***Dr. Somvir Bajar***
*Assistant Professor*
*Department of Environmental Science and Engineering*
*J.C. Bose University of Science & Technology, YMCA*
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## *EDUCATION*

**Ph.D., Environmental Science & Engineering**, Department of Environmental Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar, Haryana (India), 2014

***Title of thesis:*** *Flux and Mitigation of Methane from Solid Waste Dumpsites in Subtropical conditions*

**M.Sc., Environmental Science**, Department of Environmental Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar, Haryana (India), 2006 (1st Class, 74.92%)

**MBA (HR)**, Guru Jambheshwar University of Science & Technology, Hisar, Haryana (India) *(Distance Mode)*, 2010 (1st Class)

**Post Graduate Diploma in Industrial Safety Management (PGDISM)**, Directorate of Distance Education, Guru Jambheshwar University of Science & Technology, Hisar, Haryana (India), 2009 (1st Class, 70.22%)

**B.Sc. (Medical)**, JVMGRR College, Ch. Dadri (Bhiwani, Haryana), Maharashi Dayanand University, Rohtak, Haryana (India), 2004 (1st Class, 75.03%)

## *ACADEMIC/ RESEARCH POSITIONS*

| | |
|---|---|
| 2020-Till Now | Assistant Professor, Department of Environmental Science and Engineering, J.C. Bose University of science and Technology, YMCA, Faridabad (Haryana) |
| 2016-20 | Assistant Professor, Department of Environmental Sciences, Central University of Haryana, Jant-Pali, Mahendergarh (Haryana) |
| 2014- 2016 | Senior Demonstrator (Env. Health), PGIMER, Chandigarh (India) |
| 2013-14 & 2011-12 | Project Fellow, UGC-MRP, Department of Env. Sc. & Engg., GJUS&T, Hisar |
| 2010-12 | Guest Faculty, Department of Env. Sc. & Engg., GJUS&T, Hisar |
| 2008-09 | Contractual Faculty, Department of Env. Sc. & Engg., GJUS&T, Hisar |
| 2008 | Guest Faculty, Department of Env. Sc. & Engg., GJUS&T, Hisar |

## *AREA OF INTEREST*

- Environmental Pollution Monitoring and Control
- Biofuels
- Carbon Sequestration
- Bioremediation

## *SUBJECTS TAUGHT*

### M.Sc. (Environmental Sciences)

- Instrumental Techniques for Environmental Analysis (EVS-103B)
- Air & Noise- Pollution and Abatement (EVS-201B)
- Lab: Air Pollution Sampling & Analysis (EVS-209B)
- Natural Resource Management (EVS-303A)
- Lab: Waste Management (EVS-308A)
- Industrial Visit/Field Work and Report Writing (EVS-309A)
- Lab: Pollution Management (EVS-404A)

**M.Tech. (Energy and Environmental Engineering)**

- Air Pollution Control Engineering (MTEVE-203A-1)
- Lab: Air Pollution Control Engineering (MTEVE-205A)

**UG Programmes (B.Tech/B.Sc.)**

- Environmental Sciences (MC-401)
- Environmental Sciences (BEVS-201B)

