Dr. L. Ravikumar,
Professor,
Institutional Coordinator Research and Development
Coordinator-TEQIP-III
Former HOD-Department of Mechanical Engineering
Department of Mechanical Engineering,
BMS College of Engineering,
Bengaluru-560019.

Residential Address:
No 28.A, Shiva krupa, 10 th Main, Hampinagara, RPC layout
Vijayanagara, Bangalore-560104

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Academic Achievements

- Advisor R&D BMSCE
  Institutional Coordinator- Research and Development 2017 to 2020
- Nodal officer –Academic TEQIP-III
- Coordinator TEQIP-II
- Subject Expert –DRDO –CEPTAM Board
- NBA Evaluator
- HOD Mechanical Engineering(April 2015 to2017)
- Member BOG, BMSCE(faculty representative)2013-2016
- Subject expert-Mechanical Engineering-PhD studies, Bangalore University2016-18
- Chairman, BOE,BOS Mechanical Engineering(2015-17),
- Member LIC, VTU, Belgaum (2010)
- Member BOS Mechanical Engineering. Visveswaraya Technological University, Belgaum, Karnataka, 2005-2007
- Member BOE PG(Machine Design), Bangalore University 2008-2010

- EDUSAT- Invited Lecture-Design of Machine Elements-II
- Member BOS Mechanical Engineering, SIT Tumkur 2008-2009
- Chaired a technical session at an International conference and National Conferences
- Offered faculty position at NIT Surathkal and NIT Jalandhar
- Invited as judge for the students technical paper presentation at various institutions
- Visiting Student Fellowship, NAL, Bangalore for P.G. Studies, 1994

Administrative Activities at BMSCE

- Institutional Coordinator- Research and Development 2017 to till date
- Nodal officer –Academic TEQIP-III
- HOD-Mechanical Engineering (April 2015-2017)
- Coordinator-II, TEQIP-II

  (Principal Member for The Preparation Of TEQIP Institutional Development Proposal (IDP))
- Member For The Preparation Of TEQIP Institutional Concise Proposal(CIP) TEQIP phase1
- Deputy chief Coordinator for the VTU valuation center - 2000,2001, 2007
- Coordinator- Theory examinations: BMS college of Engineering
- MEMBER BOE, BOS at different universities and Institutes

Educational Qualification

Sl. No.	University	Degree	Year	Field of specialization
1	Indian Institute of Technology Kharagpur	Ph.D	2004	Structural Dynamics (Aerospace Engineering)
1	Bangalore University	M.E	1995	Machine Design
2	Bangalore University	BE	1990	Mechanical Engineering
3	Board of Technical Education Karnataka	DME	1986	Mechanical Engineering

Employment Records (Starting from present position)

Academic

Sl. No.	University/College	Designation	Period
1	B.M.S. College of Engineering	ICRD	2017-till date
		HoD	April 2015-2017
2		Professor	2010-till date
3		Associate professor	2007-2010
4		Assistant Professor	2004 – 2006
5		Lecturer	1994 – 2004

Industrial

Sl. No.	Industry	Designation	Period
1	UCAM Limited, BEL Industrial Area, Bangalore	Trainee Engineer	1990-1991
2	HMT-IV Tumkur	G. App. Trainee	1991-1992

Research Projects

Total Numbers : **SIX** (2006-18)

Total amount received : **70.25 lakhs**

Research Project ongoing 2015-2018

- Development of Carbon Fiber Reinforced Plastic (CFRP) torque transmission tube" CVRDE (16.90 Lakhs)

- Performance Studies of Semi Active Journal Bearing (6 lakhs)

Research Projects executed 2006-2014

1) Damping and Stiffness Characteristics of Non-Newtonian Fluids in squeeze Film Dampers used as External Damping Medium

