### **Curriculum Vitae**

Brief Profile: 1-2 paragraphs (not exceeding 500 words)

- 1. Name: B.Ravisankar
- 2. Designation: Associate Professor
- 3. Office Address: Dept. of MME
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- 6. Field(s) of Specialization: Metal Forming, Severe Plastic Deformation, Diffusion Bonding
- 7. Employment Profile

Job Title	Employer	From	То
Associate Lecturer	Principal, Vellore Engineering College, Vellore	27.11.1988	15.02.1989
Teaching Research fellow	Vice Chancellor, Anna University	17.02.1989	30.07.1992
Senior project officer Gr II	Dean (ICSR), IIT, Madras	01.12.1993	21.11.1995
Lecturer	Principal, PSG College of Technology, Coimbatore	22.11.95	22.11.2000
Senior Lecturer	Principal, PSG College of Technology, Coimbatore	23.11.2000	30.11.2004
Assistant Professor	Principal, PSG College of Technology, Coimbatore	01.12.2004	27.07.2005



Assistant Professor	Director, National Institute of Technology, Tiruchirappalli	28.07.2005	27.07.2008
Associate Professor	Director, National Institute of Technology, Tiruchirappalli	28.07.2008	till date

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph D	Bharathiar	2004		Diffusion Bonding
M.E	Anna	1992	I class with distinction	Production
B.E	Madras	1988	I class	Metallurgy
HSC	Board of Hr.Sec.Education, Tamil Nadu	1984	I class	Maths, Physics, Chemistry and Biology
SSLC	Board of Sec.Education, Tamil Nadu	1982	I class	

### 9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	То
Member, Hospital	Institution	22.11.2016	till date
committee			
Programme Co	Department	24.09.2014	till date
ordinator for			
M.Tech-MSE			
DAC member for	Department	30.01.2012	30.01.2014
Physics			
Chairman, DPEC,	Department	2010	2016
M.Tech (WE)			
Chairman, DPEC,	Department	2016	till date
B.Tech (MME)			

#### 10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	То
Member of question paper passing board.	Anna University, Chennai	2003	till date
Member of the Board of studies in the faculty of Mechanical Engineering	Anna University, Coimbatore	2007	2010
Member of the Board of studies in the faculty of Metallurgical Engineering	Govt. College of Engineering, Salem	2013	till date
Member of the Board of studies in the faculty of Metallurgical Engineering	PSG College of Technology, Coimbatore	2016	till date
Member of the Board of studies in the faculty of Manufacturing Engineering	AMRITA University, Coimbatore	2015	till date

#### 11. Awards, Associateships etc. NIL

Year of Award	Name of the Award	Awarding Organization

#### 12. Fellowships

Year of Award	Name of the Fellowship	Awarding	From	То
		Organization	(Month/Year)	(Month/Year)
1997-98	Young Scientist Fellowship	Tamil Nadu	July 1997	October 1997
		Government		

#### 13. Details of Academic Work

(i) Curriculum Development:

I am course co ordinator for M.Tech-MSE programme of MME department. I am coordinating the curriculum development apart from contributing to the curriculum of other PG and UG streams offered by MME department.

(ii) Courses taught at Postgraduate and Undergraduate levels

PG: Metal Forming, Design and Selection of Materials, Physical Metallurgy

**UG:** Phase Transformation and Heat treatment, Strength of Materials, Special steels and Cast irons, Non Ferrous Physical Metallurgy

(iii)Projects guided at Postgraduate level

1. Development and analysis of diffusion bonding of titanium with a nickel based superalloy – S.S. Annamalai- M.E (Industrial metallurgy), PSG College of Technology, Coimbatore, 2000

2 Development of Diffusion Bonding of in SU 263 A – T.Vanitha Devi – MSc (Material Science) – PSG College of Technology, Coimbatore, 2002

3. Diffusion Bonding of Superalloys – P.Adaickalavan - M.E (Industrial metallurgy), PSG College of Technology, Coimbatore, 2002.

4. Bonding of Invar with Alnico using vacuum bonding technology – J.Krishnamoorthi, M.E (Industrial metallurgy), PSG College of Technology, Coimbatore, 2004

5. Analysing diffusion bonding with ultrasonic testing – S.Suresh Kumar- MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2005

6. Sliding wear behaviour of In 718 – C.P.Suresh Kumar - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2005

7. Sliding wear behaviour of 304 austenitic stainless steel employed in steam generator tube support – K.Senthil Kumar Sliding wear behaviour of In 718 – C.P.Suresh Kumar - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2005

8. Evaluation of fatigue strength and crack growth of 316L(N) austenitic stainless steel T-Pipe joints, K.Kanda Pandy MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2006

9. Synthesis and characterisation of zinc oxide varistors, Sujit Singh, MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2006

10. Laser cladding of Ni-Ti cladding material on Al-12 Si alloy – Arun Kumar Srivatsava MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2006

11. Dispersion of carbon nano tubes – Ankur Baliyan - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2006

12. Evaluation of microstructure and properties of aluminium and copper alloys processed by cryogenic rolling – M.Venkatesan - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2007

