

Dr. CHRISTOPHER STEPHEN

Father's Name : S. Stephen Devaraj
Date of Birth : 29-04-1979
Religion : Christian
Marital Status : Married
Permanent Address : #8/9, M.I.G Plot, Manali New Town,
Chennai – 600 103, Tamil Nadu, India.
Language Known : Tamil, English, German
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EDUCATION

Post Doctoral Research	2018
National Research Center of Pumps, Jiangsu University, Zhenjiang – 212 013, China.	
Supervisor: Dr. Shouqi Yuan, Professor and University Committee Chair	
Ph. D. – Hydroturbomachines (Mechanical Engineering)	2013
Indian Institute of Technology Madras, Chennai – 600 036, Tamil Nadu, India	
Thesis: Correlation of Cavitation Noise and Vibration in Radial Flow Pump of Different Leading Edge Profiles of the Vane with 9 CGPA for course work.	
Supervisor: Dr. S. Kumaraswamy, Professor (Rtd.)	
Master of Engineering (M.E.) – Energy Engineering	2003
Bharathiar University, P.S.G. College of Technology, Coimbatore - 641 004, Tamil Nadu, India	
Thesis: Structural Analysis of Bulb Turbine, 9.38 CGPA – First Rank	
Bachelor of Engineering (B.E.) – Mechanical Engineering	2000
University of Madras, R.M.K Engineering College, Kavaraipettai - 601 206, Tamil Nadu, India	
Thesis: Statistical Process Control Analysis – Project done at Simpson & Co. Ltd., Chennai	
82.06% - First Class with Distinction and Secured 20 th Rank in University of Madras	
XII	1996
82.58 %, State Board, Infant Jesus Matric HSS, Chennai – 600 103, Tamil Nadu, India	
X	1994
71.18 %, Matriculation, Infant Jesus Matric HSS, Chennai – 600 103, Tamil Nadu, India	

WORK EXPERIENCE

(TEACHING: 14 years, RESEARCH: 1 year 11 months, Industry: 1 year 5 months)

- **26th Oct 2019 – Present Organization (4months)** – [Professor]
Dept. of Mech. Engg., Vel Tech University, Avadi, Chennai – 600 062, Tamil Nadu, India.
- **28th Aug 2018 – 25th Oct 2019 (1 year 3 months)** – [Associate Professor]
Dept. of Mech. Engg., Vel Tech University, Avadi, Chennai – 600 062, Tamil Nadu, India.
- **11th March 2016 – 23rd January 2018 (1 year 11 months)** – [Postdoctoral Fellow]
National Research Center of Pumps, Jiangsu University, Zhenjiang – 212 013, China.
- **1st August 2012 – 4th Aug 2018: (4 years)** – [Associate Professor]
Dept. of Mech. Engg., Saveetha School of Engineering, Chennai – 602 105, Tamil Nadu, India.
- **1st April 2011 – 30th June 2011: (3 months)** – [Senior Scientist]
Hydroturbomachines Lab, Dept. of Mech. Engg., IIT Madras, Chennai – 600 036, Tamil Nadu, India.
- **1st October 2008 – 30th November 2009: (1 year 2 months)** – [Senior Project Officer]
Hydroturbomachines Lab, Dept. of Mech. Engg., IIT Madras, Chennai – 600 036, Tamil Nadu, India.
- **5th January 2008 – 30th June 2008: (6 months)** – [Visiting Lecturer]
AMET University, Chennai – 603 112, Tamil Nadu, India.
- **3rd January 2003 – 2nd January 2010: (7 years)** – [HTRA]
Dept. of Mech. Engg., IIT Madras, Chennai – 600 036, Tamil Nadu, India.

- **8th June 2000 – 16th July 2001: (1 year 1 month)** – [Lecturer]
Sri Durga Devi Polytechnic, Kavaraipettai – 601 206, Tamil Nadu, India.

