

**Name:** SAGAR YANDA

Employee ID: A5MEC00T45

**Designation:** Asst. Professor

**Department:** Mechanical Engineering

Date of Birth: 23-08-1987

Father Name: Yanda Rajarao

Mother Name: Sattaru Venikumari

Reservation Category if Any: **BC-A**

**Address:** Door No 1-464, Sainaknagar, Tolusurupalli Road, Tekkali, Srikakulam

**Mobile Number:** 9491816317/7989551354

**Email id:** ysagar.mech@adityatekkali.edu.in

**Date of Joining in the Institution:** 14-03-2014

**Academic Excellence:**

| QUALIFICATION           | BOARD / UNIVERSITY | DIVISION    | YEAR        |
|-------------------------|--------------------|-------------|-------------|
| PhD (ME)                | NIT Raipur         | -           | Pursuing    |
| M.Tech (Machine Design) | JNTU Kakinada      | DISTINCTION | Oct, 2011   |
| B.E (Mechanical)        | Andhra University  | FIRST CLASS | April, 2008 |

**Total Years of Experience (Teaching/Industry):** 07 Years

| Period   |           | Organization/Institution | Designation         |
|----------|-----------|--------------------------|---------------------|
| Mar 2014 | Till date | AITAM, Tekkali           | Assistant Professor |
| Mar 2011 | Apr 2013  | DK Industries            | Engineer            |

**Areas of Interest:**

1. Natural Fibers
2. Additive Manufacturing
3. Design of Machine Members
4. Engineering Mechanics
5. Finite Element Analysis
6. Mechanics of Solids

**Guidance of Academic Projects:**

- i) Doctoral Projects : -
- ii) Masters Projects : 1



### **Memberships of Professional Societies and Other Organizations:**

1. **Life member**, Indian Society for Technical Education (ISTE)
2. **Life member**, Institute of Engineers (IE)

### **Other Responsibilities:**

1. Department of Mechanical Engineering Yukthi Coordinator.
2. Department of Mechanical Engineering Time table Coordinator.
3. Department of Mechanical Engineering Project Coordinator.
4. Department of Mechanical Engineering APSSDC Coordinator.
5. CAD/CAM Lab in charge

### **Details of Book Publications:**

1. **Sagar Yanda**, Satish Geeri, Ashok Kumar Kottapalli” Fabrication and mechanical behaviour of E-glass fiber based composites” published book chapter on Lambert Academic publishing.
2. **Sagar Yanda**, Satish Geeri “Some Experimental Studies of Glass Fiber Oriented Reinforced Polymer Composites” published book chapter on AkiNik Publications, **ISBN:** 978-93-90420-33-9, **Book DOI:** <https://doi.org/10.22271/ed.book.970>
3. **Sagar Yanda**, Haribabu yegireddy “Design and analysis of composite drive shaft” ” published book chapter on Scholar’s press publishing.
4. **Sagar Yanda**, Haribabu yegireddy “Design and analysis of double pipe helical heat exchanger” published book chapter on Scholar’s press publishing.

### **Details of Patents:**

1. Aditya Institute Of Technology And Management Mr. D Bhanuchandra Rao, Dr. Apparao Damarasingu, Mr. Hari Babu Yegireddy, Sagar Yanda, Mr. Doddi Ramajogi Naidu, Mr. Devi Prasad Pilla “AI & IOT BASED BIKE CONDITION ANALYZING DEVICE” Design number: 397729-001, Date: 16-10-2023.
2. Aditya Institute Of Technology And Management Dr. Jagadish, Raghveer dontikurti , P. Suman, Sagar Yanda, Dr. P. Srinivasrao “A SYSTEM AND METHOD FOR SELF GENERATION OF POWER BY ELECTRIC VEHICALS” Date: 26-05-2023.
3. Dr. Yenda Srinivasa Rao, )Mr. Gosula Suresh, Mr. Chandrashekhar B, Mr. Sagar Yanda, Mrs. R. Bala Bhavani, Mr. Manikyam Sandeep, Mr. Elayaraja R, Mr. Suresh, Dr. D. V. Sreekanth “AI BASED INTELLECTUAL BIKE ENGINE START- STOP MECHANISM USING FINGER PRINT” Application No.202441068326 A, Date of filing of Application :10/09/2024, Publication Date : 20/09/2024.

