Dr. V. C. Venkatesh

After getting his BS degree in Mechanical Engineering and completing two years industrial

experience in a leading Electronics industry in Bangalore, Vellore Venkatesh was awarded a 4

year French Government Scholarship to do his MS and PhD in France. He did his Masters at

ISMCM, St. Ouen, Paris and his PhD at the Sorbonne (Paris). 20 years later the University of

Pierre and Marie Curie, Paris conferred on him the degree of Doctor of Science for his thesis on

Wear of Cutting Tools.

Dr. Venkatesh has worked in the following universities before joining UNLV:

1. Indian Institute of Technology, Madras (IITM)

2. National University of Singapore, Singapore (NUS)

3. Tennessee Technological University, Cookeville TN, USA (TTU)

4. Nanyang Technological University, Singapore (NTU)

5. University of Technology Malaysia, Johor Bahru (UTM)

6. Multi Media University, Malaysia, Malacca (MMU)

His American experience started from February 1988 to August 1993 when he worked as a

Professor of Industrial Engineering in the Center for Manufacturing Research, at Tennessee Technological University, Cookeville TN. Research was his primary focus together with teaching

of Manufacturing Courses like Metrology, Metal Cutting, and Design for Manufacture and

Assembly (DFMA) at the undergraduate and graduate levels.

Since August 2008 he has been teaching the following courses in the Department of Mechanical

Engineering, UNLV:

Fall 2008-09: ME 440 Machine Elements Design

ME 302 Mechanics of Materials

ME 795 Design for Manufacture and Assembly (DFMA)

Spring 2008-09: ME 446/646 Composite Materials

ME 302 Mechanics of Materials

Fall 2009-10: ME 495/695 Metal Cutting

ME 302 Mechanics of Materials

ME 427/627 Manufacturing Systems

Spring 2009-10: ME 302 Mechanics of Materials

ME 446/646 Composite Materials

Fall 2010-11: ME 795 Design for Manufacture and Assembly (DFMA)

Spring 2010-11: ME 795 Precision Engineering

Fall 2011-12: ME 795 Design for Manufacture and Assembly (DFMA)

His research interest in UNLV is the Milling of free machining Titanium Alloy Ti-54.

Throughout his career Vellore has carried out research in manufacturing areas, in particular metal cutting, manufacturing processes and precision engineering. He has supervised 23 PhDs, 16 of them at IIT Madras, 2 at TTU, and 5 at UTM. He has published over 200 papers with about 100 in journals. He is a Fellow of the prestigious Academy for Production Engineering- CIRP which has its headquarters in Paris France. He is a Fellow of SME (Society of Manufacturing Engineers, USA) and of ASME.

He has published two textbooks:

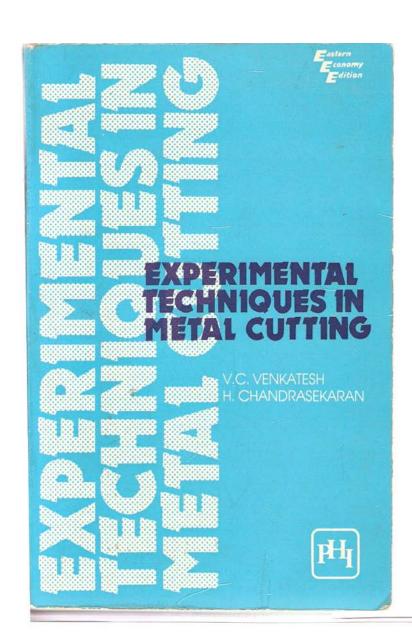
- 1. Experimental Techniques in Metal Cutting, Prentice Hall of India, 1987
- 2. Precision Engineering, McGraw Hill, USA, May 2008

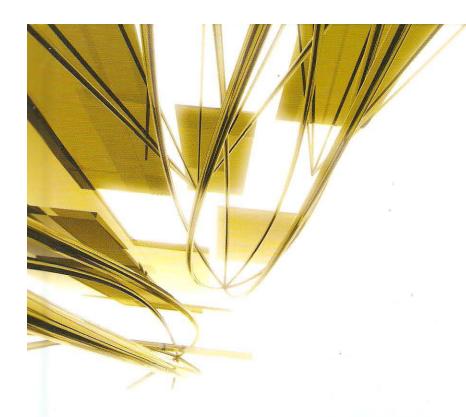
He is also the Founder Editor in Chief of IJPTech (International Journal of Precision Technology, Inderscience Publishers, UK)

