



BIO-DATA Dr. D. DEEPAK

- 1. Name** : **Dr. DHARMPAL DEEPAK**
2. Designation : Assistant Professor
3. Department : Mechanical Engineering
4. Date of Birth : 05.05.1977
5. Address for Correspondence : Mechanical Engineering Department,
Punjabi University,
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6 Areas of Specialization : Mechanics of Composite Materials, Development of Polymer and Metal composites, Design of Experiments.

7. Academic Qualifications:

S. No.	Degree	Year	University /Board	% of Marks	Division	Subject/Specialization
2	M.Tech.	2006	GNDEC, Ludhiana (Pb.)/PTU, Jalandhar	70 %	First	Production Engineering
3	Ph. D.	2012	UCoE, Punjabi University, Patiala (Pb.)			Mechanical Engineering

8. Membership of Professional Bodies:

- (i) Life Member – Indian Society for Technical Education

9. Details of Experience:

Sl. No.	Name of Employer	Position held	Duration	Nature of Experience
1.	University College of Engineering, Punjabi University, Patiala (Pb.)-147002	Assistant Professor (Regular)	23.10.2011 (A/N) to till date	Teaching and Research
2.	Rayat Institute of Engineering and Information Technology, Railmajra, Distt. SBS Nagar (Pb.)-144533	Lecturer/Assistant Professor	27.07.2004 to 23.10.2011	Teaching and Research
4.	SLIET, Longowal, Distt. Sangrur (Pb.)-148106	Lecturer	12.01.2004 to 28.05.2004	Teaching and Research
5.	IITTCoE, Pojewal, Distt. SBS Nagar (Pb.)	Lecturer	01.08.2003 to 11.01.2004	Teaching and Research
6.	Cheema Boilers Ltd., Kurali, Distt. Ropar (Pb.)	Sr. Engineer	01.01.2001 to 31.07.2003	Industry
7.	Indian Acrylics Ltd., Sangrur (Pb.)	Shift Engineer	03.11.1999 to 22.11.2000	Industry

10. Published Work (Please specify numbers only):

- a) Research Papers i) National = 01
ii) International = 16
- b) Conference/Seminar Presentation = 26
- c) Books: 01

11. Invited Talks: 10**12. Ph.D. Students guided/under guidance: 05**

13. M. Tech. Students Guided:

S. No.	Name of Student & Roll No.	Title of Thesis	Year of Completion
1.	Mohan Singh (RIEIT, Railmajra (Pb.))	A robust parameter design study in turning of bright mild steel based on Taguchi method	March 2011
2.	Ashish Singla (11093017)	Effect of anisotropy on creep in a thick cylinder made of functionally graded composite	Oct. 2012
3.	Ripandeep Singh (11093012)	Fabrication and characterization of 5083Al-SiC surface composite by friction stir processing	Oct. 2012
4.	Sukhdeep Singh (11093003)	Fabrication and characterization of 5083Al-Al ₂ O ₃ surface composites by friction stir processing	Oct. 2012
5.	Evaran Singh (11193002)	Fabrication and characterization of jute fiber reinforced-recycled polyethylene composites	Aug. 2013
6.	Sukhdeep Singh (11193044)	Tensile and flexural behavior of hemp fiber reinforced virgin and recycled high density polyethylene matrix composites	Aug. 2013
7.	Harsimran Singh Salaria (11193010)	Investigation of tensile and flexural behaviour of sisal fiber reinforced recycled/virgin high density polyethylene	Aug. 2013
8.	Mohit Sood (11293009)	Effect of fiber chemical treatment on mechanical properties of sisal fiber/recycled HDPE composites	Aug. 2013
9.	Navratan Goyal (11173033)	Evaluation of tensile and flexural properties of hemp reinforced fresh/recycled polyethylene based natural fiber composites	Nov. 2014
10.	Jharminder Singh Dhaliwal (11173035)	Investigation of tensile and flexural behaviour of coconut fiber reinforced fresh/recycled high density polyethylene	Nov. 2014
11.	Kamalpreet Singh (11393020)	Evaluation of Mechanical and metallurgical behavior of friction welded Al 6082 and Al 6063 dissimilar materials	July 2015
12.	Harpreet Singh	Experimental investigation of tensile and flexural behaviour of Banana fiber reinforced fresh/recycled	Aug. 2015

