


JSS Mahavidyapeetha
JSS Academy of Technical Education
Department of Civil Engineering



FACULTY PROFILE

1. Personal Details

| | | |
|---------------------------|--------------------------------|---|
| NAME | DR. BISHNU KANT SHUKLA |  |
| DEPARTMENT | CIVIL ENGINEERING | |
| DESIGNATION | ASSISTANT PROFESSOR | |
| PHONE | 8284942192 | |
| EMAIL ID | bishnukantshukla@jssaten.ac.in | |
| Date of Joining (JSSATEN) | 01/12/2020 | |

2. Experience

| | | | |
|---------------------------|---------------------|-------------|-------------------|
| Total Experience in Years | Teaching: 7.8 Years | Industry: 0 | Research: 8 Years |
|---------------------------|---------------------|-------------|-------------------|

3. Qualifications

| COURSES | SPECIALIZATION | Year of Award | INSTITUTION | UNIVERSITY |
|---------|-----------------------------|---------------|---|------------------------------------|
| B.Tech | Civil Engineering | 2014 | JSS Academy of Technical Education, Noida | Uttar Pradesh Technical University |
| .M.Tech | Water Resources Engineering | 2016 | N.I.T. Kurukshetra | N.I.T. Kurukshetra |
| Ph.D | Civil Engineering | 2024 | Lovely Professional University | Lovely Professional University |

4. Research & Publications

| | | |
|---|--------------------------|---------------|
| Papers Published in Web of Science indexed Journals | International: 38 | National: NIL |
| Papers Published in SCOPUS indexed Journals | International: 68 | National: NIL |

| | | |
|---|---|---------------------|
| Papers Published in other Journals | International: 06 | National: 03 |
| Papers Presented in Conferences / Symposium | International: 68 | National: 21 |
| Books / Book chapters Published | Name of the book: NIL Publisher: Year of Publication: | |
| | Name of the book: NIL Publisher: Year of Publication: | |

5. Research Guidance

| | | |
|------------------------------------|-----|--|
| PhD Guide? Give field & University | NIL | - |
| PhDs / Projects Guided | NIL | Projects at Master's Level: 04 Projects at Bachelor's Level: 28 |

6. Grants

i. Funds Received (Projects)

| Project Name | Grant Amount | Date of receiving the Grant | Duration | Grant issuing authority/ Body / Organization |
|---|---------------|-----------------------------|----------|---|
| Assessing the suitability of Imperial Smelting Furnace Slag (ISFS) as a construction material in Flexible and Rigid Pavements | Rs. 10,49,000 | 17/03/2022 | 2 years | Council of Scientific and Industrial Research, Govt. of India |

ii. Patents

| Sl. No. | Title Details | Details of award of patent / Filed |
|----------------------------------|---|--|
| Details of Indian Patents | | |
| 1 | Sustainable Rotating Biological Contactor | Application No.201911048071 A; Publication Date : 06/12/2019 |
| 2 | A Novel Formulation for Anti-Epileptic Activity | Application No.201911049478 A; Publication Date : 20/12/2019 |
| 3 | A Smart Device for Cooking | Application No.201911050250 A ; Publication Date : 20/12/2019 |
| 4 | A Herbal Cigarette for Curing Epileptic Seizures | Application No.201911052267 A; Publication Date : 20/12/2019 |
| 5 | An Automated Sluice Outlet Device Providing Constant Discharge for Surface Irrigation | Application No.201911049743 A; Publication Date : 03/01/2020 |

| | | |
|----|--|--|
| 6 | Passive Smokers Mask | Application No.202011044332 A; Publication Date : 23/10/2020 |
| 7 | A Novel Aeration System | Application No.202011045822 A; Publication Date : 06/11/2020 |
| 8 | Plant Shading System | Application No.202011045820 A; Publication Date : 13/11/2020 |
| 9 | A Purifying Smoking Mask | Application No.202011047070 A; Publication Date : 13/11/2020 |
| 10 | Snow Free Roof | Application No.202011047857 A; Publication Date : 13/11/2020 |
| 11 | A Novel Floating Water Lifting System | Application No. 202111049236A; Patent No. 409116; Publication Date: 05/11/2021; Date of Grant: 17/10/2022 |
| 12 | An Integrated Chimney System for Performing Holy Rituals | Application No. 202111049873 A; Publication Date: 12/11/2021 |
| 13 | A Water Seal Trap Cleaner | Application No. 202011041694A; Publication Date: 25/09/2020 |
| 14 | Aggrandizing the mechanical behaviour and environmental benefit of Rigid Pavement using Imperial Smelting Furnace Slag (ISFS) | Application No. 202211063795A; Filing Date: 04/11/2022 |
| 15 | Aggrandizing the mechanical behaviour and environmental benefit of Flexible Pavement using Imperial Smelting Furnace Slag (ISFS) | Application No. 202211063794A; Filing Date: 04/11/2022 |
| 16 | IoT Based Irrigation System Using Soil Moisture Sensor in Agriculture Field | Application No. 202241065251A; Publication Date: 25/11/2022 |
| 17 | IoT Based Alerting System for Electric Vehicles in Smart Cities | Application No. 202241069863A; Publication Date: 09/12/2022 |
| 18 | Motorized Aeration Unit and Method Thereof | Application No. 202211069977A; Publication Date: 09/12/2022 |
| 19 | Goggles for Civil Engineers | Application No. 202211068934A; Publication Date: 09/12/2022 |
| 20 | Development of Eco-Friendly Concrete using Industrial Waste such as Flyash, Imperial Smelting Furnace Slag, Stone Dust with Hooked Steel Fibre | Application No. 202311000219A; Publication Date: 13/01/2023 |
| 21 | Development of Eco-Friendly and Sustainable Concrete using Imperial Smelting Furnace Slag, Construction & Demolition Waste, Waste Marble Powder and Metakaolin | Application No. 202311000421A; Publication Date: 13/01/2023 |
| 22 | Manufacturing of Zero Carbon Emission Bricks using Wheat Husk, Sand and Local Soil | Application No. 202311000498A; Publication Date: 13/01/2023 |
| 23 | Block Chain Based Centralized Cloud Application in Smart Cities | Application No. 202341003902A; Publication Date: 20/01/2023 |
| 24 | Self-Trimming Scissors | Application No. 202211070770A; Publication Date: 20/01/2023 |
| 25 | IoT based Physical Rehabilitation System for Smart Walker | Application No. 202341005738A; Publication Date: 19/05/2023 |
| 26 | Small Scale Machine for Recycling of Aggregate Concrete Materials | Application No. 378679-001; Filing Date: 11/04/2023; Status: Granted |
| 27 | IoT Based Weather Reporting System | Application No. 378815-001; Filing Date: 11/04/2023; Status: Granted |

| | | |
|--------------------------------------|---|--|
| 28 | Transportable Oxygen Delivery Device | Application No. 381070-001; Filing Date: 09/06/2023; Status: Granted |
| 29 | Solar Desalination System | Application No. 385384-001; Filing Date: 01/05/2023; Status: Granted |
| 30 | Air Pollution Monitor | Application No. 386121-001; Filing Date: 12/05/2023; Status: Granted |
| 31 | Blood Cancer Detection Device | Application No. 388723-001; Filing Date: 21/06/2023; Status: Granted |
| 32 | Solid Waste Disposal Unit | Application No. 393049-001; Filing Date: 18/08/2023; Status: Granted |
| 33 | Pumping Unit for Irrigation | Application No. 395859-001; Filing Date: 23/09/2023; Status: Granted |
| 34 | IoT based Biogas Leakage Detecting Device | Application No. 399711-001; Filing Date: 10/11/2023; Status: Granted |
| 35 | Weather Forecasting System | Application No. 399731-001; Filing Date: 10/11/2023; Status: Granted |
| 36 | Smart Laser-Assisted Dual Toner Cartridge Printer | Application No. 407678-001; Filing Date: 15/02/2024; |
| 38 | AI-Enabled Construction and Demolition Waste Separator with Adjustable Dividers | Application No. 407679-001; Filing Date: 15/02/2024; |
| Details of Australian Patents | | |
| 39 | Snow Free Roof | Application No. AU2021106633A4; Date of Application: 23/08/2021 Date of Publication: 25/11/2021 |
| 40 | Passive Smokers Mask | Application No. AU2021106233A4; Date of Application: 20/08/2021 Date of Publication: 16/12/2021 |
| 41 | A Purifying Smoking Mask | Application No. AU2021106631A4; Date of Application: 23/08/2021 Date of Publication: 16/12/2021 |

iii. Consultancy

| Title of the work | Amount in Rs. | Date of receiving the Grant | Duration | Grant issuing authority/ Body / Organization |
|-------------------|---------------|-----------------------------|----------|--|
| NIL | - | - | - | - |

