

## **Curriculum Vitae**

Name : B. V. Venkatarama Reddy

Date of birth : 24 September 1955

Position held : Professor (Retired), Department of Civil Engineering

Address for communication : Centre for Sustainable Technologies  
Indian Institute of Science, Bangalore 560 012, INDIA  
Email: [venkat@iisc.ac.in](mailto:venkat@iisc.ac.in), [byrasandravenkat@gmail.com](mailto:byrasandravenkat@gmail.com)  
Tel. +919448493293 (Mobile)

Home address : 29, Dharani, 5<sup>th</sup> Main Road  
Tatanagar, Kodigehalli  
Bengaluru 560 092, India

### **ACADEMIC QUALIFICATIONS**

Bachelor's degree in Civil Engineering, University of Mysore, India, 1978  
Master of Science (Engineering), Indian Institute of Science, Bangalore, India, 1984  
Ph. D., Structural Engineering, Indian Institute of Science, Bangalore, India, 1992

### **PROFESSIONAL POSITIONS HELD**

1. Chairperson: CED-30 sectional committee on Clay & Stabilised Soil Products for Construction, Bureau of Indian Standards, Govt. of India, New Delhi, India. Since 2018
2. Chairman: 2012 - 2021, Centre of Sustainable Technologies (CST), Indian Institute of Science (IISc), Bangalore, India
3. Chairman: 2012 – 2014, Centre for Campus Management & Development, Indian Institute of Science, Bangalore, India
4. Senior Professor: 2010 - 2021, Department of Civil Engineering, Indian Institute of Science, Bangalore, India
5. Visiting Professor: 2015 – 2016, University of Bath, UK
6. DAAD Visiting Professor: 2008 – 2009, Bauhaus University, Weimar, Germany
7. Associate Professor: 2004 – 2010, Dept. of Civil Engineering, IISc, Bangalore, India

### **MEMBERSHIP OF PROFESSIONAL BODIES**

1. Member - Indian Concrete Institute
2. Associate Member: International Scientific Committee on Earthen Architectural Heritage (ISCEAH)
3. Member: International Committee on Non-Conventional Materials and Technologies (IC-NOCMAT)
4. Member: British Masonry Society, UK
5. Senior Member: The International Union of Laboratories and Experts in Construction Materials, Systems and Structures (RILEM), France

### **GUIDANCE OF STUDENTS FOR RESEARCH CONFERENCE'S**

Ph. D.: 18; MSc. (Engg.): 6 (Degree by research)

### **COURSES TAUGHT FOR POSTGRADUATE PROGRAMMES**

1. Design of R.C. and Masonry Structures
2. Structural Masonry
3. Advanced Concrete Design
4. Experimental Methods in Structural Engineering
5. Alternative Building Methods for Architects and Engineers

6. Earthen Materials & Structural Systems (at Bauhaus University, Germany)
7. Natural Building Materials (jointly at University of Bath UK)

### **SPONSORED RESEARCH PROJECTS**

Sponsored research projects mainly pertain to development and dissemination of wide range of technologies having immediate benefit to the industry and societal outreach. Totally about **152 million** rupees generated under sponsored research since the last 10 years.

#### **Sponsored projects (selected)**

- Dissemination of Sustainable Technologies in Rural and Peri-urban Habitats (C-BELT, a Corporate Social Responsibility project)
- Developing Earth Based Building Products Utilising Solid Wastes (UK-India Education Research Initiative)
- Developing alkali-activated low carbon bricks using construction and demolition wastes for energy efficient walling envelopes
- Capacity Building in Bioenergy & Low Carbon Technologies
- Developing Design Guidance for Rammed Earth Construction (Indo-French collaborative research, CEFIPRA)
- Utilisation of iron ore tailings for fine aggregate in concrete and mortars
- Construction waste – Potential resource for building products: A case study of Bangalore
- Renewable Energy Technologies in Built Environment (Renewable Energy Network programme – UK-India programme)
- Development & dissemination of roofing tiles from industrial and mine wastes
- Development and field testing of alternative building technologies
- Technology Interface Unit for Khadi and Village Industries
- Bioreactors for clean coffee effluents
- Development and dissemination of lime-based building blocks

#### **PUBLICATIONS:** 170 Nos.

(90 - Refereed journals, 4 – Books, 8 – Edited Books/book chapters, 68 – Conference proc.)

