# SRI SAIRAM ENGINEERING COLLEGE

## Profile of Dean (R&D)

1. **Name** : Dr .A .Rajendra Prasad
2. **Gender** : Male
3. **Date of Birth** : 22-05-1967
4. **Designation & Affiliation** : Dean- R&D
5. **Postal Address** : Sri Sai Ram Engineering College,
   Sai Leo Nagar , West Tambaram
   Chennai - 600044
   Tamil Nadu
6. **Phone Numbers** : (044) 22512222 Extension: 231
   (0) 8754502223
7. **E-mail ID** : dean@ sairam.edu.in

8. **Qualifications:**

| Sl.No | Degree | Institution | Year |
|---|---|---|---|
| 1. | B.E ( Mechanical ) | Sri Venkateswara University, Tirupathi, Andhra Pradesh. | 1990 |
| 2. | M.E (Thermal ) | Regional Engineering College, Trichy. | 1992 |
| 3. | Ph.D ( Energy ) | Anna University, Chennai. | 2009 |

**9. Employment Experience:**

| Sl.No | Position & Organization | Nature of job profile | Period |
|---|---|---|---|
| 1. | Lecturer / Mookambigai College of Engineering,Trichy | Giving lectures and conducting practical classes for UG and PG Engineering students. | 1992 to 1995 |
| 2. | Assistant Professor/ Sathyabama University, Chennai. | Giving lectures and conducting practical classes for UG and PG Engineering students. | 1995 to 1998 |
| 3. | Dean ( R&D ) / Prof & Head ( Mechanical Engineering ) Sri Sai Ram Engineering, College, Chennai -600 044. | Heading R&D activities of the Institution. Administration of Department Activities, Giving lectures for UG and PG Engineering students. | 1998 to till date |

**10. List of Publications:**

**International Journal Publications :**

1. Dr. A. Rajendra Prasad "An Approach to the development of a Green Energy Farm using free flow horizontal axis water turbine", International Journal of Mechanical Engineering and Technology, June 2017, Vol.8, Issue 6

2. Dr. A. Rajendra Prasad "Experimental Analysis of Hardness and Densification of Microwave Sintered Al/ SiC /Al2O3 / Fly ash Composites , Indian Journal of Science and technology (IJST) , Oct 2016.

3. Dr. A. Rajendra Prasad "An Approach to the Development of a Green Energy farm using free flow Horizontal Axis water turbine", Indian Journal of Science and technology (IJST) , Oct 2016.

4. Dr.A.Rajendra Prasad "Evaluation of Mechanical properties and Analysis of Rapidly Heat treated T-1 High speed steels , International Journal of Applied Engineering and research , ISSN 0973 – 4562 , Vol.10 No 49 ( 2015 ).

5. Dr.A.Rajendra Prasad "Evaluation of Mechanical properties and Analysis of Rapidly Heat treated M – 42 High speed steels , International Journal of Applied Engineering and research.

6. Dr.A.Rajendra Prasad, Published a paper titled " Investigation of Tensile Properties of Manila fibre Reinforced composite" in Applied Mechanics and Materials (2015 ) PP 96 – 99.

7. Dr.A.Rajendra Prasad, Published a paper titled "Evaluation of Mechanical properties of abaca-Jute – glass fibre reinforced epoxy composite" in Materials and Design ( 2013 ) PP 357-356.

8. Dr. A. Rajendra Prasad "Optimized of Integrated Photovoltaic-Wind power generation systems with battery storage" was published in International Journal of Energy Vol.31 (2006) 1607-1618.

**11. Patents filled and Granted:**

| Name | Date of Patent adoption | Patent Number | Granted | Patent Owner |
|---|---|---|---|---|
| Mobline a Mechanism for enhancing the functionalities of existing landlines | 17.12.2010 | 3526/Che/ 2010 A | 17.12.2010 | Dr. A. Rajendra Prasad |
| Blue tooth based vehicle Engine Control system | 23.10.2013 | 4784/CHE/ 2013 | Filed | Dr. A. Rajendra Prasad |
| Three Wheeled Commercial Vehicle | 01.01.2014 | 259169 | 07.08.2014 | Dr. A. Rajendra Prasad & S.V.Pragadeesh. |
| PCM Assisted Cold Storage Flask | 31.05.2017 | CBR/19773 | Filed | Dr. A. Rajendra Prasad & Mr. N.Vasudevan |
| Prevention of Air Suffocation inside a Car cabin using Mechatronics System | 31.05.2017 | CBR/19770 | Filed | Dr. A. Rajendra Prasad & B.K Rohit |

