# Curriculum Vitae Dr. T.V.S.VARA LAKSHMI

#### **Assistant Professor**



## **CONTACT INFORMATION:**

## Dr. T.V.S. VARA LAKSHMI

Assistant Professor Department Of Civil Engineering University College Of Engineering And Technology Acharya Nagarjuna University, Nagarjuna Nagar Guntur- 522 510, A.P. INDIA,

Phone: 9703504939(Cell), Email: varam23@gmail.com

Date of Birth: 23/12/1979

### **EDUCATION**:

S.No.	Degree	Year	University	Subjects studied	% Marks	Division
1.	B. Tech	2002	Nagarjuna	Civil Engineering	63.18%	First class
			University			
2.	PGDCPA	2003	Andhra	Computer	68.3%	First class
			University	Applications		
3.	M.E	2005	Andhra	Structural	74.85%	First class
			University	Engineering and		
				Natural Disaster		
				Management		
4.	Ph.D	2014	Andhra	Thesis Title: Ana	llysis And	Design Of
			University	Orthotropic Two-Way Rectangular Slab With		
				Long Side Central Opening Using Yield Line		
				Analysis		
5.	MBA	2017	Acharya	Finance	60.3%	First class
			Nagarjuna	Management		
			University			

### **EMPLOYMENT**:

Acharya Nagarjuna Assistant Professor From: 16-08-2010 To: TILL DATE

University

Andhra University Teaching Associate From: 02-02-2006 To:15.08.2010

Creative Aakruthi Designer From 02-04-2002 To: 10.04.2003

## **COURSES TAUGHT**

**Post Graduate Level**: Structural Dynamics, Disaster Management, Earthquake Resistant Design of Structures.

**Undergraduate Level**: Prestressed Concrete, Design of Concrete Structures-I, Advanced RCC Structures, Concrete Technology, Estimation and quantity surveying, Surveying – I & II, Building Materials & Construction.

### **AWARDS & ACHIEVEMENTS**

Dr. T.V.S. Vara Lakshmi – *Sri V.B. V. Reddy Research Gold Medal for the best Ph.D Thesis in* Civil Engineering in the Faculty of Engineering for the year of 2014 by Andhra University held on  $29^{th}$  July 2017.

Dr. T.V.S. Vara Lakshmi  $-3^{rd}$  prize for the paper Emerging way to Enhance the Durability of concrete structures through bacteria addition bacterial concrete ICATEMS held on 16 &  $17^{th}$  Nov 2017, organized by Golden Valley Integrated campus Ananthapur, Andhra Pradesh.

#### PH.D GUIDANCE

### **AWARDED: 07**

- 1. Effects of different types of curing on strength and durability characteristics of alkali resistant glass fibre---- Jaison. J.Memadam (2023).
- 2. A contemplation regarding properties of concrete by Augmenting of bio-cement-----Ravi Shanti Kala (2023).
- 3. Analysis & Design of Economical Ecofriendly Bubble Deck Slabs Using Polypropylene Hollow Balls----Mrs. Samantha.Konuri (2023).
- 4. Effect of Bacillus grouped bacteria's on strength and durability permeation characteristics of concrete incorporating silica fume and metakaolin----- Mrs. Shaik Bifathima (2021).
- 5. Effect of Molarity and Alkaline Liquid Ratios on Strengths and Durability Properties of FA & MK based GPC---Mr. A. Lakshmi Deepak (2021).
- 6. Bacterial concrete as self healing material: An experimental investigation--Mr.C. Venkata Siva Rama Prasad (2019).
- 7. Effect of industrial waste materials on the geopolymer concrete--- Mr. Ahmed Mohmed Ahmed Blash (2019).

### **REGISTERED: 07**

#### M.E. THESIS

### AWARDED: 22

- 1. Comparison between linear and nonlinear analysis of steel frame and nonlinear impact on behavior of structures--- Mohammed Sameer Attaee(2021).
- 2. A study on the properties of Geo-Polymer concrete by replacement with different percentages of GGBS & Fly ash---Swaroopa vani.B(2018).
- 3. An experimental study on mechanical properties of hybrid fiber reinforced concrete--- U.V.krishna Raju(2017).
- 4. Significance of Silica fume on the mechanical properties of recycled aggregate concrete---Jerri Appa Rao(2017).
- 5. Study on Seismic performance evaluation of existing building and comparative investigation of effective with and without shear wall by using ETABS--- Suzan Hassan Ahmed(2017).
- 6. A study on the properties of Geopolymer concrete by replacement with Metakaolin and flyash ---k.Himabindu(2016).
- 7. A study on performance of concrete (M30) with partial replacement of cement by flyash---T.kondala Reddy (2016).
- 8. Seismic Performance of high rise RC structures with and without openings in shear wall---Waleed Khaleel Nayal (2016).
- 9. Effect of seismic vibration on analysis and design of elevated water tanks in seismic zone (I, III) having different shape by using Sap2000---Murtaja Ibrahim Fadhil (2016).