#### **PATENTS**

1. Process for treatment of fluoride contaminated water and a domestic defluoridation unit, Patent application # 614/CHE/2004, (Inventors: Rao, S. M., Mamatha, P. and Venkatarama Reddy, B. V.)
2. A new low-embodied energy building integrated photovoltaic roof mounting mechanism (Patent Application No. 32/KOL/2008 A, International classification: E04D13/18) (Inventors: Monto Mani, B. V. Venkatarama Reddy and BHEL) Patent No. 262623
3. An integrated sanitation system and a process for effective treatment of wastewater (Inventors: Monto Mani and B. V. Venkatarama Reddy), (Application No. 2787/CHE/2008, approved)
4. “Double Guarded Hot Box”. Inventors (or Authors): Monto Mani, B. V. Venkatarama Reddy, G. S. V. L. Narasimham, N. C. Balaji, K. I. Praseeda and Gayathri Aadithya, (Patent filed: May 2011, Application number: 1826/CHE/2011)
5. Stove-mould assembly, (Application #: 4595/CHE/2011) (Inventors: S. S. Lokras, Pramod R. Khadilkar, H. I. Somashekar, B. V. Venkatarama Reddy and Monto Mani)

#### **AWARDS & RECOGNITIONS**

1. Prof. Satish Dhawan Young Engineers Award for Engineering Sciences (Government of Karnataka, India) for the year 2004
2. Holcim awards acknowledgement prize (Asia Pacific region) for “Low-cost low-maintenance school extension Building,” for the design on low embodied energy building, 2008.

3. Association of Consulting Civil Engineers India and NAGADI – Award for the best publication in Civil Engineering for the book “Alternative Building Materials and Technologies”, 2008.
4. Suez Environment Water for All Foundation of the Institute de France award for “Appropriate/innovative sanitation design for the rehabilitation of tsunami affected island village of Kodiyampalayam, Tamil Nadu”, 2009
5. Amulya and Vimala Reddy award for Sustainable Development, Indian Institute of Science, Bangalore, India. 2011
6. Member, Committee on revision of National Building Code of India, Part 6 Structural Design: section 4 Masonry, CED 45/T-9, Bureau of Indian Standards, New Delhi.
7. Member, Governing Body of Karnataka State Building Centre, Bangalore since 2004.
8. Chairman, CED 30 committee on clay and stabilised earth products, Bureau of Indian Standards, New Delhi, India.
9. Director, Executive Board, Karnataka State Police Housing & Infrastructure Development Corporation Limited, Bangalore, India (2011 – 2015).
10. DAAD Guest Professorship at the Department of Architecture and Building Physics, Bauhaus University Weimar, Germany for 6 months during 2008-09.
11. Visiting Professor, Dept. of Architecture & Civil Engineering, University of Bath, UK (2015 – 16, one year)
12. Fulbright-Nehru Academic & Professional Excellence Fellowship: 2019-20
13. Member: Editorial committee, Construction Materials, Proceedings of Institution of Civil Engineers Journal, London UK, Thomas-Telford publication, 2014-17.
14. Member TC-RILEM committee on Testing and characterisation of earth-based building materials and elements
15. Member, Editorial panel for Building Research & Information journal

## **RESEARCH INTERESTS**

- (a) Structural Masonry and Mechanics of Materials
- (b) Low carbon building materials and technologies
- (c) Energy in buildings and green buildings
- (d) Construction materials from non-organic solid wastes

Moisture transport in brick-mortar-masonry assemblies; Stabilized compressed earth block and fly ash brick masonry; Bond strength & bond enhancement techniques; Bond strength-masonry strength relationships; Stabilised earth mortars; Strength and stability of masonry and rammed earth walls; Flexural behaviour of fly ash brick masonry; FE modelling and prediction of masonry behaviour.

Static compaction of soils; energy, density and moisture relationships; Modelling static soil compaction process; Optimum stabiliser-clay ratios and soil grading limits; Strength and stability of rammed earth walls; Reinforced rammed earth; Design guidance for rammed earth walls; Shrinkage phenomenon in compacted stabilised earth materials; Steam cured fly ash bricks; Bond development phenomenon in fly ash brick masonry; Flexure behaviour of fly ash brick masonry; Fly ash blended lean concrete mixes; Geopolymer bricks; Composite beam panel roofs; Unreinforced masonry vaults and domes; Cool roofs.

Embodied energy (EE) assessment; Methods of EE analysis; EE and operational energy in buildings; Thermal characteristics of materials and thermal behaviour of conventional and traditional buildings; Energy efficiency and green buildings

Iron ore tailings as fine aggregate; Re-use of fluoride contaminated sludge and mine tailings in building materials; Fine aggregates from C&D wastes; Alkali activated C&D products; Characteristics of manufactured sand; Fine aggregates from processed granulated steel slag and steel slag; Fly ash-lime-gypsum bricks.

