# Dr. Nimu Chand

Permanent Address: D-483 old Vidyadhar Nagar Near Bus stand Masjid Jaipur, Rajasthan India 302023 **Mobile no: 9784923200, 9829319478 Mail id: ncrmnitmeta@gmail.com** 

Objective: Currently I am looking for an opportunity in academics or Research labs in materials industries where I can exploit my Technical leadership and strong communications skills through which I can grow my career with an organization where I see good opportunities and competitive challenges. I believe in Team work, Contribution and Togetherness.

# **Education qualifications**

S.No	Name of Degree	University/ Institute	Stream/Specilization	Session	CGPA (on 10
					point scale)
1	Ph.D	Malaviya National Institute of	Metallurgical and Materials	2014 -	8.83
		Technology Jaipur	Engineering	2019	
2	M.Tech	Malaviya National Institute of	Metallurgical and Materials	2012-14	8.80
		Technology Jaipur	Engineering		
3	B.Tech	Malaviya National Institute of	Metallurgical Engineering	2004-08	7.0
		Technology Jaipur			

#### Work Experience (Total approx 04 years after B.Tech (2008-2012)

S.No	Designation	Name of Employer	Duration	Expe	CTC
				(Years)	
1	Graduate	JSW Steel Limited , Bellary	Aug, 2008-Mar-09	01	3.80
	Engineer	Karnataka			lac/annum
	Trainee (GET)				
2	Lecturer	Indus Institute of Technology	Mar, 09 to July -2010	1.4	16000/pm
		and Engineering			
3	Junior Manager	Jindal Steel and Power	Aug 2010 to July 2012	2	4.80
		Limited (JSPL) Raigarh,			lacs/annum
		Chhattisgarh			

Domain Skills				
Material Science	Heat Treatment	Materials Characterization		
Ceramics	Biomaterials	Mechanical testing of materials		

# **Academic Projects**

Title Effects of various dopants on mechanical and Biological properties of HA synthesized by wet

precipitation method

Supervisor Prof. A K Bhargava (MNIT Jaipur) External Supervisors Dr. Vamsi Krishna Balla (Sr. Principal

Scientist and HOD, and Dr. Biswanath Kundu ,Bioceramics and coating division , CGCRI Kolkata

Scope This extensive research effort is study to find out various effects of multi-ionic dopants on different biological and mechanical properties of HA for biomedical applications. This work involves

biological and mechanical properties of HA for biomedical applications. This work involves various characterizations to confirm the feasibility of materials for use as biomedical application such as cell culture study, simulated body fluid (apatite formation study), antibacterial study, Phase

and chemically stability, dielectric study, Photoluminescence (PL) study.

Master's Project

Title Development of In-Situ grown ceramic film on Zr and Ti:Zr (50:50) alloy for load bearing

applications

Supervisor Prof. A K Bhargava (MNIT Jaipur) and External Supervisor Dr. Vamsi Krishna Balla (Sr. Principal

Scientist and HOD, Bioceramics and coating division, CGCRI Kolkata

Scope This research was an experimental study of In-Situ grown oxide and nitride films to analyze various characteristic properties (In-Vitro tribological testing in simulated Body fluid and Corrosion testing

in Hanks solution) for load bearing implant application. Significantly improvement observed in

wear and corrosion associated with hardness, surface roughness and contact angle measurements which are useful properties for bioimplants grade.

## **Bachelor's Project:**

Title Effect of Plasma Nitriding on properties of EN steel

(Department of Metallurgical Engineering, MNIT, Jaipur, India)

Guide Dr. R.P. Dahiya (Director MNIT Jaipur), Prof. in Physics department) Dr. Ashok Sharma (HOD,

Metallurgical Engg Department MNIT Jaipur) & Dr. S.K. Gupta (Reader, Metallurgical Engg

department MNIT Jaipur)

Scope The Project was an attempt to analyze experimentally "the effect of plasma nitriding treatments on

mechanical properties" of 19MnCr5 steel such as Hardness, Micro hardness, UTS, Ductility and Toughness in comparison with without plasma nitriding treatment on same steel. Hardness, Micro hardness, & wear resistance improved significantly with the comparison of the same non treated

steel grade.