   Ref No 8023/RID/RPS-15/2011-12

   Amount Sanctioned: 10.750Lakhs

2) Temperature Effects on Evaluation of Damping and Stiffness Characteristics of Magneto-Rheological Fluids used as External Damping Medium
   AR & DB File No: DARO/08/1041575/M/I/23-12-2010

   Amount Sanctioned: 16.840Lakhs

3) Flutter Instability of Machine Components with/without Flaws Subjected to Follower Loads
   AICTE File No: 8023/RID/BOR/RPS-86/2005-06

   Amount received: 10 Lakhs

4) Evaluation of Damping and Stiffness Characteristics of Magneto-Rheological Fluids used as External Damping Medium"
   No: DARO/08/1041391/M/I 28th Dec 2006

   Amount received: 9.984 Lakhs

Patents Applied

1. Bump foil squeeze film damper with floating shims in the constrained space. (applied with patent office) No. - 2451/CHE/2015, Date 08/05/2015

2. Bearings comprising smart materials. No. - 1461/CHE/2014,Date-20/03/2014

Consultancy Project Handled

Stress analysis of carrousel and valve arrangements for LPG line
M/S FABS Limited, Bangalore

Cost: Rs. 25,000/-

Details of Research work Supervised

Name of Candidates	Registered under VTU	Area of Specialization	Status
H.P Jagadish	VTU	Evaluation of Damping and Stiffness Characteristics of Magneto-Rheological Fluids used as External Damping Medium	Awarded
G.Saravanakumar	VTU	Temperature Effects on Evaluation of Damping and Stiffness Characteristics of Magneto-Rheological Fluids used as External Damping Medium	Awarded
Raghu Yograj	VTU	Semiactive Journal bearing	Awarded
Rakshit	VTU	Flutter analysis of delaminated composite panels subjected to various loads.	On going

M.Sc. Engineering by Research

Name of Candidates	Registered under VTU	Area of Specialization	Status
Gururaj G. Nayak	VTU	Dynamic Stability Analysis of Columns Subjected to Conservative and Non-Conservative Loads	Completed
Sandesh S	VTU	Nonlinear torsional transient vibrations	completed
UG, PG	VTU	Guided Several Projects	

Publications

International Journals

1. “Feasibility and performance studies of Semi Active Journal Bearings”, Procedia technology, Vol 25, pp1154-1161 Elsevier, 2016.

2. “Magnetorhelogical fluid and grease based squeeze film dampers- A Comparison”, International Journal of Mechanical Engineering and Material Science. Vol 8(1)49-53 2015

3. “Effect of L/D Ratio and the Temperature on MR Fluid Squeeze Film Damper Performance”, Asian Journal of Engineering and Applied Technology, Vol. 3 No. 2, pp.37-41, 2014.

4. “Effect of Temperature and Electric Field on the Damping and Stiffness Characteristics of ER Fluid Short Squeeze Film Dampers”, Journal of Advances in Tribology.1-10, Vol 2013

5. “Effect of Temperature on the Performance of Squeeze Film Damper Lubricated With Magnetorheological Fluid”, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-3, Issue-5, 160-164, 2013.

6. “Dynamic stability analysis of column with localized flaw subjected to follower loads” International Journal of Advanced Mechatronics and Robotics Vol 3 No 2 71-84, 2011.

7. “Calibration of stiffness and damping characteristics of magnetorheological fluid long squeeze film damper in terms of Reynolds number”, Journal of Mechanical Engineering Science Vol 224(10),2121-2128, 2010.

8. “Dynamic characteristics of MR fluid short squeeze film damper in terms of Reynolds number”, Journal of Aerospace Sciences and Technologies Vol 62(2), 141-151, 2010.

9. “Dynamic instability characteristics of doubly curved panels with circular cutouts subjected to follower edge load”. Aircraft Engineering and Aerospace Technology vol 177(1), 52-61, 2005.

