Curriculum Vitae



Dr. N. Ramesh Babu, is currently Asst. Professor at the Department of Metallurgical and Materials Engineering, National Institute of Technology Tiruchirappalli. He holds Ph.D. in Biomaterials from the department of Metallurgical and Materials Engineering IIT MADRAS. He received the Best PhD Thesis award from IIT Madras in the year 2007. His areas of research include Biomaterials, Nanomaterials and Plasma electrolytic processing. He has published 50 papers in international peer-reviewed journals in the area of Biomaterials and Surface Engineering. He also served as a reviewer for 14 International journals. He has presented 30 papers in conferences in India and abroad and received best paper awards in two international conferences. He has guided 3 PhDs in the area of Biomaterials and currently he is guiding 4 PhDs in Biomaterials and Plasma Electrolytic Processing. As a Principal Investigator and Co-Investigator, he has involved in research projects worth more than 6 Crore, sponsored by the Department of Science and Technology, Department of Biotechnology and Naval research board of DRDO.

- 1. Name:
- 2. Designation:
- 3. Office Address:

Dr.N.RAMESH BABU Assitant Professor

Room No 112B,

Department of Metallurgical and Materials Engineering,

NIT Trichy 620015

- 4. Telephone (Direct) (Optional): Telephone : 0431-2503464 Extn (Optional): 0431-2503471 Mobile (Optional): 09944932221
- 5. Email (Primary): nrb@nitt.edu
- 6. Field(s) of Specialization:

Email (Secondary) :rameshrohith@gmail.com

Biomaterials, Nanomaterials and Plasma electrolytic processing

7. Employment Profile

Job Title	Employer	From	То
Junior Manager-production	Navabharat Ferro Alloys Limited Poloncha Telangana	20-11-1995	1-7-1999
Assistant Professor	National Institute of Technology Tiruchirappalli, Tamilnadu	24-4-2006	till date

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

Examination	Board / University	Year	Division/ Grade	Subjects
AMIIM	Indian Institute of Metals, Kolkata	1997	Nil	Metallurgy
M.Tech	Indian Institute of Technology Madras	2001	First	Metallurgical Engineering
PhD	Indian Institute of Technology Madras	2007	Nil	Metallurgical and Materials engineering

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	То
Assistant Professor	Metallurgical and Materials	24-4-2006	till date
	Engineering, NIT Trichy		
Associate Dean	NIT Trichy	Oct 2015	till date
(R&C)			
Convener-	NIT Trichy	2016	till date
Sophisticated			
Instrument Facility			
Incharge for	NIT Trichy	2007	2009
Institute water			
purifiers			

10. Academic/Administrative Responsibilities outside the University: Nil

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2007	The best Ph.D Thesis in	IIT Madras

	Metallurgical and Materials Engineering	
2012	Best paper award for the paper presented (oral presentation) at International Conference on Future Bioengineering (ICFB 2012) in Bangkok, Thailand during November 24-25, 2012	· · · · · · · · · · · · · · · · · · ·
2003	Best poster paper award for the paper presented at International Conference on Advances in Surface Treatment: Research and Applications (ASTRA-2003), Nov 3-6, 2003, Hyderabad	ARCI, Hyderababd

- 12. Fellowships : Nil
- 13. Details of Academic Work
 - (i) Curriculum Development : Involved in the Curriculum Development for both BTech and MTech programs of Metallurgical and Materials Engineering
 - (ii) Courses taught at Postgraduate and Undergraduate levels

Semester	Code and Subject title	B.Tech/	Student
		M.Tech	feedback score
			on 10 point scale
July-Dec, 2006	MT209 Mineral Processing and	B.Tech	9.0 on 10 point scale
	Metallurgical Analysis		
	MT211 Materials Science	B.Tech	9.0 on 10 point scale
Jan-June, 2007	MT 652 Ceramic Materials	M.Tech	9.04 on 10 point scale
	BMT E02 Fractography & Failure	B.Tech	8.58 on 10 point scale
	Analysis		
July-Dec, 2007	BMT 701 Ceramic Materials	B.Tech	7.99 on 10 point scale
	MT211 Materials Science	B.Tech	8.72 on 10 point scale
	MT 601 Physical Metallurgy (lab	M.Tech	
	for m.tech welding Engg.)		
Jan-June, 2008	MT 652 Ceramic Materials	M.Tech	Feedback not collected
	BMT E11 Fractography & Failure	B.Tech	9.02 on 10 point scale
	Analysis		
July-Dec, 2008	MT 401 Ceramic Materials	B.Tech	9.15 on 10 point scale
	MT211 Materials Science	B.Tech	8.21 on 10 point scale
	MT657-Physiccal Metallurgy		
	Laboratory (M.Tech Mat.Sci. 1st		
	sem)		
Jan-June, 2009	MT 652 Ceramic Materials	M.Tech	9.6 on 10 point scale
	MT 454 Fractography & Failure	B.Tech	9.3 on 10 point scale

	Analysis		
July-Dec, 2009	MT 401 Ceramic Materials	B.Tech	8.93 on 10 point scale
	MT211 Materials Science	B.Tech	8.63 on 10 point scale
	MT 660 Biomaterials	Ph.D	Directed study
	MT 657 Metallography Laboratory		
	(M.Tech Materials Science)		
Jan-June, 2010	MT652 Ceramic Materials	M.Tech	8.2 on 10 point scale
	MT 454 Fractography & Failure	B.Tech	8.97 on 10 point scale)
	Analysis (B.Tech)		
	MT658 Material Testing and		
	Characterization Laboratory (M.		
	Tech-MSE)		
	MT801 Research Techniques in		
	Mechanical Sciences (PhD course		
	Coordinator)		
July-Dec, 2010	MT 401 Ceramic Materials	B.Tech	8.7 on 10 point scale
	PH 211 Electrical, Electronic and	B.Tech	8.6 on 10 point scale
	Magnetic Materials		
	MT 657 Metallography Laboratory	M.Tech-	9.9 on 10 point scale
		MSE	
Jan-June, 2011	MT652 Ceramic Science and	M.Tech	Feedback score not
	Technology		available
	MT 308 Non-Ferrous Physical	B.Tech	Feedback score not
	Metallurgy		available
	MT216 Ferrous Metallography	B.Tech	
	Laboratory		
July-Dec, 2011	MT 401 Ceramic Materials	B.Tech	8.6 on 10 point scale
	PH 211 Electrical, Electronic and	B.Tech	Feedback score not
	Magnetic Materials	DI D	available
	MT806 Advanced	Ph.D	
	Bioceramics (Ph.D)		
	MT 657 Matalla granby Matariala		
	MT 657 Metallography, Materials		
	Testing and Characterization Laboratory (M.Tech-MSE)		
Jan-June, 2012	MT623 ceramic science and	M. Tech	9.0 on 10 point scale
Jan-June, 2012	technology	WI. ICCII	5.0 on 10 point scale
	MT308 Non-ferrous Physical	B.Tech	7.8 on 10 point scale
	metallurgy	Directi	7.6 on 10 point scale
	MT658 Materials testing and		
	characterization laboratory (M.Tech		
	Industrial Metallurgy)		
July-Dec 2012	MT 401 Ceramic Materials	B.Tech	8.4
	PH 610 Electrical, Magnetic and	M.Tech	9.4