- 10. A study of response of RC Tall Buildings subjected to Blast Loads---Mohanad Hatam Shadhar(2016).
- 11. A study on the properties of Geo-Polymer Concrete by replacement with Metakaolin & Fly ash---P.Annapurna(2016).
- 12. Study on the behavior of Coir Fibre Reinforced Fly ash Based Geopolymer Concrete---A.Hanumatha Rao(2016).
- 13. Twisting Behavior of Buildings during Earthquakes---M.Hemambaraadhara Reddy(2016).
- 14. Effect of Discontinuous load path on Seismic performance of building using SAP 2000----Bushra Quasim Hussein (2015).
- 15. Comparison study of Zone-II and Zone-IV by considering different angles of slope ground for the analysis of Multi-storey building by using E-Tabs---Wisam Gabbar Thamer(2015) .
- 16. Best resist tall building having same plan area for regular and irregular shapes at different levels under seismic load by using E-Tabs--- Taha Khalid Mohammed Ali (2015).
- 17. Effect of shear wall height and types on the behavior of multi-storey building located at Seismic Zones (II, V) by using SAP 2000---Yousuf Asaadsalih(2015).
- 18. An experimental on concrete by partial replacement of cement and sand with flyash and glass powder---N. Prasad(2015).
- 19. An experimental on partial replacement of cement with flyash and fine aggregate with robo sand---T.Suresh Kumar.(2015).
- 20. Design of Flexural Resistance of high performance of concrete---M.Srividya(2015).
- 21. Performance of concrete by replacing coarse aggregate and fine aggregate with blast furnace slag and crusher dust---G. Prasad Rao(2015).
- 22. Design of Suspension Bridge--- Karrar Yousif Fadhil (2013).

### **PUBLICATIONS**

## **International Journals: 43**

- 1. C. Venkata Siva Rama Prasad, **T. V. S. Vara Lakshmi**, G. Sree Lakshmi Devi, Microstructural and Cantabro loss studies on self-healing concrete with crushed stone sand, Bacillus subtilis bacteria and calcium lactate", Innovative Infrastructure Solutions (2023) https://doi.org/10.1007/s41062-023-01088-8.
- 2. Jaison J Memadam, **Dr. T.V.S. Vara Lakshmi**, "Strength Characteristics of Glass Fibre Concrete Under Different Types of Curing", Neuro Quantology, January 2023, Vol 21, issue 2, pp-63-73, doi:10.148047/nq.2023.21.2.NQ23008.
- 3. Jaison J Memadam, **Dr. T.V.S. Vara Lakshmi**, " Effect of Normal, Calcium Chorlide integral and polethene sheet membrane curing on the strength characteristics of Glass fiber and Normal concrete", Springer Nature Singapore pte ltd 2022, intelligent sustainable systems, .https://doi.org/10.1007/978-981-16-6369-7\_10
- 4. Kiran kumar poloju, Kota srinivasu, **T.V.S.Vara Laxmi**, G.Mallikarjuna Rao, "Method of detrmining characteristics of geoploymer concrete under elevated temperatures", Neuro Quantology, August 2022, Vol 20, issue 7, doi:10.14704/nq.2022.20.10.NQ551072.
- 5. Jaison J Memadam, **Dr. T.V.S. Vara Lakshmi**, "SEM,XRD AND EDX analysis of Glass fiber concrete under different types of curing," *Engineering letters*, *International Association of engineers, engineering letters*(IAENG), online ISSN:1816093X,18160948,Vol-30, issue-1.
- 6. Samantha. Konuri, **Dr. T.V.S. Vara Lakshmi**, "Estimation of material quantities with their cost comparison among conventional slab and bubble deck slab", *International Association of engineers*, *engineering letters*(IAENG), online ISSN:1816093X,18160948,Vol-30, issue-1.
- 7. Jaison J Memadam, **Dr. T.V.S. Vara Lakshmi**, "Chemical attack and Sorptivity Characteristics of GFRC under different curing conditions", Neuro Quantology, August 2022, Vol 20, issue 7, pp-3405-3419, doi:10.14704/nq.2022.20.7.NQ33421.

