

## Curriculum Vitae

### 1. Personal Information

- a) Name : Dr. Sharan A. S.  
b) Date of Birth : 2-5-1978  
c) Qualification : Ph. D, M. Tech.  
d) Specialization : Electro hydraulics, composites  
e) Professional Licenses : MISTE, IEI  
f) Address : Sharan A. S.  
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### 2. Academic Record

Degree	Year	College	University	Specialization	Result
BE	2000	Bapuji Institute of Engg. & Tech., Davangere	Kuvempu University, Shimoga	Mechanical	I Class
M. Tech.	2005	UBDT College of Engineering, Davangere	Kuvempu University, Shimoga	Production Engineering & System Technology	I Class
PhD	2014	UBDT College of Engineering, Davangere	Kuvempu University, Shimoga	Electro hydraulics	

### 3. Projects Carried out

#### Place

- M.Tech** Manufacturing and Static Stress Analysis of an Aircraft Component HAL, Bangalore
- PhD** Investigation on the Characterization of Electro Hydraulic Servovalve Kuvempu university

#### **4. Sponsored research projects**

1. Design and Development of Creep Test Set Up funded by VTU Rs: 8,50,000 in the year in the year 2010
2. Development of advanced fabrication and study of tribological properties For MNC materials funded by AICTE , Rs:17, 32,950=00 in the year 2013
3. Development of Electronically Controlled Proportioning Directional Servo Valves funded by KSCST Rs: 7000 in the year 2015
4. Development of Portable Fire Extinguisher Using Acoustic Waves funded by KSCST Rs: 7000 in the year 2016
4. Study on Effect of Critical Parameters on Performance of Acoustic Fire Extinguisher funded by KSCST Rs: 7000 in the year 2017
5. Effect of Acoustic Waves on Notorious Bacteria Causing Various Diseases funded by college Rs: 5000 in the year 2017
6. Design And Development Of Low Cost Energy Efficient Fruit Preservation System Using Acoustic Waves funded by KSCST Rs: 6000 in the year 2018
7. Design And Development Of The Low Cost Centrifuge Device For Medical Micro Fluidic Application funded by KSCST Rs: 6000 in the year 2018
8. S.M.A.R.T Portable Fruit Preservation System funded by KSCST Rs: 12,000 in the year 2019
9. Eco-Friendly Water Filtration Using Plant Xylem funded by KSCST Rs: 7,000 in the year 2019
10. Design And Development Of Low Cost Ultraviolet And Ultrasonic Disinfection Device For Rural Hospitals funded by KSCST Rs: 9,000 in the year 2019

#### **5. Innovative projects**

1. Development of Electronically Controlled Proportioning Directional Servo Valves
2. Development of Portable Fire Extinguisher Using Acoustic Waves
3. Study on Effect of Critical Parameters on Performance of Acoustic Fire Extinguisher
4. SMART: Innovative Approach To Delay Ripening Of Fruits
5. Effect of Acoustic Waves on Notorious Bacteria Causing Various Diseases

#### **6. Patent planned projects**

1. Development of Portable Fire Extinguisher Using Acoustic Waves ( design)
2. SMART: Innovative Approach To Delay Ripening Of Fruits (design)
3. Effect of Acoustic Waves on Notorious Bacteria Causing Various Diseases ( process)

## 7. Awards

Awarded "PROJECT OF THE YEAR" award for the project titled "Development of Portable Fire Extinguisher Using Acoustic Waves" during the Seminar and Exhibition of Student Projects - 39<sup>th</sup> SERIES: 2015-16

Awarded "PROJECT OF THE YEAR" award for the project titled "Design And Development Of Low Cost Energy Efficient Fruit Preservation System Using Acoustic Waves" during the Seminar and Exhibition of Student Projects - 41<sup>th</sup> SERIES: 2017-18

## 8. Lab establishment

1. Worked efficiently for the establishment of fluid power lab. The kit, aids in training the trainees.
2. Developed electronically controlled electronically controlled proportioning directional control valve

## 9. Work Shop Attended

Sl. No.	Course	Place	Date	Sponsored by
1.	FEM and Its Application to Non-linear Problems	PES College of Engineering, Mandya	11-22, 2005	July AICTE, New Delhi
2.	Industrial Hydraulics & Pneumatics	MICO Vocational Center, Bangalore	29-31 2005	Aug. Bosch Rexroth India Ltd., MICO and NIE-IIPC, Mysore
3.	Composite Materials	GM Institute of Technology, Davangere	3 Dec. 2005	ISTE, New Delhi
4.	New Trends in Materials and Manufacturing	UBDT College of Engineering, Davangere	18-19 Feb 2006	World Bank aid TEQIP Project
5.	Recent Trends in production Engineering and Management	UBDT College of Engineering, Davangere	15-17 2006	June World Bank aid TEQIP Project
6.	NAMES	B.I.E.T Davangere	26-30 March 2007	AICTE, New Delhi
7.	Electro-Hydraulics	Mysore	13-06-2008	Bosch Rexroth (COC)
8.	Computational fluid dynamics	Dept. of Mech. Engg. PESIT Bangalore	June 30th to July 4th 2008	Dept. of Mech. Engg. PESIT
10.	Hydraulics and Pneumatics	Mysore	Feb 24th to	Dept. of IP. Engg.