	Optoelectric Materials		
	MT619 Physical Metallurgy	M.Tech	8.3
	Laboratory (M.Tech Welding		0.0
	Engineering)		
Jan-June, 2013	MT623 Ceramic science and	M. Tech	9.2
	technology		··-
	MT308 Non-ferrous Physical	B.Tech	7.9
	metallurgy		
	MT216 Ferrous Metallography Lab	BTech	7.8
	(B.Tech)		
July-Dec, 2013	MT 401 Ceramic Materials	B.Tech	8.0
	PH 610 Electrical, Magnetic and	M.Tech	9.4
	Optoelectric Materials		
	MT619 Physical Metallurgy		8.3
	Laboratory (M.Tech Welding		
	Engineering)		
Jan-June, 2014	MT308 Non-ferrous Physical	B.Tech	7.7
	metallurgy		
	MT(22 Complete site and and	M. T. d	0.5
	MT623 Ceramic science and	M. Tech	8.5
	technology MT658 Materials testing and	M.Tech	8.5
	characterization laboratory	Industrial	0.5
	characterization haboratory	metallurgy	
July-Dec, 2014	MT 401 Ceramic Materials	B.Tech	7.6
July Dec, 2011	MT651 Electrical, Magnetic and	M.Tech	8.1
	Optoelectric Materials		0.1
	MT 657 Metallography, Materials	M.Tech	8.4
	Testing and Characterization	Materials	
	Laboratory	Science	
Jan-June, 2015	MT308 Non-ferrous Physical	B.Tech	7.9
,	metallurgy		
	MT623 Ceramic science and	M. Tech	9.6
	technology		
	MT316 Non-Ferrous	B.Tech	7.9
	Metallography Laboratory		
July-Dec, 2015	MT 401 Ceramic Materials	B.Tech	
	MT651 Electrical, Magnetic and	M.Tech	
	Optoelectric Materials	MTash	
	MT 657 Metallography, Materials	M.Tech Materials	
	Testing and Characterization	Materials Science	
	Laboratory	Science	

(iii)Projects guided at Postgraduate level

Sl.	Name of	Yea	Title of Thesis	Co-Supervisors
No.	Student	r		(if any)

1.	T Sekhar	2006	Evaluation of Metallurgical and Mechanical Properties of Dissimilar Welds of Stainless Steels	Dr.Madhusudhan Reddy, DMRL, Hyderabad
	T. Sekhar	2007	Microstructure, Mechanical Properties and Pitting Corrosion Behavior of Dissimilar Stainless Steel Weldments	Dr.Madhusudhan Reddy, DMRL, Hyderabad
2.	Anjaiah Yamagani	2006	Optimization of Welding Parameters for Laser Welding of Titanium Alloy (Ti-6Al-2Sn-4Zr- 2Mo+Si)	Dr. G. Buvanashekaran, Welding Research Insitute, BHEL, Trichy
	Anjaiah Yamagani	2007	A Study of Titanium alloy by Laser and TIG Welding Processes	Dr. G. Buvanashekaran, Welding Research Institute, BHEL Trichy
3.	Krishna Chaitanya Puvvada	2007	Optimization of laser parameters for welding of Titanium alloy	Dr. G. Buvanashekaran, Welding Research Institute, BHEL Trichy
	Krishna Chaitanya Puvvada	2008	Optimization of welding parameters for laser welding of commercially pure Titanium	Dr. G. Buvanashekaran, Welding Research Institute, BHEL Trichy
4.	Kallida Latha	2007	Establishment of welding procedures and execution of deposition of ferritic stainless steels (with E410 electrodes) on 410S clad Carbon Steel plants	NA
	Kallida Latha	2008	Establishment of procedures and execution of weld deposition of ferritic stainless steels on internal surface of Carbon steel nozzle pipes (with ER410 filler) by automatic GTAW process	NA
5.	A. Joseph Berkmans	2008	Development of bioactive and bioresorbable nanoceramics for biomedical applications	NA
6.	S. Murthy Ram	2008	Development of antibacterial and bioactive nanoceramics for biomedical applications	NA

7	V	2000		Duef V
7.	K. Venkateswarlu	2009	Surface modification of Titanium alloy implant material by plasma electrolytic oxidation and characterization for biomedical applications Nanosized antibacterial and	Prof. V. Muthupandi, NIT Trichy
8.	M. Sandhya Rani	2009	catalytic hydroxyapatite: synthesis and characterization	Dr.M. Ashok, Dr. Ch. Subrahmanyam, NIT Trichy
9.	M. Hari kishore	2009	Sol-Gel synthesis and characterization of nanocrystalline Titania for biomedical applications	Dr.A.Chandra Bose, NIT Trichy
10.	Naresh Devisetti	2010	Plasma electrolytic boriding of Staineless steels for implant applications	NA
11.	K Pavan Kumar	2010	Synthesis and characterization of nanosized carbonated hydroxyapatite	NA
	K Pavan Kumar	2011	Synthesis and characterization of nanosized multifunctional hydroxyapatite for biomedical applications	NA
12.	S Suresh	2011	Surface modification of Ti-6al-4V alloy implant material by plasma electrolytic oxidation and characterization for biomedical applications	NA
13	Viswanathan R	2011	Development Mg/hydroxyapatite composites for biomedical applications	
	Viswanathan R	2012	Effect of fluoride additives on structural, morphological and corrosion characteristics of micro- arc oxidized Z31 magnesium alloy	
14	T Athmaramudu	Dec 2012	Studying the effectof frequency and dutycycle on plasma electrolytic oxidation coatings on AZ31 Mg alloy	
	T Athmaramudu	May 2013	Development of composite oxide layer coating on AZ31 Magnesium alloy	
15	S. Hariprasad	Dec 2012	Study on electrochemical characteristics of micro arc oxidized doped TiO2 films on Cp- Ti	

<u>г</u>	0.11 ' 1	1.6		
	S. Hariprasad	May	Role of electrolyte chemistry on in-	
		2013	vitro properties of micro arc	
			oxidized titania films on Cp-Ti	
16	E. lokesh kumar	Dec	Effect of sodium carbonate content	
		2012	in electrolyte solution on surface	
			modification of Ti-6Al-4V by	
			plasma electrolytic oxidation	
	E. lokesh kumar	May	Surface modification of Nitinol by	
		2013	plasma electrolytic oxidation	
17	Divesh kumar	May	Surface modification of Cp-Ti by	
		2014	plasma electrolytic oxidation	
18	Gouham Y	May	Effect of electrical parameters on	
		2014	structural, morphoplogical and	
			corrosion resistance of micro arc	
			oxidation coatings on Ti-6Al-4v	
			alloy	
19	Arjun Varma R	May	Surface modification of Zm21	
		2014	magnesium alloy by plasma	
			electrolytic oxidation for	
			orthopaedic implant applications	
20	Manu Harilal	May	Rapid sysnthesis and	
		2014	characterization of nanocrystalline	
			hydroxyapatite and substituted	
			hydroxyapatites by	
			mechanochemical method	
21	Arun S	Dec	Surface modification of Nitinol by	
		2013	plasma electrolytic oxidation	
	Arun S	May	Surface modification of Al-7075	
		2014	alloy by plasma electrolytic	
			oxidation	
22	Jathin Thomas	Dec	Fabrication and characterization of	
	Κ	2014	plasma electrolytic oxidation	
			coatings formed on aluminized	
			steel	
	Jathin Thomas	May	Development of plasma electrolytic	
	K	2015	borided coatings on mild steel	
23	Melwin Sajan	Dec	Plasma electrolytic oxidation of	
		2014	AZ31 magnesium alloy diffusion	
			bonded with aluminium	
24	Melwin Sajan	May	Mechanical and electro-chemical	
		2015	performances of Plasma	
			electrolytic oxidized titanium in	
			phosphate solution with different	
		1	additives	