## *RESEARCH PROJECTS EXPERIENCE*

- Research Grant Proposal to Haryana State Council for Science, Innovation and Technology (HSCSIT), Govt. of Haryana funded research project entitled, "Volatile Organic Compounds in Ambient Air: Source Apportionment and DFT Quantum Analysis for NCR Region".
  *(2024-27; Budget Sanctioned: Rs. 30 Lakhs: Ongoing)*
- Department of Science and Technology (DST, New Delhi) funded "Promotion of University Research and Scientific Excellence (PURSE) Project on "Environmental Intervention"
  *(2023-27; Amount: Rs. 6.90 Crores; Ongoing)*
- University Seed Grant funded research project entitled, "Leachate Characterization and Assessment of its Impact on Groundwater Quality in the surroundings of Bandwari Landfill site" *(2021-23; Amount: Rs. 2,00,000/-; Completed)*
- District Mineral Foundation, Bhiwani sponsored project entitled, "Assessment of Environmental Quality Status under the Influence of Stone Crushing Activities in Khanak Village, Bhiwani (Haryana)" *(2019; Amount Approx. 2 Lakhs)*
- Ministry of Human Resource and Development (MHRD), Global Initiative for Academic Networks (GIAN), Indian Institute of Kharagpur, Kharagpur funded academic project entitled, "Implementation of Global Initiative for Academic Networks (GIAN) programme on 174040C01: Principles of Environmental Catalysis" *(August 6-17, 2018; Amount: $12,000 (Rs. 8,16,000))*
- UGC Major Research Project entitled "Photobioreactor based Sustained Hydrogen Production Integrated with Heavy metal Removal from Wastewaters using Cyanobacterial Systems" *(2011-2012 & 2013-14)*
- Department of Environment (DoEn), Government of Haryana (GoH), project entitled, "Assessment of Atmospheric Pollutants Associated with Respirable particulate matter ($PM_{10}$ & $PM_{2.5}$) in Panipat area" *(2011-12)*
- Department of Environment (DoEn), Government of Haryana (GoH), project entitled, "Emission and Siting Criteria for Brick Kilns in Haryana" *(2007)*
- National Ambient Air Monitoring Programme (NAMP) - CPCB, New Delhi, operated one of the stations at Hisar, Haryana (India) *(2007-2013).*
- M.Sc. dissertation project entitled, "Tolerance of two indigenous cyanobacteria to Cr (VI) and metal removal potential of their exopolysaccharides" *(2005-06).*

## *CONSULTANCY EXPERIENCE*

- Provided consultancy to more than 60 industrial units regarding adequacy and performance assessment of ETP/ZLD units operated in their premises *(2018-2025, Amount: Rs. 18.26 lakhs).*
- Visited more than 950 industries for environmental sample collection/ consultancy *(2007-2013, Amount: Approx. Rs. 80 lakhs).*
- Consultancy Project entitled, "Regular Monitoring of Regular Environmental Monitoring of Ambient Air, Stack Emission, ESP Efficiency, Water Effluent, Fly Ash Quality & Meteorological Parameters" for "Panipat Thermal Power Station (PTPS), Panipat (Haryana) (*December, 2010 to March, 2013; Amount: Rs. 60, 32, 980).*

- Annual EMG Contract for testing of Ambient Air, Water, Effluent, Water Quality, Analysis of Iron & Various Heavy Metals, Stack Emission and Analysis of Drinking Water Testing for plant and Township in and Around NTPC Faridabad" for "Faridabad Gas Power Station, NTPC Ltd., Neemka Faridabad (Haryana) *(June, 2011 to May, 2012 & June, 2012 to March, 2013; Amount: Rs. 16,67, 100)*
- Consultancy Project entitled, "Environmental Monitoring at and around IGSTPP" for "Indira Gandhi Super Thermal Power Plant, Araveli Power Corporation Pvt. Ltd., Jharli, Jhajjar (Haryana) *(November, 2011 to October, 2012 & December, 2012 to August, 2013; Amount: Rs. 21,38,150).*

## *REFEREED JOURNAL ARTICLES*

### ❖ INTERNATIONAL JOURNAL ARTICLES

- Yadav, N., **Bajar, S.*,** Gupta, S., Vijayan, N., Sharma, S.K. (2024). Evaluating health risks of PM2.5-bound heavy elements in Faridabad, Haryana (India): an industrial perspective. Environmental Monitoring and Assessment, 196, 1185. Springer Publisher, Singapore; (DOI: https://doi.org/10.1007/s10661-024-13317-3) IF: 2.9 (2023). Accepted: 25 October 2024; Online/ Published: 08 November 2024) (ISSN-e: 1573-2959; Scopus and SCIE Indexed. (API Score: 19.6)

- Devi, A., **Bajar, S.,** Sheikh, Z.U.D., Singh, A., Kotwal, N., Bharti, A., Raina, R., Kouser, R., Kothari, R. (2024). A perspective towards sustainable and economically viable approach of waste biorefineries through lignin valorization. Biomass Conversion and Biorefinery, 1, (1), 1-25. Springer Publisher, Singapore; (DOI: https://doi.org/10.1007/s13399-024-05793-x) IF: 3.5 (2023). Accepted: 16 May 2024; Online/ Published: 17 June 2024) (ISSN-e: 2190-6823; ISSN-p: 2190-6815); Scopus and SCIE Indexed. (API Score: 19.6)

