

FACULTY BIO - DATA



Name of the Faculty Member : Dr.R.BALASUNDARAM
Present Designation : Professor & Head
Contact No. : 9976102422, balasundaramr@krce.ac.in

I. Particulars of Educational Qualification :

- 1) Studied B.E. in Adhiparasakthi Engineering College, Madras University, 1994
- 2) Studied M.E in Engineering Design, Government College of Technology, Bharathiyar University, 1996.
- 3) Ph.D in Mechanical Engineering, Anna University, 2015

II. Title of Ph.D. Thesis

:
**DISCOVERING DISPATCHING RULES FOR PERMUTATION
FLOWSHOP SCHEDULING USING DATA DRIVEN APPROACH**

III. Additional Qualification

- i) GATE Score : **84.00 PERCENTILE** in 1994
ii) Memberships
i) ISTE - LM 69383
ii) IWS - L 01685
iii) M.I.E - M-1628148

IV. Academic Experience

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
SHANMUGA COLLEGE OF ENGG	LECTURER	24/06/1996	30/04/1997		10	
SRM ENGG COLLEGE	LECTURER	10/11/1997	05/11/2003	5	11	

TAFE- COLLEGE,MALAYSIA	LECTURER	19/11/2003	17/03/2006	2	3	
SASTRA UNIVERSITY	Sr.LECTURER	26/06/2006	31/10/2008	2	4	
SHRI ANGALAMMAN COLLEGE OF ENGG &TECH	ASST. PROFESSOR	03/12/2008	30/06/2011	2	6	
SHRI ANGALAMMAN COLLEGE OF ENGG &TECH	ASSO. PROFESSOR	01/07/2011	24/04/2015	3	9	
K.RAMAKRISHNAN COLLEGE OF ENGG,TRICHY	ASSO. PROFESSOR	04/06/2015	19/08/2015	0	2	15
K.RAMAKRISHNAN COLLEGE OF ENGG,TRICHY	PROFESSOR	20/08/2015	31/05/2018	2	8	11
K.RAMAKRISHNAN COLLEGE OF ENGG,TRICHY	PROF & HEAD	01/06/2018	TILL DATE	0	4	
				20	1	0

V. List of Publications :

D) INTERNATIONAL JOURNALS: 11

- 1) **Balasundaram,R,** Valavan.D, Baskar.N, (2014) ‘Heuristic Based Approach for BI-Criteria Optimization of Minimizing Makespan and Total Flow Time of Flowshop Scheduling’, International Journal of Mechanical & Mechatronics Engineering IJMME-IJENS Vol:14 No:02, pp 1-11, ISSN :2077-124X(online)
- 2) **Balasundaram,R.** Valavan,D. & Baskar,N. (2014) ‘Minimizing Total Flow Time in Permutation Flowshop Scheduling by Two-Phase Approach’, International Review of Mechanical Engineering, Vol : 8, No. 3, pp 631-637, 2014. ISSN: 1970-8742 (online).
- 3) **Balasundaram,R.** Kannan,G. Baskar,N. & Siva Sankar.R, (2015) ‘Rule Based Heuristic Approach For Minimizing Total Flow Time in Permutation Flowshop Scheduling’,TEHNICKI VJESNIK-TECHNICAL GAZETTE – Croatia. Vol.22, No.1, pp.25-32, 2015. ISSN: 1848-6339 (online).