### **International Journals:**

1. **Sagar Yanda**, Swami Naidu Gurugubelli “Micro hardness Studies on AL-8MG Alloys to Analyses The Deformation Behaviour” International Journal of Mechanical Engineering Research and Development (IJMERD), ISSN 2248 – 9347(Print) ISSN 2228 – 9355(Online), Volume 1, Number 2 May-October (2011), pp. 41-52
2. **Sagar Yanda**, B. Krishnamurthy, G.Satish “Finite Element Analysis of Axial Flow Turbine” International Journal of Innovative Research in Science, Engineering and Technology (An ISO 3297: 2007 Certified Organization) Vol. 4, Special Issue 6, May 2015.
3. D. Apparao, **Y. Sagar** “Design and Development of Hand Water Pump with a Pendulum” International Journal of Engineering and Management Research Volume-5, Issue-6, December-2015.
4. **Sagar Yanda**, D.Apparao “DESIGN AND ANALYSIS OF TURBO JET ENGINE” Asia Pacific Journal of Research Vol: I. Issue XLII, August 2016.
5. D. Sreeramulu, **Y. Sagar**, P. Suman and A.Satish Kumar “Integration of Process Planning and Scheduling of a Manufacturing Systems using Petri nets and Genetic

- Algorithm” Indian Journal of Science and Technology, Vol 9(41), DOI: 10.17485/ijst/2016/v9i41/100874, November 2016
6. Ch.Ravikumar, P. Srihari, **Y Sagar** Thermal analysis of artificial hip joint by using biodegradable materials INTERNATIONAL JOURNAL FOR RESEARCH & DEVELOPMENT IN TECHNOLOGY
  7. D.Sreeramulu, C.J.Rao, Y.Sagar, M.Venkatesh Finite Element Modeling and Machining of Al 7075 Using Coated Cutting Tools ScienceDirect Materials Today: Proceedings 5 (2018) 8364–837
  8. **Sagar Yanda**, Gunji Bala Murali, Dr. Siva Shankar raju, Bill Jason Duckworth, Chandra Sen, Sidakdeep Singh Chadha ]”Design Optimization of Universal Joints for All-Terrain Vehicles” International Conference on Design, Automation, and Control (ICDAC 2020) IOP Conf. Series: Materials Science and Engineering doi:10.1088/1757-899X/1123/1/012012
  9. C. J. Rao, R. Siva Sankara Raju, D. Sreeramulu, and **Y. Sagar** “Fabrication and Evaluation of Optimized Parametric Condition During EDM Machining of Al-CSA Composite Using Taguchi Orthogonal Array” Advances in Design and Thermal Systems Select Proceedings of ETDDMT 2020.
  10. **Sagar Yanda**, Gunji Bala Murali, Dr. Siva Shankar raju, Bill Jason Duckworth, Chandra Sen, Sidakdeep Singh Chadha “ Design Optimization Of Universal Joint for All Terrain Vehicles” International Conference on Design, Automation, and Control (ICDAC 2020) IOP Conf. Series: Materials Science and Engineering 1123 (2021) 012012 IOP Publishing doi:10.1088/1757-899X/1123/1/012012.
  11. C. J. Rao, R. Siva Sankara Raju, D. Sreeramulu, and **Y. Sagar** “Fabrication and Evaluation of Optimized Parametric Condition During EDM Machining of Al-CSA Composite Using Taguchi Orthogonal Array” Advances in Design and Thermal Systems, Lecture Notes in Mechanical Engineering (2021), [https://doi.org/10.1007/978-981-33-6428-8\\_33](https://doi.org/10.1007/978-981-33-6428-8_33)
