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Education:	<ul style="list-style-type: none"> • B.Sc (Phy), University of Poona, (MS), 1972 • B.E. (Electronics) M. S. University Baroda (Guj) 1975 • M.E (E&TC) University of Poona, (MS), 1979 • Ph.D (Process Modeling) University of Pune – 1990 • Total teaching Experience : 33 years
Research Interests:	<ul style="list-style-type: none"> • Process Modeling and Process control • Optical Networking. • Elementary particles and their role in optical properties of optical network elements. • Electronic Product design
Funded Research Projects:	<ul style="list-style-type: none"> • Electronics Instrumentation & Process Control Systems for Improving Productivity and Efficiency of Sugary Industry - Traditional Industry of National Importance, DOE sponsored, Rs 14 Lakhs • Auto-Lamp Test Unit for ISO 9000 Compliance of Bulbs used auto Industry, Rs 1 Lakh, Sponsored by Bajaj Auto Limited. • Design, Dev of information management , activity governance for production , planning, inventory management purchase, Birla Kennametal, Aurangabad
Teaching:	<ul style="list-style-type: none"> • Scope of Electronic Instrumentation an, Measurement systems for agriculture and Agro based Industries • Design of Instrumentation and Control Systems for Agriculture and Agro based Industries • Study of Analog & Digital Integrated Circuits, Grounding & Shielding Techniques and pre-requisites of system Design • Design of Analog and Digital Systems • Computer & Languages • Advanced Instrumentations and control Systems • Computer Networks • Advanced Computer Systems
Projects:	<ul style="list-style-type: none"> • Undergraduate Projects (15)and PG projects (8)

Professional:	<u>Membership:</u> <ul style="list-style-type: none"> • Fellow, Institution of Electronics & Telecommunication Engineers of India (IETE). • Senior member, Instrument Society of America (ISA) • Senior member, Instrument Society of America (ISA) • Life Member, Indian Society for Technical Education (ISTE) • Life Member, Indian Physics Association (IPA) • Life member, Crystal Growth Association of India
Publications:	<ul style="list-style-type: none"> • International Journals: 18 • National Publications: 10 • National Conferences : 30 • International Conferences: 03 • Books : 1 (Manuscript Posted to McGraw-hill)
Computer Skills:	<ul style="list-style-type: none"> • Object oriented Programming • Microsoft Office 2003

Publications:

Patil V.L, "Space packets of pulses to desired time" Electronics Engineering , February 1977, Vol 49 , No 588 , P 29 , Morgan-Grampian Publications , London (UK).

Subba Rao M V & Patil V.L, "BCD divide by-n-counter with symmetrical output" Electronic Engineering , October 1978 , vol 50 , No 613 , P 25 , Morgan-Grampian Publications , London (UK).

Jain D S and Patil V.L, "Latch circuit clears easily" EDN , September 20 , 1979 , Vol 24 , No 17 , P 131-133 , Cahners Publications , Boston (USA)

Jain D S and Patil V.L, "Program frequency - divider duty cycle" EDN, January 5, 1980 , Vol 25 , No 1 , P 154 , Cahners Publications , Boston (USA)

Patil V.L and Jain D S, "Decimally programmable divide by-n-counter maintains pulse symmetry" Digital Design , January 1980 , Vol No P 80, Benwill Publications , Boston (USA)

Jain D S and Patil V.L, "A simple tri-stable latch" Computer Design, August 1980 , Vol 19 , No 8 , P 134 , A Penwell Publications , Littleton(USA)

Patil V.L and Varma R, "Pulse width sieve counts the good and bad" EDN , August 5 , 1980, Vol 25, No 14, P 130, Cahners Publications, Boston(USA)

Patil V.L and Varma R, "Digital comparator saves de-multiplexing hardware "Electronics International", August 14 , 1980 , Vol 53 , No 18 , P129 , Mc-Graw Hill Publications , New York (USA)

Subba Rao M V and Patil V.L, "Sync clock, counter improve programmable - width generator", Electronics , November 20 , 1980 , Vol 53 , No 25 , P 131, Mc-Graw Hill Publications , New York (USA)

Patil V.L, "Resistors replace ICs for thumbwheel switch testing", Electronic Test , February 1982 , Vol 5 , No 2 , P 22 , Benwill Publishing corporation , A Morgan-Grampian company, Boston (USA)

