



Dhanakonda Gopinath

H.No: 41-158/1, Pipeline Road, Kukatpally, Hyderabad-500072
+919550238948 | dhanakondagopinath@gmail.com

Professional Summary

- A highly competent, Passionate post graduate mechanical engineer with excellent presentation and technical skills, Having 8 years of experience in teaching, Research and development
- Expertise in implementing innovative teaching approaches to enhance the teaching and learning process
- Experience in product development of medical devices and analyze the performance of designs
- Hands-on experience in creating prototype models using ultimaker3 extended rapid prototyping machine
- Strong experience in preparing the solid model for 3D printing with optimum settings in cura software

Work Experience

- [Theranos Life Sciences Private Limited, Hyderabad | Product Design Engineer](#) Jan 2019- Till date
Design and Development of microfluidic chip, Engineering Analysis of designs
Fabrication of medical device components using rapid prototyping machine
- [Chaitanya Bharathi Institute of Technology, Hyderabad | Assistant Professor](#) Sep 2014-May 2018
Subjects Handled : Fluid Dynamics, Mechanical Technology, EME, POM
Member of Mechanical Engineering Course Assessment Committee
Panel Judge for Student LED Design Conference-2015 held by SME-CBIT
- [GITAM School of Technology, Hyderabad | Assistant Professor](#) Jun 2013-May 2014
Subjects Handled: Fluid Mechanics, Applied Thermodynamics
Organizing Member of the National Seminar on Industrial Safety-2014

Education

- [Jawaharlal Nehru Technological University College of Engineering, Hyderabad](#) Sep 2010-Dec 2012
M.Tech in Engineering Design, 81%
- [Annamacharya Institute of Technology and Sciences, Rajampet](#) Jul 2003-May 2006
B.Tech in Mechanical Engineering, 70%

Diploma in Mechanical Engineering, 78%

Achievements and Awards

- Received the National Teacher's Excellence Award on 4th September, 2015 at New Delhi. Felicitated by Padma Vibhushan Dr. Purshotam Lal and Deepak Kumar-Director at Ministry of Home Affairs, Govt. of India
- Secured State 2nd Rank in Post Graduate Engineering Common Entrance Test (PGECET)-2012
- Qualified in GATE-2014 and Faculty Eligibility Test (FET) -2013 Conducted by JNTU- Hyderabad
- Received 1st Prize in a National Level Writing Competition Conducted by Institute of Engineers

Research and Development Projects

- **Design and Development of Microfluidic Chip Device to Detect CTCs**

We have developed patent pending microfluidic lab-on-a-chip device to detect and enumerate CTCs using artificial intelligence powered algorithms. The invention includes methods utilizing a microfluidic system for isolation of targeted cells through the use of microfluidic flow chamber. The present invention is to create a disturbed flow of blood to increase the capture rate of the biological with specific microstructure designs. Since the actual device had more than 3000 gates, We made certain simplifications during simulation. The flow of fluid in three different design iterations was simulated using the COMSOL Multiphysics software.

- **Design of Linear Connector and Interface Assembly**

We developed a design in SolidWorks for the existing dolomite linear connector with several modifications to suit our application. The linear connector connection system provides fast and reliable connection between microfluidic chips and 1.6 mm outer diameter tubing. The Top Interface works in conjunction with the linear connector, providing fluidic connections to the top surface of glass microfluidic chips.

Research Publications

- "Optimization of Four Wheeler Connecting Rod Using Finite Element Analysis" D.Gopinath, Ch.V.Sushma, Materials Today: Proceedings (Elsevier), Volume-2, Issues 4-5, Pages 2291-2299, September 2015
- "Design and analysis of assembly of Piston, Connecting rod and Crank shaft" G.Gopal, Dr L. Suresh Kumar,

Papers Presented in National/International Conferences

- Presented a Paper on “A Research on Flipped Classroom Approach to Improve Learning Skills of the Students in Technical Education” at 47th ISTE National Annual Convention during 27th-29th January, 2018
- Presented a paper on “Design and Optimization of Four Wheeler Connecting Rod Using Finite Element Analysis” at 4th International Conference on Materials Processing and Characterization on 15th March,2015

Memberships in Professional Bodies

- Member of the International Association of Engineers (IAENG)
- Associate Member of the Institute of Research Engineers and Doctors (IRED)

Subjects interested to teach

- Thermal Engineering
- Dynamics of Machines
- Power Plant Engineering
- Design of Machine Elements
- Refrigeration and Air Conditioning
- Fluid Mechanics and Hydraulic Machines

Declaration

I hereby declare that the above information is true and correct to the best of my knowledge.

Gopinath

(D.GOPINATH)