- 8. Samantha. Konuri, **Dr. T.V.S. Vara Lakshmi**, "Assessment of environmental impact on carbodioxide emission between conventional slabs and bubble deck slabs" *Journal on Emerging Technologies and innovative research* (JETIR), ISSN: 2349-5162, Vol-9, issue-5 May-2022.
- 9. R.Santhi Kala, **Dr. T.V.S. Vara Lakshmi**, "Permanence studies on concrete by aggrandizing with Bio-Cement on M25 mix", *ARPN Journal of Engineering and Applied Sciences*, ISSN: 1819-6608, Vol-16, issue -11, June 2021,pp 1104-1112.
- 10. Pavan Kumar Jogi, **Dr. T.V.S. Vara Lakshmi**, "Performance of Bacillus Pasterurii and Calcium lactate on mechanical properties of Self Healing Concrete", *Design Engineering*, year -2021, issue 7, pp 10159-10172.
- 11. Pavan Kumar Jogi, **Dr. T.V.S. Vara Lakshmi**, "Self Healing Concrete based on different Bacteria: A Review", *Materials Today: Proceedings*, Vol-43, Part 2, 2021, pp 1246-1252.
- 12. Dr. Ahmed Mohamed Ahmed Blash, **Dr. T.V.S. Vara Lakshmi**, "A study of the Effect of Polyproplen Fibers(PF) on fresh and hardened concrete grade 40 using Zillah sand", *International journal of Engineering Science Invention*, (*IJESI*) ISSN No.2319-6734, Vol-9, Issue-11, November 2020, pp 34-40.
- 13. R.Santhi Kala, **Dr. T.V.S. Vara Lakshmi**, "Inherent appliance of Bio-cement to intensify properties of concrete", *Internatinal journal of Advanced research in engineering and technology*, ISSN: 0976-6499, Vol-11, issue-8, August 2020, pp.no: 184-189.
- 14. A.Lakshmi Deepak, **Dr. T.V.S. Vara Lakshmi** "Effect of Alkaline Liquids Ratio and Molarity of Sodium hydroxide on Hardened Properties of GPC" *Solid State Technology*, Volume-63, Issue-6, *January-2020*, pp-17309-17317.
- 15. A.Lakshmi Deepak, **Dr. T.V.S. Vara Lakshmi** "Durability Properties of Geo-Polymer Concrete with Fly Ash and Metakaolin" *International Journal of Scientific & Technology Research (IJSTR)* ISSN: 2277 8616, Volume-9, Issue-1, *January-2020*, pp-256-260.
- 16. Sk.Fathima, **Dr. T.V.S.Vara Lakshmi**, "Self healing concrete by adding Bacillus Megaterium MTCC with Glass & Steel fibers" Civil and Environmental Engineering (Sciendo), Vol. 16, Issue 1, 184-197, DOI: 10.2478/cee-2020-0018.
- 17. C. Venkata Siva Rama Prasad, **Dr. T.V.S. Vara Lakshmi**, "Experimental investigation on bacterial concrete strength with Bacillus subtilis and crushed stone dust aggregate based on ultrasonic pulse velocity", *Materials Today: Proceedings* 27(2020) 1111-1117, February 2020.
- 18. Sk.Fathima, **Dr. T.V.S.Vara Lakshmi**, "Review On Emergent ways to raise the strength aspect &durability of concrete structure by adding Bacillus Megaterium MTCC1684" *International Journal of Scientific & Technology Research (IJSTR)* ISSN: 2277–8616, Volume-8, Issue-12, December 2019.
- 19. Sk.Fathima, **Dr. T.V.S.Vara Lakshmi**, "Tentative Exploration of Bacterial concrete with partial replacement of stone dust" *International journal of Recent Technology and Engineering*, *ISSN*: 2277 3878, Volume-8, Issue-4, November 2019. https://www.ijrte.org/portfolio-item/d7836118419/
- 20. R.Santhi Kala, **Dr.T.V.S. Vara Lakshmi**, "A contemplation regarding properties of concrete by augmenting of Bio cement Review paper", *International Journal of research(IJR)*, ISSN: 2236-6124, Volume VIII, Issue 10, October-2019.
- 21. Samantha. Konuri, **Dr. T.V.S. Vara Lakshmi** "Review on Bubble Deck slabs Technologies and their applications" *International Journal of Scientific & Technology Research (IJSTR)* ISSN: 2277–8616, Volume-8 Issue-10, October 2019.
- 22. A.Lakshmi Deepak, **Dr. T.V.S. Vara Lakshmi** "Mechanical Properties of Geo-Polymer Concrete with Fly Ash and Metakaolin" *International Journal of Engineering and Advanced Technology (IJEAT)* ISSN: 2249 8958, Volume-9 Issue-1, *October 2019*.
- 23. Jaison Joy Memadam, **Dr. T.V.S. Vara Lakshmi**, "Strength characteristics of M-30 concrete using coloured polythene sheets curing" *International journal of Recent Technology and Engineering*, ISSN: 2277-3878, volume-8, issue-2511 September-2019, pp.1080-1082.

