**Dr. GYANENDRA KUMAR**

Greater Noida | [gyanendra.attri@gmail.com](mailto:gyanendra.attri@gmail.com) | +91-9760239685 | [Linkedin - Free social media icons](https://www.linkedin.com/in/gyanendra-kumar-ph-d-364b6130/) [icon-researchgate – Matt-Jaskulski.com](https://www.researchgate.net/profile/Gyanendra-Attri/scores) [Icon

Description automatically generated](https://orcid.org/0000-0002-0348-9871)

Professional with 13-years of varied experience in consultancy, research, education, cement, and concrete. I have proven expertise in sustainable product development, sustainability analysis, construction and demolition waste management, material testing and characterization, optimization techniques, and construction project management.

*“* *I am truly fascinated with the tremendous academic journey & several credentials he earned in last few years. Gyanendra worked under me & found him very curious for learning customer centric services & improvised on many fronts ,rendered best technical support to customers. I wish him all the best.~ Ashish Singhai, Public Speaker and Zonal Head, Technical Services at JK Cement Ltd.*

**SKILLS**

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**Technical skills:** Microsoft excel and word, openLCA, GaBi, One Click LCA, and AutoCAD

**Material testing:** Physical, chemical, mechanical, durability and microstructural properties investigations

**Sustainability:** Life cycle assessment (LCA), life cycle cost (LCC), and EPD specialist

**Analytical skills:** Optimization techniques,Data collectionand analysis, visual representation, and statistical analysis

**Academic writing:** Technical note or research paper writing, reports, project, and thesis writing

**Construction project management:** Scheduling and controlling (CPM, PERT, PDM), and earned value management (SV, CV, SPI, CPI)

**AWARDS/ACCOMPLISHMENTS/CITATIONS**

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* CII Certified Professional in Resource Efficiency and Environment Sustainability.
* Selected as a Sustainability Ambassador by SPSC (UN recognised body).
* Selected as a Green Buildings Ambassador by SPSC (UN recognised body).
* Selected as a GSFN Research India Chair.
* Invited as an Eminent Speaker” for a faculty development programme (FDP) by Civil Engineering department, Anand Engineering college, Jaipur to be held from 06 – 10 Feb. 2023.
* Invited as an “Eminent Speaker” at Global Waste Management Conference.
* Recognized as “Construction Product Life Cycle Assessment Specialist” by One Click, LCA.
* Successfully completed professional training, i.e., EPD Bootcamp and LCA Summer School 2022.
* Global coordinator in Global Sustainability Future Network (GSFN) for sustainable development.
* Member of Climate Practitioners India Network (CPIN) recognised by National Institute of Urban Affairs (NIUA), India.
* Ph.D. in “Development and sustainability assessment of eco-friendly paver blocks using construction and demolition waste, crusher dust, and silica dust as alternative aggregates” from MNIT Jaipur on November 2022.
* A research article, i.e., “Leaching behavior of recycled concrete aggregates and previous concrete incorporating these aggregates” was selected as the best research paper at TRACE – 2022 international conference.
* Technical manager for Low-carbon cement, i.e., Limestone Calcined Clay Cement (LC3) in Development Alternatives Group (TARA).
* Published 10 original research papers in SCI and SCOPUS indexed Journals and presented 7-researches at international conferences over the last 3 years, i.e., 2019 to 2022.
* 42 citations and 4 H-index from 2019 to 2022.
* Reviewer of high-impact journals
* M. Tech. gold medallist.
* Chartered Engineer and MIE of Institution of Engineers, India.

**EXPERIENCE**

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**DEVELOPMENT ALTERNATIVES GROUP (TARA) NEW DELHI, INDIA**

**Senior Manager** - Sustainable Product Development **Aug. 2022 to till date**

* Business head of TARA applied research centre (TARC).
* Handing overseas clients in cement plants, i.e., Thailand, Sri Lanka, and Nepal for technology transfer.
* Conducting branding activities such as media events, workshops, exhibiting stalls at conference and events on LC3 and its technology.
* Responsible for creating markets, getting orders, managing execution, and reporting to clients.
* Responsible for quality control of testing and reports.
* Support research on building materials.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR, INDIA**

**Teaching Assistant**  **July 2020 to June 2022**

* Assisted my supervisor in teaching courses, i.e., “ Sustainable materials and construction” and “Construction information system” at NIT Jaipur.
* Assisted in developing a new lab in civil engineering department, i.e., “Waste to Resource and Sustainable Construction”, and sustainable product manufacturing unit in NIT Jaipur.
* Coordinated training programs.

