

Curriculum Vitae

Name: Dr. Balraj Singh Brar
Present Designation: Professor in Mechanical Engineering,
Yadavindra Department of Engineering,
Talwandi Sabo.
Date of Birth: 14 November, 1975
Resident of: Bathinda. 9814744310

Membership of Professional Bodies:

- Life Member, Indian Society for Technical Education, New Delhi.
- Fellow, Institution of Engineers (India), Kolkata.

Educational Qualifications:

1. **Ph.D.** in Mechanical Engineering from PEC University of Technology, Chandigarh. Started: 2.12.2009; submitted thesis: May, 2013, Awarded Provisional Degree: 27.06.2014.
2. **Master of Engineering** in Industrial Materials & Metallurgy from Punjab Engineering College, Chandigarh. Duration: 1997-1999, Scoring 65.5%, Class Topper.
3. **Bachelor of Engineering** in Mechanical Engineering from Baba Banda Singh Engineering College, Fatehgarh Sahib, Duration: 1993-1997, scoring 75.6 % with Honours.
4. **10+2 Non-Medical** from DAV College, Bathinda, Duration: 1991-1993, scoring 63.3%.
5. **Matriculation** from Dasmesh Public School, Bathinda, in 1991, scoring 70.6%.

Teaching Experience:

- Lecturer in Mechanical Engineering at Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib. (29.07.1998-14.03.2005)
- Assistant Professor in Mechanical Engineering at Malout Institute of Management and Information Technology, Malout. (16.03.2005 - 09.06.2005)
- Reader/Associate Professor in Mechanical Engineering at Yadavindra College/Department of Engineering, Talwandi Sabo. (10.06.2005 to 17.03.2023), Research Scholar at PEC, Chandigarh by availing study leave from 2 Dec., 2009 to 1 Dec., 2012 for regular Ph.D. at PEC, Chandigarh.
- Professor in Mechanical Engineering from 18.03.2023.

Subjects Taught:

UG: Strength of Materials, Machine Design I & II, Mechanical Vibrations, Fluid Mechanics Lab, SOM Lab, Engineering Graphics.
PG: Non-Traditional Machining, Research Methodology
Ph.D. Course: Research Methodology & Publication Ethics

Departmental Contributions & Administrative Responsibilities performed:

Developed laboratories of workshops of Mechanical Engineering	As Incharge, MED	2005 to 2008
Punjabi University Guru Kashi Campus, Talwandi Sabo. All hostels.	Senior Warden	9.11.05 to 25.07.06
Yadavindra College of Engineering, Punjabi University Guru Kashi Campus, Talwandi Sabo	Officiating Director	01.01.08 to 13.07.08
	Head	14.07.08 to 27.08.08
	Incharge	28.08.08 to 25.03.09
YDoE	Faculty I/c Admin	23.04.09 to 01.12.09
Yadavindra College of Engineering, Punjabi University Guru Kashi Campus, Talwandi Sabo.	Incharge	15.01.13 to 09.06.13
	Head	10.06.13 to 16.06.16
Punjabi University Guru Kashi Campus, Talwandi Sabo	Incharge	15.01.13 to 9.08.17
Dr. Avtar Singh Guest House, PUGKC, Talwandi Sabo.	Incharge	5.02.13 to 10.10.17

ME Thesis: "Effect of Some Industrial Wastes and Minerals as Fillers on Mechanical Properties of Fibre Reinforce PMCs".

Ph.D. Thesis: "Development and Investigations in Electro-chemical aided Abrasive Flow Machining ECA²FM Process".

Project Undertaken: Completed an R&D Project entitled "Investigations of Hybrid Abrasive Flow Machining Process" sponsored for Rs. 75000/- by The Institution of Engineers (India) with Reference: SCK/RD2016830/2010-2011.

Ongoing Research: AFM Setup with necessary fixtures designed & developed inhouse and installed in the Fluid Machinery Lab of the department. Guiding 5 Ph.D. Students. Doing research in the field of AFM and Guar Based Biodegradable Composite. 8 Publications since 2017.

Professional Responsibilities:

- Acted as Reviewer for:
 - Journal of Institution of Engineers (India) series C (2012 & 2014).
 - For ASME IMECE2015 Conference, 13-19 Nov., 2015 at Houston (2+).
 - International Journal of Renewable Energy Research-IJRER, Gazi University, Ankara (19 Nos.).
- Member of IQAC Committee & Grievance Redressal Committee of Akal University, Talwandi Sabo.
- Dean Colleges Nominee for the Governing body of 'Hardik college of Education, Bhawanigarh for 2022 – 2025.
- Worked as Member of Central Counselling committee for PTU, Jalandhar, AICTE inspection Team, Nominee in the Administrative Committee of Guru Gobind Singh College, Sanghera, Barnala, Sub Divisional Legal Services in 2014, V.C. nominee in the Sub-Committee for the inspection of Akal University, Talwandi Sabo In 2013 & 2014, Nodal Officer, AISHE till 2017, Nominee for the NAAC inspection at LBSAM College, Barnala, Various Purchase & agricultural land lease/contract committees.
 - Served for many terms as member of
 1. Faculty of Engineering & Technology.
 2. Board of Studies (Mechanical Engineering).
 3. AACD of the department.