## Major scientific contributions

- Fundamental contribution to the knowledge on static compaction of soils and modelling static soil compaction process
- Deducing optimum stabiliser-clay ratios and soil grading limits for a range of soils to produce stabilised compressed earth blocks
- Development of test methods for assessing the deterioration and durability of stabilised earth materials
- Establishing Mohr-Coulomb failure envelopes and theories of failure for high density stabilised rammed earth
- Developing and standardising methods for determining characteristic compressive strength of rammed earth & establishing stress reduction factors for design guidance
- Mapping the shrinkage phenomenon in compacted stabilised earth materials
- Establishing optimum mix designs for lime-fly ash mixes, activated through gypsum/steam curing.
- Bond development phenomenon in fly ash brick masonry and establishing the presence of chemical bond.
- Established bond strength -masonry strength relationships.
- The scientific findings on retrieving clay minerals from the compacted cement stabilised earth products
- Refining embodied energy (EE) assessment methods and data bank creation on EE of materials and operational energy in buildings across different climate zones of India-useful database for green building assessment methods.
- Optimum mix proportions for alkali activated and geopolymer stabilised compressed earth brick and rammed earth utilising non-organic solid wastes
- Fine aggregates for mortar and concrete from slag, C&D waste, mine tailings, and manufactured sand

## TRANSLATIONAL R&D, INNOVATIONS, TECHNOLOGY DEVELOPMENT, & OUT-REACH ACTIVITIES

R&D work pertains to finding solutions to the real-time problems aimed at devising innovative technologies for the construction sector. Brief highlights of some of the innovations, technologies developed, and dissemination efforts are as follows.

1. **Machines for Compressed Earth Blocks:** Design and development machines for the production of compressed earth blocks (CEB). Technology transfer for commercial production.
2. **Optimum Soil Grading for Stabilised Compressed Earth Blocks and Rammed Earth:** Optimum soil grading curves for the extreme cases of silty and sandy soils for the stabilised compressed earth products. These specifications are being widely used for the construction of stabilised compressed earth block and rammed earth buildings.
3. **Design & Development of Test methods for Dimensional Stability of Stabilised Compressed Earth Blocks (CEB):** Developed length comparator to measure linear expansion on saturation for CEB. This test has been adopted in the Indian code on stabilised CEB (IS 1725-2013, 2nd rev.).
4. **Cement-Soil Mortars for Masonry:** A new mortar (called cement-soil mortar) was discovered, which improves the workability and bond development in masonry drastically. Compatibility of the mortars established for the stabilised CEB masonry.
5. **Bond Strength – Masonry Compressive Strength Relationships:** It was discovered that bond strength influences masonry compressive strength for stiffer mortar-softer masonry unit combination and shown that the masonry compressive strength increases with increase in bond strength. A number of bond enhancing techniques developed and put into practice.
6. **Steam Cured Fly Ash Blocks:** The technology of steam cured fly ash block manufacture was standardised and implemented for commercial exploitation.

7. **Alkali activated compressed bricks:** Developed design and production processes for the manufacture of compressed bricks using C&D waste and geopolymer/alkali activated binders. A start-up company will utilise this know-how.
8. Developed Indian standard codes (IS 1725 – 2013 & IS 17165 – 2020) on stabilised earth brick technology.
9. The R&D work and findings on non-organic solid wastes (mine tailings, granulated slag, M-sand) as fine aggregates in concrete and mortar resulted in saving millions of tonnes of mined natural materials (river sand and granite).

### **Impact of scientific/translational research and technological contributions**

The R&D work pertained to finding solutions to the real-time problems aimed at devising innovative low carbon technologies for the construction sector. The development efforts on low carbon materials and building technologies is of direct relevance to the industry & have been practiced by many building professionals. Large numbers of structures (>150,000) built across India using alternative building technologies which has resulted in saving >3 million tons of carbon.

The environmental and ecological problem of river sand mining was greatly addressed through the design and development of alternative fine aggregates utilising industrial and mined by-products. The alternative fine aggregates developed include M-sand, granulated slag, mine tailings. The technology and the processes are being widely used by the construction industry.

Established a Centre for Bio-energy and Low Carbon Technologies (C-BELT). This effort is mainly catered to imparting skills on BELT technologies to the bottom of the pyramid beneficiaries and nurturing entrepreneurs in promotion of BELT technologies in rural and peri-urban areas.