- 24. Jaison Joy Memadam, **Dr. T.V.S. Vara Lakshmi**, "Strength Characteristics of GFRC using calcium chloride integral curing method" *International journal of Recent Technology And Engineering*, ISSN: 2277-3878, Volume-8, Issue-2511 September-2019, pp.3040-3044.
- 25. C. Venkata Siva Rama Prasad, **Dr.T.V.S. Vara Lakshmi** "Effect of Crushed sand and Bacillus Subtilis on cantabro loss of Bacterial Concrete" *International Journal of Technology* Volume, Issue 02, April 2019.
- 26. C. Venkata Siva Rama Prasad, **Dr.T.V.S. Vara Lakshmi** "Use of Crushed rock sand as an alternative to river sand in Bacterial Concrete", *I-manager's Journal on Civil Engineering*, Volume 9, No.1, pp.1-8, Dec 2018 Feb 2019.
- 27. R.Santhi Kala, **Dr.T.V.S. Vara Lakshmi** "Strength studies on Bio cement concrete", *International Journal of Civil Engineering & Technology (IJCIET)* Volume10,Issue 01,January -2019, pp147-154.
- 28. C.Venkata Siva Ram Prasad, **Dr. T.V.S. Vara Lakshmi**, "Effect of bacillus subtilis on mechanical behavior of bacterial concrete". *ARPN journal of Engg and applied sciences*", Vol 13, No18, Sep 2018. pp. 4873-4881.
- 29. C.Venkata Siva Ram Prasad, **Dr. T.V.S. Vara Lakshmi,** "Effect of Bacillus subtility on a resistance of bacterial concrete", *International journal of applied Engg Research*, Vol 13, Issue No. 16, PP-12663-12666, Aug 2018.
- 30. Mr. Ahmed Mohamed Ahmed Blash, **Dr. T.V.S. Vara Lakshmi**, "Effect of industrial Pozzolana Meterials of Geopolymer concrete Mixes', *International journal of technical innovation in modern engineering & science*, (*IJTIMES*) Aug 2018, Vol-4, Issue-8.
- 31. Mr. Ahmed Mohamed Ahmed Blash, **Dr. T.V.S. Vara Lakshmi**, "studies on role of silica fume in Geopolymer concrete and its properties", *International journal of civil Engg & Technologies (IJCIET)*, July 2018, Vol-9, Issue-7, Pg 112-122.
- 32. Suzan Hassan Ahmed, **Dr. T.V.S. Vara Lakshmi**, "Study of seismic performance evaluation of existing building and comparative investigation of effective with and withour shear wall by using ETABS". *International journal of professional Engg studies (IJPRES*) July 2018 Vol.10, Issue-1, Pg: 246-255
- 33. Murtaja Ibrahim Fadhil, **Dr. T.V.S. Vara Lakshmi**, "Effect Of Seimic Vibration On Analysis And Design Of Elevated Water Tanks In Seismic Zone (I, III) Having Different Shape By Using SAP2000", *International Journal Of Engineering Science And Computing* (IJESC) April 2017, Vol.7, Issue-4.
- 34. Waleed Khaleel Nayel, **Dr. T.V.S. Vara Lakshmi**, "Seismic Performance Of High Rise RC Structures With And Without Openings In Shear Wall", *International Journal Of Engineering Science And Computing* (IJESC) April 2017, Vol.7, Issue-4.
- 35. Mohanad Hatem Shadhar, **Dr. T.V.S. Vara Lakshmi**, "Study of Response of RC Tall Buildings subjected to Blast loads", *International Journal of Engineering Science and Computing* (IJESC) April 2017, Vol.7, Issue-4.
- 36. Mr. Ahmed Mohamed Ahmed Blash, **Dr. T.V.S. Vara Lakshmi**, "Properties of Geopolymer Concrete produced by Silica Fume and Ground –Granulated Blast-Furnace Slag", *International Journal of Science & Research*, (IJSR), Oct 2016, Vol: 5, issue 10, pp. 319-323.
- 37. **Dr. T.V.S. Vara Lakshmi,** Prof. K. Rambabu, Prof. K. Srinivasa Rao, "Application of affine theorem to orthotropic rectangular reinforced concrete slab with long side opening symmetric about vertical axis", *International Organization of Scientific Research*, (IOSR), May-June 2016, vol: 13, issue: 03, pp. 30-38.
- 38. Bushra Gasim Hussein, **Dr. T.V.S. Vara Lakshmi**, "Effect of Discontinuous load path on Seismic performance of building using SAP 2000", *International Journal of Scientific Engineering & Technology Research* (IJSETR), May 2016, Vol: 5, Issue: 11, pp. 2145 2151
- 39. Wisam Jabbar Thamer, **Dr. T.V.S. Vara Lakshmi**, "Comparison study of Zone II and Zone IV by considering different angles of slope ground for the analysis of Multi-storey building by using E-Tabs", *International Journal of Scientific Engineering & Technology Research*