**DRONACHARYA GROUP OF INSTITUTION GREATER NOIDA, INDIA**

**Assistant Professor**  **Aug. 2015 to June 2017**

* Headed research and innovation cell.
* Completed 3-FDPs and 4-courses from IIT-Bombay, IIT- Kharagpur, NITTTR Chandigarh.
* Organised sports activities.
* Published 2-research papers in national journals
* Coordinated 4-industrial visits, 2-seminars, and 2-guest lectures.
* Guided students for project competitions who won 2-national project competitions.
* Taught Building materials and construction, construction project management, concrete technology, and estimation and costing.

**GAUTAM BUDH UNIVERSITY GREATER NOIDA, INDIA**

**Guest faculty** **Sept. 2013 to July 2017**

* Taught Building materials and construction, construction project management, concrete technology, and estimation and costing.
* Organised industrial visits for students

**NOIDA INTERNATIONAL UNIVERSITY GREATER NOIDA, INDIA**

**Assistant Professor** **Sept. 2013 to July 2015**

* Coordinator for cultural programs and sport activities.
* Organised industrial visits for students
* Coordinator of research and development cell.

**JAYPEE CEMENT JABALPUR, INDIA**

**Sr. officer (Technical)** **June 2009 to Sept. 2013**

* Organised 50+ technical meetings of key contractors, engineers, and architects.
* Supervised testing of building materials
* Guiding key account customers about concrete mix design.
* Providing technical support to key-account customers.

**CERTIFICATIONS**

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* CII Certified Professional in Resource Efficiency and Environment Sustainability
* Certified Chartered engineer from Institution of Engineers, India (IEI) .
* Elite Certification in “Life Cycle Assessment” from IIT-Kharagpur through NPTEL.
* Specialization Certificate in “Construction Project Management” from Columbia University.
* Elsevier certificates for reviewing 5-research articles.
* AutoCAD professional certification from Autodesk.

**TRAINING/ FDPS/ SHORT TERM COURSES/ ONLINE COURSES**

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**SUSTAINABILITY COURSES/TRAINING**

* Participated in the “Training Programe on Sustainable Waste Management” organised by CII – Sohrabji Godrej Green Business Centre on 18 February 2023 at Pragati Maidan, New Delhi, India.
* Professional course “ESG and Climate Change” from Wharton, University of Pennsylvania through Coursera.
* One week LCA and GaBi Workshop held at MNIT, Jaipur.
* One week GIAN program on “Advanced Course on Sustainability in Materials & Design” organised by MNIT.
* One week online STTP on “Sustainable manufacturing for Atma-Nirbhar Bharat” organised by MNIT.
* AICTE recognised one week STC on “Climate Change, Disaster management and Sustainable Development” conducted by NITTTR – Chandigarh.
* Certification on “The Age of Sustainable Development” from Columbia University through Coursera.
* Professional course on “Circular Economy: Sustainable - Material Management” from Lund University, EIT Raw Materials, VITO, Geological Survey of Denmark and Greenland, National Technical University of Athens, Ghent University & Delft University of Technology through Coursera.

**MATERIAL CHARACTERIZATION AND OPTIMIZATION COURSES**

* Three day online advance course on “Microstructure Characterization Techniques and mix design of special concretes” organised by CSIR-SERC Madras.
* SPARC sponsored one week workshop on “Characterization and Simulation of Advanced Materials” organised by MNIT, Jaipur.
* Ten days FDP programme on “Advance optimization techniques” organised by MNIT
* Two weeks GIAN course “Multiscale Modelling for Advance Materials” organised by MNIT.

**PROJECT MANAGEMENT COURSES**

* Specialization certificate in construction project management from Columbia University through edX
* Professional course on “Introduction to Project Management” from Adelaide University through edX.
* Professional course on “Managing Project Risks & Changes” from University of California Ervine through Coursera.
* Professional course on “Budgeting & Scheduling Project” from University of California Ervine through Coursera
* Professional course on “Initiating & Planning Project” from University of California Ervine through Coursera
* One week FDP on “Big data analysis for Urban Planning & Management” from IIT-Roorkee

**DATA ANALYSIS COURSES**

* Professional course on “Data Visualization with advanced Excel” from PwC through Coursera.
* Professional course on “Problem Solving with Excel” from PwC through Coursera.
* Professional course on “Data-Driven Decision Making” from PwC through Coursera.

**OTHER COURSES**

* Professional course on “Humanitarian Response to Conflict & Disaster” from Harvard University through edX.
* Professional course on “User Innovation: A Path to Entrepreneurship” from MIT through edX.
* Four week AICTE approved FDP on – “Use of ICT in Education for Online and Blended Learning” conducted by by IIT-Bombay.
* One week STC on “Technical Writing using LaTeX” organised by MNIT, Jaiipur.
* AICTE recognised one week STC on “Introduction to AutoCAD” from NITTTR – Chandigarh

**TECHNICAL WEBINARS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* “Sustainable Infrastructure Using Envision to Plan, Design and Rate Infrastructure Projects” organised by ASCE (AWI030514)
* “Sustainable Geotechnical Applications: Sustainability & Life Cycle Analysis of Recycled Materials - Part VI of VI” by ACSE (AWI0725112)
* “Whole Building Lifecycle Assessment: Quantifying Impacts of Construction Materials” organised by ASCE (AWI033116)
* “Draft EIA Notification 2020: Highlights and Challenges” organized by The Institution of Engineers, India.

**PUBLICATIONS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**JOURNAL PAPERS**

* Gyanendra Kumar, Ramesh Chandra Gupta, Sandeep Shrivastava, (2022). Sustainable zero-slump concrete containing construction and demolition waste from a 63-year old demolished building. Journal of materials in civil engineering. DOI: 10.1061/(ASCE) MT.1943-5533.0004257
* Gyanendra Kumar, Ramesh Chandra Gupta, Sandeep Shrivastava, (2022). Comparative environmental impacts of recycled concrete aggregate and manufactured sand production. Process intergration and optimization for sustainability (Springer). DOI: 10.1007/s41660-022-00244-4 MT
* Gyanendra Kumar, Ramesh Chandra Gupta, Sandeep Shrivastava, (2022). Sustainable precast concrete blocks incorporating recycled concrete aggregate, stone crusher, and silica dust. Journal of Cleaner Production (Elsevier). https://doi.org/10.1016/j.jclepro.2022.132354
* Gyanendra Kumar, Ramesh Chandra Gupta, Sandeep Shrivastava, (2022). Environmental impact assessment of sustainable zero-slump concrete containing industrial wastes, Environment, development and sustainability (Springer). (Under review)
* Gyanendra Kumar, Ramesh Chandra Gupta, Sandeep Shrivastava, (2020). Effect of demolished concrete and stone crusher dust on properties of M-40 grade paver blocks. Mater. Today Proc. (Elsevier) 44, 4330–4336. <https://doi.org/10.1016/j.matpr.2020.10.553>
* Gyanendra Kumar, Ramesh Chandra Gupta, Sandeep Shrivastava, (2020). Impact of recycled concrete aggregate on mechanical and durability properties of concrete paver blocks. Mater. Today Proc. (Elsevier) 27, 311–317. <https://doi.org/10.1016/j.matpr.2020.11.977>
* Gyanendra Kumar, Ramesh Chandra Gupta, Sandeep Shrivastava, (2019). Paver blocks manufactured from construction & demolition waste. Mater. Today Proc. (Elsevier) 42, 975–981. <https://doi.org/10.1016/j.matpr.2019.11.039>