13. Structure and property evaluation of equal channel processed aluminium and copper alloys – S.Manivannan - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2007

14. Optimisation of welding parameters in 9Cr-2W-0.5 Mo steel in consideration with cold cracking susceptibility – R.Arul Prakash - MTech (Welding engineering), National Institute of Technology, Tiruchirappalli, 2007

15. Modelling the hot deformation behaviour of titanium alloys using artificial neural network – K.Senthil Kumar - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2007

16. Evaluation of relative grain boundary energy in Ferritic steels by serial sectioning method – V.B.Rajkumar - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2008

17. Studies of Indentation creep behaviour on P91 and P92 base metals – S.Ashok- MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2008

18. Effect of Equal channel angular pressing on microstructural and mechanical properties of 2014 Al alloy – C.Mahendra Reddy - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2008

19. Optimising the mechanical properties of fine structured 2024 and 5083 Al alloys by cryo rolling – Devaiah Doppalapudi - - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2009

20. Densification of Al-Yttria composite powder by Equal Channel Angular Pressing – Ramu Yarra - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2009

21) The Indentation creep studies on high temperature low alloy steels in power plant industry and ECAP studied AA 2014 in aerospace Industrial Applications – V.Sudhakar Naik - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2010

22) Effect of Equal Channel Angular Pressing on Microstructural and Mechanical Properties of Al 7075 alloy – Kondiah Gudimetla - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2010

23) Development of Aluminium and Aluminium- Alumina composites through equal channel angular pressing – Sivanaga Sowjanya Tutika - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2010.

24) TEM characterisation of Yttria Alloy D 9 interfaces – P.Aravindram - MTech (Materials Science), National Institute of Technology, Tiruchirappalli, 2010.

25) Magnetically Impelled Arc Butt Welding of high thickness tubes using DOE technique for Boiler applications – Subba Reddy Mundla - MTech (Welding Engineering), National Institute of Technology, Tiruchirappalli, 2010.

26) An Experimental study on joining of severe plastic deformed (ECAP) aluminium material with tube to tube plate friction welding – Murali Kumar Yeddalapalli - MTech (Welding Engineering), National Institute of Technology, Tiruchirappalli, 2010.

27) Preparation and surface characterisation of nanocrystalline ternary Ni-Mo-P alloy coatings - G.S.Vinod Kumar - MTech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2010.

28) Vanadate based coatings as Eco friendly surface treatments for the corrosion protection of Aerospace aluminium alloys – Kiran S kotian - MTech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2010.

29) Preparation and Characterisation of Autocatalytically deposited Nano crystalline Ternary Ni-Mo-P Alloy Coatings – G.S.Vinodh Kumar - MTech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2011.

30) Densification of Al 2024 and Al 2024/Alumina powders by conventional; P/M route and ECAP-Nishtha Gupta - MTech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2011.

31) Friction Stir Welding of Cold and Cryo Rolled 5083 Al alloy – Murali Kumay Yeddalapalli - MTech (Welding Engineering), National Institute of Technology, Tiruchirappalli, 2011.

32) Optimisation of strength and ductility in AA 2014 Process through ECAP - Kiran S Kotian - MTech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2011.

33) Improvement of Wear Resistance in Rotovator Blades, Sasikaran V, MTech (Industrial Metallurgy), National Institute of Technology, Tiruchirappalli, 2013

34) Preparation, Characterisation and Performance Evaluation of Electroless Nickel coated HSS Drill bits, Aneesh B, MTech (Industrial Metallurgy), National Institute of Technology, Tiruchirappalli, 2013

35) Effect of Titanium on aging behaviour of D9 steels in nuclear environment, Anil Kumar Sunkuru, MTech (Industrial Metallurgy), National Institute of Technology, Tiruchirappalli, 2013

36) Consolidation of Mechanically alloyed 5083 aluminium nano composite by ECAP, N B Praksh Tiruveedula, MTech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2013.

37) Influence of Weld chemistry and post weld heat treatment on microstructure and mechanical properties of P91 weld steels – P.Krishnamraju- M.Tech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2014.

38) Evaluation of quality of Diffusion Bonding of Cu-Cu (Similar) materials using C-Scan – K.Siva Kishore Babu – M Tech (Industrial Metallurgy), National Institute of Technology, Tiruchirappalli, 2014.

39) Metallurgical and Mechanical properties of mechanically alloyed 5083 Al- Nano composite with Yttria by ECAP – Pravir Polly - M Tech (Industrial Metallurgy), National Institute of Technology, Tiruchirappalli, 2014.

40) Hot deformation behaviour of Titanium modified AISI 316 L stainless steel under Axial Torsion – Avik Kumar Mahata - M.Tech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2014.

41) Preparation, characterisation and JMA modeling of crystallisation of Electroless Nickel-Boron Coatings – Vinod Kumar - M.Tech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2014.

42) Quality Evaluation of diffusion bonded joints of dissimilar (Al-Cu) Materials – Bharat Bhushan - M.Tech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2014.

43) Consolidation of mechanically alloyed AI-5083 Alloy by ECAP – B Chaithanyahrushna - M.Tech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2014.