SCHOLASTIC ACHIEVEMENTS

- Academic Partner in **Hydraulic Institute (HI) – (Membership No. 71640)**.
- Elected as Member of American Society of Mechanical Engineers (**ASME**) – (**Membership No.9519083**).
- Elected as Member of International Association for Hydro-Environment Engineering and Research (**IAHR**) – (**Membership No.59168**).
- Elected as Member of National Society for Fluid Mechanics and Fluid Power (**NSFMFP**), India – (**Membership No.LM714**)
- Elected as Member of Indian Society of Mechanical Engineering (**ISME**), India – (**Membership No. L1140**).
- Elected as Member of Institution of Engineers India (**IEI**) in Mechanical engineering division (**Membership No. M-143728-8**).
- Elected as Member of Institution of Engineering and Technology (**IET**), UK.
- Secured **20th Madras University rank** in Mechanical Engineering graduates in the year 2000.
- Qualified in **GATE 2001** with 79.05 percentile
- Half-time Teaching Research Assistantship (**HTRA**), Scholarship awarded by Ministry of HRD, Govt. of India.

RESEARCH AREAS

- Computational Fluid Dynamics on Pumps
- Design of Pumps
- Cavitation
- Flow Analysis through Pipes and Bends
- Slurry Flow through Hydraulic Hoses
- Signal Processing in Mechanical Systems
- Experimental Methods in Hydroturbomachines
- Design of Hydroturbines
- Numerical Analysis of Solar Panel Cooling

PROJECTS

- Project proposal titled as “Vibro-Acoustic Studies on Close-Coupled Vertical Inline Pump” has applied under the scheme of Start-Up Research Grant, SERB, New Delhi in May 2018 and waiting for the reviewer comments.
- Worked in the project (as Principal Investigator under State Key Program of National Natural Science Funds of China (Grant No. 51239005), duration 20 months and cost of the project is around 19 Lakhs INR (approx.) or 200,000 CNY - Completed
- A project proposal was submitted to BRICS STI Framework Programme (multilateral projects) for the title “Pump Working as a Turbine” on 25th August 2016 with collaboration of three universities of different countries (India, China and Russia). It was not accepted.
- Project proposal titled as “Development of a Kit to Diagnose the Operating Conditions of Pumps” has applied in the Department of Science and Technology, New Delhi in June 2013 and it was not accepted.

PATENT FILED

Patent was filed in the title “Microwave synthesis of strontium-substituted Hydroxyapatite powders” in October 2013 (IPR NO. 5196/CHE/2013) along with Dr. R. NARAYANAN, Associate Professor.

LIST OF JOURNAL PUBLICATIONS (PEER-REVIEWED)

NOTE: Journal (J); International Conference (IC); National Conference (NC);

