Dr. Vanamala Uma Maheshwar

PROFESSOR, Dept. of Mechanical Engineering, University College of Engineering, , OSMANIA UNIVERSITY DIRECTOR, Research Development & Consultancy Centre, OSMANIA UNIVERSITY CHAIRMAN, SOCIETY OF AUTOMOTIVE ENGINEERS-INDIA, Telangana

Mobile No: 9885085670

Email Ids : Mahesh.v@ uceou.edu

1) INDUSTRIAL EXPERIENCE (5 Years)

@R&D, Mahindra & Mahindra Ltd-Nashik & Other Industries
Coordinated ISO 9001 Certification of M&M, R&D in Record 11 months duration
Worked in Industry in several capacities as Production Manager,
Manager-Production Planning & Control, Marketing Manager,
Design & Development Engineer and ISO 9001 Coordinator etc.,

2) TEACHING & RESEARCH EXPERIENCE (28 Years+)

@University College of Engineering, Osmania University

Coordinated ISO 9001 Certification of University College of Engineering, Osmania University -the First Engineering College in AP to get ISO9001 Certification in Year 2000

Coordinated the First time NBA Certification of University College of Engineering, Osmania University

3) FIELDS OF SPECIALISATION

- ➤ Turbo machinery, Thermal Engineering, Computational Fluid Dynamics, Automobile Engineering, Refrigeration & Air Conditioning, Renewable Energy Systems, Fluid Flows & Gas Dynamics, Cascade Aerodynamics
- > Expert in Career Guidance and Counseling
- Lead Auditor for Quality Management Systems (ISO 9000)

4) PRESENT RESPONSIBILITIES

- > PROFESSOR, Dept of Mechanical Engg, University College of Engineering, Osmania University
- > THE DIRECTOR, Research Development & Consultancy Centre, Osmania University
- > THE CHAIRMAN, Society of Automotive Engineers-India Hyderabad Division (SAEIndia Hyderabad Div)

5) PAST RESPONSIBILITIES

PLACEMENT OFFICER, University College of Engineering, Osmania University, (2005-2019)

- > MOST SUCCESSFUL PLACEMENT OFFICER SERVED FOR RECORD 14 YEARS, Securing Record Placements Consistently even during Campus Telangana Agitation Or Global Economy Recession times.
- ➤ As per INDIA TODAY SURVEY conducted in JUNE 2016, based on the score of Placements as recorded by the Global Human Resource Development Centre (GHRDC), a research based organization, University College of Engineering Secured All India 14th Rank in India Today Survey on Placements Overtaking many IIITs, IITs & NITs which is an unique achievement.
- Earned a rare distinction for being **THE LONGEST SERVING PLACEMENT OFFICER**, University College of Engineering (Autonomous), Osmania University.
- Ensured exponential increase in no of Job offers from below 200 in 2005 to 728 in 2012
- Achieved **264% increase in No of Student Placements within first 7 years** of taking up the responsibility as Placement Officer.



COORDINATOR, Osmania University Centenary Celebrations, (2016-17)

- > Played a key role in organising the Biggest event of 100 Years of Osmania University
- > Organised Inaugural Ceremony of Osmania University Centenary Celebrations , the Guests being Sri Pranabh Mukherjee, Hon. President of India and Sri K. Chandra Sekhar Rao, Chief Minister of Telangana State
- > Coordinated and Facilitated presence of 120+ Corporate CEOs and HR Managers to Inaugural Ceremony of Osmania University Centenary Celebrations
- > Coordinated Osmania University Global Alumni Meet of Centenary Celebrations of OU
- > Played a key role in organising the Biggest event of 100 Years of Osmania University

FOUNDING SECRETARY, National Association of Placement Officers (NATPO) (2012-14)

- > Launched the first initiative of its kind in India to form a National Association of Placement Officers with active participation of Placement Officers from IITs, IIITs, NITs, University Colleges, Deemed Universities etc., to enhance collaboration between Educational Institutes and Industry on Training and Placements of Front.
- NASSCOM invited me to a Special Meeting with its Chairman in Bengaluru to discuss and sought NATPO support on Launching All India wide NAC-Tech Test proposed to be conducted by NASSCOM during Academic Year 2012-13 for the benefit of Freshers across India from all Engineering Colleges for Job Opportunities in Software Companies