Sl.No	PI/Co-	Project title	Period	Funding	Budget
	PI			Agency	(lakhs)
1.	PI	Surface Modification of biodegradable	2012-	DST, New	39.03
		magnesium alloys by plasma electrolytic	2015	Delhi	
		processing for orthopaedic implant			
		applications			
2.	PI	Surface Modification of Titanium and	2009-	DBT, New	29.27
2.		Titanium Alloy Bio-medical Implant	2012	Delhi	_> /
		Materials by Plasma Electrolytic			
		Oxidation and Characterization for			
		Biomedical Applications			
3.	Co-PI	Synthesis and Characterization of	2009-	DST, New	572.32
		Nanomaterials for Engineering	2012	Delhi	
		Applications			
4.	Co-PI	Development and Characterization of	2009-	NRB	28.66
		One Dimensional Oxide Nanomaterials	2012	(DRDO),	
		for Gas Sensing Applications		New Delhi	
5.	PI	Doped hydrogenated amorphous silicon	2012-	DBT,	3.10
		carbon alloys (a-SiC:H) for artificial	2015	New Delhi	
		heart valve and stent applications			
6.	PI	Development of Bioactive and	2009-	NRCM,	~1
		Antibacterial Nanocrystalline	2012	IISc	
		Hydroxyapatite Coatings on Ti and Ti-		Bangalore	
		Alloy Implant Materials by PEO			
		Technique			

14. Details of Major R&D Projects

15. Number of PhDs guided

Name of the PhD	Title of PhD Thesis	Role(Supervisor/	Year
Scholar		Co-Supervisor)	of
			Award
Mr. D.Sreekanth	Surface modification of	Supervisor	2014
	biodegradabale magnesium		
	alloys by plasma electrolytic		
	oxidation for orthopaedic		
	implant applications		
Mr. K. Venkateswarlu	Surface modification of titanium	Supervisor	2014
	by		
	Micro arc oxidation and		
	Characterization for biomedical		

	Applications		
Ms. M Sandhya Rani	Fabrication and characterization of nanostructured ZrO ₂ and ZrO ₂ /hydroxyapatite composite coatings on Zr for biomedical applications	Supervisor	2014
Mr. T. Arun Nellaiappan	Plasma electrolytic processing of Al alloys	Supervisor	On- going
Mr S. Arun	Nano structured coatings on Zr alloys	Supervisor	On- going
Mr. S. Hari Prasad	Nano structured coatings on Mg alloys	Supervisor	On- going

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

Date	Title of	Level of	Role (Participant/	Event Organized by	Venue
(s)	Activity		Speaker/ Chairperson, Paper presenter, Any		
		National/ Local)	other)		

- 1. Attended International Conference on **Design of Biomaterials**, Dec 9-11, 2012 IISC, Bangalore.
- 2. NRC-M Winter Workshop on X-Ray Diffraction Methods, 26-31 December 2011, organized by UGC Networking Resource Centre for Materials , Department of Materials Engineering, Indian Institute of Science, Bangalore 560 012.
- 3. Workshop on **New Visions for Biomaterials and Regenerative Medicine** on 16-17 March 2011, Organized by Professor David Williams, FREng, Editor-in-Chief, Biomaterials Journal at Sree Chitra Tirunal Institute for Medical Sciences & Technology Thiruvananthapuram, Kerala
- 4. AICTE-QIP short term course on **Smart Processing of Materials** organized by the Department of Metallurgical and Materials Engineering, NIT-Tiruchirapplli during 10-14 August 2009 at NIT Trichy.
- 5. MHRD-AICTE Faculty development programme on **Composite Materials: processing challenges and opportumities** organized by the Dept. of Prod. Engg.NIT Trichy from 13th - 24th July 2009 at NIT Trichy.
- 6. MHRD AICTE Staff Development Programme on **Recent Advances in Materials** and **Processing Technologies** organized by the Department of Metallurgical and Materials Engineering, NIT-Tiruchirapplli during 1 - 12 June 2009 at NIT Trichy.
- 7. MHRD-AICTE summer school on **Advances in Materials Processing**, organized by the Dept. of Prod. Engg.NIT Trichy from 30th June 2008 to 11th July 2008 at NIT Trichy.

- 8. Undergone training On **Instructional Design and Delivery System** at National Institute of Technical Teachers Training and Research, Chennai from 21-8-2008 to 27-8-2008.
- 9. Attended two days workshop on **Right to Information Act 2005 and Role of Information Officer** conducted by National Archives of India, RTI cell New Delhi in collaboration with NIT Trichy on 8-8-2008 to 9-8-2008.
- Participated in short term course under continuing education programme on PEM Fuel Cells-Principles and System Level Iintegration during16-17 March 2007 organized by department of chemical engineering, Indian Institute of Technology Madras, Chennai-600036.
- 11. Participated in an International conference on Nanomaterial and its Applications during 4-6 Feb 2007 organized by department of chemistry, National Institute of Technology, Tiruchirappalli 620015.
- 12. Attended the international workshop on **MEMS and Micro/Nano Systems technology for Bio-Implants and Bio Applications** organized by Advanced Technology Centre, Indian Institute of Technology, Kharagpur, during 28-30 December 2006 at IIT Kharagpur Kolkata Campus, Salt Lake City, Kolkata.
- 13. Attended the 5th International conference on **Trends in Industrial Measurements and Automation** organized by National Institute of Technology, Tiruchirappalli, during 4-6 January 2007 at National Institute of Technology, Tiruchirappalli.
- 14. Attended the Pre-conference one day tutorial on 3 Jan 2007 on Nano-, Neuro-, Bio-& Info-Technologies, MEMS, NEMS and Nuerosurgery by Prof Vijay.K.Varadan University of Arkansas during 5th International conference on "Trends in Industrial Measurements and Automation" organized by National Institute of Technology, Tiruchirappalli.
- 15. Attended the workshop on **Composite Materials** organized by the department of Metallurgical and Materials Enginnering National Institute of Technology, Tiruchirappalli, during 29-30 September 2006 at National Institute of Technology, Tiruchirappalli.
- 16. Attended the workshop on **Emerging Trends in Corrosion Control and Surface Engineering** organized by the department of Metallurgical and Materials Engineering National Institute of Technology, Tiruchirappalli, during 9-10 February 2007 at National Institute of Technology, Tiruchirappalli.
- 17. Attended the workshop on **Powder Metallurgy of Refractory and Hard Metals-Processing and Prospect** organized by the department of Metallurgical and Materials Enginnering National Institute of Technology Tiruchirappalli and Heavy Alloy Penetrator Project, Tiruchirappalli during 8-9 Decemebr 2007 at National Institute of Technology, Tiruchirappalli.
- 18. Participated in a workshop on **Laser Materials Processing** organized by the department of Physics, National Institute of Technology Tiruchirappalli and Welding Research Institute, B.H.E.L-Tiruchirappalli during 9-10 January 2007 at National Institute of Technology, Tiruchirappalli.
- 19. Undergone Industry-Internship for training in the area of **Microwave Processing of Materials** for the period of 15 days from 12-6-2006 to 26-6-2006 in VB Ceramic Consultants, Chennai-600042.