Established a workshop series on “low carbon building materials and technologies.” The **one**-week workshop is towards imparting skills to the architects, engineers and building professionals. A self-supporting activity organised since 1995, and trained thousands of persons in low carbon building technologies. 10 – 15% of the trained professionals are practicing the design and construction of low-C buildings, resulting in enormous quantity of carbon savings.

### **CURRICULUM DEVELOPMENT / EDUCATIONAL MATERIAL**

- (a) Designed and developed an elective course on “Alternative building materials and technologies” for an undergraduate Engineering programme for Visveswaraiah Technological University, India.
- (b) New course on “Earthen materials and structural systems for buildings” was developed for PG program at Bauhaus University Weimar Germany
- (c) Contributed for developing a detailed teaching material for the architects, engineers, conservation professionals and building professionals for a programme on “Earth construction technologies”. This is a collaborative work with Department of Architecture and Building physics, Bauhaus University, Germany.

### **INDUSTRIAL RESEARCH AND CONSULTANCY PROJECTS**

Demand from the construction industry, for low carbon materials and the alternative building technologies developed over three decades of R&D. Technical services offered through consultancy projects. Totally about **80 consultancy projects** worth **25 million** rupees.

### **VISITS ABROAD and COLLABORATIVE WORK**

- (i) Presented papers in international conferences organised in Malaysia, Mauritius, Vietnam, Australia, UK, Germany, Portugal, Egypt, Peru, Croatia, USA, Sri Lanka and China. Visiting scientist at the University of Auckland New Zealand, University of Nottingham UK,

University of Bath UK, University of Bauhaus Weimar Germany, University of Illinois Chicago and ENTPE Lyon France.

(ii) Collaborative research projects and teaching

- (a) Student exchange and intern training programmes with University of Bath, UK
- (b) Teaching courses on stabilised earth construction and research supervision for doctoral and master degree theses at University of Bath, UK
- (c) Sponsored research collaborative projects with ENTPE Lyon France, on developing design guidance for rammed earth under Indo-French joint project work.
- (d) Collaborative R&D work in earth construction with Bauhaus University Weimar, Germany. Contributed to developing course material on “Planning and Building with Earth – Course handbook for architects, engineers, conservators and archaeologists”.
- (e) Taught a course on earthen materials & structural systems at Bauhaus University, Weimar
- (f) Student exchange and intern training programme, Bauhaus University, Weimar
- (g) Collaborative R&D and student intern training programmes with University of Illinois, Chicago, USA
- (h) Technical advisor, Watershed Materials LLC California USA