- Yadav, S., **Bajar, S.,** Hemraj, Rohilla, R., Chikkara, SK., Dhankhar, R. (2023). Assessment of groundwater quality near municipal solid waste landfill by using multivariate statistical technique and GIS: a case study of Bandhwari (Gurugram) landfill site, Haryana, India. Sustainable Water Resource Management, 9, (174), 1-15. Springer Publisher, Singapore; (DOI: https://doi.org/10.1007/s40899-023-00964-6) IF: 2.1). Accepted: 16 October 2023; Online/ Published: 03 November 2023) (ISSN-e: 2363-5045; ISSN-p: 2363-5037); Scopus and SCIE Indexed. (API Score: 8.4)

- Devi, A., **Bajar, S.,** Sihag, P., Sheikh, Z. U. D., Singh, A., Kaur, J., Bishnoi N.R., Pant D. (2023). A panoramic view of technological landscape for bioethanol production from various generations of feedstocks. Bioengineered, 14, (1), 81-112. Taylor and Francis Online, London; (DOI: https://doi.org/10.1080/21655979.2022.2095702) IF: 4.9). Accepted: 25 June 2023; Online/ Published: 04 July 2023) (ISSN-e: 2165-5979; ISSN-p: 2165-5987); Scopus and SCIE Indexed. (API Score:19.6)

- Singh, K., Meena, R.S, Kumar, S., Dhyani, S., Sheoran, S., Singh, H.M., Pathak V.V. Khalid, Z., Singh, A., Chopra, K., **Bajar, S.,** Ansari, F.A., Gupta, S.K., Varjani, S., Kothari, R., Tyagi, V.V., Singh, B., Byun, C. (2023). India's renewable energy research and policies to phase down coal: Success after Paris agreement and possibilities post-Glasgow Climate Pact. Biomass and Bioenergy, 177, 106944. Elsevier Sci Ltd, Oxford, England; (DOI: https://doi.org/10.1016/j.enzmictec.2023.110304) IF: 6.0). Accepted: 28 August 2023; Online/ Published: 31 August 2023, October, 2023) (ISSN-e: 1873-2909; ISSN-p: 0961-9534); Scopus and SCIE Indexed. (API Score: 9.9)

- Sheikh, Z. U. D., **Bajar, S*.,** Devi, A., Rose, P. K., Suhag, M., Yadav, A., Yadav, D.K., Deswal, T., Kaur, J., Kothari, R., Pathania, D. and Singh, A. (2023). Nanotechnology based technological development in biofuel production: current status and future prospects. Enzyme and Microbial Technology, 171, 110304; Elsevier Sci Ltd, Oxford, England; (DOI: https://doi.org/10.1016/j.enzmictec.2023.110304) IF: 3.4). Accepted: 5 August 2023; Online/ Published: 26 August 2023, February 20, 2023) (ISSN-e: 1879-0909; ISSN-p: 0141-0229); Scopus and SCIE Indexed. (API Score: 19.6)

- Kothari, R., Singh, H.M., Azam, R., Goria, K., Bharti, A., Singh, A., **Bajar, S.,** Pathak, A., Pandey, A.K. and Tyagi, V.V. (2023). Potential avenue of genetic engineered algal derived bioactive compounds: influencing parameters, challenges and future prospects. Phytochemistry Reviews, 167, 1-34; Springer Publisher, Singapore; (DOI: https://doi.org/10.1007/s11101-023-09859-y) IF: 7.7). Accepted: January 20, 2023; Online/ Published: March 20, 2023) (ISSN-e: 1572-980X; ISSN-p: 1568-7767); Scopus and SCIE Indexed. (API Score: 9.9)

- Shankar, S., Gadi, R., **Bajar, S.,** Yadav, N., Mandal, T. K., & Sharma, S. K. (2023). Insights into seasonal-variability of SVOCs, morpho-elemental and spectral characteristics of PM2.5 collected at a dense industrial site: Faridabad, Haryana, India. Chemosphere, 323, 138204, Elsevier Sci Ltd, Oxford, England; (DOI: https://doi.org/10.1016/j.chemosphere.2023.138204) IF: 8.8). Accepted: December 5, 2022; Online/ Published: February 20, 2023) (ISSN-e: 1879-1298; ISSN-p: 1568-7767); Scopus and SCIE Indexed. (API Score: 9.9)

