

**RESUME of**  
**Dr. R. MARKANDEYA**  
**Professor of Metallurgical Engineering &**  
**PRINCIPAL, JNTUH COLLEGE OF ENGINEERING MANTHANI,**  
**PEDDAPALLI – 505212**

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**Name** : Dr. R. Markandeya  
**Father's Name** : (Late) R. Laxmaiah  
**Date of Birth** : 1<sup>st</sup> August 1963  
**Date of joining JNTUH service** : 15-10-1992  
**Place of Birth** : Gunnepelli (V), Warangal Rural (D), Telangana  
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Balajinagar, Kukatpally,  
Hyderabad – 500 072  
**Caste** : BC 'B', PADMASHALI

**I. ACADEMIC QUALIFICATIONS:**

- B. Tech. (Met. Engg) from NIT Warangal in 1987
- M. Tech from Institute of Technology IIT Varanasi, Banaras Hindu University, Varanasi (UP) in 1990
- Ph. D. from Institute of Technology IIT Varanasi, Banaras Hindu University, Varanasi (UP) in 2004

**II. Details of Experience: Total Academic Experience – 28 years 11 months**

- **October 1992 to October 2002** : Assistant Professor in Metallurgical Engineering at JNTUH College of Engineering, Hyderabad
- **October 2002 to June 2011** : Associate Professor in Metallurgical Engineering at JNTUH College of Engineering, Hyderabad
- **July 2011 to till date** : Professor in Metallurgical Engineering at JNTUH College of Engineering, Hyderabad

### **III. Administrative Experience**

- Worked as Head of Metallurgical Engineering Department from 14-11-2009 to 18-01-2010.
- Worked as Head of Metallurgical Engineering Department again from 02-03-2010 to 02-10-2012. During this time M. Tech (Regular and PTPG) courses were started in the department of Metallurgical Engineering.
- Worked as Special Officer for Part Time PG Programmes (PTPG) in the college from 01-11-2012 to 12-08-2014.
- Worked as Chairman, Board of studies for Metallurgical Engineering subject for six years at JNTUH Hyderabad.
- Worked as member for Board of Studies for IIIT Basara, IIIT RK Valley and Yogi Vemana College of Engineering, Cuddappa.
- Working as Principal JNTUH College of Engineering Manthani, Peddapally Dist. from 13-08-2014 to till date.
- Serving as Member of Executive Council for JNTUH, since February 2020.

### **IV. Other Responsibilities held:**

- Worked as NSS Program Officer in the College from August 2005 to August 2008 and conducted number of programs with NSS volunteers during these three years. The programs were of the type – Blood donation camps, Tree plantation, Anti ragging rally, Clean and green program, Special camps on educating the rural people on adult education, AIDS, HIV, Clean and green, etc.
- Worked as Additional Controller of Examinations (EDEP) in the University from September 2008 to July 2009. During this time worked as an in-charge for complete EDEP section of the University Examination Branch and performed duties to the satisfaction of myself and to the higher ups.

### **V. Membership in Professional bodies:**

- Life member in Indian Institute of Metals
- Life member in Indian Institute of Welding
- Life member in ISTE

## **V. Research Experience:**

- Four candidates were awarded Ph. D. Degree under my Guidance.
- Three candidates were taken Ph. D. Degree under my Co-Guidance.
- Three more candidates are working for their Ph. D under my guidance.

## **VI. Consultancy Projects: One**

- Completed one consultancy project sponsored by National Mineral Development Corporation (NMDC), Hyderabad. The project cost is Rs. 12.35 lakhs.

## **VII. Research Publications: 28**

1. **R. Markandeya**, S. Nagarjuna and D. S. Sarma, "Precipitation Hardening of Cu-4Ti-1Cd Alloys", Journal of Materials Science, 39 (2004) 1579-1587p.
2. **R. Markandeya**, S. Nagarjuna and D. S. Sarma, "Precipitation Hardening of Cu-Ti-Cr Alloys", Materials Science and Engineering A Journal, 371 (2004) 291-305p.
3. **R. Markandeya**, S. Nagarjuna and D. S. Sarma, "Precipitation Hardening of Cu-Ti-Zr Alloys", Materials Science and Technology Journal, 20 (2004) 849-858p.
4. **R. Markandeya**, S. Nagarjuna and D. S. Sarma, "Characterization of prior cold worked and age hardened Cu-3Ti-1Cd alloy", Material Characterization Journal, 54 (2005) 360-369p.
5. **R. Markandeya**, S. Nagarjuna and D. S. Sarma, "Effect of prior cold work on age hardening of Cu-4Ti-1Cr alloy", Materials Science and Engineering A Journal, 404 (2005) 305-313p.
6. **R. Markandeya**, S. Nagarjuna and D. S. Sarma, "Influence of prior cold work on age hardening of Cu-Ti-Zr alloy", Materials Science and Technology Journal, 21 (2005) 1171-1180p.
7. **R. Markandeya**, S. Nagarjuna and D. S. Sarma, "Effect of prior cold work on age hardening of Cu-4Ti-1Cd alloy", Journal of Materials Science, 41 (2006) 1165-1174p.
8. **R. Markandeya**, S. Nagarjuna, D. V. V. Satyanarayana and D. S. Sarma, "Work Hardening Behavior of Age-hardenable Cu-Ti-Cd Alloys", Material Science and Engineering Journal, 428 (2006) 233p.
9. **R. Markandeya**, S. Nagarjuna and D. S. Sarma, "Effect of prior cold work on age hardening of Cu-3Ti-1Cr alloy", Material Characterization Journal, 57 (2006) 348p.
10. **R. Markandeya**, S. Nagarjuna and D. S. Sarma, "Precipitation Hardening of Cu-3Ti-1Cd Alloys", Journal of Material Engineering and Performance, 16 (2007) 640 – 646p.