Some recent papers are listed below:

- Venkatesh, V.C., Izman, S., Mon, T.T., Vichare, P., The novel bondless wheel, spherical glass chips, and a new method of aspheric generation, Journal of Materials Processing Technology, Vol. 167, 2005, pp.184-190.
- M.J. Jackson, A. Khangar, X. Chen, G.M. Robinson, V.C. Venkatesh and N.B. Dahotre, Laser cleaning and dressing of vitrified grinding wheels, Journal of Materials Processing Technology, Volume 185, Issues 1-3, 30 April 2007, Pages 17-23. ISSN: 0924-0136
- 3. V.C. Venkatesh and S. Izman, Development of a novel bondless diamond grinding wheel for machining IC chips for failure analysis, Journal of Materials Processing

- Technology, Volume 185, Issues 1-3, 30 April 2007, Pages 31-37. ISSN: 0924-0136.
- M.Y. Noordin, V.C. Venkatesh and S. Sharif, Dry turning of tempered martensitic stainless tool steel using coated cermet and coated carbide tools, Journal of Materials Processing Technology, Volume 185, Issues 1-3, 30 April 2007, Pages 83-90. ISSN: 0924-0136
- K. Suardi, E. Hamzah, A. Ourdjini and V.C. Venkatesh, Effect of heat treatment on the diffusion coefficient of hydrogen absorption in gamma-titanium aluminide, Journal of Materials Processing Technology, Volume 185, Issues 1-3, 30 April 2007, Pages 106-112. ISSN: 0924-0136.
- 6. S. Izman and V.C. Venkatesh, Gelling of chips during vertical surface diamond grinding of BK7 glass, **Journal of Materials Processing Technology**, Volume 185, Issues 1-3, 30 April 2007, Pages 178-183. ISSN: 0924-0136.
- 7. V.C. Venkatesh et al, Cryogenic machining of Ti alloys, 23<sup>rd</sup> AIMTDR Conference 2008, IIT Madras Dec. '08, pp.8-17.
- 8. Z.W. Zhong & V.C. Venkatesh, Recent developments in grinding of advanced materials, **Int Journal of Advanced Manufacturing Technology**, Vol.41, 2009, pp. 468-480.
- V.C. Venkatesh et al, Precision cryogenic drilling, turning and grinding of Ti-64 alloys, Int Journal of Precision Technology, Inderscience Publishers, Vol. 1, No. 3-4, 2010, pp. 287-301.
- 10. T.S. Lee, T.O. Ting, P.V. Rao, V.C. Venkatesh & Y.J. Lin, Evolutionary algorithms on diamond grinding of SiC, **Int Journal of Precision Technology**, Inderscience Publishers, Vol. 2, No. 1, 2011, pp.1-11.





## PRECISION

V. C. VENKATESH SUDIN IZMAN

## Honors, Awards and Professional Activity

- 1. French Government Scholarship, Paris, France, 1959-1963
- 2. Vasvik Gold Medal and Cash Prize, Bombay, India, 1977
- 3. Launching of book Experimental Techniques in Metal Cutting with Prentice Hall of India, 1<sup>st</sup> edition 1980; 2<sup>nd</sup> Edition 1987.
- 4. SME's Hans Ernst Memorial Plaque, 1988
- 5. Medals: Gold 3, Silver 2, Bronze 1, for inventions, UTM, Malaysia, 1998-2007
- 6. UTM Malaysia-M\$ 8 million-Top Down IRPA-Development of new cutting tools (including the bondless diamond grinding wheel)-(Co-PI) 2004-2007; 4 Bottom-Up IRPA Projects totaling over M\$ 1 million and Contract Research with Kennametal, Latrobe PA (Cutting Tools and Intel (Malaysia) [Pentium III Chip]. 1 Patent and 1 Invention Disclosure. 1998-2007.
- 7. NTU Singapore-S\$ 1.4 million. Setting up a Precision Engineering Center. (PI) 1995-97.
- 8. NUS Singapore- S\$ 1 million-Parameters in Tool & Die and Machinability Studies (PI), Science Council, 1982-85.
- 9. Fellow of CIRP (Academy), SME, and ASME
- 10. Launching of Indian Edition of book Precision Engineering with Tata-McGraw Hill April 2007, (US Edition in May 2008) and IJPTech Journal, Inderscience UK, journal in October 2007.

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