

## A. Books Published

1. Studies on Hydraulic Jump in Prismatic and Non-Prismatic Channels (A Reference book), Dr. Sumit Gandhi and Dr. R.P. Singh, LAP Lambert Academic Publishing 2011, Paperback, 284 Seiten, Germany, 2011, ISBN 978-3-8465-1447-4
2. Interactions and Adsorption Dynamics of Cr(VI) Removal by EOLP, (A Reference book), *Fatma Zahra, Ram Pal Singh and Sumit Gandhi*, LAP LAMBERT Academic Publisher 2023, London NZ9ED, U.K., ISBN : 978-620-6-15558-4; May 2023.

## B. Book Chapters Published

1. Jha, P. Sachan, A.K. and Singh, R.P. “An Overview: Supplementary Cementous Materials” A book chapter in *Advances in Construction materials and sustainable Environment*, Publisher Springer, pp. 53-63, 2021, ISBN: 978-981-16-6556-1  
{Part of the lecture notes in Civil Engineering Book Series (LNCE, Volume 196)}  
DOI: 10.1007/978-981-16-6557-8-5
2. Jha, P. Sachan, A.K. and Singh, R.P. “Bagasse Ash (ScBA) and its Utilization in Concrete as Pozzolanitic Material: A Review” A book chapter as Part of the lecture notes in Civil Engineering (LNCE) Book Series, Volume 143, year 2021, pp. 471-480.
3. Properties of Concrete with Bagasse Ash and Stone Dust Exposed to Sulphate Attack  
Jha, P., Sachan, A. K., and **Singh, R. P.**  
National Conference on Recent Advances in Structural Engineering: Select Proceedings of NCRASE 2020, Lecture notes in Civil Engineering, Vol. 135, Year 2021, pp. 29 – 37,  
DOI: [https://doi.org/10.1007/978-981-33-6389-2\\_4](https://doi.org/10.1007/978-981-33-6389-2_4)
4. Utilization of Stone Dust as an effective alternative for Sand Replacement in Concrete  
Pooja Jha ., A. K. Sachan ., R. P. Singh .,  
3<sup>rd</sup> International Conference on Innovative Technologies for clean and sustainable Development, held at NITTR, Chandigarh, India. Also published in RILEM Book series, Springer, Volume 29, Year 2021, pp. 513-526.  
DOI:10.1007/978-3-030-51485-3\_34  
Link: [http://link.springer.com/chapter/10.1007%2F978-3-030-5151485-3\\_34](http://link.springer.com/chapter/10.1007%2F978-3-030-5151485-3_34)

## C. Book Chapters Reviewed

1. Reviewed a book chapter on Modelling of Water quality Index of Haryana: A comparison of Deep Neural Network and Support Vector Machine in May 2022 as requested by Prof K.K. Singh, NIT Kurukshetra.
2. Reviewed a book chapter on Environmental Performance Assessment of Electric and Two-Wheelers using LCA, in May 2022 as requested by Prof K.K. Singh, NIT Kurukshetra.

## Research Publications

Groundwater quality assessment using PCA and water quality index (WQI) in a drought-prone area

H.K. Pandey, Vishal Kumar Singh, Sudhir Kumar Srivastava and Ram Pal Singh

**article** : Sustainable Water Resources Management, published on-line, Springer Nature Singapore, Nov 27, 2023, pp.1-22.(eSCI, I.F. 2.4)

DOI: <https://doi.org/10.1007/s40899-023-00963-7>

Soil Loss Estimation Using RUSLE in Hard Rock Terrain: a Case Study of Bundelkhand, India  
H. K. Pandey, Vishal Kumar Singh, - Ram Pal Singh, Sudhir Kumar Singh

**article** : Water Conservation Science and Engineering published on=line, Springer Nature,Singapore, Nov 30 2023), pp. 1-17, (eSCI, I.F. 3.0)

DOI: <https://doi.org/10.1007/s41101-023-00229-5>

Strength Properties and Durability of Concrete Prepared from Sugarcane Bagasse Ash and Stone Dust,

Pooja Jha, A. K. Sachan, R.P. Singh,

**article** Sugar Tech, vol. 24(1), Year 2022, Page: 746-763, DOI:10.1007/s12355-021-01047- 6

Investigation on the durability of concrete with partial replacement of cement by bagasse ash (BAH) and sand by stone dust (SDT)

Pooja Jha, A. K. Sachan, and R. P. Singh

**article**: Materials Today: Proceedings, Volume 43, Year 2021, Pages 237-243

DOI: <http://doi.org/10.1016/j.matpr.2020.11.652>

Agro-waste sugarcane bagasse ash (ScBA) as partial replacement of binder material in concrete  
Jha, P., Sachan, A. K. and Singh, R. P.