11. G. Venkateswara Rao, **R. Markandeya** and S K Sharma, Application of Gravity methods for beneficiation of Sub Grade iron ore, Proceedings of XIII International Journal of Mineral Processing, 2007, pp 118-132.
12. Venkata Narayana Yenugula, Bhasker Perumandla, Ravinder Reddy Pinninti and **Markandeya Ravvala**, “Experimental investigation on buckling of GFRP cylindrical shells subjected to axial compression”, IOSR Journal of Mechanical and Civil Engineering, 9 (2013) 20-25p and p-ISSN : 2320-334X.
13. Venkata Narayana Yenugula, Ravinder Reddy Pinninti and **Markandeya Ravvala**, “Buckling Analysis of laminated composite cylindrical shells subjected to axial compressive loads using FEM”, International Journal of Engineering Research & Technology (IJERT), 2(1) (2013) 1-5p and ISSN : 0974-3154.
14. Y. Venkata Narayana, Jagadish Babu Gunda, P. Ravinder Reddy and **R. Markandeya**, Non-linear Buckling and Post-buckling Analysis of Cylindrical Shells Subjected to Axial Compressive Loads: A Study on Imperfection Sensitivity, Nonlinear Engineering JI, **Vol. 2, Issue no: 3**, (2013) **pp.** 78-85. ISSN : 2192-8029
15. K. Ramanjaneyulu, G. Madhusudhan Reddy, A. Venugopal Rao and **R. Markandeya**, “Structure-Property Correlation of AA 2014 Friction Stir Welds: Role of Tool Pin Profile”, Journal of Materials Engineering and Performance, ASM International, Vol. 22, No. 8, 2013, pp 2224-2240. ISSN : 1059-9495
16. Y. Venkata Narayana, Jagadish Babu Gunda, P. Ravinder Reddy and **R. Markandeya**, Nonlinear buckling and post-buckling analysis of imperfect cylindrical shells subjected to axial compressive load, Journal of Structural Engineering CSIR-SERC, **Vol. 42, Issue No. 2**, (2015) **pp.** 78-85, ISSN 0970-0137.
17. Chiluveru Parameshwar, **R. Markandeya** and G. L Datta, Improvements in Energy Efficiency in a Alloy Steel Foundry - a Case Study, Indian Foundry Journal, Volume 61, Issue 7, July 2015.
18. Chiluveru Parameshwar, **R. Markandeya** and G. L Datta, “Actual Power Consumption Values of Alloy Steels – Experimental Results”, International Journal of Scientific Research and Management (IJSRM), Volume 3, Issue 7, July 2015, pp 3363-3368.
19. Chiluveru Parameshwar and **R. Markandeya**, Energy Efficiency Methods in Ferrous Melting Foundries Green House Gas Emissions- A Review, International Journal of Scientific Research and Management (IJSRM), Volume 3, Issue 9, Sept 2015, pp 3572-3577.

20. Chiluveru Parameshwar and **R. Markandeya**, “The Study of Theoretical and Practical Requirements of Energy for Melting Steel in a Foundry – A Review”, Iron & Steel Review, Nov 2015, Volume 59, No 6, pp 99-104.
21. Chiluveru Parameshwar, G.L Datta, **R. Markandeya**, “Theoretical Melting Energy Calculations for Producing Alloy Steels from Thermodynamic Laws”, Indian Foundry Journal, vol 61, issue 7, Dec 2015, pp52-60.
22. K. Ramakrishna, Kumar Abhishek, **Ravvala Markandeya**, “Effect of Superheat on Rim Thickness in Rimming Steel Ingots”, IJESRT, 5(4), April 2016.
23. G V Rao, **R. Markandeya** and S K Sharma, Recovery of Iron values from Iron ore slimes of Donimalai Tailing dam, Transactions of Indian Institute of Metals, 69(1), 2016, pp 143-150.
24. G. Venkateswara Rao, **R. Markandeya** and Rajan Kumar, Optimization of process variables for recovery of iron values from sub-grade iron ore by using Enhanced Gravity Separation, International Journal of Engineering Research & Technology (IJERT), Volume 5, Issue 1, January 2016, pp 900-909.
25. G. Venkateswara Rao, **R. Markandeya** and S K Sharma, Stratification studies with sub grade iron ore from deposit no. 10 & 11A, Bacheli complex, Bailadila, India, Journal of The Institution of Engineers (India), Series D, Metallurgical & Materials and Mining Engineering, DOI 10.1007 / s40033-016-0117-9 (in press).
26. M. Mahesh Kumar, A.H.V. Pavan, **R. Markandeya**, Kulvir Singh Defect Assessment in Gas Turbine Blade Coatings using Non-Contact Thermography 2020 Material Today Proceeding Vol. 44, Part 6, 2021, Pages 4414-4420
27. M. Mahesh Kumar, M. Swamy, M. S. Rawat and **R. Markandeya** “Estimation of thickness in thermal barrier coatings by using Pulse Phase Thermography”, IJAIEM ISSN 2319 – 4847, Volume 2, Issue 5, May 2013
28. M. Mahesh Kumar, K. Joshna, **R. Markandeya**, M. S. Rawat Effect of streamside oxidation and fireside corrosion degradation processes on creep life of service exposed boiler tubes- International Journal of Pressure Vessels and Piping Volume 144, August 2016, Pages 45-48

