Curriculum Vitae

1. Personal Details

Name: Dr. Yashvir Singh
Nationality: Indian
Designation: Associate Professor
Department of Mechanical Engineering
Harcourt Butler Technical University
Kanpur, Uttar Pradesh-208002
Email: dryvsingh21@gmail.com, yashvir.s@hbtu.ac.in
Contact: +917895797503, +917055174774

2. Education

Universiti Tun Hussein Onn Malaysia *Completed 2023*
Parit Raja, Malaysia
Post Doctoral

- Specialized in Machining of bio-lubricants

University of Petroleum and Energy Studies *Completed 2020*
Dehradun, Uttarakhand, India
Doctor of Philosophy

- Specialized in Tribological characterization of bio-lubricants developed from non-edible vegetable oils

Dr. APJ Abdul Kalam Technical University *Completed 2011*
Lucknow, Uttar Pradesh, India
Master of Technology

Dr. B. R. Ambedkar University *Completed 2007*
Agra, Uttar Pradesh, India
Bachelor of Engineering in Mechanical Engineering

3. Employment details

- Presently working as **Associate Professor** in Department of Mechanical Engineering, Harcourt Butler Technical University, Kanpur, Uttar Pradesh
- Worked as **Post Doctoral Fellow** at Faculty of Mechanical and Manufacturing Engineering, Universiti Tun Hussein Onn Malaysia, Malaysia
- Worked as **Associate Professor** at Department of Mechanical Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand, India
- Worked as **Assistant Professor** at Department of Mechanical Engineering, Sir Padampat Singhania University, Udaipur, Rajasthan
- Worked as **Research Assistant** at Department of Aeronautics and Astronautics, National Cheng Kung University, Tainan, Taiwan
- Worked as **Assistant Professor** at Department of Mechanical Engineering, University of Petroleum and Energy Studies, Dehradun, Uttarakhand
- Worked as **Assistant Professor** at Department of Mechanical Engineering, Hindustan

College of Science and Technology, Mathura, Uttar Pradesh

- Worked as **Lecturer** at Department of Mechanical Engineering, Apex Institute of Technology, Rampur, Uttar Pradesh

4. Publication in Peer Reviewed Journals

1) Singh et al. **Optimization of Sintering Process Parameters by Taguchi Method for Developing Al-CNT-Reinforced Powder Composites,** (2023) *Crystals*, 13 (9), art. no. 1352.

2) Singh et al. **Study the effect of optimized input parameters on a CRDI diesel engine running with waste frying oil methyl ester-diesel blend fuel with ZnO nanoparticles: a response surface methodology approach,** (2023) *Biomass Conversion and Biorefinery*, 13 (14), pp. 13127-13152.

3) Singh et al. **Production of bio-oil from lychee-based biomass through pyrolysis and maximization of bio-oil yield with statistical and machine learning techniques,** (2023) *Journal of Cleaner Production*, 413, art. no. 137472.

4) Singh at al. **Performance and emission analysis of single-cylinder direct injection engine running with cottonseed-ethyl oleate biodiesel blends,** (2023) *Environmental Progress and Sustainable Energy*, 42 (4), art. no. e14098.

5) Singh et al. **Development of epoxidized Moringa oleifera nanolubricant with CeO_2 nanoparticles as an additive for improving the lubrication characteristics,** (2023) *Biomass Conversion and Biorefinery*, 13 (11), pp. 10229-10242.

6) Singh et al. **Rheological characteristics and tribological performance of neem biodiesel–based nano oil added with MWCNT,** (2023) *Biomass Conversion and Biorefinery*, 13 (11), pp. 10263-10273.

7) Singh et al. **Challenges and future opportunities of nanoparticle applications to various biofuel generation processes – a review,** (2023) *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*, 237 (3), pp. 1085-1099.

8) Singh et al. **Combined Effect of Phosphonium Ionic Liquid and Copper Oxide Nanopowder as Additives to the Bio-based Lubricant During Tribological Analysis,** (2023) *Waste and Biomass Valorization*, 14 (2), pp. 487-503.