Patil V.L, "Counter scheme provides ac - mains control" EDN , July 23 1982 , Vol 27 , No 13 , P 193, Cahners Publications , Boston (USA) (**Voted best design of the issue by the readers**)

Patil V. L , "Interface lets microprocessor control stepper motor "Electronics , July 28 , 1982, Vol 55 , No 15 , P 119 , Mc-Graw Hill Publishing Company , New York (USA)

Kapur P and Patil V.L, "Low grade massecuite boiling using ac resistivity as a reference variable" International sugar journal , October 1982 , Vol 84 , No 1006 , P 294 - 299 , A Morgan-Grampian Publishing Company , London (UK)

Patil V.L, "Parallel I/O options for 8085 based systems" Microprocessor & Microsystems , March 1984 , Vol 8 , No 2 , P86-93 Butterworth & Company (publishers) Ltd , IPC Press (UK).

Acharya G.N , Kapur P and Patil V.L, "Interrelationships among process variables in low grade strikes" International sugar journal , May 1984 , Vol 86 , No 1025 , P 131-135 , A Morgan Grampian Publications (UK)

Patil V.L, "Control frequency and duty cycle independently" EDN , June14 , 1984 , Vol 29 , No 12, P 235 , Cahners Publications ,Boston (USA)

Kapur P , Patil V.L and Acharya G.N, "Microprocessor based system for regulation of low grade strikes" International sugar journal , May 1986 , Vol 88 ,No 1049 , P 94-98 , A Morgan Grampian publications (UK)

Kapur P , Patil V.L , Gautam G.K and Acharya G.N, "Microprocessor-based vacuum pan monitoring system for sugar crystallisation" Microprocessors & Microsystems , May 1987, Vol 11, No 4, P 215 - 219 , IPC Press , Butterworth & Co(Publishers) Ltd (UK).

Annexure E: Publications in International Symposia/Seminars Proceedings:

Kapur P, Patil VL, Gautam GK, Vasudeva TR "Role of Multiple Properties Measurements in regulation of low grade Stikes" International Society for Sugar Cane Technologists (IISCT), Brazil, 1989

Kapur P, Patil VL, Gautam GK, Vasudeva TR and Acharya GN "Microprocessor based Control Strategies and Role of ASICS for Sugar Crystallisation Process" Society for Instruments and Control EGINEERS(SICE), Japan

Parekh PC, Patil DR, Sisle SL, Deshikan A, Damahe BA, Patil VL (Guide) "Distributed Process Control System for Cane handling Station of sugar Industry" Fourth International Conference on Control Automation, Robotics and Vision (ICARV-96), Nanyang Technical University Singapore Dec 3-6 1996.

Annexure F: National Publications:

Kapur P , Patil V.L "Microprocessor based Pan Boiling System" Maharashtra Sugar Monthly, August 1982 No 11.6 P 1-9

Acharya G.N , Kapur P and Patil V.L, "Study of AC Resistivity and viscosity and their role in regulating low grade strikes" Maharastra Sugar , Nov 1985.

Kapur P , Patil V.L ,Gautam G.K and Acharya G.N, "Design & simulation study of a decoupled controller for sugar crystallisation process in sugar industry" Journal of institution of engineers (India) , November 1986 - February, 1987 , Vol 67 , NO P 46-49 , Calcutta (India)

Kapur P , Patil V.L , Gautam G.K and Acharya G.N, "Modelling and control aspects of sugar crystallisaton process in the sugar industry" Indian journal of Physics , 61A, P 410-418 , 1987.

P Kapur, V.L.Patil,GK Gautam, TR Vasudeva, GN Acharya "Equipment Design and Instrumentation System for Sugar Crystallisation Process in Continuous Pans" Proceedings of Sugar Technologists Association of India , 50 th Annual Convention, Nov 1-3, 1987.

Kapur P, Patil V.L, Gautam G.K, Vasudva T.R and Acharya G.N., "Microprocessor based control strategies and role of ASICS for sugar crystallisation process" Journal of Institution of Electronics and Telecommunication Engineers (JIETE), India.

V.L.Patil "Graphics for Scientific Applications", Proceedings of National Symposium on Advanced Techniques in Electronic Product Design", (NSEPD-94) , Allied Publishers, New Delhi, Feb 18-20, 1994.

V.R.Rode V.L.Patil "Electronic Process Control System for Grape Raisin Making", Proceedings of National Symposium on Advanced Techniques in Electronic Product Design" (NSEPD-94) , Allied Publishers, New Delhi, Feb 18-20, 1994.

