Prof. Vijay K. Minocha

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Links and Brief profile

(**https://dtu.irins.org/profile/66956**)

(**https://www.scopus.com/authid/detail.uri?authorId=6603724118**)

(**https://ascelibrary.org**/action/doSearch?field1=Contrib&text1=Minocha&Ppub=&Ppub=&AfterYear=&BeforeYear=)

Qualification	:	**B.E. (I.I.T. Roorkee))**, **1984**
		M.Tech (I.I.T. Kanpur), **1986**
		Ph. D (Delhi University), **2007** *(Modeling & Monitoring of Environmental Systems)*
Area of Specialization		**Modelling and A.I. applications in Civil Engineering**

Leading Positions held   Duration

Director (Control of Pollution)
Min. of Environment, Forests & CC, : September 2005 to July 2007(on deputation)
G.O.I.

Head of Department
Civil and Environmental Engg.,
and
**Dean (Academic, Admn.
& Students Welfare)** : July 2007 to July 2010 (on diverted capacity)
CBPGEC, Jaffarpur, Delhi
now a campus of **NSUT, Delhi**

Principal CBPGEC, Jaffarpur : July 2010 to March 2018 (on diverted capacity)
now a campus of **NSUT, Delhi**

Professor & Head, : January 2021 to December 2023
Civil engineering, DTU, Delhi

Chairman of Departmental Research : w.e.f. January 2023
Committee (DRC)
Civil Engineering DTU, Delhi
Director, Recruitment : w.e.f. January 2024
DTU, Delhi

Summary of research/Technical Publications   Number

1) **ASCE Journals**   :   **28**

2) Other Reputed International / National Journals   10
         i. LATEST JOURNAL PAPER
         ii. https://doi.org/10.2166/wst.2024.025

3) International /National (Conference/Seminars, Symposium/Workshops)   100+

4) Number of Monographs//Chapters   05

Published Papers in Journals:

1) Kaushik, Vijay, Bandita, Kumar, Munendra, **Minocha, Vijay K**. (2024) "Prediction of the flow resistance in non-prismatic compound channels" Water Practice & Technology, Volume 19 (5), Pages 1822–1835,DOI: 10.2166/wpt.2024.117

2) Singh, Balraj; **Minocha, Vijay K.**, (2024), Approximation in scour depth around spur dikes using novel hybrid ensemble data-driven model. Water Science & Technology. DOI: https://doi.org/10.2166/wst.2024.025

3) Singh, Balraj; **Minocha, Vijay K**., (2023). Discussion of "Prediction of Maximum Scour Depth near Spur Dikes in Uniform Bed Sediment Using Stacked Generalization Ensemble Tree-Based Frameworks" by Manish Pandey, Mehdi Jamei, Masoud Karbasi, Iman Ahmadianfar, and Xuefeng Chu. Journal of Irrigation and Drainage Engineering. DOI:10.1061/(**ASCE**)IR.1943-4774.0001739

4) Bansal, Deepak; **Minocha, Vijay K**.; Kaur, Arvinder, (2022), COVID 19 and Urban Development. Sustainable Infrastructure Development. DOI:10.1007/978-981-16-6647-6_4

5) Bansal, Deepak; **Minocha, Vijay K**.; Kaur, Arvinder, (2022), Reduction of GHGs in Buildings—Indian Affordable Houses. Sustainable Infrastructure Development. DOI:10.1007/978-981-16-6647-6_1

6) Bansal, Deepak**., Minocha, Vijay K**., Kaur, Arvinder., Vaidehi, A Dakwale., R, VRalegaonkar. (2021). Reduction of embodied energy & construction cost of affordable houses through efficient architectural design: A case study in Indian Scenario, Advances in Civil Engineering, Volume 2021, Article ID 5693101, 11 pages, https://doi.org/10.1155/2021/5693101. (**SCIE Indexed).**

7) Bansal, Deepak**., Minocha, Vijay K**.,(2021), Arvinder, Kaur. (2021), Embodied Energy, CO_2e, and Construction Cost of Indian Housing: Model of Low-Rise versus High-Rise Development, Journal of Architectural Engineering, ASCE, Year 2021, DOI: 10.1061/(**ASCE**) AE.1943-5568.0000480. (**ESCI Indexed).**

8) Bansal, Deepak; **Minocha, Vijay K**.; Kaur, Arvinder, (2020), Component wise-embodied energy analysis of affordable houses in India, Asian Journal of CivilEngineering, Volume 21, Year 2020, Pages 137-145,DOI:10.1007/s42107-019-00184-(SCIE Indexed).