- (IJSETR), May 2016, Vol : 5, Issue: 10, pp. 2107 2119.
- 40. Taha Khalid Mohammed Ali, **Dr. T.V.S. Vara Lakshmi**, "Best resist tall building having same plan area for regular and irregular shapes at different levels under seismic load by using E-Tabs", *International Journal of scientific Engineering & Technology Research* (IJSETR), May 2016, Vol: 5, Issue: 10, pp. 2099 2106.
- 41. Yousuf Asaad Salih, **Dr. T.V.S. Vara Lakshmi**, "Effect of shear wall height and types on the behavior of multi storey building located at Sesimic Zones (II, V) by using SAP 2000", *International Journal of Scientific Engineering & Technology Research* (IJSETR), May 2016, Vol: 5, Issue: 10, pp. 2090 2098.
- 42. **Dr. T.V.S. Vara Lakshmi**, Prof. S. Adiseshu, "A study on preparing of High Performance concrete using silica fume and fly ash", *International Journal of Engineering & Science (THE IJES)*, Feb 2016, Vol: 5, Issue: 02, pp. 29-35.
- 43. Mr. Ahmed Mohamed Ahmed Blash, **Dr. T.V.S. Vara Lakshmi**, "Studies on the physical properties of ground granulated blast-furnace slag incorporating in Geopolymer concrete", *International Journal of Engineering Research & Technology (IJERT)*, Feb 2016, Vol: 5, Issue: 02, pp. 88-92.

### **INTERNATIONAL CONFERENCES: 11**

- 1. Samantha Konuri, **Dr. T.V.S. Vara Lakshmi**, "Experimental studies comparing conventional concrete to bubble deck concrete" Second global conference on Recent advancements in sustainable materials (GC-RASM 2022), 18<sup>th</sup> April 2022, at Mangalore, Karnataka, India.
- 2. R.Santhi Kala, **Dr. T.V.S. Vara Lakshmi**, "Enhancement in properties of concrete by assessing Bio-cement", Material today-Proceedings, ISSN: 22134-7853, April 2021.
- 3. Pavan Kumar Jogi, **Dr. T.V.S. Vara Lakshmi,** "Self Healing Concrete based on different Bacteria: A Review", *International Conference on Advanced Materials Behavior and Characterization*, February 2020.
- 4. A.Lakshmi Deepak, **Dr. T.V.S. Vara Lakshmi** "Experimental Studies on Mechanical Properties of Geo-Polymer Concrete with Fly-Ash and Metakoalin" *International Conference on Recent Advances in Science, Engineering, Technology and Management(IJARSET)*,31<sup>st</sup> August 2019, at Sree Vahini Institute of Science and Technology-Tiruvuru, Krishna Dist, A.P.
- 5. Jaison Joy Memadam, **Dr. T.V.S. Vara Lakshmi** "Strength Characteristics of concrete using coloured polythene sheets curing", two days international conference on science engineering and technology-July 26<sup>th</sup> -27<sup>th</sup> 2019 organized by Amalapuram institute of Management & college of engineering, Mummdivaram, A.P.
- 6. C.Venkata Siva Ram Prasad, **Dr. T.V.S. Vara Lakshmi** "Evaluation of Bacterial Concrete strength with crushed stone dust aggregate based on Ultrasonic pulse velocity", Two day National Conference on Advances in Sustainable Construction Materials (ASCM 2019), March 15<sup>th</sup> -16<sup>th</sup> 2019, NIT Warangal, Telangana.
- 7. Sk.Fathima, **Dr. T.V.S.Vara Lakshmi** "Emerging way to enhance the strength aspects & durability of concrete structures by adding Bacillus Sugnuis", International Conference on Innovations in Engineering and Management held at MVR college of Engineering and Technology, 22<sup>nd</sup> & 23<sup>rd</sup> FEB 2019, Paritala, Andhra Pradesh.
- 8. C.Venkata Siva Ram Prasad, **Dr. T.V.S. Vara Lakshmi** "Effect of Crushed sand on Cantabro loss of Bacterial Concrete", SEC18: proceedings of the 11<sup>th</sup> Structural Engineering Convention (SEC 2018), 19<sup>th</sup> -21<sup>th</sup> December, Jadavpur University, Kolkata.
- 9. Mr. Ahmed Mohamed Ahmed Blash, **Dr. T.V.S. Vara Lakshmi**, "Effect of fly ash on ground granulated blast furnace slag based Geopolymer concrete", International conference on recent advance in Engg & Technology (ICRAET-18) Feb 2018, Pg, 56-58, Guntur, Andhra Pradesh.
- 10. C.Venkata Siva Ram Prasad, **Dr. T.V.S. Vara Lakshmi** "Emerging way to enhance the durability of concrete structures through bacterial addition bacterial concrete

