Brief CV

1. **Name:** **Er. Rajesh Kumar**
2. **Date of Birth: 15.01.1992**
3. **Email:** rajeshkumar@cbri.res.in/ rk2896315@gmail.com
4. **Phone** (with STD code)**:** 01332-283238
5. **Academic Qualification:**

Degree	University / Institution	Division / Equivalent	Year of Passing	Specialization
B.Tech	Madan Mohan Malaviya University of Technology, Gorakhpur, Uttar Pradesh, India	1st (Hons.)	2012	Civil Engineering
M.Tech	Academy of Scientific and Innovative Research/ CSIR-CBRI Roorkee, Uttarakhand, India	1st (Hons.)	2014	Building Engineering & Disaster Mitigation
Ph. D	Indian Institute of Technology (IIT) Delhi, New Delhi, India	-	Ongoing w.e.f. Jan' 2020	Structural Engineering

6. **Experience Details (In reverse chronological order):** **Attached**

Institute / Organization	Type (Academic Instt./ Industry / Self-employed)	Post Held	From (date) To (date)	Nature of Job
CSIR-Central Building Research Institute, Roorkee, Uttarakhand, India	National Research Lab	Trainee Scientist	05-09-2012 To 07-01-2016	The research work in the project, 'Cost-effective Building Products using Low grade limestone Waste' has been carried out.
CSIR-Central Building Research Institute, Roorkee, Uttarakhand, India	National Research Lab/ Academic Institute	Scientist (C)	08-01-2016 To 07-01-2020	The R&D projects related to Stone wastes utilization, Lightweight concretes, Composite cement etc.
Academy of Scientific and Innovative Research/ CSIR- CBRI Roorkee, Uttarakhand, India	Academic Institute	Assistant Professor	20-07-2021 To Till date	Mentorship and Teaching to PG students
CSIR-Central Building Research Institute, Roorkee, Uttarakhand, India	National Research Lab	Senior Scientist (E1)	08-01-2020 To Till date	The R&D projects related to Statistical modelling, ANOVA, Multi-attribute optimization technique, Low carbon/Limestone Calcined Clay Cement, Low Energy/CSAB cement etc.
CSIR-Central Building Research Institute, Roorkee, Uttarakhand, India	National Research Lab	Head-Organic Building Materials Group	01-01-2022 To 31-03-2023	

7 (a). Papers Published in National / International Journals / *presented in National / International Conferences:*

