## Dr M S Rawat Retired General Manager BHEL Principal Muffakham Jah College of Engineering & Technology(MJCET)



### **Bio-Data**

.

Name:

Fathers name:Late Shri Kedar Singh Rawat

Present Residential Address:

Permanent Address:

8-7-79/20 Srinagar Colony, R R Nagar, Old Bowenpally, Secunderabad 8-7-79/20 Srinagar Colony, R R Nagar, Old Bowenpally, Secunderabad 500011

Contact Phone Nos:

Date of Birth

E Mail:

mpsrawat83@gmail.com;

15<sup>th</sup> August 1959

Dr Mahipal Singh Rawat

## **Educational Qualification:**

S.	Degree	Institute	Year	%	Remarks
No				marks	
1	BE	IIT Roorkee	1983	91(3.72	Received Thompson Award for
				/	Securing 2 <sup>nd</sup> position in BE.
				4.00)	Thomson Award named after
					founder of Institute J J Thomson.
2	One year course In Quality	ISI Madras	1985	89	2 <sup>nd</sup> Position
	Reliability & Operations				
	Research				
3	Non Destructive Evaluation	EPRI, USA	1994		Received Training in USA
	Certification				
4	Acoustic Emission Testing	Physical	2000		Received Training in UK
	Certification	Acoustics, UK			
5	PhD	IIT Mumbai	2002		Topper in Course Work
6	Internal Rotary Tube Inspection	IRIS Inspection	2003		Received Training in USA
	Certification	Services, USA			
7	MBA(HR)	IGNOU	2005	62	Completed MBA in shortest
					possible time as per IGNOU
					timeline
8	Qualified Certification program of	MoE & ATAL	2021		One Month Program
	Innovation Ambassador (Innovation				_
	cell of MoE & ATAL)				
9	Level-I German Course	BHEL	19		Qualified with A Grade
-		Hyderabad	86		

### **Industrial Experience**

Graduated from **University of Roorkee (Now IIT-R) in 1983** and was recipient of Thomson award for securing second position in class. Thompson Award was instituted in the name of founder of the institute and this award resulted in my getting admission to PhD directly after B.E.

Joined BHEL Corporate R&D Hyderabad in 1983 and was sponsored for one year course in Quality Reliability and Operations Research at Indian Statistical Institute, Madras. Secured second position in the program and received best project award at ISI Madras. **Completed PhD from IIT Bombay "Role of Residual Stresses on Life of12% Cr Steel Used in Thermal Power Plants" in the year 2002.** 

Started career undertaking several developmental projects in the area of Non-destructive testing of power plant components and Residual Life Assessment Studies. Have three patents to the credit and one more patent application has been filed. Have guidednumber of M.Tech students mainly from NIT Warangal. Was PhD examiner for Jawaharlal Nehru Technological University (JNTU), Hyderabad. Evaluated one PhD thesis for JNTU and was **co- guide for one PhD student who completed his PhD from JNTU Hyderabad**. Was reviewer for International Journal of Industrial Chemistry and editorial board member for **International Journal of Materials Science and Applications. Completed a high priority project** Castability studies of castings for Advanced Ultra Super Critical(AUSC) project. This project was monitored by PrincipalScientific Adviser's Office(PSA) to Prime Minister.Superannuated from BHEL in August 2019 as General Manager

## Academic Experience

After Superannuating from BHEL, Joined Greater Noida Institute of Technology(GNIOT), Greater Noida as Professor & Head, Mechanical Engineering Department in January 2020. During my tenure as HoD, organized a number of programs for Mechanical Engineering Department. Organised workshop for students in the area of "3D Modelling and ANSYS Analysis" inviting experts from Hyundai Motors. Organised tailor made internship program for final year students involving industry experts during Corona pandemic. Also organized about 10 webinars for the benefit of our students. Have 4 Scopus indexed papers. At GNIOT successfully organized AICTE sponsored International e-Conference as Conference Co-ordinator on "Cutting Edges in Mechanical Engineering" on February 20, 2021. Conference papers have been published in IOP conference series Volume 1168, 2021.

Successfully completed **"Innovation Ambassador Training"** jointly organized by MoE's Innovation cell & AICTE Training And Learning (ATAL) Academy from 30-06-2021 To 30-07-2021. Also completed faculty development programs sponsored by AICTE Training And Learning (ATAL) Academy in the area of Management Information System and Waste Management.

