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Dr. ASHISH NAYYAR

Associate Professor-II – Department of Mechanical Engineering with 17 years teaching experience

Teaching Experience (17 years)

- ◆ Two years teaching (2002-2004) in Maharishi Arvind Institute of Engineering & Technology, Jaipur.
- ◆ Presently Working at Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur as Professor in the Department of Mechanical Engineering.

Subject Taught

Under graduate level

I.C. Engine, Machine Design-I & Machine Design-II, Mechanics of solids, Machine Drawing, Non conventional energy sources, Mechanical engineering, Dynamics of machines, Power plant engineering, Steam turbine, Gas turbine, Production Engineering, Solar Engineering

Post graduate level

Design of thermal systems, Solar energy, Renewable energy sources, Thermal power plant engineering, Advanced Refrigeration and Air Conditioning techniques, Energy conservation

Professional Qualification

- Ph.D., MNIT Jaipur, (2018)
- M.Tech. (Energy Engineering) (1st Rank), CGPA= 9.41, MNIT Jaipur (2009)
- Bachelor in Mechanical Engineering, 65.35%, M.B.M. Engg. College, Jodhpur, (2002)
- Diploma in Mechanical Engineering (Gold Medalist), 74.98%, Govt. Polytechnic College, Ajmer (Board of Technical Education, Rajasthan, Jodhpur) (1999)

Awards Conferred:

- First in all Rajasthan in diploma course and awarded by “BHAMASHAH AWARD-1999” by Maharana Mewar Foundation, Udaipur.
- Appreciation (BEYOND THE BEST) in Faculty Development Programme organized by CEED INDIA

Membership of Esteemed Society:

- Life member of Indian Society for Technical education (ISTE) M.No-. LM 50445
- Member of Institution of Engineers (India), M-146431-5
- Member and Faculty Coordinator SAEINDIA Student’s chapter in the institute (ID 7140311839)
- Member of American Society of Mechanical Engineers (ASME)

Patents (Published)

1. K. Gupta, Z. Nizami, K. Suthar, D.G. Das Agrawal, S.K. Jain, P.K. Jain, A. Nayyar, **Two wheeler vehicle to prevent back ache for rider**, Application No.201811002382 A, 2018. doi:Publication Date : 26/01/2018.
2. A. Nayyar, P. Saraswat, A. Agarwal, S.K. Jain, K. Gupta, G. DAS AGRAWAL, N.S. Sran, S. Vijayvergiya, Y. Sharma, C. Kumar, D.K. Sharma, N.K. Sain, C.K. Prajapati, M. Bhoi, D. Sharma, B. Jain, A. Dhamani, A. Sharma, **Dual-Axis Parabolic Solar Cooker System To Automatically Track Sunlight**, Application No.201811033875 A, 2018. Publication Date : 28/09/2018.
3. A. Nayyar, P. Saraswat, R.S. Chundawat, K. Gupta, R.R. Singh, S. Kumar, A. Kumar, **System To Provide Automatic Gear Change And Throttle Coupled To Gear Lever Of Sports Vehicle**, Application No.201811020033 A, 2018. Publication Date: 15/06/2018.
4. A. Agarwal, Y. Sharma, C.K. Prajapati, M. Bhoi, C. Kumar, **Tracking Parabolic Solar Cooker System**, Application No.201811023286 A, 2018. Publication Date: 13/07/2018.
5. A. Nayyar, P. Saraswat, K. Gupta, S. Vijayvergiya, N.S. Sran, C.P. Kumar, M. Bhoi, J.K. Sen, **Parabolic Solar Cooker System To Track Sunlight In Real-Time**, Application No.201811025948 A, 2018. Publication Date : 03/08/2018.

Publications

International Journals:

1. S. Singh, A. Nayyar, R. Goyal, and M. Saini, "Experimentally Optimization of a Variable Compression Ratio Engine Performance Using Different Blends of Cotton Seed with Diesel Fuel at Different Compression Ratio," *Int. J. Mech. Eng. Robot. Res.*, vol. 8, no. 1, pp. 121–128, 2019.
2. A. Nayyar, D. Sharma, S. Lal, B. Bhardwaj, and M. Augustine, "Modeling and experimental investigation for performance and emissions on a diesel engine using bio-oxygenated ternary fuel blends," *Energy*, vol. 168, pp. 136–150, 2019.
3. C. Kumar, K. B. Rana, B. Tripathi, and A. Nayyar, "Properties and effects of organic additives on performance and emission characteristics of diesel engine: a comprehensive review," *Environ. Sci. Pollut. Res.*, vol. 25, no. 23, pp. 22475–22498, 2018.
4. K. D. Choudhary, A. Nayyar, and M. S. Dasgupta, "Effect of compression ratio on combustion and emission characteristics of C.I. Engine operated with acetylene in conjunction with diesel fuel," *Fuel*, vol. 214, pp. 489–496, 2018.
5. K. Gupta, K. Suthar, S. K. Jain, G. D. Agarwal, and A. Nayyar, "Design and experimental investigations on six-stroke SI engine using acetylene with water injection," *Environ. Sci. Pollut. Res.*, 2018.
6. C. Kumar, K. B. Rana, B. Tripathi, and A. Nayyar, "A comparative study of oxygenated additives for diesel in compression ignition engine," *Int. J. Renew. Energy Technol.*, vol. 9, no. 1/2, pp. 16–27, 2018.
7. S. K. Pathak, A. K. Thakur, A. Nayyar, and C. Kumar, "A comprehensive review of biodiesel and CNG as alternative fuels for compression ignition engine," *Int. J. Renew. Energy Technol.*, vol. 9, no. 1/2, pp. 223–243, 2018.
8. D. Mathur, A. Maheshwari, A. Sharma, C. Kumar, and A. Nayyar, "Design and Optimization of Perimetric Disc Brake Rotor," *Int. J. Innov. Res. Sci. Eng. Technol.*, vol. 7, no. 8, pp. 9157–9164, 2018.
9. A. Nayyar, D. Sharma, S. L. Soni, and A. Mathur, "Characterization of n-butanol diesel blends on a small size variable compression ratio diesel engine: Modeling and experimental investigation," *Energy Convers. Manag.*, vol. 150, 2017.

10. A. Nayyar, D. Sharma, S. Lal, and A. Mathur, "Experimental investigation of performance and emissions of a VCR diesel engine fuelled with n-butanol diesel blends under varying engine parameters," *Environ. Sci. Pollut. Res.*, 2017.
11. A. Nayyar, D. Sharma, S. L. Soni, and A. Mathur, "Experimental study of performance and exhaust emissions of a VCR diesel engine fuelled with oxygenated additives," in *Proc. ASME. 57601; Volume 1: Boilers and Heat Recovery Steam Generator; Combustion Turbines; Energy Water Sustainability; Fuels, Combustion and Material Handling; Heat Exchangers, Condensers, Cooling Systems, and Balance-of-Plant, V001T04A021*, 2017.
12. A. K. Dhariwal and A. Nayyar, "An Experimental Investigation on Performance of Agricultural Stationary Diesel Engine Fueled With Hydroxy-Diesel Mixture as a Fuel," *Int. J. Recent Eng. Res. Dev.*, vol. 02, no. 09, pp. 1–6, 2017.
13. N. K. Sain, A. Nayyar, and C. Kumar, "Effect of Various Parameters on Engine Performance and Emissions for a Single Cylinder VCR Diesel Engine," vol. 2, no. 2, pp. 20–25, 2016.
14. A. Goswami, S. Vashist, and A. Nayyar, "Effect of Compression Ratio on the Performance Characteristics of Spark Ignition Engine Fueled with Alternative Fuels: A Review," *SAE Tech. Pap. 2015-01-0766*, vol. 2015–April, no. April, 2015.
15. C. Kumar, A. Nayyar, M. Bafna, A. Agarwal, and V. Parkash, "Analysis of emission Characteristics of NM –Diesel Blend on VCR Diesel Engine" *Int. J. Recent Adv. Mech. Eng.*, vol. 4, no. 1, pp. 115–124, 2015.
16. N. Goyal, A. Nayyar, and C. Kumar, "Experimental Investigation of the Performance of Vcr Diesel Engine Fuelled By N-Butanol Diesel Blend," *Int. J. Res. Eng. Technol.*, vol. 4, no. 8, pp. 444–450, 2015.
17. C. Kumar, M. Bafna, A. Nayyar, V. Parkash, and N. Goyal, "Experimental Investigation of the Performance of VCR Diesel Engine Fuelled by NM-Diesel blend," *Ijetae*, vol. 4, no. 8, pp. 122–125, 2014.
18. S. Sharma and A. Nayyar, "A review on available evidence for effects of ethanol fuels on air pollutant emissions from motor vehicles," *Int. J. Sci. Res.*, vol. 3, no. 1, pp. 331–334, 2014.
19. D. K. Sharma, A. Nayyar, and agarwal ram Kumar, "Biodiesel production from *Jatropha curcas* in India: A review," *Int. J. Eng. Res. Technol.*, vol. 6, no. 2, pp. 143–146, 2013.
20. P. M. Bhatt and A. Nayyar, "Explanation of Indian climatic zones and incorporation of passive architectural techniques in buildings," *Paripex - Indian J. Res.*, vol. 1, no. 10, pp. 4–8, 2012.
21. S. Kasera, A. Nayyar, and D. Sharma, "The Energy Consumption Performance of Roof Garden," *Int. J. Sci. Eng. Res.*, vol. 3, no. 7, pp. 1–4, 2012.
22. S. Kasera and A. Nayyar, "Energy Simulation : A Case Study of Institutional Building," *Int. J. Eng. Stud.*, vol. 4, no. 2, pp. 87–95, 2012.
23. S. Kasera, A. Nayyar, and R. K. Goyal, "Opportunity of Energy Saving : A Case Study of engineering college workshop," *J. Pure Appl. Sci. Technol.*, vol. 1, no. 2, pp. 59–65, 2011.