- 4) **Balasundaram, R.** Valavan, D. Srinivasan, D & Baskar, N (2015) , ‘Learning Effective Dispatching Rule for Minimizing Total Flow Time in Permutation Flowshop Scheduling’, International Journal of Applied Engineering Research, vol. 10, no. 6, pp. 14357-14370. ISSN : 0973-4562.
- 5) Valavan D, **Balasundaram R** & Rajkumar G, (2016), ‘Experimental Design and Analysis of Carbon Fiber Reinforced Composite Drive Shaft’, Asian Journal of Research in Social Sciences and Humanities Vol. 6, No. 11, pp. 167-178. ISSN 2249-7315 DoI No.:10.5958/2249-7315.2016.01183.7
- 6) Kannan G, **Balasundaram, R.** Baskar, N, & Asokan. P. (2017) , ‘A hybrid approach for minimizing makespan in permutation flowshop scheduling’ Journal of Systems Science and Systems Engineering, Springer- China, Vol.26, Issue No. 1, pp. 50-76, Doi : 10.1007/s11518-016-5297-1, ISSN 1861-9576.
- 7) Balachandar, R. **Balasundaram R.** and Rajkumar G. (2018), ‘Dry Sliding Wear Characteristics of Aluminum 6061-T6, Magnesium AZ31, and Rock Dust Composite’, IOP Conference Series : Materials Science and Engineering, Vol. 314, Issue No.1, <http://iopscience.iop.org/article/10.1088/1757-899X/314/1/012013/meta>
- 8) Ramakrishnan, H., **Balasundaram R.**, Ganesh, N. Karthikeyan, M. (2018), ‘ Experimental Investigation of Cut Quality Characteristics of SS321 Using Plasma Arc Cutting’, Journal of Brazilian Society of Mechanical Engineering, <https://doi.org/10.1007/s40430-018-0997-8>
- 9) Rajkumar, G., **Balasundaram, R.**, Ganesh, S., Rajaram, S. (2018), ‘ Investigation of Turning Parameters of Machining INCONEL-718 Using Titanium and Carbide Inserts’, Materials today : Proceedings, Vol.5, Issue No. 5, Part. 2, pp.11283-11294, <https://doi.org/10.1016/j.matpr.2018.02.095>

- 10) Rajaram, S., Rajkumar, G., **Balasundaram, R.**, Srinivasan, D. (2018) 'Experimental Investigation of Drilling Small Hole in Duplex Stainless Steel (SS205) Using EDM', Journal of Mechanics and Mechanical Engineering, Vol. 22, Issue. 1, pp. 285-293.
- 11) Balachandar, R., **Balasundaram.R.**, Srinivasan, D., Rajkumar, G. (2018) 'Cut Quality Characteristics of Al 6061 – T6 Composites using Abrasive Water Jet Machining', International Journal of Materials Engineering Innovation, Vol. 9. Issue. 3, pp.179-194.

II) BOOK CHAPTER : 02

1) **Balasundaram. R.**, Baskar. N and Siva Sankar. R, "Discovering Dispatching Rules For Job Shop Scheduling Using Data Mining", Published in Springer link book Series – Advances in Intelligent systems and Computing , Volume178, pp. 63-72,2013 ISBN: 978-3-642-31599-2

http://link.springer.com/chapter/10.1007/978-3-642-31600-5_7

2) **Balasundaram.R.**, Baskar.N and Siva Sankar.R, "A New Approach to Generate Dispatching Rules for Two Machine Flowshop Scheduling using Data Mining" , Published in – Elsevier – Procedia Engineering Vol:38, pp. 238-245, 2012,Annexure-II

<http://www.sciencedirect.com/science/journal/18777058/38>

III) INTERNATIONAL CONFERENCE : 06

1) **Balasundaram.R** and Baskar.N, (2010) 'Minimizing Completion Time Variance In Single Machine System Using Scatter Search Algorithm' , International Conference on Advances in Industrial Engineering Applications ICAIEA, Organized by the Department of Industrial Engineering, College of Engineering, Anna University Chennai, January 6-8.

2) **Balasundaram.R.**, Baskar.N and Siva Sankar.R, (2011) 'Minimizng Number Of Tardy Jobs In Single Machine Scheduling Using Decision Tree Based Approach', International Conference on Computational Intelligence and Engineering Applications, 16 -17th, October, 2011, Bhubaneswar, India. pp -24-30.

3) **Balasundaram.R,** Baskar.N and Siva Sankar.R, (2011) ‘Minimizng Maximum Lateness In Single Machine Scheduling Using Data Mining Based Approach’, International Conference on Simulation, Modeling and Analysis (COSMA 2011), 14 -16th, December,2011, Amirtha University, Tamilnadu, India pp- 446 to 452.

<http://www.scribd.com/doc/76708467/COSMA-2011-Proceedings>

4) **Balasundaram.R,** Baskar.N and Siva Sankar.R, (2012) ‘ Minimizing Mean Flow Time In A Single Machine Scheduling Using Data Mining ’ 4th International Conference & 25th All India Manufacturing Technology, Design and Research Conference – *AIMTDR 2012*, December 14-16, 2012, Vol. II, PP 1253- 1258. Jadavpur University, Kolkata, India.