FOUNDING JT. SECRETARY, ALUMNI ASSOCIATION, University College of Engineering, Osmania University (2015-17)

> Contributed in Building a Corporate Style Alumni Office in University College of Engineering, Osmania University, Designed and hosted Webportal to build a network over 5000 + WORLDWIDE Alumni in a Record Two months Time, Launched Annual Global Alumni Meet (GAM) with Mr Shantanu Narayen, CEO, Adobe as Chief Guest

CO-CONVENER, TS PGECET 2019, a Telangana State Level PG Engineering Common Entrance Exam (2019-20)

> Successfully coordinated Telangana State Level Post Graduate Engineering Common Entrance Exam with Exams conducted online across the State without any Technical Glitches and declared Results in Time.

VICE CHAIRMAN, Society of Automotive Engineers-India Hyderabad Division (2016-22)

- ➤ Earned a rare distinction for being THE LONGEST SERVING VICE CHAIRMAN, Society of Automotive Engineers-India Hyderabad Division
- Organised many SAE india Events in AP & Telangana States

MEMBER, NATIONAL LEVEL ENGINEERING EDUCATION BOARD (EEB-SAE India), Society of Automotive Engineers-India (2017-2019)

- ➤ **THE COORDINATOR,** Corporate Relations & Placements, Human Capital Development Centre(HCDC), Osmania University (2022-23)
- ➤ **LEAD CHAMPION,** SAE India Career Start 2023, A Unique Recruitment Drive connecting Automotive Companies to SAE Student Members for Jobs & Internships Selections (March June 2023)
- FACULTY ADVISOR, ENGINEERS MUSIC & CULTURAL CLUB (EMC²), University College of Engineering, Osmania University (2017-2023)
 - The Elite Students' Music & Cultural Club which was active even during Covid Time- Winning Several Prizes at University Level & State Level in Dance, Singing & Rock Band Competitions. Offers Free Training on Music

to Junior Students by Senior Students. Conducts popular Annual Traditional Day of OU Engg College apart from Several Singing, Dance & Other Cultural Competitions.

- > FACULTY ADVISOR, Collegiate Club of Society of Automotive Engineers-India (2013-2023)
- SAE Collegiate Club, University College of Engineering, Osmania University College Students have a dedicated Garage where they Design from Scratch, Fabricate & Test Several kinds of Automobiles such as Formula Racing Cars, All Terrain Vehicles, Battery Powered 2 Seater -Three Wheelers, Electric 2 Wheelers, Electric 4 Wheelers, Autonomous Unmanned Air Crafts, Go Karts etc., Winning Several National Level Top Prizes consistently
- FACULTY ADVISOR, YOUVA NGO, Osmania University (2016-2023)