National Journals:

1. K. Dhariwal, A. Nayyar, and dinesh kumar Sharma, "Utilization of HHO gas with diesel fuel in stationary compression ignition engine," *Ski. Res. J.*, vol. 8, no. 1, pp. 52–59, 2018.
2. S. K. Pathak, A. Nayyar, and C. Kumar, "Effects of Exhaust Gas Recirculation (EGR) on Performance and Emissions of a Compression Ignition (CI) Engine Fuelled with Diesel," *Ski. Res. J.*, vol. 7, no. 2, pp. 64–69, 2017.
3. C. Kumar, K. B. Rana, B. Tripathi, and A. Nayyar, "Performance and emission characteristics of VCR Diesel fueled by diesel additive blend," in *Renewable Energy Sources and Sustainable Development: Opportunities and Challenges (RESSD-2016)*, 7-8 Oct. 2016, 2016.

4. N. Goyal, A. Nayyar, and C. Kumar, "Experimental Investigation of the Emission of Diesel Engine Fuelled by N-Butanol-Diesel Blend," *Ski. Res. J.*, vol. 6, no. 1, pp. 60–64, 2015.
5. K. D. Choudhary and A. Nayyar, "Optimization of Induction Flow Rate of Acetylene in the C . I . Engine Operated on Duel Fuel Mode," *Int. J. Emerg. Technol. Adv. Eng.*, vol. 3, no. 12, pp. 3–8, 2013.
6. A. Nayyar and N. Goyal, "Recent Trends in internal combustion engines," *Ski. Res. J.*, vol. 2, pp. 122–126, 2012.
7. A. Nayyar, "Performance of jatropha blends in a diesel engine," *Ski. Res. J.*, vol. 1, pp. 102–108, 2011.

International Conferences:

1. A. Nayyar, D. Sharma, S. L. Soni, and A. Mathur, "Experimental study of performance and exhaust emissions of a vcr diesel engine fuelled with oxygenated additives," in *Proc. ASME. 57601; Volume 1: Boilers and Heat Recovery Steam Generator; Combustion Turbines; Energy Water Sustainability; Fuels, Combustion and Material Handling; Heat Exchangers, Condensers, Cooling Systems, and Balance-of-Plant, V001T04A021*, 2017.
2. N. K. Sain, A. Nayyar, C. Kumar, K. B. Rana, and B. Tripathi, "Effect of nitromethane-n butanol-diesel blends on the emission of a diesel engine," in *6th International Conference on Advances in Energy Research, 12-14 Dec. 2017, 2017*, p. 91.
3. A. Nayyar, D. Sharma, S. L. Soni, A. Mathur, and N. K. Sain, "Effect of nitromethane-N-butanol-diesel blends on the performance and emmission of a diesel engine," in *New and Renewable Energy Resources for Sustainable Future (ICORNER-2017), 2-4, Feb. 2017, 2017*.
4. A. Nayyar, C. Kumar, and S. K. Pathak, "A Comprehensive Review of biodiesel and CNG as alternative fuels," in *New and Renewable Energy Resources for Sustainable Future (ICORNER-2017), 2-4, Feb. 2017, 2017*, p. Page no. 113.
5. M. I. U. Hque, A. Nayyar, and C. Kumar, "Possibilities of using hydrogen with gasoline in SI engine : A Review," in *New and Renewable Energy Resources for Sustainable Future (ICORNER-2017), 2-4, Feb. 2017, 2017*.
6. A. Nayyar, D. Sharma, and S. L. Soni, "Opportunity and effects of using alternative fuels in C.I. Engine: A Review," in *International conference on Recent Trends in Engineering and Material science (ICEMS 2016), 17-19 March 2016, 2016*.
7. A. Nayyar and A. K. Dhanopia, "Design, development and testing of prototype of vertical axis wind turbine for highways," in *ICRTME15, International Conference on Recent Trends in Mechanical Engineering, 25-26 March 2015, 2015*.
8. D. kumar Sharma, A. Nayyar, and A. R. Kumar, "Biodiesel production from jatropha curcas in india: A Review," in *World congress on "Frontiers of Mechanical, Aeronautical and Automobile Engineering" (WCFMAAE-13), 2-3 Feb. 2013, 2013*.
9. A. Nayyar, "Overview : The effect of exhaust gas recirculation (EGR) on emission control in diesel engine," in *International Conference on Recent Trends in Mechanical & Manufacturing Engineering (ICRTMM-2016), 8-9 April 2016, 2016*.

National Conferences:

1. Keshav Jakhotia and A. Nayyar, "A technical review of NOx reduction technologies in diesel Engines," in *Future Dimensions in Mechanical Engineering (NCFDME-18), 10-11 Aug. 2018, 2018*.
2. N. K. Sain, A. Nayyar, and C. Kumar, "Performance characteristic of a diesel fuelled by diesel-n-butanol-nitro methane," in *Future Dimensions in Mechanical Engineering (NCFDME-18), 10-11 Aug. 2018, 2018*.

3. A. Nayyar, "Bio-diesel production from non-edible oils in india," in Achieving Make in India Through Manufacturing Excellence (AMITME-2016), 26-27 Feb. 2016, 2016.
4. C. Kumar, A. Nayyar, K. B. Rana, and B. Tripathi, "Performance and emission characteristic of C. I. Engine using Additive : A Review," in Emerging Trends in Automobile Engineering, 15-16 Oct. 2016, 2016, pp. 1–4.
5. A. Nayyar, "Experimental optimization of various parameters to determine engine performance with less emission for a single cylinder VCR diesel engine," in Achieving Make in India through Manufacturing Excellence (AMITME-2016), 26-27 Feb. 2016, 2016.
6. A. Nayyar, "Effect of different possible additives on performance of single cylinder diesel engine:A Review," in Achieving Make in India Through Manufacturing Excellence (AMITME-2016), 26-27 Feb. 2016, 2016.
7. C. Kumar, K. B. Rana, B. Tripathi, and A. Nayyar, "Performance and emission characteristics of VCR Diesel fueled by diesel additive blend," in Renewable Energy Sources and Sustainable Development: Opportunities and Challenges (RESSD-2016), 7-8 Oct. 2016, 2016.
8. D. K. Sharma, A. Nayyar, A. kumar Agarwal, and C. Kumar, "Review of safety standards in automobiles in India compared to USA and European Countries," in Emerging Trends in Automobile Engineering, 15-16 Oct. 2016, 2016, p. 79.
9. A. Nayyar, "An evaluation of performance and combustion characteristics of a CI Engine on higher compression ratios," in National Conference on Futuristic Trends in Mechanical Engineering (NCFTME-15), 14-15 March 2015, 2015.
10. A. Nayyar, J. Kumar, and C. Kumar, "Exhaust gas recirculation effect on NOx emission in diesel engine," in Emerging trends in Mechanical Engineering in Education & Professional Practices (ETMEPP-15), 28 Feb.-1 March 2015, 2015.
11. A. Nayyar, "A literature review of six sigma," in Recent Advances and Future Directions in Mechanical Engineering, 7-8 Nov. 2014, 2014.
12. A. Nayyar and J. K. Upadhyay, "The effect of EGR on emission control in diesel engine," in Recent Advances and Future Directions in Mechanical Engineering, 7-8 Nov. 2014, 2014.
13. C. Kumar, A. Nayyar, and M. Bafna, "Performance evaluation and emission characteristics of C.I engine using alternative fuel: a review," in Power System Operation and Energy Management: Vision 2020, 2014.
14. A. Nayyar and D. K. Sharma, "An evaluation of performance characteristics of a compression ignition engine on higher compression ratios," in National Conference on "Future Directions in Thermal engineering" 11 May 2013, 2013.
15. A. Nayyar, "Magnetic refrigeration," in Emerging Trends in Power system Engineering (ETPSE-2012), 23 April 2012, 2012.
16. A. Nayyar, "Air pollution due to marble dust and its management," in Air Quality Management, 28-29 April 2012, 2012.
17. D. Singh, A. Nayyar, and N. K. Banthiya, "A bridge between petro-and bio fuels," 2012.
18. D. Singh, A. Nayyar, and B. Kumar, "Lean implementation by managing quality issues," 2012.
19. P. K. Saxena and A. Nayyar, "Performance and emission characteristics of jatropa oil in a direct injection compression ignition engine," in ISTE Annual Faculty Convention-2009, 5-6 Dec. 2009, 2009.
20. A. Nayyar and S. Das, "Waste heat recovery techniques," in Innovation in Engineering and Technology (IET-2008), 15 Sept. 2008, 2008.