- "ICATEMS  $16^{th}$  &  $17^{th}$  Nov 2017, Golden valley integrated campus (GVIC) Madenapalli , Andhra Pradesh.
- 11. **T.V.S.Vara Lakshmi,** K.Srinivasa Rao, K.V.G.D.Balaji, "Effect of Zone Factor on Base Shear For Regular Buildings", International Conference ICASDA-2005, December 7<sup>th</sup>-9<sup>th</sup> 2005, College of Engineering, GITAM, Visakhapatnam pp. 380-389.

### **NATIONAL CONFERENCES: 3**

- 1. R.Santhi Kala, **Dr. T.V.S. Vara Lakshmi**, "Potential application of Bio-cement to enhance properties of concrete" Two day National conference on "Emerging trends in civil engineering", 6-7<sup>th</sup> march 2020, BEC, Bapatla, A.P, India
- 2. Narendra Kumar Adapa, **Dr. T.V.S. Vara Lakshmi**, "Experimental studies on stabilization of soil by using Alkali Activated Palmoil Fuel Ash" National Level conference on Recent Challenges in Civil Engineering Science and Technology, REC Eluru 29<sup>th</sup> Feb 2020.
- 3. **T.V.S.Vara Lakshmi,** K.Srinivasa Rao, P.S.N.Raju, "*Impact of Zone Conversions on Base shear*" NCEE -2007, Thiagarajar College of Engineering, Madurai 625 015, 18-19 Dec 2007.

## **BOOK PUBLISHED: 01**

1. Narendra Kumar Adapa, **Dr. T.V.S. Vara Lakshmi**, "Constitutive Composite Matrix-Carbon Composite fibre- Lamber Academic Publishing.

## **PATENTS: 4**

- 1. R.Santhi Kala, Dr.T.V.S.Vara Lakshmi, "application of Bio-Cement to enhance properties of concrete", official journal of the patent office, Application No. 202341012948A, March- 2023.
- 2. Y. Hemantha kumar, om prakash singh, s.solai Mathi, saurav kar, g. jegadeesh, vishal akula, teegala siva sankar reddy, k srinivasa rao, **Dr. T.V.S. Vara Lakshmi**, "Prediction of compression strength of bacterial concrete using artificial intelligence techniques", official journal of the patent office, Application No.202241041881, August -2022.
- 3. Jaison joy memadam, **Dr. T.V.S. Vara Lakshmi**, "Strength and durability characteristics of glass fibre reinforced concrete under different types of curing", official journal of the patent office, Application No.202241046910, August -2022.
- 4. Samantha. Konuri, **Dr. T.V.S. Vara Lakshmi**, "Analysis & design of economical ecofriendly bubble deck slabs using polypropylene hollow balls", official journal of the patent office, Application No.202241042671, issue no. 30/2022, july-2022.

## **CONFERENCES / WORKSHOP ORGANIZED:-03**

- 1. **Director,** one day National Seminar on "Emerging Trends in Civil Engineering (ETCE-2020)", 26<sup>th</sup> February 2020.
- 2. **Organizing Secretary,** one day National Workshop on "Deep foundation Technologies for Infrastructure Development of Andhra Pradesh", 12th March 2016.
- 3. **Organizing committee member,** "International conference on navigation systems and signal processing application (NSSP 2013)" organized by University College of engineering & technology ANU, Guntur, held on 13 & 14<sup>th</sup> Dec 2013.