 NGO with Alumni & Students of Osmania University Serving Society in several ways

6) SOME ACHIEVEMENTS/ RECOGNITIONS

- > PAPER PUBLICATIONS Many Publications in International & National Journals & Conferences
- ➤ **Project Investigator** for Ministry for Non Conventional Energy Sources Sponsored Project under R&D "Development and Testing of Small Wind Turbine Electrical Pump Systems"
- ➤ **Ranked among the Top 10 Professors of AP State in** 2009. AP State Council of Higher Education felicitated Prof V. Uma Maheshwar for being who made maximum Impact in the Students' Lives (Ranked through voting of Students conducted by 24X7 Company)
- ➤ Felicitated for being the Successful Placement Officer by Maharashtra Association of Placement Officers in HR CONCLAVE organized on July 22, 2022 at Pune. And was asked to share the SUCCESS STORY to the delegates of HR Conclave.
- ➤ Conferred with Prestigious LEADERSHIP AWARD Twice from SAE India (2022 & 2023) for exemplary LEADERSHIP ROLE played in helping the Functioning of SAE INDIA Southern Section at Annual Awards Function Organised by SAE ISS in Chennai
- > Won National Level Innovation Award (Rs One Lakh) from SAE India for Designing & Demonstrating Unique purely mechanical Low cost FOUR WHEEL STEERING MECHANISM incorporated in an All terrain Vehicle.
- > Mentored an All GIRLS TEAM named ATHENA with 25 Girls from Mechancial Engg. Who designed, fabricated and tested a GOKART and won the Award of "Empowered Women of the Kart Racing" at an International Kart Racing Championship held in March 2017.
- **Received many Corporate Awards** from Accenture, Cognizant, Wipro, Infosys, TCS etc for Industry Institution Initiatives.
- ➤ **Infosys Published Interview** of Prof V Uma Maheshwar in their First Edition of Online Journal of Infosys
- Featured in **Cover Page Article of Eenadu Sunday Supplement** as Successful Placement Officer (March 18, 2007)
- ➤ **Author of Newspaper articles** on Career Counselling in THE HINDU, SAKSHI, EENADU, NAMASTE TELANGANA, METRO News etc.,
- > LIVE Interviews telecasted on Career Counselling by many TV Channels like TV9, NTV, ETV, HMTV and Doordarshan etc.,
- > Successfully completed **Dale Carnegie Training in High Impact Presentation Skills**
- > PAPER PUBLICATIONS Many Publications in International & National Journals & Conferences
- ➤ Mentored Students in Design, Fabrication & Testing of ELECTRIC TWO WHEELER which got National Level First Prize in 2022 at a Competition organized by SAE India Southern section

7) INTERNATIONAL /NATIONAL CONFERENCES ORGANIZED

- ➤ As ORGANISING SECRETARY, Organised International Conference on Reforms in Technical Education- Global Trends (ICORTE-2010), organized by University College of Engineering, Osmania University at Hotel Katriya & Towers, Hyderabad during 27-28 August, 2010
- ➤ As CONVENER, Organised International Conference "VETOMAC IV" on Vibration Engineering and Technology of Machinery during March 17-19, 2007 at Hotel Katriya & Towers, Hyderabad in Collaboration with BHEL R&D and Vibration Institute of India. The conference was attended by a large no. of foreign delegates from UK, USA, China, Poland, Canada, Iran and Serbia etc., and researchers from academia like IITs, NITs and other University Engineering Colleges and industry experts from BARC, ISRO, CSIR Labs, DAE, BHEL, NAL, Altair Engineering, ANSYS India, National Instruments, TCS, CTS and WIPRO etc.,
- ➤ As ORGANISING JT. SECRETARY, Organised National Conference on "Technical Education in the new Millennium Management & Challenges" (TECMANCH-2000)" during March 12-13, 2000 at Osmania University, Hyderabad.
- ➤ **ORGANISED CHILDREN SCIENCE EXHIBITION** *during NATIONAL SCIENCE CONGRESS* 1997 hosted by Osmania University in January, 1997 at Arts College inaugurated by the then Prime Minister of India, Sri I.K. Gujral.

8) INDUSTRY & ACADEMIC SERVICE DETAILS:

DESIGNATION	NAME OF THE EMPLOYER	PERIOD
Professor	Dept of Mechanical Engg, University College of Engineering,	2018-till date
Associate Professor	Osmania University	2007-2018
Assistant Professor	Hyderabad	1997-2007
R&D Engineer &	R&D,	1996-97
Coordinator-ISO 9001	Mahindra & Mahindra	
	Nashik, Maharashtra	
Production Manager,	Harvin Scientific Optics Pvt Ltd,	1993-96
Manager-Production	Balanagar, Hyderabad	
Planning and Control		
Design and Development	Renewable Energy Systems Ltd,	1992-193
Engineer	Jeedimetla, Hyderabad	

9) ACADEMIC QUALIFICATIONS

Course	Branch/ Specialisation	Institute/University
Ph.D. (2018)	Mechanical Engineering	Osmania University
	(Experimental work carried out in IIT Madras)	
ME (1999)	Mechanical Engineering	II : : C 11 C
First Class with Distinction	with Specialisation in Turbomachinery	University College of Engineering,
BE (1992)	Mechanical Engineering	Osmania University
First Class with Distinction		Osmania Oniversity

10) Paper Publications URLs

https://vidwan.inflibnet.ac.in/profile/588771

https://www.webofscience.com/wos/author/record/LWK-1162-2024

https://orcid.org/0000-0003-1171-276X

https://scholar.google.com/citations?user=fy-EjqYAAAAJ&hl=en

Prof. V. Uma Maheshwar Dept. of Mechanical Engineering University College of Engineering, Osmania University