Presently Principal at Muffakham Jah College of Engineering & Technology(MJCET), Hyderabad

(Since Nov 2021)

# Recognition in Industry:

S.No	Recognition	Institute	Year	Remarks
1	Was Invited as chairperson of	Shot Peening	1989	
	technical session at	conference,		
	International Conference on	Warsaw,		
	Shot Peening (ICSP-7)	Poland		
2	Organised International	Organised on Behalf	1989	
	Conference on Life Extension &	of BHELat		
	Prediction(LIPREX) at	Hyderabad		
	Hyderabad			
3	Member for Design	BHEL, Trichy	1995	Received Appreciation
	& Development of			letter from CMD, BHEL
Λ	Development of Automated	BHEI	1005	Eacility developed for
-	Ultrasonic Scanning System for	Corporate R&D	1555	the first time in India.
	examination of Generator End	Hydferabad		Implemented at a
	Retaining Rings			power station
5	<b>Received Appreciation letter</b>	Madhya Pradesh	2000	Completing RLA Studies
	from MP Electricity Board	Electricity Board		in shortest possible
	The second secon		2002	time of 10 days.
6	f Internal Retary Inspection	BHEL Hyderabad	2003	System developed
	System of heat Exchanger			around the probe as
	Tubes			medium for UT energy
				Transmission
7	PhD examiner	JNTU Hyderabad		
8	PhD Co Guide	JNTU Hyderabad		One student completed
				PhD
9	Principal Investigator in a	Monitored by Principal		Project completed on
	project on Castability studies of	Scientific Adviser's	2016-2019	April 30",2019
	castings for Advanced Ultra	Office(PSA) to Prime		
	Plant(AUSC)	WIIIISter		
10	Life member of ISNT	ISNT	Current	
11	Reviewer	International Journal of		
		Industrial	Current	
		Chemistry.		
12	Reviewer	2 <sup>nd</sup> International Conf.		Conference at
		on Meh, Electric &		Hangzhou, China,
10	Poviowor	Industial Engg.		IVIAY 25-27, IVIEIE 2019,
13	NEVIEWEI	Conf on Numerical		
		Modelling in Engg.		10g. 15 22, MINIL2015
14	Reviewer	5th Annual International		May 17-18, 2019.
		Workshop on Materials		Hunan, Changsha, China,
		Science and Engineering		IWMSE-2019

## **Recognition in Academia**

1	Organised International e- Conference on "Cutting Edges in Mechanical Engineering", as Conference Co-ordinator	GNIOT Greater Noida	2021	Feb 20, 2021, GNIOT, Greater Noida. <b>Sponsored by AICTE</b>
2	Session Co-Chair in technical session in International e- Conference on "Cutting Edges in Mechanical Engineering",	GNIOT Greater Noida	2021	Feb 20, 2021, GNIOT, Greater Noida
3	Reviewer for technical papers in International e-Conference on "Cutting Edges in Mechanical Engineering",	GNIOT Greater Noida	2021	Feb 20, 2021, GNIOT, Greater Noida
4	Reactivated innovation cell at MJCET	MJCET Hyderabad	2022	
5	Established ideation & startup center namely SU Knowledge Hub Foundation	MJCET Hyderabad	2023	January 2023
6	Established Drone center for training students in flying & manufacturing of drones.	MJCET Hyderabad	2023	March 2023
7	Improvement of NAAC accreditation grade	Improved grade of MJCET from B++ to A+	2024	Feb 2024
8	Encouraged students for generating new Ideas. One student received Government funding of Rs 15 Lakhs	MJCET	2024	March 2024
9	Encouraged ECE department to receive 2.0 Lakhs funding from AICTE under Vaani program.	MJCET	2004	June 2024
10	Two faculty members got AICTE funding of 5 & 4 lakhs for start up projects	MJCET	2004	June 2024

## Papers Published during stay in Industry

- Effect of various Heat Treatments on Mechanical Properties of a Steam Turbine Blading Steel Containing Delta Ferrite: BHEL Journal Vol 10 No 2, 1989
- Effect of Heat Treatment on Mechanical Properties and Fracture Behaviour of a 12 Cr Mo
  V steel: Journal of Material Science & Engineering A 127, 7-15, 1990
- Effect of Surface Stresses on Corrosion Properties of Low Carbon Manganese Steel: 7<sup>th</sup> National Congress on Corrosion Control, 1997
- Influence of Shot Peening on Corrosion Properties of Steam Turbine Blading Steel: 7<sup>th</sup> International Conference on Shot Peening, Warsaw, Poland, 1999
- Role of Shot Peening on Life Extension of 12% Cr Turbine, Blading Martensitic Steel Subjected to SCC and Corrosion Fatigue: : 7<sup>th</sup> International Conference on Shot Peening, Warsaw, Poland, 1999
- 6) Renovation, Modernisation and Uprating of Hydro Power Plants: BHEL Journal Vol 20, No1, 1999