## PARTICIPATION IN CONFERENCES / SEMINARS / WORKSHOPS:- 21

- 1. Advanced course on Geopolymer concrete conducted by CSIR-SERC, Chennai during 28-29<sup>th</sup> January 2021.
- 2. Advanced course on Micro Structural Characterization Techniques and Mix Design of Special Concretes conducted by CSIR-SERC, Chennai during 9<sup>th</sup> to 11<sup>th</sup> September 2020.
- 3. Webinar on Energy Geostructures and Sustainable Geotechnical Engineering by Vidyavardhaka College of Engineering, Mysuru on 5<sup>th</sup> August 2020.
- 4. Webinar on Recycling Techniques for sustainable Payments by Vidyavardhaka College of Engineering, Mysuru on 4<sup>th</sup> August 2020.
- 5. Webinar on Sustainable Green City using Geo informatics by Vidyavardhaka College of Engineering, Mysuru on 3<sup>rd</sup> August 2020.
- 6. Webinar on Sustainable Developments in civil Engineering by Vidyavardhaka College of Engineering, Mysuru on 3<sup>rd</sup> to 8<sup>th</sup> August 2020.
- 7. Five Day Faculty Development Programme on Emerging trends in Civil Engineering by Gates Institute of Technology, Ananthapuramu 25<sup>th</sup> to 29<sup>th</sup> July 2020.
- 8. Webinar on Geopolymer Composites by ICI Vijayawada Centre & Ultratech Cement Ltd during 27<sup>th</sup> June 2020.
- 9. Webinar on special concrete & its Applications by Department of Civil Engineering Osmania University Hyderabad during 5<sup>th</sup> to 9<sup>th</sup> June 2020.
- 10. Webinar on low corbon cements –sustainable construction materials by BEC, Bapatla 8<sup>th</sup> June 2020.
- 11. One day FDP on Awareness of Publication Ethics and anti plagiarism tools for Thesis writing by RCE, Eluru on 7<sup>th</sup> March 2020.
- 12. Legal Awareness Program by RCE, Eluru on 4<sup>th</sup> March 2020.
- 13. A three day workshop on developing a teacher supportive material for quality improvement among faculty of engineering and technological institutions II phase at Inter University centre for teacher education on 18<sup>th</sup> to 20<sup>th</sup> December 2019.
- 14. International work shop on disaster mitigation and management by Gitam University 10<sup>th</sup> to 11<sup>th</sup> December 2018.
- 15. State level work shop on Neeru Pragathi by APSCHE, Amaravathi on 8<sup>th</sup> May 2017.
- 16. National women's Parliament by Legislative Assembly A.P. 10<sup>th</sup> to 12<sup>th</sup> Feb 2017.
- 17. Workshop on Irrigation vision document by Water Resources Department govt of A.P.on 8<sup>th</sup> Feb 2017.
- 18. One day National Seminar on problems related to infrastructure geotechnics (SPRING) organized by department of Civil engineering, KKR & KSR Institution of technology and sciences on 23<sup>rd</sup> Aug 2014.
- 19. Workshop on greater Visakhapatnam Environmental concerns organized by Dept. of civil engineering, A.U., Visakhapatnam held on 30.06. 2006.
- 20. A training program on Total Station Data Analysis, LAN software & 3D civil software, organized by Dept. of Civil Engineering, A.U., Visakhapatnam from 10<sup>th</sup> Feb to 10<sup>th</sup> March 2006.
- 21. National Conference on Modern cement concrete and bituminous roads organized by Gitam College, Visakhapatnam during 18<sup>th</sup> to 20<sup>th</sup> Dec 2003.

### ORIENTATION PROGRAMMES / REFRESHER COURSES PARTICIPATION:-07

- 1. Participated in short term training programme through ICT Mode on "Automated Manufacturing Systems" Organized by National Institute of Technical Teacher's training and research, Kolkata, from 01.07.2019 to 05.07.2019.
- 2. Participated in short term training programme through ICT Mode on "NBA Accreditation and SAR Preparation" Organized by National Institute of Technical Teacher's training and research, Kolkata,

- from 21.01.2019 to 25.01.2019.
- 3. Participated in short term training programme through ICT Mode on "Outcome based education and Accreditation" Organized by National Institute of Technical Teacher's training and research, Kolkata, from 24<sup>th</sup> Sep 2018 to 28<sup>th</sup> Sep 2018.
- 4. Participated in 5 days Introductory Workshop on "A foundation course on Human values and professional ethics" from 5<sup>th</sup> 9<sup>th</sup> Jan 2015 held at academic staff college, Andhra University, Visakhapatnam.
- 5. Participated in NI-MSME, faculty development programme on Entrepreneurship development, organized by UGC academic staff college, Andhra University, Visakhapatnam from 29.03.2010 to 09.04.2010.
- 6. Participated in Refresher course organized by UGC academic staff college, Andhra University, Visakhapatnam from 03.03.2010 to 23.03.2010.
- 7. Participated in Orientation programme organized by UGC academic staff college, Andhra University, Visakhapatnam from 12.10.2009 to 08.11.2009.