7. Awards Received

| | |
|---------------------------|---|
| “Best Paper Award” | <p>1. Received “Best Paper Award” for the research paper Entitled “Surface Jet Aerators in Waste Water Treatment: A Comprehensive Review”, at National Conference : Advanced Structures, Materials And Methodology in Civil Engineering (ASMMCE-2018) held at National Institute of Technology, Jalandhar, India on 3rd -4th November 2018</p> <p>2. Received “Best Paper Award” for the research paper Entitled “Synthetic Fiber Reinforcement in Pavement Construction”, at International Conference on Sustainable Environment and Civil Engineering (ICSECE-2019) held at Easwari Engineering College, Chennai, India on 28th -29th March 2019</p> <p>3. Received “Best Paper Award” for the research paper Entitled “Compressive Strength Enhancement of Pervious Concrete Using Polymer Fiber”, at 3rd International Conference on Recent Advances In Fundamental And Applied Sciences (RAFAS-2021) held at Lovely Professional University, Phagwara, India on 25th -26th June 2021</p> |
|---------------------------|---|

8. Publications

i. International Journals

| Sl. No. | Title of the paper | Name(s) of Author(s) | Name of the Journal | Volume No. Issue No. Year | WOS / Scopus / Both | Impact Factor/ SJR | Publisher |
|---------|---|---|---|---------------------------|---------------------|--------------------|---|
| 1 | Study on oxygen transfer by solid jet aerator with multiple openings | Shukla, B.K. and Goel, A. | Engineering Science and Technology, an International Journal | 21(2):2018 | Scopus & WoS | 5.76 | Elsevier B.V. |
| 2 | A Comprehensive Review of Surface Jet Aerators | Shukla, B.K., Rajesh Kumar, V. and Goel, A. | Pollution Research | 37(May Suppl.):2018 | Scopus | 0.159 | EM International |
| 3 | Experimental Studies on the Effect of Variation in Jet Length on Oxygenation Performance of Elliptical Shaped Solid Jet Aerator | Shukla, B.K., Rajesh Kumar, V. and Goel, A. | Journal of Advanced Research in Dynamical and Control Systems | 10(08):2018 | Scopus | 0.129 | Institute of Advanced Scientific Research |
| 4 | An Empirical Investigation of Lateral Placement of Vehicles on Multi-lane Highways Using Infra- | Singh, S., Shukla, B.K. and Santhakumar, S.M. | International Journal of Research and Analytical | 05(04):2018 | | | |

| | | | | | | | |
|----|---|---|--|-------------|--------|-------|------------------|
| | Red Sensor Data | | Reviews | | | | |
| 5 | A Study on Lane-Based Capacity of Four-Lane Rural Highways with Heterogeneous Traffic | Singh, S., Shukla, B.K. and Santhakumar, S.M. | International Journal of Research and Analytical Reviews | 05(04):2018 | | | |
| 6 | Fly Ash from Industry to Society: A Sustainable Approach | Sharma, P.K., Shukla, B.K. and Sharma, A. | International Journal of Research and Analytical Reviews | 05(04):2018 | | | |
| 7 | Quantitative Assessment of Jet Length and Circular Opening Multiplicity Variations on Oxygenation Efficiency of Solid Jet Aerators | Shukla, B.K., Sharma, P.K. and Goel, A. | International Journal of Research and Analytical Reviews | 05(04):2018 | | | |
| 8 | An Experimental Evaluation of Oxygenation Efficiency: Influence of Variation in Jet Thickness and Discharge Dynamics in Hollow Jet Aeration Systems | Shukla, B.K., Sharma, P.K. and Goel, A. | International Journal of Research and Analytical Reviews | 06(01):2019 | | | |
| 9 | Physico-Chemical Parameters and Status of Ground Water Pollution in Jalandhar-Phagwara Region | Shukla, B.K., Bhowmik, A.R., Bhargav Raj, R. and Sharma, P.K. | Journal of Green Engineering | 9(02):2019 | Scopus | 0.194 | Alpha Publishers |
| 10 | A Comparative Study on Effect of Variation in Opening Shape on Oxygenation Performance of Surface Jet Aerators used in Water and Wastewater Treatment | Shukla, B.K., Khan, A., Saikiran, G. and Sriram, M. | Journal of Green Engineering | 9(03):2019 | Scopus | 0.194 | Alpha Publishers |
| 11 | Use of Waste Synthetic Fiber Reinforcement in Environment Friendly and Economic | Shukla, B.K., Bhowmik, A.R., Sharma, | Journal of Green Engineering | 10(01):2019 | Scopus | 0.194 | Alpha Publishers |

| | | | | | | | |
|----|--|---|--|--------------|--------------|-------|--------------------------------------|
| | Pavement Construction | P.K. and Abhimanyu | | | | | |
| 12 | Pollution Status and Water Quality Assessment in Pre-Monsoon Season-A Case Study of Rural Villages in Allahabad District, Uttar Pradesh, India | Shukla, B.K., Gupta, A., Sharma, P.K. and Bhowmik, A.R. | Materials Today: Proceedings | 32(04):2020 | Scopus & WoS | 0.341 | Elsevier B.V. |
| 13 | Study on Oxygenation Performance of Solid Jet Aerator having Circular Opening corresponding to Variable Jet Length and Flow Area | Shukla, B.K., Sharma, P.K. and Goel, A. | Journal of Physics: Conference Series | 1531: 2020 | Scopus | 0.599 | Institute of Physics Publishing |
| 14 | Physico-Chemical Study of Some Surface Water Bodies of Punjab | Shukla, B.K., Sharma, P.K. and Khan, M.A. | Journal of Physics: Conference Series | 1531: 2020 | Scopus | 0.599 | Institute of Physics Publishing |
| 15 | Use of System Dynamics Forecasting Model in Transportation System to Reduce Vehicular Emissions-A Mathematical Approach | Singh, S., Shukla, B.K. and Sharma, P.K. | Journal of Physics: Conference Series | 1531: 2020 | Scopus | 0.599 | Institute of Physics Publishing |
| 16 | An Experimental Study on Oxygenation Performance of Rectangular Shaped Solid Jet Aerator having Rounded Edges | Shukla, B.K., Goel, A. and Sharma, P.K. | Journal of Green Engineering | 10(06): 2020 | Scopus | 0.194 | Alpha Publishers |
| 17 | Statistical Analysis of Water Quality Parameters of Domestic Wastewater in the City of Srinagar, Jammu and Kashmir, India - A Case Study | Shukla, B.K., Bashir, M., Sharma, V. and Abhimanyu | Journal of Critical Reviews | 07(03): 2020 | | | Innovare Academics Sciences Pvt. Ltd |
| 18 | Role of Mega Hydro Power Projects: A Case Study of Ranjit Sagar Dam, Pathankot, India | Gupta, D.K., Sharma, P.K. and Shukla, B.K. | Journal of Emerging Technologies and Innovative Research | 07(06): 2020 | | | |

| | | | | | | | |
|----|--|--|---|--------------|--------------|-------|----------------------|
| 19 | Mix Design and Factors Affecting Strength of Pervious Concrete | Shukla B.K. and Gupta A. | Advances in Structural Engineering and Rehabilitation. Lecture Notes in Civil Engineering | 38: 2020 | Scopus & WoS | 0.108 | Springer Nature |
| 20 | A Review on Energy-Efficient and Sustainable Urban Buildings | Shukla, B.K., Rashid, H.O., Bhowmik, A.R. and Sharma, P.K. | Advances in Renewable Energy and Sustainable Environment, Lecture Notes in Electrical Engineering | 667: 2021 | Scopus | 0.134 | Springer Nature |
| 21 | An Analytical Investigation of Surface Water Quality and Pollution Status in Srinagar, Jammu and Kashmir, India | Shukla, B.K., Bashir, M., Sharma, P.K. and Abhimanyu | Journal of Green Engineering | 11(01): 2021 | Scopus | 0.194 | Alpha Publishers |
| 22 | Cost and Feasibility Analysis of Chromium Removal from Water Using Agro and Horticultural Wastes as Adsorbents | Sharma P.K., Ayub S., Shukla B.K. | RILEM Bookseries | 29: 2021 | Scopus | 0.236 | Springer Nature |
| 23 | A Comparative Study on the Sustainability of Public and Private Road Transportation Systems in an Urban Area: Current and Future Scenarios | Singh S., Shukla B.K. | RILEM Bookseries | 29: 2021 | Scopus | 0.236 | Springer Nature |
| 24 | Analysis of Traffic Flow Characteristics Based on Area-Occupancy Concept on Urban Arterial Roads Under Heterogeneous Traffic Scenario—A Case Study of Tiruchirappalli City | Singh, S., Vidya, R., Shukla, B.K. and Moses Santhakumar, S. | Advances in Water Resources and Transportation Engineering . Lecture Notes in Civil Engineering | 149: 2021 | Scopus | 0.108 | Springer Nature |
| 25 | Effects of Modifiers on the Properties of Asphalt for | Bansal, V., Shukla, B.K. and | Journal of Physics: Conference | 2267(1):2022 | Scopus & WoS | 0.599 | Institute of Physics |