	(11273035)	high density polyethylene composites	
13.	Amanjot Singh Baluja	Effect of fibre orientation in woven jute fibre/polypropylene composites on mechanical properties	Sep. 2016
14.	Goldendeeep Singh	Investigating tensile and flexural behavior of hybrid jute-cotton fibre polypropylene laminated composites	Sep. 2016
15.	Manminder Singh	Tensile and flexural properties of cotton/linen fabric reinforced laminated polypropylene composites	Sep. 2016
16.	Swarnjit Singh	Effect of layering pattern on the mechanical properties of jute-linen reinforced polypropylene hybrid laminated composites	Sep. 2017

14. List of Papers/Courses taught at P.G. and U.G. Level:

Sr.No.	Course Title	Level
		Under Graduate (UG)/Post Graduate (PG)
1.	Theory of Machines-I	UG
2.	Theory of Machines-II	UG
3.	Engineering Drawing	UG
4.	Mechanical Measurements and Metrology	UG
5.	Advance Manufacturing Processes	PG
6.	Machining Science	UG
7.	Production Planning and Control	UG
8.	Research Methodology	PG
9.	Design of Experiments	PG

15. List of Papers Published:

(a). Publications in Refereed International Journals (16)

1. D. Deepak, Rupinder Singh and Maninderjit Singh (2008), "Development of aluminium based silicon carbide metal matrix composite", Manufacturing Technology Today, pp. 3-10. ISSN: 0972-7396

2. Dharmpal Deepak, V. K. Gupta and Ashok K. Dham (2009), "Impact of Stress Exponent on Steady State Creep in a Rotating Composite Disc", *Journal of Strain Analysis for Engineering Design*, 44 (2), pp. 127-135. (ISSN: 0309-3247, IF-0.748)
3. Manoj Singla, D. Deepak Dwivedi, Lakhvir Singh, Vikas Chawla (2009), "Development of Aluminium Based Silicon Carbide Particulate Metal Matrix Composite", *Journal of Minerals & Materials Characterization & Engineering*, 8 (6), pp. 455-467. (ISSN: 2327-4085 (Online), 2327-4070 (Print)).
4. Manoj Singla, Dharmendra Singh, Dharmpal Deepak (2010), "Parametric optimization of gas metal arc welding processes by using factorial design approach", *Journal of Minerals and Materials Characterization and Engineering*, 9 (04), 353-363. ISSN: 2248-9622 (Online).
5. Mohan Singh, Dharmpal Deepak, Manoj Singla (2010), "A Comprehensive study of operational condition for turning process to optimize the surface roughness of object", *International Journal on Emerging Technologies*, 22 (11), pp. 2221-2232. (ISSN NO. 0975-8364)
6. Mohan Singh, Dharmpal Deepak, Manoj Singla (2010), "A robust parameter design study in turning bright mild steel based on Taguchi method", *International Journal on Emerging Technologies*, 1 (2), pp. 100-110. (ISSN NO. 0975-8364)
7. Dharmpal Deepak, V. K. Gupta and Ashok K. Dham (2010), "Steady State Creep in a Rotating Composite Disc of Variable Thickness" *International Journal of Materials Research*, 101 (6), pp. 780-786. (ISSN: 1862-5282, IF-0.824).
8. Dharmpal Deepak, V. K. Gupta and Ashok K. Dham (2010), "Creep Modeling in Functionally Graded Rotating Disc of Variable Thickness", *Journal of Mechanical Science and Technology*, 24 (11), pp. 2221-2232. (ISSN: 1738-494X (print), 1976-3824 (electronic), IF-0.374)
9. Dharmpal Deepak, V. K. Gupta and Ashok K. Dham (2011), "Mathematical Modeling of Steady State Creep in a Functionally Graded Rotating Disc of Variable Thickness", *International Journal of Computational Materials Science and Surface Engineering*, 4 (2), pp. 109-129. (ISSN: 1753-3473 (Online), 1753-3465 (Print)).
10. Ashish Singla, Manish Garg, Dharmpal Deepak and V. K. Gupta (2012), "Creep Modeling in an Orthotropic FGM Cylinder", *Asian Review of Mechanical Engineering*, 1 (2), pp. 55-61. (ISSN: ISSN 2249-6289).
11. Sukhdeep Singh, Dharmpal Deepak and V.K. Gupta (2012), "Fabrication and Characterization of 5083 Al-Al₂O₃ Surface Composite by Friction Stir Processing", *International Journal of Materials Engineering and Technology*, 8 (2), pp. 137-154. (ISSN: 0975-0444).
12. Dharmpal Deepak, V. K. Gupta and Ashok K. Dham (2013), "Investigating the effect of thickness profile of a rotating functionally graded disc on its creep behavior", *Journal of Thermoplastic Composite Materials*, 26 (4), pp. 461-475. (Sage, ISSN: Print-0892-7057, Online-:1530-7980, 2015 IF-1.134).
13. Dharmpal Deepak, Ripandeep Singh Sidhu and V.K. Gupta (2013), "Preparation of 5083 Al-SiC Surface Composite by Friction Stir Processing and its Mechanical Characterization", *International Journal of Mechanical Engineering*, 3 (1), pp. 1-11, (ISSN: 2277-7059).