44) Evaluation of Quality of Diffusion bonded joints by "C" Scan and Destructive Testing – R.Rajapandian - M.Tech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2015.

45) Densification Behaviour of Bi-modal Nanostructured Al 5083 alloy powder by ECAP – J.Ganesh Varma - M.Tech (Materials Science and Engineering), National Institute of Technology, Tiruchirappalli, 2015.

46) Consolidation of Mechanically alloyed 5083 nano composites powders by Equal Channel Angular Pressing – Thathi Gowtham Shome - M.Tech (Industrial Metallurgy), National Institute of Technology, Tiruchirappalli, 2015.

47) Residual stress analysis of shot peened IN 706 Ni based superalloy – Subrahmanyam Adabala - M.Tech (Industrial Metallurgy), National Institute of Technology, Tiruchirappalli, 2015.

48) Parameter optimisation and study of weld quality in Electron Beam Welding if Inconel 718 joints for aerospace applications – Deepak George - M.Tech (Welding Engineering), National Institute of Technology, Tiruchirappalli, 2016.

49) Effect of heat treatment and brazing thermal exposure on 0.07C-16Cr-6Ni stainless steel – Vishnu K C - M.Tech (Industrial Metallurgy), National Institute of Technology, Tiruchirappalli, 2016.

50) Consolidation of Mechanically alloyed 5083 powders by Equal Channel Angular Pressing – B.Naveen - M.Tech (Industrial Metallurgy), National Institute of Technology, Tiruchirappalli, 2016.

51) Evaluation of mechanical behaviour of coated materials – Thathi Gowtham Shome - M.Tech (Industrial Metallurgy), National Institute of Technology, Tiruchirappalli, 2016.

52) Residual stress analysis of shot peened Almen strips – Comparison with IN 706 Rotor Alloy – Subrahmanyam Adabala - M.Tech (Industrial Metallurgy), National Institute of Technology, Tiruchirappalli, 2016.

Title of Project	Eunding Aganay	Dur	ation	Status
Title of Project	Funding Agency	From	То	Ongoing/ Completed
Diffusion bonding in superalloys	AICTE	1999	2001	Completed
Reliability studies relating to failure of aluminium 7075 alloy used in aerospace applications	CASSA, DRDO	1999	2000	Completed
Analysis of diffusion bonding by FEM	TNSCST	2000	2001	Completed
Development of Diffusion Bonding of (i) Ti-6Al-4V with Ti- 6Al-4V, (ii) INCO 718 with INCO 718 and (iii) Ti-6Al-4V with INCO 718	AR&DB	2002	2004	Completed
Development of Diffusion bonding of Ti-6AI-4V with a nickel based superalloy IN 718	AICTE	2003	2005	Completed
Deformation Studies of Armour Steel under Medium Strain Rates	DRDO	2003	2005	Completed
Requirement and specifications for	IISU-ISRO	2003	2005	Completed

#### 14. Details of Major R&D Projects

			1	
the development				
and realisation of				
bonding of INVAR				
with magnetic				
materials using				
vacuum diffusion				
bonding technology		2005	2000	
Manufacture Of	DRDO	2006	2008	Completed
Hollow Cylinder In YBCO By Hot				
Pressing under				
Superplastic				
Condition				
Development of	AR&DB	2007	2010	Completed
Ultrasonic	madb	2007	2010	Completed
Method for				
Assuring				
Reliability of				
Components				
Manufactured by				
Diffusion				
Bonding				
Development of	DST	2007	2010	Completed
Iron based	DST	2007	2010	Completed
Multicomponent				
and				
Nanodispersed				
Bulk Metallic				
Glasses through				
Mechanical				
Alloying for				
Industrial				
Applications		2000	2011	
Development of	DRDO	2008	2011	Completed
nanostructured				
and bimodal				
nanostructured				
Aluminium alloys				
by Severe				
Plastic				
Deformation				
(SPD)	NDD	2000	2010	
Friction stir	NRB	2008	2010	Completed
processing of				
similar and				
Dissimilar				
Fusion Welds of				
Aluminium alloys				
used in Naval				

applications				
Development of	DRDO	2011	2014	Completed
light weight in				
situ Metal				
Intermetallic				
Laminates for				
Defence				
Applications				
Consolidation of	DST	2012	2016	Completed
mechanically				
alloyed 5083				
aluminium nano				
composites by				
equal channel				
angular pressing				
(ECAP)				
Development of	DST	2015	2018	On Going
nano structured				
magnesium				
silicide thermo				
electric materials				
by spark plasma				
sintering and				
evaluation of				
electric power				
generation from				
thermal system				
PEO coatings on	DST (Indo-Russian	2016	2019	On Going
Zr for nuclear	project)			
applications				