| | | | | | | | |
|----|---|---|--|--------------|--------------|-------|---------------------------------|
| | Sustainable and Improved construction of Flexible Pavements | Sharma, P.K. | Series | | | | Publishing |
| 26 | Application of Urea Formaldehyde Raisin in Pavement Subgrade Stabilization at Hindon Barrage | Bansal, V., Shukla, B.K. and Sharma, P.K. | Journal of Physics: Conference Series | 2267(1):2022 | Scopus & WoS | 0.599 | Institute of Physics Publishing |
| 27 | Experimental study on eccentrically loaded rectangular footing on sand for embedded condition to enhance serviceability of structures | Bharti, G., Shukla, B.K., Srinivasan, V. and Bansal, V. | Materials Today: Proceedings | 61(02): 2022 | Scopus & WoS | 0.341 | Elsevier B.V. |
| 28 | Sustainable design of textile industry effluent treatment plant with constructed wetland | Shenoy, A., Shukla, B.K. and Bansal, V. | Materials Today: Proceedings | 61(02): 2022 | Scopus & WoS | 0.341 | Elsevier B.V. |
| 29 | Treatability of effluent from small scale dye shop using water hyacinth | Shenoy, A., Bansal, V. and Shukla, B.K. | Materials Today: Proceedings | 61(02): 2022 | Scopus & WoS | 0.341 | Elsevier B.V. |
| 30 | Identification and Analysis of Factors of Delay in Road Construction Projects | Shukla, B.K., Bansal, V., Varadhrajan, S., Bharti, G., Shenoy, A., Singh, U.K. and Kirthabashri, S.V. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 280: 2023 | Scopus | 0.108 | Springer Nature |
| 31 | A Review on influence of replacing industrial wastes with fine aggregate in concrete | Varadharajan, S., Kirthanashri, Samim, M., Shukla, B.K. and Bharti, G. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 281: 2023 | Scopus | 0.108 | Springer Nature |
| 32 | Utilization of flyash in concrete: A state of the Art review | Varadharajan, S., Kirthanashri, Maurya, N., Bishetti, P., Shukla, B.K. and Bharti, G. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 281: 2023 | Scopus | 0.108 | Springer Nature |
| 33 | Use of Waste marble dust and Waste glass powder and bacterial solution for manufacture of ecofriendly concrete | Varadharajan, S., Kirthanashri, Tiwari, A., Jaiswal, A. and Shukla, B.K. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 281: 2023 | Scopus | 0.108 | Springer Nature |

| | | | | | | | |
|----|---|--|---|--------------|-----------------|-------|--------------------|
| 34 | Study on Suitability of Sawdust as an alternate for Fine Aggregate in Concrete | Bishetti, P., Varadharajan, S. Shukla, B.K. and Bharti, G. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 281: 2023 | Scopus | 0.108 | Springer Nature |
| 35 | Study on Paving Blocks Using Plastic Waste | N.H. Parikshit, Manjunath, B.N. and Shukla, B.K. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 281: 2023 | Scopus | 0.108 | Springer Nature |
| 36 | Enhanced Landfill Mining Waste Valorization Techniques: A Methodological Review | Dar, S.A., Sharma, P.K. and Shukla, B.K. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 281: 2023 | Scopus | 0.108 | Springer Nature |
| 37 | A Comprehensive Review of Mass Transfer Phenomenon in Gas-Liquid Phase Flow during Aeration in Wastewater Treatment | Imtiyaz, I., Krishnakant, Shukla, B.K., Varadharajan, S. and Bharti, G. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 281: 2023 | Scopus | 0.108 | Springer Nature |
| 38 | Effect of Self-Healing Concrete on Modular Structure | Bharti, G., Shukla, B.K., Srinivasan, V., Singh, A., Kirthanashri, S.V. and Bishetti, P. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 281: 2023 | Scopus | 0.108 | Springer Nature |
| 39 | ANN model for prediction of compressive and tensile strength of bacterial concrete | Varadharajan, S., Kirthanashri, S.V., Shahban, M., Shukla, B.K. and Bharti, G. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 281: 2023 | Scopus | 0.108 | Springer Nature |
| 40 | ANN Model for Evaluation of Seismic Behavior of Irregular Steel Building Frames | Varadharajan, S., Kirthanashri, S.V., Rao, M.G., Jaiswal, A. and Shukla, B.K. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 281: 2023 | Scopus | 0.108 | Springer Nature |
| 41 | Behaviour of Fibre Reinforced Polymer Laminates Strengthening Prestressed Concrete Beams | Hurukadli, P., Bharti, G. and Shukla, B.K. | Materials Today: Proceedings (ISSN: 2214-7853) | 78(04): 2023 | Scopus & WoS | 0.341 | Elsevier B.V. |
| 42 | Impact of using a Blend of Bagasse Ash | Arya, P., Patel, S.B., Bharti, | Materials Today: | 78(04): 2023 | Scopus & WoS | 0.341 | Elsevier B.V. |

| | | | | | | | |
|----|--|--|--|--|--------------|-------|---------------------------------|
| | and Polyester Fiber in Black Cotton Soil for Improvement of Mechanical and Geotechnical Properties of Soil | G., Shukla, B.K. and Hurukadli, P. | Proceedings (ISSN: 2214-7853) | | | | |
| 43 | Deflection of Reinforced Concrete Beams: An Analytical Study on the Impact of Steel Fiber | Hurukadli, P., Bharti, G., Shukla, B.K., Garg, P. and Tripathi, A. | Materials Today: Proceedings (ISSN: 2214-7853) | DOI: https://doi.org/10.1016/j.matpr.2023.03.321 | Scopus & WoS | 0.341 | Elsevier B.V. |
| 44 | Environmental Impact Analysis and Utilization of Copper Slag for Stabilising Black Cotton Soil | Bharti, G., Parikshit, N.H., Sihag, P., Tripathi, A., Shukla, B.K. and Jagudi, S. | Materials Today: Proceedings (ISSN: 2214-7853) | DOI: https://doi.org/10.1016/j.matpr.2023.04.305 | Scopus & WoS | 0.341 | Elsevier B.V. |
| 45 | Constructing a Greener Future: Comprehensive Review on the Sustainable Use of Fly Ash in the Construction Industry and Beyond | Shukla, B.K., Gupta, A., Gowda, S. and Srivastav, Y. | Materials Today: Proceedings (ISSN: 2214-7853) | 93(03): 2023 | Scopus & WoS | 0.341 | Elsevier B.V. |
| 46 | Reinforcing Civil Infrastructure with Waste Glass-Enhanced Concrete: A Comprehensive Review of Properties, Performance and Applications | Maurya, N., Srivastav, Y., Rawat, S., Ranjan, Y., Srivastav, R., Shukla, B.K. and Varadharajan, S. | Materials Today: Proceedings (ISSN: 2214-7853) | 93(03): 2023 | Scopus & WoS | 0.341 | Elsevier B.V. |
| 47 | Advancements in Sensor-Based Technologies for Precision Agriculture: An Exploration of Interoperability, Analytics and Deployment Strategies | Shukla, B.K., Maurya, N., Sharma, M. | Engineering Proceedings (ISSN: 2673-4591) | 58(1): 2023 | Scopus | 0.306 | MDPI |
| 48 | Analytical Study on the Effect of Steel Fiber in the Deflection of Pre-Stressed Concrete Beams | Parikshit, P., Garg, P., Bharti, G., Tripathi, A. and Shukla, B.K. | IOP Conference Series: Earth and Environmental Science (ISSN: 1755-1307) | 1110: 2023 | Scopus & WoS | 0.197 | Institute of Physics Publishing |
| 49 | Physico-Chemical Analysis of Groundwater in | Singh, S., Singh, V.P., Garg, P. and | IOP Conference Series: | 1110: 2023 | Scopus & WoS | 0.197 | Institute of Physics |