**article**: Materials Today: Proceedings, Volume 44, Year 2021, Pages 419-427.

DOI:<http://doi.org/10.1016/j.matpr.2020.09.751>

Understanding the variability in Estimation of Water Quality of Lakes and Reservoirs

Ramp Pal Singh ., Vasudevan Mangottiri ., Balaganesh Pandiyan .,

**article** IOP Conference series: Materials Science and Engineering (Open Access), Volume 955, Year 2020, Pages 1 - 9

DOI:10.1088/1757-899X/955/1/012085

Microstructure Analysis of Concrete: Utilizing Bagasse ash waste as partial replacement of cement

Pooja Jha, Sachan A. K. and Singh, R.P.

**article** Indian Journal of Environmental Protection (IJEP), Volume 40, Year 2020, Pages 269 - 275

Standardised nanostructured Ta/N-TiO<sub>2</sub> For environmental contaminants: an efficient visible light induced photochemical quencher for dyes

Kamini Gupta ., Jatinder Kumar ., R. P. Singh ., Anjana Pandey ., Priya Rai ., Ashutosh Pandey

**article** Materials Technology, Volume 34, Year 2019, Pages 765--775  
DOI:10.1080/10667857.2019.1628331

Dissipation Kinetics of Hexaconazole and Lambda-Cyhalothrin Residue in Soil and Potato Plant  
Ragini Devi, A K Sachan, and R P Singh

**Article** Potato Research, Volume 62, Year 2019, Pages 411-422 DOI:10.1007/s11540-019-9418-3

Assessment of Noise Pollution during Deepawali at Allahabad Mohd. Nafees, Satyendra Nath and Singh, R.P.

**article** Indian Journal of Environmental Protection (IJEPE), Volume 39, Year 2019, Pages 384 - 386

A Dimensionless approach to model granule size variation in UASB Reactor  
Singh, V., Singh, R.P. and Pandeya, N.D.

**article** International Journal of Science, Engineering and Management, Volume 3, Year 2018, Pages 14 - 20

Synthesis, characterization of nano-sized anatase TiO<sub>2</sub> and its adsorption behaviour for environmental contaminant

Gupta, K., Pandey, A. and Singh, R.P.

**article** Cellular and Molecular Biology, Volume 63, Year 2017, Pages 18--20

Photochemical quenching of aqueous methylene blue by N, Nb co-doped TiO<sub>2</sub> nanomaterials under visible light: a confirmatory UV/LC-MS study

Gupta, Kamini and Pandey, Ashutosh and Singh, R. P.

**article** Materials Research Express, Volume 4, Year 2017, Pages 1-12

A Dimensionless Approach to model Hydraulic Conductivity of Soil-Flyash Mixtures , Pandey, A. and Singh, R.P.

**article** International Journal of Advances in Civil Engineering, Volume 4, Year 2017, Pages 57-61  
DOI:ISBN: 978-93-85832-29-1

Empirical Formulation of Flow Characteristics in Trapezoidal Channels

Gandhi, S., and Singh, R. P.

**Article** Journal of The Institution of Engineers (India): Springer Series A, Volume 97(3), Year 2016, Pages 247-253, e-ISSN: 2250-2157, Indexed in Astrophysics Data System.

DOI:10.1007/s40030-016-0153-3

Non-linear regression models for PM<sub>10</sub> and PM<sub>2.5</sub> concentrations in Ambient Air due to burning of crop residues

Chanduka, L., Singh, R. P. and Dhir, A.