## 15. Number of PhDs guided

Name of the PhD	Title of PhD	Role(Supervisor/ Co-	Year of
Scholar	Thesis	Supervisor)	Award
Dr. P. Venkatachalam	The role of processing routes of Equal channel angular pressing on microstructure, mechanical properties texture and thermal stability of an Al-	Supervisor	2011
Dr.S.Jerome	Cu alloyDevelopmentofAl-TiCmetal	Supervisor	2012

	matrix composite by liquid and solid routes – A study		
Dr. S. Ramesh Kumar	Studies on Effect of ECAP, Cryo rolling and Cryo ECAP on Mechanical Properties and Microstructure of Al 5083	Supervisor	2012
Dr. S Surendarnath	Some Studies on Property Evolution of Commercially Pure Aluminum Processed Through Conventional and New ECAP Dies	Co Supervisor	2014
Dr (Ms) Ms. Meenu Srinivastva	High Temperature Oxidation and Corrosion Performance of Electrodeposited Nico-Aluminide and Nico-Craly Composite Coatings	Supervisor	2016

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of	Level of	Role	Event	Venue
	Activity	Event	(Participant/	Organized	
		(International/	Speaker/	by	
		National/	Chairperson,		
		Local)	Paper		
			presenter,		
			Any other)		
1-2,	INCOSURF - 92	International	Paper	IISc	Bangalore
December,1992			presenter		
14 - 17,	NMD	International	paper	VSP	Vishakapatnam
November,1994.			presenter		
14 - 17,	NMD	International	paper	IIT	Delhi
November,1996.			presenter		
10 - 11,	Conference on	National	Paper	NML	Jamshedpur
December, 1996	Computer Applications in		presenter		
	Applications in Metallurgy and				
	Material science				
	-				
	CAMME 96				

14 - 17, November,1998.	NMD	International	paper presenter	IISc	Bangalore
September 16- 18, 1999	Education Technology	National	Participant	PSG Institute of Medical Sciences & Research	Coimbatore
15-16 December, 1999	Reliability Analysis &Engineering	National	participant	VSSC	Trivandrum
11-13th February, 2000	48th Indian Foundry Congress	National	participant	IFA	Coimbatore
15-16 March, 2000	Advances in Metal forming	national	participant	Anna University	Chennai
28-30 September, 2000	Design, Quality and Productivity improvement in Metal Forming industries	national	participant	Advanced Forming Technology Center	Bangalore
09.10.2000 to 21.10.2000	Energy conservation and Environmental pollution in Mini steel plants and Foundry industries	National	participant	Regional Engineering College	Jaipur
19th and 20th, January 2001	Technical Communication	National	participant	Education Technology Cell of PSG College of Technology	Coimbatore
14-15, June 2001	Reliability Analysis and Engineering	national	participant	Institute of Armament Technology	Pune
7-8, September, 2001	Recent Advances in Material Processing	National	participant	Annamalai University	Chidambaram
January 31 - February 01, 2002	National Conference on Processing of Metals	national	participant	PSG College of Technology	Coimbatore
11.11.2002 to 23.11.2002	Recent Advances in Casting Engineering and Quality Managment with ISO 9000, TQM, QS 9000 and TS 16949 concepts	national	VSSC	PSG College of Technology	Coimbatore
25.05.2003 to 07.06.2003.	Human Values and Professional Ethics	national	participant	PSG College of Technology	Coimbatore
09.02.2004 to	Methods in	national	participant	Indira	Kalpakkam

28.02.2004	Material Characterisation			Gandhi Centre for Atomic Research (IGCAR)	
July 01-02,2004	Emerging Trends in Surface Engineering	national	paper presenter	VLB Janakiammal College of Engineering and Technology	Coimbatore
14 - 17, November,2004.	NMD	International	paper presenter	VSSC	Trivandrum
14 - 17, November,2005.	NMD	International	paper presenter	IIT	Chennai
14.12.2005 to 21.12.2005	Welding Engineers course training programme	national	participant	Indian Welding Society, Southern Zone	Tiruchirappalli
26.01.2006 to 30.01.2006	OIM &Texture	national	participant	DST-SERC	IIT, Bombay
June 23-25, 2006	NANO TECHNOLOGY – materials and Methods	International	paper presenter	Coimbatore Institute of Technology	Coimbatore
November 24-26, 2006	National Welding Seminar	national	participant	IIW	Chennai
15-16, December 2006	Recent Advances in Materials and Processing (RAMP 2006)	International	paper presenter	PSG College of Technology	Coimbatore
12-13, April 2007	Manufacturing Technology – Realms Ahead (ManTra 2k7)	national	participant	BHEL	Tiruchirappalli
5, January 2008	futuristic materials for Aerosapce applications	national	paper presenter	PSG College of Technology	Coimbatore
17-18, April 2008	Structure and Thermodynamics of Emerging Materials	national	participant	Indira Gandhi Centre for Atomic Research (IGCAR)	Kalpakkam
14-17, July 2008	Junior Euromat 2008	International	paper presenter	University of Laussane,	Switzerland
07, September 2009.	Intellectual property and innovation management in knowledge era	national	participant	National Research Development Corporation (NRDC),	Tiruchirappalli