### **International Journal Publication**

S.No.	Title of paper	Author(s)	Name of the	Vol. &	Pages	ISSN
			Journal	Year		NO
1	Structural and phase	Nimu Chand Reger,	Ceramics	45	252-	0272-
	analysis of multi-ion	Anil Kumar	International	(2019)	263	8842
	doped hydroxyapatite	Bhargava, Itishree				
	for biomedical	Ratha, Biswanath				
	applications	Kundu, Vamsi				
		Krishna				
		Balla				
2	Wear and corrosion	Nimu Chand Reger,	Surface & Coatings	334	357-	0257-
	properties of in-situ	Vamsi Krishna Balla,	Technology	(2018)	364	8972
	grown zirconium nitride	Mitun Das, Anil				
	layers for implant	Kumar Bhargava,				
	applications					
3	In vitro	Nimu Chand Reger,	International Journal	1(2018)	1-14	1744-
	cytotoxicity and ion	Biswanath Kundu,	of Applied Ceramic			7402
	release of multi- ion	Vamsi Krishna Balla,	Technology 16 (2),			
	doped hydroxyapatite	Anil Kumar Bhargava	503-516			

## **Conferences / Proceedings/ Publications**

### NATIONAL CONFERENCES

- 1. **Nimu Chand Reger**, A. K. Bhargva, Vamsi Krishna Balla, "Wear Behaviour of *In-situ* grown ceramic film on Zirconium for orthopadeic implants" National Conference on Advanced Materials & Processing, held on December 2-4, 2015, MNIT Jaipur
- 2. **Nimu Chand Reger**, Bhawna jarwal, A K Bhargava, Techniques for Hydroxyapatite synthesis" National Conference on Advanced Materials & Processing, held on December 2-4, 2015, MNIT Jaipur
- 3. **Nimu Chand Reger**, Bhawna Jarwal, A. K. Bhargava, "Synthesis Techniques for Hydroxyapatite :an overview" National Confrence on "Advanced functional Materials & their application (AFMA), Dec,11-12, 2015 held at Govt Women Engineeing College Ajmer.
- 4. Joy Dutta, Dr. M. Mazumdar, K. K. Sinha, P. K. Mishra, **Nimu Chand Reger**, P.K. Guin, N. Dharnidhar Reddy, R. K. Saini, S. Ghosh, "A journey for remedial measures of fish crack on hot rolled plate surface at JSPL, Raigarh" a technical poster presented at 65<sup>th</sup> annual technical meeting (49<sup>th</sup> conference National metallurgical Day) held at Hyderabad(13-16 Nov2012).

## **SHORT-TERM COURSES**

- 1. Attended successfully a 5 days short term course on "Applied Statistics for Experiments" sponsored by TEQIP-III organized by department of Chemical Engineering and Mechanical Engineering, MNIT Jaipur during October 9-13, 2017.
- 2. Attended successfully a 5 days Training program on "Field Emission Scanning Electron Microscopy" organized by department of Material Research Centre, MNIT Jaipur during March 28-April-1, 2017.
- 3. Successfully completed a 5 days short term course on "Biomaterials and its Applications" organized by department of Materials Science and Engineering, Indian Institute of Technology Kanpur, from December 7-11, 2015
- 4. Successfully attended a 5 days short term course on "Structure, Properties and Applications of Engineering Materials" organized by department of Metallurgical and Materials Engineering, MNIT Jaipur, from July 1-5, 2013.
- 5. Attended successfully a one week short term course on "Computational Techniques in Engineering and Sciences" organized by department of Metallurgical and Materials Engineering, MNIT Jaipur during April 1-5, 2013.
- 6. Successfully completed a two weeks short term training program on "Recent Trends in Stainless Steel" Jointly organized by Electrotherm (India) Ltd (ET) and Indian Stainless Steel Development Organization (ISDO) held at Indus Institute of Technology and Engineering, Ahmadabad, Gujrat during Dec2009-January 2010.

#### WORKSHOPS

- 1. Successfully participated in 2 days workshop on "Foundry Aspects of Melting and Casting of Aluminum Alloys" organized by department of Metallurgical and Materials Engineering in association with IIF Jaipur chapter, MNIT Jaipur from October 21-22, 2016.
- 2. Successfully attended in 2 days training cum workshop on "Metallurgical Analysis by Chemical Method" organized by department of Metallurgical and Materials Engineering, **MNIT Jaipur from October 1-2, 2016**.
- 3. Successfully contributed as an active volunteer for 5 days "ASM Materials Camp" organized by ASM International Society held at department of Metallurgical and Materials Engineering, MNIT Jaipur during May 04-08, 2013.
- 4. Successfully participated in one day workshop on "Scanning and Transmission Electron Microscopy: Sample Preparation and Studies" organized by department of Metallurgical and Materials Engineering in association with MRC, MNIT Jaipur on Dec 18, 2012.
- 5. Successfully participated and presented work in Two days workshop cum seminar on "Advanced Functional Materials" jointly organized by department of Metallurgical and Materials Engineering and MRC Jaipur during Dec 8-9, 2012.
- 6. Successfully participated and presented work in Two days workshop cum Seminar on" Steel forum" **Nimu Chand Reger**, M K Banerrjee, "**Recent trends in clean steel making practices**", organized by department of Metallurgical and Materials Engineering, MNIT Jaipur during September 11-12, 2012.
- 7. Successfully participated and contributed as an active volunteer in the **International Conference** on "Technology Trends in Aluminum Cast Components & Process" organized by department of Metallurgical and Materials Engineering, MNIT Jaipur during December 21-22, 2008.
- 8. Successfully participated and contributed as an active volunteer in the 21<sup>st</sup> national symposium on "**PLASMA Science & Technology**", held by Physics & Metallurgical Engineering Department of MNIT Jaipur, during Dec 15-16, 2006.

