

## K. S. SCHOOL OF ENGINEERING & MANAGEMENT

#15, Mallasandra, Off.Kanakapura Road,Bengaluru-560109, Karnataka, INDIA.

Faculty Name	Dr Vijayalakshmi Akella			
Designation	Professor and Head			
<b>Educational Qualification</b>	P.hD	34		
Experience in Years	Teaching: 32 Research 25 Industry: 1			
Areas of Interest	Building Performance, Earthquake Engineering			
Aadhar Number	8160 3329 0567			
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### **Educational Details**

Examination/	College / University	Year of
Degree		Passing
UG	JNTU	1986
PG	Andhra University	1988
PhD	JNTU, Hyderabad	2007

### **Publications**

#### **Journal Publications:**

- **1.** Vijayalakshmi Akella, "Effect of Glazing on Building Envelope A case study", The journal of the Indian Institute of Architects. Oct 2004.
- **2.** Vijayalakshmi Akella, "Buildings for moderate climates- Bangalore", The journal of The Indian Institute of Architects. May 2007.
- **3.** Vijayalakshmi Akella, "Relative Magnitude Analysis (RMA) and its Comparison over other Computational Approaches", International Journal of mathematical sciences and Engineering Applications, ISSN 0973-9424, Vol 6, No 1, Jan 2012, pp-381-390
- **4.** Vijayalakshmi Akella, "Influence of Bangalore's canyon geometry on the intra-urban Ambient Air Temperature", International Journal of Construction and Architecture Scientific Herald Issue No; 3(23), ISSN 2075-0811, 2014, 40-50.
- **5.** Vijayalakshmi Akella, "Structural condition assessment and feasibility study", The International reviewer, Vol 2, Issue 2, 2015, ISSN-2395-1575, December 2015, 35-37.

- **6.** Vijayalakshmi Akella, "Township Guidelines to curb Urban Heat Island effect", National Journal on the Indian Institute of Architects, Issue No; 12, Volume; 80, December 2015.
- **7.** Vijayalakshmi Akella, "Experimental Studies on Bearing Capacity of Inclined Skirted Footings on Sand", Journal of Geotechnical Studies (MAT Journals), July 2016.
- **8.** Vijayalakshmi Akella , "Experimental Studies on Bearing Capacity of Skirted Footings on C-φ Soils", International Journal of Research in Engineering and Technology, September 2016.
- **9.** Vijayalakshmi Akella, "Impact of Building Orientation on energy Consumption in the design of Green Building" International Journal of Emerging Research in Management & Technology, Vol 6, Issue 2, ISSN 2278-9350, February 2017, 8-11.
- **10.** Vijayalakshmi Akella, "Design and Testing of Geopolymer Blocks for Infills in Masonry Structures" International Journal of Emerging Research in Management & Technology, , Volume 6, Issue 5, ISSN-2278-9359, May 2017, 82-86.
- **11.** Vijayalakshmi Akella, "Ajanta Caves: Past Present and Future", International Research Journal of Engineering and Technology (IRJET), 2019.
- **12.** Vijayalakshmi Akella, "Estimation of Ductility for High Rise Buildings for a Different Plant Aspect Ratio", International Research Journal of Engineering and Technology (IRJET), 2019.
- **13.** Vijayalakshmi Akella, "Experimental Studies and Numerical Validation on Bearing Capacity of Skirted Footings on c-Φ Soils", "Advances in Structures, Systems and Materials. Springer, Singapore, ISBN 978-981-15-3254-2, pp 85-98. 2020
- **14.** Vijayalakshmi Akella, "Numerical Validation of Experimental Results for Bearing Capacity of Internal Inclined Skirted Footings on c-φ Soil" Journal of Construction Management, Vol. XXXVI, No II, ISSN 0970-3675, pp 5-12. 2021.
- **15.** Vijayalakshmi Akella, "Internet of Things for High Performance Net Zero Energy Buildings", Innovations in the Industrial Internet of Things (IIOT) and Smart Factory, 2021

#### **Conference Papers:**

- 1. Vijayalakshmi Akella "Thermal performance of vernacular building in Kerala, South India", World conference on sustainability", Tokyo, Japan, September 2005. This work is translated to Spanish by Institute of tropical architecture, Costa Rica, 2005.
- 2. Vijayalakshmi Akella "parametric study of heat loads in air conditioned buildings" Paper Presented and Published in the proceedings of "International Conference on Green Energy (IGEC-2)" in Ontario, Canada, June 2006
- 3. Vijayalakshmi Akella, "Guidelines for Energy Efficient Buildings in moderate climate" presented