- Devi, A., **Bajar, S.*,** Kour, H., Kothari, R., Pant, D., Singh, A. (2022). Lignocellulosic Biomass Valorization for Bioethanol Production: A Circular Bioeconomy Approach. BioEnergy Research, 15, 1820–1841; Springer Publisher, Singapore; (DOI: https://doi.org/10.1007/s12155-022-10401-9) IF: 3.6). Accepted: January 24, 2022; Online/ Published: February 7, 2022) (ISSN-p: 1939-1234); Scopus and SCIE Indexed. (API Score: 19.6)
- Devi, A., Singh, A., **Bajar, S.***, & Owamah, H. I. (2021). Nanomaterial in liquid biofuel production: applications and current status. *Environmental Sustainability*, 4, 343–353; Springer Publisher, Singapore; (DOI: https://doi.org/10.1007/s42398-021-00193-7). *(Accepted: May 20, 2021; Online/ Published: June 11, 2021) (ISSN-e: 2523-8922); Referred Journal*

- Devi, A., Singh, A., **Bajar, S.**, Pant, D., Din, Z.U (2021). Ethanol from lignocellulosic biomass: An in-depth analysis of pre-treatment methods, fermentation approaches and detoxification processes. *Journal of Environmental Chemical Engineering*, 9(5), 105798; Elsevier Sci Ltd, Oxford, England; (DOI: https://doi.org/10.1016/j.jece.2021.105798; **IF: 5.909**) *(Accepted: June 1, 2021; Online/Published: June 4, 2021) (ISSN-e: 2213-3437; ISSN-p: 2213-2929); SCIE Indexed.*

- Singh, A., **Bajar, S.**, Devi, A., Bishnoi, N. R. (2021). Evaluation of cellulase production from Aspergillus niger and Aspergillus heteromorphus under submerged and solid-state fermentation. *Environmental Sustainability*, 4, 437–442; Springer Publisher, Singapore; (DOI: https://doi.org/10.1007/s42398-021-00173-x) *(Accepted: April 15, 2021; Online/ Published: May 15, 2021) (ISSN-e: 2523-8922); Referred Journal.*

- Singh, A., **Bajar, S.**, Devi, A., Bishnoi, N. R. (2021). Adding value to agro-industrial waste for cellulase and xylanase production via solid-state bioconversion. *Biomass Conversion and Biorefinery*, 1-10; Springer Heidelberg, Germany; (DOI: https://doi.org/10.1007/s13399-021-01503-z; **IF: 4.987**) *(Accepted: April 6, 2021; Online/Published: April 21, 2021) (ISSN-e: 2190-6823; ISSN-p: 2190-6815); SCIE Indexed.*

- Singh, A., **Bajar, S.**, Devi, A., Pant D. (2021). An overview on the recent developments in fungal cellulase production and their industrial applications. *Bioresource Technology Reports*, 14, 100652; Elsevier; (DOI: https://doi.org/10.1016/j.biteb.2021.100652) *(Accepted: February 3, 2021; Online/Published: February 25, 2021) (ISSN-e: 2589-014X); Scopus Indexed.*

- Alfa, M. I., Owamah, H. I., Onokwai, A. O., Gopikumar, S., Oyebisi, S. O., Kumar, S. S., **Bajar, S.**, Olusegun D. Samuel, Samuel C. Ilabor, (2020). Evaluation of biogas yield and kinetics from the anaerobic co-digestion of cow dung and horse dung: a strategy for sustainable management of livestock manure. *Energy, Ecology and Environment*, 6, 425-434; Springer, Singapore; (DOI: https://doi.org/10.1007/978-981-15-6021-7_5. *(Accepted: November 9, 2020; Online/Published: November 23, 2020) (ISSN-e: 2363-8338; ISSN-p: 2363-7692)*; *Scopus Indexed.*

- Das, T.D., Kumar, S.S., Ghosh, P., Shah, G., Malyan, S.K., **Bajar, S.**, Shekhar I., Thakur, L.S. (2020). Remediation strategies for mitigation of phthalate pollution: Challenges and future perspectives. *Journal of Hazardous Materials*, 409, 124496; Elsevier, Netherlands; (DOI:

https://doi.org/10.1016/j.jhazmat.2020.124496; **IF: 10.588**) *(Accepted: November 4, 2020; Online/Published: November 6, 2020) (ISSN-e: 1873-3336; ISSN-p: 0304-3894); SCIE Indexed.*