**article** Journal of Pollution Effects & Control, Volume 8(1), Year 2016, Pages 141-148 (Open access).

Mass transfer kinetics using two-site interface model for removal of Cr (VI) from aqueous solution with cassava peel and rubber tree bark as adsorbents

M. Vasudevan: P.S. Ajithkumar: R.P. Singh: N. Natarajan

**article** Environmental Engineering Research, Volume 21 (2), Year 2016, Pages 152--163

Web-GIS based Framework for Solid Waste Complaint Management for Sustainable and Smart City

Singh, Yadvendra P., Singh, A. K. and Singh, R.P.

**article** International Journal of Advanced Remote Sensing and GIS, Volume 5 (10), Year 2016, Pages 1930—1936 (Open access)

Influencing Factors of Granule Size in UASB Reactor and Mathematical Approach for Its Prediction

Singh, Vidya, Singh, R.P and Pandeya, N.D.

**article** International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), Volume 4, Year 2015, Pages 4904--4909

Selection of a suitable Surfactant based on Zeta Potential for use as Purging solution in Electrokinetic Remediation of Cadmium from Cadmium contaminated soil.

Arti Alok, R.P. Tiwari, and R.P. Singh

**article** Oxidation Communications, Volume 38 (3), Year 2015, Pages 1511--1520

Using GIS and Remote Sensing Technique for Zoning of Wastewater Drainage of Allahabad City

Yadvendra Pratap Singh, Ram Pal Singh, A. K. Singh and D.K. Yadav

**article** International Journal of Advanced Remote Sensing and GIS, Volume 4 (1), Year 2015, Pages 1419—1434 (Open access)

**DOI:** [10.23953/cloud.ijarsg.126](https://doi.org/10.23953/cloud.ijarsg.126)

Evaluation of Kinetics of Leaching of Lignins and Tannins in Batch Adsorption of Cr (VI) by Emblica officinalis Leaf Powder (EOLP)

Ram Pal Singh, Fatma Zahra

**article** Journal of Membrane and Separation Technology, Volume 3, No. 4, Year 2014, Pages 232—242. E-ISSN: 1929 – 6037/14,

DOI: <http://dx.doi.org/10.6000/1929-6037.2014.03.04.7>

Mixing Kinetics in Batch Adsorption of Chromium(VI) by Emblica officinalis Leaf Powder Ram Pal Singh, Fatma Zahra

**article** International Journal of Advanced Technology in Engineering and Science (IJATES), Volume 2, Special issue No. 1, September 2014, Pages 349—357, ISSN (Online: 2348-7550. I.F. 5.8

Effect of pH of Analyte in Electrokinetic Remediation of Cadmium Contaminated Soil  
Alok, Arti and Tiwari, R. P. and Singh, R. P.

**article** International Journal of Engineering Research & Technology (IJERT), Volume 1, Issue 10, Year 2012, Pages 1—11., ISSN: 2278-0181

A Dimensionless approach for rate of Re-aeration in River Ganges  
Singh, R. P.

**article** International Journal of Science, Spirituality, Business and Technology (IJSSBT), Volume 1, issue 1, Year 2012, Pages 56—61., ISSN (print) : 2277 - 7261

Identification of Principal Hydraulic Jump Characteristics in Prismatic and Non-Prismatic Channels: Principal Component Analysis  
Gandhi, S., and Singh, R. P.

**Article** International Journal of Water Resources and Environment Management, Volume 2, Issue 1, Year 2011, Pages 77-89. Published by Research Science Press, New Delhi (India)., ISSN:2229-5933.

Enhanced Remediation of Cadmium and Copper from clayey Soil  
Alok, Arti and Tiwari, R. P. and Singh, R. P.

**article** Oxidation Communications, Volume 33, Issue 3, Year 2010, Pages 583—592. Published by journal of the Balkan tribological association.

Axial dispersion and mass-transfer controlled simulation study of chromium (VI) adsorption onto tree leaves and activated carbon  
Singh, R.P., Zahra F., Savio W. and Prasad, S.C.