	Г				
				New Delhi	
October 12 - 13, 2009	Interface Related Mechanical Behaviour of Materials	International	Invited talk	IISC	Bangalore
13-17, December 2010	NRC-M Winter workshop on Joining of Materials	National	participant	UGC	Tiruchirappalli
29-31 January 2012	Aerospace, Mechanical, Automotive and Materials Engineering, ICAMAME 2012	International	Session chairman	IMMME	Dhubai
03 May 2012	Missile Materials and Technologies	National	participant	DRDL	Hyderabad
31 October – 04 November 2014	Engineering and Technology Innovation (ICETI 2014)	International	Session chairman	ICETI	Taiwan
28-29, April 2015	Conclave on Academic Reforms (CAR 2015)	national	participant	NIT	Tiruchirappalli
13-16, November 2015	NMD	International	part of organising team	IIM	Coimbatore
29 <sup>th</sup> October 2016	Challenges and Trends in Development of Welding Consumables	National	participant	PSG College of Technology	Coimbatore

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/	Date (s)	Role	Venue
AICTE-ISTE short term course on "Recent trends in Metal shaping Techniques	National/ Local) National	Nov 15 - 27, 1999	Co ordinator	PSG College of Technology, Coimbatore
TEQIP - Metallurgy for Non Metallurgists	National	Feb 02 - 04, 2006	Co ordinator	National Institute of Technology, Tiruchirappalli
Powder Metallurgy of Refractory and Hard Metals – Processing and Prospect	National	December 08-09, 2006	Organising Secretary	National Institute of Technology,

				<b></b>
				Tiruchirappalli
AICTE-QIP short term	National	February	Co ordinator	National
course on "Metallurgy and		11 - 15,		Institute of
Materials: Today and		2008		Technology,
Tomorrow				Tiruchirappalli
MHRD -AICTE-Faculty	National	June 1-	Co ordinator	National
development programme		12, 2009		Institute of
on "Recent Advances in				Technology,
Materials and Processing				Tiruchirappalli
Technology				
AICTE-QIP short term	National	August	Co ordinator	National
course on "Smart		10-14,		Institute of
Processing of Materials		2009		Technology,
_				Tiruchirappalli
Advanced Materials and	National	December	Co ordinator	National
Manufacturing Methods		3-8, 2012		Institute of
(A3M)				Technology,
				Tiruchirappalli
Advanced Materials and	National	June 6-	Co ordinator	National
Manufacturing Methods		10, 2016		Institute of
(A3M)				Technology,
				Tiruchirappalli
International Conference on	International	March 10-	Organising	National
Emerging Trends in		12, 2017	Secretary	Institute of
Materials and			Secretary	Technology,
Manufacturing Engineering				Tiruchirappalli

### 18. Invited Talks delivered

Торіс	Date	Inviting Organization
Diffusion Bonding of Titanium	September 07, 1998	Defence Metallurgical Research
0	September 07, 1990	
Alloys	January 11, 0000	Laboratory, Hyderabad
Recent Advances in Metal	January 11, 2000	Tamil Nadu College of Engineering,
Shaping Techniques		Coimbatore
Stress Tensors in Metal	September 27-28, 2003	Government College of Engineering,
Forming		Salem
Smart Materials	November 08-09, 2004	Vellore Institute of Technology
		(Deemed University), Vellore
Superplastic forming and	November 26, 2004	N S S College of Engineering,
diffusion bonding		Palkkad
Mechanical Testing and	November 14, 2006	Sri Angalamman College of
Behaviour of Materials		Engineering and Technology, Trichy
Nano sized grains by severe	December 3, 2006	National Institute of Technology,
plastic deformation		Tiruchirappalli.
Equal channel angular	April 26, 2007	Indira Gandhi Centre for Atomic
Pressing		Research, Kalpakkam
Diffusion Bonding" and	26.06.2007.	Korea Advanced Institute of Science
"Equal Channel Angular		and Technology (KAIST), Daejeon,
Pressing: State of the art of		Republic of Korea
the technologies and		
properties of Ultra Fine		
Grained Commercially Pure		
Titanium		
Mechanism of Plastic	November 4, 2007	National Institute of Technology,
		<b>37</b>
deformation		Tiruchirappalli.