(Copies of first pages of the papers attached) Attached

International Peer–reviewed (SCI): 17 Nos. *(*Corresp. author)*

1. Ishan Bhandari and **Rajesh Kumar* (2023).** Effect of Silica Fume and PCE-HPMC on LC3 mortar: Microstructure, Statistical optimization and Life Cycle Assessment. Construction and Building Materials, Elsevier, Volume 403, 133073. *https://doi.org/10.1016/j.conbuildmat.2023.133073* (Impact Factor: 7.4/2022)
2. Deepak Singh, **Rajesh Kumar*,** NS Nighot, Anurag Rajput, Abhilasha Prajapati, Bibhakar Kumar Singh, MS Kirgiz, B. Srinivasaraonaik, Raghav Kumar Mishra, Shahnavaz Khan, Rajni Lakhani (2023). A comprehensive review on valorisation of octal by-product as supplementary admixtures in the production of fired and unfired bricks. Construction and Building Materials, Elsevier, 408, 133641. https://doi.org/10.1016/j.conbuildmat.2023.133641 (Impact Factor: 7.4/2022)
3. Ishan Bhandari, **Rajesh Kumar***, A Sofi and NS Nighot (2023). A Systematic Study on Sustainable Low Carbon Cement – Superplasticizer Interaction: Fresh, Mechanical, Microstructural and Durability Characteristics. Heliyon, Elsevier, *https://doi.org/10.1016/j.heliyon.2023.e19176* (Impact Factor: 4.0/2022)
4. Agarwal, R., Pawar, N., Supriya, Rawat, P., Rai, D., **Kumar, R.,** & Naik B, S.* (2023). Thermo-mechanical behavior of cementitious material with partial replacement of Class-II biochar with accelerated carbonation curing (ACC). Industrial Crops and Products, Elsevier, 204, 117335. *https://doi.org/10.1016/j.indcrop.2023.117335* (Impact Factor: 5.9/2022).
5. Anurag, **Rajesh Kumar***, & S. Goyal (2023). Recycling of calcined low-grade limestone slurry in producing low carbon cementitious binder towards sustainable environment: ANOVA, Statistical modeling & Microstructural performance. *Environmental Development*, Elsevier, *https://doi.org/10.1016/j.envdev.2023.100910* (Impact Factor: 5.4/2022)
6. BK Singh, **Rajesh Kumar***, S Sengupta (2023). Industrial production of fly ash and sand-based geopolymer bricks using different molarity of NaOH solution and assessment of their mechanical and durability properties. Iranian Journal of Science and Technology, Transactions of Civil Engineering, Springer Nature. ISSN: 2228-6160. *https://doi.org/10.1007/s40996-023-01154-2* (Impact Factor: 1.7/2022).
7. N.S. Nighot, **Rajesh Kumar*** (2023). A comprehensive study on the synthesis and characterization of eco-cementitious binders using different kind of industrial wastes for sustainable development. *Developments in the Built Environment*, Elsevier, 100135. *https://doi.org/10.1016/j.dibe.2023.100135* (Impact Factor: 8.2/2022)
8. Abhilasha, **Rajesh Kumar*,** Rajni Lakhani, RK Mishra, S Khan (2023). Utilization of Solid Waste in the Production of Autoclaved Aerated Concrete and their Effects on its Physio-mechanical and Microstructural Properties: Alternative sources, characterization, and performance insights, International Journal of Concrete Structures and Materials, **17**, Article number: 6, *Springer Nature. https://doi.org/10.1186/s40069-022-00569-x (Impact Factor: 3.4/2022)*
9. **Rajesh Kumar*** & Abhishek Srivastava (2022). Influence of lightweight aggregates and Supplementary Cementitious Materials on the properties of Lightweight Aggregate Concrete. *Iranian Journal of Science and Technology, Transactions of Civil Engineering, Springer Nature. ISSN: 2228-6160*. *https://doi.org/10.1007/s40996-022-00935-5* (Impact Factor: 1.7/2022).

10. P. Tomar, **R. Kumar*,** R. Lakhani, A. Srivastava & V. K. Chibber (2022). Improvement in hygroscopic property of Macro-defect free cement modified with Hypromellose/ potassium methyl siliconate copolymer and pulverized fly ash. Journal of Thermal Analysis and Calorimetry, *Springer Nature. e-ISSN: 1588-2926. https://doi.org/10.1007/s10973-022-11447-9* (Impact Factor: 4.4/2022).
11. **Rajesh Kumar*,** P. Tomar, A. Srivastava, R. Lakhani & V. K. Chibber (2022). Improvement of Mechanical and Microstructure Properties of Modified Fly Ash-Blended Low Carbon Cement with Hydroxy Propyl Methyl Cellulose Polymer. *Iranian Journal of Science and Technology, Transactions of Civil Engineering, Springer Nature. ISSN: 2228-6160*. *https://doi.org/10.1007/s40996-022-00855-4* (Impact Factor: 1.7/2022).
12. **Kumar, R.*,** Srivastava, A., & Lakhani, R. (2021). Industrial wastes-cum-Strength enhancing additives incorporated lightweight aggregate concrete (LWAC) for energy efficient building: A comprehensive review. *Sustainability*, *14*(1), 331. *https://doi.org/10.3390/su14010331 (Impact Factor: 3.889/2021).*
13. **Rajesh Kumar*** (2021). Effects of high volume dolomite sludge on the properties of eco-efficient lightweight concrete: Microstructure, statistical modeling, multi-attribute optimization through derringer's desirability function, and life cycle assessment. *Journal of Cleaner Production*, Elsevier, *307*, 127107. *https://doi.org/10.1016/j.jclepro.2021.127107* (Impact Factor: 11.072/2021).
14. Anurag, **Rajesh Kumar***, Goyal, S., & Srivastava, A. (2021). A comprehensive study on the influence of supplementary cementitious materials on physico-mechanical, microstructural and durability properties of low carbon cement composites. *Powder Technology*, Elsevier, *394*, 645-668. *https://doi.org/10.1016/j.powtec.2021.08.081* (Impact Factor: 5.64/2021/Q1).
15. **Rajesh Kumar* (2020).** Modified mix design and statistical modelling of lightweight concrete with high volume micro fines waste additive via the Box-Behnken design approach. *Cement and Concrete Composites*, Elsevier, *113*, 103706. *https://doi.org/10.1016/j.cemconcomp.2020.103706*. (Impact Factor: 7.856/2020/Q1) **(Best Research Paper Award; by Jury)**
16. Hou, P.*, Guo, Z., Li, Q., Zhang, X., Liu, J., Cheng, X., **Kumar, R.,** Srinivasaraonaik, B., & Singh, L. (2019). Comparison study on the sulfate attack resistivity of cement-based materials modified with nanoSiO2 and normal SCMs: pore structure and phase composition. Construction & Building Materials, Elsevier, 228, 116764. *https://doi.org/10.1016/j.conbuildmat.2019.116764* (Impact Factor: 4.419/2019/Q1).
17. **Kumar, R.**, Lakhani, R.*, & Tomar, P. (2018). A simple novel mix design method and properties assessment of foamed concretes with limestone slurry waste. *Journal of Cleaner Production*, Elsevier, *171*, 1650–1663. *https://doi.org/10.1016/j.jclepro.2017.10.073* (Impact Factor: 6.395/2018/Q1).
18. Tomar, P., Lakhani, R.*, Chhibber, V. K., & **Kumar, R.** (2018). Macro-defect free cements: a future oriented polymer composite materials for construction industries. Composite Interfaces. Taylor and Francis Ltd., 25, 607-627. *https://doi.org/10.1080/09276440.2018.1439637* (Impact Factor: 2.025/2018/Q2).