- (J12) Christopher, S. and Kumaraswamy, S. Assessment of Noise Signature for a Cavitating Centrifugal Pump. *ASME Journal of Fluids Engineering*. (Waiting for reviewer comments)
- (J11) Christopher, S., Yuan, S., Xing cheng, G. and Ji, P. Computational Study of Fluid-Borne Noise in Vertical Inline Pump. *Journal of Drainage and Irrigation Machinery Engineering*, Vol. 37, No. 2, pp. 94-100, Feb 2019. DOI: 10.3969/j.issn.1674-8530.18.1183
- (J10) Christopher Stephen, A review of cavitation effects on vibration in centrifugal pump. *Fluid Mechanics Research International Journal*, Vol. 2, Issue 3, 2018, pp.128–129. DOI: 10.15406/fmrij.2018.02.00028
- (J09) Yandong Gu, Shouqi Yuan, Ji Pei, Lei Xing, Christopher Stephen, Xiuli Wang, Fan Zhang, Wenjie Wang. Effects of Blade Thickness on Hydraulic Performance and Structural Dynamic Characteristics of High-power Coolant Pump at Overload Condition. *Proc. IMechE Part A: Journal of Power and Energy*, Vol. 232, No. 9, pp. 992-1003, March 2018. DOI: 10.1177/0957650918764729
- (J08) Christopher, S. and Kumaraswamy, S. Experimental Determination of Cavitation Characteristics of Low Specific Speed Pump Using Noise and Vibration. *Journal of the Institution of Engineers (India): Series C*, Vol. 100, No. 1, pp. 65-74, January 2018. DOI: 10.1007/s40032-017-0431-5
- (J07) Christopher, S., Yuan, S., Ji, P., and Xing Cheng, G. Numerical Flow Prediction in Inlet Pipe of Vertical Inline Pump. *ASME Journal of Fluids Engineering*, Vol. 140, Issue 5, May 2018, pp. 051201-1 - 051201-10, available on online from 26th December 2017. doi: 10.1115/1.4038533
- (J06) Christopher, S. and Kumaraswamy, S. Numerical optimization of leading edge profiles in Impeller Vane of Radial flow Pump. *ISME Journal of Thermofluids*, Vol. 3, No. 1, 2017, pp. 28-39.
- (J05) Christopher, S. A Review about the Diagnostics of Rotodynamic Pump using Vibro-Acoustic Method. *Indian Journal of Science and Technology*, Vol. 9, Issue 36, September 2016. DOI:10.17485/ijst/2016/v9i36/100938
- (J04) Christopher, S. and Kumaraswamy, S. Study of Noise and Vibration Signal for a Radial Flow Pump during Performance Test. *Fluid Mechanics and Fluid Power – Contemporary Research*, Springer Publication, pp 853-861, September 2016. https://doi.org/10.1007/978-81-322-2743-4_80
- (J03) Christopher, S. and Kumaraswamy, S. Flow Visualization Study on Radial Flow Pump under Cavitation Conditions. *Applied Mechanics and Materials*, Vol. 592-594, July 2014, pp. 1919 - 1923.
- (J02) Christopher, S. and Kumaraswamy, S. Identification of critical NPSH from noise and vibration in a radial flow pump for different leading edge profiles of the vane. *ASME Journal of Fluids Engineering*, Vol. 135, Issue 12, Dec 2013, pp. 121301-1 to 121301-15. <https://doi.org/10.1115/1.4025072>
- (J01) Christopher, S. and Kumaraswamy, S. Experimental study of cavitation hysteresis on radial flow pump. *Institution of Engineers (India) Journal*, Vol. 92, April 2011, 34-39.

LIST OF JOURNAL PUBLICATION FROM STUDENTS WORK

- (SJ06) Mahesh Babu, P., Chaithanya, K., P, Lokanath Reddy, K. and Christopher, S. Anti-Theft Fuel Supply System for Automobiles. *International Journal of Applied Engineering Research*, Vol. 10, No.65, 2015, pp. 74 - 80.
- (SJ05) Naga Vamsi, P, Sameer, Sandeep Kumar, G, Lal Basha, S, Gowtham, S. and Christopher, S. Design and Fabrication of Mini Lathe. *International Journal of Applied Engineering Research*, ISSN 0973-4562 Vol. 10, No.65, 2015, pp. 169 – 172.
- (SJ04) Soorya Prakash, R., Srikumar, B., Srinivasan, J., Subramani, M. and Christopher, S. Dual Utilization of Pump Motor. *International Journal of Applied Engineering Research*, ISSN 0973-4562 Vol. 10 No.65 (2015), pp. 136 – 139.

- (SJ03) Abdul Khadeer, A., Jerris, J., Raghav, V., RamBabu, N., Christopher, S. Design and Fabrication of Milling Fixture for Coniflex Cutter. *International Journal of Applied Engineering Research*, Vol. 10 No.33 (2015), pp. 24431-24434.
- (SJ02) Arumugam, Harikrishnan, Dhatchnamoorthy, Saimurali, Sivasubramaniam. and Christopher, S. Conversion of Reciprocating Motion Into Rotary Motion in Conventional Hand Pump. *International Journal of Scientific Research*, Vol. 3, Issue 11, November 2014, pp. 183 – 185.
- (SJ01) Ranjith Kanna, Sathivel, M., Sathya, C., Selva Ganapathy, S., Sasikanth, and Christopher, S. Dynamic Measurement of Tyre air Pressure in Vehicle. *International Journal of Scientific Research*, Vol. 3, Issue 11, November 2014, pp. 179 – 182.