10. “Vibration, buckling and dynamic instability behaviour of laminated composite cross-ply curved panels with central circular cutout subjected to partial in-plane edge loading”. *International Journal of Structural Stability and Dynamics.* Vol 5(1), pp 1-20, 2005.

11. “Vibration, buckling and dynamic instability behaviour of doubly curved panels with central circular cutout subjected to a non-uniform partial edge loading. *Int. Journal of Advances in Vibration.* Vol 4(2), 2005.

12. “Dynamic instability characteristics of laminated composite doubly curved panels subjected to partially distributed follower edge loads”. *International Journal of Solids and Structures*. Vol 42(8), pp 2243-2264, 2005.

13. “Dynamic stability analysis of isotropic/laminated composite plates with circular cutout subjected to partial follower edge load”. *Journal of Aerospace Engineering and Technologies*. Vol 56(4), 226-239, 2004.

14. “Tension buckling and parametric instability characteristics of doubly curved panels with circular cutout subjected to non-uniform tensile edge loading”. *Thin Walled Structures,* 42(7), 947-962, 2004.

15. “Dynamic instability characteristics of doubly curved panels subjected to partially distributed follower edge loading with damping”. *Proc. of Institution of Mech. Engrs. IMechE Part C. U.K. Journal of Mechanical Engineering Science*. 218, 1-15, 2004.

16. “Dynamic instability characteristics of laminated composite plates subjected to partial follower edge load with damping”. *International Journal of Mechanical Sciences*, 45(9), 1429-1448,2003.

17. “Tension Buckling and vibration behaviour of laminated composite curved panels subjected to partial edge loading”, *Composite Structures*, 60, 171-181, 2003.

18. “Tension Buckling and vibration behaviour of curved panels subjected to non-uniform in-plane edge loading”, *International Journal of Structural Stability and Dynamics*, 2(3), 409-423, 2002.

National Journals

1. “Comparative Study of M.R. Fluid Journal Bearings and M.R. Fluid Squeeze film Dampers for Static and Dynamic Characteristics” Indian Journal of Tribology, Issue 2, Volume 4, July-December 2009**.**

2. Buckling behaviour of laminated composite cylindrical curved panel subjected to biaxial non-uniform edge loading”, J. Inst. of Engineers(India)Aerospace Engineering, Volume 87, pp 12-16 May 2006

International Conferences:

1. An investigation of special magnetorheological fluid squeeze film dampers. Proceedings of ICTACEM 2014, International Conference on Theoretical, Applied, Computational and Experimental Mechanics, December 29-31, 2014, IIT Kharagpur, India\ ICTACEM-2014/235

2. Magnetorheological fluid and grease based squeeze film dampers – A COMPARISON. International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (October 16-18, 2014).PTU Punjab

3. Effect of Temperature on the Dynamic Characteristics of Magnetorheological Fluid Long Squeeze Film Damper", International Conference ASIATRIB 2014, Agra, 17-20th February 2014

4. Damping and stiffness characteristics of grease based squeeze film damper, International Conference ASIATRIB 2014, Agra,17-20th February 2014

5. Performance Analysis of Magnetorheological Fluid Squeeze Film Damper Used as External Damping Medium", International Conference "AMMMT 2013", SIT Tumkur, during 2-4, May, 2013.

6. Effect of temperature and electric field on the damping and stiffness characteristics of ER fluid squeeze film dampers", International Conference on Advanced Manufacturing and Automation, "INCAMA 2013"Kalasalingam University, Srivilliputur, during March 28-30, 2013.

7. Dynamic stability analysis of column with localized flaw subjected to follower loads, AFTMM, Punjab Technological University, Jalandhar, October 2011.

8. Theoretical analysis of static and dynamic characteristics of MR fluid rectangular squeeze film dampers, ICTACEM 2010, Dec-2010, IIT-KGP.

9. Effect of temperature on static and dynamic characteristics of MR fluid squeeze film dampers, December-2010, ICIT, Ranchi.