International Peer–reviewed (Scopus Indexed): 21 Nos.

1. Snigdhajit Mukherjee, **Rajesh Kumar*,** A. Sofi, Monalisa Behera (2023). "Rheological and Mechanical properties of different types of lightweight aggregate concrete", Recent Advances in Green Technologies and Sustainable Development. Taylor & Francis. pp. 248-253. (accepted and will be published soon)

2. Anurag, **Rajesh Kumar***, Shweta Goyal, Sumedha (2023). “Supplementary cementitious materials in low carbon cementitious binders and concrete composites: Fresh and Hardened Properties”, *Indian Journal of Environmental Protection* (ISSN 0253–7141). (accepted and will be published soon)
3. DK Das, **Rajesh Kumar*,** A. Sofi (2023). “Hydration kinetics and stability study of pure phases of cement clinker with the addition of SCMs and dopants”, Recent Advances in Green Technologies and Sustainable Development. Taylor & Francis. pp. 266-269. (accepted and will be published soon)
4. MS Kirgiz, AG Galdino, RDSG Campilho, **Rajesh Kumar,** KG Kolovos, EF Ledesma, Vinod M. Kumar (2023). “Valorization of Nanocarbon Dot Based Green Binder Systems in Terms of Earthquake Engineering, Reinforced Concrete Building, Applied Mechanics, Transportation Engineering, and their Applications”. Key Engineering Materials. Trans Tech Publications Ltd. (accepted and will be published soon)
5. Piyush Verma, **Rajesh Kumar*,** Snigdhajit Mukherjee, Mahesh Sharma (2023). “Rheological and Mechanical Properties of Self-Compacting Concrete under Partial Replacement of Marble Slurry and Fly Ash”. (accepted and will be published soon)
6. Shubham Semwal, Abhilasha Prajapati, **Rajesh Kumar*,** Sachin Kashyap, R. Siva Chidambaram, Gunjan Joshi (2023). “Thermo-mechanical behaviour of lightweight precast sandwich panel incorporated with solid waste – An Experimental Investigation”. (accepted and will be published soon)
7. MS Kırgız, H. Biricik, A.G.S. Galdino, **Rajesh Kumar***, R.D.S.G. Campilho, K. G. Kolovos, EF Ledesma (2023). “Biochar ash from wheat straw as supplementary cementitious material and its application in civil engineering: physical, mechanical, and durability properties”. Design, Process, Energy, and Evaluation in Materials Science. Trans Tech Publications Ltd. (accepted and will be published soon)
8. **Rajesh Kumar*** (2023). “Influence on Hydration and Microstructural Properties of Low Carbon Cementitious Binder Modified with Water Soluble Polymer and Fly Ash”, Recent Advances in Materials, Mechanics and Structures. Lecture Notes in Civil Engineering, vol 269. Springer, Singapore. *https://doi.org/10.1007/978-981-19-3371-4_1*
9. **Rajesh Kumar*** (2023). Recent progress in newer cementitious binders as an alternative to Portland cement: Need for the 21st century. Recent Advances in Structural Engineering & Construction Management, Lecture Notes in Civil Engineering, vol 277. Springer. *https://doi.org/10.1007/978-981-19-4040-8_63*
10. **Rajesh Kumar*** & Bibhakar Kumar Singh (2023)**.** Cement stabilized mud blocks admixed with bagasse fibre, wheat straw and crumb rubber: Physico-mechanical and thermal investigation. Recent Advances in Structural Engineering & Construction Management, Lecture Notes in Civil Engineering, vol 277. Springer. *https://doi.org/10.1007/978-981-19-4040-8_49* **(Best Paper Award by Springer-ICSMC Jury)**
11. **Rajesh Kumar*** & Rajni Lakhani (2023)**.** Studies on polymer-modified Lime-surkhi repair mortar for heritage buildings: Physico-mechanical and Microstructural characterization. Recent Advances in Structural Engineering & Construction Management, Lecture Notes in Civil Engineering, vol 277. Springer. *https://doi.org/10.1007/978-981-19-4040-8_60*
12. Chandra Shekhar Sharma & **Rajesh Kumar*** (2023). “Influence of dry lime sludge on the physico-mechanical & microstructural properties of low carbon cementitious composites exposed at elevated temperature”, Recent Advances in Materials, Mechanics and Structures. Lecture Notes in Civil Engineering, vol 269. Springer, Singapore. *https://doi.org/10.1007/978-981-19-3371-4_30*
13. Anurag and **Rajesh Kumar*** (2023). “Optimization of clinker factor for low carbon penta-blended cement mortar via Box-Behnken Design of Response Surface Methodology”,