LIST OF INTERNATIONAL CONFERENCES (PEER-REVIEWED)

- (IC10) Christopher, S. and Kumaraswamy, S. Assessment of Noise Signature for a Cavitating Centrifugal Pump. AJKFLUIDS2019-5132, Proceedings of the ASME-JSME-KSME 2019 Joint Fluids Engineering AJKFLUIDS2019, July 28-August 1, 2019, San Francisco, CA, USA. DOI: 10.1115/AJKFluids2019-5132 V03BT03A027; 9 pages, ISBN: 978-0-7918-5905-6 <https://doi.org/10.1115/AJKFluids2019-5132>
- (IC09) Christopher Stephen, Shouqi Yuan. and Ji Pei. Numerical Analysis of Flow Induced Noise inside the Vertical Inline Pump, PAPER NO. 391, Proceedings of the 7th International and 45th National Conference on Fluid Mechanics and Fluid Power (FMFP), December 10-12, 2018, IIT Bombay, Mumbai, India.
- (IC08) Christopher, S., Yuan, S., Xing cheng, G., Ji, P. and Yiyun, W. Study of Flow Induced Noise in Vertical Inline Pump Using Lighthill Analogy. MATEC Web of Conferences, ICDAMS 2018, 172, 01010, 2018.
- (IC07) Christopher, S., Yuan, S., Xing cheng, G. and Ji, P. Computational Study of Fluid-Borne Noise in Vertical Inline Pump. 14th Asian International Conference on Fluid Machinery, Jiangsu University, Zhenjiang, China – 212 013, October 10–13, 2017.
- (IC06) Christopher, S. and Yuan, S. Numerical Study of Velocities Inside the Impeller of Radial Flow Pump. 1st International Conference and 18th ISME Conference on Enabling Sustainable Development in Mechanical Engineering, National Institute of Technology Warangal, Warangal – 506 004, Telangana, India, February 23–25, 2017.
- (IC05) Christopher, S. and Kumaraswamy, S. Cavitation Effects in Centrifugal Pump by Varying Leading Edge Profiles of the Vane. 2nd International Conference on Cavitation and Multiphase Flow, Jiangsu University, Zhenjiang, China – 212 013, October 22–25, 2016.
- (IC04) Christopher, S. A Review about the Diagnostics of Rotodynamic Pump using Vibro-Acoustic Method, 2nd International Conference on Design, Analysis, Manufacturing and Simulation, Saveetha School of Engineering, Saveetha University, Chennai – 602 105, April 7-8, 2016.
- (IC03) Christopher, S. and Kumaraswamy, S. Study of Noise and Vibration Signal for a Radial Flow Pump during Performance Test. 5th International Conference and 41st National Conference on Fluid Mechanics and Fluid Power, IIT Kanpur, Kanpur – 208 016, December 12-14, 2014.
- (IC02) Christopher, S. and Kumaraswamy, S. Flow Visualization Study on Radial Flow Pump under Cavitation Conditions. *International Mechanical Engineering Congress, IMEC-2015*, NIT Trichy, June 13-15, 2014.
- (IC01) Christopher, S. and Kumaraswamy, S. Effect of change of leading edge on the flow in the impeller passage of a radial flow pump. 2nd International Congress on Computational Mechanics and Simulation, ICCMS-06, IIT Guwahati, Assam, December 8-10, 2006, 1359-1368.

LIST OF NATIONAL CONFERENCES (PEER-REVIEWED)

- (NC05) Srikar Sai Tej and Christopher, S. Characteristics of Upstream Flow in Closed Coupled Vertical Inline Pump, PAPER NO. 218, Proceedings of the 46th National Conference on Fluid Mechanics and Fluid Power (FMFP), December 9-11, 2019, PSG College of Technology, Coimbatore, India.

Dr. CHRISTOPHER STEPHEN

- (NC04) Christopher, S. and Kumaraswamy, S. Vibro-Acoustic Diagnostics on Radial Flow Pump during Cavitation Test. *42nd National Conference on Fluid Mechanics and Fluid Power*, NIT Surathkal, December 14-16, 2015.
- (NC03) Christopher, S. and Kumaraswamy, S. Numerical Investigation Of Leading Edge Profile Variation In Impeller Vane Of Radial Flow Pump. *17th ISME Conference on Advances in Mechanical Engineering*, Indian Institute of Technology Delhi, Hauz Khas, New Delhi 110016, October 3 -4, 2015.
- (NC02) Christopher, S. and Kumaraswamy, S. Effect of varying the inlet edge of the impeller on the performance of a radial flow Pump. *National Conference on CFD application in Power & Industry sectors*, BHEL R & D, Hyderabad, November 17–18, 2006.
- (NC01) Christopher, S. and Kumaraswamy, S. Studies on various leading edges on the flow in a Radial flow pump Using CFD. *CONVERGENCE, 2005 ANSYS India conference*, J N Tata Auditorium, Indian Institute of Science Campus, Bangalore, November 29-30, 2005.