10. Vibration and Buckling behaviour of laminated composite curved panel subjected to biaxial non-uniform edge loading, ICOVP-2009,19-23 Jan 2009, IIT Kharagpur.

11. Comparative study of Magnetorhelogical fluids journal bearings and squeeze film dampers for static and dynamic characteristics, International conference on Industrial Tribology, Nov 6-8, 2008, ICIT 2008, New Delhi

12. Flutter instability analysis of plate with damage subjected to follower forces, International conference on Theoretical, applied, Computational and Experimental Mechanics. ICTACEM-2007, Indian Institute of Technology, Kharagpur. December 27-29, 2007.

13. Instability Analysis of Columns with Damage under Distributed Follower Load, Jan 28-30, 2006, Fatigue damage and Analysis, XIV NASAS, VNIT Nagpur.

14. Dynamic stability characteristics of cantilever plate subjected to varying follower load with damping, International conference on Structural Engineering Convention SEC-2005, Dec. 14-16, 2005, IISc, Bangalore.

15. Dynamic stability characteristics of cantilever plate subjected to varying follower load with damping. 8th International conference on Shell Structures, SSTA, Oct 12-15, 2005, Gdansk- Jurata, Poland.

16. Effect of Aspect ratio and Boundary conditions on Tension Buckling Behaviour of Curved panels Subjected to Follower Edge Loading with Damping. ICTACEM-2004, IIT-Kharagpur.

17. Flutter Behaviour of a Plate with Circular Cutout Subjected to Non-Uniform Follower Force. Accepted for ASEM-04 Seoul, Sept. 2004.

18. Flutter Behaviour of Laminated Composite Plate with a Circular Cutout Subjected to Non-Uniform Follower force. ICASI and XIII NASAS, July 14-17th 2004 at IISc., Bangalore.

19. Dynamic instability characteristics of rectangular plates subjected to intermediate partial follower edge load. SEC-2003, Dec. 12-13, 2003 at IIT, Kharagpur.

20. Dynamic instability characteristics of laminated composite plate plates subjected to intermediate partial follower edge load. INCCOM-2 & XII NASAS, Sept. 5-6, 2003 at IISc., Bangalore.

21. Buckling behaviour of laminated composite cylindrical curved panel subjected to biaxial non-uniform edge loading, 54th AGM-AeSI & International Seminar, Jan 21-22, 2003 at Kolkata.

22. Tensile buckling and vibration behaviour of curved panels, 2nd International Conference on Structural Stability and Dynamics (ICSSD). December 16-18, 2002, at NUS, Singapore.

National Conferences/symposium

1. Effect of temperature on the Dynamic characteristics of MR fluid squeeze film damper Jun 2011, MSRIT, Bangalore.

2. Static and Dynamic Characteristics of Magneto-rheological Fluid Pure Translatory Squeeze Film Damper April 2010, SSCE, Bangalore.

3. Performance characteristics of pure translational parallel surface MR Fluid Squeeze film dampers, May 2009, IEM Dept. BMSCE.

4. Calibration of stiffness and damping characteristics of MR fluid Squeeze film in terms of Reynolds number, Nat DMME-09, Malnad College of Engineering, March-2009, Hassan.

5. Study on smart autotronics, ETIME-2008, 28-29, August, 2008, BMSCE, Bangalore.

6. Vibration analysis of stiffened laminated plates by finite element approach, ETIME-2008, 28-29, August,2008, BMSCE, Bangalore.

7. Vibration and buckling analysis of plate with damage subjected in-plane loads, ETIME-2008, 28-29, August,2008, BMSCE, Bangalore.

8. Behaviour of electro- rheological fluids in dampers:-an overview. ETIME-2008, 28-29, August,2008, BMSCE, Bangalore.

9. Performance characteristics of a mr fluid spherical squeeze film damper in a spherical seat, ETIME-2008, 28-29, August,2008, BMSCE, Bangalore.

