# **Faculty Profile**

- 1. Name : Dr. Jeyaprakasam S
- **2.** Designation : Associate Professor
- **3.** Date of Joining : 02.07.2012
- 4. Nature of Association : Regular
- 5. E mail: <u>sjeyaprakasam@ksrct.ac.in</u> <u>sjeyaprakasam@gmail.com</u>
- **6.** Mobile no. : +91 98946 94658
- 7. Academic Qualifications:



Course	Name of the Institution / University	Year of Passing	% of Marks	Class
Ph.D (Part time)	Anna University, Chennai	2020	-	-
M.E (Engineering Design)	Kongu Engineering College, Perundurai, Erode/Anna University, Chennai.	May 2007	84	First (Distn)
B.E. (Mech)	Kongu Engineering College, Perundurai, Erode/Bharathiar University, Coimbatore.	April 2001	74.21	First
DIPLOMA (Mech)	Thiagarajar Polytechnic College, Salem- 5.	March 1998	90.93	First
S.S.L.C.	Gandhi Kalvi Nilayam, Thengalpalayam, Namakkal.	March 1995	86.6	First

## 8. Teaching Experience

- Associate Professor, K.S.Rangasamy College of Technology, Tiruchengode, from 01.09.2018 to till-date.
- Assistant Professor, K.S.Rangasamy College of Technology, Tiruchengode, from 02.07.2012 to 31.08.2018.
- Assistant Professor, Kumaraguru College of Technology, Coimbatore, from 01.10.2010 to 11.05.2012.
- Lecturer, Kumaraguru College of Technology, Coimbatore, from 02.07.2008 to 30.09.2010.
- Lecturer, K.S.R. College of Engineering, Tiruchengode, from 01.06.2007 to 31.05.2008.
- Lecturer, Muthayammal Polytechnic College, Rasipuram, from 02.07.2003 to 30.06.2005.

## 9. Projects

## DIPLOMA

• Title: "Solar Conversion System – SOLCON 1998"

#### **Under Graduate:**

• Title: "Design and Analysis of Spur gear using LISP program"

#### **Post Graduate**

• **Title:** "Design and analysis of effect of draw bead geometry in sheet metal drawing process"

#### Ph. D

- Thesis title: "Characterization and machining behavior of aluminium 6061 hybrid composites"
- Received Supervisor recognition (**Ref. No. 4120052**) in Faculty of Mechanical Engineering, Anna University, Chennai.

## **10.** Publications

#### **International Journals**

- 1. Jeyaprakasam, S, Venkatachalam, R & Velmurugan, C 2019. 'Experimental investigations on the influence of TiC/graphite reinforcement in wear behavior of AL 6061hybrid composites', Surface Review and Letters, vol. 26, no. 4, 1850173 (11 pages), ISSN: 0218-625X, IF: 1.24.
- Jeyaprakasam, S, Kathirselvam, M, Velmurugan, C & Venkatachalam, R & 2022. 'Experimental study of process parameters on machining performance in electro-discharge machining of 6061Al/TiC/Gr composites', Surface Review and Letters, Vol. 29, No. 4 (2022) 2250049 (12 pages), ISSN: 0218-625X, IF: 1.24.

#### **International Conferences**

- 1. **Jeyaprakasam S**, Venkatachalam R, Prabu M, "Experimental Investigations on AA 6061 Hybrid Metal Matrix Composite" Proceedings of International Mechanical Engineering Congress (IMEC 2014), organized by national Institute of Technology, Trichy during 13th -15th June 2014.
- Ajith R, Balaji J, Bharath P, Bharath kumar A & Jeyaprakasam S 2019, "Sensor activated window system", Proceedings of the international conference on Sustainable Materials (ICSM 2K19) held at K.S.R.College of Engineering, Tiruchengode, during 19-20<sup>th</sup> March 2019.
- Hari arasu R, Hariram V, Meganathan J, Janakar V & Jeyaprakasam S 2019, "Fabrication of one arm Pneumatic Exoskeleton", Proceedings of the international conference on Sustainable Materials (ICSM 2K19) held at K.S.R.College of Engineering, Tiruchengode, during 19-20<sup>th</sup> March 2019.
- 4. Moorthi M, Venkatachalam G, Jeyaprakasam S, Sathish D and Karthikeyan S "Study on Mechanical Properties of Morus Fiber Reinforced Polymer Composites", Recent Innovations in Robotics, Construction and Mechanical Sciences, (ICRIRCMS-2022) at K S Rangasamy college of Technology, Tiruchengode, 10th & 11th June 2022.
- Jeyaprakasam S, Kathirselvam M, Moorthi M and Gnanasekaran M, "Tribological and Microstructure Characteristics of Hybrid Aluminium Matrix Composite Containing Titanium Carbide (TiC) and Graphite Particles", Recent Innovations in Robotics, Construction and Mechanical Sciences, (ICRIRCMS-2022) at K S Rangasamy college of Technology, Tiruchengode, 10th & 11th June 2022.