Recent Advances in Structural Engineering & Construction Management, Lecture Notes in Civil Engineering, vol 277. Springer. *https://doi.org/10.1007/978-981-19-4040-8_47*

14. Bibhakar Kumar Singh & **Rajesh Kumar*** (2023). "Novel lightweight Portland Pozzolana Cement (PPC) stabilized mud composites using crumb rubber & agricultural waste: Physico-mechanical and thermal performance", Materials Today Proceedings, Elsevier. *https://doi.org/10.1016/j.matpr.2023.03.132*
15. Shagun Solanki, **Rajesh Kumar*,** Ankit Prakash Yadav and Sandeep Gupta (2023). "Mathematical Modelling and ANOVA analysis to develop sustainable ceramic tiles using high volume marble slurry", Materials Today Proceedings, Elsevier. *https://doi.org/10.1016/j.matpr.2022.12.229*
16. Ishan Bhandari and **Rajesh Kumar*** (2022). "Limestone-Calcined Clay-Silica Fume Blended Cement: Statistical modelling and multi-attribute optimization through derringer's desirability function", Materials Today Proceedings, Elsevier. *https://doi.org/10.1016/j.matpr.2022.10.130*
17. **Kumar R.*,** Lakhani R., Kumar A. (2022). Physico-Mechanical and Thermal Properties of Lightweight Structural Concrete with Light Expanded Clay Aggregate for Energy-Efficient Buildings. Advances in Construction Materials and Sustainable Environment. Lecture Notes in Civil Engineering, vol 196. Springer, Singapore. *https://doi.org/10.1007/978-981-16-6557-8_14*
18. Srivastava A., **Kumar R.*** & Lakhani R. (2021). "Low energy Eco-cementitious binders as an alternative to Ordinary Portland Cement" in 'Smart Materials, Technologies, and Devices: Applications of Industry 4.0' published by Springer Nature Switzerland, C. M. Hussain, P. Di Sia (eds.). *https://doi.org/10.1007/978-3-030-58675-1_143-1.*
19. **Kumar R.*,** Lakhani R., Singh B.K., Sharma M., Negi S.K. (2022). Agro-Industrial Wastes Incorporated Cement Stabilized Mud Composites for Roof and Wall Assembly in Energy Efficient Building Envelope. Advances in Construction Materials and Sustainable Environment. Lecture Notes in Civil Engineering, vol 196. Springer, Singapore. *https://doi.org/10.1007/978-981-16-6557-8_15*
20. Srivastava A.*, Singh S.K., **Kumar R.** (2022). Physical and Mechanical Characteristics of Cement Mortar with Coal Bottom Ash as Fine Aggregate Under Elevated Temperature. Advances in Construction Materials and Sustainable Environment. Lecture Notes in Civil Engineering, vol 196. Springer, Singapore. *https://doi.org/10.1007/978-981-16-6557-8_46*
21. Lakhani, R.*, **Kumar, R.,** & Tomar, P. (2014). Utilization of stone waste in the development of value-added products: A state of the art review. *Journal of Engineering Science and Technology Review*. 7, Issue 3, 180-187, ISSN: 1791-2377. *DOI: 10.25103/jestr.073.29*