DOCTORAL MEMBER FOR THE FOLLOWING CANDIDATES

1. Mr. Seralathan. S, Associate Professor in Hindustan University Ph. D Work Titled as “Computational Studies on Various Rotating Vaneless Diffusers of A Low-Pressure Ratio Shrouded Type Centrifugal Impeller Compressor Stage”.
2. Mr. Prakash. N, Associate Professor in Hindustan University, Ph. D Work Titled as “Numerical Simulation of Flow Through Marine Propellers”.

GRADUATE STUDENTS SUPERVISED

1. Mr. Velumurugan, Associate Professor in Saveetha School of Engineering, Saveetha University, Ph. D Work Titled as “Numerical Investigation of Radial Flow Pump Under Cavitating Condition” – ongoing.
2. Mr. Karthick. A, Assistant Professor in Saveetha School of Engineering, Saveetha University, Ph. D Work Titled as “Evaluation of corrosion behavior on submersible pump” – ongoing.
3. Arjun, C. A. and Backiaraj, S. M.Tech from the Department of Mechanical Engineering, Saveetha School of Engineering, Saveetha University.
4. Gan Xing Cheng, M.Tech (AY 2016-2017) at Jiangsu University.

UNDERGRADUATE STUDENTS SUPERVISED

- 17 batches of mini projects (2nd year and 3rd year)
- 7 batches of final year projects
- 7 publications from the student’s project

REFeree AND EDITORIAL MEMBER IN JOURNALS

1. Journal of Applied Fluid Mechanics
2. Chinese Journal of Mechanical Engineering
3. Journal of Hydrodynamics
4. International Journal of Hydromechanics

ASSISTANCE FOR RESEARCH

- Performance test on radial flow pumps.
- Cavitation test on radial flow pumps.
- Performance test on pump working as a turbine.
- Performance test on jet pump.
- Performance test on submersible pump.
- Performance test on vertical Inline pump.
- Parallel and series operation of pumps.
- Performance test on Pelton turbine.
- Performance test on Francis turbine.
- Performance test on Kaplan turbine.
- Commissioning of auxiliary pump

SKILLS

- Expert Level: ICEM CFD 17.0, CFX 17.0, ANSYS 17.0, AutoCAD 2015, Siemens NX 10, CATIA V6
- Intermediate Level: MatLab 2015
- Beginner Level: Fluent 17.0, NI LabVIEW 2012

BOOK PUBLISHED

1. Design of Impeller for Radial Flow Pump, First Edition, Published by M.M India Medical Services Private Limited, Chennai, 2015.
2. Automobile Technology: A Practical Approach, Published by M.M India Medical Services Private Limited, Chennai, 2015.
3. A Guide for Fluid Mechanics and Fluid Machineries Laboratory, under preparation.
4. All About Net Positive Suction Head (Rotodynamic Pumps) for Indian User, under preparation.

RESPONSIBILITIES AT VEL TECH RANGARAJAN DR. SAGUNTHALA UNIVERSITY

- Introduced two course related to my specialization Design of Rotodynamic Pumps and Engineering Application of Pumps.
- UG Seminar Coordinator
- PG Research Seminar Coordinator
- Mentor for 18 students
- Squad member for University Examination