D.J.Abhange,V.L.Patil "Microprocessor based System for Seed Dehusking", Proceedings of National Symposium on Advanced Techniques in Electronic Product Design" (NSEPD-94) , Allied Publishers, New Delhi, Feb 18-20, 1994.

C Sreekumar ,V.L.Patil "Moisture Measurement Techniques using microwaves for Agro-based Industries", Proceedings of National Symposium on Advanced Techniques in Electronic Product Design" (NSEPD-94) , Allied Publishers, New Delhi , Feb 18-20, 1994.

Annexure G: Presentation of papers in National Symposia/Seminars:

M.V. Subbarao, Patil V.L and S.C.Mittal "Automatic Liming and pH Control System for Juice Clarification Process of Sugar Industry", Workshop on Electronic Process Control Instrumentation for Sugar Industry", September 23 1979, CEERI, Pilani, Rajasthan, India.

Kapur P, D.S.Jain and Patil V.L "Control of C massecuite using AC Resistivity as a reference Variable", Workshop on Electronic Process Control Instrumentation for Sugar Industry", September 23 1979, CEERI, Pilani, Rajasthan, India (Presented by Patil V.L.)

Kapur P , Patil V.L "Low grade Sugar boiling using ac Resistivity as a Variable", Recent Trends in Research, Developments and Applications", IETE Symposium on Instrumentation, June7-8 1982, Calcutta, India.

Kapur P , Patil V.L "Microprocessor based Pan Boiling System", National Seminar on Improving Productivity of Sugar Cane and Cane Sugar Industry through application of computer Technology", August 1982, India International Centre, New Delhi.

Patil V.L. "Parallel I/O options for 8085 based Systems" Symposium on Microprocessor based Systems, May 5, 1983, CEERI, Pilani, Rajasthan, India. (Presented by Patil V.L.)

Acharya G.N., Kapur P and Patil V.L. "Design aspects of Microprocessor based Monitoring and Control System for Pan Boiling Operation" Higher Technology for Sugar Cane and Sugar Production, May 28, 1983, Bangalore.(Presented by Patil V.L.)

Acharya G.N., Kapur P and Patil V.L. "Study of Inter-relationships among process variables for low grade Strikes" Higher Technology for Sugar Cane and Sugar Production, May 28, 1983, Bangalore. (Presented by Kapur P)

Patil V.L. "Interfacing Pan Sensors to Pan Boiling System" Advanced Training Programme on Microprocessor based Electronic Instrumentation and Control Systems September 10-25, 1984 and September1985 CEERI, Pilani, Rajasthan, India. (Presented by Patil V.L.)

Kapur P., V.L.Patil, GK Gautam, GN Acharya "Some Design Aspects of Multivariable Controller for Sugar Crystallisation Process" Seminar on Boiling House Automation, June 15, 1985 ,Deccan Sugar Institute Pune. (Presented by Patil V.L)

Kapur P.,V.L.Patil, GK Gautam, GN Acharya "Microprocessor based Pan Monitoring System for Sugar Crystallisation Process" Seminar on Boiling House Automation, June 15, 1985 ,Deccan Sugar Institute Pune. (Presented by Patil V.L)

Kapur P.,V.L.Patil, GK Gautam, GN Acharya "Process Variables and their inter-relationships for control action in Sugar Crystallisation Process" Seminar on Boiling House Automation, June 15, 1985 ,Deccan Sugar Institute Pune. (Presented by Kapur P)

Kapur P. Pati ,VL, Gautam GK, Acharya GN "Pan Boiling Automation - Current and Future Trends with reference to Continuous Pans " Seminar on Boiling House Automation, June 15, 1985 ,Deccan Sugar Institute Pune. (Presented by Acharya G.N)

KapurP, V.L.Patil, GK Gautam, Vasudeva T.R. Acharya GN "Development and State of art in Electronic Instrumentation & Control Systems for Sugar Crystallisation Process" Workshop and Get-together for modernisation of Sugar Industry using Electronic Systems, September 19, 1986, CEERI, Pilani, Rajasthan, India.