International Conference Paper: 21 Nos. Presented

1. S Mukherjee, R Kumar*, A. Sofi (2023). "Statistical Optimization and Rheological Behaviour of Limestone- Calcined Clay Incorporated Lightweight Self Compacting Concrete", The 5th Euro-Mediterranean Conference for Environmental Integration (EMCEI-2023), Rende (Cosenza), Italy, 2–5 October 2023. (Will be published in Scopus with doi)
2. BK Singh*, Rajesh Kumar, Siddharth Sengupta, Dipanshu Snehi, Deepak Kumar (2023). "Performance assessment of industrially produced fly ash-sand-based geopolymer bricks in an acidic environment". International Conference on"Advancement in Sustainable Materials for Energy and Environment (ASMEE 2023)", Central Institute of Petrochemicals Engineering & Technology: Institute of Petrochemicals Technology (CIPET: IPT), Raipur, 6th & 7th October, 2023 . (Will be published in Scopus with doi)
3. **Rajesh Kumar*** & Bibhakar Kumar Singh (2022). "Physico – mechanical and thermal characteristics of novel lightweight mud composites for wall -roof treatment", Second International Conference on Construction Materials and Structures (ICCMS), National

Institute of Technology Calicut (NITC), 13-19 December, 2022. **(Elsevier- ICCMS Best Research Paper Award).**

4. Chandra Shekhar Sharma & **Rajesh Kumar*** (2022). "Use of low-grade limestone slurry to develop Sustainable low carbon Portland Limestone cementitious material", International Conference on Recent Developments in Civil Engineering, 20-21 OCTOBER 2022 MNNIT Allahabad, Prayagraj, India; In association with Indian Concrete Institute (ICI) & Indian Geotechnical Society (IGS). *http://mnnit.ac.in/rdc2022/ (Paper ID – 83). (Will be published in Scopus with doi)*
5. **Rajesh Kumar*** (2022). "Eco-efficient Lightweight concrete with high volume micro fines via the Box Behnken design approach of Response Surface Methodology", The 11th Global Conference on Materials Science and Engineering CMSE 2022, Shenzhen, China, September 16-19, 2022. (Paper ID – CMSE4749). *https://opensz.oss-cn-beijing.aliyuncs.com/CMSE2022/file/CMSE2022-Conference%20Program(v12).pdf*
6. **Rajesh Kumar*** (2021). "Experimental investigation on the effect of high volume micro fines on mechanical, seismic resistance and thermal properties of Aircrete", 11th International Conference on Sustainable Waste Management & Circular Economy and IPLA Global Forum 2021, Kolkata, West Bengal, India, pp. 1-19, 01st – 04th December 2021. (will be published online with DOI). **(Springer- IconSWM Excellence Award for Best Paper).** (Paper ID – AB_01). *https://www.iswmaw.com/*
7. Anurag Rajput and **Rajesh Kumar*** (2021). "A comprehensive study on the multi-attribute optimization of clinker factor for sustainable cementitious system via Response Surface Methodology", 11th International Conference on Sustainable Waste Management & Circular Economy and IPLA Global Forum 2021, Kolkata, West Bengal, India, pp. 1-21, 01st – 04th December 2021. (Paper ID – AB_02). https://www.iswmaw.com/
8. **Rajesh Kumar*** & Bibhakar Singh (2021)**. "**Studies on natural fibres incorporated Cement stabilized mud blocks", International Conference on Structures, Materials and Construction (ICSMC 2021), Jaypee University of Information Technology, Waknaghat, HP, India, 12th – 13th Nov 2021. (Paper ID – 134). *https://ocs.springer.com/misc/home/ICSMC2021.*
9. Anurag Rajput, **Rajesh Kumar***, Shweta Goyal, Sumedha (2021). "Efficacy of supplementary cementitious materials in low carbon cementitious binders and concrete: An updated holistic approach", International Conference on Structures, Materials and Construction (ICSMC 2021), Jaypee University of Information Technology, Waknaghat, HP, India, 12th – 13th Nov 2021. (Paper ID – 284). *https://ocs.springer.com/misc/home/ICSMC2021.*
10. **Rajesh Kumar*** (2021). "Newer low carbon cementitious binders as an alternative to Ordinary Portland cement", International Conference on Structures, Materials and Construction (ICSMC 2021), Jaypee University of Information Technology, Waknaghat, HP, India, 12th – 13th Nov 2021. (Paper ID – 274).
11. **Rajesh Kumar*** and Rajni Lakhani (2021). "Physico-mechanical and Micro-structural characterization of HPMC incorporated Lime-surkhi repair mortar", International Conference on Structures, Materials and Construction (ICSMC 2021), Jaypee University of Information Technology, Waknaghat, HP, India, 12th – 13th Nov 2021. (Paper ID – 271).
12. Anurag Rajput and **Rajesh Kumar*** (2021). "Multi-attribute optimization for clinker factor of Low carbon cement mortar using Response Surface Methodology ", International Conference on Structures, Materials and Construction (ICSMC 2021), Jaypee University of Information Technology, Waknaghat, HP, India, 12th – 13th Nov 2021. (Paper ID – 116).
13. **Kumar R.*,** Singh B.K. and Sharma M. (2021). "Cement Stabilized Mud Composites induced with Agro-Industrial Wastes", International Conference on Construction Materials and Environment, 2021 (ICCME 2021), Jaypee University of Information Technology, Waknaghat, Solan, Himachal Pradesh, India, June 3-4, 2021. (Paper ID – 025).

