


Yadavindra College of Engineering

Punjabi University Guru Kashi Campus

Talwandi Sabo

FACULTY ACADEMIC PROFILE

Name	DR. BALRAJ SINGH BRAR			 Photo
Designation	Associate Professor			
Department/ Section/ Subject	Mechanical Engineering Section			
Official Address	Yadavindra College of Engineering, Punjabi University Guru Kashi Campus, Talwandi Sabo (Distt. Bathinda) Punjab India - 151302			
Contact No. (s)	+91-9814744310			
Email (s)	brarbalraj@yahoo.com ; brarbalraj@pbi.ac.in ;			
ACADEMIC QUALIFICATIONS				
Degree	Degree Name	Thesis Title	University	
PhD	Ph.D.	DEVELOPMENT AND INVESTIGATIONS IN ELECTRO-CHEMICAL AIDED ABRASIVE FLOW MACHINING (ECA ² FM) PROCESS	PEC University of Technology, Chandigarh	
Post-Graduation	M.E. (INDUSTRIAL MATERIALS AND METALLURGY)	Effect of Some Industrial Wastes and Minerals as fillers on Mechanical Properties of Fibre Reinforced PMCs.	Punjab Engineering College, Chandigarh	
Graduation	B.E. (Mechanical Engineering) with Honours from Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib.		Punjabi University, Patiala	
Any other	Gate 1998 with 89.14 percentile, TOEFL, GRE, British Council English Score "CEFR Advanced Level C1"			
Thrust Areas/ Research Interests	1. Fine Finishing (Non Traditional Machining) 2. Composites			
Subjects Taught	Strength of Materials, Machine Design I & II, Mechanical Vibrations, Research Methodology, Non Traditional Machining, Heat and Mass Transfer, Engineering Graphics.			

Total Experience (Years)	21	Teaching Experience	21	Industry Experience	Nil
Employment History	1. Lecturer – Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib (29.07.1998 to 13.03.2005) 2. Assistant Professor – Malout Institute of Management and Information Technology. (15.03.2005 to 09.06.2005) 3. Reader/Associate Professor – YCoE, Talwandi Sabo (10.06.2005 to till date)				
Membership of Punjabi University Academic Bodies	1. Board of Studies Mechanical Engineering. 2. Faculty of Engineering and Technology				
Administrative/ Academic Duties performed.	<ul style="list-style-type: none"> • Officiating Director (01.01.2008 to 13.07.2008)/ Head (14.07.2008 to 27.08.2008)/In-charge (28.08.2008 to 25.03.2009) of Yadavindra College of Engineering, Punjabi University Guru Kashi Campus, Talwandi Sabo. • Senior Warden (November,2005 to 25.07.2006) of Punjabi University Guru Kashi Campus, Talwandi Sabo. • In-charge (15.01.13 to 09.06) /Head (10.06.13 to 09.06.2016) of Yadavindra College of Engineering, Punjabi University Guru Kashi Campus, Talwandi Sabo. • In-charge of Punjabi University Guru Kashi Campus, Talwandi Sabo from 15.01.2013 to 09.08.2017. • In-charge of Dr. Avtar Singh Guest House, Punjabi University Guru Kashi Campus, Talwandi Sabo from Feb, 2013 to 10.10.2017. 				

FACULTY RESEARCH PROFILE

Google Scholar ID	brarbalraj@gmail.com; https://scholar.google.com/citations?hl=en&user=3cYOv2gAAAAJ		
Impact Factor	1.458 + 0.870 = 2.328	Citation Index	248
h-Index	7	I10-index	5
SNIP	--	SJR	---
No. of Candidates (Completed PhD)	Nil	No. of Candidates (Ongoing PhD)	05
PG Thesis guided	01	PG Thesis Ongoing	Nil
Research Projects Completed 1. Title 2. Amount in lakhs 3. Date of completion	“Investigations of Hybrid Abrasive Flow Machining Process” sponsored for Rs. 75000/- by The Institution of Engineers (India) with Reference: SCK/RD2016830/2010-2011. Completed on 14 March, 2012		
Names of Foreign Countries Visited for Academic Purpose	United States of America		

Papers in International Journals	07	Papers in National Journals	03
Papers in International Conferences	07	Papers in National Conferences	08
International Conferences Attended	02	National Conferences Attended	08
Total International Conferences/ Workshops/ Seminars /STCs/ FDPs attended	02	Total National Conferences/ Workshops/ Seminars/ STCs/ FDPs attended	08 Conf+ 12 STC/W orksho p
Memberships of National Professional Bodies - Life Member, Indian Society for Technical Education, New Delhi. - Life Member, Institution of Engineers (India), Kolkata			
Editor/ Reviewer of Journals	<ul style="list-style-type: none"> International Journal of Renewable Energy Research (IJRER) Journal of Institution of Engineers (India): Series C 		
Session Chair/Invited Talks/Seminars/Expert Lecture in International Conferences	02	Session Chair/Invited Talks/Seminars/ Expert Lecture in National Conferences	Nil