9) **Minocha, Vijay K.,**(2005), Discussion of "Impact Stops on Vehicle Fuel Consumption and Emissions" by Hesham Rakha and Yonglian Ding, Journal of Transportation Engineering, **Volume** 131, **Year** 2005, **Pages** 571, DOI:10.1061/(**ASCE**)0733- 947X(2005)131:7(571) (**SCIE Indexed).**

10) **Minocha, Vijay K**., Hegazy, Tarek, (2005), Discussion of "Reconstruction of the building infrastructure: Two performance prediction models" by Mohamed Attalla, Tarek Hegazy, and Ralph Haas, Journal of Infrastructure Systems, Volume 11, Year 2005, Pages 268-269, DOI:10.1061/(**ASCE**)1076-0342(2005)11:4(268) (**SCIE Indexed).**

11) **Minocha, Vijay K**. (2004), Discussion of "Comparative analysis of event-based rainfall-runoff modeling techniques - Deterministic, statistical, and artificial neural networks" by Ashu Jain and S. K. V. Prasad Indurthy, Journal of Hydrologic Engineering, Volume 9, Year 2004, Pages 550-553, DOI:10.1061/(**ASCE**)1084-0699(2004)9:6(550) (**SCIE Indexed).**

12) **Minocha, Vijay K**., (2004), Discussion of "performance of neural networks in daily streamflow forecasting" Journal of Hydrologic Engineering, Volume 9, Year 2004, Pages 555-556, DOI:10.1061/(**ASCE**)1084-0699(2004)9:6(555) (**SCIE Indexed).**

13) **Minocha, Vijay K**.,(2004), Discussion of "effect of lane width on capacity under mixed traffic conditions in india", Journal of Transportation Engineering, Volume 130, Year 2004, Pages 402-403,DOI:10.1061/(**ASCE**)0733-947X(2004)130:3(402) (**SCIE Indexed).**

14) **Minocha, Vijay K**.;Melhem, Hani G.;Cheng, Yousheng,(2004), Discussion of "prediction of remaining service life of bridge decks using machine learning" by Hani G. Melhem and Yousheng Cheng, Journal of Computing in Civil Engineering, Volume 18, Year 2004, Pages 383-385,DOI:10.1061/(**ASCE**)0887-3801(2004)18:4(383.2) (**SCIE Indexed).**

15) **Minocha, Vijay K**.,(2003), Discussion of "Neural Network Prediction of Air Stripping K_La" by Y. Djebbar and R. M. Narbaitz, Journal of Environmental Engineering, Volume 129, Year 2003, Pages 780-781, DOI:10.1061/(**ASCE**)0733- 9372(2003)129:8(780) (**SCIE Indexed).**

16) **Minocha, Vijay K**.(2003), Discussion of "predicting chlorine residuals in drinking water: Second order model", Journal of Water Resources Planning and Management, Volume 129, Year 2003, Pages 437-439 ,DOI:10.1061/(**ASCE**)0733-9496(2003)129:5(437) (**SCIE Indexed).**

17) **Minocha, Vijay K**.,(2003), Discussion of "Dimensional Analysis of Reaeration Rate in Streams" by Carlo Gualtieri, Paola Gualtieri, and Guelfo Pulci Doria, Journal of Environmental Engineering, Volume 129, Year 2003, Pages 676-677, DOI:10.1061/(**ASCE**)0733-9372(2003)129:7(676) (**SCIE Indexed).**

18) **Minocha, Vijay K**., (2003), Discussion of "probability distribution of low streamflow series in the united states", Journal of Hydrologic Engineering, Volume 8, Year 2003, Pages 297, DOI:10.1061/(**ASCE**)1084-0699(2003)8:5(297) (**SCIE Indexed).**