10. Fracture mechanics based assessment of embedded delamination in laminated composite panels, ETIME-2008, 28-29, August,2008, BMSCE, Bangalore

11. Theoretical investigation of stiffness and damping characteristics of MR fluid squeeze film dampers, NCETM, TBI-KIET, Ghaziabad, 27-28, June 2008.

12. Dynamic Instability Analysis of Columns, panels subjected to Non Follower and Follower Load, National conference on Advances in Civil Engineering,21-22, March 2008, ACE-2008, Bhatkal

13. Flutter instability characteristics of doubly curved panels subjected to varying follower load with damping,CEMCT-06, GNDEC, Ludhiana, 24-25,Nov. 2006

14. Non-linear torsional vibration analysis, NATCON.ME-2006, Sri. Sddaganga Institute of Technology, Tumkur, 26th & 27th May 2006.

15. Coupling stiffness sensitivity analysis on Torsional Transient Vibrations, National conference on Emerging trends in Mechanical Engineering (ETIME-2006), BMS College of Engineering, 10-11, Feb 2006.

16. Dynamic stability analysis of cantilever column with damage, National conference on Advances in Mechanical Engineering , AIME-2005, 20th- 21st Jan. 2006, JMIU-New Delhi

17. Flutter characteristics of cylindrical panels subjected to follower forces with damping, National conference on composite component and construction (NCCCC), 12-13th Sept. 2005, JNTU, Kakinada, Andra pradesh.

18. Effect of Aspect ratio and Boundary conditions on Tension Buckling Behaviour of Curved panels Subjected to Non-Uniform In-Plane Edge Loading 18th National Convention of Aerospace Engineers, Nov-17-19, 2004

19. Dynamic instability characteristics of laminated angle-ply plates subjected to intermediate partial follower edge load. ETSMC-2003, Nov. 1-2, 2003 at NIT, Rourkela.

20. Buckling and vibration behaviour of doubly curved panels subjected to non-uniform biaxial loading (Compression/Tension). Wave Mechanics and Vibration (WMVC-2003), March 15-16, 2003 at Jalpaiguri.

21. Degenerated modes in Vibration Problems. 45th ISTAM international congress, December 26-29, 2000, Sivakasi.

Conference/ workshops Organized

Sl. No	Year	Conference/Short term Courses organized	Organization/ Venue	Dates
1	2000	STTP on Mechatronics	BMSCE	12-15 Dec 2000

2	2006	National Conference on Emerging trends in Mechanical Engineering	BMSCE	FEB 10&11
3	2006	Work shop on Role analysis and role effectiveness	BMSCE	Sept. 1, 2
4	2007	Workshop on English Learning and Computer Awareness February 19-24, 2007	BMSCE	February 19-24
5	2008	National Conference on Emerging trends in Mechanical Engineering	BMSCE	AUG 28 & 29
6	2013	Identification of Slow Learners	BMSCE	Aug 20, 2013
7	2014	FDP on Theoretical, Computational and Applied Mechanics	BMSCE	16-24, June, 2014
8	2015	Curriculum Design and Development of Mechanical Engineering	BMSCE	5&6, June, 2015
9	2015	Automobile Mechanics and IC Engines	BMSCE	30&31, Oct., 2015
10	2016	Environmental Management Frame Work-2016	BMSCE	29/02/16 to 04/03/2016
11	2016	International Conference – ICAMA	BMSCE	15-17, June 2016
12	2016	CAMD with Solidworks and GD&T	BMSCE	8 – 12, August, 2016

Short term Training Programme/ workshops /seminars attended

Sl. No	Year	Conference/Short term Courses organized	Organization/ Venue	Dates
1	1998	CAD/CAM/Rapid prototyping for near net shape manufacturing. at	IISc-Bangalore	Aug. 03 – 07, 1998
2	1998	Finite element method	IISc-Bangalore	Sept. 21-25,1998
3	1999	Experimental methods of stress analysis	IIT- Kharagpur	Jan. 04–08, 1999
4	1999	Management of manufacturing enterprises: Recent trends and developments	IIT-Mumbai	May 25 – 29, 1999
5	1999	Mathematical models for multi criteria decision making in	BMSCE - Bangalore	July 03 – 17 1999