14. Manish Garg, Dharmpal Deepak, V.K. Gupta (2014), "FE modeling of creep in linear and non-linear FGM cylinder under internal pressure", *Multidiscipline Modeling in Materials and Structures*, 10 (1), pp. 94 – 105. (Emerald, ISSN: 1573-6105).
15. Sukhdeep Singh, Dharmpal Deepak, Lakshya Aggarwal and V.K. Gupta (2014), "Tensile and flexural behavior of hemp fiber reinforced virgin-recycled HDPE matrix composites", *Procedia Materials Science*, 6, pp. 1696–1702. (Elsevier, ISSN: 2211-8128).
16. Dharmpal Deepak, Manish Garg and V. K. Gupta, (2015), "Creep Behavior of Rotating FGM Disc with Linear and Hyperbolic Thickness Profiles", *Kragujevac Journal of Science*, 37, pp. 35-48. (ISSN: 1450-9636).
17. Mohit Sood, Dharmpal Deepak and V.K Gupta (2015), "Effect of Fiber Chemical Treatment on Mechanical Properties of Sisal Fiber/Recycled HDPE Composite", *Materials Today: Proceedings 2* (4–5), pp. 3149-3155 (Elsevier, ISSN: 2214-7853).

(b). Publications in Refereed International Conferences (09)

1. Dharmpal Deepak, V. K. Gupta and Ashok K. Dham (2010), "Thermal residual stresses and creep in a rotating composite disc of variable thickness", 2nd International Conference on Production and Industrial Engineering CPIE-2010, held at Dr. B. R. Ambedkar NIT, Jalandhar (Pb.), Dec. 03-05, 2010, Paper Code J013, pp. 280-284.
2. Dharminder Singh, Dharmpal Deepak and Manoj Singla (2010), "Prediction of Metal Deposition rate and penetration in submerged arc welding process", Proc. of International conference on engineering innovations: A fillip to economic development, held at Continental Group of Institutes, Jalvehra (Pb.) Feb.18-20, 2010.
3. Dharmpal Deepak and V.K. Gupta (2011), "Effect of Varying Disc Thickness Profile on Steady State Creep in a Functionally Graded Rotating Composite Disc", International Conference on Advances in Modeling, Optimization and Computing (AMOC -2011), Dec. 05-07, 2011, IIT Roorkee, India, pp. 32 (Abstract Only).
4. Ashish Singla, Manish Garg, Dharmpal Deepak and V. K. Gupta (2012), "Effect of anisotropy on creep behaviour of a functionally graded cylinder", Proc. International conference on advancements & futuristic trends in mechanical & materials engineering, organized by PTU, Kapurthala, Oct. 05-07, 2012, pp. 513-519.
5. Dharmpal Deepak (2012), "Impact of thickness gradient on creep behavior of a rotating FG disc", International conference on Advancements in Engineering and Technology, held at Bhai Gurdas Institute of Engg. and Tech., Sangrur (Pb.), Oct. 12-13, 2012.
6. Dharmpal Deepak (2012), "Modeling primary creep in a rotating disc made of Al-SiCp", International conference on Advancements in Engineering and Technology, held at Bhai Gurdas Institute of Engg. and Tech., Sangrur (Pb.), Oct. 12-13, 2012.
7. Ashish Singla, Manish Garg, Dharmpal Deepak and V. K. Gupta (2012), Creep modeling in an orthotropic FGM cylinder, Proc. International conference on advancements & futuristic trends in mechanical & materials engineering, organized by PTU, Kapurthala, Oct. 05-07, 2012, pp. 520-526.
8. Evaran Singh, Dharmpal Deepak, Lakshya Aggarwal and V. K. Gupta (2013), "Fabrication and Characterization of Jute Fiber Reinforced-Recycled Polyethylene Composites", Proceedings of the International Conference on Research and Innovations in Mechanical Engg. (ICRIME-2013), Lecture notes in Mechanical Engg, held at GNDEC Ludhiana, 24-26 Oct. 2013, pp. 315-322. (Published by Springer India, 2014).

