company Financial Management (CONEN 612), First Semester – Department of Civil & Construction, IAU. Lectures; Instructor.
4	Strategic Planning in Construction (CONEN 619), Second Semester – Department of Civil & Construction, IAU. Lectures; Instructor.

### Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
	Postgraduate	All students of Master of Engineering Management	2017	Date
	Undergraduate	Average of 5 students per year	2014	Date

### Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
	M.Sc.	A Framework for Evaluating Contractors' Proficiency in Reducing Construction Waste Generation"	Department of Building Engineering, Imam Abdulrahman Bin Faisal University	On-going

### Ongoing Research Supervision

#	Degree Type	Title	Institution	Date
	PhD	Development of a Framework for Enhancing IBS Contractors' Performance".	School of Housing, Building and Planning, Universiti Sains Malaysia, 11800 USM, Pulau Pinang, Malaysia	On-going





## Administrative Responsibilities, Committee and Community Service (Beginning with the most recent)

### Committee Membership

#	From	To	Position	Committee/Organization
1	Sept. 2021	Date	Head	Development of M.Eng Safety Engineering, College of Engineering, IAU.
2	October, 2016	April, 2017	Member	Development of M.Eng Engineering Management, Dept. of Construction Engineering, IAU
3	Sept. 2014	Date	Head	Training & Community Services, Dept. of Construction Engineering, IAU
4	Sept. 2016	Date	Member	College Committee for Summer Training II, College of Engineering, IAU
5	Sept. 2016	Date	Member	College Committee for Community Services, College of Engineering, IAU
6	Sept. 2014	Date	Member	Departmental Committee for Quality & Accreditation, Dept. of Construction Engineering, IAU

### Community Services

#	From	To	Type of Service
1	Sept. 2016	Date	Criteria Development for Intervention Works to Community Mosque Buildings (الإحسان لبيوت الرحمن)
2	Sept. 2017	June 2019	Rendering sustainable professional consultations related to settlement and damages of community buildings at King Fahd Suburb, Dammam

### Last Update

27/10/2021