| | | | | | | | |
|----|---|---|--|--------------|--------------|-------|-----------------|
| | Noida-Ghaziabad Region | Shukla, B.K. | Earth and Environmental Science (ISSN: 1755-1307) | | | | Publishing |
| 50 | A Comprehensive Overview of Vital Water Quality Parameters | Shukla, B.K., Teeli, M.A., Shukla, S., Chandra, R., Bharti, N., and Singh, U. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 439: 2024 | Scopus | 0.108 | Springer Nature |
| 51 | Application of Nanomaterials in Water Purification: A Thematic Review | Shukla, B.K., Singh, R.D., Singh, N., Singh, S., Burman, Y.K., and Singh, R. | Lecture Notes in Civil Engineering (ISSN: 2366-2557) | 439: 2024 | Scopus | 0.108 | Springer Nature |
| 52 | Prediction of the Subgrade Soil California Bearing Ratio Using Machine Learning and Neuro-Fuzzy Inference System Techniques: A Sustainable Approach in Urban Infrastructure Development | Gowda, S., Kunjar, V., Gupta, A., Kavitha, G., Shukla, B.K. and Sihag, P. | Urban Science (ISSN: 2413-8851) | 08(01): 2024 | Scopus & WoS | 2.00 | MDPI |
| 53 | Integrated Water Resources Management (IWRM) in the Geospatial Epoch: An Ontological Dive into Sustainable Hydrological Governance | Shukla, B.K., Tripathi, A., Nagavi, J.C., Prasad, S., Sahoo, M. Chaudary, S., Ayush and Verma, S. | Sustainable Development and Geospatial Technology - Volume 2: Applications and Future Directions | Accepted | Scopus | 0.108 | Springer Nature |
| 54 | Quantitative Geospatial Analysis of Sedimentation Rates in Bhadar Reservoir through Advanced Remote Sensing & GIS Techniques | Tripathi, A., Bansal, V., Shukla, B.K., Chauhan, H.L., Bharti, G. and Verma, S. | Sustainable Development and Geospatial Technology - Volume 2: Applications and Future Directions | Accepted | Scopus | 0.108 | Springer Nature |
| 55 | Harnessing Geospatial Technology for Sustainable Development: A Multifaceted Analysis of Current Practices and Future Prospects | Nagavi, J.C., Shukla, B.K., Bhati, A., Rai, A. and Verma, S. | Sustainable Development and Geospatial Technology - Volume 1: Foundations and | Accepted | Scopus | 0.108 | Springer Nature |

| | | | | | | | |
|---|---|---------------------------------------|---|------|--|--|--|
| 1 | Surface Jet Aerators for Waste Water Treatment: A Critical Review | Goel, A. and Shukla, B.K. | Symposium on Hydrology | 2015 | | | National Institute of Hydrology |
| 2 | Effect of Jet Length Variation on Oxygenation Efficiency of Solid Jet Aerator | Shukla, B.K. and Kumar, M. | International Conference on Trends and Recent Advances in Civil Engineering (TRACE-2016) | 2016 | | | Amity University, Noida |
| 3 | System Dynamics Simulation Modeling of Transportation System and Economic Interaction | Singh, S., Shukla, B.K. and Singh, S. | Neo-International Conference on Habitable Environments and International Professional Meet (NICHE-IPM-2016) | 2016 | | | Lovely Professional University, Phagwara |
| 4 | Effect of Number of Nozzles on Oxygenation Efficiency of Rectangular with Rounded Edge Shaped Aerator | Shukla, B.K. and Goel, A. | Civil Engineering Conference-Innovation for Sustainability | 2016 | | | NIT Hamirpur, Himachal Pradesh |
| 5 | Assessment of Physico-Chemical Charecteristics of Ground Water in Jalandhar-Phagwara Region of Punjab | Shukla, B.K., Sen, M.K. and Kumar, M. | National Conference on Recent Trends in Chemical Science and Engineering (RTCSE-2017) | 2017 | | | NIT Hamirpur, Himachal Pradesh |
| 6 | Assessment of Surface Water Quality of Northern Punjab | Sen, M.K., Shukla, B.K. and Kumar, M. | National Conference on Recent Trends in Chemical Science and Engineering (RTCSE-2017) | 2017 | | | NIT Hamirpur, Himachal Pradesh |

| | | | | | | | |
|----|--|--|---|------|--|--|---|
| 7 | Performance Characteristics of Solid Jet Aerator having Nozzle with Multiple Openings | Shukla, B.K. and Singh, H. | Computing for Sustainable Global Development-INDIACOM 2017 | 2017 | | | Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi |
| 8 | An Analytical Investigation to Select a Suitable Path for Canal using ANN to Meet the Challenges of Water Scarcity in Gomati District of Tripura | Bhowmik, S., Shukla, B.K. and Prabhakar, D | International Conference on Sustainable Technologies for Intelligent Water Management | 2018 | | | IIT Roorkee |
| 9 | Transportation System Modeling of Chennai City using Object Oriented Simulation | Bhowmik, A.R., Shukla, B.K. and Srikanth, G. | National Conference : Advanced Structures, Materials And Methodology in Civil Engineering (ASMMCE-2018) | 2018 | | | NIT Jalandhar, Punjab |
| 10 | Surface Jet Aerators in Waste Water Treatment: A Comprehensive Review | Bhowmik, A.R. and Shukla, B.K. | National Conference : Advanced Structures, Materials And Methodology in Civil Engineering (ASMMCE-2018) | 2018 | | | NIT Jalandhar, Punjab |
| 11 | Performance Characteristics of Multiple Plunging Surface Jet Aerator with Variable Jet Length | Shukla, B.K., Pandey, P., Sen, M.K., Rajesh Kumar, V. and Bashir, M. | Computing for Sustainable Global Development-INDIACOM 2018 | 2018 | | | Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi |
| 12 | Study on Physico-Chemical Characteristics of Surface Water in Srinagar, Jammu and Kashmir, India | Bashir, M., Rajesh Kumar, V., Shukla, B.K. and Al-Haj, M.J. | Computing for Sustainable Global Development-INDIACOM 2018 | 2018 | | | Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi |

| | | | | | | | |
|----|---|---|---|------|--|--|---|
| 13 | Design of Energy Efficient Residential Building in a Tropical Region using Sustainable Techniques | Bashir, M., Nazir, O., Al-Haj, M.J., Jeelani, A., Shukla, B.K. and Rajesh Kumar, V. | Computing for Sustainable Global Development-INDIACOM 2018 | 2018 | | | Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi |
| 14 | Physico-Chemical Analysis and Design of Proper Management Technique for Solid Waste Produced in Srinagar City | Jeelani, A., Bashir, M. and Shukla, B.K. | Computing for Sustainable Global Development-INDIACOM 2018 | 2018 | | | Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi |
| 15 | Study on Physico-chemical Characteristics and Correlation Analysis of Domestic Wastewater in Srinagar, Jammu and Kashmir, India | Shukla, B.K. and Bashir, M. | Computing for Sustainable Global Development-INDIACOM 2018 | 2018 | | | Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi |
| 16 | Energy Efficient Sustainable Residential Buildings - A Critical Review | Al-Haj, M.J., Vasudeva, R., Shukla, B.K., Chelumalla, D.K., Bashir, M. and Kaur, M. | Computing for Sustainable Global Development-INDIACOM 2018 | 2018 | | | Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi |
| 17 | Efficiency Enhancement of Piano Key Weir using Provision of Lips at Downstream Side | Shukla, B.K., Rajesh Kumar, V. and Manoharan, R. | Sustainable Agriculture, Food and Nutritional Security (SAFNS-2018) | 2018 | | | Lovely Professional University, Phagwara |
| 18 | Model assisted planning of ground water development with integration of cropping pattern in sardar sarovar command area, Gujarat, India | Kumar, M., Shukla, B.K. and Srivastava, S. | Sustainable Agriculture, Food and Nutritional Security (SAFNS-2018) | 2018 | | | Lovely Professional University, Phagwara |