**12. Awards of appreciation received:**

1. Received the Best Project Award appreciation from the Institution of Engineers ( India ) ,student chapter of Taminadu state centre during 1st IE (I) Tamilnadu State Centre students & Technicians Convention , All India Seminar on " Innovation , Technology and Knowledge Economy for guiding the student Project titled " Design ,Analysis & Fabrication of Solar Powered zero Emission Hybrid Trike ( SP – ZEHT), Held at Adhiyamaan College of Engineering during 6th – 7th March 2015.

2. Received the Award of appreciation jointly from the IIT Bombay and Radiance 2013 for Coordinating the programme titled " Technology Outreach programme 2013 ", organized at Department of Mechanical Engineering, Sri Sairam Engineering College during the period of 4th to 5th February 2013.

3. Received the Project Award appreciation from the Engineer Infinite Contest in ELECTRAMA 2010 for guiding the student Project titled " Gravity propelled power generator ", Electrama 2010.

4. Received Best teacher award from Sri Sairam Engineering College for the department of Mechanical Engineering during the academic year 2005 - 2006.

5. Received the Excellency award in teaching from the lions club of madras Metropolitan South during the teacher's day celebrations 2006.

**13. Guest Lectures Delivered / Resource Person:**

1. Delivered Special lecture on "Intellectual Proper Rights (IPR)" Sri Sairam Engineering College, Chennai during Entrepreneurship Awareness Camp (EAC) conducted by Electronics and Communicxation Engineering held during on 21st March 2016.

2. Delivered Special lecture on "Technology – R & D & Intellectual Property Rights" Sairam Institute of Technology, Chennai on 16th November 2015.

3. Delivered Special lecture on Solar Photovoltaic systems" at Shridi Sai Engineering College, Bangalore on 9th October 2014.

4. Delivered Special lecture on "Renewable Energy Technologies" at Dhanalakshmi engineering college , Chennai on 23rd January 2012.

5. Delivered Special lecture on "Emerging trends in Renewable Energy Technologies "at Anand Institute of Higher Technology, Chennai on 12th November 2013.

6. Acted as a Resource person for AICTE sponsored Staff Development Programme on "Recent Developments in Manufacturing and Management" organized by Department of Mechanical Engineering, Sri Sairam Engineering College during the period of 25th to 30th July 2011.

**14. Certification Programmes attended:**

1. Received the Internal Auditor certification for ISO 9001:2008 from the Creative management Consultants upon completion of training held during 11th -12th October 2011.

2. Received the Internal Quality Auditor certification for "Quality Management System and Audit Training" from the Creative management Consultants upon completion of training held on 10th May 2003.

**15. Participation / Presented in International conferences / World Summit:**

1. Participated in the 3rd World summit on Accreditation organized by National Board of Accreditation, during March 18th to 20th, 2016 at New Delhi.

2. Presented a paper titled "Synergy between Engineering institutes and industries in India in the 2nd World summit on Accreditation organized by National Board of Accreditation, during March 18th, 2014 at New Delhi.

3. Participated in the 1st World summit on Accreditation organized by National Board of Accreditation, during Marc h 25th to 28th, 2012 at New Delhi.

4. Participated in International conference on Geotechnique, Construction Materials and Materials and Environment on 14th – 16th November 2012 in Kuala Lumpur, Malaysia.

5. Participated in International conference on Renewable Energy Technologies and pre conference workshop on "Research Perspective on Solar PV and Wind Energy Systems, Held at PSG College of Technology, Coimbatore during 15th – 17th December 2011.

6. Presented a Paper in International conference on "Energy and Environmental Technologies for sustainable development" held at Malaviya National Institute of Technology (MNIT), Jaipur on 10th October 2003.

