

## RESUME

**NAME:** Mr. SANADI ATULKUMAR GULAB.

**BIRTH DATE:** 18<sup>th</sup> August 1988.

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### OBJECTIVE:

To be an integral part of an organization that I join & serve the organization with the best of my quality so as to grow my knowledge with the organization.

### EDUCATIONAL QUALIFICATION:

**Doctor of Philosophy: Pursuing** (Mechanical Engineering)-**Sugar Industry.**

**Post-Graduation:** M. Tech. - Mechanical Engineering. (Heat & Power Engineering.)

**College:** Walchand College of Engineering, Sangli. (Autonomous Institute).

PG Degree	Year of passing	C.P.I.	Class
M. Tech	Aug 2015	7.25	First

### GATE:

Qualifying year	Discipline	Score	Marks out of 100
2012	ME	258	22.33

**Degree:** B.E. Mechanical Engineering.

**College:** D.K.T.E.'s Textile & Engineering Institute, Ichalkaranji.

**University:** Shivaji University, Kolhapur.

UG Degree	Year of passing	Average (%)	Class
B.E.	May 2011	66.59	First with Distinction

**Higher Secondary Education:**

**Name of junior college:** Mahatma Gandhi high school & junior college, Rukadi

<b>Examination</b>	<b>Board</b>	<b>Year of passing</b>	<b>Percentage</b>
H.S.C.	M.S.B.S.H.S.C.E. Kolhapur.	2006	54.17%

**Secondary Education:**

**Name of school:** Pioneer High school, Atigre.

<b>Examination</b>	<b>Board</b>	<b>Year of passing</b>	<b>Percentage</b>
S.S.C.	M.S.B.S.H.S.C.E. Kolhapur	2004	69.47%

**SKILLS:**

**Technical skills:** AutoCAD 2014, CATIA V5R15, etc.  
Beginner in 'ICEM CFD', 'FLUENT AND GAMBIT'.  
Autodesk Fusion 360

**PROJECTS:**

**Doctor of Philosophy: Pursuing** (Mechanical Engineering) in Shivaji University

**“ENERGY INTEGRATION OF MULTIPLE EFFECT OF EVAPORATOR IN SUGAR PLANT”**

In this study, Pinch analysis is a methodology for minimizing energy consumption of a process plant & Energy reduction comparison has been developed with respect to the effect of evaporation. Mathematical modeling has been done to the three-effect evaporator problem. Modeling and simulation of Three-effect evaporation systems are done to compare the steam economy in all effects. Simulation is done using CFD to solve non-linear complex multivariable equations.

**M.TECH -MECH (HEAT AND POWER ENGG):**

**DURATION: 2 year**

**Development, Performance & Analysis of Low Temperature Refrigeration System for A Small Cold Room By Using Brine Solution**

The interest in application of secondary refrigerant systems in refrigeration is increasing. Reduced refrigerant losses and the chance for lower installation and operation costs is promoting this development. Secondary refrigerant were limited to the medium temperature sector. More recently, highly efficient brine fluids based on organic salt solutions have been introduced which can be used for low temperature application as well as increased flexibility and efficiency while it is reducing the installation costs.

A major use of refrigeration is in the preservation, storage and distribution of perishable foods. Cold room is an insulated room where low temperature maintains with the help of refrigeration system. The cold room facilities available are mostly for a single commodity like potato, orange, apple, grapes, pomegranates, flowers, etc. which results in poor capacity utilization. The cold room facilities are the prime infrastructural component for such perishable commodities.

**B.E. MECHANICAL:**

**DURATION: 1 year.**

**MANUFACTURING OF DOVETAIL SLIDE FOR DUPLEX MILLING MACHINE (SONSORED BY :-SAMARTH ENGG, KOLHAPUR).**

We know that rate of production on milling machine with linear slide is very low as compare with dovetail slide up 5 to 6 number of products increases. We develop with help of Samarth engineering, Kolhapur Company, these dovetail slide on duplex milling machine.