- and Published in the proceedings of "International Conference on sustainable building East Asia SB07", Kuala Lumpur, Malaysia, Nov 2007.
- 4. Vijayalakshmi Akella, "Combating Global Warming and Wetlands: A Conjoint Analysis for Bangalore City" International Conference on "ICCFRE", University of Kerala & NEA. December 9-11, 2011,
- Vijayalakshmi Akella, Influence of land use pattern on temporal climatic variations mapping Bangalore City", Proceedings of the 5th International congress of Environmental Research, University of Malaysia, Terengganu, Kualalumpur, Malaysia, 22-24 nov, 2012
- 6. Vijayalakshmi Akella, "Urbanization of Bangalore and Its Impact on water bodies", International Conference, 2012, 115.
- 7. Vijayalakshmi Akella, "Municipal Solid Waste Management in Bangalore-Existing Scenario and Recommendation –A Review", International Conference on "Sustainable Waste Management, Infosysis Campus, July30-Aug01, 2012, 53-57.
- 8. Vijayalakshmi Akella, "Influence of land-use pattern on temporal Climatic variations mapping Bangalore city, India", International Conference on "5th International Congress of Environmental Research ICER-12". Malaysia 2012, 623.
- 9. Vijayalakshmi Akella, "Morphometric Analysis of Tippagondanahalli Watershed (T.G Halli) Karnataka using Geographic Information System (GIS)", International conference Sustainable water, Wastewater and Energy management (SWWEM), IISC, 17th to 19th August 2016.
- 10. Vijayalakshmi Akella, "Design and Testing of Geopolymer Blocks for Infills in Masonry Structures", International Conference on Emerging trends in science & Engineering (ICETSE) 11th and -12<sup>th</sup> May 2017, Coorg Institute of Technology, Ponnampet, Kodagu, Karnataka.
- 11. Vijayalakshmi Akella, "Seismic Analysis of Hoysala Architectural Building", 16th Symposium on Earthquake Engineering, 20<sup>th</sup> to 22<sup>nd</sup>, December 2018, IIT, Roorkee.
- 12. Vijayalakshmi Akella, "Experimental Studies on Bearing Capacity of Inclined Skirted Footings on C-φ Soils", 2<sup>nd</sup> International Conference on Emerging Research in Civil, Aeronautical & Mechanical engineering- ERCM 2019, 25<sup>th</sup> 26<sup>th</sup> July 2019, NMIT, Bangalore.
- 13. Vijayalakshmi Akella, "Experimental Investigation on SCC with Indigenously Developed Geopolymer Aggregates", 2<sup>nd</sup> International Conference on Emerging Research in Civil, Aeronautical & Mechanical engineering- ERCM 2019, 25<sup>th</sup> 26<sup>th</sup> July 2019, NMIT, Bangalore.

### **Awards**

- 1. Received a grant of Rs 20 lacs from VGST to conduct Dynamic analysis of Heritage structures
- 2. Received a grant of Rs 9.03 lacs from VTU, to conduct impact of Urban heat Island in Bangalore
- 3. Received Rs 50,000 from to conduct national seminar on heritage structures, 2020
- 4. Received Rs 1,50,000 to conduct performance of vernacular architecture, 2022

# **Other Accomplishment**

- 1. NAAC overall coordinator for 2016-2021
- 2. Chairman, grievance committee

## Research Guidance

Department	Name of the researcher	registe red for	Research Supervisor	year of registrati on	course work completed
Civil		KSSEM,	Dr Vijayalakshmi		
Engineering	Vasantha Lakshmi G	VTU	Akella	2015	Yes
Civil		KSSEM,	Dr Vijayalakshmi		
Engineering	Sushma C K	VTU	Akella	2016	Yes
Civil		KSSEM,	Dr Vijayalakshmi		
Engineering	Sushma M	VTU	Akella	2019	Yes
Civil		KSSEM,	Dr Vijayalakshmi		
Engineering	Abhilash Reddy B L	VTU	Akella	2019	No

# **Professional Membership**

1. Life member -

**Indian Society** 

for Technical

**Education** 

2. Life member-

**Indian Society** 

for Earthquake

technology

**ISET** 

# **Contact Details**

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