9) Singh et al. **Prediction of higher heating values based on imminent analysis by using regression analysis and artificial neural network for bioenergy resources,** (2023) *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*.

10) Singh et al. **Performance of single slope solar still with various operation parameters—An experimental, statistical, and CFD simulation approach toward optimality,** (2023) *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process*

Mechanical Engineering.

11) Singh et al. **Enhancement of combustion characteristics of waste cooking oil biodiesel using TiO2 nanofluid blends through RSM,** (2023) *Fuel*, 331, art. no. 125681.

12) Singh et al. **Dual pretreatment of mixing H_2O_2 followed by torrefaction to upgrade spent coffee grounds for fuel production and upgrade level identification of H_2O_2 pretreatment**
(2022) *Environmental Research*, 215, art. no. 114016.

13) Singh et al. **Friction and wear characteristics of chemically modified mahua (madhuca indica) oil based lubricant with SiO_2 nanoparticles as additives,** (2022) *Wear*, 508-509, art. no. 204463, .

14) Singh et al. **Intensive exploration of the fuel characteristics of biomass and biochar from oil palm trunk and oil palm fronds for supporting increasing demand of solid biofuels in Thailand,** (2022) *Energy Reports*, 8, pp. 5640-5652.

15) Singh et al. **Effect of process parameters on the diesel engine performance fuelled with Prosopis juliflora biodiesel response surface methodology approach,** (2022) *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*, 236 (2), pp. 440-451.

16) Singh et al. **Effect of fuel injection pressure and EGR techniques on various engine performance and emission characteristics on a CRDI diesel engine when run with linseed oil methyl ester**
(2022) *Energy and Environment*, 33 (1), pp. 41-63.

17) Singh et al., **Sustainability of chemically modified Simarouba glauca for tribological applications and chemical structure analysis at different loads,** (2022) *Biomass Conversion and Biorefinery*.

18) Singh et al. **Sustainability of corn based-biomass for production of bio-oil and their characterization through solar thermal energy approach,** (2022) *Biomass Conversion and Biorefinery*.

19) Singh et al. **Nanosize Al2O3 reinforcement in Si-rich aluminum MMC for enhanced tribological performance in engine components,** (2022) *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*.

20) Singh et al. **Effect of α-aluminium oxide nano additives with Sal biodiesel blend as a potential alternative fuel for existing DI diesel engine,** (2022) *Energy and Environment*.

21) Singh et al. **Tribological study and parameters optimisation of CNT added glass fibre reinforced polymer composite sliding under inert environment,** (2022) *Advances in Materials and Processing Technologies*.

22) Singh et al. **Production and feasibility characterization of bio-oil from jojoba seed–based biomass through solar thermal energy pyrolysis process,** (2022) *Biomass Conversion and Biorefinery*.

23) Singh et al. **Optimization of long-term storage stability of Kusum biodiesel using herbal anti-oxidant,** (2022) *Biomass Conversion and Biorefinery*.

24) Singh et al. **Status of biofuel in India with production and performance characteristics: a review** (2022) *International Journal of Ambient Energy*, 43 (1), pp. 61-77.

25) Singh et al. **Optimization of biodiesel synthesis from Jojoba oil via supercritical methanol: A response surface methodology approach coupled with genetic algorithm** (2022) *Biomass and Bioenergy*, 156, art. no. 106332.

26) Singh et al. **Integrating Taguchi method and artificial neural network for predicting and maximizing biofuel production via torrefaction and pyrolysis,** (2022) *Bioresource Technology*, 343, art. no. 126140.

27) Singh et al., **Extraction and Characterization of Munja Fibers and Its Potential in the Biocomposites,** (2022) *Journal of Natural Fibers*, 19 (7), pp. 2675-2693.

28) Singh et al. **Analysis of methanol synthesis using CO2 hydrogenation and syngas produced from biogas-based reforming processes,** (2021) *Chemical Engineering Journal*, 426, art. no. 130835, .

29) Singh et al. **Prediction of an optimum engine response based on di erent input parameters on common rail direct injection diesel engine: A response surface methodology approach,** (2021) *Scientia Iranica*, 28 (6), pp. 3181-3200.