Articles in Magazines

1. A. Nayyar, CAR-Computer (Automotive Technology), SKIT Times. (2005), 26.
2. A. Nayyar, How a Hologram is made, SKIT Times. (2006), 29–30.

Book Publication

1. Mechanics of Solid, Nodia & Company, 2008.
2. Mechanical Engineering, Vasu Publication, Jaipur, 2006.
3. B.E. Ist Year Engineering Solved Paper, 2005.
4. A. Nayyar, ed., Electronics & Communications Solved Papers, Shri Krishna Publication, Jaipur, 2004.
5. Renewable Energy Technology, Neelkanth Publishers (P) Ltd., 2010.
6. Question Sets- Mechanical & Production Engineering, Shri Krishna Publication, Jaipur
7. Performance of Nitromethane- Diesel Blends Fuled VCR CI Engine, LAP LAMBERT Academic Publishing, 2018.

Keynote:

1. Invited talk in international conference on recent trends in mechanical and manufacturing engineering (ICRTMME-2016), 11 April 2016, VIT (East), Jaipur.
2. Panellist in national conference on sustainable engineering applications of material science and Phycio-chemical innovations, 26–27 Feb. 2016, SKIT, Jaipur.
3. Invited Talk in national conference on achieving make in india through manufacturing excellence (AMITME-2016), 9 March 2016, Rajdhani Engineering College, Jaipur.
4. Resource person in AICTE sponsored two weeks faculty development programme on training of trainers for accreditation, 23 March to 3 April 2015, SKIT, Jaipur.

Faculty Development Programme and Workshop:

1. Two days Faculty Development Programme on NBA Accreditation: Related Terminology and Issues, 13–14 Sept. 2018, SKIT, Jaipur.
2. One week An Inter- Departmental Workshop on Mechatronics, 8–13 January 2018, SKIT Jaipur.
3. One week AICTE-ISHRAE refresher course on ‘Refrigeration and Air Conditioning, 17–21 December 2018, Chitkara University.
4. One week short term course on Research Methodology, 20–24 March 2017, MNIT Jaipur & IIE Mumbai.
5. Two days faculty development programme on Blooms Taxonomy: Teaching and Learning, 24–25 April 2017, SKIT, Jaipur.
6. One week short term course under quality improvement programme on Emerging Trends in Development of Alternative Fuelled Dual Fuel Compression Ignition Engines, July 13-17 2015, IIT Delhi.
7. Two weeks AICTE sponsored faculty development programme on Training of Trainers for Accreditation, 23 march-3 April 2015, SKIT, Jaipur.
8. One day PIC, DST & GOR sponsored IPR camp on Intellectual Property Rights, 26 March 2014, MNIT Jaipur.
9. One week faculty development programme & two days programme on Digital Classroom, 18–26 July, 2013, Pearson Education limited, Jaipur.
10. One day Author workshop National Live WebEx by Keith Lambert (Elsevier),” 2013, p. 11 September 2013, SKIT, Jaipur.
11. One week short term course on Advanced Engine Combustion & Emission Control, 17–22 July 2012, IIT Kanpur.
12. Three days Faculty Development Programme, 1–3 August 2011, SKIT, Jaipur.
13. Three days faculty development program Beyond the Beats, January 17-19 2011, CIEED INDIA, SKIT, Jaipur.
14. Four days ASME Student Leadership Seminar-2011, 26–28 Feb. 2011, SKIT, Jaipur.
15. One Day PFC-TIFAC, DST, GOI New Delhi sponsored workshop on Intellectual Property Rights, August 19 2011, MNIT Jaipur.
16. One day ISHRAE workshop on Energy Efficient Refrigeration & Air Conditioning Techniques, 5 February 2010, GIT, Jaipur.
17. Two days training program on Energy Simulation of Building, 20–21 March 2010, MNIT Jaipur.