6. Jeyaprakasam S, Keerthivarman P, Kabisith S R and Divit M S, "Study of Machinability behavior of Titanium carbide and graphite reinforced aluminium 6061 composite", Recent Innovations in Robotics, Construction and Mechanical Sciences, (ICRIRCMS-2022) at K S Rangasamy college of Technology, Tiruchengode, 10th & 11th June 2022.

### **National Conferences**

- 1. **S. Jeyaprakasam**, P.Senthilvelmurugan, "Design and analysis of effect of draw bead geometry in sheet metal drawing process" Proceedings of National Conference on Product Life Cycle Management (PLM 2007), Kongu Engineering college, Perundurai during 2<sup>nd</sup> and 3<sup>rd</sup> March 2007.
- M. Prabu, S. Jeyaprakasam, "Experimental Investigation on AA 6061 Hybrid Metal Matrix Composites" Proceedings of Sixth National Conference on Recent Advancements in Mechanical Engineering 2014 (RAME 2014) K.S.Rangasamy College of Technology, Tiruchengode, pp. 15, 2<sup>nd</sup> April 2014.
- P. Premkumar, S. Jeyaprakasam, "Study of Tribological Behavior of Hybrid Metal Matrix Composite" Proceedings of Sixth National Conference on Recent Advancements in Mechanical Engineering 2014 (RAME 2014) K.S.Rangasamy College of Technology, Tiruchengode, pp. 15, 2<sup>nd</sup> April 2014
- S. Elankathir, S. Jeyaprakasam, "Design and Development of Furniture by using Microsized Wooden Wastes" Proceedings of Seventh National Conference on Recent Advancements in Mechanical Engineering 2015(RAME 2015) K.S.Rangasamy College of Technology, Tiruchengode, pp.7, 16<sup>th</sup> April 2015.
- D. Jeevananth, S. Jeyaprakasam, "Analysis of effect of baffle inclination angle on shell and tube heat exchanger using Computational Fluid Mechanics" Proceedings of the National workshop-cum-conference on Small Gas Turbine Engines – (SGTE – 2016), K.S.Rangasamy College of Technology, Tiruchengode, pp.149-157, 28<sup>th</sup> &29<sup>th</sup> January 2016.
- S. Balakumar, P. Gowtham, K. Logesh and S. Jeyaprakasam, "Design and fabrication of solar powered seed sprayer machine" Proceedings of National Conference on Recent Advancements in Materials, Manufacturing, Design and Thermal Sciences" (RAMMDTS 23) organized by Department of Mechanical Engineering, K.S.Rangasamy College of Technology, Tiruchengode, on April 26, 2023.

## 11. Workshop / Conference / Seminar Participated (1 to 3 Days Only)

- 1. Participated in two day workshop on "Soft Computing Techniques in Industrial Automation" organized by Kongu Engineering College, Perundurai during 6<sup>th</sup> and 7<sup>th</sup> November 2008.
- 2. Participated National Conference titled "Innovative Ideas in Mechatronics (IIM 2009)" organized by Kumaraguru College of Technology, Coimbatore held on 14<sup>th</sup> March 2009.
- Participated in two day workshop on "Swarm Robotics" organized by Kongu Engineering College, Perundurai during 6th and 7<sup>th</sup> August 2009.
- Participated one day workshop on "Dynamic Modeling and Simulation" organized by Kumaraguru College of Technology, Coimbatore on 22<sup>nd</sup> March 2010.