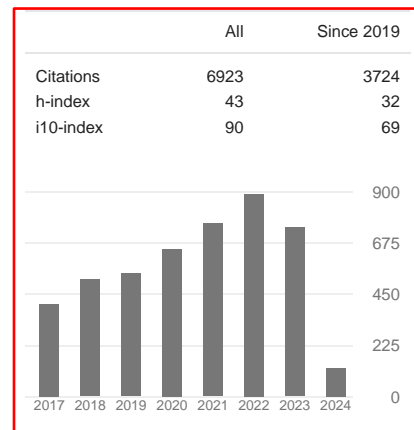
**ORGANISING CONFERENCES AND SYMPOSIA**

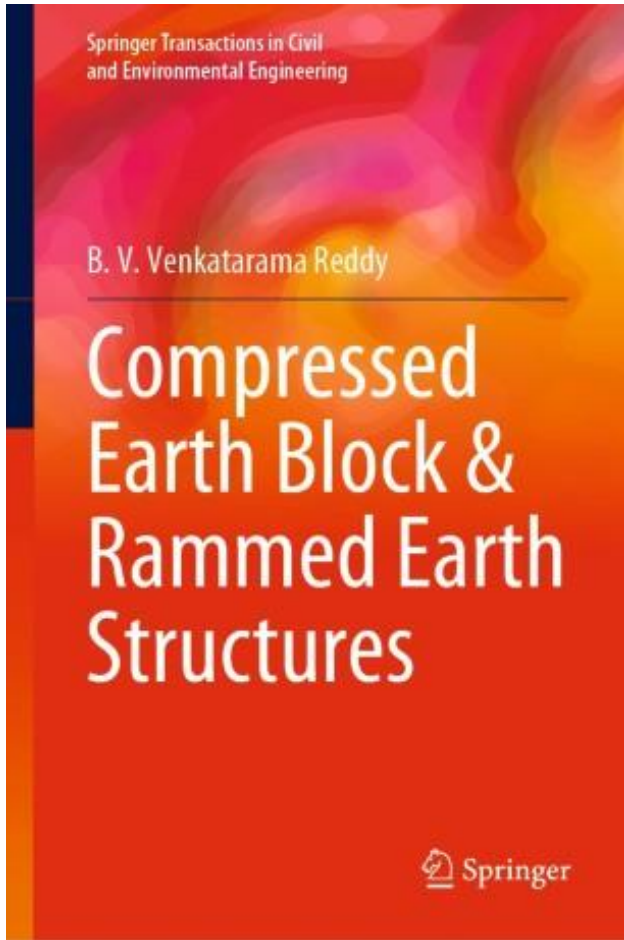
1. **Organising Secretary:** 6<sup>th</sup> International Seminar on Structural Masonry for Developing Countries-2000, Bangalore, India, jointly organised in collaboration with University of Edinburgh, and International Masonry Council for Developing Countries, UK.
2. **Organising Chairman:** International Symposium on Earthen Structures, August 2007 Bangalore, India, organised in collaboration with ENTPE France and University of Bath UK.
3. **Member:** Scientific Committee, International conference on “The design for sustainable well-being and empowerment”, IISc and TU Delft Netherlands, 2014
4. **Organising Chairman:** International Symposium on Earthen Structures, August 2018 Bangalore, India, organised in collaboration with ENTPE France, Durham University UK, University of Bath UK, Coventry University UK, Dachverband Lehm Germany.
5. Organising Chairman for UKIERI-UGC Workshop (UW-2019) on “Alkali activated earth building products utilising non-organic solid wastes” 15 Feb. 2019
6. Technical and advisory committee member for several National & International conferences

**PUBLICATIONS**

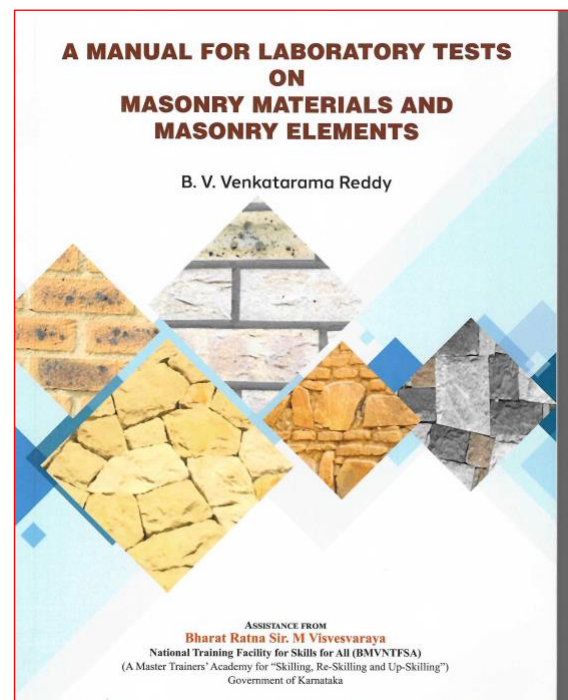
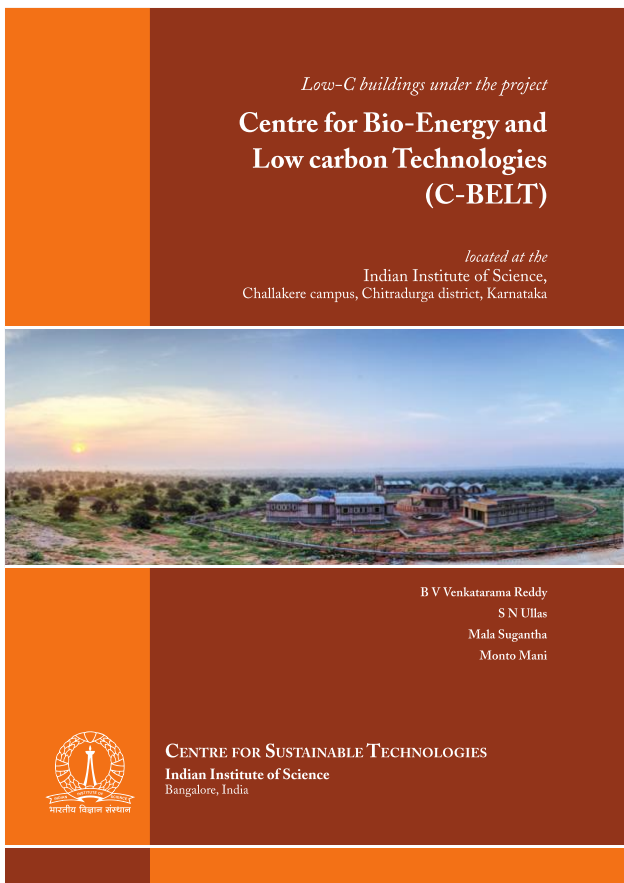
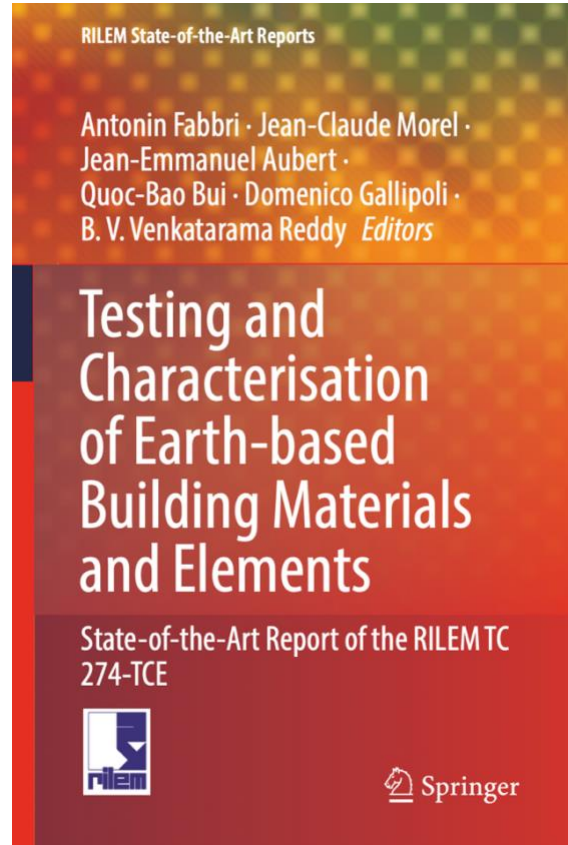
(a) Books