18. One day ASHRAE workshop on HVAC system design & equipment selection & Primary only variable flow pumping system, 25 sept. 2010, Jaipur.
19. Three days Soft Skills Workshop, 15–17 Sept. 2009, Infosys, Chandigarh.
20. Two days Faculty Development Programme, 10–12 August 2009, SKIT, Jaipur.
21. Two week AICTE sponsored staff development programme on Induction Training Workshop for New Teachers, 28 April-10 May 2008, SKIT, Jaipur.
22. Two week MHRD/AICTE summer school on Alternative Automobile Fuels, 30 June-12 July 2008, MNIT Jaipur.
23. One week Faculty development Programme, 28 July-1 Aug. 2007, SKIT, Jaipur.
24. Two days workshop (under TEQUIP) on Intellectual Property Rights, 26–27 may 2007, MNIT Jaipur.
25. One week ATC course on Autodesk Inventor-11, 17–25 Dec. 2006, SKIT, Jaipur.
26. One week ATC course on AutoCad-2007, 9–15 Dec. 2006, SKIT, Jaipur.
27. Two weeks Staff Development Programme, 6–16 Dec. 2006, SKIT, Jaipur.
28. One day seminar on Advanced Manufacturing Technologies, 30 Dec. 2005, JNIT, Jaipur.
29. Two days seminar on Computational Fluid Dynamics, 7–8 April 2005, MNIT Jaipur.

Consultancy and Appreciation

1. Consultancy as an Advisor for Shri Jagdishprasad Jhabarmal Tibrewala University, Jhunjhunu, in: 2017: p. Feb. 2017-2018.
2. Consultancy for student project work from Gyan Vihar University, Jaipur, in: 2014: p. 21 March 2014, SGVU, Jaipur.
3. Consultancy for laboritries development of Shri Jagdishprasad Jhabarmal Tibrewala University, Jhunjhunu, in: 2012: p. 9 May 2012, JJTU, Jhunjhunu.
4. Consultancy for student project from Jodhpur Institute of Engineering & Technology, Jodhpur, in: 2015: p. 17 June 2015, JIET, Jodhpur.
5. Performed Academic Audit for UG and PG programmes of Shri Jagdishprasad Jhabarmal Tibrewala University, Jhunjhunu, in: 2018: p. 3 Jan. 2018, Jhunjhunu.
6. Appreciation from CIEED INDIA for “Beyond the Beats,” in: 2011: p. 17–19 January 2011, SKIT, Jaipur.
7. Appreciation from Texas Instruments for participation and ideas in India Innovation challenge Design Contest 2018, in: 2018: p. 2018.
8. Appreciation from Swami Keshvanand Institute of technology, Management & Gramothan for establishing kitchen waste bio gas plant, in: 2007: p. 18 July 2007, SKIT, Jaipur.
9. Appreciation from Jaipur Engineering College Kukas for planning and selection of equipment for laboratories, in: 2008: p. 22 Aug. 2008, Jaipur Engineering College, Jaipur.
10. Appreciation from Vivekananda Global University for established centre for industrial robotics, in: 2015: p. 17 December 2015, VGU, Jaipur.
11. Appreciation from Marudhar Engineering College for planning and establishing our Mechanical Engineering department, in: 2007: p. 3 September 2007, MEC, Bikaner.
12. Appreciation from Vivekananda Institute of Technology for planning the institute building and establishing our Mechanical Engineering department, in: 2008: p. 22 July 2008, VIT Jaipur.
13. Appreciation from Parents for guiding and mentoring, in: 2016: p. 1 August 2016, M & M Ltd.
14. Appreciation from Jaipur Engineering College for consultant of kitchen waste based bio gas plant, in: 2008: p. 13 August 2008, JEC, Jaipur.
15. Expert in Panel Discussion in national conference on sustainable engineering application of material science and physico- chemical innovations (NCSEAM-2016), in: 2016: p. 26–27 February 2016, SKIT, Jaipur.
16. Appreciation from Vivekananda College of Engineering for planning the institute building and establishing our Mechanical Engineering department, in: 2008: p. 22 July 2008, VCE, Jaipur.