**article** Journal of Environmental Engineering Division, ASCE, vol.135, Issue 10, Year 2009, pp.1071-1083, Published by Journals Department, ASCE, 1801, Alexander Bell Drive, Reston, VA 20191-4400. ISSN:0733-9372/2009/10-1071-1083/\$25.00  
DOI:10.1061/(ASCE)EE.1943-7870.0000050

Organic loading rate/Flow rate regulation during start-up phase in UASB Reactor  
Singh, R. P. and Ojha, C.S.P,

**article** Journal of Institution of Engineers (India), IEI, vol.89, Year 2009, pp.25 – 29, 04/2009, Published by The Institution of Engineers (India) Kolkata, ISSN : 0251 – 110X.

Selection of suitable aggregation function for estimation of river pollution index for river Ganges in India  
Singh, R. P., Satyendra Nath, S. C. Prasad and A. K. Nema,

**article** Journal of Environmental Engineering Division, ASCE, vol.134, Issue 8, Year 2008, pp.689-701, Published by Journals Department, ASCE, 1801, Alexander Bell Drive, Reston, VA 20191-4400.  
DOI:10.1061/(ASCE)0733-9372(2008)134:8(689)

Flow Distribution Parameters in Relation to Flow Resistance in an Upflow Anaerobic Sludge Blanket Reactor System  
Ojha, C.S.P. and Singh, R.P.

**article** : a Technical Note; Journal of Environmental Engineering Division, ASCE, vol.128, Issue 2, Year 2002, pp.196-200, Published by Journals Department, ASCE, 1801, Alexander Bell Drive, Reston, VA 20191-4400.  
DOI:10.1061/(ASCE)0733-9372(2002)128:2(196)

"Monitoring of Variation in the Water Quality of River Ganga at Sangam in Allahabad,  
Singh, R.P., S. Nath, S. C. Prasad and H. Verma,

**article** Indian Journal of Environmental Protection, IJEP, vol.27, Issue 8, Year 2007, pp.680-688, Published by Kalpana Corporation, Varanasi., ISSN:0253-7141.

Deterministic models for line source emission: A Review  
Singh, B.K., Singh, R. P., Singh A.K. and Prasad, S.C.

**article** Journal IAEM, vol.33, Issue 3, Year 2006, pp.163-167.

Nutrient's Requirement for UASB Process : a review  
Singh, R.P., Kumar, S. and Ojha, C.S.P. ",

**article** : Biochemical Engineering Journal, vol.3 (01), Year 1999, pp.35-54, Published by Elsevier Science, S.A.  
DOI: [https://doi.org/10.1016/S1369-703X\(98\)00043-6](https://doi.org/10.1016/S1369-703X(98)00043-6)

A Critique on Operational Strategies for Start-up of UASB Reactors: Effects of Sludge Loading Rate and Seed/ Biomass Concentration  
Singh, R.P., Kumar, S. and Ojha, C.S.P.

**article** : Biochemical Engineering Journal, vol.1, Year 1998, pp.107-119, 01/1998, Published by Elsevier Science, S.A.  
DOI: [https://doi.org/10.1016/S1385-8947\(97\)00086-7](https://doi.org/10.1016/S1385-8947(97)00086-7)

A Study of Removal of Hexavalent Chromium by Adsorption on Sawdust  
Singh, R.P., Vaishya, R.C. and Prasad, S.C

**article** : Indian Journal of Environmental Protection (IJEP), vol.12 (12), Year 1992, pp.916-922

## Conference Papers

Properties of Concrete with Bagasse Ash and Stone Dust Exposed to Sulphate Attack  
Jha, P., Sachan, A. K., and **Singh, R. P.**

**Conference Paper** : National Conference on Recent Advances in Structural Engineering: Select Proceedings of NCRASE 2020, Lecture notes in Civil Engineering, Vol. 135, Year 2021, pp. 29 – 37,  
DOI: [https://doi.org/10.1007/978-981-33-6389-2\\_4](https://doi.org/10.1007/978-981-33-6389-2_4)

Utilization of Stone Dust as an effective alternative for Sand Replacement in Concrete

Pooja Jha, A. K. Sachan ., R. P. Singh .,

**Conference Paper** 3<sup>rd</sup> International Conference on Innovative Technologies for clean and sustainable Development, held at NITTR, Chandigarh, India. Also published in RILEM Book series, Springer, Volume 29, Year 2021, Pages 513-526.