| | | | | | | | |
|----|--|---|--|------|--------|--|---|
| 19 | Synthetic Fiber Reinforcement in Pavement Construction | Bhowmik, A.R., Jaideep, R., Shukla, B.K., Sharma, P.K. and Abhimanyu. | International Conference on Sustainable Environment and Civil Engineering (ICSECE-2019) | 2019 | | | Easwari Engineering College, Chennai |
| 20 | Infra-Red Sensor-Based Technology for Collecting Speed and Headway Data on Highways Under Mixed Traffic Conditions | Singh, S., Shukla, B.K. and Moses Santhakumar, S | 7th International Conference on Signal Processing and Integrated Networks (SPIN), Amity University, Noida, India | 2020 | Scopus | | IEEE Xplore |
| 21 | An experimental study on various design mixes of pervious concrete for optimum compressive strength | Shukla, B.K. and Mongar, B. | International Conference on Recent Development in Sustainable Infrastructure: Research and Practices (ICRDSI-2020) | 2020 | | | Kalinga Institute of Industrial Technology, Bhubaneswar, Odisha |
| 22 | Mass transfer phenomenon in gas-liquid phase flow-A critical review | Krishnakant, Imtiyaz, I., Tiwari, A., Sharma, S., Sharma, R., Sharma, P.K. and Shukla, B.K. | International Conference on Recent Development in Sustainable Infrastructure: Research and Practices (ICRDSI-2020) | 2020 | | | Kalinga Institute of Industrial Technology, Bhubaneswar, Odisha |
| 23 | A Comprehensive Review on Groundwater Quality Assessment and Monitoring | Abhinav, Taming, T.A., Sandiri, P., Rathod, B.S.B., Shivakumar, D., Sharma, P.K. and Shukla, B.K. | International Conference on Recent Development in Sustainable Infrastructure: Research and Practices (ICRDSI-2020) | 2020 | | | Kalinga Institute of Industrial Technology, Bhubaneswar, Odisha |
| 24 | Analysis of eccentrically loaded rectangular footing on granular soil for surface condition | Bharti, G. and Shukla, B.K. | International Conference on Recent Advances In Fundamental And Applied Sciences (RAFAS-2021) | 2021 | | | Lovely Professional University, Phagwara, Punjab, India |

| | | | | | | | |
|----|---|--|--|---------------|----------------|--|--|
| 25 | A critical review on behaviour of fiber reinforced pre stressed concrete beams | Hurukadli, P., Kumar, A., Shukla, B.K. and Bharti, G. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 26 | Improvement in behaviour of black cotton soil using copper slag | Bharti, G., Jagudi, S. and Shukla, B.K. | F-EIR Conference 2021 - Environment Concerns and its Remediation | 2021 | | | The Federation of Environmental Issues and its Remediation (F-EIR) |
| 27 | An experimental study on design mixes of pervious concrete for optimum compressive strength | Shukla, B.K., Kumar, A., Shenoy, A. and Parashar, B. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 28 | A sustainable design of energy efficient and environment friendly residential building for tropical climate | Shukla, B.K., Kumar, A., Bharti, G. and Parashar, B. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 29 | Experimental study on the influence of available absorbent as internal curing agent on cement mortar | Hurukadli, P., Kumar, A., Shukla, B.K. and Bharti, G. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 30 | A compendious study on groundwater quality evaluation and monitoring | Singh, S., Singh, V.P., Yadav, S., Kushwaha, V., Kumar, A. and Shukla, B.K. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 31 | Use of foam concrete and 3D printing technology in civil engineering : A state of the art review | Kirthanashri, S.V., Varadharajan, S., Maurya, A., Irfan, D., Shukla, B.K. and Kumar, | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |

| | | | | | | | |
|----|--|--|----------------------------|---------------|----------------|--|-------------------------------|
| | | A. | | | | | |
| 32 | Use of fly ash and metakaolin to manufacture sustainable concrete | Varadharajan, S., Kirthanashri, S.V., Dwivedi, A., Irfan, D., Shukla, B.K. and Kumar, A. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 33 | Use of silica fume concrete to enhance mechanical properties and environmental benefits | Varadharajan, S., Kirthanashri, S.V., Kumar, A., Irfan, D., Shukla, B.K. and Kumar, A. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 34 | Replacement of fine aggregate with Imperial slag for manufacture of ecofriendly concrete | Varadharajan, S., Kirthanashri, S.V., Singh, K., Irfan, D., Shukla, B.K. and Kumar, A. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 35 | Evaluation of impact of leachate on physico-chemical properties of soil and groundwater at Ghazipur site, New Delhi – A case study | Tripathi, A., Shukla, B.K., Kumar, A. and Nayak, J. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 36 | Assessment of sedimentation rate in Sipu reservoir using remote sensing & GIS technique | Tripathi, A., Langhi, M., Shukla, B.K., Kumar, A. and Bharti, G. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |

| | | | | | | | |
|----|---|--|----------------------------|---------------|----------------|--|-------------------------------|
| 37 | Interplay between Criteria Pollutants and Covid-19 Pandemic | Shenoy, A., Shukla, B.K. and Kumar, A. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 38 | Improvement in engineering behaviour of soil by using polyester fibre | Shenoy, A., Shukla, B.K. and Kumar, A. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 39 | Stabilization of black cotton soil using steel slag | Bharti, G., Shukla, B.K., Kumar, A., Bansal, V. and Hurukadli, P. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 40 | Experimental study on physico-mechanical properties of expansive soil by using wheat straw fiber | Bharti, G., Shukla, B.K., Kumar, A., Parashar, B. and Varadharajan, S. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 41 | Assessment of behavior of Steel Space frames with Two-way orthogonal latticed grids and Orthogonal square pyramid space grids | Irfan, D., Varadharajan, S., Mateen, S., Kumar, A. and Shukla, B.K. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 42 | Study of Growth of Steel, Steel Infrastructure & Steel Industries in India | Irfan, D., Varadharajan, S., Mateen, S., Mobasshir, S.M., Kumar, A. and Shukla, B.K. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |

| | | | | | | | |
|----|--|--|--|---------------|----------------|--|---|
| 43 | Impact of Copper and Steel Slag Blend in Strengthening Mechanical Properties of Black Cotton Soil | Bharti, G., Kumar, A., Shukla, B.K., Manjunath, B.N., Tripathi, A., Shenoy, A. and Harukadli, P. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 44 | Effect of Implementation of Waste Shredded Plastic on Construction of Flexible Pavement | Bharti, G., Shukla, B.K., Kumar, A., Manjunath, B.N., Bansal, V. and Varadharajan, S. | AIP Conference Proceedings | 2800(1): 2023 | Scopus and WoS | | American Institute of Physics |
| 45 | Augmenting Concrete Performance and Sustainability with Recycled Glass: A Critical Examination of Material Characteristics and Construction Applications | Maurya, N., Srivastav, Y., Rawat, S., Sharma, M., Srivastava, R., Sihag, P. and Shukla, B.K. | AIP Conference Proceedings | 3500(1): 2024 | Scopus and WoS | | American Institute of Physics |
| 46 | Environmental Effects and Sustainable Hydropower Development: A Review of Deployment Research, Environmental Valuation and IoT Sensors Integration | Rawat, S., Shukla, B.K., Sihag, P., Srivastav, Y. and Singh, H.K. | AIP Conference Proceedings | 3500(1): 2024 | Scopus and WoS | | American Institute of Physics |
| 47 | Improvement in Expansive Soil using Steel and Copper Slag | Bharti, G., Shukla, B.K. and Srinivasan, V. | First Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC-21) | 2021 | | | National Institute of Technology, Jalandhar, Punjab |

| | | | | | | | |
|----|---|---|---|------|--|--|---|
| 48 | Enhancing the Strength of Roads by Mixing Shredded Waste Plastic in Proportion with Aggregate and Bitumen | Bharti, G. and Shukla, B.K. | First Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC-21) | 2021 | | | National Institute of Technology, Jalandhar, Punjab |
| 49 | Recent Advancement on Solar Roadways | Bharti, G., Shukla, B.K., Varadharajan, S., Singh, A., Kirthanashri, S.V. and Bishetti, P. | First Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC-21) | 2021 | | | National Institute of Technology, Jalandhar, Punjab |
| 50 | ANN model for evaluation of seismic behaviour of irregular steel building frames | Varadharajan, S., Kirthanashri, S.V., Rao, M.G., Jaiswal, A. and Shukla, B.K. | First Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC-21) | 2021 | | | National Institute of Technology, Jalandhar, Punjab |
| 51 | Advances in Intelligent Transportation System in India | Bharti, G., Shukla, B.K., Varadharajan, S., Pandey, N., Kirthanashri, S.V. and Bishetti, P. | First Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC-21) | 2021 | | | National Institute of Technology, Jalandhar, Punjab |
| 52 | Experimental investigation on stabilisation of black cotton soil using copper slag | Bharti, G., Hurukadli, P., Sihag, P., Tripathi, A., Shukla, B.K. and Jagudi, S. | International Conference on Advanced Earth Sciences & Foundation Engineering (ICASF-2022) | 2022 | | | Chandigarh University, Mohali, Punjab |
| 53 | Analytical Study on the Effect of Steel Fiber in the Deflection of Reinforced Concrete Beams | Hurukadli, P., Shukla, B.K., Bharti, G., Tripathi, A. and Sihag, P. | International Conference on Advanced Earth Sciences & Foundation Engineering (ICASF-2022) | 2022 | | | Chandigarh University, Mohali, Punjab |