LIST OF PAPER PUBLICATIONS

S.No.	Details of Papers Published
1	Uma Maheshwar Vanamala, Siva Prasad Thammineni," Computational Study on Effect of Blade Spacing on Performance of a Tesla Turbine", National Conference on Advances in Mechanical Engineering and Nanotechnology (AMENT-2024) Organised by Department of Mechanical Engineering, University College of Engineering, Osmania University, Hyderabad, August 23-24, 2024
2	Uma Maheshwar Vanamala, Sandeep Betham, "Steady State and Static Structural analysis of Gas Turbine Blade Geometry using different materials and YSZ Coatings", National Conference on Advances in Mechanical Engineering and Nanotechnology (AMENT-2024) Organised by Department of Mechanical Engineering, University College of Engineering, Osmania University, Hyderabad, August 23-24, 2024
3	Uma Maheshwar Vanamala, Muhammad Farhan Haneef, "Analysis of Enhanced Airfoil Surface with Shark Denticles and its effect on the Airfoil Characteristics", National Conference on Advances in Mechanical Engineering and Nanotechnology (AMENT-2024) Organised by Department of Mechanical Engineering, University College of Engineering, Osmania University, Hyderabad, August 23-24, 2024
4	Vanamala Uma Maheshwar, Aditya Shiva Apalla, "Study of Entropy Generation in Secondary Flows in the T106A Low Pressure Axial Turbine Cascade", Atlantis Press - Springer Nature Journal, Advances in Engineering Research, AER 223, pp. 1189–1196, 2023 https://doi.org/10.2991/978-94-6463-252-1_119 ISBN 978-94-6463-252-1
5	Vanamala Uma Maheshwar, Purna, "Computational Analysis of Horizontal Axis Wind Turbine Blade NACA 63(4)221", Fifth Indian National Annual National Conference (INAC 2023) organized by Indian Society for Science and Engineering(ISSE) Hyderabad Chapter in association with DRDO, ISRO, and UCEOU at University College of Engineering, Osmania University during 24-25 March 2023
6	Vanamala Uma Maheshwar, Nidamarty Laasya Priya, "Galactic Cosmic Energy -a Novel Mode of Energy Harvesting", Journal by Springer Publisher on Emerging Trends in Smart Modeling Systems and Design Vol. 2, 2019 https://doi.org/10.1007/978-3-030-24314-2_55 ISBN978-3-030-24314-2
7	V. Uma Maheshwar, AnkitaChiluka, "Application of Natural Fibre Reinforced Polymer CompositeMaterials in Turbo Machines", Sixth International Conference on Natural Polymers, Biomaterials, ICNP – 2018, held at Mahatma Gandhi University, Kottayam, Kerala during December 07 - 09, 2018 organized by Mahatma Gandhi University, India, Gdansk University of Technology, Poland, Federal University of Rio de Janeiro, and Brazil, Beijing University of Chemical Technology, China