**EXPERIENCE:**

**Teaching: 8 Years**

Designation	Name of Institution	Period
Assistant Professor	Ashokrao Mane Group of Institutions, Vathar Tarf Vadgoan.	July 2015 to present

**SUBJECTS TAUGHT:**

Sr. No.	Subject	Year (Class)	Semester
1	Heat and Mass Transfer	TE Mechanical	Odd (V <sup>th</sup> )
2	Renewable Energy Engineering	TE Mechanical	Even (VI <sup>th</sup> )
3	Wind Energy	BE Mechanical	Odd (VII <sup>th</sup> )
4	Refrigeration and Air Conditioning	BE Mechanical	Odd (VII <sup>th</sup> )
5	Cryogenics Engineering	BE Mechanical	Even (VIII <sup>th</sup> )

6	Energy And Power Engineering	BE Mechanical	Even (VIII <sup>th</sup> )
7	Fluid And Turbo Machinery	SE Mechanical	Even (IV <sup>th</sup> )
8	Applied Thermodynamics	SE Mechanical	Odd (III <sup>rd</sup> )
9	Numerical Methods In Mechanical Engineering.	SE Mechanical	Even (IV <sup>th</sup> )
10	Fluid Mechanics	SE Mechanical	Odd (III <sup>rd</sup> )
11	Energy And Environmental Engineering.	FE Applied Science	Odd(1st )

### **BE PROJECTS GUIDED:**

1. 'Design and Development of Multipurpose Chaff Cutting Machine.' (A.Y. 2016-17).
2. 'Design and Development of Inclined Type Plate & Tube Heat Exchanger'(A.Y. 2017-18).
3. 'Development of De-super heater for Domestic Refrigerator' (A.Y. 2018-19).
4. 'Design and Development of Magnetic chip Collector with Swarf Collector' (A.Y. 2018-19).
5. 'Design and Manufacturing Silver and Gold Making Machine' (A.Y. 2019-20).

### **STTP's ATTENDED:**

- Advanced Technology Of Cryogenics In DYPCOE Kolhapur 2016.
- Formulation and Assessment Of PEO'S. PO'S& CO'S For NBA Accrediation Process. SGI Atigre, 2016.
- ISTE Program In ADCET Ashta. 2016.
- Research Methodology in AMGOI Vathar 2017.
- Renewable Energy: Past, Present and Future in AMGOI Vathar Feb 2018.
- Technical Computing Using Matlab (Technicamp-2018) In AMGOI June2018.
- Product Design Engineering in AMGOI Vathar Dec 2018.
- Soft Computing Techniques for Modeling And Optimization In Mechanical Engineering, in AMGOI Vathar March 2019.
- One Week Faculty Development Program on " A New Era of Manufacturing : Challenges & Opportunities in DYPCOE Bawada, Kolhapur July 2022
- Teaching, Learning, Assessment, Examination and Evaluation reforms for overall quality improvement in OBE March 2022.
- National Intellectual Property Awareness Mission In NMCOE, Peth, Sangli November 2023.

### PAPERS PUBLISHED:

- Performance Investigation of Chilling Plant With R 22 & Secondary Refrigerant Ethylene Glycol (C<sub>2</sub>H<sub>6</sub>O<sub>2</sub>) In JETIR (Volume 1 Issue 6 November-2014).
- Comparative Performance Study of Low Temperature Refrigeration System Using Refrigerant R134a Instead To R22 JETIR (Volume 2 Issue 6 June-2015).
- Performance Evaluation of Optimum Insulation materials For Solar Water Tank To Improvement of Efficiency (Conference Publication).
- Comparative Performance Study of Low Temperature Refrigeration System Using Refrigerant R134a Instead To R22 (Conference Publication).
- Comparative Review on Multiple Effect Evaporators in Sugar Industry. ICCT 2023. (Conference Publication).
- Multiple Effect Evaporators in Sugar Industry: Comprehensive Review. ICFAS 2023. (Conference Publication).

### DESIGN PATENT:

- Design Patent is Registered and Published “Evaporator System in Sugar Production Unit” Application Number 3862288-001.

### AREA OF SPECIALIZATION:

- Thermal Engineering.
- Heat Exchangers.
- Renewable Energy.
- Refrigeration and Air-Conditioning.
- Numerical Methods.

### DEPARTMENTAL RESPONSIBILITIES:

- Worked as Faculty Coordinator for **Project Coordinator**.
- Departmental coordinator for ‘**Heat and Mass Transfer**.’
- Departmental coordinator for ‘**NBA Criterion No. 3 – Course Outcome and Program Outcome Attainment**’

### DECLARATION:

I hereby solemnly declare that the information furnished above is true to best of my knowledge.

PLACE: Kolhapur

Sanadi Atulkumar Gulab.