- **Bajar, S.***, Singh, A., Kaushik, C. P., & Kaushik, A. (2021). Suitability assessment of dumpsite soil biocover to reduce methane emission from landfills under interactive influence of nutrients. *Environmental Science and Pollution Research,* 28(2), 1519-1532; Springer Heidelberg, Germany; (DOI: *https://doi.org/10.1007/s11356-020-10441-8;* **IF: 4.223**) *(Accepted: August 6, 2020; Online/Published: August 25, 2020) (ISSN-e: 1614-7499; ISSN-p: 0944-1344)*; *SCIE Indexed.*

- **Bajar, S.**, Singh, A., & Bishnoi, N. R. (2020). Exploration of low-cost agro-industrial waste substrate for cellulase and xylanase production using Aspergillus heteromorphus. *Applied Water Science*, 10(6), 153; Springer Heidelberg, Germany; (DOI: https://doi.org/10.1007/s13201-020-01236-w; **IF: 3.874**) *(Accepted: May 19, 2020; Online/Published: June 1, 2020) (ISSN-e: 2190-5495; ISSN-p: 2190-5487)*; *SCIE Indexed.*

- Singh, A., **Bajar, S.,** Bishnoi, Narsi R. (2017). Physico-chemical pretreatment and enzymatic hydrolysis of cotton stalk for ethanol production by *Saccharomyces cerevisiae. Bioresource Technology,* 244(1): 71-77; Elsevier Sci Ltd, Oxford, England; (DOI: https://doi.org/10.1016/j.biortech.2017.07.123; **IF: 9.642)**. *(Accepted: July 21, 2017, Online/Published July 23, 2017) (ISSN-e: 1873-2976; ISSN-p: 0960-8524)*; *SCIE Indexed.*

- **Bajar, S.*,** Singh, A., Kaushik, C.P., Kaushik, A. (2017). Statistical assessment of dumpsite soil suitability to enhance methane bio-oxidation under interactive influence of substrates and temperature. *Waste Management,* 63: 188-195; Pergamon-Elsevier Science Ltd, Oxford, England; (DOI: https://doi.org/10.1016/j.wasman.2016.12.021; **IF: 7.145)**. *(Accepted: December 13, 2016, Online/Published: January 4, 2017) (ISSN-e: 1879-2456; ISSN-p: 0956-053X)*; *SCIE Indexed.*

- **Bajar, S.*,** Singh, A., Kaushik, C.P., Kaushik, A. (2016). Evaluation and Statistical Optimization of Methane Oxidation using Rice Husk Amended Dumpsite Soil as Biocover. *Waste Management,* 53: 136–143; Pergamon-Elsevier Science Ltd, Oxford, England; (DOI: https://doi.org/10.1016/j.wasman.2015.09.023; **IF: 7.145)**. *(Accepted: September 17, 2015, Online/Published: December 10, 2015) (ISSN-e: 1879-2456; ISSN-p: 0956-053X); SCIE Indexed.*

- Singh, A., **Bajar, S.,** Bishnoi, Narsi R. (2014). Enzymatic hydrolysis of microwave alkali pretreated rice husk for ethanol production by *Saccharomyces cerevisiae, Scheffersomyces stipitis* and their co-culture. *Fuel,* 116: 699–702; Elsevier Sci Ltd, Oxford, England; (DOI: https://doi.org/10.1016/j.fuel.2013.08.072; **IF: 6.609)**. *(Accepted: August 27, 2013; Online/Published: September 7, 2013) (ISSN-e: 1873-7153; ISSN-p: 0016-2361); SCIE Indexed.*

- Kulhari, A., Sheorayan, A., **Bajar, S.,** Sarkar, S., Chaudhury, A., Kalia, R.K. (2013). Investigation of heavy metals in frequently utilized medicinal plants collected from environmentally diverse locations of north western India. *SpringerPlus,* 2: 676-684; Springer Nature, Netherlands; (DOI: https://doi.org/10.1186/2193-1801-2-676). *(Accepted: December 11, 2013; Online/Published: December 17, 2013) (ISSN-e: 2193-1801); Scopus Indexed.*

- **Bajar, S.*,** Kaushik, C.P., Kaushik, A. (2013). Dynamics of methane oxidation in landfill cover soil under variable composition of microcosm gaseous regime. *International Journal of Environmental Research and Development,* 3(1): 17-24. Research India Publication, Delhi; (Accessed from: https://www.ripublication.com/Volume/ijerdv3n1.htm) *(Accepted: February 25, 2013; Online/Published: May 9, 2013) (ISSN-e: 2249 - 3131)*; *Referred Journal*