- 20. Attended SERC school on **Methods in Materials Characterization** organized by the DST during Feb 9th to 28th, 2004 at the Indira Gandhi Centre for Atomic Research, Kalpakkam-603102.
- 21. Attended the workshop on **Mammalian Cell Culture**, organized by the Department of Biotechnology, IIT Madras, 19th -20th September 2005 at IIT Madras.
- 22. Attended two days course on **Biomaterial Informatics & Intellectual Property Rights** organized by Industry Institute Partnership Cell, Sri Chitra Tirunal Institute of Medical Sciences and Technology, Thiruvananthapuram, 2003.
- 23. One day workshop on **Electron Microscopy**, organized by the department of Metallurgical and Materials Engineering, IIT Madras, Jan 2003.
- 24. Attended one day workshop on **Role of Electronic Databases in R&D Excellence** by Edutech India Pvt. Ltd on 16-03-2006 organized by the Central Library, IIT Madras
- 25. Industrial training at **Defense Metallurgical Research Laboratory,** Hyderabad from 22nd May 2000 to 2nd July 2000 under the guidance of Dr Vijay Singh Scientist E for fulfilling the academic requirements of M.Tech programme at IIT Madras.
- 26. Training program on **Web of Science** (Science citation index extended), organized by the Central Library, IIT Madras and Thomas Scientific Customer Education and Support Department UK. (date: 7-4-2006)

	,			
Title of Activity	Level of Event	Date (s)	Role	Venue
	(International/			
	National/ Local)			
Indo-Australian	International	January	Steering	Anna
Conference on		22 - 24,	committee	University,
Biomaterials, Tissue		2015	member	Chennai
Engineering, Drug				
Delivery System &				
Regenerative Medicine,				
BiTERM – 2015				
International Conference	International	February	Organizing	NIT Trichy
on Advances In		5-7,	committee	-
Materials. Manufacturing		2015	member-	
and Applications			AMMA 2015,	
(AMMA-2015)				
International Conference	International	March	Co-Convener	NIT Trichy

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

<u>Short Term Courses and workshops Organized</u> by Dr. N. Ramesh Babu, Dept. of M.M.E, NIT Trichy

10-12,

2017

on Emerging Trends in

Manufacturing Engineing

Materials and

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Sl.No	Date	Event Title	Responsibility
1.	Dec 16-21, 2013	Short Term Course on Engineering Materials and Manufacturing Processes (EMMP-2013)	Coordinator
2.	June 25-30, 2012	Short Term Course on engineering Materials and Manufacturing Methods (EM3-2012)	Coordinator
3.	15 Mar 2008	Workshop on Advances in Biomaterials (Under TEQIP community Services)	Coordinator
4.	5-6 Mar 2008	Workshop on Nanomaterials: Science, Technology and Applications. (Under TEQIP community Services)	Coordinator
5.	24 Feb 2008	Workshop on Structure and Properties of Advanced Engineering Materials. (Under TEQIP Tribal Development Plan)	Coordinator
6.	23 Feb 2008	Workshop on Trends in Nanomaterials Research. (Under TEQIP Networking with GCE Salem)	Coordinator
7.	4 Nov 2007	Workshop on Materials Science for Engineers. (Under TEQIP Tribal Development Plan)	Coordinator
8.	2-3 Dec 2006	Workshop on Nanomaterials: Properties and Applications. (Under TEQIP community Services)	Coordinator

18. Invited Talks delivered

1. Invited Talks at conferences

Sl.No	Date	Title of the talk and Event	
1.	19-21 Dec	Second International Conference on Nanostructured Materials and	
	2014	Nanocomposites (ICNM 2014) to be held on 19, 20 and 21 December 2014,	
		Kottayam, Kerala, India. The conference is organized by International and	
		Interuniversity Centre for Nanoscience and Nanotechnology (IIUCNN),	
		Mahatma Gandhi University, Kottayam, Kerala, India.	
2.	<u>21</u> -23 Aug	(Key note lecture)Development of nanostructured oxide and	
	2014	oxide/hydroxyapatite composite coatings on metallic implant materials by	
		plasma electrolytic oxidation; Three Days National conference on Bio-	

		Nanotechnology (BIONANO' 14) 21 –23 August, 2014, organized by
		Department of Nanotechnology Sri Ramakrishna Engineering College,
		Coimbatore –641 022
3.	15 th May	International Symposium on Corrosion & Materials Degradation (ISCMD
	2014	2014) under the auspices of 9th International Materials Technology
		Conference and Exhibition (IMTCE 2014). Date: 14th – 15th May 2014,
		KUALA LUMPUR, MALAYSIA. The conference is organized by the
		Institute of Materials, Malaysia (IMM).
4.	23 Dec	Fabrication of corrosion resistant and bioactive coatings on metallic implant
	2013	materials by plasma electrolytic oxidation; National Conference on
		Challenges in Biomaterials Research, Jointly organized by VIT Vellore and
		CSIR-CECRI at VIT Vellore, 23-24 Dec 2013
5.	7-9 Aug	Plasma electrolytic oxidation for surface modification of metallic implant
	2013	materials; International conference on Surface Engineering For Research
		and Industrial Applications - INTERFINISH-SERIA 2013 organized by
		Rajalakshmi Engineering College (REC) in association with International
		Union for Surface Finishing (IUSF) at Chennai, India

2. <u>Invited talks at workshops</u>

Sl.No	Date	Title of the talk and Event
1.	7-8 March	Fabrication of corrosion resistant and bioactive coatings on metallic implant
	2014	materials by plasma electrolytic oxidation; National workshop on Advances
		In Materials And Processing Technology University college of engineering,
		Vijayanagaram JNTU Kankinada 7-8 March 2014.
2.	23 Feb	Trends in Biomaterials; Workshop on trends in bio medical engineering,
	2014	22nd and 23rd Feburary 2014 (under TEQIP-II) organized by Department of
		Instrumentation and Control Engineering, National Institue of Technology,
		Tiruchirappalli-620 015.
3.	21 Dec	Plasma electrolytic oxidation coatings, Short term course on Engineering
	2013	Materials and Manufacturing Processes, NIT Trichy, 16-21 Dec 2013
4.	20 Dec	Nanostructured coatings by Plasma Electrolytic Oxidation Processing,
	2013	workshop on Applications of Nanotechnology in Mechanical Engineering,
		NIT Trichy, 18-21 Dec 2013
5.	13	Nanostructured ceramic coatings by Plasma Electrolytic Oxidation, National
	Dec2013	Workshop on
		Optoelectronics and Advanced Materials (OPAM-2013), 12 & 13 th Dec
		2013, Anna University Trichy
6.	23 Nov	Plasma electrolytic oxidation coatings; DST sponsored seminar on Advanced
	2013	manufacturing Processes, organized by PVP Siddhartha Institute of
		Technology, Kanuru, Vijayawada Andhra Pradesh
7.	May 28,	Plasma electrolytic oxidation for industrial and biomedical applications;
	2013	DRDO Naval Research Board sponsored National Workshop on Surface
		Modifications of Structural Materials, May 27-28, 2013
8.	29 th Dec	Delivered a invited talk on "Ceramic Materials" in Materials Awareness
	2012	Program at DRDL Hyderabad, June 25-30, 2012