Precautions in Testing	November 17, 2007	Jawaharlal Nehru national college of
Diffusion Bonding under	November 21, 2007	Engineering, Shimoga, Karnataka. National Institute of Technology,
Superplastic conditions Simulations in EQUAL CHANNEL ANGULAR PRESSING (ECAP)	November 27, 2007	Tiruchirappalli. National Institute of Technology, Tiruchirappalli.
EQUAL CHANNEL ANGULAR PRESSING (ECAP)	January 29, 2008	National Institute of Technology, Tiruchirappalli.
Bulk Nanostructured Light Alloys by Severe Plastic Deformation	February 23, 2008	GCE, Salem
Diffusion Bonding	June 19, 2008	Kings College of Engineering, Punalkulam
Bulk Nanostructured Light Alloys by Severe Plastic Deformation	July 08, 2008	National Institute of Technology, Tiruchirappalli.
Electron Optical Techniques for Characterization	July 09, 2008	National Institute of Technology, Tiruchirappalli.
Nano sized grains by severe plastic deformation	June 02, 2009	National Institute of Technology, Tiruchirappalli.
Selection of Materials	June 04, 2009	National Institute of Technology, Tiruchirappalli.
Corrosion and Wear behaviour of ultra fine grained materials	June 18, 2009	National Institute of Technology, Tiruchirappalli.
Equal Channel Angular Pressing	August 12, 2009	National Institute of Technology, Tiruchirappalli.
Diffusion Bonding	August 12, 2009	National Institute of Technology, Tiruchirappalli.
Non linear analysis of Severe Plastic Deformations	September 19, 2009	Mookambigai College of Engineering, Pudukkottai.
ECAP of commercially pure Titanium: A Review	October 12, 2009	Indian Institute of Science, Bangalore.
Selection of Materials for Engineers	February 03, 2010	VRS College of Engineering and Technology, Villupuram.
Wear of Ultrafine Grained Materials	April 29, 2010	Kongu Engineering College, Perundurai, Erode.
Phase Diagrams and Heat treatment	October 9, 2010	Nachimuthu College of Engineering and Technology, Pollachi.
Composites	November 08, 2011	Jayaram College of Engineering and Technology, Tiruchirappalli.
Sponsored Research – Getting It Clicked	December 07, 2011	Jayaram College of Engineering and Technology, Tiruchirappalli.
Plastic Deformation" and "Hot working and Annealing	November 01-02, 2012	Defence Research and Development Organisation (DRDL), Hyderabad.
ECAP of Light alloys	December 05 , 2012	National Institute of Technology, Tiruchirappalli.
ECAP	July 06 , 2013	National Institute of Technology, Warangal.
ECAP and Selection of Materials	October 30, 2013	Govt. College of Engineering, Salem.

Selection of Materials and	November 11, 2013	MAM College of Engineering,
Processes		Tiruchirappalli.
ECAP of steels for high	April 04, 2014	PSG College of Technology,
performance	-	Coimbatore.
Mechanism of Plastic	April 09, 2014	Anna University – Regional Centre,
Deformation		Coimbatore.
ECAP of Steels	May 12, 2014	Indian Institute of Science,
		Bangalore.
Severe Plastic Deformation	May 26, 2014	PSG College of Technology,
		Coimbatore.
Formability tests	July 27, 2015	Govt. College of Engineering,
,		Salem.
A step ahead in Equal	13-16 November 2015	PSG College of Technology,
Channel Angular Pressing		Coimbatore. – in NMD
(ECAP)		
Non Ferrous Alloys	November 26 <sup>th</sup> , 2015	PSNA College of Engineering and
		Technology, Dindugal.
Advanced materials for	18 <sup>th</sup> February 2016	Anna University, Tiruchirappalli.
automobile bodies	,	
Mechanical properties of	8 <sup>th</sup> march 2016	Anna University, Tiruchirappalli.
Materials at elevated		
temperatures		
Advanced materials for	June 07, 2016	National Institute of Technology,
automobile bodies in volume	,	Tiruchirappalli.
production		· · · · · · · · · · · · · · · · · · ·
P.0000000		

### 19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member )	Organization	Membership No. with date
Life Member	Indian Society for Technical Education	28341
Life Member	Institution of Engineers	M 128999/8
Life Member	Indian Society for Non Destructive Testing	5211
Life Member	Indian Welding Society	L00542
Life Member	Indian Institute of Metals	C03 LM01 35722
Life Member	Materials Research Society of India	MRSI – LMB 990
Life Member	Powder Metallurgy Association of India	PMAI- LM 65007
Life Member	Society for Biomaterials and Artificial Organs – India	LM 498

### 20. Academic Foreign Visits

Country	Duration of Visit	Programme
South Korea	May 25 <sup>th</sup> to June 28 <sup>th</sup> 2007	TEQIP training programme
Switzerland	14.07.2008 to 18.07.2008	International conference Junior Euromat 2008.

Dubai	29-31 January 2012	International Conference on Aerospace, Mechanical, Automotive and Materials Engineering, ICAMAME 2012
Taiwan	31 October – 04 November 2014	International conference on Engineering and Technology Innovation (ICETI 2014).