- Lowering of Boronisation Temperature for Application to Hydro Turbine Components: 37<sup>th</sup> NMD & 53<sup>rd</sup> ATM of IIM at IIT Kanpur, 1999
- 8) Effect of Pitting Corrosion on Fatigue Resistance of Shot Peened 12% Cr steel: 37<sup>th</sup> NMD
  & 53<sup>rd</sup> ATM of IIM at IIT Kanpur, 1999
- Failure Analysis of Differential Pressure Control Valve Spring-A Case Study: 37<sup>th</sup> NMD & 53<sup>rd</sup> ATM of IIM at IIT Kanpur, 1999
- 10) Effect of Shot Peening on Chrome Plating: 38<sup>th</sup> NMD & 54<sup>th</sup> ATM of IIM at Bhilai, 2000.
- 11) Condition Assessment of Condenser Tubes through Eddy Current Examination: 38<sup>th</sup> NMD
  & 54th ATM of IIM at Bhilai, 2000
- 12) Influence of Residual Stresses and Environment on Electrochemical Behaviour of Steam Turbine Blading Steel: BHEL Journal, Vol 23, No2, 2002
- 13) Corrosion Fatigue and its Prevention in Power Plant Components through Shot Peening:BHEL Journal, Vol 24 No1, 2003
- 14) Monitoring Crack Initiation in Metallic Components through Acoustic Emission, 3rd MENDT -Middle East Nondestructive Testing Conference & Exhibition - Bahrain, Manama, 27-30 Nov2005
- 15) Failure of Condenser Tubes in a Thermal Power Plant Caused by De-Nickelification: National Conference on Failure Analysis (NCFA) - 2006, conducted by DMRL, at Hyderabad, Dec 2006
- 16) Failure Analysis of Input Shaft of Planetary Gear Box of a Bowl Mill- A Case Study: 5th International Conference on Creep, Fatigue and Creep-Fatigue Interaction (CF-5) at IGCAR Kalpakkam, Tamil Nadu, September 24-26, 2008
- 17) Preventive Maintenance of Kiln Furnace used for Production of Ceramic Insulators using Thermography, National Seminar & Exhibition on Non-Destructive Evaluation NDE 2009, December 10-12, 2009
- 18) Active Infrared Thermographyfor Non Destructive EvaluationOf Defects In Wear Resistance And Thermal Barrier Coatings, National Seminar & Exhibition on Non-Destructive Evaluation NDE 2011, December 8-10, 2011
- 19) Theoretical estimation of thickness variation in thermal barrier coatings by using Pulse Phase Thermography, 11th International Conference on Quantitative InfraRed Thermography, Naples, Italy, 11-14 June 2012
- 20) Effect of steam side oxidation and fireside corrosion degradation processes on creep life of service exposed boiler tubes, International Journal of Pressure Vessels and Piping 144, May 2016.

#### Papers published during stay in Academic Institute

1)Artificial Intelligence in Mechanical Engineering and material science International e-Conferenceon "Cutting Edges in Mechanical Engineering", Feb 20, 2021, GNIOT, Greater Noida. 2)Development of NDT technique for reliable identification of defects in FRP-Silicone shred interface in composite insulators, International e-Conference on "utting Edges in Mechanical Engineering", Feb 20, 2021, GNIOT, Greater Noida. 3) Experimental analysis of a Double Slope Active Solar Still under forced circulation mode International e-Conference on "Cutting Edges in Mechanical Engineering", Feb 20, 2021, GNIOT, Greater Noida.

4) Optimization of FDM 3D Printing process parameters using Taguchi Technique, International e-Conference on "Cutting Edges in Mechanical Engineering", Feb 20, 2021, GNIOT, Greater Noida.

## Patents:

- 1) A method for improving fatigue & stress corrosion properties of leading edge of steam turbine blades
- 2) Method of manufacturing carbide insert roll
- 3) A process of forming metal boride coating on surface of steel and alloyed components for Improved Wear Properties.
- 4) "Method of Calibration Block Preparation for TBC Coating Thickness Measurement using Thermography"