KapurP, V.L.Patil, GK Gautam, Acharya GN "Design and Simulation Study of Decoupled Controller for Sugar Crystallisation Process" Institution of India Paper meet, October 23, 1986, Madras , India. (Presented by Patil VL)

Kapur P, Patil V.L., Gautam GK, Vasudeva TR, Acharya GN "Equipment Design and Instrumentation System for Sugar Crystallisation Process in Continuous Pans" Sugar Technologists Association of India , 50 th Annual Convention, Nov 1-3, 1987, All India Institute of Medical Sciences, New Delhi

Patil V.L., Gautam GK, Vasudeva TR, Kapur P "Maintenance Aspects of Microprocessor based Pan Monitoring System" October 3-8 , 1988, Deccan Sugar Institute Pune.

Kapur P , Patil V.L., Gautam GK, Vasudeva TR, Acharya GN "Continuous Pan Technology and review of various types of Continuous Pans" October 3-8 , 1988, Deccan Sugar Institute Pune.

Kapur P , Patil V.L., Gautam GK, Vasudeva TR, Acharya GN " MIPMOS –Part II, October 3-8 , 1988, Deccan Sugar Institute Pune.

Kapur P , Gautam GK, Saikumar KS, Agrawal AK, Patil V.L. and Vasudeva TR "A Prototype Knowledge based System for Monitoring of Sugar Crystallisation Process" , 4 th National Symposium on Crystal Growth August 14-16 , 1989, Central Food Technology Research Institute, Mysore, India.(Presented by VL Patil)

Kapur P , Patil V.L., Gautam GK, Vasudeva TR, Acharya GN " Microprocessor based Intelligent System for regulation of Sugar Crystallisation Process of Sugar Industry" , National Conference on circuits & Systems, November 2-4 , 1989, University of Roorkee, Roorkee(UP) , India.

V.L.Patil, Gautam GK, Vasudeva TR, AK Agrawal, P Kapur, GN Acharya "Sugar Crystal Growth-Study of internal forces and properties of Sucrose Molecules" Symposium on Crystal Nucleation, Solution Growth and Surface Morphology" Jan 8-9, 1990 , Anna University, Madras. (Presented by V.L.Patil)

V.L.Patil "Mathematical Modelling and Computer Simulation Study of Milk Condensation Process in Vacuum Pans", Workshop on Recent Advances in Measurement Techniques and Instrumentation for Agricultural Applications" August 18-20, 1993 Vasantdada Sugar Institute, Pune. (Presented by V.L.Patil)

Damahe BA, V.L.Patil "Importance of Indigenous Design and Development Sensors and Transducers", Workshop on Recent Advances in Measurement Techniques and Instrumentation for Agricultural Applications" August 18-20, 1993 Vasantdada Sugar Institute, Pune. (Presented by V.L.Patil)

V.L.Patil "Graphics for Scientific Applications", National Symposium on Advanced Techniques in Electronic Product Design" (NSEPD-94) Feb 18-20, 1994. (Presented by V.L.Patil)

Rode V.R and Patil V.L. "Electronic Process Control System for Grape Raisin Making", National Symposium on Advanced Techniques in Electronic Product Design" (NSEPD-94) Feb 18-20, 1994.

Abhange D.J, Patil V.L. "Microprocessor based System for Seed Dehusking", National Symposium on Advanced Techniques in Electronic Product Design" (NSEPD-94) Feb 18-20, 1994.

Sreekumar C, .Patil,V.L "moisture Measurement Techniques using microwaves for Agro-based Industries", National Symposium on Advanced Techniques in Electronic Product Design" (NSEPD-94) Feb 18-20, 1994.

Patil VL "Technical and Engineering Education at CEDTs (Invited Paper) " Revamping of Technical Education, Arranged by ISTE & SGGS Nanded, Hotel Ajanta Ambassador, Aurangabad,

Annexure H: Project Guidance (PG Students):

"Microprocessor based Stepper motor Controller using intelligent positioning Controller chip" by Puneet Dhameja , M.Tech (Electronics), IIT Delhi , May 1988.

"Microprocessor based Pan boiling System Interface Bus Compatible Stepper Motor Position Controller Employing Position feedback" by Rajinder Pal Khurana , M.Tech (Inst), REC Kurukshetra , July 1989.

"Design of DAS around IBM PC for Pan Control" by Pawan Gautam , M.Tech (Inst) , REC Kurukshetra , April 1990.

"Supervisory Monitoring System for Sugar Industry" by Avinash Tale , M.Tech (Electronics Design Technology) , CEDTI, Aurangabad ,Feb 1993.