9. Mohit Sood, Dharmpal Deepak and V.K Gupta (2015), "Effect of Fiber Chemical Treatment on Mechanical Properties of Sisal Fiber/Recycled HDPE Composite", 4th International Conference on Materials Processing and Characterization (ICMPC 2014), held at GRIET, Hyderabad from 14-15 March 2015.

(c). Publications in Refereed National Conferences(17)

Published/Presented (17):

1. D. Deepak Dwivedi, Manoj Singla, Neeru Singla, Vikas Chawla (2006), "Flexible Manufacturing Systems-An Overview", Proc. of National Conference on Advancement in modelling and Simulation, held at LLRIET, Moga (Pb.), Jan. 20-21, 2006, pp. 42-45.
2. D. Deepak Dwivedi, Manoj Singla, Rupinder Singh, Vikas Chawla (2006), "Techniques for fabrication and Testing of Aluminium based Metal Matrix Composites-An overview", Proc. of National Conference on Trends and Advances in Mechanical Engg., held at YMCA Institute of Engg., Faridabad (Haryana), Dec. 9-10, 2006, pp. 40.
3. D. Deepak Dwivedi, Manoj Singla, Rupinder Singh, Vikas Chawla (2006), "Development of Metal Matrix Composites (Al-SiC) & subsequent evaluation of mechanical Properties", Proc. of National Conference on Trends and Advances in Mechanical Engg., held at YMCA Institute of Engg., Faridabad (Haryana), Dec. 9-10, 2006, pp. 42.
4. Manoj Singla, D. Deepak Dwivedi, Lakhvir Singh, Vikas Chawla (2006), "Fabrication and property analysis of metal matrix composites (Al-SiC)", Proc. of National Conference on Recent Advances in Mechanical Engg., held at RIEIT, Railmajra (Pb.), Sept. 8-9, 2006, pp. 209-212.
5. Manoj Singla, D. Deepak Dwivedi, Vikas Chawla, Neeru Singla (2006), "Role of Industry, Industry associations, NGO's in management of technical education-Experience of India and developed countries", Proc. of National Conference on Recent Advances in Mechanical Engg., held at RIEIT, Railmajra (Pb.), Sept. 8-9, 2006, pp. 302 (Abstract only).
6. D. Deepak Dwivedi, Manoj Singla, Rupinder Singh, Maninderjit Singh (2006), "Fabrication of aluminium based silicon carbide composites-An approach", Proc. of National Conference on Recent Advances in Mechanical Engg., held at RIEIT, Railmajra (Pb.), Sept. 8-9, 2006, pp. 302 (Abstract only).
7. Dharmpal Deepak, V. K. Gupta and Ashok K. Dham (2010), "Modelling Creep in a Variable Thickness Composite Disc with Thermal Residual Stresses", National Conference on Global Trends in Mechanical Engineering (GTME2010), held at Ryat and Bahra Institute of Engineering and Bio-Technology, Mohali (Pb.), April 13-17, 2010.
8. Mohan Singh, Dharmpal Deepak, Manoj Singla, Manish Goyal and Vikas Chawla (2010), "An Experimental Estimate Mathematical Model of Surface Roughness for Turning Parameters on CNC Lathe Machine", Proc. of National Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, held at Yadavindra College of Engineering, Talwandi Sabo, Bathinda (Pb.), Feb. 19-20, 2010, pp. 336-343.
9. Dharmpal Deepak and V. K. Gupta (2011), "Effect of transient period on creep behavior of a rotating composite disc", Proc. of Ist National Conference on Advances in Mechanical Engineering (NCAME-2011), held at UIET, Panjab University, Chandigarh, May 20-21, 2011, pp. 105-108.
10. Dharminder Singh, Dharmpal Deepak and Manoj Singla (2011), "Parametric Optimization of Gas Metal Arc Welding Processes by using Factorial Design Approach", Proc. of National Conference on Advanced Manufacturing Technologies (AMT-2011), held at