0	c th D	
9.	5 th Dec 2012	Materials for Medical Applications; Short term course on Advanced Materials and Manufacturing Methods (A3M), NIT Tiruchirappalli during 3- 8 Dec 2012
10.	June 21, 2012	Delivered a lecture on "Structure of Materials" in Short Term Course on Engineering Materials and Manufacturing Methods (EM3-2012), June 25-30, 2012
11.	June 22, 2012	Delivered a lecture on "Phase diagrams and Phase transformations" in Short Term Course on engineering Materials and Manufacturing Methods (EM3- 2012), June 25-30, 2012
12.	June 23, 2012	Delivered a lecture on "Electrical And Magnetic Properties Of Materials" in Short Term Course on engineering Materials and Manufacturing Methods (EM3-2012), June 25-30, 2012
13.	June24, 2012	Delivered a lecture on "Progress In Biomaterials" in Short Term Course on engineering Materials and Manufacturing Methods (EM3-2012)
14.	28-Feb- 2012	Advances in Biomaterials; Seminar on Advancement in Materials organized by Dept. of Mechanical Engineering, Seshasayee Institute of Technology, Trichirappalli
15.	10 June 2009	Bioceramics and their clinical applications: MHRD – AICTE Staff Development Programme on Recent Advances in Materials and Processing Technologies organized by the Department of Metallurgical and Materials Engineering, NIT-Tiruchirapplli during 1 - 12 June 2009.
16.	15 March 2008	Nano ceramics for medical applications: Workshop on Advances in Biomaterials organized by the Department of Metallurgical and Materials Engineering, NIT-Tiruchirapplli.
17.	23 Feb 2008	Nanostructured ceramics for medical applications: Workshop on Trends in Nanomaterials Research organized by the Department of Metallurgical and Materials Engineering, NIT-Tiruchirapplli.
18.	11-15 Feb 2008	Recent Trends in Biomaterials: AICTE-QIP short term course on "Metallurgy and Materials: Today and Tommorow" held during Feb 11-15 at National Institute of Technology, Trichy.
19.	24-25 Jan 2008	Biomaterials: A Nano Approach: National conference on Emerging Materials and Technologies India -2020, organized by the Department of Metallurgical and Materials Engineering, NIT-Tiruchirapplli.
20.	4 Nov 2007	Introduction to Phase diagrams: Workshop on Materials Science for Engineers organized by the Department of Metallurgical and Materials Engineering, NIT-Tiruchirapplli.
21.	20 Dec 2006	Iron –Iron carbide equilibrium diagram: Faculty development programme on Engineering Materials and Metallurgy organized by the Metallurgy Department GCE Salem
22.	21 Dec 2006	Structure and properties of ceramic materials: Faculty development programme on Engineering Materials and Metallurgy organized by the Metallurgy Department GCE Salem
23.	15-16 Dec 2006	Nano-Biomaterials: Workshop on Recent Advances and Challenges in Biotechnology Processes organized by the Department of Chemical Engineering NIT- Tiruchirappalli.
24.	29-30 Sep	Nanocomposites for Biomaterial Applications: Workshop on Composite

2006	Materials organized by the Department of Metallurgical and Materials
	Engineering, NIT-Tiruchirapplli.

Sl.No	Date	Title of the talk and Event
6.	19-21 Dec	Second International Conference on Nanostructured Materials and
	2014	Nanocomposites (ICNM 2014) to be held on 19, 20 and 21 December 2014,
		Kottayam, Kerala, India. The conference is organized by International and
		Interuniversity Centre for Nanoscience and Nanotechnology (IIUCNN),
		Mahatma Gandhi University, Kottayam, Kerala, India.
7.	<u>21</u> -23 Aug	(Key note lecture)Development of nanostructured oxide and
	2014	oxide/hydroxyapatite composite coatings on metallic implant materials by
		plasma electrolytic oxidation; Three Days National conference on Bio-
		Nanotechnology (BIONANO' 14) 21 –23 August, 2014, organized by
		Department of Nanotechnology Sri Ramakrishna Engineering College,
		Coimbatore –641 022
8.	15 th May	International Symposium on Corrosion & Materials Degradation (ISCMD
	2014	2014) under the auspices of 9th International Materials Technology
		Conference and Exhibition (IMTCE 2014). Date: 14th – 15th May 2014,
		KUALA LUMPUR, MALAYSIA. The conference is organized by the
		Institute of Materials, Malaysia (IMM).
9.	23 Dec	Fabrication of corrosion resistant and bioactive coatings on metallic implant
	2013	materials by plasma electrolytic oxidation; National Conference on
		Challenges in Biomaterials Research, Jointly organized by VIT Vellore and
		CSIR-CECRI at VIT Vellore, 23-24 Dec 2013
10.	7-9 Aug	Plasma electrolytic oxidation for surface modification of metallic implant
	2013	materials; International conference on Surface Engineering For Research
		and Industrial Applications - INTERFINISH-SERIA 2013 organized by
		Rajalakshmi Engineering College (REC) in association with International
		Union for Surface Finishing (IUSF) at Chennai, India

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date

Professional Memberships

- Indian Institute of Metals, Kolkata, India (LM01-40741; 2008)
- Materials Research Society of India, Bangalore, India (LM B922; Jan 2007)
- Powder Metallurgy Association of India, Hyderabad, India (LM 62406; Nov 2006)
- The Indian Ceramic Society, Kolkata, India (2007, LM)
- Society for Biomaterials and Artificial Organs, Trivandrum, India (LM 267, 2004)
- Society for Tissue Engineering and Regenerative Medicine, India (LM 14, 2009)
- The Society for Polymer Science-INDIA, Pune (LM 291, 2011)
- Plasma Science Society of India, Ahmadabad (LM 950, 2011)
- Society for Materials Chemistry, Mumbai (LM 506, 2011)
- Magnetics Society of India, DMRL, Hyderabad, (LM 520, 2011)
- Asia-Pacific Chemical, Biological& Environmental Engineering Society (Senior Member; Member No: 100651) (Aug 2012)
- 20. Academic Foreign Visits

Country	Duration of Visit	Programme

Short Visits to Abroad

by Dr. N. Ramesh Babu, Dept. of M.M.E, NIT Trichy.