**16. Participation / Presented in National conferences:**

1. Paper titled "Rapid Heat Treatment Process Using Microwaves-A Novel Approach" was selected for presentation in Advanced Manufacturing Technologies : Advanced Manufacturing-Processes conference ,during 26th October 2016 at Qatar Foundation.

2. Participated in the 102nd Indian Science Congress organized by The Indian Science Congress Association, during 3rd to 7th January, 2015 held at University of Mumbai, Mumbai.

3. Presented a Paper titled "Emission Control –Newer approaches and Challenges" in National Seminar on " Automobile Emissions Monitoring and Control" organized by Annamalai University ,Department of Mechanical Engineering during 15th – 16th March 2002

4. Participated and presented a paper in the National Renewable Energy Convention -2001 during 27th to 29th December 2001 organized by Department of Mechanical Engineering, Regional Engineering College, and Warangal.

5. Attended national Conference on Commercialization Aspects of Renewable Energy Sources (CARES -2000) organized by department of Renewable Energy Sources , College of Technology & Agricultural Engineering , Agricultural University during the period of 28th to 29th April 2000.

**17. Participation in Seminar SDP / FDP / Workshops / Training Programmes :**

1. Attended AICTE sponsored Faculty Development Programme on "Processing and Characterization of composite materials including Natural Fiber Re-inforced composites organized by Department of Mechanical Engineering, Sri Sairam institute of Technology during the period of 18th to 31st March 2015.

2. Attended workshop on " Role of Lean Manufacturing on Organization Competitiveness" organized by Department of Mechanical Engineering, Sri Sairam Engineering College on August 28 , 2014.

3. Attended TEDA sponsored International Workshop on Renewable Energy , Climate Change & Energy Management ( RECCEM -2013 ) organized by Anna University , Chennai during the period of 24th to 25th January 2013.

4. Attended National workshop on Machine Learning for Mechanical Engineers organized by School of Mechanical and Building Sciences, VIT Chennai on 25th February 2012.

5. Participated in One day workshop on "Finite Element Analysis Tools and its applications" Organized by Department of Mechanical Engineering, Sri Sairam Engineering College during held on 19th July 2012.

6. Participated in the Short term training Programme on "Self Awareness and Higher Goals in Education" Organized by the Centre for Continuing Education, Indian Institute of technology, Madras during the period of 21st – 25thJune 2011.

7. Attended Basic Life support and First Aid Skills training organized by Department of Mechanical Engineering, Sri Sairam Engineering College in association with Usha Fire safety Equipments on 19th September 2009.

8. Participated in Indo –German Workshop on "Major Aspects of Energy Research in India and Germany: the Challenges for the future (IGWS -2007) Organized by Institute for Energy studies, Anna University, Chennai during 20th – 21st June 2007.

9. Participated in Two days workshop on "Renewable Energy Sources" Organized by Arupadai Veedu Institute of Technology, Vinayaka Missions University, on 15th to 16th February 2007.

10. Attended technical seminar on Wind Electric Generation Technology –Education Module organized by Koyo- Sales Service Company on 28th January 2006 at Madras Boat Club, Chennai.

11. Participated In intensive training programme on "Renewable Energy Technologies for Engineering and Educational Institutions" Jointly Organized by the Solar Energy Cemtre & Ministry of Non-Conventional Energy sources, Chennai during 3rd to 5th August 2006.

12. Participated in AICTE – ISTE sponsored Short term training programme on " Advanced Energy Technologies" Organized by the Department of Mechanical Engineering , IIT Madras , during 20th -24th December 2004.

13. Participated in AICTE sponsored One day workshop on "Environment & Pollution Awareness" Organized by RMK Engineering College, on 12th July 2004.

14. Attended AICTE sponsored National workshop on “Taguchi Method based Quality Engineering Techniques “, held at Arunai Engineering College, during 16th – 20th February 2001.

15. Attended AICTE sponsored Quality Improvement Programme in a short term course on “Renewable Energies for Rural Areas “organized by Centre for Continuing Education, Indian Institute of Science, Bangalore during the period of 29th May to 9th June 2000.

16. Participated in the winter school on “Cogeneration and waste heat recovery” conducted by the Department of Mechanical Engineering ,Anna University ,Madras during the period 5th to 18th December 1993.