#### **VIII. Conference Publications: 7**

1. M.Mahesh Kumar, M.Swamy, M.S. Rawat, K.S. Vikrant, V.John Thomas and **R. Markandeya**, “Active infrared Thermography for Non Destructive Evaluation of Defects in Wear Resistance and Thermal Barrier Coating”, National Conference on Non- Destructive Evaluation NDE-2011 (8-10, December 2011), an ISNT Chapter page No.142-145.

2. M.Mahesh Kumar, M.Swamy, M.S. Rawat, K.S. Vikrant, AHV Pavan, V.John Thomas and **R. Markandeya**, “Depth Estimation of Defects in composite Material using Non – contact active infrared Thermography”, National Conference on Non- Destructive Evaluation NDE-2011 (8-10, December 2011), an ISNT Chapter page No.151-154.
3. G. Venkateswara Rao, **R. Markandeya** and S. K. Sharma, “Process amenability studies of sub-grade iron ore from Bacheli complex, Bailadila sector, India”, Proceedings of XXVI International Mineral Processing Congress (IMPC 2012), New Delhi, India.
4. G. Venkateswara Rao, S. K. Sharma and **R. Markandeya**, “Modelling and optimization of Multi Gravity separator for recovery of iron values from sub-grade iron ore”, Proceedings of XXVII International Mineral Processing Congress (IMPC 2014), Santiago, Chile.
5. G. V Rao, **R. Markandeya** and Rajan Kumar, “Feasibility studies on beneficiation of sub grade iron ore from deposit 5, Bacheli complex, Bailadila, Chattisgarh using Mozley Mineral Separator”, Proceedings of XV International Conference on Mineral Processing Technology, MPT – 2016, TCS – TRDDC, Pune.
6. M. Mahesh Kumar, M. S. Rawat and **R. Markandeya**, “Theoretical estimation of thickness variation in thermal barrier coatings by using Pulse Phase Thermography”, 11th International Conference on Quantitative InfraRed Thermography, 11-14 June 2012, Naples Italy.
7. M. Mahesh Kumar, M. Swamy, M. S. Rawat, **R. Markandeya** and V J Thomas, “Active infrared thermography for non-destructive evaluation of defects in wear resistance and thermal barrier coatings”. Proceedings of the National Seminar & Exhibition on Non-Destructive Evaluation NDE 2011, December 8-10, 2011

Place : Hyderabad

Date :16-09-2021

**Dr. R. Markandeya**

## **Highlights of the works done at JNTUH College of Engineering Manthani as PRINCIPAL since August 2014:**

- Instrumental in getting approval and equivalent from DGMS and Ministry of Labour & Employment, New Delhi for mining machinery engineering course.
- Escalated and involved in getting approval for women employment in mines by getting amendment in mines act in the parliament.
- College has been recognized as National Test Centre for different exams by the Central Government Agencies.
- College has got 2f and 12b recognition by UGC so that faculty can apply for research grants from AICTE, UGC, etc.
- Worked for getting AICTE recognition to the college and obtained.
- Conducted online as well as offline examinations for various State Government exams for recruitment as well as academic admissions.
- Plantation of more than 5000 plants in the campus
- Developed the play ground with the cooperation of SCCL by soil filling for the worth of approximately Rs. 4.0 crore in nearly 14.0 acres area.
- Conducted the guest lectures by the academic experts from institutes like NIT Warangal. This has resulted in University gold medal in all five branches in 2019 convocation.
- Conducted special classes to third and final year students for improving their placement skills.
- Established the dispensary in a separate building.
- Established the library in a newly constructed building.
- Academic activities have been commenced in newly constructed Academic building.
- Established the internal roads with street lighting.
- Established the boundary to the play ground with complete wire mesh on one side and plantation inside the compound wall on other three sides.
- Established the full floodlighting in the play ground so that students can play maximum time in the ground.
- Established the hostels for boys and girls with entire cooking and dining system along with residential provision.
- Established most of the laboratories in all departments.
- Added new equipment in existing laboratories.
- Established courts for different games in the play ground as well as in the hostels.
- Established the RO plants in the hostels as well as academic area.