30) Singh et al. **Application of Taguchi and response surface methodology approach to a sustainable model developed for a compression-ignition engine using polanga biodiesel/diesel blends** (2021) *Proceedings of the Institution of Mechanical Engineers. Part I: Journal of Systems and Control Engineering*, 235 (6), pp. 854-868.

31) Singh et al. **Effect of different lubricating environment on the tribological performance of cnt filled glass reinforced polymer composite,** (2021) *Materials*, 14 (11), art. no. 2965, .

32) Singh et al. **Production of a sustainable fuel from microalgae Chlorella minutissima grown in a 1500 L open raceway ponds**, (2021) *Biomass and Bioenergy*, 149, art. no. 106073, .

33) Singh et al., **Micro and Nano-Crystalline Diamond Coatings of Co-cemented Tungsten Carbide Tools with Their Characterization,** (2021) *Journal of Bio- and Tribo-*

Corrosion, 7 (2), art. no. 35, .

34) Singh et al., **Biodiesel yield and properties optimization from Kusum oil by RSM** (2021) *Fuel*, 291, art. no. 120218.

35) Singh et al., **Effect of ZnO nanoparticles concentration as additives to the epoxidized Euphorbia Lathyris oil and their tribological characterization,** (2021) *Fuel*, 285, art. no. 119148.

36) Singh et al. **Exhaust gas recirculation effect on the performance of a CRDI diesel engine fuelled with linseed biodiesel/diesel blend through response surface methodology** (2021) *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*.

37) Singh et al. **Experimental studies on performance and exhaust emission characteristics of a diesel engine fuelled with diesel-linseed oil methyl ester (LOME) blends,** (2021) *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, 43 (6), pp. 754-768.

38) Singh et al., **Application of response surface methodology to optimize diesel engine parameters fuelled with pongamia biodiesel/diesel blends,** (2021) *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, 43 (2), pp. 133-144.

39) Singh et al. **Michelia Champaca: Sustainable novel non-edible oil as nano based bio-lubricant with tribological investigation,** (2020) *Fuel*, 282, art. no. 118830.

40) Singh et al. **Effect of Groove Designs on Residual Stress and Transverse Shrinkage in GMAW and PGMAW of A333 Seamless Steel Pipes,** (2020) *Journal of Advanced Manufacturing Systems*, 19 (4), pp. 799-813.

41) Singh et al. **Effect of design parameters on performance and emissions of DI diesel engine running on biodiesel-diesel blends: Taguchi and utility theory,** (2020) *Fuel*, 281, art. no. 118765, .

42) Singh et al. **Chemical modification of juliflora oil with trimethylolpropane (TMP) and effect of TiO2 nanoparticles concentration during tribological investigation** (2020) *Fuel*, 280, art. no. 118704.

43) Singh et al. **Prediction of performance and emission parameters of Kusum biodiesel based diesel engine using neuro-fuzzy techniques combined with genetic algorithm,** (2020) *Fuel*, 280, art. no. 118629.

44) Singh et al. **Effect of SiC nanoparticles concentration on novel feedstock Moringa Oleifera chemically treated with neopentylglycol and their trobological behavior,** (2020) *Fuel*, 280, art. no. 118630.

45) Singh et al. **Diesel engine performance and emission analysis running on jojoba biodiesel using intelligent hybrid prediction techniques** (2020) *Fuel*, 279, art. no. 118571.

46) Singh et al. **Experimental investigation of the behaviour of a DI diesel engine fuelled with biodiesel/diesel blends having effect of raw biogas at different operating responses,** (2020) *Fuel*, 279, art. no. 118460.

47) Singh et al. **Performance and emission characteristics of the diesel engine running on neem (azadirachta indica) biodiesel with effect of exhaust gas recirculation at optimum injection strategies,** (2020) *Pollution*, 6 (4), pp. 725-735.

48) Singh et al. **Sal biodiesel production using Indian abundant forest feedstock** (2020) *Fuel*, 273, art. no. 117781.