“Real time Microprocessor based System for Grape Raisin making ” by V.R Rode , M.Tech (Electronics Design Technology) , CEDTI, Aurangabad ,Feb 1994.

“Microprocessor based System for Seed de husking Process ” by DJ Abhange , M.Tech (Electronics Design Technology) , CEDTI, Aurangabad ,Feb 1994.

“Supervisory Control and Data acquisition System” by Shekh Faisal , M.Tech (Electronics Design Technology) , CEDTI, Aurangabad ,Feb 1995.

“Distributed Process Control System for Cane handling Station of Sugar Industry” by PC Parekh, DR Patil, A Deshikan and SL Sisle , M.Tech (Electronics Design Technology) , CEDTI, Aurangabad ,Feb 1996.

Project Guidance (UG Students):

“Study of suitable controller for Pan boiling stage” by Mohamad Aslam Khan, BE (Electronics), Banaras Hindu university, Varansi(UP), May 1982.

“Microprocessor based digital filters” by Sudhir Kumar, Practice school-1, BITS Pilani(Raj), 333031, June 2 ,1982.

“Assembly Language programming of 8085 microprocessor” by Ms Hemeshwari Badola, BE(Electronics), University of Roorkee.

“Level sensing and viscosity measurement of sugar solutions” by B.K.Gupta BE(Electronics)MBM College Jodhpur(Raj) September 1983.

“Liquid Level measurements of variable density liquids” by Rajesh Varma , B.Tech(Electronics) IIT, Delhi, May 1984.

“Level measurements in Vacuum Pans” by Mohan Lal , B.E(Electronics) MBM College, Jodhpur, August 1985.

“Temperature Measurements of Sugar Solutions” by Chiranji Lal , B.E(Electronics) MBM College, Jodhpur, August 1985.

“Viscosity Measurement Techniques” by Rajesh Mangal , B.E II (Electronics) MBM College, Jodhpur, June 1986.

“Design and Development of MIPMOS Compatible D/A Card ” by Suresh Soni , B.E(Electronics) MBM College, Jodhpur, June 1986.

“Development of universal 2D Plot Software” by Somesh Sawal , B.E(Electronics), College of Engineering, Wardha, July 1988.

“Microprocessor Compatible Integrated Stepper Motor Control Unit(ISMCU) , By Vinit Chakku, DEPM, CEDTI, Aurangabad, June 1993.

“Analog Voltage Compatible Integrated Stepper Motor Control Valve with position sensing and control, By T Gaidhani and SC Kolhe, DEPM, CEDTI, Aurangabad, June 1994

Annexure I: Research Result and Technical Reports:

“Microprocessor based system for on-line computation & display of purity and Brix and regulation of low grade strikes” EI/PBS/84/01.

“Massecuite temperature measurements in a vacuum pan used in sugar industry” CEERI Internal report No. CEERI-86017

“Deputation report of sh V.L.Patil regarding his visit to Germany from June-August 01 , 1986, ES/PBS-DEP REP/86/01, 1986

"Program package for transfer function identification using frequency response data" Report submitted to Universitat GH Paderborn (Germany) 1986.

"Hardware Aspects of Microprocessor based system for sugar crystallization process" EI/PBS/86/03, 1986.

"Mathematical Modeling of process plants" CEERI/ES/TR-8/88, 1988.

"Parallel I/O options for 8085 based systems " February 1985, No. CEERI-85005 .

"Functional Relations of Sugar Crystallizations Process Variables" December 1987 , No. CEERI/ES/PR-9/87 (Classified document).

"Plotting for modeling, Simulation & Control Applications" March 1991, CEERI/ESA/PR-3/91

"Scientific Data Graphing Package", ScidGraf 1.0 , Write-up for copyright, April 1991.

"Functioning of Semiconductors", Know thy subject Series, Sept. 1991, CEDT/91/001

"Introduction to Unix", CEDTA/AICL/93/unix/001

"Introduction to Computer Networks" CEDTA/AICL/93/net/001, 1993.

"Simple Unix Commands" CEDTA/AICL/94/unix/002

"Simple Unix File Commands" CEDTA/AICL/94/unix/003

"Network Standardization" CEDTA/AICL/96/net/002, 1996

"Network Architectures" CEDTA/AICL/96/net/003, 1996

"Generalized Network Concepts", CEDTA/AICL/96/net/004, 1996