  12. Surajit Barad, Jagadish , Sathish Kumar Adapa , and **Sagar Yanda** “ Experimental Optimization of Green FDM Process Parameters: An Integrated MCDM Approach” Advances in Manufacturing Engineering, Lecture Notes in Mechanical Engineering (2023), [https://doi.org/10.1007/978-981-19-4208-2\\_17](https://doi.org/10.1007/978-981-19-4208-2_17)
  13. Sivasankara Raju Rallabandi, Sathish Kumar Adapa, Jagadish, C.J. Rao & Sagar Yanda “EVALUATION OF THERMO-MECHANICAL BEHAVIOR OF HEMP FIBER POLYMER COMPOSITES” 2152-2057/22/\$35.00 © 2022 by Begell House, Inc. [www.begellhouse.com](http://www.begellhouse.com)
  14. Sathish Kumar Adapa , Jagadish , Sagar Yanda , and Siva Sankara Raju “Optimization of AWJM Process on Processing of Lite Bamboo Reinforced Polymer Composite by Using Grasshopper Algorithm” Advances in Manufacturing Engineering, Lecture Notes in Mechanical Engineering (2022), [https://doi.org/10.1007/978-981-19-4208-2\\_5](https://doi.org/10.1007/978-981-19-4208-2_5)
  15. Sivasankara Raju Ra,†, Jagadishb, CJ Raoc, Satish Kumar Aadapad, Sagar Yanda “ Predication of temperature distribution and strain during FSW of dissimilar Aluminum alloys using Deform 3D” Material TECH 2022 (Second International Conference on Materials and Technologies (2022).
  16. Sivasankara Raju Rallabandi†, Sagar Yanda, C.J. Rao, B. Ramakrishna, D. Apparao “Development of a color-code sorting machine operating with a pneumatic and programmable logic control” e International Conference on Materials Innovation and Sustainable Manufacturing <https://doi.org/10.1016/j.matpr.2023.05.150>
  17. Sagar Yanda , Jagadish Sathish Kumar Adapa , N. V. Swamy Naidu and Sivasankara Raju “Structural and Thermal Analysis of Modified Ventilated Paperboard Using Finite Element Analysis” Advances in Material Science and Metallurgy, Lecture Notes in Mechanical Engineering, [https://doi.org/10.1007/978-981-19-4918-0\\_21](https://doi.org/10.1007/978-981-19-4918-0_21)
  18. Begari Vijayakrishna, G. Mrudula, **Y.Sagar**, P.Prakesh, Durga Venkatesh Janaki, M. V. N. V. Satyanarayana “Mechanical Properties Enhancement in Friction Stir Processed AA2024 Alloy through Pin Profile Optimization” J. Inst. Eng. India Ser. D <https://doi.org/10.1007/s40033-024-00751-3>, Received: 23 February 2024 / Accepted: 22 April 2024 © The Institution of Engineers (India) 2024

19. Sudhakar Uppada, **Sagar Yanda**, Kishore Kumar Kandi, P.Prakesh, Durga Venkatesh Janaki “Effect of Accumulative Roll Bonding on Microstructure and Mechanical Behavior of Al6061” J. Inst. Eng. India Ser. D <https://doi.org/10.1007/s40033-024-00805-6>, Received: 14 June 2024 / Accepted: 23 August 2024 © The Institution of Engineers (India) 2024.
20. Marukurthi V N V Satyanarayana, Sagar Yanda, Kethavath Kranthi Kumar, Bade Venkata Suresh, Durga Janaki Venkatesh, Rajani Kanthreddy Kolagotla. Kumar Raja Gudaru “Effect of multi-pass overlapping friction stir processing on fatigue behavior of Al-Cu alloy” Proc IMechE Part L: J Materials: Design and Applications 1–12 © IMechE 2024, DOI: 10.1177/1464420724127672