#### **Professional Trainings**

- E Completed the training on **Basic Fire Safety and Emergency Preparedness** (Theory & Practical) from Safety department JSPL Raigarh, Chhattisgarh on 24<sup>th</sup> September 2010.
- E Completed training on **Basic Life Support and First Aid Skills** (Theory & Practical) from safety department at JSPL Raigarh on 11<sup>th</sup> Nov 2010.
- E Professional Short Term Course on "Electric arc furnace steel making" by Mr. Vishavbandhu at JSPL Raigarh.
- Ξ Training program attend on "MBTI" by Mr. R. S. Dabas at JSPL Raigarh.
- E Professional Short Term Course on **Advanced Power Point Presentation** -2007.

#### **Extra Co-Curriculum Activities**

- E Organized Education and Science fairs as a chief organizer at Govt School Footolav to promote the value and need of education during 2013-2015.
- E Agile member of NCC Air Wing Junior division at Government DARBAR Sr. Sec. School Jaipur during 2002-2003
- Ξ Participated in various dance competition at MNIT Jaipur during 2004-2008.
- E Participated in various cultural activities such as Rangmanch, Mimes, at MNIT Jaipur during 2004-2008.
- Ξ Active Member of NSS team of MNIT Jaipur during 2004-2008.
- E Worked as active volunteer in various programs such as AIEEE admission counseling 2005-2008, Convocation 2006 & 2007, National & International conferences (2006-2008) held at Malviya National Institute of Technology, Jaipur.

### Name and address of two References:

1 <sup>st</sup> Re	feree	2 <sup>nd</sup> Referee		
Name	Dr. Anil Kumar Bhargava	Name	Dr. Vamsi Krishna Balla	
Position	Professor and ex HOD	Position	Senior Principal scientist and Ex HOD	
Address	Prof A K Bhargava, Professor and ex HOD Department of Metallurgical and Materials Engineering, JLN Marg Malaviya nagar Jaipur Rajasthan. 302017	Address	Vamsi Krishna balla, Senior Principal Scientist, Bioceramics and coating division, CSIR- Central Glass and Ceramic Research Institute, 196 Raja S C Mullick Road Kolkata -700032, India	
E-mail	akbhmt@gmail.com	E-Mail	vamsi.balla@gmail.com	
Phone No.	9414052177	Phone No.	9088011776	

# Short Term plan:

## (a) Teaching

- (1) To provide good quality knowledge of Metallurgical and Materials Engineering to both UG and PG students
- (2) In addition to regular classes, to conduct extra theory classes, tutorials, and practical sessions to the students who want to pursue their career in core industries.
- (3) To develop curriculum structure /syllabus of both UG and PG upto level of IIT/IISC/foreign universities

## (b) Research

- (1) To motivate both UG and PG students for conducting research projects or experiments in cutting edge of research areas such as automotive, defense, biomaterials sectors, etc.
- (2) To fetch research funding by submitting research proposals to national agencies such as MSME/DST/DRDO/RPCB/BRNS/MHRD.
- (3) To conduct short term courses/seminars/conferences/workshops for improvements of our academic s well as research understandings.

# Long Term plan:

# (a) Teaching

- (1) To take regular transparent feedback from both UG and PG students for our continuous improvement in teaching methods.
- (2) To conduct industrial visits and collaborate with industries for hands on training to both UG and PG students.

### (b) Research

- (1) To develop International level labs where UG and PG/Ph.D./Research fellows can perform experiments to enhance their knowledge in thirst areas of research
- (2) To conduct original research and try to get patents and publish good quality research works in reputed international/national Journals (SCI).

## Computer/IT Expertise

Basic Computer Knowledge : Microsoft office (XP 2003 & 2007, Vista)

Software : Industrial SAP system version –
Languages : Basics of C programming

# **Personal Dossier**

Age as of July 2017 33Years and 11months

Languages Known English, Hindi

Passport Valid Passport (Valid till 2028)

Marital status Married

Permanent address D-483, Vidyadhar Nagar, Jaipur, Rajasthan India-302023