- Singh, A., **Bajar, S.,** Bishnoi, Narsi R., Singh, N. (2010). Laccase production by *Aspergillus heteromorphus* using distillery spent wash and lignocellulosic biomass. *Journal of Hazardous Materials,* 176: 1079-1082; Elsevier, Netherlands; (DOI: https://doi.org/10.1016/j.jhazmat.2009.10.120; **IF: 10.588**) *(Accepted: October 29, 2009; Online/Published: November 10, 2009) (ISSN-e: 1873-3336; ISSN-p: 0304-3894); SCIE Indexed.*

- Sharma, M., Kaushik, A., **Somvir,** Bala, K. and Kamra, A. (2008). Sequestration of Chromium by exopolysaccharides of *Nostoc* and *Gloeocapsa* from dilute aqueous solutions. *Journal of Hazardous*

*Materials,* 157, 315-318; Elsevier, Netherlands; (DOI: https://doi.org/10.1016/j.jhazmat.2007.12.100; **IF: 10.588**) *(Accepted: December 28, 2007; Online/Published: January 4, 2008) (ISSN-e: 1873-3336; ISSN-p: 0304-3894); SCIE Indexed.*

## ❖ NATIONAL JOURNAL ARTICLES

- Sharma, B., Singh, I., **Bajar, S.**, Gupta, S., Gautam, H., & Kumar, P. (2020). Biogenic silver nanoparticles: evaluation of their biological and catalytic potential. *Indian Journal of Microbiology (https://www.springer.com/journal/12088/)*, 60, 468-474; Springer, New York; (DOI: https://doi.org/10.1007/s12088-020-00889-0; **IF: 2.461**). *(Accepted: May 20, 2020; Published: May 27, 2020) (ISSN-e: 0973-7715; ISSN-p: 0046-8991); SCIE Indexed.*
- Singh, A., and **Bajar, S.** (2019) Optimization of cellulolytic enzyme production by thermophilic fungus *Thermoascus aurantiacus* using response surface methodology. *Indian Journal of Biochemistry and Biophysics (IJBB),* 56(5), 399-403; CSIR-NISCAIR; (http://op.niscair.res.in/index.php/IJBB/article/view/28248/465477155; **IF: 1.918);** *(Published: 13 September 2019); Scopus Indexed.*
- **Bajar, S.,** Kaushik, C.P., Kaushik, A. (2013). Optimization of temperature and moisture content for methane oxidation in acclimatized subtropical landfill soil using Response Surface Methodology. *Indian Journal of Environmental Science*, 17(2): 91-99; Green Earth Foundation; *(Accepted: March 11, 2013; Published: December, 2013) (ISSN-p: 0971-8958); Referred Journal*
  ** Corresponding Author*

## *PROCEEDINGS / BOOKS CHAPTERS*

- **Bajar, S.,** Yadav, N. and Yadav, K. (2025). Microplastic in the Air: Sources, Distribution, and Environmental Implications. In: Microplastic Pollution: Occurrence, Health Risk and Challenges (Ed.(s) Kataria, K., Garg, V.K., Han, C., Rene, E.R. CRC Press, Taylor & Francis, LLC pp. 1-28, *(ISBN 978-1-032-70657-3 e-book), DOI: https://doi.org/10.1201/9781032706573; (Published: 31 January 2025).*
- **Bajar, S.,** Prajapati, A; Singh, A. (2024). Waste-to-Green Hydrogen: Converting Dumpsite Waste for Environmental Sustainability in the Green Hydrogen Economy. In: Green Hydrogen Economy for Environmental Sustainability, Volume-1: Fundamental and Feedstocks (Ed.(s) Kothari, R and Pathania, D. ACS Publications pp. 229-248, *(e-ISBN 978-0-841-29698-5), DOI: https://doi.org/10.1021/bk-2024-1473.ch011; https://doi.org/10.1021/bk-2024-1473; (Published: 21 August 2024).*
- **Bajar, S.,** Singh, A., Yadav, N., Yadav, K., Prajapati, A., Rani, N. (2023). Current Status and Future Prospective on Different Generations of Biofuel Production. In: Sustainable Butanol Biofuels (Ed.(s) Singh, A., Kothari, R., **Bajar, S.,** Tyagi V.V. CRC Press, Taylor & Francis, LLC pp. 1-28, *(ISBN 978-0-367-76077-9 (Print); 978-100-31-6540-8 e-book), DOI: https://doi.org/10.1201/9781003165408; (Published: 27 April 2023).*
- Devi, A., Singh, A., **Bajar, S.,** Pant, D. (2023). Pretreatment and Hydrolysis of Biomaterials for Butanol Production. In: Sustainable Butanol Biofuels (Ed.(s) Singh, A., Kothari, R., **Bajar, S.,** Tyagi V.V. CRC Press, Taylor & Francis, LLC pp. 1-28, *(ISBN 978-0-367-76077-9 (Print); 978-100-31-6540-8 e-book), DOI: https://doi.org/10.1201/9781003165408; (Published: 27 April 2023).*
- Kaur, J., Din, Z.U., Singh, A., **Bajar S.,** Suhag, M. (2023). Genetic Engineering in Butanol Production: Recent Trends. In: Sustainable Butanol Biofuels (Ed.(s) Singh, A., Kothari, R., **Bajar, S.,** Tyagi V.V. CRC Press, Taylor & Francis, LLC pp. 1-28, *(ISBN 978-0-367-76077-9 (Print); 978-100-31-6540-8 e-book), DOI: https://doi.org/10.1201/9781003165408; (Published: 27 April 2023).*
- Sharma, P., **Bajar, S.,** Bishnoi, N.K., Singh, A. (2022). Role of Thermophilic Bacterial Enzymes in Lignocellulosic Bioethanol Production: A Panoramic View. In: Biomass, Bioenergy & Bioeconomy