17. Participated in the 3 – day programme on “Industry –Institute –Participation” conducted by Mookambigai college of Engineering, during the period of 19th to 21st January 1995.

18. Participated in the short term course under FDP Programme on “Advances in Heat Exchangers” Organized by the Department of Mechanical Engineering , Centre for Continuing Education, Indian Institute of technology, Madras during the period of 16th to 20th December 1996.

19. Participated in the Winter school on “Advanced Energy Conversion Technologies and Energy Management” Organized by the Department of Mechanical Engineering , Vellore Engineering College during the period of 7th to 12th December 1998.

## 18. Funded / Sponsored Research Projects:

| S.No. | Title | Sponsoring Agency | Period | Amount (Rs. Lakhs) | Project Status |
|---|---|---|---|---|---|
| 1. | Development of a green Energy farm by designing and developing Shrouded Hydrofoil Horizontal Axis Hydro – Kinetic water turbine. | Department of Science and Technology, ( DST), New Delhi | 3 years 2015-18 | 33,69,000 | In progress |
| 2. | Development of appropriate rural sanitation with reference to sledge treatment . | Ministry of drinking water and Sanitation , Swachh Bharat Mission (Gramin) Divison, Govt. of India | 2 years 2015-17 | 17,66,300 | In progress |
| 3. | Study on the Influence of Cryogenic treatment on Aluminum alloys and its composites during solidification and after solidification in material property modification suitable for aerospace applications – Research Promotion Scheme (RPS). | Research Promotion Scheme AICTE | 3 years 2015-18 | 12,94,118 | In progress |
| 4. | Innovation and Entrepreneurship Development Centre ( IEDC). | Department of Science and Technology ( DST), New Delhi | 2012-17 | 45,50,000 | In progress |

| | | | | | |
|---|---|---|---|---|---|
| 5. | Solar Photovoltaic Powered PCM Integrated Cooling system for fruits / Vegetables preservation in remote locations | Research Promotion Scheme AICTE | 2 years (2010-11)& (2011-12) | 3,75,000 | Completed |
| 6. | Treatment of Bio-Gas and Increasing Efficiency of Methane. | Department of Science and Technology | 2 Years (2010-11)& (2011-12) | 3,72,000 | Completed |
| 7. | Auto Sensing Car door lock to prevent accidents. | TNSCST | 1 year (2010-11) | 6,000 | Completed |
| 8. | Upgradation of I.C Engine Lab by establishing computerised Engines for Bio-fuels | MODROBS Scheme of AICTE | 1 year (2010-11) | 5,50,00 | Completed |
| 9. | Establishment of Flexible Manufacturing System | MODROBS Scheme of AICTE | 1 year (2009-10) | 10,000,00 | Completed |
| 10. | Development of Flexible Fuel Engine | Ford India Ltd. | 2 Years (2008-09)& (2009-10) | 2,00,000 | Completed |
| 11. | Design And Fabrication of Multi Level Automatic Car Parking System. | TNSCST | 1 Year (2008-09) | 50,000 | Completed |

## 19. Consultancy Projects:

| S.No | Title | Sponsoring Agency | Period | Amount (Rs.) |
|---|---|---|---|---|
| 1. | Components Manufacturing. | Klas Engineering | 10/2/2010 | 11,000 |
| 2. | Components manufacturing. | We two Engineering | 02/7/2009 | 18,000 |

| | | | | |
|---|---|---|---|---|
| 3. | Design and fabrication of cycle for physically challenged by replacing rotary motion with reciprocating motion. | TNSCST | 1 Year (2006-07) | 5,000 |
| 4. | Design and fabrication of above knee prosthesis for physically challenged. | TNSCST | 1 Year (2004-05) | 5,000 |
| 5. | Experimental Investigations on latent Heat Thermal Energy storage Unit (LHTS) | Sapthagiri Educational Trust | 1 Year (2002-03) | 7,000 |

**20. Membership in professional Societies:**

1. Life member in “The Indian Society for Technical Education”.
2. Life member in “Solar Energy Society of India”.
3. Life member in “The Institution Of Engineers (India)”.
4. Member in “Confederation of Indian Industry (CII)”.
5. Member in “Society of Automotive Engineers (SAE)”.