49) Singh et al. **Effective utilization of tobacco (Nicotiana Tabaccum) for biodiesel production and its application on diesel engine using response surface methodology approach,** (2020) *Fuel*, 273, art. no. 117793.

50) Singh et al. **A state-of-the-art review on thermochemical conversion of biomass for biofuel production: A TG-FTIR approach,** (2020) *Energy Conversion and Management*, 209, art. no. 112634.

51) Singh et al. **An evaluation of thermal characteristics of bacterium Actinobacillus succinogenes for energy use and circular bioeconomy** (2020) *Bioresource Technology*, 301, art. no. 122774.

5. Conference articles presented and published

1) Singh et al. **Application of value stream mapping for waste elimination: A case of construction equipment industry,** (2023) *AIP Conference Proceedings*, 2521, art. no. 050002.

2) Singh et al. **Nano-particle and its impact on the lubrication process** (2023) *AIP Conference Proceedings*, 2521, art. no. 020022.

3) Singh et al. **Chemical modification of sal oil and its tribological characterization,** (2023) *AIP Conference Proceedings*, 2521, art. no. 020023.

4) Singh et al. **Biodiesel as an alternative fuel employed in CI engine to meet the sustainability criteria: A review,** (2023) *AIP Conference Proceedings*, 2521, art. no. 030002.

5) Singh et al. **Optimization of Al 4032 alloy reinforced with silicon carbide using Taguchi method,** (2023) *AIP Conference Proceedings*, 2521, art. no. 020010.

6) Singh et al. **A review on the production and characterization methods of bio-based lubricants,** (2021) *Materials Today: Proceedings*, 46, pp. 10503-10506.

7) Singh et al. **Experimental analysis based parametric study of packed bed heat regenerator with air as passing medium,** (2021) *Materials Today: Proceedings*, 46, pp. 10488-

10491.

8) Singh et al. **Experimental investigations on gaseous hydrogen supplemented Aleurites Fordii biodiesel in a direct injection diesel engine for performance enhancement and reduction in emissions,** (2021) *Materials Today: Proceedings*, 46, pp. 11140-11148.

9) Singh et al., **Chitin as bio-based nanomaterial in packaging: A review,** (2021) *Materials Today: Proceedings*, 46, pp. 11254-11257.

10) Singh et al., **Effect of SiC Nanoparticles Concentration on the Tribological Behavior of Karanja Oil,** (2021) *Lecture Notes in Mechanical Engineering*, pp. 157-165.

11) Singh et al., **Experimental investigation of flushing approaches on EDM machinability during machining of titanium alloy,** (2020) *Materials Today: Proceedings*, 38, pp. 139-145.

12) Singh et al. **Process investigations on the use of waste plastic as thermal energy storage material,** (2020) *Materials Today: Proceedings*, 28, pp. 1372-1375.

6. Conference articles presented

1) Singh et al. **Effect of magnesium oxide nanoparticles addition on the tribological behavior of maongongo oil** presented in *International Conference on Emerging Trends and Advancements in Mechanical Engineering, Alwar, Rajasthan* during March 11-12, 2019 held at Laxmi Devi Institute of Engineering and Technology, Alwar, Rajasthan.

2) Singh et al. **Friction and wear behavior of heveabrasiliensis oil based biolubricant-Taguchi Method** presented in *International Conference on Emerging Trends and Advancements in Mechanical Engineering, Alwar, Rajasthan* during March 11-12, 2019 held at Laxmi Devi Institute of Engineering and Technology, Alwar, Rajasthan.

3) Singh et al. **Effect of magnesium oxide nanoparticles addition on the tribological behavior of maongongo oil** presented in *International Conference on Emerging Trends and Advancements in Mechanical Engineering, Alwar, Rajasthan* during March 11-12, 2019 held at Laxmi Devi Institute of Engineering and Technology, Alwar, Rajasthan.

4) Singh et al. **Experimental evaluation of the friction and wear of cassia tora oil with TiO_2 nanoparticles as additive** presented in *International conference on advanced materials, energy and environmental sustainability* during 14-15th December, 2018 at University of Petroleum and Energy Studies, Dehradun, Uttarakhand, India.