### International Conferences:

1. **Sagar Yanda**, B. Krishnamurthy, G.Satish “Finite Element Analysis of Axial Flow Turbine”, International Conference on MULTICON’15, Muthayammal Engineering College, Rasipuram, Tamilnadu ,29-30 April’2015.
2. D. Sreeramulu, **Y. Sagar**, P. Suman and A.Satish Kumar “Integration of Process Planning and Scheduling of a Manufacturing Systems using Petri nets and Genetic Algorithm” 2<sup>nd</sup> International Conference on Design, Analysis, Manufacturing & Simulation (ICDAMS 2016), Saveetha School of Engineering, Saveetha University, Chennai, 7-8 April 2016.
3. D. Sreeramulu, M. Venkatesh, **Y. Sagar**, A.Satish Kumar “Utilisation of Blending Karanja oil with Methanol in a Diesel Engine” International Conference on Recent Trends in Engineering, Science & Technology (ICRTEST-2016), St. Peter’s Engineering College, Dullapally, Hyderabad, 25-27 October 2016.
4. D.Sreeramulu, C.J.Rao, **Y.Sagar**, M.Venkatesh “Finite Element Modeling and Machining of Al 7075 Using Coated Cutting Tools” International on Emerging Trends in Materials and Manufacturing Engineering (IMME2017), NIT Trichy, Chennai, 10-12 March 2017.
5. **Sagar Yanda**, Gunji Bala Murali,Dr. Siva Shankar raju, Bill Jason Duckworth, Chandra Sen, Sidakdeep Singh Chadha |”Design Optimization of Universal Joints for All-Terrain Vehicles” International Conference on Design, Automation, and Control (ICDAC 2020) IOP Conf. Series: Materials Science and Engineering, held on 6<sup>th</sup> January to 8<sup>th</sup> January, 2020 at VIT Vellore, Tamil Nadu, India
6. **Sagar Yanda**, D.Sreeramulu, Chigilipalli Kiran “Automatic colour coding sensing punching machine based on Pneumatics” in International Virtual Conference on “Mechatronics, Automation and Cyber Physical Systems” (MAC-2020) organized by Centre for Mechatronics and Cyber Physical Systems, School of Mechanical Engineering, VIT, Vellore, Tamil Nadu, India, on 26 and 27th June 2020.
7. **Sagar Yanda**, D.Sreeramulu, Chigilipalli Kiran “Automatic colour coding sensing punching machine based on Pneumatics” in International Virtual Conference on “Mechatronics, Automation and Cyber Physical Systems” (MAC-2020) organized by Centre for Mechatronics and Cyber Physical Systems, School of Mechanical Engineering, VIT, Vellore, Tamil Nadu, India, on 26 and 27th June 2020.
8. **Sagar Yanda** “ Development of Color-Code Sorting Machine Operating with a Pneumatic and Programmable Logic Control” in International Conference on Materials Innovation and Sustainable Manufacturing ( I C M I S M- 2 0 2 2 ) during 16th & 17th December 2022, organized by the Department of Mechanical Engineering, Vishnu Institute of Technology-Bhimavaram, Andhra Pradesh, India.
9. **Sagar Yanda** “Prediction of Thermo mechanical behavior of hemp fiber polymer composites” in International Conference on Futuristic Advancement in materials,

manufacturing and during 16th & 17th December 2022, organized by the Department of Mechanical Engineering, Vishnu Institute of Technology-Bhimavaram, Andhra Pradesh, India.

#### **Details of Conferences / Workshops / Refresher Courses Attended**

##### **Internal:**

| <b>S. No</b> | <b>Dates</b>                                      | <b>Name of the programme</b>                                                                                      | <b>Host Institute</b> |
|--------------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1.           | 15 <sup>th</sup> -16 <sup>th</sup> November, 2014 | Two Day Seminar on “Twenty First Century, the dawn of Digital Era Algological Issues Of Technical Teachers”       | AITAM, Tekkali        |
| 2.           | 17 <sup>th</sup> -21 <sup>th</sup> December, 2015 | Five Day Faculty Development Program on “Advances and Applications of Composites, Nano Materials and Nano Fluids. | AITAM, TEKKALI        |
| 3.           | 13 <sup>th</sup> -14 <sup>th</sup> July, 2019     | Five Day Faculty Development Program on “Outcome Based Education.                                                 | AITAM, TEKKALI        |
| 4.           | 1 <sup>st</sup> -5 <sup>th</sup> June, 2020       | Advanced Manufacturing Enterprise in Digital Era                                                                  | AITAM, TEKKALI        |
| 5.           | 21 <sup>st</sup> -25 <sup>th</sup> August, 2023   | Cloud Infrastructure                                                                                              | AITAM, TEKKALI        |