1. Venkatarama Reddy B.V. (2022). Compressed earth block & rammed earth structures, Springer, Singapore, ISBN 978-981-16-7876-9; ISBN 978-981-16-7877-6 (eBook); <https://doi.org/10.1007/978-981-16-7877-6>
2. Antonin Fabbri, Jean-Claude Morel, Jean-Emmanuel Aubert, Quoc-Bao Bui, Domenico Gallipoli, B.V. Venkatarama Reddy (Editors) (2022). Testing and Characterisation of Earth-based Building Materials and Elements, State-of-the-Art Report of the RILEM TC 274-TCE, Springer Nature Switzerland AG, Cham, ISBN 978-3-030-83296-4, <https://doi.org/10.1007/978-3-030-83297-1>.
3. Venkatarama Reddy B.V., Monto Mani and Pete Walker (Eds), (2019). Earthen Dwellings and Structures - Current Status in their Adoption, Springer Transactions in Civil and Environmental Engineering. Springer, Singapore, ISBN 978-981-13-5882-1
4. Jagadish K.S., Venkatarama Reddy B.V. and Nanjunda Rao K.S. (2017). Alternative Building Materials and Technologies, New-Age International, 2<sup>nd</sup> ed., ISBN: 978-93-859-2387-6
5. B. V. Venkatarama Reddy (2023). A manual for laboratory tests on masonry materials and masonry elements, Bharat Ratna Sir M Visvesvaraya National Training Facility for Skills for All, Government of Karnataka, India





## Books



## (b) Patents

1. Patent filled on the “*A new low-embodied energy building integrated photovoltaic roof mounting mechanism*”. Inventors (or Authors): IISc- Monto Mani and B. V. Venkatarama Reddy; BHEL- C.V. S. N. Murty, M. Sreenath, S. Lokabhiraman and N. Anandarao, (Granted Patent No. 262623, 29 Aug’ 2014)
2. Patent filled on the “*An integrated sanitation system and a process for effective treatment of wastewater*”. Inventors (or Authors): Monto Mani, B. V. Venkatarama Reddy (Granted Patent No. 272306, 29 Mar’ 2016)
3. Patent filled on the “*Double Guarded Hot Box*”. Inventors (or Authors): Monto Mani, B. V. Venkatarama Reddy, G. S. V. L. Narasimham, N. C. Balaji, K. I. Praseeda and Gayathri Aadithya, (Patent filed: May 2011, Application number: 1826/CHE/2011)
4. Patent filled on the “*Stove-mould assembly*”. Inventors (or Authors): Pramod Khadilkar, S. S. Lokras, H. I. Somashekar, B. V. Venkatarama Reddy and Monto Mani. (Filed 27 Dec’ 2011 Application number: 4595/CHE/2011)

## Popular articles

1. B. V. Venkatarama Reddy, All that green may not be sustainable!, Deccan Herald, 21.07.2023, <https://www.deccanherald.com/opinion/comment/all-that-green-may-not-be-sustainable-1239088.html>

## (b) Journals (refereed)

1. Vibha Venkataramu, B.V. Venkatarama Reddy, Durability characteristics of concrete made with Processed Granulated Blast Furnace Slag as fine aggregates, Construction Materials, 2024 (Under review)
2. Preethi R., and Venkatarama Reddy B. V. (2024). Characteristics of geopolymer stabilised compressed earth bricks, <https://doi.org/10.1016/j.istruc.2024.106007>, Structures, 61, 106007.
3. Rathod R.S.B., and Venkatarama Reddy B. V. (2022). Behaviour of plain and fibre reinforced cement stabilised rammed earth under compression, tension and shear, Construction and Building Materials, <https://doi.org/10.1016/j.conbuildmat.2022.128125>, 344, 128125
4. Venkatarama Reddy B.V. and Rathod R.S.B. (2022). Influence of interlayer shear studs on the behaviour of cement stabilised rammed earth under compression, tension and shear, Journal of Building Engineering, 49, <https://doi.org/10.1016/j.jobe.2022.104096>
5. Alastair Marsh, Andrew Heath, BV Venkatarama Reddy, Preethi R Krishnamurthy, Mark Evernden, Pascaline Patureau, Pete Walker (2022). Scale-up effects in alkali-activated soil blocks, Proceedings of the Institution of Civil Engineers-Construction Materials, 175(3), 137-149, <https://doi.org/10.1680/jcoma.19.00102>.
6. Antonin Fabbri, Jean Claude Morel, Jean-Emmanuel Aubert, Quoc-Bao Bui, Domenico Gallipoli, A. Ventura, B.V.V. Reddy, Erwan Hamard, A. Pele-Peltier, H.N. Abhilah, An overview of the remaining challenges of the RILEM TC 274-TCE, testing and characterisation of earth-based building materials and elements, RILEM Technical Letters 6: 150-157, 2021, <https://doi.org/10.21809/rilemtechlett.2021.149>
7. Vibha Venkataramu and B.V. Venkatarama Reddy (2021). Characteristics of Mortars and Masonry using Granulated Blast Furnace Slag as Fine Aggregate, Journal of Materials in Civil Engineering, [https://doi.org/10.1061/\(ASCE\)MT.1943-5533.0004204](https://doi.org/10.1061/(ASCE)MT.1943-5533.0004204)
8. Sri Bhanuprathap Rathod R. and Venkatarama Reddy B.V. (2021). Strength and stress-strain characteristics of fibre reinforced cement stabilised rammed earth, Materials and Structures, 54(2), 1-13, <https://doi.org/10.1617/s11527-021-01640-x>
9. Sri Bhanuprathap Rathod R. and Venkatarama Reddy B. V. (2021). Bond strength of coir fibers in cement-stabilized rammed earth matrix, Journal of Materials in Civil Engineering, 33(11), 04021293-1, [https://doi.org/10.1061/\(ASCE\)MT.1943-5533.0003916](https://doi.org/10.1061/(ASCE)MT.1943-5533.0003916)
10. Gourav K., Nanjunda Rao K.S. and Venkatarama Reddy B.V. (2020). Prediction of out-of-plane flexural behaviour of FaL-G brick masonry using simplified micro-modelling approach, Masonry International, 33(1), pp. 1-14.
11. Preethi R.K. and Venkatarama Reddy B.V. (2020). Experimental investigations on geopolymer stabilised compressed earth products, Construction and Building Materials, 257, 119563, <https://doi.org/10.1016/j.conbuildmat.2020.119563>
12. Alastair T.M. Marsh, Andrew Heath, Pete Walker, Venkatarama Reddy B.V., Guillaume Habert (2020). Discussion of “Earth Concrete. Stabilization Revisited”, Cement and Concrete Research, 130, <https://doi.org/10.1016/j.cemconres.2020.105991>
13. David A Weed, Adam G Tennant, Mohammad Hosein Motamedi, K Gourav, Craig D Foster and BV Venkatarama Reddy (2020). Finite Element Model Application to Flexural Behavior of Cement Stabilized Soil Block Masonry, Materials and Structures, 53(3), <http://dx.doi.org/10.1617/s11527-020-01490-z>
14. Gourav K., Ullas S.N., Venkatarama Reddy B.V. (2020). Studies on properties of flowable earth mix concrete for monolithic load bearing walls, Construction and Building Materials, 250, [doi.org/10.1016/j.conbuildmat.2020.118876](https://doi.org/10.1016/j.conbuildmat.2020.118876)