## **ACADEMIC ACTIVITIES**

## A. Board of Studies

(Structure of syllabus/Syllabus framing/Syllabus quality checking)

- 1. Member, Board of Studies for the Department of Civil Engineering, Acharya Nagarjuna University Guntur 2015-2018.
- 2. BOS Member for Swarnaandhra college of Engg & Technology, Narsapur Feb 2018.
- 3. BOS Member for Devinene Venkata Ramana & Dr. Hima Sekhar, MIC College of Technology Kanchancharala Krishna Dist, Andhra Pradesh 2018.
- 4. BOS Member for Narasaraopeta Engineering College (Autonomous), kotappakonda road, Yellmanda, Narasaraopeta, Guntur Dist, Andhra Pradesh 2019.
- 5. DAC Member for Chalapathi Institute of Engineering and Technology, Chalapathi Nagar, Lam, Guntur-34, Andhra Pradesh 2019.

### **B.** University Level Academic Activities

- 1. Coordinator for the Department of Civil Engineering, University College of Engineering and Technology, Acharya Nagarjuna University, Guntur.
- 2. Care Taker for NCC 1o(A), Acharya Nagarjuna University, Guntur.
- 3. Coordinator, constitution of Anti Ragging Committee by Acharya Nagarjuna University for the students of University College of Engineering and Technology.
- 4. Residential Warden for Ladies, Indira Priyadarshini Ladies Hostel, Acharya Nagarjuna University, Guntur 2015-2017.
- 5. Assistant Warden for Ladies, Indira Priyadarshini Ladies Hostel, Acharya Nagarjuna University, Guntur 2017-2021.
- 6. Member in Accommodation, International Indian Economic Association organized by Acharya Nagarjuna University 2017.
- 7. Member for Core Committee for NAAC Assessment, ANU
- 8. Member, IQAC Acharya Nagarjuna University, Guntur.
- 9. Editor Board Member for ANU journal, Acharya Nagarjuna University, Guntur

### C. State Level Activities

- 1. Being a member in tender committee constituted by Govt of A.P. Vijayawada Municipal Corporation 2013.
- 2. Committee member, constituted by Govt of A.P. to go into the details of Collapse of the portion of bridge flyover at railway (KN6/6-7) on Gudivada section of the Ramavarappadu 2013.
- 3. Member of expert team constituted by Acharya Nagarjuna University on "Explosion of Gas Pipeline" at Nagaram Village, in East Godavari on 27<sup>th</sup> June 2014.

- 4. Member & Project Technical Expert, to evaluate the Social Impact Assessment Report on seed access road under phase-II from Kanakadurgamma Varadhji to Undavalli Guntur district, constituted by Guntur Collector, 2016.
- 5. Member & Project Technical Expert, to evaluate the Social Impact Assessment Report on railway track from Guntur to Tenali, constituted by Guntur Collector, 2016.
- 6. Member & Project Technical Expert, to evaluate the Social Impact Assessment Report on Land Acquisition Nadikudi Sree Kalahasti new BG line. Constituted by Guntur Collector 2017.
- 7. Member & Project Technical Expert, to evaluate the Social Impact Assessment Report on Land Acquisition Mukkullapadu, chitalacheruvu villages of Nuzendla Mandalam constituted by Guntur Collector, 2018.
- 8. Member & Project Technical Expert, to evaluate the Social Impact Assessment Report on Land Acquisition in Phirangipuram Nandendla & Narsaraopeta Mandals by Guntur Collector, 2018.

### **MEMBERSHIP:**

- 1. The Institution of Engineers (India) ----- Associate Member --- AM3099396.
- 2. The Indian Society for Technical Education -----Life Member---LM 138234.

## **REVIEWER/EDITORIAL FOR JOURNALS:**

- 1. Journal of Emerging Technologies and Innovative Research, Member ID: 115130
- 2. American Journal of Construction and Building Material, Reference: AJCBM
- 3. International Journal of Creative Research Thoughts, Member ID: 115403
- 4. International Association of Engineers Member ID: 248708
- 5. International Journal of Innovative Research in Engineering & Multidisciplinary Physical Sciences member ID: 824.