11.	Fluid power circuits and control: Fundamentals and Applications	Chennai	28th 2009 13th to 18th July 2009	NIE Dept. of Mech. Engg IIT madras
12.	"Mechatronics: Integrated Technologies for Intelligent Machines".	Chennai	January 18-23, 2010	Dept. of Mech. Engg IIT madras
13.	Micromachining-A Breakthrough Technology	Chennai	January 31-5 of Feb.18-23, 2011	Dept. of Mech. Engg IIT madras
14.	Robotics: Mechanics, Control, Sensing, Vision and Intelligence"	Chennai.	January 14 -18 , 2013	Dept. of Mech. Engg IIT Madras.
15.	Industrial training programme on CNC lathe	Mysore	December 12 <sup>th</sup> -27 2014	Askar Microns Mysore
16.	Mechatronics and Intelligent system	Chennai.	July 27 <sup>th</sup> -01 <sup>st</sup> August 2015	Dept. of Mech. Engg IIT Madras.

## 9. Publications

### National Conference

Sl. No.	Title	Name of the Conference	Date	Venue
1.	DFM Approach to Design of Chassis Beam	National Conference on Mechanical Engineering Trends (COMET-2006).	11-22, July 2005	Bellary Engineering College, Bellary
2.	Evaluation of Mechanical Behavior of Hybrid Composites	National conference on recent trends in Mechanical Engineering (TEQIP)	17-18, November 2006	Sri J.C of Engineering Mysore
3.	Experimental Investigation on Progressive Damage and Impact Energy Absorption of Hybrid Fabric Composites	National Conference on Advances in Mechanical Engineering (Name 2010)	24-25 Sept 2010	Department of Mechanical Engineering Jawaharlal Nehru National College of Engineering, Shimoga-577 204

### International Conference

1. Torque Motor Modelling of an Electrohydraulic Servovalve COPEN 06 09-10 Dec 2009 Department of Mechanical Engineering, PSG College of Technology Coimbatore
2. Mechanical Characterization of Wood COPEN 06 09-10 Dec 2009 Department of Mechanical Engineering, PSG College of Technology Coimbatore
3. Experimental Investigation Flexural Properties of Wood Polymer Composites Under Wet Conditions International Conference on Recent Trends in Materials and Characterization (RETMAC) 14-15 Feb, 2010 Department of Mechanical Engineering National Institute of Technology Karnataka, Surathkal, India
4. Fracture Behavior of Wood Polymer Composite under Varied Wet Conditions Frontiers International Conference in Mechanical Engineering FIME2010 20-22 May, 2010 Department of Mechanical Engineering National Institute of Technology Karnataka, Surathkal, India
5. Numerical Analysis on Torque Motor Dynamics used in Electrohydraulic Servovalve The 11th Asian International Conference on Fluid Machinery and Paper The 3rd Fluid Power Technology Exhibition November 21-23, 2011, IIT Madras, Chennai, India
6. Constitutive modeling of creep properties of Aluminum 6061 Alloy International Conference on Advances in Materials & Manufacture Applications August 17<sup>th</sup>-19<sup>th</sup> 2017 Amrita School of Engineering, Bengaluru
7. Investigations on dynamic properties of aluminium matrix composite reinforced with iron oxide 1<sup>ST</sup> International Conference on Innovations in Mechanical Engineering 5th & 6th January, 2018 Guru Nanak Institutions, Hyderabad

particles

### **International Journal**

1. Finite Element Analysis of Electrohydraulic servo valve torque motor" International Journal of Applied Science and Technology Research Excellence Volume3, Issue1, Jan-Feb2013,page No.99-103.
2. Optimisation of Pressure Recovery in Jet pipe Electrohydraulic Servo Valve Using CFD Analysis" International Journal of Applied Science and Technology Research Excellence Volume5, Issue1, Mar-Aprl2013,
3. Modeling and Simulation of Jet pipe Servo valve Torque Motor Applied Mechanics and Materials Vols. 592-594 (2014) pp 2308-2313.
4. Investigation of critical parameters affecting working design dynamics of torque motor employed in electrohydraulic servo valve.
5. Constitutive modeling of creep properties of Aluminum 6061 Alloy IOP Conf-series: Material Science & Engineering,

### **10 Invited Talks**

1. Delivered a talk on "Modeling and Simulation of Mechanical Systems with Simulink" at four Day workshop on Mat lab & its Applications
2. Delivered a talk on "Homeland Security" at various engineering colleges in chitradurga and Bellary.

### **11 Workshops organized:**

1. One day workshop on Mathematical Analysis in Engineering system on 10 of June 2010
2. One day workshop on Mechatronics: Innovative approach for Integrated system on 12 of July 2012
3. One day workshop on Robotics calibration on 15 of July 2014
4. On week workshop on Internship on engine technology