RESPONSIBILITIES AT SAVEETHA SCHOOL OF ENGINEERING (SSE) & AT JIANGSU UNIVERSITY

- Resource person for One day national level workshop on CFD for beginners, SSE, SIMATS, Chennai 602 105, India, April 12, 2018.
- Session Chair for 3rd International Conference on Design, Analysis, Manufacturing, and Simulation, SSE, SIMATS, Chennai 602 105, India, April 6-7, 2018.
- Session Chair for 14th Asian International Conference on Fluid Machinery, Jiangsu University, Zhenjiang 212 013, China, November 10-13, 2017.
- Session Chair for International Symposium of Cavitation and Multiphase Flow, Jiangsu University, Zhenjiang 212 013, China, October 22-25, 2016.
- Joint Secretary for 2nd International Conference on Design, Analysis, Manufacturing and Simulation, SSE, Saveetha University, Chennai – 602 105, April 7-8, 2016.
- Session Chair for 1st International Conference on Design, Analysis, Manufacturing and Simulation, SSE, Saveetha University, Chennai – 602 105, March 21-22, 2013.
- Project coordinator for 2nd and 3rd years of UG Mechanical students.
- Coordinator for framing B.E. Automobile curriculum and syllabus 2014.
- Coordinator for revision of subjects for new curriculum 2016.
 - Fluid Mechanics and Fluid Machinery
 - Design of Jigs, Fixtures and Press Tools
 - Computational Fluid Dynamics
 - Mechanics of Solids.
- Squad member for University Examination
- Coordinator for preparing the NAAC report 2015 (Mechanical Department).
- Coordinator for organizing the details for UGC report 2015.
- Foreign University (Plymouth, UK) Affairs for Mechanical Department.
- Placement Coordinator (AY 2014 – 2016)
- Charity Wings Coordinator (AY 2014 – 2016)

- Materials Collection from students, faculty and volunteers
- Visiting orphanage, old-age homes and Government schools
- Education Technology Cell Coordinator (AY 2014 – 2016)
 - Innovative Teaching Methods – MILA (Multiple Interactive Learning Activity)
 - Training on Google drive
 - Training on Moodle
 - Training on Smart Board
 - Training on Pear Deck – Discussion through electronic gadgets
- Coordinator for Book Publications from Mechanical Department (AY 2014 – 2016)
- Registered for Guideship – Two Ph. D scholars are registered.
- Coordinator for registration committee in ‘SAVEX 2K14’ (Innovative Education Exhibition in Health, Technology, Management & Law), Saveetha University, Thandalam campus, Chennai – 602 105, January 8-10, 2014.

EVENT ORGANISED AT SAVEETHA SCHOOL OF ENGINEERING (SSE)

- ❖ One of the organizer for 3rd International Conference on Design, Analysis, Manufacturing and Simulation, SSE, Saveetha University, Chennai – 602 105, April 6-7, 2018.
- ❖ 2nd International Conference on Design, Analysis, Manufacturing and Simulation, SSE, Saveetha University, Chennai – 602 105, April 7-8, 2016.
- ❖ Workshop on Illuminate Pre-Eureka 2015 in association with IIT Bombay, SSE, Saveetha University, Chennai – 602 105, September 21, 2015.
- ❖ Visit to Dazzling Stone Home for Children Orphanage, Saraswathy Nagar, Sirukulathur, Kundarthur, Chennai-600 069, February 27, 2015.
- ❖ Workshop on Pumps – Design and Application, SSE, Saveetha University, Thandalem – 602 105, December 18-19, 2014.
- ❖ Seminar on Composite Materials, SSE, Saveetha University, Thandalam – 602 105, Sep 2, 2014.
- ❖ Workshop on Computational Fluid Dynamics, SSE, Saveetha University, Thandalem – 602 105, Sep 12-13, 2013.

PUMP RELATED TRAINING AND COURSES

- Attended Workshop on “Next Generation 3D Printing”, IIT Madras, Feb 22-23, 2018.
- Training on Pump Selection, Sizing, Installation, Operation, Maintenance based on API 610 Standards, NRCP, Jiangsu University, Zhenjiang, China - 212 013, Jan 5-6, 2017.
- Forum on Advances in Fluid Machinery Technology for Sustainable Future, National Research Center of Pumps (NRCP), Jiangsu University, Zhenjiang, China - 212 013, June 1-2, 2016.
- Course on Optimum Design Criteria for Pumps by Prof. Giorgio Pavesi (University of Padova, Italy), NRCP, Jiangsu University, Zhenjiang, China - 212 013, May 17-25, 2016.
- Course on Flow Physics Inside the Turbomachines-Pumps by Prof. Gerard Bois (ENSAM, France), NRCP, Jiangsu University, Zhenjiang, China - 212 013, May 4-11, 2016.
- Training on Pump Servicing and Diagnostic Tool, Kirloskar Brother Limited, Kirloskarwadi, Pune, Feb 1-5, 2016.
- Short term course on “Pumps and Cavitation”, IIT MADRAS, Chennai, and December 2005.