DOI:10.1007/978-3-030-51485-3\_34

Link: [http://link.springer.com/chapter/10.1007%2F978-3-030-5151485-3\\_34](http://link.springer.com/chapter/10.1007%2F978-3-030-5151485-3_34)

Study on the Effect of Supplementary Cementitious Materials (SCM) as Cement Replacement on the Properties of Concrete

Pooja Jha, A.K. Sachan, R.P. Singh

**conference paper** Energy and Environmental Technologies for Sustainable Development (CHEM-CONFLUX 20), Year 2020

A Dimensionless approach to model granule size variation in UASB Reactor: Model development and its Validation

Singh, V., Singh, R. P., Pandey, A. and Pandey, N.D

**conference paper** 6th World Conference on Applied Science and Engineering, held at Goa, India, during, January 2-3, 2018 , Year 2018

DOI:01.1617/vol5iss1pid001011

A Dimensionless approach to model Hydraulic Conductivity of Soil-Flyash mixtures

Pandey, A. and Singh, R. P.

**conference paper** ASAR International Conference, held at New Delhi, India, during, June 04, 2017, pp.57-61, ISBN: 978-93-85832-29-1.

DOI:01.1617/vol5iss1pid001011

Modelling Reaeration phenomenon in River using Dimensionless approach

Pandey, A. and Singh, R.P.

**conference paper** 7th International Conference on Advances in Civil and Structural Engineering (CSE-2017), held at Kuala Lumpur, Malaysia, July 01-02, 2017, Pages 31-35, ISBN:978-01-63248-127-6,

DOI:10.15224/978/1-63248-127-6-37

Using Smart Phone for lodging solid waste complaint and its monitoring in Web GIS based System

Singh, Y.P., Singh, A.K. and Singh, R.P.

**conference paper** International Conference on UrbanGeoinformatics (ICUG-2017), held at Teri University, New Delhi during February 22-23, 2017.

Hydraulic Jump Characteristics in Non-Prismatic Channels

S. Gandhi ., R. P. Singh .,

**Conference Paper** ISHS 2014 - Hydraulic Structures and Society - Engineering Challenges and Extremes: Proceedings of the 5th IAHR International Symposium on Hydraulic Structures, held at Brisbane, Australia, August 2014, pp. 678-686. ISBN: 9781742721156

DOI:10.14264/uql.2014.14



Appraisal of certain anaerobic digestion studies  
Ram Pal Singh and P. Pal

**conference paper** International Conference AEST-2014, held at Houston, Texas, U.S.A., Volume 1, Year 2014, Pages 159--166

Factors affecting granulation and granule size development in UASB Reactor: A Review  
Singh, Vidya, Singh, R.P. and Pandeya, N.D.

**conference paper** International Conference on Recent Trends and Challenges in Civil Engineering (RTCCE-2014), held at MNNIT Allahabad, Volume 1, Year 2014, Pages 281--286

Effect of purging solution 's pH on electrokinetic remediation of cadmium contaminated soil Alok, Arti and Tiwari, R.P. and Singh, R.P.

**conference paper** : International Conference on Recent Trends and Challenges in Civil Engineering(RTCCE-2014), held at MNNIT Allahabad, Year 2014, Pages 240-245

Disasters Induced by Water Pollution  
Singh, R.P.

**conference paper** : In Workshop on Disasters and Their Management", Workshop on Disasters and Their Management, MNNIT, Allahabad, Year 2014, pp.157-175, Published in Proceedings)

Simulation Studies on Inorganic and Organic Contaminants Transport in Sanitary Landfills  
Singh, Ram Pal

**conference paper** International Conference on Case Histories in Geotechnical Engineering, held at Chicago, U.S.A. during May 1-5, 2013, Year 2013, Pages 6—14.

Performance evaluation of Reverse Osmosis membrane in water treatment  
Tiwari, M. K. and Singh, Ram Pal

**conference paper** : International Conference on Advances in Environmental Engineering, held at I.I.T. Guwahati, Assam in March 2012, pp.84- 91, Year 2012, Published By Springer International Publishing.