		Engineering and industry		
6	1999	Advanced microprocessor and PC training	UVCE-Bangalore	July 19 – Aug. 8,1999
7	2000	Mechatronic system design	IISc-Bangalore	Sept 11- 22, 2000
8	2000	STTP on Mechatronics	BMSCE	12-15 Dec 2000
9	2004	Interpersonal Communication, February	IIT-Kharagpur	Feb. 16-21, 2004,
10	2004	Recent Advances in Computational Techniques,	BMSCE-Bangalore	2-13th August 2004,
11	2004	The Quality Lever	CII, Bangalore	*30 Sept &1st Oct 2004*
12	2004	Finite Element analysis and identification in Rotor Bearing,	IIT-Gawahati	20th to 24 th Dec.2004,
13	2005	Failure analysis of Engineering materials and Residual life Assessment	VNIT, Nagpur	31 Jan. to 11th Feb., 2005
14	*2005*	Aluminium alloy Composite Materials	BMSCE, Bangalore	*17-18 Feb,2005*
15	2005	Feel Teacher	BMSCE, Bangalore	01-04, Sept 2005
16	2006	Advanced Vibrations	IIT-Bombay	3-7, July 2006
17	2006	Role analysis and Role effectiveness	BMSCE, Bangalore	1-2, Sept. 2006
18	2006	Computer aided Engineering Drawing	BMSCE	4-6, Sept. 2006
19	2007	Managerial Capacity Building	SPFU, Bangalore	10-14 July 2007
20	2007	Computer Aided Machine Drawing	BMSCE	5-6,Oct 2007
21	2009	Engineering Noise and Vibration Control	IISc, Bangalore	13-24, July 2009
22	2010	Spacecraft Attitude Dynamics and Control	IIT-Bombay	17-21,May 2010
23	2010	Summer School in Tribology	IiPM, Gurgaon	21-24, June, 2010
24	2010	Research & Development and Innovation Initiate	MCE Hassan	3rd July 2010
25	2011	Navigation control and Guidance	IIT-Bombay	13-17th June 2011
26	2011	Recent developments in Design of Press Tools, Jigs and Fixtures	NIT-Calicut	04-09th July 2011
27	2011	Fracture Mechanics and Fatigue	NIT- Surthkal	8-12, August 2011

28	2013	Teaching Methodologies	SPFU.GoK, Bangalore	16&17, Dec 2013
29	2014	Intelligent Machines and Systems	BMSCE	20-24, Jan. 2014
30	2015	Curriculum Design and Development of Mechanical Engineering	BMSCE	5&6, June, 2015
31	2015	Assessment of Quality of Teaching Learning Process	BMSCE	29/07/2015
32	2015	Leadership in University Management	NUS, Singapore	29/09/15 to 01/10/2015
33	2016	Environmental Management Frame Work-2016	BMSCE	29/02/16 to 04/03/2016
34	2016	3rd World Summit on Accreditation	Delhi	18-20, March 2016
35	2016	Fatigue and Fracture Mechanics	BMSCE	25-07-16 to 05-08-2016

Areas of Interest

- Structural dynamics
- Experimental stress Analysis
- Mechanical vibrations
- Strength of materials
- Machine Design

Subjects Taught in the last five years:

- Experimental stress Analysis
- Mechanical vibrations
- Strength of materials
- Machine Design
- Computer aided Engineering drawing

Books Reviewed:

Mechanical Vibrations – Pearson publications, 1993

Personal Profile

Date of Birth 05-05-1968

Nationality Indian

Dr. Ravikumar L