19) **Minocha, Vijay K**.;Saini, Gaurav, (2003), Discussion of "estimating vehicle fuel consumption and emissions based on instantaneous speed and acceleration levels", Journal of Transportation Engineering, Volume 129, Year 2003, Pages 578-579,DOI:10.1061/(**ASCE**)0733-947X(2003)129:5(578) (**SCIE Indexed).**

20) **Minocha, Vijay K**.;Malhotra, Gaurav, (2003), Discussion of "testing hydrologic time series for stationarity", Journal of Hydrologic Engineering, Volume 8, Year 2003, Pages 298-299,DOI:10.1061/(**ASCE**)1084-0699(2003)8:5(298) (**SCIE Indexed).**

21) **Minocha, Vijay K**.;Upadhyaya, Prakash C., (2003), Discussion of "finite fourier probability distribution and applications", Journal of Hydrologic Engineering, Volume 8, Year 2003,

Pages 231, DOI:10.1061/(**ASCE**)1084-0699(2003)8:4(231) (**SCIE Indexed).**

22) **Minocha, Vijay K**.;Zayed, Tarek M.;Chang, Luh Maan, (2003)Discussion of "statewide performance function for steel bridge protection systems" by Tarek M. Zayed, Luh-Maan Chang, and Jon D. Fricker, Journal of Performance of Constructed Facilities, Volume 17, Year 2003, Pages 62-64, DOI:10.1061/(**ASCE**)0887-3828(2002)16:2(46) (**SCIE Indexed).**

23) **Minocha, Vijay K**., (2003), Discussion of "classification of river basins using artificial neural network", Journal of Hydrologic Engineering, Volume 8, Year 2003, Pages 105, DOI:10.1061/(**ASCE**)1084-0699(2003)8:2(105) (**SCIE Indexed).**

24) **Minocha, Vijay K.;**Upadhyaya, Prakash C., (2003), Discussion of "uncertainty assessment of regionalized flood frequency estimates", Journal of Hydrologic Engineering, Volume 8, Year 2003, Pages 107, DOI:10.1061/(**ASCE**)1084-0699(2003)8:2(107) (**SCIE Indexed).**

25) **Minocha, Vijay K**., (2002), Discussion of "model for determining optimum bus-stop spacing in urban areas", Journal of Transportation Engineering, Volume 128, Year 2002, Pages 596, DOI:10.1061/(**ASCE**)0733-947X(2002)128:6(596) (**SCIE Indexed).**

26) **Minocha, Vijay K**., (2002), Discussion of "comparison of ANNss and empirical approaches for predicting watershed runoff", Journal of Water Resources Planning and Management, Volume 128, Year 2002, Pages 379-381,DOI:10.1061/(**ASCE**)0733-9496(2002)128:5(379) (**SCIE Indexed).**

27) Geeta Arora., M. L. Kansal., **Vijay K. Minocha**., James C. Powell ., John R. West., Nicholas B. Hallam ., Christopher F. Forster ., John Simms ., (2001), Performance of various kinetic models for chlorine decay, Journal of Water Resources Planning and Management, Volume 127, Year 2001, Pages 349-351,DOI:10.1061/(**ASCE**)0733-9496(2001)127:5(349) (**SCIE Indexed).**

28) Kumar, Arun; **Minocha, Vijay K**.; Abdelhamid, Tariq S.;Everett, John G., (2001), Time series analysis for construction productivity experiments, Journal of Construction Engineering and Management, Volume 127, Year 2001, Pages 252, DOI:10.1061/(**ASCE**)0733-9364(2001)127:3(252) (**SCIE Indexed).**

29) Kumar, Arun., **Minocha, Vijay K**., (2001), Rainfall runoff modeling using artificial neural networks, Journal of Hydrologic Engineering, Volume 6, Year 2001, Pages 176-177, DOI:10.1061/(**ASCE**)1084-0699(2001)6:2(176) (**SCIE Indexed).**

30) Kumar, Arun., **Minocha, Vijay K**., (2001), Back-propagation neural network in tidal-level forecasting, Journal of Waterway, Port, Coastal and Ocean Engineering, Volume 127, Year 2001, Pages 54-55, DOI:10.1061/(**ASCE**)0733- 950X(2001)127:1(54) (**SCIE Indexed).**