Evaluation of kinetics of Cr(Vi) adsorption onto Embilica officinalis leaf powder  
Fatma Z. and Singh, R.P.

**conference paper** : IITK-BARC Workshop cum 17th National Symposia on Advances in Environmental Monitoring and Modeling, held at I.I.T. Kanpur, May 2010, pp.90-100, (Published in Proceedings).

Use of ANN and Neuro-fuzzy models for prediction of vehicular exhaust emissions. A case study of Oslo City, Norway  
Manoj K. Unni and Singh, R.P.

**conference paper** IITK-BARC Workshop cum 17th National Symposia on Advances in Environmental Monitoring and Modeling, held at I.I.T. Kanpur, May 2010, pp.184-188, (Published in Proceedings).



Modelling of Dissolved Oxygen Behaviour in Fast Moving Shallow Hilly Streams  
Singh, R. P., M. Barman, and C.S.P. Ojha

**conference paper** International conference on “Water, Environment, Energy and Society (WEES-2009), New Delhi, pp.1171-1178, Year Jan. 2009, Published By Allied Publisher Pvt. Ltd., New Delhi.

Modelling of Dissolved Oxygen Behaviour in Fast Moving Shallow Hilly Streams  
Singh, R. P., M. Barman, and C.S.P. Ojha

**conference paper** International conference on “Water, Environment, Energy and Society (WEES-2009), New Delhi, pp.1171-1178, Year Jan. 2009, Published By Allied Publisher Pvt. Ltd., New Delhi.

Design of Concrete Pavements: New Code of Practices  
Singh, R.P.

**conference paper** : Workshop on Design of Rural Roads: New Code of Practices, held at MNNIT, Allahabad, April 2009. (Published in Proceedings).

Design of Cement Concrete Pavement for Rural Roads  
Singh, R.P.

**conference paper** : Workshop on Design of Rural Roads: New Code of Practices, held at MNNIT, Allahabad, April 2009, pp.1-12. (Published in Proceedings).

Transport and Interactions in Bacterial adhesion in River Bank Filtration  
Singh, R.P.

**conference paper** EU-India International River Bank Filtration Conference, *held at* I.I.T. Roorkee, Uttaranchal, November 2006.

Identification of Cost Functions for Optimization of Wastewater Treatment Plant Design and Operation  
Singh, R.P.

**conference paper** Indo-Australian International Conference on Information Technology in Civil Engineering, UAC-ITCE, I.I.T. Roorkee, Uttaranchal, 02/2006

"Use of Local Materials, Industrial Wastes in Rural Road Constructions & Influence of Environmental Factors  
Singh, R.P.

**conference paper** NRRDA sponsored Training Programme for Field Engineers, held at NERIST, Nirjuli, Arunachal Pradesh, January 2004, pp.23-41, (Published in Proceedings).

Simulation of a UASB Reactor Performance Treating Whey Permeate Wastewater  
Singh, R.P. and Ojha, C.S.P.

**conference paper** Water and Environment Series, IWA, held at I.I.T. Delhi, Year December 2002, pp.787-796, Published By IWA Publishing: Alliance House, 12 Caxton Street, London, SW1H 0QS, UK

Community-based Training and Organisational Set-up for Disaster Management  
Singh, R.P.

**conference paper** In Training cum workshop on Community-based Training on Disaster Management, held at NERIST, Nirjuli, Arunachal Pradesh, October 2002, pp.35-37 (Published in Proceedings).

Water Quality Monitoring of Dikrong River in Arunachal Pradesh  
Singh, R.P., Ojha, C.S.P., Jha, D.K., Khongthaw, M.M., Murtem, T. and Sonam, B.

**conference paper** International Conference on Construction Industry, Environment Management and Disaster Management, held at Chandigarh (INDIA), November 2000, pp.840-853.

Settling Characteristics of Granules in UASB Reactor",  
Singh, R.P., Kumar, S. and Ojha, C.S.P.,

**Conference paper** International Seminar on Civil Engineering Practices in Twenty-first Century, held at University of Roorkee, Roorkee, Uttaranchal, February 1996, pp.1508-1517.

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