5) **Balachander R,** Balasundaram R and Rajkumar G, (2017) ‘Dry Sliding Wear Charactristics of Aluminum Al 6065-T6, Magnesium AZ31 and Rock Dust Composite’, International Conference On Advances In Metaullurgy, Materials And Manufacturing – ICAMMM2017 , March 6-8 , pp. 347-357, Organized by Government College of Engineering, Salem, Tamilnadu,

6) Rajkumar G, **Balasundaram R,** Ganesh N and Rajaram S, (2017) “Investigation On Turning Parameters Of Machining Inconel 718 Using Titanium & Carbide Tool Inserts ”, International Conference on Materials, Manufacturing and Modeling, March 9-11, Organized by VIT, Vellore, Tamilnadu, India .

VI) GRANTS RECEIVED :

1)Received **Rs 90,000** /- from National Assessment and Accreditation Council (NAAC), Bangalore to conduct Two days workshop on “Quality Conscious & Quality Sustenance in Higher Education, on Feb 16 & 17th , 2017.

VII) PATENTS :

Sl.No	Title	Name of Applicants	Patent No.	Award Date	Agency/Country	Status
1	Agricultural Sprayer Machine	Albert Francis & R.Balasundaram	201741034425	Complete filing : 19/03/18	IPO/Chennai	Under Publication
2	Rotary Engine	R.Balasundaram R.Vidhuran, M.Shek Jamal, Presenna Kumar & Remegius	201841015209	Complete filing : 22/04/2018	IPO/Chennai	Under Publication

OTHER RESPOSIBILITIES HELD:

- 1) IQAC – coordinator for K.Ramakrishnan College from April 2016 to till date
- 2) R&D Cell in-charge for K.Ramakrishnan Group of Institutions from Feb-2017 to June 2018

Others:

- 1) Chief Guest to address Inaugural function of Mech YUGA2k17, of Trichy Engineering College on 20/03/17

VIII. List of Short Term Course Attended :

Sl. No.	Name of the Programme	Duration	From	To	Place
1	CNC Machines and CIM	22 Days	08/07/1998	31/07/1998	Anna University, Chennai
2	Young Technical Teachers	3 Days	28/12/1998	30/12/1998	SRM Engineering College, Chennai
3	Pro-E & I-Deas	19Days	08/08/2000	26/08/2000	Anna University, Chennai
4	IT enabled Manufacturing	2 Days	03/05/2002	04/05/2002	Anna University, Chennai
5	FDP on	2 Days			Anna University, Trichy

	CAD/CAM/CAE & PLM		28/02/2009	01/03/2009	
6	FDP on Data Warehousing and Data Mining	13 days	25/05/2009	06/06/2009	NIT, Trichy
7	NBA – Norms & Forms	1 Day	01/10/2009	-	Association of Self Financing Professional Engineering Colleges, Trichy
8	Research and Data Analysis using SPSS	1 Day	08/10/2010	-	M.A.M, College of Engineering, Trichy
9	Application of Intelligent Optimization Techniques Using Matlab- 7.0	2 Days	07/01/2011	08/01/2011	Bannai Amman Institute of Technology, Sathyamangalam
10	Research Methods and Tools for Researchers	2 Days	11/03/2011	12/03/2011	Jayaram Engineering College, Trichy
11	Recent Research and Development in Manufacturing Process	13 Days	29/04/2013	11/05/2015	MAM College of Engineering
12	Workshop on Siemens Centre of Excellence in Manufacturing for South Tamilnadu	1 Day	20/02/2016	-	NIT, Trichy
13	NAAC Awareness on Quality system in Higher Education	2 Days	29/09/2016	30/09/2016	Anna University, Chennai
14	IPR Procedures & Best Practices	4 Days	03/05/2017	06/05/2017	Anna University, Chennai
15	NBA Awareness workshop	1 Day	04/08/2018		NBA & Anna University, Chennai.

IX. List of Short Term Course Organized :

Sl.No.	Name of the Programme	Duration	From	To	Place	Resource Person
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1	Various Funding Opportunities and Art of Writing Research Proposal	1 Day	22/08/15	-	K.R.C.E	Dr.V.Balasuburamaian, Professor, Department of Manufacturing Engineering, Annamalai university, Chidambaram.
2	IPR	1 Day	1/7/2016	-	KRCE	Dr.M. Kanda Babu, Center Head IPR & Innovations, Professor, Department of Production Engg, Anna University, Chennai
3	How to Publish research Papers in international Journals	1 Day	04/8/2016	-	KRCE	Dr.G.Kannan, Professor and Head, Center for Engineering Operations Management, University of Southern Denmark
4	Quality Conscious and Quality Sustenance in Higher Education	2 days	23/02/17	24/02/17		Sponsored by 'NAAC'