### 21. Publications

## (A) <u>Refereed Research Journals</u>:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
<b>B.Ravisankar</b> and K.A.Padmanabhan	On the hot pressing of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-X</sub>	Journal of Material Science Letters	14	1777- 1780	1995	
<b>B.Ravisankar</b> , S S Ramakrishnan and P C Angelo	On Diffusion Bonding of Ti-6Al-4V	Trans IIM	55	105-114	2003	0.5
<b>B.Ravisankar</b> and Joong Keun Park	ECAP of Commercially Pure Titanium: A Review	Trans IIM	61	51-62	2008	0.5
<b>B.Ravisankar</b> , J.Krishnamoorthi, S S Ramakrishnan and P C Angelo	Diffusion bonding of SU 263	Journal of Materials Processing Technology	209	2135- 2144	2009	
D. Devaiah, P. Venkatachalam, S. Ramesh Kumar and <b>B. Ravisankar</b>	Effect of Two Directional Cold and Cryo Rolling on Mechanical Properties of 5083 Al Alloy	International Journal of Materials Science	5	17-22	2010	
P. Venkatachalam, <b>B.</b> Ravisankar and S. Kumaran	Microstructure and mechanical properties of 2014 Al alloy processed by equal channel angular pressing (ECAP)	Int. J. Microstructure and Materials Properties	5	88-100	2010	
Devaiah Doppalapudi, P.Venkatachalam, S.Ramesh Kumar, <b>B.Ravisankar</b> and K.Jayashankar	Improving the mechanical properties of 2024 al alloy by cryo rolling	Trans IIM	63	31-34	2010	
S.Jerome, <b>B.Ravisankar</b> and S.Natarajan	Synthesis and evaluation of mechanical and high temperature tribological properties of in-situ al-TiC composites	Tribology International	43	2029- 2036	2010	
P. Venkatachalam, S.Ramesh Kumar, <b>B.</b>	Investigations on the Effect of Processing	Transactions of Nonferrous Metals	20	1822- 1828	2010	

<b>Ravisankar</b> , V. Thomas Paul and M. Vijayalakshmi	Routes on Microstructure and Mechanical properties of 2014 Al alloy processed by Equal Channel Angular Pressing	Society of China				
Meenu Srivastava, J.N.Balaraju, <b>B.Ravisankar</b> , K.S.Rajam	(ECAP) Improvement in the properties of nickel by nano-Cr <sub>2</sub> O <sub>3</sub> incorporation	Surface and Coatings	205	66-75	2010	
Ramu Yarra, P.Venkatachalam, S.Ramesh Kumar, <b>B.Ravisankar</b> , K.Jayasankar and P.S. Mukherjee	Densification Of Al- Y <sub>2</sub> O <sub>3</sub> Composite Powder By Equal Channel Angular Pressing	Transactions of Indian Institute of Metals	63	813-817	2010	
Ramesh Kumar S, Kondiah Gudimetla, P.Venkatachalam and <b>B.Ravisankar</b>	Stress corrosion cracking of Al 7075 alloy processed by equal channel angular pressing	Journal of Engineering, Science and Technology	2	53-61	2010	
K.Manikanda Subramanian P.Chandramohan and <b>B.Ravisankar</b>	Influence of texture on the mechanical properties of hot rolled duplex stainless steels	Trans IIM,	64	519-534	2012	
S.Ramesh Kumar and <b>B.Ravisankar</b>	Scaling Up of Equal Channel Angular Pressing Simulation Using Deform 3D	International Journal of Advances in Science and Technology,	2	88-95	2011	
M. S. Senthil Saravanan, S. P. Kumaresh Babu,K. Sivaprasad, <b>B. Ravisankar,</b> P. Susila and B.S.Murty	Consolidation of CNT-reinforced AA4032 nanocomposites by ECAP	International Journal of Nanoscience	10	233-236	2011	
S. Jerome, Ashish Kumar, S. P. Kumaresh Babu and <b>B. Ravisankar</b>	Studies on Mechanical Properties and Wear Behaviour of in situ Al-TiC Composites	Advanced Materials Research	328- 330	1654- 1658	2011	
Ramesh Kumar S, Kondaiah Gudimetla, Venketachalam P, <b>Ravisankar B</b> , Jayasankar K,	Microstructural and Mechanical Properties of Al 7075 alloy processed by Equal Channel Angular Pressing	Materials Science and Engineering A	533	50-54	2012	
Perumal Venkatachalam Shibayan Roy, V. Thomas Paul, M. Vijayalakshmi, <b>Balasubramanian</b> <b>Ravisankar</b> and Satyam Suwas	The Role of Processing Routes on the evolution of Microstructure and Texture Heterogeneity during ECAP of AI-Cu Alloy	Materials Science Forum	702- 703	113-118	2011	