S.No.	Details of Papers Published
8	V. Uma Maheshwar, Aditya Shiva Appalla, "Biodegradable materials for tissue engineering insurgeries and organ transplantations", Sixth International Conference on Natural Polymers, Biomaterials, ICNP – 2018, held at Mahatma Gandhi University, Kottayam, Kerala during December 07 - 09, 2018 organized by Mahatma Gandhi University, India, Gdansk University of Technology, Poland, Federal University of Rio de Janeiro, and Brazil, Beijing University of Chemical Technology, China
9	V Uma Maheshwar, Vijrumbana, "Analysis of Key Design Parameters of a Pure Scramjet Engine to Reduce its Starting Mach Number", International Journal of Modern Engineering and Research Technology. Volume 5, Special Issue, June 2018, pp 161-177
10	V. Uma Maheshwar, Moogi Srinivasa Rao "Comparative Study of Structured and Unstructured Meshing of Nozzle Model", International Journal of Modern Engineering and Research Technology. Volume 5, Special Issue, June 2018, pp 178-186
11	V. Uma Maheshwar, Pavan Mummadi, "Computational Study of Savonius Vertical Axis Wind Turbine (VAWT) for Different Overlap Ratios", International Journal of Modern Engineering and Research Technology. Volume 5, Special Issue, June 2018, pp 187-197
12	V. Uma Maheshwar, RVSSR Pavana Kumar, "Computational Study of Two Phase Flow and Heat Transfer in Helical Pipes", International Journal of Modern Engineering and Research Technology. Volume 5, Special Issue, June 2018, pp 198-205
13	Vanamala Uma Maheshwar, Nidamarty Laasya Priya, "Galactic Cosmic Energy -a Novel Mode of Energy Harvesting", International Conference on Emerging Trends in Engineering(ICETE) Organised by Alumni Association, University College of Engineering, Osmania University at Hyderabad during March 22-23, 2019 : pp 458-465
14	V. Uma Maheshwar, AMK Prasad, "Experimental Investigation of Downstream Flow Field in a Linear Turbine Cascade: Effects of Relative Wall Motion", International Journal of Advanced Research in Basic Engineering Sciences and Technology, Volume 2, Special Issue 22 - April 2017, pp.37-49, ISSN 2456-5717
15	V. Uma Maheshwar, AMK Prasad, "Experimental Investigation of Downstream Flow field in a Linear Turbine Cascade: Effects of Incidence changes", International Journal of Engineering Technology, Management and Applied Sciences, Volume 4, Issue 10, Oct 2016, ISSN 2349-4476
16	V.Uma Maheshwar & Raja Rao, An Innovative Design Concept of Four Wheel Steering Mechanism for an Automobile, SAE International Journal, Paper ID: 2013-01-2845, Published on Nov 27, 2013. The same paper was also Invited for presentation at 8th SAEINDIA International Mobility Conference & First Commercial Vehicle Engineering Congress 2013 held during December 4-7, 2013 at Chennai Trade Center, Chennai Organised by SAE International.
17	Md. Abdul Raheem Junaidi, GM Sayeed Ahmed, Dr. Nawazish Mehdi, V. Uma Maheshwar, "Design Optimisation and Analysis of a Steam Turbine Rotor Grooves", IOSR Journal of Mechanical and Civil Engineering, Vol 8,Issue 6 (Sep-Oct 2013), pp 66-72
18	V. Uma Maheshwar, Ahmed Abdul Moiz, Ali Qasim Khoyee, P Satya Seshu and Vassan Hariharan "Hybrid Electric Vehicle Penetration in Asia-Pacific Countries – Current Scenario and Future Challenges", 7th SAE International Mobility Conference, New Delhi, 9-11 January 2012.