Present Responsibilities:

- Faculty I/c, Social Media of the Campus. Team maintaining: <https://www.facebook.com/pugkc>, www.pugkc.ac.in, https://www.instagram.com/guru_pup/
- Chairman of Extra Curricular Activities, YDoE, coordinating the activities of various Clubs
- Faculty I/c Training & Placement, YDoE, maintaining <https://www.facebook.com/placementclub.ycoe>
- Recently on 14 March, 2023 organised "6th Punjabi University Junior Science Star Competition-2023" as Coordinator.

Professional/Academic Assignments Abroad:

- Presented a paper and chaired two technical sessions at ASME IMECE2015, International Mechanical Engineering Congress & Exposition", 13-19 November, 2015 at Houston. Co-Chair: Wesley S. Hunko, Auburn University, Alabama.

Other Tests Qualified: - GATE 1998 with 89.14 percentile, TOEFL 1999 & GRE 2000

Awards Won: - Indian Society for Technical Education, New Delhi awarded 'Best B.Tech Project State Award for the year 2002' for the Project "Design and fabrication of Roller Burnishing Tool" guided by me.

- A robot 'Fateh' designed by the students of BBSBEC, Fatehgarh Sahib won a special award for Innovation in Mechanism Design at an International Robotics Competition "Survivor" organised by the IIT, Mumbai from 28-30 Jan, 2005. I was a member of Faculty Advisory Committee.

Expert Talks: Delivered Expert talks on the topics: References/Reviewing Aspects in Thesis Writing on 08.07.2014, Robust Engineering on 24 Nov., 2016, Statistics Revisited for Engineers on 11.05.2018 and Simple Regression with Microsoft Excel on 10.01.2019 and Testing for Goodness of Fit with a case study from Psephology on 26.02.2020 as Special lecture/in STTPs named 'Engineering Today' in the department.

Publications: 28 Nos. uploaded on the Google Scholar Profile of "Balraj Singh Brar".



Balraj Singh Brar

Punjabi University, Patiala
Manufacturing
composites

	All	Since 2018
Citations	328	153
h-index	7	5
i10-index	6	2

TITLE	CITED BY	YEAR
Effect of filler addition on the compressive and impact properties of glass fibre reinforced epoxy N Gupta, B Singh Brar, E Woldesenbet Bulletin of Materials Science 24, 219-223	214	2001
Electrochemical-aided abrasive flow machining (ECA ² FM) process: a hybrid machining process BS Brar, RS Walia, VP Singh The International Journal of Advanced Manufacturing Technology 79, 329-342	38	2015
Development of a robust abrasive flow machining process setup BS Brar, RS Walia, VP Singh, M Singh Int J Surf Eng Mater Technol 1 (1), 17-23	13	2011
Electro chemical machining in the aid of abrasive flow machining process BS Brar, RS Walia, VP Singh International Journal of Surface Engineering & Materials Technology 2 (1), 5-9	12	2012
State of Art Abrasive Flow Machining BS Brar, RS Walia, VP Singh National Conf. on Adv. and Futur. Trends in Mech. and Matrils. Engg.(AFTMME ...	12	2010
A robust helical abrasive flow machining (HLX-AFM) process BS Brar, RS Walia, VP Singh, M Sharma Journal of The Institution of Engineers (India): Series C 94, 21-29	10	2013
Helical abrasive flow machining (HLX-AFM) process BS Brar, RS Walia, VP Singh, M Sharma International Journal of Surface engineering and Materials Technology 2 (2 ...	8	2012
Electro chemical aid to abrasive flow machining process: harnessed for improved surface finishing BS Brar, RS Walia, VP Singh International conference on advancements and futuristic trends in mechanical ...	7	2012
A review on rice straw management strategies L Singh, BS Brar Nature Environment and Pollution Technology 20 (4), 1485-1493	5	2021
Latest trends in abrasive flow machining process B Singh, S Kumar, BS Brar Journal of Advanced Research 4 (1-2), 1-7	2	2017
Effects of helical rod profiles in Helical Abrasive Flow Machining (HLX-AFM) process BS Brar, RS Walia, VP Singh, P Singh	2	2015

More Publications available at 'Google Scholar Profile', can be accessed by scanning:

