# SRI SAI RAM ENGINEERING COLLEGE

## DEPARTMENT OF MECHANICAL ENGINEERING

| Name: Dr. M. ARUL PRAKASH                           |   |  |  |  |  |
|---|---|--|--|--|--|
| <b>Designation:</b>                                 | Associate Professor   |  |  |  |  |
| Qualification:                                      | M.E., Ph.D.   |  |  |  |  |
| Area of Specialization:                             | Computational Fluid Flow and Heat Transfer Thermal Engineering, Teaching- 22 years  |  |  |  |  |
| Experience:   | Industry-10 months  |  |  |  |  |
| Number of Workshops/<br>Conferences/ FDP Conducted: | <b>FDP Conducted on</b> "Computational Fluid Dynamics and Engineering Simulation" June – 2020.  |  |  |  |  |
| Resource person for FDP:                            | Topic of Presentation: "Code Development FOR Heat Transfer Problems in CFD", Seth Vishambhar Nath Institute of Engineering and Technology, Safedabad, Lucknow-Barabanki Highway, UP. July 2020.  Topic of Presentation: "Simulation of Hydraulics and pneumatic circuits", FDP on 'Hydraulics and Pneumatics'.  Sri Sai Ram Engineering College, Chennai. |  |  |  |  |
| Number of Workshops/                                | Worshop/FDP/STTP – 19   |  |  |  |  |
| Conferences/ FDP Attended:                          | National/Int. Conference - 06   |  |  |  |  |
| Publications:                                       | Journals: International: 09  Conferences: National: 01  |  |  |  |  |
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|   |   |  |  |  |  |
|   |   |  |  |  |  |
|   | International: 03   |  |  |  |  |

## **ACADEMIC BACKGROUND:**

| Degree/<br>Qualification                               | Institution  | Year of<br>Passing | Board/University             | Percentage<br>of marks<br>(%) |
|--|--|--------------------|------------------------------|-------------------------------|
| Ph.D<br>(Computational<br>Studies on Wall<br>Jet Flow) | Institute of Road and Transport Technology, Erode,                   | 2018               | Anna University,<br>Chennai. | -                             |
| M.E<br>(Thermal<br>Engineering)                        | Karunya Institute of Technology, Coimbatore.                         | 2000               | Bharatiar<br>University      | CGPA=7.94                     |
| B.E (Mechanical<br>Engineering)                        | Arulmigu Meenakshi Amman<br>College of Engineering,<br>Kancheepuram. | 1997               | University of<br>Madras      | 61%                           |
| Higher<br>Secondary                                    | Carmel Higher Secondary School, Nagercoil.                           | 1993               | State Board, TN.             | 82%                           |
| S.S.L.C  | Carmel Higher Secondary School, Nagercoil.                           | 1991               | State Board TN.              | 83%                           |

### PROFESSIONAL EXPERIENCE:

| Name of the College /                                | Designation            | Date of<br>Joining | Date of<br>Relieving | Experience |        |
|--|------------------------|--------------------|----------------------|------------|--------|
| Industrial   |                        |                    |                      | Years      | Months |
| Sri Sairam Engineering<br>College                    | Associate<br>Professor | 19-06-2013         | Till Date            | 8          | 08     |
| Global Institute of<br>Engineering and<br>Technology | Assistant<br>Professor | 04-07-2011         | 31-05-2013           | 01         | 10     |
| Noorul Islam University                              | Assistant<br>Professor | 04-08-2010         | 07-06-2011           | -          | 10     |
| Adhiyamaan College of Engineering                    | Lecturer               | 18-01-2006         | 03-08-2010           | 04         | 07     |
| SCAD College of<br>Engineering and<br>Technology     | Lecturer               | 17-12-2004         | 22-08-2005           | -          | 08     |
| Maharaja Engineering<br>College                      | Lecturer               | 01-12-2000         | 16-12-2004           | 04         | -      |
| Sankara Institute of<br>Technology                   | Lecturer (Polytechnic) | 16-06-1998         | 16-06-1999           | 01         | -      |
| KSG Industrials                                      | Engineer<br>Trainee    | 28-07-1997         | 13-061998            | -          | 10     |

#### List of publications in International Journals:

**Arul Prakash, M**, Mayilsamy, K, and Rajesh Kanna, P, "Numerical simulation of two-dimensional laminar wall jet flow over solid obstacle". In Applied Mechanics and Materials, volume 592, pages 1935–1939. Trans Tech Publications, 2014.

**Arul Prakash, M,** Mayilsamy, K, and Rajesh Kanna, P, "Numerical investigations on effect of obstacle in an incompressible laminar wall jet flow". In Applied Mechanics and Materials, volume 852, pages 747–753. Trans Tech Publ, 2016.

**Arul Prakash, M,** Mayilsamy, K and Murali, G, "Effect of inlet slot dimension onlaminar plane wall jet flow over an obstacle". In Advances in Natural and Applied Sciences, volume 11(4), pages 580–587. AENSI Publication, 2017.

**Arul Prakash, M,** Mayilsamy, K, Maheandera Prabu, P, Ravinthiran, A, and Murali, G, "Flow analysis of laminar wall jet over curved cavity with a channel mounted fin". International Journal of Recent Technology and Engineering, 8(3):1876–1882, 2019.

Murali, G, Nagavamsi, V, Srinath, A, and **M Arul Prakash**, "Battery Thermal Management System Using Phase Change Material on Trapezoidal Battery Pack with Liquid Cooling System". International Journal of Advanced Science and Technology, 29 (5), pages: 5288 - 5300, Science and Engineering Research Support Society (SERSC), 2020.

Ravinthiran, A, Suresh, M, Babu, T, Mani, R, and **Arul Prakash, M**, "Design, Analysis and Development of Epoxy Resin made Omnidirectional Wind Turbine." In IOP Conference Series: Materials Science and Engineering, vol. 988, no. 1, p. 012044. IOP Publishing, 2020.

**Arul Prakash, M,** Meganathan, S, "Topology Optimization of Connecting Rod Using DOE", Proceedings of International Conference on Advances In Mechanical Engineering (ICAME'21), Sri Sai Ram Engineeringg College, pp-17, 2021.

**Arul Prakash, M,** Meganathan, S, "Parametric Studies on Flow Characteristics of Swing Type Check Valve", Proceedings of International Conference on Advances In Mechanical Engineering (ICAME'21), Sri Sai Ram Engineering College, pp-18, 2021.

Ajith Kumar, T, **Arul Prakash, M,** Ajith, R, Abishek, N, Surendhar, S, "Development of Ultrasonic Sensor Based Automatic Braking System". International Journal of Engineering Research in Computer Science and Engineering. Volume 6, Issue 7, pp. 117-124, 2019. IFERP.

Rama Subramanian, M, Ramprakash, K, Sunil Kaashyap, B.N, Balaji, B, **Arul Prakash, M**, Elanchezhian, C, Indran, K, "Thermo economic advantage of absorption refrigeration system in refineries". International journal of mechanical and production engineering. Volume 2, Issue 5, pp. 2320-2092, 2014.

Elanchezhian, C, **Arul Prakash, M**, "Management of Solid Waste and Power Generation using Plasma Arc Gasification Process". International Journal of Mechanical and Manufacturing Technology. Volume 2, Issue 1, pp.96, 2013.

Suresh, M, Arjunan, T.V, **Arul Prakash, M,** "Desalination Technologies: An Overview", Proceedings of the National Conference on Evolving Trends in Mechanical Engineering (ETME-09), The oxford College of Engineering, Bangalore, Karnataka. Pp.133. 2009.

#### **NITTT Module Completed:**

Module – 5: Technology Enabled Learning and Life long Learning,

Completed Nov 2021,

Score Obtained: 91.

#### **International Conferences Attended:**

Jan 27 & 28, 2021

AICTE Sponsored

International Conference on Advances in Mechanical Engineering (ICAME'21) Sri Sairam Engineering College, Chennai.

Feb 24 & 25, 2016

International Conference on'Mechanical Materials and Manufactur\ing Systems' Technical Paper 'Influence of Energy Storage Geometry on Statification in Domestic Solar Water Heater'

Sri Sairam Engineering College, Chennai.

April 25 & 26

2016

International Conference on'Mechanical Engineering Design'

Technical Paper 'Numerical Investigation on Effect of Obstacle in an Incompressible Laminar Wall jet Flow'

SSN College of Engineering, Chennai

June 13-15,

2014

**International Mechanical Engineering Congress** 

Technical Paper 'Numerical Simulation of Two Dimensional Laminar Wall Jet Flow over Solid Obstacle'

National Institute of Technology, Tiruchirapalli.

January 9 & 10,

2014

Second International Conference on "Emerging Trends in Energy and Environment" Department of Mechanical Engineering,

Sri Sairam Engineering College, Chennai.

Oct 28 & 29,

2003

PSG College of Technology, Coimbatore,

National conference on TREE BORNE OIL SEEDS AS A SOURCE OF ENERGY FOR DECENTRALIZED PLANNING,

Organised by Ministry of Non-Conventional Energy Sources.

Nov 12&13.

2003

ANSYS User India Conference,

Bangalore,

#### Papers published in international conferences:

Jan 27 & 28, 2021

**AICTE Sponsored** 

International Conference on Advances in Mechanical Engineering (ICAME'21)

Arul Prakash, M, Meganathan, S,

Technical Paper 'Topology Optimization of Connecting Rod Using DOE', pp-17, 2021.

Sri Sairam Engineering College, Chennai.

Jan 27 & 28, 2021

AICTE Sponsored

International Conference on Advances in Mechanical Engineering (ICAME'21)

Arul Prakash, M, Meganathan, S,

Technical Paper 'Parametric Studies on Flow Characteristics of Swing Type Check Valve', pp-18, 2021.

Sri Sairam Engineering College, Chennai.

Feb 24 & 25, 2016

International Conference on'Mechanical Materials and Manufactur\ing Systems' Technical Paper 'Influence of Energy Storage Geometry on Statification in Domestic Solar Water Heater'

Sri Sairam Engineering College, Chennai.

April 25 & 26

2016

International Conference on'Mechanical Engineering Design'

Technical Paper 'Numerical Investigation on Effect of Obstacle in an Incompressible Laminar Wall jet Flow'

SSN College of Engineering, Chennai.

June 13-15,

2014

**International Mechanical Engineering Congress** 

Technical Paper 'Numerical Simulation of Two Dimensional Laminar Wall Jet Flow over Solid Obstacle'

National Institute of Technology, Tiruchirapalli.

#### Faculty/Staff Development /Training Programme (Orientation programmes) Attended:

July 26 to 30,

2021,

Online Orientation Training Programme for Mentors,

Sponsored by AICTE, New Delhi,

Under National Initiative for Technical Teachers Training.

Jan 25 to Feb 6,

2021,

Online Orientation Training Programme for Mentors,

Two weeks Online FDP on 'Advances in Computational Fluid Dynamics and its

Application',

Sponsored by AICTE, New Delhi,

Department of Mechanical Engineering,

Geethanjali College of Engineering and Technology, Telangana.

July 12 to 16,

2021

Five days online Faculty Development Programme on

'Inculcating Universal Human Values in Technical Education'.

Organised by AICTE, New Delhi.

Dec 07 to 11,

2020,

AICTE Training and Learning (ATAL) Academy

Online FDP on 'Augmented Reality(AR)/ Virtual reality (VR)'

Coordinated by Kumaraguru College of Technology.

Nov 23 to 27,

2020.

AICTE Training and Learning (ATAL) Academy

Online FDP on 'Energy Engineering'

Coordinated by Government College of Technology, Coimbatore.

Nov 09 to 13,

2020.

AICTE Training and Learning (ATAL) Academy

Online FDP on '3D Printing and Design'

Coordinated by Indian institute of Technology, Dharwad.

August 4 - 6,

2016

Faculty Development Programme on "Computer Aided Design and Usage of Software".

Department of Mechanical Engineering,

Sri Sairam Engineering College, Chennai.

Nov 17 to Nov 22

2014

FDP on 'Fluid Dynamics - Theory to industrial Applications'.

Centre for Continuing Education, IIT Madras.

Nov 4 to 16,

2013

Faculty Development Programme on "Advancements in Materials, Manufacturing

Processes and Management Systems"

Sri Sairam Engineering College, Chennai.

Aug 26-28,

2010

Noorul Islam Centre for Higher Education, Kumaracoil,

Faculty Development Programme,

Organised by Noorul Islam University.

Dec 10-14,

2007

National Institute of Technology, Kumaracoil,

Short Term Training Course on,

ENERGY CONSERVATION MEASURES FOR MANUFACTURING AND PROCESS

**INDUSTRIES** 

July31 to Aug11,

2006

Adhiyamaan College of Engineering, Hosur,

AICTE SPONSORED Staff Development Programme on,

WORLD CLASS NEW PRODUCT DEVELOPMENT.

Oct29 to Nov08,

2001

Amrita Institute of Technology and Science, Coimbatore,

AICTE Sponsored Short Term Training Programme on,

DESIGN OF TURBO MACHINES USING CFD WITH SPECIAL EMPHASIS ON

PUMP AND BLOWER DESIGN

#### **Workshops Attended:**

February 22<sup>nd</sup> to 24<sup>th</sup>

2019

Three Days National Workshop on Understanding Modelling of Turbulent Flows and its Progress (UMTFP 2019)

VIT University, Chennai.

April 24 and 25

2015

Two day Workshop on "CFD in Thermal Engineering"

VIT University, Vellore.

Feb 06 & 07,

2015,

Two day national workshop on "Computational Fluid Dynamics"

SSN College of Engineering, Chennai.

Aug 28,

2014

One Day Workshop on "Role of Lean Manufacturing on Organization Competitiveness" Department of Mechanical Engineering,

Sri Sairam Engineering College, Chennai.

Sep 11,

2013

Live WebEx 'National Level Author workshop'

Publishing Connect, Elsevier.

Dec 11-21,

2012

2-Week ISTE Workshop on ENGINEERING THERMODYNAMICS,

Organised by IIT Bombay, Supported by MHRD,

Remote centre: Thanthai Periyar Govt. Institute of Technology, Vellore.

Dec 15 & 16,

2011

National Workshop on Modern Measurement Techniques in

Fluid and Thermal Engineering,

VIT University, Vellore.

Organised by the School of Mechanical and Building Sciences, VIT

Sep 18 & 19,

2009

MECHANICAL AUTOMATION, Arunai Engineering College, Tiruvannamalai,

In Association with M / s Trident Techlabs, Chennai.