14. **Kumar R.*,** Lakhani R., Kumar A. (2021). "Lightweight Structural Concrete with LECA for Energy-Efficient Buildings", International Conference on Construction Materials and Environment, 2021 (ICCME 2021), Jaypee University of Information Technology, Waknaghat, Solan, Himachal Pradesh, India, June 3-4, 2021. (Paper ID – 024).
15. **Kumar, R.*,** Singh, B. K. and Lakhani, R. (2021). "Development of novel lightweight mud phuska composite using less cohesive soil, agricultural and rubber aggregates for roof and wall treatment", Abstracts of International Conferences & Meetings, 1(3). International Conference on Reuse and Recycling of Materials and their products (ICRM – 2020), Organized by Mahatma Gandhi University, Kottayam Kerala & Wroclaw University of Technology Wroclaw, Poland. December 11-13,2020. ***DOI:*** *https://doi.org/10.5281/zenodo.5052003*
16. **Kumar, R.*** and Lakhani, R. (2021). "Development of lightweight aggregate concrete with optimum thermal transmittance for opaque wall assembly in composite climates ", Abstracts of International Conferences & Meetings, 1(3).International Conference on Reuse and Recycling of Materials and their products (ICRM – 2020), Organized by Mahatma Gandhi University, Kottayam Kerala & Wroclaw University of Technology Wroclaw, Poland, December 11-13, 2020. ***DOI:*** *https://doi.org/10.5281/zenodo.5051936*
17. Rajni Lakhani, **Rajesh Kumar**, Priyanka Tomar* and Nishant Kumar (2019). "Study of cement-lime mortars for heritage buildings: Micro-structural and Physico-mechanical aspects", International Conference on Advanced Materials, Nirmalagiri College, Kannur, Kerala, India, pp. 103-110, 12th – 14th June, 2019.
18. Priyanka Tomar*, Rajni Lakhani and **Rajesh Kumar** (2018). "Effect of Hydroxy Propyl Methyl Cellulose and Fly Ash on the Fresh and Hardened Properties of Cement Paste", An International Conference on Advances in Construction Materials and Structures", IIT-Roorkee, March 7-8, 2018.
19. Priyanka Tomar*, **Rajesh Kumar,** Rajni Lakhani and Shahnawaz Khan (2017). **'**'Influence of the Self Crosslinkable Polymers on the Properties of the Fly ash Blended Composite Cements", An International conference on Mechanical, Manufacturing, Industrial and Civil Engineering"**,** Jaipur, Rajasthan, pp. 52-62, Dec.17, 2017.
20. Rajni Lakhani* and **Rajesh Kumar** (2016). "Value Added Building Products using Kota Stone Cutting and Slurry Waste", Emerging Building Materials and Construction Technologies, India Habitat Centre, New Delhi, India, Nov. 18, 2016.
21. **Rajesh Kumar*** and Rajni Lakhani (2016). "Use of Kota Stone Slurry Waste in the Development of Non-Load Bearing Cellular Foamed Concrete Blocks", An International Seminar on Emerging Building Materials and Construction Technologies, BMTPC, New Delhi, India, March 21-22, 2016, Paper ID – 101.