Chitkara Institute of Engineering and Technology, Rajpura (Pb.), January 7, 2011, pp. 77-80.

11. Shivinder Singh, Rahul Vaishya and Dharmpal Deepak (2011), "Metal matrix composite characterization of aluminium-fly ash composite using stir casting method", Proc. of 1st National Conference on Advances in Mechanical Engineering (NCAME-2011), held at UIET, Panjab University, Chandigarh, May 20-21, 2011, pp. 415-420.
12. Dharmpal Deepak and Rahul O Vaishya (2012), "Development of Aluminium based silicon carbide composites using stir casting technique", Proc. of National Conference on Role of ICT in societal and industrial applications, held at SUIET, Dera Bassi (Pb.), 2012, pp. 198-201.
13. Ashish Singla, Manish Garg, Dharmpal Deepak and V. K. Gupta (2012), "Steady State Creep in Transversely Isotropic FGM Cylinder", National Conference on Advanced Materials and their Applications in the Era of Globalization (AMAEG'12), held at Department of Applied Sciences, SVIET, Banur, Patiala, Oct. 20, 2012.
14. Sukhdeep Singh, Dharmpal Deepak and V. K. Gupta (2012), "Friction Stir Processing of Al Alloys", National Conference on Advanced Materials and Their Applications in the Era of Globalization (AMAEG'12), held at Department of Applied Sciences, SVIET, Banur, Distt. Patiala, Oct. 20, 2012.
15. Manish Garg, Dharmpal Deepak and V. K. Gupta (2015), "Analysis of functionally graded variable thickness rotating disc under thermo-mechanical loading", National Conference on Advances in Materials and Materials Processing (AMMP-15), at Metallurgical and Materials Engineering Department, NIT Srinagar, from March 27-28, 2015, pp. 23.
16. Navratan Goyal, Dharmpal Deepak, Kishore Khanna and V.K Gupta (2015), "Evaluation of tensile and flexural properties of hemp reinforced fresh/recycled polyethylene based natural fiber composites", National Conference on Advances in Materials and Materials Processing (AMMP-15), held at Metallurgical and Materials Engineering Department, NIT Srinagar, from March 27-28, 2015, pp. 22.
17. Dharmpal Deepak, Manish Garg and V.K Gupta (2015), Effect of residual stress on steady state creep in a rotating composite disc of linearly varying thickness, National Conference on Advances in Materials and Materials Processing (AMMP-15), held at Metallurgical and Materials Engineering Department, NIT Srinagar, from March 27-28, 2015, pp. 29.

(d). Books Published/ Book Chapters Contributed (01)

1. Harsimrandeep Salaria, Dharmpal Deepak and Vinay Gupta (2013), "Mechanical Behaviour of Sisal fibre Reinforced HDPE Composites", LAP LAMBERT Academic Publishing, Germany, (ISBN-978-3-659-50695-6), PP. 57, Dec. 2013.