(Ed.(s) Kothari R., Singh, A., Arora N.K., Microorganisms for Sustainability (Vol. 35). Springer, Singapore, pp. 41-56, *(ISBN 978-981-19-2911-3 (Print); 978-981-19-2912-0 e-book), DOI: https://doi.org/10.1007/978-981-19-2912-0; (Published: 13 October, 2022).*

- Devi, A., Singh, A., **Bajar, S.,** Sharma N.K. (2022). Bioethanol from Biomass: Technologies and Challenges. In: Biomass, Bioenergy & Bioeconomy (Ed.(s) Kothari R., Singh, A., Arora N.K., Microorganisms for Sustainability (Vol. 35). Springer, Singapore, pp. 41-56, *(ISBN 978-981-19-2911-3 (Print); 978-981-19-2912-0 e-book), DOI: https://doi.org/10.1007/978-981-19-2912-0; (Published: 13 October, 2022).*

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ii. **Bajar, S** and Singh, A (2023). Climate Change, Environmental Policy and Administration (Dr. Tejpal Dhewa). E-Content and all 04 quarters developed for MOOC course in "Environment Policy and Administration" sanctioned by the Consortium for Educational Communication (CEC), Ministry of Education, Government of India. https://onlinecourses.swayam2.ac.in/cec23_hs60/course

iii. **Bajar, S** and Singh, A (2023). Biodiversity, Environmental Policy and Administration (Dr. Tejpal Dhewa). E-Content and all 04 quarters developed for MOOC course in "Environment Policy and Administration" sanctioned by the Consortium for Educational Communication (CEC), Ministry of Education, Government of India. https://onlinecourses.swayam2.ac.in/cec23_hs60/course

iv. **Bajar, S** and Singh, A (2023). Waste Management: An Introduction, Environmental Policy and Administration (Dr. Tejpal Dhewa). E-Content and all 04 quarters developed for MOOC course in "Environment Policy and Administration" sanctioned by the Consortium for Educational Communication (CEC), Ministry of Education, Government of India. https://onlinecourses.swayam2.ac.in/cec23_hs60/course

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viii. **Bajar, S** and Singh, A (2023). Natural Resource Conservation and Management, Environmental Policy and Administration (Dr. Tejpal Dhewa). E-Content and all 04 quarters developed for MOOC course in "Environment Policy and Administration" sanctioned by the Consortium for Educational Communication (CEC), Ministry of Education, Government of India. https://onlinecourses.swayam2.ac.in/cec23_hs60/course

ix. **Bajar, S** and Singh, A (2023). Environmental Hazard and Risk Management, Environmental Policy and Administration (Dr. Tejpal Dhewa). E-Content and all 04 quarters developed for MOOC course in "Environment Policy and Administration" sanctioned by the Consortium for Educational Communication (CEC), Ministry of Education, Government of India. https://onlinecourses.swayam2.ac.in/cec23_hs60/course

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