##### **External:**

| <b>S. No</b> | <b>Dates</b>                               | <b>Name of the programme</b>                                                                                                                                                                                                 | <b>Host Institute</b>                                          |
|--------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| 1.           | 10-12 April, 2014                          | Three Day national Workshop on “Advances and Applications of CFD”                                                                                                                                                            | JNTU K, Kakinada                                               |
| 2.           | 6 <sup>th</sup> December, 2014             | One Day national Workshop on “Solid Waste Management in Ferrous and Non-Ferrous Industries”                                                                                                                                  | JNTU Kakinada, University college of engineering Vizinagaram   |
| 2.           | 29-30 April, 2015                          | “Finite Element Analysis of Axial Flow Turbine”, International Conference on MULTICON’15                                                                                                                                     | Muthayammal Engineering College, Rasipuram, Tamilnadu          |
| 3.           | 07-08 April, 2016                          | 2 <sup>nd</sup> International Conference on Design, Analysis, Manufacturing & Simulation (ICDAMS 2016) on “Integration of Process Planning and Scheduling of a Manufacturing Systems using Petri nets and Genetic Algorithm” | Saveetha University, Chennai                                   |
| 4.           | 25-27 October, 2016                        | ” International Conference on Recent Trends in Engineering, Science & Technology (ICRTEST-2016) on “Utilisation of Blending Karanja oil with Methanol in a Diesel Engine”                                                    | St. Peter’s Engineering College, Dullapally, Hyderabad         |
| 5.           | 28 <sup>th</sup> November-03 December 2016 | One Week Faculty Improvement Program (FIP) on “Autodesk Nastran In-CAD”                                                                                                                                                      | Madanapalle Institute of Technology & Science (MITS), Chittoor |

|     |                                                     |                                                                                                                                                                           |                                                                                       |
|-----|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 6.  | 10-12 March, 2017                                   | ” International on Emerging Trends in Materials and Manufacturing Engineering (IMME2017) on “Finite Element Modeling and Machining of Al 7075 Using Coated Cutting Tools” | NIT Trichy, Chennai                                                                   |
| 7.  | 4-6 February, 2019                                  | Current Trends in Aerospace                                                                                                                                               | APSSDC                                                                                |
| 8   | 15-10 October, 2019                                 | One Week Faculty Developmentt Program (FDP) on “Product Re-Engineering”                                                                                                   | APSSDC                                                                                |
| 8.  | 18-24 April, 2020                                   | Practical aspects of Finite Element Analysis Using ABAQUES                                                                                                                | APSSDC                                                                                |
| 9.  | 30 April-02 May, 2020                               | Automotive Structures Design using <b>CATIA</b>                                                                                                                           | APSSDC                                                                                |
| 10  | 30th April to 4th May 2020.                         | Design, Simulation and Development of Unmanned Aerial Vehicles (Drones) and Applications in Various Engineering Sectors                                                   | NAFEMS in association with Rajarambapu Institute of Technology, Islampur, Maharashtra |
| 11. | 6th May to 9th May 2020                             | 3D printing for design and advanced development applications for automotive structures                                                                                    | NAFEMS in association with Rajarambapu Institute of Technology, Islampur, Maharashtra |
| 12. | 18th May to 30th May 2020                           | CATIA                                                                                                                                                                     | APSSDC                                                                                |
| 13. | 21th May to 23rd May 2020                           | Design for Manufacturing And Assembly (DfMA)                                                                                                                              | APSSDC                                                                                |
| 14. | 21th May to 23rd May 2020                           | Outcome Based Education                                                                                                                                                   | Lendi Institute Of Technology                                                         |
| 15. | 28th May to 30th May 2020                           | Finite Element Analysis for Beginner: Theory and Simulation                                                                                                               | VIT, Vellore                                                                          |
| 16. | 1 <sup>st</sup> June to 13 <sup>th</sup> June 2020  | SOLID EDGE                                                                                                                                                                | APSSDC                                                                                |
| 17. | 03 <sup>rd</sup> June to 06 <sup>th</sup> June 2020 | Finite Element Analysis approach for industrial applications using ANSYS                                                                                                  | APSSDC                                                                                |
| 18. | 8 <sup>th</sup> June to 10 <sup>TH</sup> June 2020  | Fluid & Structural Simulation using CRADLE                                                                                                                                | Lakireddy Bali Reddy College of Engineering, Mylavaram.                               |