PHD SUPERVISION DETAILS

S.No.	Candidate Name	Registration No.	University
Ongoing			
1	Manmeet Shergill	7141-14-1479, 30.08.2016 DRB	Mechanical Engineering Department, Punjabi University, Patiala
2	Karamjit Singh	7141-14-1478, 27.09.2016 DRB	Mechanical Engineering Department, Punjabi University, Patiala
3	Som Kumar	7141-14-1477, 27.09.2016 DRB	Mechanical Engineering Department, Punjabi University, Patiala
4	Taranveer Singh	7141-11-992, 30.08.2017 DRB	Mechanical Engineering Department, Punjabi University, Patiala
5	Lakhvir Singh	Enrolled – 2018, Regd. No: 7141-11-1032	Mechanical Engineering Department, Punjabi University, Patiala

LIST OF SCI JOURNAL PUBLICATIONS

S. No.	Author	Title	Journal	Vol.	Number	Page no.	Year of Publication
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1	Nikhil Gupta, Balraj Singh Brar, Eyassu Woldesenbet	Effect of filler additions on the compressive and impact properties of glass fiber reinforced epoxy	Bulletin of Material Science	24	2	219-223	2001
2	B.S. Brar, R.S. Walia, V.P. Singh, M. Sharma	A robust helical abrasive flow machining (HLX-AFM) process	Journal of the Institution of Engineers (India): Series C	94	1	21-29	2013
3	B.S. Brar, R.S. Walia, V.P. Singh	Electrochemical-aided abrasive flow machining (ECA ² FM) process: A hybrid machining process	International Journal of Advanced Manufacturing Technology	79		329-342	2015

LIST OF NON-SCI JOURNAL PUBLICATIONS

S. No.	Author	Title	Journal	Vol.	Number	Page no.	Year of Publication
1	B.S. Brar, R.S. Walia, V.P. Singh, M. Singh	Development of a robust abrasive flow machining process setup	International Journal of Surface Engineering and Materials Technology (IJSEMT),	1	1	17-23	2011
2	B.S. Brar, R.S. Walia, V.P. Singh	Electro chemical machining in the aid of abrasive flow machining process	International Journal of Surface Engineering and Materials Technology (IJSEMT),	2	1	5-9	2012
3	B.S. Brar, R.S. Walia, V.P. Singh, M. Sharma	Helical abrasive flow machining (HLX-AFM) process	International Journal of Surface Engineering and Materials Technology (IJSEMT),	2	2	48-52	2012
4	P. Thareja, B.S. Brar	Distancing Hazards on the Road, Statistically	Omniscience: A Multi-disciplinary Journal	2	1-3	1-12	2012
5	Karamjeet Singh, Som Kumar,	Latest Trends in Abrasive Flow Machining Process	Journal of Advanced Research in	4	1&2	20-25	2017

	Balraj Singh Brar		Production and Industrial Engineering				
6	Manmeet Shergill, Taranveer Singh, Balraj Singh Brar	A Review of Abrasive Material and Advancements In Abrasive Flow Machining(AFM)",	International Journal of Engineering Development and Research	6	4	536-545	2018
7	Som Kumar, Karamjeet Singh, Balraj Singh Brar	Recent Trends in Electrochemical and Electromagnetic Aid in Abrasive Machining Processes: A Review	International journal of Research and Analytical Reviews	5	3	634-640	2018

LIST OF CONFERENCE PUBLICATIONS

S. No.	Author	Title	Conference Name	Page no.	Year of Publication
International Conferences					
1	Nikhil Gupta; Balraj Singh Brar; Eyassu Woldesenbet	Effect of filler addition on Mechanical Properties of Glass Fiber Reinforced Epoxies	TMS Fall Meeting 2000 on 8-12th October, held in St. Louis, Missouri, U.S.A.	Abstract on page 124	2000
2	B.S. Brar, M. Singh, R.S. Walia, V.P. Singh, G.S. Walia	Parametric optimization of developed AFM setup for micro finishing using Taguchi method	Proceedings of the International Congress on Productivity, Quality, Reliability, Optimization and Modelling (ICPQROM-2011, held from Feb. 7-8 at Indian Statistical Institute, New Delhi, Vol II, Case Study and Review	853-864	2011
3	B.S. Brar, R.S. Walia, V.P. Singh	Electro chemical aid to abrasive flow machining process: Harnessed for improved surface finishing	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, Punjab Technical University, Punjab, India (October 5-7),	527-532	2012
4	B.S. Brar, J.K. Singh, R.S. Walia, C. Sagar, N. Yadav, P. Bhatner,	A Review on abrasive flow machining (AFM) and its recent	3rd International Conference on Production & Industrial Engineering (CPIE 2013) at Dr B R Ambedkar National	983-991	2013