17. Appreciation from Rajasthan Institute of Engineering & Technology for planning and selection of equipment for our laboratories of the department, in: 2007: p. 18 May 2007, RIET, Jaipur.

Grants Fetched:

1. For National Conference on “Renewable Energy: Future Saviour of the World” 7th & 8th May 2010. (Rs.One Lac Fifty thousand, approx)
Ministry of New and Renewable Energy, Govt. of India, Delhi
Suzlon India Ltd. And REIL, Jaipur
Other private sponsors
3. For Modernization and Removal of Obsolescence, 2013-14 (Rs.18.1 lacs)
All India Council for Technical Education
4. The **Institution of Engineers (INDIA)** for Project on Smart Mobile transportation, Project I.D. UG2015022 29-05-2015 (Rs. Twenty Thousand)
5. For Travel Grant from AICTE-Present paper in ASME international conference-USA, 2017,
All India Council for Technical Education,
Approval F. No. 10-19/RIFD/TG/POLICY- 1/2016-17
6. International Travel Support by **DST Rajasthan**
Commitment letter NO. F.7(5)DST/R&D/TG/2014/4201 dated 15.06.17

Conference/Seminar/workshop Organized:

- Convener --International Conference New and Renewable Energy resources for Sustainable Future, Feb. 2-4, 2017
- Coordinator of SAEINDIA National Convention October 10, 2015 at SKIT Jaipur
- Principal Coordinator-National conference on Recent Advances and Future Directions in Mechanical Engineering, November 8-9, 2014
- Advisor-SAEINDIA Student Convention held at MNIT Jaipur on September 13, 2014
- Co-Convener-National Conference on “Emerging Trends in Mechanical Engineering: Issues, challenges & Development” September 23-24, 2011.
- Convener-National Conference on “Renewable Energy: Future Saviour of the World” 7th & 8th May 2010.

National Competitions

1. Faculty Advisor of MOTO Dangal held on an off road track 2017.
2. Faculty Advisor of Main event BAJA SAE INDIA 2017.
3. Faculty Advisor of Virtual BAJA SAEINDIA 2010-2011, in: 2010: p. 2–3 July 2010, SAEINDIA.
4. Faculty Advisor of XCELERATORS MOTORSPORTS awarded I prize (Jigyasa 17), in: 2017: p. 22–24 September 2017, Global Technical Campus.
5. Faculty Advisor of International Go- Kart Championship, in: 2015: p. 27–30 March 2015, GO-KART.
6. Faculty Advisor of Virtual BAJA SAEINDIA, in: 2014: p. 1–2 Aug. 2014 at Gujarat Technological University.

M. Tech. Guided

1. Forced Convection Heat Transfer Analysis in circular tube Using Composite Desirability (CD) Function: An Experimental and CFD Based Study
2. An experimental investigation of effect of Ethanol Gasoline Blend on Exhaust emissions and Performance of a spark Ignition Engine Using DOE as a tool

3. Optimization of Performance of a single cylinder four stroke VCR CI Engine using cotton seed methyl ester-diesel blends
4. An Experimental study on agricultural stationary diesel engine fuelled with Hydroxy-Diesel mixture as a fuel
5. An experimental investigation of effect of EGR on performance and emission characteristics of a dual fuel CI engine using CFD as a tool
6. An Experimental Investigation of using Hydroxygen-Gasoline Mixture on VCR spark ignition engine and optimization of engine parameters
7. Study of Performance and Emission of Variable Compression Ratio Diesel Engine Fuelled with Nitromethane-n-Butanol-Diesel Blends
8. Effect of Various Absorbing Materials on Performance of Single Basin Single Slope Solar Still
9. Experimental Investigation of the Performance and Emission of Diesel Engine Fuelled with n-Butanol Diesel Blends
10. Experimental Investigation of the Performance and Emission of VCR Diesel Engine by NM-Diesel Blend
11. Design, Fabrication and Testing of Heat Exchanger using Waste Heat Recovery of I.C. Engine
12. Stochastic Finite Element Buckling Response of Laminated Composite Plate in Thermal Environment Using Micromechanical Approach
13. Performance Analysis of 2 Stroke Single Cylinder SI Engine Operating on Alcohol-Gasoline Fuel Blends Using Multi Spark Plugs
14. Optimization of Induction Flow Rates and Compression Ratios for Acetylene in a Compression Ignition Engine
15. Energy Simulation: A Case Study of an Institutional Building
16. Development of a Simulation Program for Thermal Analysis of Single Zone Building with Passive Architecture Techniques.

Responsibilities in the Present Job

Teaching/Departmental Responsibilities

- ◆ Working as Associate Professor-II in the Department of Mechanical Engg.
- ◆ Coordinated for planning and arranging external examinations.
- ◆ Coordinated time-table committee.
- ◆ Coordinated for industrial training of students.
- ◆ Overall Lab Incharge of Mech. Engg. Labs
- ◆ Lab Incharge of CAD lab, Thermal Engineering Lab., I. C. Engine Lab
- ◆ Act as External examiner in various Engineering colleges

Administrative Responsibilities

- ◆ Chief Proctor of Institute (2017)
- ◆ **Deputy HOD**, Department of Mechanical Engineering (2010-2014)
- ◆ **Coordinator, M. Tech** programme in department(2009-2013)
- ◆ Member of Proctorial committee (2009-2016)
- ◆ Coordinator for preparing Proposal for Accreditation from AICTE and follow up
- ◆ Co-coordinator AICTE Staff Development programme-2009
- ◆ Co-coordinator AICTE Staff Development programme-2010
- ◆ Coordinated of Student Counseling Committee
- ◆ Overall Lab Incharge of Mech. Engg. Labs
- ◆ Chairman, Society of Mechanical Engineers, SKIT.
- ◆ Coordinator for planning and arranging external examinations.
- ◆ Coordinator for arranging expert lectures, CAD courses and educational tour & industrial visits.
- ◆ Coordinator of Equipment Procuring Committee
- ◆ Coordinator Purchase committee of Department

Cultural & Sports Activities

- ◆ Coordinator sports committee in annual function PRAVAH-2005
- ◆ Coordinator sports committee in annual function PRAVAH-2006
- ◆ Coordinator hospitality committee in annual function PRAVAH-2007
- ◆ Coordinator discipline committee in annual function PRAVAH-2008
- ◆ Coordinator discipline committee in annual function PRAVAH-2009
- ◆ Coordinator discipline committee in annual function PRAVAH-2010
- ◆ Chief Coordinator of annual function PRAVAH-2012

Lab Development

- ◆ Visited various Suppliers of engineering equipment at Ambala and Ludhiana to explore the quality equipment for development of labs (2004).
- ◆ Visited various Suppliers of engineering equipment and various Engineering colleges at Faridabad to explore the quality equipment and development of labs (2005).
- ◆ Visited Technical Teaching (D) Equipment, Bangalore for pre-dispatch inspection and testing of Fluid Machine lab equipment's (2006).
- ◆ Establish Thermal lab, MOS lab, DOM lab, Fluid Machine lab, CAD lab etc. in SKIT, as working there from very starting of Mechanical Department.
- ◆ Prepare Lab manual for thermal lab and MOS lab.

Learning Material Developed

- ◆ Course material on Machine Design-I.
- ◆ Course material on Mechanics of Solids.
- ◆ Course material on I.C.Engine.
- ◆ Lab Manuals of Thermal Engineering Lab-I and Thermal Engineering Lab-II.
- ◆ Lab Manual of Mechanics of Solids lab.

Other activities

- ◆ Co-coordinator in NCSESI-08 a National Conference on Energy Issue.
- ◆ Design and develop whole Mechanical Department for new upcoming Engineering College.

- ◆ Chairman and founder member, SKIT Renewable Energy Club.
- ◆ Writing Technical articles in SKIT TIMES.
- ◆ Co-coordinator of SKIT Blood Donation Camp (2005-2007)
- ◆ Coordinator of SKIT Blood Donation Camp (2009-2012)

Ashish Nayyar

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