7 (b). Technology Transfer: 03 Nos.

(Copies of supporting documents have attached) : MoUs, Newpaper, Photos etc.

List of Designs, Products, Process, Project Implementation	Place where used	Year of implementation / use
Building Products using Kota Stone Waste	Rajasthan State Pollution Control Board, Jaipur, Rajasthan, India	2018
"IPN Coating for the protection of Reinforced Concrete Structures" **to**	Nagpur Metro	2023

M/s. Kansai Nerolac Paints Pvt. Ltd., Mumbai, India		
Flooring- Wall Tiles, Bricks, & Paver Blocks Using Marble Waste	M/s. Marble Plaza, New Delhi	07.11.2023

8. Patent:

Item	Patent/Copyright No	Year	Granted by
An improved process of making cement concrete interlocking paver blocks using Kotastone slurry	202211060661	Date of Filing: 21.10.2022	Yet to be granted

09. Awards :

Name of the Award	Details of contribution related to the Award	Awarded by	Year	Type (National / International)
Diamond Jubilee Director's Technology Award - 2017	Best Technology Award for ***"Building Products using Kota Stone Waste"***	Director, CSIR-CBRI along with Jury	2018	National
Best Research Paper Award-2021	Best Research Paper on ***"Cement stabilized mud blocks admixed with bagasse fibre, wheat straw and crumb rubber: Physico-mechanical and thermal investigation"***	Springer along with International Conference on Structures, Material and Construction-2021	2021	International
Springer-IconSWM Excellence Award for Best Research Paper -2021	Best Research Paper on ***"Experimental investigation on the effect of highvolume low-grade stone slurry on mechanical, seismic resistance & thermal properties of Aircrete"***	Springer along with 11th IconSWM-CE & IPLA Global Forum 2021	2021	International
Diamond Jubilee Director's Award for Best Research Paper-2021	Best Research Publication* ***"Modified mix design and statistical modelling of lightweight concrete with high volume micro fines waste additive via the Box-Behnken design approach"*** ***https://doi.org/10.1016/j.cemconcomp.2020.103706***	Director, CSIR-CBRI along with Jury	2022	National
Young Engineers Award: 2022-23	Contributions in Engineering Research (Civil Engineering). Website-https://www.ieindia.org/webui/IEI-Activities.aspx#prizes-awards	The Institution of Engineers (India)	2022	National
Best Research Paper Award:	Best Research Paper on "Physico - mechanical and thermal characteristics	Elsevier along with International	2022	International

2022	of novel lightweight mud composites for wall -roof treatment" (Authors: Rajesh Kumar* & Bibhakar Singh)	Conference on Construction Materials and Structures- 2022		

10. Membership of Professional Societies:

Name of the Society	Address	Membership Category & Number
The International Union of Laboratories and Experts in Construction Materials, Systems and Structures (RILEM)	Champs sur Marne 77447 Marne la Vallée Cedex 2	Young Member & 41009
American Concrete Institute (ACI)	ACI Resource Center – Elk Grove Village, IL 60007 USA	Individual & 02112222
Indian Concrete Institute (ICI)	Indian Concrete Institute, No.201, First Floor, "Ten Square", No.64, Jawaharlal Nehru Road, Koyambedu, Chennai - 600107	Life Member (LM) & LM-13373
The Institution of Engineers (India)	8 Gokhale Road, Kolkata, India	Life- Member (MIE) & M-1748240
American Society of Civil Engineers (USA)	1801 Alexander Bell Drive, Reston, VA 20191	Member & 012293040
ASTM International	100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428-2959, USA	Member & 2368739
The Indian Science Congress Association (ISCA)	Indian Science Congress Association 14, Dr. Biresh Guha Street, Kolkata- 700 017	Life- Member & L-42632

Date: 01.12.2023