- 1. Presented a paper in 1st International Conference in Nano-Technology organized by the Nanyang Technological University Singapore. (2004)
- 2. Presented a paper in 5th International Nanotech Symposium & Exhibition in Kintex, Korea, organized by Korea Nano Technology Research Society. (August 2007)

- 3. Visited Nanoscience and Nanotechnology Initiative, National University of Singapore (NUSNNI) Singapore for one month training in the area of Nanobiomaterials under Technical Education Quality Improvement program of NIT Trichy. (Dec 2007)
- 4. Visited Kualalumpur, Malaysia during March 21-25, 2011 for presenting a paper in Eight International Conference on Composite Science and Technology organized by University Putra Malaysia. Also chaired a Session (C6) in this conference.
- Presented a paper in 23rd Symposium and Annual Meeting of International Society for Ceramics in Medicine (BIOCERAMICS 23), held in Istanbul, TURKEY during 6-9th November 2011.
- Presented a paper in International Conference in Future Bioengineering (ICFB 2012) November 24-25, 2012, Bangkok, Thailand, organized by Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEES).
- 7. Presented a paper in the 6th International Light Metals Technology Conference (LMT2013) held during 24-26 July 2013 at Old Windsor, UK.
- Visited Kualalumpur, Malaysia during March 14th-16th 2014, to deliver an invited talk in the International Symposium on Corrosion & Materials Degradation (ISCMD 2014) under the auspices of 9th International Materials Technology Conference and Exhibition (IMTCE 2014). This Conference is organized by Institute of Materials, Malaysia (IMM).
- 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)

S.No.	Author(s)	Year	Title of Paper	Complete Reference of Journal
1.	S Arun, T Arunnellaiappan, N Rameshbabu	2016	Fabrication of the nanoparticle incorporated PEO coating on commercially pure zirconium and its corrosion resistance	Surface and Coatings Technology 305 (2016) 264–273
2.	S. Hariprasad, M. Ashfaq, T. Arunnellaiappan, Manu Harilal, N. Rameshbabu	2016	Role of electrolyte additives on in-vitro corrosion behavior of DC plasma electrolytic oxidization coatings formed on Cp-Ti	Surface and Coatings Technology 292 (2016), 20-29
3.	Viswanathan Alagan Sridhar Sampath, Philipp Maydannik, Tatiana Ivanova, Marina Shestakova, Tomáš Homola, Anton Bryukvin, Mika Sillanpää, Rameshbabu Nagumothu	2016	Efficient solar photocatalytic activity of TiO2 coated nano-porous silicon by atomic layer deposition	Superlattices and Microstructures 97 (2016) 155- 166
4.	Sridhar Sampath, Marina Shestakova, Philipp Maydannik, Tatiana Ivanova, Tomáš Homola, Anton Bryukvin, Mika Sillanpää, Rameshbabu Nagumothu and Viswanathan Alagan	2016	Photoelectrocatalytic activity of ZnO coated nano-porous silicon by atomic layer deposition	RSC Advances 6 (2016) 25173- 25178
5.	S Gowtham, T Arunnellaiappan, N Rameshbabu	15 Sep 2016	An investigation on pulsed DC plasma electrolytic oxidation of Cp–Ti and its corrosion behaviour in simulated body fluid	Surface and Coatings Technology 301 (2016) 63-73

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6.	T Arunnellaiappan, M Ashfaq, LR Krishna, N Rameshbabu	April 2016	Fabrication of corrosion- resistant Al 2 O 3-CeO 2 composite coating on AA7075 via plasma electrolytic oxidation coupled with electrophoretic deposition	Ceramics International 42 (2016) 5897– 5905
7.	T. Arunnellaiappan, N. Kishore Babu, L. Rama Krishna, N. Rameshbabu	Oct 2015	Influence of frequency and duty cycle on microstructure of plasma electrolytic oxidized AA7075 and the correlation to its corrosion behavior	Surface & Coatings Technology 280 (2015) 136–147
8.	M. Sandhyarani, M. Ashfaq, T. Arunnellaiappan, M.P. Selvan, S. Subramanian, N. Rameshbabu	May 2015	Effect of electrical parameters on morphology and in-vitro corrosion resistance of plasma electrolytic oxidized films formed on zirconium	Surface & Coatings Technology 269 (2015) 286–294
9.	S.Sridhar, A.Viswanathan, K.Venkateswarlu, N.Rameshbabu	April2015	Enhanced visible light photocatalytic activity of porous P-block elements (C, N & F) doped TiO2 coatings on Cp-Ti by micro-arc oxidation	Journal of Porous Materials 22 (2015) 545– 557
10.	M. Sandhyarani, T. Prasad Rao N. Rameshbabu	Oct 2014	Role of electrolyte composition on structural, morphological and in-vitro biological properties of plasma electrolytic oxidation films formed on zirconium	Applied Surface Science 317 (2014) 198–209
11.	K. Venkateswarlu,M. Sandhyarani,T.A. Nellaippan,N. Rameshbabu	Sep 2014	Estimation of Crystallite Size, Lattice Strain and Dislocation Density of Nanocrystalline Carbonate Substituted Hydroxyapatite by X-ray Peak Variance Analysis	Procedia Materials Science 5 (2014) 212 – 221
12.	 M. Harikishore, M. Sandhyarani, K. Venkateswarlu, T.A. Nellaippan, N. Rameshbabu 	Sep 2014	Effect of Ag doping on antibacterial and Photocatalytic Activity of Nanocrystalline TiO2	Procedia Materials Science 6 (2014) 557 – 566

13.	M Sandhyarani, Rameshbabu N, K Venkateswarlu, L Rama Krishna	Jan 2014	Fabrication, characterization and in- vitro evaluation of nanostructured zirconia/hydroxyapatite composite film on zirconium	Surface and Coatings Technology 238 (2014) 58– 67
14.	A. Chithambararaj,N. Rameshbabu,A. Chandra Bose	July 2014	Study of microwave assisted growth of meta- stable 1-D h-MoO ₃	Science of Advanced Materials Volume 6-No-7 (2014) 1302- 1312
15.	K. Venkateswarlu, N. Rameshbabu, D. Sreekanth, M. Sandhyarani, A.C. Bose, V. Muthupandi , S. Subramanian	Aug 2013	Role of electrolyte chemistry on electronic and in vitro electrochemical properties of micro-arc oxidized titania films on Cp Ti	Electrochimica Acta 105 (2013) 468– 480
16.	M. Sandhyarani, N. Rameshbabu, K. Venkateswarlu K.V.Ravisankar M. Ashok, S. Anandan	2013	Photocatalytic and antibacterial activity of titanium, fluorine and silver co-substituted hydroxyapatite	International Journal of Modern Physics: Conference Series 22 (2013) 268– 277
17.	R. Viswanathan, N. Rameshbabu , S. Kennedy, D. Sreekanth, K. Venkateswarlu, M. Sandhya Rani, V. Muthupandi	July 2013	Plasma electrolytic oxidation and characterization of spark plasma sintered Magnesium /hydroxyapatite composites	Materials Science Forum 765 (2013) 827- 831
18.	K. Venkateswarlu, S. Suresh, N. Rameshbabu , D. Sreekanth, M. Sandhyarani	July 2013	Role of Electric Pulse Duty and Frequency on Properties of Micro-Arc Oxidized Titania Films Developed on Ti-6Al-4V	Materials Science Forum 765, 688-692
19.	D. Sreekanth, N. Rameshbabu , K. Venkateswarlu, Ch. Subrahmanyam, L. Rama Krishna, K. Prasad Rao	May2013	Effect of K_2TiF_6 and Na ₂ B ₄ O ₇ as electrolyte additives on pore morphology and corrosion properties of plasma electrolytic oxidation coatings on ZM21 magnesium alloy	Surface and Coatings Technology , 222, 31–37