S.No.	Details of Papers Published
19	V. Uma Maheshwar, "Career Guidance for Final Year Engineering Students", International Conference on Reforms in Technical Education-Global Trends (ICORTE-2010), organised by Dept. of Mechanical Engineering, University College of Engineering, Osmania University at Hyderabad during 27-28 August, 2010
20	V. Uma Maheshwar, "Placement Officer – the Brand Manager of College", International Conference on Reforms in Technical Education-Global Trends (ICORTE-2010), organised by Dept. of Mechanical Engineering, University College of Engineering, Osmania University at Hyderabad during 27-28 August, 2010
21	V.Uma Maheshwar, P. Usha Sri "Innovative Teaching- Learning Methods for Engineering Education", International Conference on Reforms in Technical Education-Global Trends (ICORTE-2010), organised by Dept. of Mechanical Engineering, University College of Engineering, Osmania University at Hyderabad during 27-28 August, 2010
22	V. Uma Maheshwar, P. Usha Sri, M. Prashanth Kumar, A. Vijay Kumar "Global Wind Energy Scenario- Role of Mechanical Engineering" International Conference on Recent Advances in Mechanical Engineering(ICRAME-2010), organised by Noorul Islam University, Kumarakoil, Tamilnadu during April 8-9, 2010.
23	P. Usha Sri, V. Uma Maheshwar and C. Syamsundar "Computational Analysis of a Centrifugal Pump Impeller", International Conference on Recent Advances in Mechanical Engineering(ICRAME-2010), organised by Noorul Islam University, Kumarakoil, Tamilnadu during April 8-9,2010.
24	P. Usha Sri, V. Uma Maheshwar and C. Ganesh "Design and Analysis of Francis Turbine Casing" is presented at International Conference on Recent Advances in Mechanical Engineering(ICRAME-2010),organised by Noorul Islam University, Kumarakoil, Tamilnadu during April 8-9, 2010.
25	L Sivaramakrishna, V Uma Maheshwar," Web based On-line Condition Monitoring Systems" International Conference on "Vibration Engineering and Technology of Machinery (VETOMAC-IV)" during December 17-19, 2007 at Hyderabad organised by University College of Engineering in Collaboration with BHEL R&D and Vibration Institute of India.
26	V Uma Maheshwar "Effect of Relative Wall Motion on Secondary and Tip Clearance Flows in a Linear Turbine Cascade", International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM 2004) held during December 28-30th, 2004 at IIT-Kharagpur organised by Indian Institute of Technology, Kharagpur.
27	P. Usha Sri, V. Uma Maheshwar, G Rammurthy, "Heat Transfer Analysis of Free convection of Non-Newtonian Power Law Fluid over a Vertical Plate with Constant Heat Flux", The Institute of Engineers (India) Journal-Chemical Engineering, Vol. 84, September 2003, pp. 25-32
28	C. Srinivas Rao, V. Uma Maheshwar "Knowledge Management: New Strategic Imperative for Business", National Seminar on "Convergence of Technologies" held during 20_22nd January, 2001 organised by Arunai College of Engineering, Tiruvannamalai
29	C. Srinivas Rao, V. Uma Maheshwar ,"Implementing E-Governance - Hard and Soft Solutions" Indian Engineering Congress -2000 held at Hyderabad during 18-22, December, 2000 organised by Institute of Engineers- India.
30	V Uma Maheshwar, "Eco-friendly Transport Vehicles - Recent Technological Developments", Sixteenth National Convention of Environmental Engineers, held at Guwahati during November 4-5, 2000 organised by The Institution of Engineers (India), Guwahati.

S.No.	Details of Papers Published
31	V Uma Maheshwar, P Usha Sri "Wind Energy in India - Future Prospects" at International Conference on "Energy Management -beyond 2000" held at Lucknow during October 19-21,2000 organised by The Institution of Engineers (India), UP State Centre, Lucknow.
32	V Uma Maheshwar, DN Reddy "Small Wind Turbine Electrical Pump Systems for Rural Applications in India- A Renewable Energy option" is presented at International Conference on "Energy Management -beyond 2000" held at Lucknow during October 19-21, 2000 organised by The Institution of Engineers (India), UP State Centre, Lucknow
33	V Uma Maheshwar, P Usha Sri "Application of Quality Systems in Technical Education" National Conference on "Technical Education in the new Millennium - Management & Challenges" (TECMANCH-2000)" organized during March 12-13, 2000 by University College of Engineering (Autonomous), Osmania University Hyderabad
34	V Uma Maheshwar, Ravande Kishore "Role of Technology in Technical Education" is presented at National Conference on "Technical Education in the new Millennium - Management & Challenges" (TECMANCH-2000)" organized during March 12-13,2000 by University College of Engineering (Autonomous), Osmania University, Hyderabad
35	V. Uma Maheshwar, G Rammurthy "Combined Free and Forced Convection Flow of non-Newtonian fluids over a Vertical Surface", Asia Pacific Journal of Energy, Heat and Mass Transfer, Vol. 21, No. 4, December 1999, pp. 157-174 (ISSN 0970-9991)
36	V. Uma Maheshwar, G Rammurthy "Computer Aided Model for Analysis of Mixed Convection Heat Transfer Boundary Value Problem over a Vertical Surface", Fifteenth National Convention of Mechanical Engineers and National Seminar on "Role of Information Technology in Engineering" organized by the Institution of Engineers (India), Andhra Pradesh State Centre, Hyderabad during December 16-18, 1999.
37	V Uma Maheshwar, P Usha Sri "Quality Management Systems for Technical Education", National Seminar on Restructuring of Technical Education System for Better Efficiency and Effectiveness organised by ISTE Chapter, V. R. Siddhartha Engineering College, Vijayawada during December 5-6, 1997