15. Lepakshi R., Venkatarama Reddy B.V. (2020). Shear strength parameters and Mohr-Coulomb failure envelopes for cement stabilised rammed earth, *Construction & Building Materials*, 249, [doi.org/10.1016/j.conbuildmat.2020.118708](https://doi.org/10.1016/j.conbuildmat.2020.118708)
16. Lepakshi R and B V Venkatarama Reddy (2020). Bond strength of rebars in cement stabilised rammed earth, *Construction and Building Materials*, 255, [doi.org/10.1016/j.conbuildmat.2020.119405](https://doi.org/10.1016/j.conbuildmat.2020.119405)
17. Abhilash Holur Narayanaswamy, Peter Walker, Venkatarama Reddy B V, Andrew Heath, Daniel Maskell (2020). Mechanical and thermal properties, and comparative life-cycle impacts, of stabilised earth building products, *Construction and Building Materials*, Vol. 243, [doi.org/10.1016/j.conbuildmat.2020.118096](https://doi.org/10.1016/j.conbuildmat.2020.118096)
18. Abhilash Holur Narayanaswamy, Peter Walker, B.V. Venkatarama Reddy, Andrew Heath (2020). Compressive strength of novel alkali activated stabilised earth materials incorporating solid wastes, *Journal of Materials in Civil Engineering*, 32(6), 1–8, [doi:10.1061/\(ASCE\)MT.1943-5533.0003188](https://doi.org/10.1061/(ASCE)MT.1943-5533.0003188).
19. Sri Bhanuprathap Rathod, R. and Venkatarama Reddy, B. V. (2019). Strength and stress-strain characteristics of coir fibre reinforced cement stabilised rammed earth, *Academic Journal of Civil Engineering*, 37(2), 164-169.
20. N. C. Balaji, Monto Mani and B. V. Venkatarama Reddy (2019). Dynamic thermal performance of conventional and alternative building wall envelopes, *Journal of Building Engineering*, 21, 373-395.
21. Hamid Eskandari-Naddaf, S Muralidhara, B K Raghu Prasad, B V Venkatarama Reddy, Amir Pakzad (2018). Properties of SCC in green and grey state, *Materials Today: Proceedings*, 5 (2), 3503-3512
22. Lepakshi Raju and B. V. Venkatarama Reddy (2018). Influence of layer thickness and plasticisers on the characteristics of cement stabilised rammed earth, *Journal of Materials in Civil Engineering*, 30(12), 04018314,1-10; DOI: 10.1061/(ASCE)MT.1943-5533.0002539.
23. K. Gourav and B. V. Venkatarama Reddy (2018). Out-of-plane behaviour of fly ash-lime-gypsum brick masonry walls, *Engineering Structures*, 173, 241-250.
24. K. Gourav and B. V. Venkatarama Reddy, Bond development in burnt clay and FaL-G brick masonry, *Journal of Materials in Civil Engineering*, 30(9), 2018, 04018202,1-10, DOI: 10.1061/(ASCE)MT.1943-5533.0002412.
25. Venkatarama Reddy, B. V. and Latha, M. S., Mortar shrinkage and flexure bond strength of stabilised soil brick masonry, *Journal of Materials in Civil Engineering*, 2018, 30(5): 05018002,
26. K. I. Praseeda, B.V. Venkatarama Reddy, M. Mani, Embodied and operational energy of rural dwellings in India, *International Journal of Sustainable Energy*, 38(3), 2017, 227 – 237, DOI: 10.1080/14786451.2017.1418742.
27. Venkatarama Reddy B. V., Suresh V. and K. S. Nanjunda Rao, Characteristic compressive strength of cement stabilised rammed earth, *Journal of Materials in Civil Engineering*, 29(2), 2017, 04016203-1 to 7, DOI:10-1061/(ASCE)MT.1943-5533.0001692.
28. Latha, M. S. and Venkatarama Reddy, B. V., Swell-shrink properties of stabilised earth products, *Construction Materials, Proc. of ICE (London)*, Vol. 170, CM1, 2017, pp. 3 – 15. <http://dx.doi.org/10.1680/jcoma.15.00032>
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