	S. Dasgupta	development	Institute of Technology, Jalandhar, India,		
5	B.S. Brar, R.S. Walia, V.P. Singh	Regression model for electro-chemical aided abrasive flow machining (ECA ² FM) process	5th International & 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014) December 12th–14th, IIT Guwahati, Assam, India	382-1	2014
6	B.S. Brar, R. S. Walia, V.P. Singh, P. Singh	Effects of Helical Rod Profiles in Helical Abrasive Flow Machining (HLX-AFM) Process	ASME 2015 International Mechanical Engineering Congress & Exposition (IMECE2015), November 13-19, 2015, Houston, Texas	Paper number IMECE2015-53711	2015
7	Gurpreet Singh, Balraj Singh Brar	Experimental Investigations in the Water Scrubber for Biogas Purification	International Conference on Interdisciplinary Research for Sustainable Development, at NITTTR Chandigarh, India, Conference Date: 6-7 November 2017 (IRSD-2017)	1-6	2017
National Conferences					
1	B.S.Brar	Role of Humanities in Integrating Human Values in Technical Education	Annual Convention of ISTE and National Seminar on Integrating Human Values in Technical Education held at Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib on April 26, 2002.	59 - 60	2002
2	B.S.Brar	Solar Passive Architecture: Fundamentals and Strategie	One day Orientation Programme held at B.B.S.B.Engg. College, Fatehgarh Sahib on January 14, 2003.	--	2003
3	Balraj Singh Brar	Technical Education Institutions : Vehicles of Rural Development	ISTE Section Convention-2004(Pb.,HP, J&K and Chandigarh) and National Seminar on Reaching the	--	2004

			Unreached – A challenge to technical education on March 13, 2004 held at Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib.		
4	Balraj Singh Brar	Green Manufacturing	National Conference on Advanced Manufacturing Systems (AMS – 2004) held from March 26-27, 2004 at Baba Banda Singh Bahadur Engineering College , Fatehgarh Sahib.	111-113	2004
5	B.S.Brar	A review of recent developments in Syntactic Foams	National Conference on Futuristic Trends in Mechanical Engineering held from September 13-14, at Shaheed Udham Singh College of Engineering and Technology, Tangori.	95 - 106	2007
6	Brar B.S., Walia R.S., Singh V.P.	State of art abrasive flow machining	National Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME' 10), Yadavindra College of Engg., Talwandi Sabo, Distt. Bathinda, Punjab, India from Feb. 19-20, 2010	128-132	2010
7	Brar B.S., Singh M., Walia R.S. and Singh V.P.	Development of hydraulic circuit for abrasive flow machining	National Conference on Futuristic Trends in Mechanical Engineering (FTME-2010), Guru Nanak Dev Engg. College, Ludhiana, Punjab, India from 29-30 Oct., 2010	256-263	2010
8	B.S. Brar, P. Thareja, R.S.	Probability and safe driving	National Conference on Impact of Science and	Paper code: ET-30, page	2011

	Walia , V.P. Singh		Technology on Societal Development (ISTSD 2011), held from November 3-5, 2011 at Shahid Udham Singh group of Institutions, Tangori, Mohali, Punjab.	105	
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ANY OTHER FIELD

1	Chaired Session: 2-5-1 Advanced Machining and Finishing - 1 (Technical Session) Session Schedule: Monday, November 16, 2015 01:15 PM-02:45 PM Session Sponsors: Session Chair: Balraj S. Brar, Yadavindra College of Engineering Session Co-Chair: Wesley S. Hunko, Auburn University in the "ASME 2015 International Mechanical Engineering Congress & Exposition", 13-19 November, 2015 at Houston.
2	Chaired Session: 2-5-2 Advanced Machining and Finishing - 2 (Technical Session) Session Schedule: Tuesday, November 17, 2015 03:30 PM-05:00 PM Session Sponsors: Session Chair: Balraj S. Brar, Yadavindra College of Engineering Session Co-Chair: Wesley S. Hunko, Auburn University in the "ASME 2015 International Mechanical Engineering Congress & Exposition", 13-19 November, 2015 at Houston.

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