5) Singh et al. **Production of Biodiesel and Exhaust gas Analysis on CI engines** presented in 5 th *International multiconference on Intelligent systems, Sustainable New and Renewable Energy Technology and Nanotechnology* during February 2011 at ISTK, Khlawad, Haryana, India.

6) Singh et al. **Study of Effect of Turning Parameters on Workpiece Hardness using Taguchi Method** presented in *proceedings of International Conference on Agile Manufacturing Systems* during 18-20 December 2011 at DEI, Agra, India.

1) Singh et al. **Production of Biodiesel/Diesel Fuel Blends from Waste Cooking Oil and Their Emission Analysis on Unmodified CI Engine** presented in the *proceeding of The 1st National Conference on Science, Engineering and Technology* (REDSET 2014) during 17-18 October 2014, G.D. Goenka University, Gurgaon, India.

2) Singh et al. **Experimental performance analysis of solar air heaters with and without fins** presented in *3rd International Conference on Energy Technology, power engineering and environment sustainability* during 1-2 November, 2014 at Jawaharlal Nehru University, New Delhi, India.

3) Singh et al. **Effective utilization of solar energy for absorption refrigeration system** presented in *National conference on excellence in management and technology* during 7-8th May, 2011 at Sunder deep Engineering College, Ghaziabad, Uttar Pradesh, India.

7. Patent published

- Singla, A., **Singh, Y.,** Patel, R.K., Singh N.K. "Biomass Stove with efficient Energy" with file number "201911011348". ***(Published)***
- Ranjit, P.S., **Singh, Y.,** Raju, T.D., Kumar, M.A., Reddy, M.S. "Steering Design – Part - IV: Methods and Means to Calculate the Angle between Horizontal centre line of the pivot centres to the drop arms of Left side wheel of Ackerman Steering Mechanism based Steering System of an Automobile by considering the Obtuse Angle" with registration number "7316/2020". ***(Published)***
- Raturi, A., Singh, D.B., Patil, P., **Singh, Y.** "A Ceiling Trapped Hot Air Evacuation Apparatus" with reference 2021100142. ***(Published)***
- Kesarwani, S., Verma, R.K., Singh, N.K., **Singh, Y**., Sharma, A. "Anti-Tople FRP Road Safety Barriers**"** with reference 381036-001 **(*Published*)**

8. Awards and Honours

- Received **"Research Award"** from Graphic Era Deemed to be University, Dehradun, Uttarakhand, India in the year 2021.
- Received **Post-Doctoral fellowship** offer from Universiti Tun Hussein Onn Malaysia, Parit Raja, Malaysia in year 2020 and 2021.
- Received **Post-Doctoral Fellowship** offer from University of Macao, Macao (*Macanese Pataca 25000*) in year 2019.
- Received **"Research award"** from University of Petroleum and Energy Studies, Dehradun in the year 2015 and 2016.
- Received **Research Assistant Fellowship** from National Cheng Kung University, Tainan, Taiwan in year 2016.
- Received **Research Assistant Fellowship** offer from National Taiwan University of

Science and Technology, Taipei, Taiwan in year 2016.

- Sahoo, P.K., Singh, Y. (Co-PI): Letter of Award on project "*Feasibility of harnessing concentrated solar thermal energy to produce and store pyrolysed biofuels for automotive engine applications*" by SERI, DST, New Delhi, India Project ID: DST/TM/SERI/2k12/51(G) (3 years duration; awarded on 20-11-2013; INR 42,85000)
- Singh, Y. (PI): Letter of Award on project " *Development of All Terrain Vehicle*" by HCST, Mathua, UP, India, Project ID: HCST/RD/2011-16 (1 year duration; awarded on January 2011, INR 200000)

9. **Honors (Invited Editorial Board Member/Peer Reviewer/Judge/Scientific Committee Member/Certificate)**

- **Guest Editor:** Materials Today Proceedings Journal (SCOPUS indexed), AIP Conference Proceedings (SCOPUS indexed), Facta Universititatis Series: Mechanical Engineering (SCI and SCOPUS indexed, **IF: 0.875**), Advances in Materials and Processing Technologies (SCOPUS indexed), Crystals (MDPI, SCI indexed, **IF:2.670**).
- **Co-Editor:** Graphic Era Journal (River Publishers)
- **Associate Editor:** International Journal of Mathematical Engineering and Management Science (https://www.ijmems.in/editorialboard.php)
- **Member of professional Bodies:** SAE, IRED, IAERD, World Academy of Science & Technology, ASHRAE
- **International Advisor:** Institute of Research & Technology
- **Peer-reviewer of Journals:** Applied energy (IF:11.446); Energy Conversion and Management (IF:11.533); Renewable Energy (IF:8.634); Fuel (IF:8.035); Biomass conversion and Biorefinery (IF:4.050); Energy and Fuels (IF: 4.654); Industrial and Engineering Chemistry Research (IF: 4.326), International Journal of Hydrogen Energy (IF: 7.139); (Industrial Crops and Products (IF: 6.449), Process safety and Environmental Protection (IF: 7.926), Heliyon (Scopus), Energy (IF: 8.857), Materials Today Proceedings (Scopus), Biomass and Bioenergy (IF:5.774), World review of science, technology and sustainable development (Inderscience Publishers, Scopus)**,** Journal of the Brazilian society of Mechanical Engineers (IF:2.361)**,** Biofuels (IF: 2.731), International Journal of Green Energy (IF:3.206).
- **International program committee member:** (I) 15th China-Europe International Symposium on Software Engineering Education, Lisbon, Portugal, May 30-31, 2019 (https://www.si.uevora.pt/divulgacoes/agenda/(item)/26401)
- **International Committee Member** at 6th Intenational Conference on Alternative Fuels, Energy and Environment: Future and Challenges, Turkey, 6-8 October 2023 (https://icafe-e.com/eng/template-kit/homepage/)
- **International Technical Committee Member:** 3rd International Conference on Engineering Management (Iconf-EM 2018) was held on August 17-19 in Shenzhen, China. (https://www.atlantis-press.com/proceedings/icesame-18)
- **Articles Reviewed:** More than 200 articles reviewed for highly reputed journals.
- Attended One week online faculty development program on *Futuristic Trends in Energy, Material and Manufacturing Technology*, HCST, Mathura, 2021 **(Duration-Five days)**
- Attended Short term Course on *Advanced Manufacturing Technology* IIT, Guwahati, 2020. **(Duration-Five days)**

- Attended 2nd One week International Faculty Development Program-Online on "*Role of Materials and Processing in Additive Manufacturing: 3D printing to industry*" GLA University, Mathura, 2020. **(Duration- Seven days)**
- Attended Webinar Series on "*Recent Research Trends in Tribology*" Girijananda Chowdhury Institute of Management and Technology, Guwahati under the scheme of TEQIP-III, 2020. (**Duration-Five days)**
- Attended Online Faculty Development Programme on "*ANSYS*" Amrapali Group of Institutions, Haldwani, Under the scheme of TEQIP-III, 2020 **(Duration-Five days)**
- Attended International Webinar on "*Science and Engineering for Nature Conservation"* J C Bose University of Science and Technology YMCA, Faridabad, 2020. **(Duration-One day).**
- Attended Faculty Development Program on *"Advanced and Innovation Manufacturing Technologies (AIMT)"* G L Bajaj Institute of Technology and Management, Greater Noida, UP, Under the scheme of TEQIP-III, 2020 **(Duration-5 days).**
- Attended Faculty development program on "*Modern Thermal Power Generation Technologies*", G L Bajaj Institute of Technology and Management, Greater Noida, UP, Under the scheme of TEQIP-III, 2019 **(Duration-5 days).**
- Attended *Spectroscopy* workshop at SPSU, Udaipur, India, 2018 **(Duration-2 days).**
- Attended *Manufacturing and Modeling of Dynamic Systems* workshop at SLIET, Longowol, Punjab, India. **(Duration- Two Weeks).**

10. Convener/Organizer

- **Co-Convener** of International Conference on Recent Trends in Materials Science with Computational Analysis, GEU, Dehradun, India, 13-14th July, 2022.
- **Convener** of International Conference on Advances in Manufacturing Technologies and Application of Artificial Intelligence, GEU, Dehradun, India, 6-7 August 2021.
- **Convener** of International Conference on Technological Advancements in Materials Science and Manufacturing, GEU, Dehradun, India, 19-20th February 2021.
- **Organizing Secretary** of National Conference on Recent Advances in Mechanical Engineering (RAME- 2012) at Hindustan College of Science and Technology, Mathura, India, 8-9 May 2012.

11. Book Chapters

1) Singh et al. **The Effectiveness of Balanites aegyptiaca Oil Nanofluid Augmented with Nanoparticles as Cutting Fluids during the Turning Process,** (2023) *Biowaste and Biomass in Biofuel Applications*, pp. 111-122.

2) Singh et al. **Challenges and Future Prospects of Biofuel Generations: An Overview,** (2023) *Biowaste and Biomass in Biofuel Applications*, pp. 49-62.

3) Singh et al. **Ecotoxicology: Methods and Risks,** (2021) *Handbook of Nanomaterials and Nanocomposites for Energy and Environmental Applications: Volumes 1-4*, 4, pp. 3373-3392.

4) Singh et al. **The Effectiveness of Balanites aegyptiaca Oil Nanofluid Augmented with Nanoparticles as Cutting Fluids during the Turning Process,** (2023) *Biowaste and Biomass in Biofuel Applications*, pp. 111-122.

5) Singh et al. **Current scenario of renewable energy in India and its possibilities in the future,** (2022) *Biofuel Technologies for a Sustainable Future: India and Beyond*, pp. 1-24.

6) Singh et al. **Biofuels - are they a sustainable alternative?,** (2022) *Biofuel Technologies for a Sustainable Future: India and Beyond*, pp. 103-117.

7) Singh et al. **Putranjiva roxburghii: A novel feedstock as a bio-based lubricant with MoS_2 nanoparticles effect and tribological analysis,** (2021) *Properties and Uses of Vegetable Oils*, pp. 43-54.

8) Singh et al. **Jatropha curcas,**(2021) *Properties and Uses of Vegetable Oils*, pp. 161-176.

9) Singh et al. **Experimental investigations on influence of preheating the jatropha based straight vegetable oil through exhaust gas framework on an IDI CI engine** (2021) *Properties and Uses of Vegetable Oils*, pp. 177-196.

12**. Book**

- **Editor** of e-book titled "*Design of VAR system using Waste Heat Recovery of Diesel Genset*" in Lambert Academic Publications, Germany with ISBN 978-3-8443-1803-6. (Edition-1, 2012) (https://www.amazon.com/Design-System-Recovery-Diesel-Genset/dp/3844318038)
- **Editor** of book entitled "*Properties and Uses of Vegetable Oils* "published by Nova Publishers. (https://novapublishers.com/shop/properties-and-uses-of-vegetable-oils/)
- **Editor** of book entitled "*Advanced Manufacturing Processes*", CRC Press (Under Process, Scopus indexed) (https://www.routledge.com/Advanced-Manufacturing-Processes/Singh-Singh-Ram/p/book/9781032054469)
- **Editor** book entitled "*Biofuel technologies for a Sustainable Future*: *India and Beyond*", River Publishers (https://www.riverpublishers.com/book_details.php?book_id=1003).
- **Editor book** entitled *"Biowaste and biomass in biofuel applications".* CRC Press (https://www.routledge.com/Biowaste-and-Biomass-in-Biofuel-Applications/Singh-Strezov-Negi/p/book/9781032193588)
- **Book Series Editor** titled **"***Engineering Tribology, Manufacturing and Applied Energy",* CRC Press (https://www.routledge.com/Engineering-Tribology-Manufacturing-and-Applied-Energy/book-series/CRCETMAE)
- **Editor** book entitled *"Biolubricants: Feedstocks, Catalysts and Nanotechnology*", Walter De Gruyter (Under Process)
- **Book Series Editor titled** *"Green Chemistry and Engineering Tribology*", Walter De Gruyter.