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|-----|-----------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 19. | 22 <sup>nd</sup> June to 27 <sup>th</sup> June 2020 | Effective Research Writing using LaTeX                                       | IIT Bombay                                                                                   |
| 20. | 20 <sup>th</sup> July to 24 <sup>th</sup> July 2020 | CATIA V5 Chassis Design                                                      | APSSDC                                                                                       |
| 21. | 2 <sup>nd</sup> Feb to 3 <sup>rd</sup> Feb 2022     | Radiation effects on polymers and advances in organic optoelectronic devices | Vaagdevi college of engineering                                                              |
| 22. | 21 <sup>st</sup> -25 <sup>th</sup> November 2022    | HYBRID ELECTRIC VEHICLES                                                     | GMR Institute of Technology, Rajam and Velagapudi Ramakrishna Siddhartha Engineering College |
| 23. | 05 -12 <sup>th</sup> December 2022                  | Optimization for Engineering Problems with MAT Lab                           | National Institute of Technical teacher Training and Research, Chandigarh                    |
| 24. | 12 -16 <sup>th</sup> December 2022                  | Material characterization Techniques                                         | National Institute of Technical teacher Training and Research, Chandigarh                    |
| 25. | 27 -31 <sup>th</sup> March 2023                     | Recent Advances in Composite Materials                                       | NIT, Puducherry                                                                              |
| 26. | 27 -31 <sup>th</sup> March 2023                     | Development of Automation Competencies                                       | National Institute of Technical teacher Training and Research, Chandigarh                    |
| 26. | 24 -28 <sup>th</sup> April 2023                     | Advances in natural fiber reinforced composites                              | NIT, Rourkela                                                                                |
| 27. | 11 -15 <sup>th</sup> March 2024                     | Digital tools for teaching and learning                                      | National Institute of Technical teacher Training and Research, Chandigarh                    |
| 28. | 09 -12 <sup>th</sup> December 2024                  | Applications of VR/AR in Manufacturing                                       | National Institute of Technical teacher Training and Research, Chandigarh                    |
| 29. | 27 <sup>th</sup> Jan -1 <sup>st</sup> Feb 202g      | Transformative Technologies in Manufacturing                                 | All India council for technical education                                                    |

#### **Certifications:**

1. Got certified with Elite (46%) from NPTEL online certification course (8 Weeks) on "Engineering Mechanics: Statics and Dynamics" conducted by IIT, Madras in Feb-March 2018.

2. Got certified with Elite (67%) from NPTEL online certification course (8 Weeks) on "Introduction to Operations Research" conducted by IIT, Madras in Aug-Sept 2018
3. Got certified with Elite (76%) from NPTEL online certification course (8 Weeks) on "Accreditation and Outcome Based Learning" conducted by IIT, Kharagpur in Aug-Oct 2019
4. Got certified from PYTHAGORAS ENGINEERING CONSULTANCY & SERVICES online certification course (1 Week) on "FEA applications in industries using ANSYS"( 1 week) in June 2020.
5. Got certified with Elite (75%) from NPTEL online certification course (12 Weeks) on "Rapid Manufacturing" conducted by IIT, Kanpur in July-Dec 2023

**Other Achievements:**

1. Secured All India GATE Rank 3877 in 2009
2. **Y.Sagar**, for having been selected as the **best paper** "Integration of Process Planning and Scheduling of a Manufacturing Systems using Petri nets and Genetic Algorithm" 2<sup>nd</sup> International Conference on Design, Analysis, Manufacturing & Simulation (ICDAMS 2016), Saveetha School of Engineering, Saveetha University, Chennai, 7-8 April 2016.
3. Ratified as Asst. Professor in 2016 JNTUK selections.



**Signature**