Nishtha Gupta , S.Ramesh Kumar , <b>B.Ravisankar</b> and	Consolidation of Al- 2024 Powder by	World Academy of Science,	61	1067- 1070	2012	
S.Kumaran	Conventional P/M Route and ECAP – A Comparative Study	Engineering and Technology				
Nishtha Gupta, <b>B.Ravisankar,</b> S.Kumaran and T.Srinivasa Rao	Densification of Al- 2024 and Al- 2024/Al <sub>2</sub> O <sub>3</sub> Powders by Conventional P/M Route and ECAP – A comparative study	Trans. IIM	65	381-386	2012	
J.Krishnamoorthi , V.Balusamy, P C Angelo , R.Vinothkumar, and <b>B.Ravisankar</b>	Diffusion Bonding of Ti-6AI-4V alloy with Inconel 718	European Journal of Scientific Research	83	221-229	2012	
Meenu Srivastava, J.N. Balaraju, <b>B. Ravisankar</b> , C. Anandan,and V.K. William Grips	High temperature oxidation and corrosion behaviour of Ni/Ni–Co–Al composite coatings	Applied Surface Science	263	597-607	2012	-
Meenu Srivastava, J.N. Balaraju, <b>B. Ravisankar</b> , and V.K. William Grips	Comparison in the Oxidation and Corrosion Behavior of Aluminum and Alumina-Reinforced Ni/Ni-Co Alloy Coatings	METALLURGICAL AND MATERIALS TRANSACTIONS A	44A	696-707	2013	
P.M.Ajith, P.Sathiya , KondaiahGudimetla and <b>B.Ravishankar</b>	Mechanical, Metallurgical Characteristics and Corrosion Properties of Equal Channel Angular Pressing of Duplex Stainless Steel	Advanced Materials Research	717	9-14	2013	
Ramesh Kumar S, <b>Ravisankar B</b> , Sathya P, Thomas Paul V, and Vijayalakshmi M	Equal Channel Angular Pressing of an Aluminium Magnesium Alloy at Room Temperature	Trans IIM	67	477-484	2014	-
S. Surendarnath, K. Sankaranarayanasamy, <b>B.</b> Ravisankar	Workability study on 99.04 % pure aluminum processed by ECAP	Materials and Manufacturing processes.	29	691-696	2014	
S. Suresh Kumar and <b>B.</b> Ravisankar	Evaluation of Quality Diffusion Bonding in Similar Material (Cu/Cu) Using Ultrasonic 'C' Scan Testing Method	Applied Mechanics and Materials	592- 594	289-293	2014	
Pravir Polly, K.Chandra Sekhar, <b>B.Ravisankar</b> , S.Kumaran	DENSIFICATION OF MECHANICALLY ALLOYED AI5083 - 5wt% Y2O3 NANO-	Applied Mechanics and Materials	592- 594	963-967	2014	1

	COMPOSITE BY EQUAL CHANNEL ANGULAR PRESSING					
Kondaiah Gudimetla, B Chaithanyakrushn, K Chandra Sekhar, <b>B</b> <b>Ravisankar</b> and S Kumaran	Densification and Consolidation of Al 5083 Alloy Powder by Equal Channel Angular Pressing	Applied Mechanics and Materials	592- 594	112-116	2014	
A.T.Vijayashakthivel, T.N.Srikanths Dath, <b>B.Ravisankar</b>	Influence of experimental environment on the enhancement of ultra fine grain structure with optimum ductility of equal channel angular pressed copper	Applied Mechanics and Materials	592- 594	410-415	2014	-
S. Surendarnath, K. Sankaranarayanasamy, and <b>B. Ravisankar</b>	A Comparative Study of Commercially Pure Aluminum Processed by ECAP Using Conventional and New Die	Materials and Manufacturing Processes	29	1172- 1178	2014	
Avik Kumar Mahata, Utpal Borah, Arvinth Davinci, Shaju K. Albert and <b>B.</b> Ravishankar	Room Temperature Torsional Behavior of 15-Cr-15Ni Titanium Modified Austenitic Stainless Steel	Procedia Engineering	86	166-172	2014	
M. Selvakumar, P. Chandrasekar, M. Mohanraj, <b>B. Ravisankar</b> , J.N. Balaraju	Role of powder metallurgical processing and TiB reinforcement on mechanical response of Ti–TiB composites	Materials Letters	144	58-61	2015	
M. Selvakumar,P. Chandrasekar, <b>B.</b> <b>Ravisankar</b> , J. N. Balaraju, and M. Mohanraj,	Mechanical properties of titanium–titanium boride Composites through nanoindentation and ultrasonic techniques - An evaluation perspective	Powder Metallurgy and Metal Ceramics	53	557-565	2015	
S.Vigneshwaran, P.Venkatachalam, P. Rajesh, S. Kumaran and <b>B.</b> <b>Ravisankar</b>	Densification of machined CP Al chips by Equal Channel Angular Pressing (ECAP)	International Journal of Applied Engineering Research	10	6006- 6010	2015	
G.Kondaiah, K.Chandra Sekhar,	Characterization of Mechanically Alloyed	Applied Mechanics and	764- 765	23-27	2015	

B.Chaitanyakrushna,	Al5083 Alloy and	Materials				
B.Ravisankar and	Composite and					
S.Kumaran,	Consolidation by					
	Equal Channel					
	Angular Pressing					
Kondaiah Gudimetla,	of Equal Channel	Materials Science	830-	63-66	2015	
Ganesh Varma Jampana, S	Angular Pressing on	Forum	831			
Ramesh Kumar, B	Densification					
Ravisankar and S Kumaran	Behavior of AI 5083					
	Alloy Powder					
S. Suresh Kumar, <b>B.</b>	Destructive and non-	Journal of	23	13-20	2016	
Ravisankar	destructive	Manufacturing				
	evaluation of copper	Processes				
	diffusion bonds					

### (B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
	_					

### (C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of	Year of	ISSN/ISBN
		Publishers	Publication	Number
Ravisankar.B	Recent Advances in Metal	PSG Tech	1999	
and P.C.Angelo	shaping Techniques			
B.Ravisankar	Handbook of Mechanical	Wiley-VCH Verlag	2015	ISBN 978-3-
and Mahmood	Nanostructuring	GmbH & Co,		527-33506-
Aliofkhazraei	_	Germany		0