| | | | | | | | |
|----|--|--|---|------|--|--|--|
| 54 | Determination of a suitable route for canals construction using soft computing methods to address the water scarcity issue in the Gomati district of Tripura, India – A case study | [99] Shukla, B.K., Bhowmik, S., Bharti, G., Shenoy, A. and Garg, P. | International Conference on Advanced Earth Sciences & Foundation Engineering (ICASF-2022) | 2022 | | | Chandigarh University, Mohali, Punjab |
| 55 | Quantification of Important Atmospheric Climatic Change Affected Material with Greenhouse Gas Emissions from Transportation Sector in Delhi | Tripathi, A., Shukla, B.K., Verma, A., Bharti, G. and Hurukadli, P. | International Conference on Advanced Functional Materials: Future Perspectives (AFMFP-2022) | 2022 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 56 | Incorporation of Non-Conventional Aggregates in Concrete-A Comprehensive Review | Shukla, B.K., Gupta, A., Gowda, S. and Rawat, S. | Proceedings of UKIERI Concrete Congress: Sustainable Concrete Infrastructure | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 57 | Current Status and Future Research Prospects in 3D Concrete Printing for Sustainable Construction | Yadav, S., Yadav, S., Singh, T., Yadav, S., Rajput, S. and Shukla, B.K. | Proceedings of UKIERI Concrete Congress: Sustainable Concrete Infrastructure | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 58 | Eco-Friendly Precast Concrete Construction Techniques: A Methodological Review | Gautam, A.K., Singh, G., Chaudhary, M., Narayan, V., Dhariwal, D., Shukla, B.K., Varadharajan, S. and Tripathi, A. | Proceedings of UKIERI Concrete Congress: Sustainable Concrete Infrastructure | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |

| | | | | | | | |
|-----------|--|--|--|------|--|--|--|
| 59 | Application of Sustainable Materials in Self-Compacting Concrete: A Comprehensive Review | Sharma, M., Singh, M.K., Yadav, M., Yadav, V., Gupta, S., Shukla, B.K., Bharti, G. and Hurukadli, P. | Proceedings of UKIERI Concrete Congress: Sustainable Concrete Infrastructure | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 60 | Overview of the Utilisation of Construction and Demolition Waste in the Production of Concrete | Gupta, Y., Patel, T., Singh, S., Verma, S., Panwar, S., Shukla, B.K. and Varadharajan, S. | Proceedings of UKIERI Concrete Congress: Sustainable Concrete Infrastructure | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 61 | Overview of Application of Geopolymer Concrete in Construction | Kumar, P., Soni, S., Khan, S.M., Agrawal, S., Srivastav, R., Shukla, B.K., Varadharajan, S. and Tripathi, A. | Proceedings of UKIERI Concrete Congress: Sustainable Concrete Infrastructure | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 62 | A Conceptual Overview of Stability Analysis and Design of Chenab Railway Bridge | Rawat, N., Sharma, P., Singh, S., Rao, M.G., Singh, S., Shukla, B.K. and Hurukadli, P. | Proceedings of UKIERI Concrete Congress: Sustainable Concrete Infrastructure | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 63 | Exhaustive Analysis of Eco-Friendly Green Concrete Construction Practices | Gupta, U., Singh, S., Mansoori, M.S., Yadav, A., Tyagi, S., Shukla, B.K. and Bharti, G. | Proceedings of UKIERI Concrete Congress: Sustainable Concrete Infrastructure | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 64 | A Methodological Assessment of Mix-Designs of Self-Compacting Concrete | Shukla, S., Singh, U., Singh, P., Samim, M., Pandey, S., Tripathi, A., Shukla, B.K. and Varadharajan, S. | Proceedings of UKIERI Concrete Congress: Sustainable Concrete Infrastructure | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |

| | | | | | | | |
|----|---|--|--|------|--|--|---|
| 65 | Application of Waste Glass in the Production of Concrete and its Impact on Strength and Durability for Green Civil Infrastructure | Maurya, N., Srivastav, Y., Rawat, S., Ranjan, Y., Srivastav, R., Shukla, B.K. and Varadharajan, S. | Proceedings of UKIERI Concrete Congress: Sustainable Concrete Infrastructure | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 66 | Recycling Fly Ash as Construction Material: An Environmentally Sustainable Approach | Shukla, B.K., Gupta, A., Gowda, S. and Srivastav, Y. | Proceedings of UKIERI Concrete Congress: Sustainable Concrete Infrastructure | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 67 | A Technological and Environmental Overview on Waste-to-Energy Systems for Effective Municipal Solid Waste Management | Singh, N., Shukla B.K. and Pandey, A.K. | International Conference on International Conference on Innovations in Clean Energy Technologies (ICET 2023) | 2023 | | | National Institute of Technology, Bhopal, Madhya Pradesh, India |
| 68 | A Holistic Review on Energy Efficient Green Buildings considering Environmental, Economy and Technical Factors | Shukla B.K., Pandey, A.K., Singh, A., Singh, D. and Anas, M. | International Conference on International Conference on Innovations in Clean Energy Technologies (ICET 2023) | 2023 | | | National Institute of Technology, Bhopal, Madhya Pradesh, India |
| 69 | Application of Membrane Aerated Biofilm Reactors in Treatment of Municipal and Industrial Wastewater: Present Trends, Challenges and Future Prospects | Shukla, B.K., Shamra, P.K. and Goel, A. | International Conference on Recent Advances in Fundamental and Applied Sciences (RAFAS-2023) | 2023 | | | Lovely Professional University, Phagwara, Punjab, India |
| 70 | Optimal Management of Voltage, Current and State of Charge of Li-ion Battery Pack | Pandey, A.K., Rawat, A.K. and Shukla, B.K. | International Conference on International Conference on Innovations in Clean Energy Technologies (ICET 2023) | 2023 | | | National Institute of Technology, Bhopal, Madhya Pradesh, India |

| | | | | | | | |
|----|--|--|---|------|--|--|---|
| 71 | Design and Simulation of a Small Agrivoltaic System | Patel, N., Pandey, A.K., Tripathi, M. and Shukla, B.K. | International Conference on International Conference on Innovations in Clean Energy Technologies (ICET 2023) | 2023 | | | National Institute of Technology, Bhopal, Madhya Pradesh, India |
| 72 | An Overview on Healthy, Intelligent and Sustainable Green Buildings | Singh, N. and Shukla, B.K. | Proceedings of International Conference on Systems, Control and Automation (ICSCA-2023) | 2023 | | | National Institute of Technology, Kurukshetra, Haryana, India |
| 73 | A Compendious Study on Impact of Aeration in Submerged Membrane Bioreactors for Wastewater Treatment | Shukla, B.K., Goel, A. and Sharma, P.K. | International Conference on Recent Advances in Sustainable Environment (RAiSE 2023) | 2023 | | | Bundelkhand University, Jhansi, Uttar Pradesh, India |
| 74 | Enhancing the Stability of Black Cotton Soil through Reinforcement with Fly Ash and Bagasse Ash Mixtures: A Comprehensive Overview | Shukla, B.K., Bharti, G., Nagavi, J.C., Hurukadli, P., Gupta, A. and Sharma, P.K. | 4th International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering (EGRWSE – 2023) | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 75 | Extensive Evaluation of Eco-Friendly Green Concrete Construction Procedures Utilizing Recycled Waste Materials | Shukla, B.K., Bharti, G., Shamanth, S., Sharma, P.K., Gowda, S., Singh, D., Pandey, A., Srivastava, P., Mishra, S. and Singh, S.K. | 4th International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering (EGRWSE – 2023) | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 75 | A Methodological Evaluation of Mixed Designs for Self-Healing Concrete | Shukla, B.K., Sharma, P.K., Bharti, G., Gupta, A., Singh, A., Patel, T., Jaiswal, B.P. and Singh, C.K. | 4th International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering (EGRWSE – 2023) | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |

| | | | | | | | |
|----|---|---|---|------|--|--|---|
| 76 | Soil Stabilization through Microbial Bioenzymes: A Comprehensive Review of Recent Developments in Eco-Friendly Approaches | Shukla, B.K., Saraswat, R., Bharti, G., Sharma, P.K., Singh, D., Srivastava, P.K., Yadav, P. and Mishra, S. | 4th International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering (EGRWSE – 2023) | 2023 | | | National Institute of Technology, Jalandhar, Punjab, India |
| 77 | Strategic Planning and Operational Analysis of PV-Wind Hybrid Systems in Emerging Asian Markets: Detailed Assessment of India and China | Singh, H.K., Malik, A., Karanwal, A., Dhama, A., Shukla, B.K., Pandey, A.K. and Verma, A.S. | International Conference on Green Energy and Sustainable Technology (ICGEST – 2024) | 2023 | | | National Institute of Technology, Kurukshetra, Haryana, India |
| 78 | Green Building Paradigms: Comprehensive Insights into Sustainability, Occupant Well-being and Future Techno-logical Transformations | Sharma, P., Rawat, N., Singh, S., Narayan, V., Shukla, B.K., Pandey, A.K. and Verma, S. | International Conference on Green Energy and Sustainable Technology (ICGEST – 2024) | 2023 | | | National Institute of Technology, Kurukshetra, Haryana, India |
| 79 | Integrated Management Approaches in Hybrid Renewable Energy Systems within Smart Grid Frameworks | Bharath, B., Shukla, B.K., Bansal, V., Javaid, I., Singh, K.K. and Verma, S. | International Conference on Future Power Network and Smart Energy Systems: Issues and Challenges (FPNSES – 2023) | 2023 | | | National Institute of Technology, Kurukshetra, Haryana, India |
| 80 | Water Quality Monitoring using IoT Embedded Smart Technology: Trends, Approaches and Challenges | Shukla, B.K., Sharma, P.K., Sharma, C., Srivastav, Y. and Rawat, S. | National Conference on Internet of Things & Embedded Systems (NCIE-2023) | 2023 | | | National Institute of Technology, Kurukshetra, Haryana, India |
| 81 | Smart Water Management Systems using IoT and Artificial Intelligence: An Overview | Shukla, B.K., Sharma, P.K., Sharma, C., Singh, A. and Agarwal, G. | National Conference on Internet of Things & Embedded Systems (NCIE-2023) | 2023 | | | National Institute of Technology, Kurukshetra, Haryana, India |

| | | | | | | | |
|----|--|---|---|------|--|--|---|
| 82 | Application of IoT and Building Information Modeling in Construction, Performance, Maintenance and Structural Health Monitoring of Buildings | Shukla, B.K., Sharma, P.K., Sharma, C., Tripathi, A. and Singh, N. | National Conference on Internet of Things & Embedded Systems (NCIE-2023) | 2023 | | | National Institute of Technology, Kurukshetra, Haryana, India |
| 83 | Empowering Smart Building Advancement through IoT: Present Innovations, Obstacles and Forthcoming Opportunities | Shukla, B.K., Singh, D., Pandey, A., Yadav, P. and Patel, A.S. | Proceedings of National Conference on Sustainable Development of Smart Cities Infrastructure (SDSCI-2023) | 2023 | | | National Institute of Technology, Kurukshetra, Haryana, India |
| 84 | Exploring Sustainable Design and Energy Efficiency in Green Buildings: Integrating Digital Twins and Renewable Energy Solutions for Smart City Development | Shamanth, S., Bharath, B., Shukla, B.K., Patel, T., Singh, A., Singh, C.K. and Jaiswal, B.P. | Proceedings of National Conference on Sustainable Development of Smart Cities Infrastructure (SDSCI-2023) | | | | National Institute of Technology, Kurukshetra, Haryana, India |
| 85 | Sustainable Construction Applications: An Integrative Approach to Reusing and Recycling Construction and Demolition Waste Materials | Shukla, B.K., Singh, D., Singh, S.K., Srivastava, P.K. and Mishra, S. | Proceedings of National Conference on Sustainable Development of Smart Cities Infrastructure (SDSCI-2023) | 2023 | | | National Institute of Technology, Kurukshetra, Haryana, India |
| 86 | 3D Concrete Printing: Advancements, Process Insights and Implications for Sustainable and Customized Construction | Shukla, B.K., Singh, A., Patel, T., Singh, C.K. and Jaiswal, B.P. | Proceedings of National Conference on Sustainable Development of Smart Cities Infrastructure (SDSCI-2023) | 2023 | | | National Institute of Technology, Kurukshetra, Haryana, India |

| | | | | | | | |
|----|--|--|---|------|--|--|---|
| 87 | Integrating IoT and Machine Learning for Efficient Urban Transportation: A Comprehensive Analysis of Smart Public Transit Solutions and Strategies for Sustainable Smart City Infrastructure | Shukla, B.K. and Singh, N. | Proceedings of National Conference on Sustainable Development of Smart Cities Infrastructure (SDSCI-2023) | 2023 | | | National Institute of Technology, Kurukshetra, Haryana, India |
| 88 | Comparative Assessment of Electric and Hybrid Vehicles: Implications for Urban Transport and Infrastructure Development | Tyagi, K., Yadav, H., Singh, S., Yadav, Y. and Shukla, B.K. | Proceedings of National Conference on Intelligent Electronic Systems and Applications (NCIESA-2024) | 2024 | | | National Institute of Technology, Kurukshetra, Haryana, India |
| 89 | Intelligent Water Resource Management: The Convergence of IoT, AI and Smart Technologies for Enhanced Efficiency and Sustainability | Singh, C., Kumari N., Chaudhary, A., Garg, A. and Shukla, B.K. | Proceedings of National Conference on Intelligent Electronic Systems and Applications (NCIESA-2024) | 2024 | | | National Institute of Technology, Kurukshetra, Haryana, India |

iv. Workshops /Conferences Attended

| Sl. No. | Name of the workshop / Conference | Organizer | Date |
|---------|---|---|---|
| 1 | Symposium on Hydrology | National Institute of Hydrology, Indian Association of Hydrologists and Central Water Commission, GoI | November, 23 th to 24 th , 2015 |
| 2 | International Conference on Trends and Recent Advances in Civil Engineering (TRACE-2016) | Amity University, Noida | August 11 th to 12 th , 2016 |
| 3 | Neo-International Conference on Habitable Environments and International Professional Meet (NICHE-IPM-2016) | Lovely Professional University, Phagwara | November, 16 th to 17 th 2016 |
| 4 | Civil Engineering Conference-Innovation for Sustainability | National Institute of Technology, Hamirpur | September 9 th to 10 th , 2016 |

| | | | |
|----|--|---|--|
| 5 | National Conference on Recent Trends in Chemical Science and Engineering (RTCSE-2017) | National Institute of Technology, Hamirpur | October 13th and 14th, 2017 |
| 6 | Computing for Sustainable Global Development-INDIACOM 2017 | Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi | March 1 st to 3 rd , 2017 |
| 7 | Strengthening Capacities for Hazardous and Disaster Risk Management | National Institute of Technology, Kurukshetra, Haryana | May 1st to 6th, 2018 |
| 8 | Environmental management and Smart Cities | Hindustan College of Science and Technology, Mathura | June 9th to 13th, 2018 |
| 9 | Hydropower Generation: Technologies and Policies | THDC-Institute of Hydropower Engineering and Technology, Tehri | Aug 27 th to Sep 1 st , 2018 |
| 10 | Short Term Course on Data Analysis Techniques using Smart PLS | Lovely Professional University, Phagwara, Punjab | Dec 10 th to 16 th , 2018 |
| 11 | International Conference on Sustainable-Technologies for Intelligent Water Management | IIT Roorkee | February 16 th to 18 th , 2018 |
| 12 | National Conference: Advanced Structures, Materials and Methodology in Civil Engineering (ASMMCE-2018) | National Institute of Technology, Jalandhar | November 3 rd to 4 th , 2018 |
| 13 | Computing for Sustainable Global Development-INDIACOM 2018 | Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi | 14 th to 16 th March, 2018- |
| 14 | Sustainable Agriculture, Food and Nutritional Security (SAFNS-2018) | Lovely Professional University, Phagwara | February 16 th to 17 th 2018 |
| 15 | International Conference on Trends and Recent Advances in Civil Engineering (TRACE-2018) | Amity University, Noida | 23rd to 24 th , 2018 |
| 16 | Short Term Course on Research and Professional Skills | National Institute of Technology, Kurukshetra, Haryana | May, 27 th to 31 st , 2019 |
| 17 | A Short-Term Course on Data Analytics | National Institute of Technology, Kurukshetra, Haryana, in association with AcadGild, AEON Learning Private Limited, Bangluru | June, 26 th to 30 th , 2019 |