**PAPER PRESENTED IN INTERNATIONAL CONFERENCES**

* Gyanendra Kumar, Navdeep, Raza, Rihan, Sandeep Shrivastava, 2022. “Leaching behaviour of recycled concrete aggregates and pervious concrete incorporating these aggregates” at 4th international conference on Trends and Recent Advances in Civil Engineering (TRACE – 2022) held online on 18 & 19 October, 2022 at AMITY Noida, India.
* Gyanendra Kumar, Navdeep, Raza, Rihan, Sandeep Shrivastava, 2022. “Comparative life cycle assessment of recycled soil stabilised brick and traditional bricks” in the 2022 Second Global Conference on Recent Advances in Sustainable materials (GC-RASM 2022) held at A.J. Institute of Engineering and Technology, Karnataka, India during 28-29, July 2022.
* Gyanendra Kumar, Ramesh Chandra Gupta, Sandeep Shrivastava, 2020. Impact of recycled concrete aggregate on mechanical and durability properties of concrete paver blocks. Mater. Today Proc. 27, 311–317. <https://doi.org/10.1016/j.matpr.2020.11.977> in International Conference on Recent Advance in Materials & Manufacturing (ICRAMM20) at Velalar College of Engineering and Technology, Erode, Tamil Nadu, India.
* Gyanendra Kumar, Ramesh Chandra Gupta, Sandeep Shrivastava, 2020. Effect of demolished concrete and stone crusher dust on properties of M-40 grade paver blocks. Mater. Today Proc. 44, 4330–4336. <https://doi.org/10.1016/j.matpr.2020.10.553> in International Conference on Advances in Materials Processing and Manufacturing Applications (iCADMA20) at MNIT Jaipur, India.
* Gyanendra Kumar, Ramesh Chandra Gupta, Sandeep Shrivastava, 2019. Paver blocks manufactured from construction & demolition waste. Mater. Today Proc. 42, 975–981. <https://doi.org/10.1016/j.matpr.2019.11.039> in International Conference on Recent Advance in Materials & Manufacturing (ICRAMM19) at Belagavi, Karnataka, India.
* Gyanendra Kumar, Ramesh Chandra Gupta, Sandeep Shrivastava, 2018. “Challenges and opportunities in construction and demolition waste management: A case of Jaipur, India”. Technical Volume (Instution of Engineers, India). 33, 204-209 in 33rd Indian Engineering Congress at Udaipur, India.
* Presented a research i.e. “Role of construction & demolition waste management in smart cities” in “International Conference on Smart Cities ‘Where are we now” and published in VSRD International Journal of Technical and Non-Technical Research e-ISSN: 0976-7967, p-ISSN: 2319-2216.

**MEMBERSHIP \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* Member of Climate Practitioners India Network constituted by NIUA.
* Global coordinator in Global Sustainability Future Network (GSFN) constituted by Dr. Renuka Thakore.
* Member (MIE) of Institution of Engineers (India)
* Associate Member of ASCE (AM-ASCE)
* RILEM (Senior Member) and member of TC: 289-DCM: Long-term durability of structural concretes in marine exposure conditions
* Member of Indian Geotechnical Society
* Life Member of International Society for Research & Development

**EDUCATION \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Ph.D. – SUSTAINABLE MATERIALS AND CONSTRUCTION JAIPUR, INDIA**

Malaviya National Institute of Technology July 2017 to Nov 2022

**SPECIALISATION – CONSTRUCTION PROJECT MANAGEMENT COURSERA, ONLINE**

Columbia University May 2017

**M.TECH. – BUILDING CONSTRUCTION AND MANAGEMENT GREATER NOIDA, INDIA**

NIU Sep. 2013 to July 2015

**M.B.A. – HR/MARKETING NOIDA, INDIA**

Jaypee Business School. (Jaypee University) Aug. 2007 to June 2009

**B.TECH. – CIVIL ENGINEERING SOLAN, INDIA**

Jaypee University of Information Technology Aug. 2004 to July 2008

**ADDITIONAL INFORMATION**

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* M. Tech. final year project, i.e., “Biomimicry in Construction Industry for effective, green and self-sustainable building”.
* MBA final year project, i.e., “Effectiveness of Training & Development in Jaiprakash Associates Limited”.
* B.Tech. final year project, i.e., “Design and analysis of a 8-floor earthquake resistant building in Chandigarh with the help of STAAD-Pro”.
* Project based 2 day Training Program in Construction Project Management through Civil Simplified (Skyfi Labs)
* Project based 2 day Training Program in BIM through Civil Simplified (Skyfi Labs) Verified certificate in 3-days project based training program on “Survey Camp using Total Station” through Skyfi Labs (Civil Simplified)

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