20.	M. Sandhyarani, N. Rameshbabu, K. Venkateswarlu, D. Sreekanth, Ch. Subrahmanyam	Mar 2013	Surface morphology, corrosion resistance and in- vitro bioactivity of P containing ZrO2 films formed on Zr by plasma electrolytic oxidation	Journal of Alloys and Compounds, 553, 324-332
21.	S. T. Ramesh, N. Rameshbabu, R. Gandhimathi, P.V. Nidheesh, M. Srikanth Kumar	Mar 2013	Adsorptive removal of Pb (II) from aqueous solution using nano-sized hydroxyapatite	Applied Water Science, 3, 105– 113
22.	K. Venkateswarlu, N. Rameshbabu, D. Sreekanth, A.C. Bose, V. Muthupandi, S. Subramanian	Jan 2013	Fabrication and characterization of micro arc oxidized fluoride containing titania films on Cp Ti	Ceramics International, 39, 801-812
23.	K. Venkateswarlu, D. Sreekanth, M. Sandhyarani, V. Muthupandi, A. C. Bose, and N. Rameshbabu	Nov2012	X-Ray Peak Profile Analysis of Nanostructured Hydroxyapatite and Fluorapatite	International Journal of Bioscience, Biochemistry and Bioinformatics, 2(6), 417-421
24.	 K. Venkateswarlu, J. Hari, D. Sreekanth, M. Sandhyarani, A. C. Bose, and N. Rameshbabu 	Nov2012	Effect of Micro Arc Oxidation Treatment Time on In-Vitro Corrosion Characteristics of Titania Films on Cp Ti.	International Journal of Bioscience, Biochemistry and Bioinformatics, 2(6), 422-426
25.	S. T. Ramesh, N. Rameshbabu , R. Gandhimathi, P.V. Nidheesh, M. Srikanth Kumar	Sep 2012	Kinetics and Equilibrium Studies for the Removal of Heavy Metals in Both Single and Binary Systems Using Hydroxyapatite	Applied Water Science, 2 (3), 187-197
26.	E. Lingareddy, A.Prabhakarn, J. Karuppiah, N. Rameshbabu, Ch.Subrahmanyam	2012	Gold supported calcium deficient hydroxyapatite for room temperature CO oxidation	International Journal of Nanoscience, 11 (3), 1240004-1 to 1240004-7

27.	K. Venkateswarlu, N. Rameshbabu , D. Sreekanth, A.C.Bose, V. Muthupandi, N.K. Babu, S. Subramanian	July 2012	Role of electrolyte additives on <i>in-vitro</i> electrochemical behaviour of micro arc oxidized titania films on Cp Ti	Applied Surface Science, 258, 6853–6863
28.	D. Sreekanth, N. Rameshbabu, K. Venkateswarlu	Aug2012	Effect of various additives on morphology and corrosion behavior of ceramic coatings developed on AZ31 magnesium alloy by plasma electrolytic oxidation	Ceramics International, 38,4607-4615
29.	D. MubarakAli, V. Gopinath, N. Rameshbabu , N. Thajuddin	May 2012	Synthesis and characterization of CdS nanoparticles using C- phycoerythrin 67 from the marine cyanobacteria	Materials Letters, 74, 8-11.
30.	D. Sreekanth, N. Rameshbabu , K. Ramaswamy Choudary, K. Prasad Rao	Jan 2012	The role of electrolyte additives on the corrosion behavior of ceramic coatings formed on ZM21 magnesium alloy by plasma electrolytic oxidation	Materials Science Forum, 710, 683-688.
31.	S. Suresh, K. Pavankumar, N. Rameshbabu, K.Venkateswarlu	Jan 2012	Effect of plasma electrolytic surface treatment on the corrosion characteristics of the Ti- 6Al-4V in acidic, industrial and marine environments	Materials Science Forum, 710, 677-682.
32.	D. Sreekanth, N. Rameshbabu	Feb 2012	Development and characterization of MgO/hydroxyapatite composite coating on AZ31 magnesium alloy by plasma electrolytic oxidation coupled with electrophoretic deposition	Materials Letters, 68, 439-442.

33.	Venkateswarlu Kotharu, Rameshbabu Nagumothu , Chandra Bose Armugam, Muthupandi Veerappan, Subramanian Sankaran, MubarakAli Davoodbasha, Thajuddin Nooruddin	Jan 2012	Fabrication of corrosion resistant, bioactive and antibacterial silver substituted hydroxyapatite/titania composite coating on Cp Ti	Ceramics International, 38, 731-740.
34.	K. Pavankumar, K. Venkateswarlu, N. Rameshbabu, V. Muthupandi	2012	X-ray peak broadening and in-vitro dissolution studies of thermally stabilized nanocrystalline carbonated hydroxyapatite	Key Engineering Materials, 493-494, 739- 745.
35.	K. Venkateswarlu, S. Suresh, N.Rameshbabu , A.C. Bose, S. Subramanian	2012	Effect of electrolyte chemistry on the structural, morphological and corrosion characteristics of titania films developed on Ti-6A1-4V implant material by plasma electrolytic oxidation	Key Engineering Materials, 493-494, 436- 441.
36.	 K. Venkateswarlu, N. Rameshbabu, A. Chandra Bose, V.Muthupandi and S. Subramanian 	Feb 2011	Studies on Development, Bioactivity and Corrosion Behavior of Nanostructured Titania/Hydroxyapatite Composite Layer on Cp Ti	Key Engineering Materials, 471-472, 325- 330.
37.	K. Venkateswarlu, A.ChandraBose, N.Rameshbabu	Oct 2010	X-ray peakbroadening studies of nanocrystalline hydroxyapatite by Williamson–Hall analysis	Physica B: Condensed matter, 405 (20), 4256- 4261
38.	N. Rameshbabu , T. S. Sampath Kumar and K. Prasad Rao	Feb 2010	Influence of microwave power, irradiation time and polymeric additions on the synthesis of nanocrystalline hydroxyapatite	Materials Research Innovations, 14(1), 45-50
39.	M Sandhyarani, A. Prabhakarn, N Rameshbabu , Ch. Subrahmanyam	2009	Nanosized non- stoichiometric hydroxyapatite: synthesis, characterization and evaluation as a catalyst for esterification reaction	Current Topics in Catalysis, 8, 81-90