31) Kumar, Rakesh;Singh, R. D.;Seth, S. M., **Minocha, Vijay K**., (2000), Discussion of Regional flood formulas for seven subzones of zone 3 of India, Journal of Hydrologic Engineering, Volume 5, Year 2000, Pages 436-437, DOI:10.1061/(**ASCE**)1084-0699(2000)5:4(436) (**SCIE Indexed).**

32) Sasikumar K., Mujumdar P.P., **Minocha, Vijay K**., (1998), Discussion of Fuzzy optimization model for water quality management of a river system, Journal of Water Resources Planning and Management, Volume 124, Year 1998, Pages 79-87,DOI:10.1061/(**ASCE**)0733-9496(1998)124:2(79) (**SCIE Indexed).**

33) **Minocha, Vijay K**.,Prasad,B.M., Kumar, Arun, Kansal, M. L., Arora, Geeta., (1997), Discussion of Identification of monitoring stations in water distribution system, Journal of Environmental Engineering, Volume 123, Year 1997, Pages 746-752, DOI:10.1061/(**ASCE**)0733-9372(1997)123:8(746)   **(SCIE   Indexed)**

34) **Minocha, Vijay K**.;Rao, A. V.S.Prabhakar,(1988), Ammonia removal and recovery from urea fertilizer plant waste, Environmental Technology Letters, Volume 9, Year 1988, Pages 655-664, DOI:10.1080/09593338809384616 (**SCIE Indexed).**

Some Papers Published in International Conferences / Magazines:

1) Bansal, Deepak**., Minocha, Vijay K**., Arvinder, Kaur.(2020). "Covid 19 and Urban Development" in a Springer Indexed International Conference on Sustainable Infrastructure Development: Innovation and advances (SIDIA 2020) on 17/8/2020. (**Springer Indexed).**

2) Bansal, Deepak**., Minocha, Vijay K**., Arvinder, Kaur. (2020). Reduction of GHGs in Buildings- India Affordable Housing" in a Springer Indexed International Conference on Sustainable Infrastructure Development: Innovation and advances (SIDIA 2020) on 17/8/2020. (**Springer Indexed).**

3) Bansal, Deepak**., Minocha,V.K.,** (2019), "Optimizing Affordable Housing through Building Materials" in 6th edition of TERI GRIHA Annual Magazine "SHASHWAT" ISSN No 2581-9291 on 11th Annual GRIHA Summit 2019 & Conference, Vol. 5, Issue 6,December 2019, pp. 142-144, on **17-18 Dec 2019** in Delhi.

4) Bansal, Deepak**., Minocha,V.K.,** Kaur, Arvinder. (2019), "Minimizing Energy & Cost in Affordable Housing by using alternative Building Materials ", BMTPC Magazine Nirman Sarika, Vol 8, Issue 3, **July-Sept 2019**, pp. 48-51.

5) Bansal, Deepak**.,Minocha,V.K.,** (2018), "APPROPRIATE BUILDING MATERIALS IN AFFORDABLE HOUSING FOR ENERGY AND COST REDUCTION" in Vidisha, M. P., India, in International Seminar on Innovations and Opportunities in Building Materials and Housing Technologies on **2 November 2018**.

6) Bansal, Deepak**., & Minocha,V.K.,** (2018), "HOUSE BARTER AND ENVIRONMENTAL MANAGEMENT", IAStructE, Newsletter of Indian Association of Structural Engineers**, May 2018**, PP 6-8.

7) Bansal, Deepak**., Minocha,V.K.,** (2018), "Analysis of low rise vs. high rise development of affordability housing in India, for cost and energy optimization, **"International Conference on Clean Technologies and Sustainable Development",** by NITTTR (National Institute of

Technical Teachers Training Institute and Research) Chandigarh in collaboration with the Ministry of Science & Technology, Government of India, Deepak Bansal & V K Minocha, pp. 105-111, **23-24 Feb 2018**

8) Bansal, Deepak**., &** **Minocha,V.K.,** (2017), "Sustainable Housing are Affordable in India"in 4th Edition of TERI GRIHA Annual Magazine "SHASHWAT" on 9th Annual GRIHA Summit 2017 & conference, Vol. 3, Issue 4, pp. 76-79, on **18-19 Dec 2017** in Delhi.