| | | | |
|----|--|--|--|
| 18 | Faculty Development Program on Disaster Mitigation and Management | Delhi Technological University, New Delhi | 25 th Nov to 29 th Nov, 2019 |
| 19 | International Conference on Sustainable Environment and Civil Engineering (ICSECE-2019) | SRM Easwari Engineering College, Chennai | March 28 th to 29 th , 2019 |
| 20 | International Conference on Recent Advances in Fundamental and Applied Sciences (RAFAS-2019) | Lovely Professional University, Phagwara, Punjab | November 5 th to 8 th , 2019 |
| 21 | Two-day Workshop on Qlik Sense Business Analyst Qualification | Lovely Professional University, Phagwara, Punjab | 13 th March to 14 th March, 2020 |
| 22 | One Week Online Faculty Development Program on 'Machine Learning' | Jagan Institute of Management Studies, Rohini, New Delhi and CSI Delhi Chapter | 13 th July to 17 th July, 2020 |
| 23 | 7th International Conference on Signal Processing and Integrated Networks (SPIN), Amity University, Noida, India | Amity University, Noida | February 27 th to 28 th , 2020 |
| 24 | International Conference on Recent Development in Sustainable Infrastructure: Research and Practices (ICRDSI-2020) | KIIT University, Bhubaneswar | December 19 th to 21 st , 2020 |
| 25 | International Conference on Trends and Recent Advances in Civil Engineering (TRACE-2020) | Amity University, Noida | August 20 th to 21 st , 2020 |
| 26 | International Conference on Recent Advances In Fundamental And Applied Sciences (RAFAS-2021) | Lovely Professional University, Phagwara, Punjab | June 25 th to 26 th , 2021 |
| 27 | F-EIR Conference 2021 - Environmental Concerns and its Remediation | The Federation of Environmental Issues and its Remediation (F-EIR) | October 18 th to 22 nd , 2021 |
| 28 | First Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC-21) | National Institute of Technology, Jalandhar, Punjab | November 19 th to 20 th , 2021 |
| 29 | International Conference on Materials for Emerging Technologies-2021 (ICMET-21) | Lovely Professional University, Phagwara, Punjab | February 18 th to 19 th , 2022 |
| 30 | Research Methodologies and Scientific Research Writing using LaTeX | National Institute of Technology, Kurukshetra, India | March 12 th to 16 th , 2022 |
| 31 | International Conference on Advanced Earth Sciences & Foundation Engineering (ICASF-2022) | Chandigarh University, Mohali, Punjab, India | June 23 rd to 24 th , 2022 |

| | | | |
|----|---|---|--|
| 32 | International Conference on Advanced Functional Materials: Future Perspectives (AFMFP-2022) | National Institute of Technology, Jalandhar, Punjab, India | August 6 th to 8 th , 2022 |
| 33 | International Conference on Sustainable Nanotechnology and Nanomaterials (ICONN-2022) | Chandigarh University, Mohali, Punjab, India | August 25 th to 26 th , 2022 |
| 34 | National Conference on Internet of Things & Embedded Systems (NCIE-2023) | National Institute of Technology, Kurukshetra, Haryana, India | February 24 th to 25 th , 2023 |
| 35 | UKIERI Concrete Congress: Sustainable Concrete Infrastructure | National Institute of Technology, Jalandhar, Punjab, India | March 14 th to 17 th , 2023 |
| 36 | International Conference on Recent Advances in Fundamental and Applied Sciences (RAFAS-2023) | Lovely Professional University, Phagwara, Punjab, India | March 24 th to 25 th , 2023 |
| 37 | International Conference on International Conference on Innovations in Clean Energy Technologies (ICET 2023) | National Institute of Technology, Bhopal, Madhya Pradesh, India | April 8 th to 10 th , 2023 |
| 38 | International Conference on Systems, Control and Automation (ICSCA-2023) | National Institute of Technology, Kurukshetra, Haryana, India | May 12 th to 13 th , 2023 |
| 39 | International Conference on Recent Advances in Sustainable Environment (RAiSE 2023) | Bundelkhand University, Jhansi, Uttar Pradesh, India | May 15 th to 16 th , 2023 |
| 40 | One Week Short Term Program on Disaster Resilient Infrastructure | National Institute of Technology, Puducherry, India | May 22 nd to 26 th , 2023 |
| 41 | National Conference on Sustainable Development of Smart Cities Infrastructure (SDSCI-2023) | National Institute of Technology, Kurukshetra, Haryana, India | May 27 th to 28 th , 2023 |
| 42 | One Week Short Term Program on Disaster Risk Reduction and Management (DRRM - 2023) | National Institute of Technology, Kurukshetra, Haryana, India | June 12 th to 16 th , 2023 |
| 43 | 4th International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering (EGRWSE – 2023) | National Institute of Technology, Jalandhar, Punjab, India | October 25 th to 27 th , 2023 |
| 44 | International Conference on Green Energy and Sustainable Technology (ICGEST – 2024) | National Institute of Technology, Kurukshetra, Haryana, India | January 5 th to 7 th , 2024 |
| 45 | One Week Short Term Course on Challenges in Wastewater, Air and Land Pollution in India | National Institute of Technology, Jalandhar, Punjab, India | January 12 th to 16 th , 2024 |
| 46 | One-day Workshop on Creation of Blue Zone Cohort in India: JSS Pancha Mantra for Longevity | JSS Academy of Technical Education, Noida, Uttar Pradesh, | February 14 th , 2024 |

| | | | |
|----|---|---|---|
| | | India | |
| 47 | One Week Faculty Development Program on Interdisciplinary Insights: Data Science, Machine Learning and Cyber Security | Jain (Deemed-to-be-University), Bangalore, Karnataka, India | February 19 th to 24 th , 2024 |
| 48 | National Conference on Intelligent Electronic Systems and Applications (NCIESA-2024) | National Institute of Technology, Kurukshetra, Haryana, India | February 23 rd to 24 th , 2024 |
| 49 | One-day Workshop on ChatGPT & AI Tools | Skill Nation | February 29 th , 2024 |
| 50 | DST Sponsored Faculty Development Program on Entrepreneurship Development | Amity University, Noida, Uttar Pradesh, India | February 19 th to March 5 th , 2024 |
| 51 | International Conference on Future Power Network and Smart Energy Systems: Issues and Challenges (FPNSES – 2023) | National Institute of Technology, Kurukshetra, Haryana, India | March 8 th to 10 th , 2024 |

v. Workshops / Conference (Organized)

| Sl. No. | Name of the workshop / Conference | Organized by | Date | Role |
|---------|--|--|---|---------------------------------|
| 1. | Computing for Sustainable Global Development-INDIACOM 2018 | Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi | 14 th to 16 th March, 2018 | Technical Team Member |
| 2. | 105 th Indian Science Congress | Indian Science Congress, Kolkata at Lovely Professional University, Phagwara, Punjab | 16 th to 20 th March, 2018 | Member of Hospitality Committee |
| 3. | International Conference on Experimentation and Progression in Engineering, Research and Technology | Lovely Professional University, Phagwara, Punjab | 15 th to 16 th November, 2019 | Organizing Committee Member |
| 4. | National Conference on Smart Building materials, Trenchless technology, Intelligent materials in manufacturing (nCASTTIM-2021) | JSS Academy of Technical Education, Noida | 23 rd September, 2021 | Organizing Committee Member |

vi. Conference/FDP Attended (those sponsored by TEQIP)

| Sl. No. | Name of the workshop / Conference | Organizer | Date |
|---------|--|--|--|
| 1 | Environmental management and Smart Cities | Hindustan College of Science and Technology, Mathura | June 9 th to 13 th , 2018 |
| 2 | Hydropower Generation: Technologies and Policies | THDC-Institute of | Aug 27 th to Sep 1 st , 2018 |

| | | | |
|---|---|--|--|
| | | Hydropower Engineering and Technology, Tehri | |
| 3 | Faculty Development Program on Disaster Mitigation and Management | Delhi Technological University, New Delhi | 25 th Nov to 29 th Nov, 2019 |

9. Details of NPTEL / COURSEERA courses completed

| Sl. No. | Name of the subject | Organized by | Date of completion / Award | Grade / Marks |
|---------|---|--------------|----------------------------|---------------|
| 1 | Introduction to Remote Sensing | NPTEL | 23/04/2017 | 61% |
| 2 | Digital Image Processing of Remote Sensing Data | NPTEL | 24/09/2017 | 72% |
| 3 | Outcome Based Pedagogical Principles for Effective Teaching | NPTEL | 24/09/2017 | 80% |
| 4 | Introduction to Geographic Information System | NPTEL | 29/04/2018 | 79% |
| 5 | Water, Society and Sustainability | NPTEL | 28/10/2018 | 58% |

10. Membership of Professional Bodies:

| | |
|-------------------------------------|-------------------------------------|
| Indian Science Congress Association | Life Member (M. No: L36574) |
| Institution of Engineers (India) | Associate Member (M. No: AM1918055) |

11. Any other information you will like to share about your professional experience

NIL