40.	N. Rameshbabu, and	Jan	Microwave synthesis,	Current Applied
	K. Prasad Rao	2009	characterization and in- vitro evaluation of nanostructured biphasic calcium phosphates	Physics, 9(1), S29-S31
41.	N. Rameshbabu, T. S. Sampath Kumar, T. G. Prabhakar, V. S. Sastry, K. V. G. K. Murty, K. Prasad Rao	Mar 2007	Antibacterial nanosized silver substituted hydroxyapatite: synthesis and characterization	Journal of Biomedical Materials Research-Part A, 80(3), 581-591
42.	N. Rameshbabu , T. S. Sampath Kumar and K. Prasad Rao	Nov 2006	Synthesis of nanocrystalline fluorinated hydroxyapatite by microwave processing and its in-vitro dissolution study	Bulletin of Materials Science, 29(6), 611-615
43.	M. Sunder, N. Rameshbabu, S. P. Victor, K.Ram Kumar and T. S. Sampath Kumar	Jan 2005	Biphasic calcium phosphates for antibiotic release	Trends Biomater. Artif. Organs, 19, 213-218
44.	N. Rameshbabu, T. S. Sampath Kumar, R. Murugan and K. Prasad Rao	Aug 2005	Mechanochemical synthesis of nanocrystalline fluorinated hydroxyapatite	International Journal of Nanoscience, 4(4), 643-649
45.	N. Rameshbabu , K. Prasad Rao, T. S. Sampath Kumar	Dec 2005	Accelerated microwave processing of nanocrystalline hydroxyapatite	Journal of Materials Science, 40(23), 6319- 6323
46.	N. Rameshbabu, Sushant Manwatkar, K. Prasad Rao, T. S. Sampath Kumar	2004	Bioactive coatings on 316L stainless steel implants	Trends in Biomaterials and Artificial Organs, 17, 43-47
47.	N. Rameshbabu, K. Prasad Rao, T. S. Sampath Kumar	Feb 2004	Effect of coralline derived Biphasic calcium phosphate shot blasting on titanium surfaces	Transactions of the Indian Institute of Metals, 57(1), 85-89

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

S.No.	Author(s)	Date Month Year	Title of Paper	Name and Place of Conference
1.	N. Ramesh Babu , BalaSubramanian, T.R.Ramachandran, S.K.Seshadri	27-28 Sep 2002	Grain refinement and Modification of Hypoeutectic Al-7%Si alloy	Fourth National Symposium of Research Scholars on Metals and Materials, IIT-Madras, Chennai, India
2.	N. Ramesh Babu, K. Prasad Rao and T.S.Sampath Kumar	Dec 2003	Microwave synthesis of carbonate containing hydroxyapatite nanoparticles.	Proceedings of the 2003 INAE Conference on Nanotechnology, Central Scientific Instruments Organisation, Chandigarh, India pp. 223-230
3.	N. Ramesh Babu, K. Prasad Rao and T.S.Sampath Kumar	Dec 2003	Silver substitute hydroxyapatite nanoparticles by microwave processing	International Conference on Nano Science and Technology, Kolkota, India
4.	N. Ramesh Babu, K. Prasad Rao and T.S.Sampath Kumar	Nov 2003	Surface modification of titanium implants	International Conference on Advances in Surface Treatment: Research & Applications, Hyderabad, India
5.	T. S. Sampath Kumar, N. Ramesh Babu and K. Prasad Rao	Nov 2003	Deposition of hydroxyapatite on titanium foils by microwave processing	Proceedings of the International Conference on Advances in Surface Treatment: Research & Applications, Hyderabad, India pp 736-738

6.	N. Ramesh Babu, K. Prasad Rao and T.S.Sampath Kumar	Jan 2004	Heat treatment of hydroxyapatite nano ceramics by microwave processing	Proceedings of the International Heat Treat- 2004, Chennai, India pp A7(1-4).
7.	M. Kunal, K.Ramkumar, N. Rameshbabu and T.S.Sampathkumar	16-21 May2004	Development of multilayer calcium phosphate-chitosan films	Transactions of the 7th World Biomaterials Congress, Sydney, Australia. pp 1275.
8.	N. Ramesh Babu , T. G. Prabhakar, K. Prasad Rao and T. S. Sampath Kumar	Oct 2004	Development of nanosized silver- substituted hydroxyapatite for tissue engineering applications	Materials for Tissues Engineering-Chemistry and Microstucture: The Role for Ceramics, Faenza, Italy
9.	T.S.Sampath Kumar, Manish Dadich, A. Siddharthan and N.Ramesh Babu	Nov 2004	Surfactants role in microwave synthesis of hydroxyapatite nanoparticles.	International Conference on Nano-Materials: Synthesis, Characterisation and Application, Kolkata, India
10.	N. Ramesh Babu, A. Gupta, M. Harish, K. Prasad Rao and T. S. Sampath kumar	Dec 2004	Nanocrystalline Ca ₁₀ (PO ₄) ₆ (OH) $_{1.6}F_{0.4}$ bioceramic by microwave processing	International Symposium for Research Students on Materials Science & Engineering, Chennai, India
11.	T.S. Sampath Kumar, A. Siddharthan and N. Ramesh Babu	3-8 July 2005	Nano calcium phosphate ceramics by microwave processing	International Union of Material Research Societies 9 th International Conference on Advanced Materials (IUMRS-ICAM 2005), Singapore.
12.	N. Ramesh Babu , Raj Kumar Singh K. Prasad Rao and T. S. Sampath Kumar	Sept 2005	The crystallization of hydroxyapatite in the presence of alginic acid and sodium alginates	National Conference on Ceramics for Medical Applications, Chennai, India

13.	T. S. Sampath Kumar, N. Ramesh Babu and A. Siddharthan	Jan 2005	Microwave processing of bioactive materials	Indo-Australian Conference on Biomaterials, Implantable Devices & Tissue Engineering, Thiruvananthapuram, India,
14.	N. Ramesh Babu , T. S. Sampath kumar and K. Prasad Rao	Jan 2005	Nanostructured biphasic calcium phosphates by microwave processing.	Indo-Australian Conference on Biomaterials, Implantable Devices & Tissue Engineering Thiruvananthapuram, India
15.	N.Rameshbabu (Invited Talk)	2008	Biomaterials: A Nano Approach	National Conference on Emerging Materials and Technologies India -2020, organized by the Dept. of MME, NIT- Tiruchirapplli.
16.	A.Joseph Berkmans, S.Vivek, N.Kartik, S.Moorthy Ram, N.Rameshbabu	2008	Physico-Chemical Characterization of Nanocrystalline Substituted Hydroxyapatites	National Conference on Emerging Materials and Technologies India -2020, organized by the Dept. of MME, NIT- Tiruchirapplli.
17.	S.Moorthy Ram, S.Vivek, N.Kartik, A.Joseph Berkmans, N.Rameshbabu	2008	In-Vitro Evaluation of Biomaterials	National Conference on Emerging Materials and Technologies India -2020, organized by the Dept. of MME, NIT- Tiruchirapplli.
18.	A.Joseph Berkmans, S.Moorthy Ram, N.Rameshbabu	23-25 July 2008	Development of bioactive and bioresorbable nanoceramics for biomedical applications	National Conference on Advanced Materials and Characterization, VIT University, Vellore