TRAINING AND COURSES

- Six Days workshop on MATLAB Programming for Metaheuristic Optimization Techniques, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai, 21-23 & 28-30 Nov 2019.
- Two Days training on ANSYS Workbench CFD 19.2, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai, 14-15 Nov 2019.
- Five Days workshop on Mechanical Systems and Mechanism for Underwater Engineering Applications at Naval Science and Technological Laboratory, DRDO, Vizag, India, 21-25 Oct 2019.
- Short term course on Mechanical CAD-CATIA V6, CADD School, Vadapalani, Chennai, Feb – May 2014.
- Short term course on CAD using UniGraphics, AU-FRG Institute of CAD/CAM, Anna University, Chennai – 600 025, 18th Oct – 24th Dec 2004.
- Short term course on FEA using ANSYS, AU-FRG Institute of CAD/CAM, Anna University, Chennai – 600 025, 27th May – 1st June 2002.
- Two days ANSYS India advanced workshop In CFD, Bangalore, December 2006.
- Three Days workshop on CFX and ICEMCFD, IIT MADRAS, Chennai, March 2004.
- One week training for “NI-LAB VIEW”, IIT Madras, Chennai, 2004.
- Training on AUTOCAD, Autodesk Training Center, Chennai, 7th May – 4th June 1998.

PROJECT AND INPLANT TRAINING

- TTK Healthcare Ltd., Chennai. - Boiler, Demineralization Plant, Process - **(30 days)**
- Mercury Process, Tirupur - Thermal and Electrical Energy Audit - **(15 days)**
- Royal Enfield Motors, Chennai. - Machine Shop, Assembly, Testing - **(15 days)**
- Simpson & Co. Ltd., Chennai. - Machine Shop, Assembly, Testing - **(30 days)**
- The K.C.P Ltd., Chennai. - Foundry, Machine Shop, Fabrication - **(10 days)**

EXTRA-CURRICULAR ACTIVITIES

- Charter member of Rotary Club (District 3230), Manali New Town, Chennai – 600 103, India, from 2014 onwards.
- Student Counselor of Guidance & Counseling Unit, IIT Madras, (AY 2006 – 2007).
- Executive member for PSG College Alumni Association (2005-2006).
- Treasurer for Infant Jesus Matric HSS Alumni Association (2008-2009).

REFERENCES

1. Post Doctoral Research Supervisor

Dr. Shouqi Yuan, Professor,
University Committee Chair,
Former President of the University,
No. 301 Xuefu Road, Jiangsu University,
Zhenjiang - 212 013, Jiangsu Province, China
Phone: +86-511-88792766
Email: shouqiy@ujs.edu.cn

2. Ph. D. Supervisor

Dr. S. Kumaraswamy, Former Professor,

Hydroturbomachines Lab,
Department of Mechanical Engineering,
Indian Institute of Technology Madras,
Chennai – 600 036, Tamil Nadu, India
Now at, No. 2A (GF), Plot 6, 2nd Street,
New Secretariat Colony, Velachery West,
Chennai - 600 042.
Mobile No.: +91-98400 84647
Email: s.kumaraswamy@gmail.com

- 3. Dr. Ji Pei**, Associate Professor,
No. 301 Xuefu Road, Jiangsu University,
Zhenjiang - 212 013, Jiangsu Province, China
Phone: (+86) 511 88786770
Email: jpei@ujs.edu.cn

OBJECTIVE

I hereby state and confirm that given an opportunity to work together, I shall disseminate the roles and responsibilities set upon me to the utmost satisfaction and best of my capabilities in the goodwill and betterment of the organization.

Date: 16-7-2020

S. Christopher