- Attended two day workshop on "Intelligent Optimization Techniques for Manufacturing" organized by Kongu Engineering College, Perundurai during 26<sup>th</sup> and 27<sup>th</sup> November 2010.
- 6. Participated National Conference titled "Innovative Ideas in Mechatronics (IIM 2011)" organized by Kumaraguru College of Technology, Coimbatore on 30<sup>th</sup> March 2011.
- Attended two day workshop on "Programmable Logic Controller and its applications (PLCA 11)" organized by Kumaraguru College of Technology, Coimbatore during 4<sup>th</sup> and 5<sup>th</sup> February 2011.
- 8. Participated two day seminar on "Design in Creo Elements Pro, Part Modeling, Assembly and Detailing" organized by Kumaraguru College of Technology, Coimbatore during 9<sup>th</sup> and 10<sup>th</sup> November 2011.
- Attended one day workshop on "Graphical system Design in Engineering" organized by Kumaraguru College of Technology, Coimbatore on 22<sup>nd</sup> August 2011.
- Attended two day workshop on "New frontiers in Research computing" organized by K.
  S. R. College of Engineering College, Tiruchengode during 3<sup>rd</sup> and 4<sup>th</sup> February 2012.
- Attended two day seminar on "Advances in CNC Programming and Operations" organized by Kumaraguru College of Technology, Coimbatore during 15<sup>th</sup> and 16<sup>th</sup> March 2012.
- Participated in one day National seminar on "Composite Materials" organized by Mechanical Engineering, K. S. Rangasamy College of Technology, Tiruchengode held on 11<sup>th</sup> September 2015.
- Participated in one day workshop on "Writing Research Papers, Plagiarism and Citation Analysis" organized by Department of Library science jointly with Society for the advancement of Library and information Science (SALIS), Erode Chapter on 26<sup>th</sup> June 2015.
- 14. Participated and served as member of organizing committee in the International conference on Nanomaterials and Nanotechnology (NANO -15) held at K.S.Rangasamy College of Technology, Tiruchengode, India during 7th -10th December 2015.
- 15. Participated one day workshop on "Intellectual Property Rights" organized by K. S. Rangasamy College of Technology, Tiruchengode held on 6<sup>th</sup> August 2016.
- Participated in the NAAC Sponsored National Seminar on "Curriculum Design for Sustainable and Societal Development: A Road Map" held at Amrita Vishwa Vidyapeetham (University), Coimbatore, during 12<sup>th</sup> and 13<sup>th</sup> August 2016.
- 17. Participated one day workshop on "Introduction of DOE and Taguchi method" organized by Mechanical Engineering, GRT institute of Engineering & Technology, Tirutani, held on 27<sup>th</sup> May 2020.
- Attended the webinar on "Friction Based Solid State Additive Manufacturing Techniques" organized in association with Indian Welding Society (IWS), Hyderabad Student's Chapter, Hyderabad, Telangana held on 8<sup>th</sup> July 2020.
- Participated in the training on "Online publication, tracking and creating research profile for faculty members of KSRCT" organized by Department of Library, K. S. Rangasamy College of Technology, Tiruchengode held on 19<sup>th</sup> December 2020.

- 20. Participated in the live webinar on "Academic Identities: An overview" organized by Department of Library, K. S. Rangasamy College of Technology, Tiruchengode held on 23<sup>rd</sup> December 2020.
- 21. Acted as the session chair in the first virtual international conference on 'Recent Innovations in Robotics, Construction and Mechanical Sciences, (ICRIRCMS-2022) organized by K S Rangasamy college of Technology, Tiruchengode in association with MAHSA University and IEI Salem local centre during 10th & 11th June 2022.
- 22. Participated in 100 hours IEI TNSC Techno Carnival for Asia Book of Records organized by IEI Tamilnadu State centre and 16 local centres to commemorate the IEI Tamilnadu State centre's Centennial year in the theme "Sustainable Development of the Nation –the Role of Engineers" during the period April 23, 2022 to November 30, 2022
- 23. Participated FDP cum industrial visit to L & T Rubber Processing Machinery (L&TRPM) unit at Vedal, Kanchipuram on 22.02.2023.

#### 12. STTP / FDP (4 To 21 Days Only)

- Participated STTP on "Instructional Design and Delivery System" conducted by NITTTR, Chennai organized by Muthayammal Polytechnic College, Rasipuram during 24<sup>th</sup> -29<sup>th</sup> May 2004.
- Attended short term training course on "Modeling and Assembly using CATIA" conducted by Kongu Engineering College, Perundurai during September 2005 – November 2005.
- 3. Participated STTP on "High tech teaching learning strategies" conducted by NITTTR, Chennai organized by Kumaraguru College of Technology, Coimbatore during 2<sup>nd</sup> April to 4<sup>th</sup> April 2009.
- 4. Participated STTP on "Computational fluid dynamics and its applications" organized by Kumaraguru College of Technology, Coimbatore during 17<sup>th</sup> June to 21<sup>st</sup> June 2011.
- 5. Participated in two week ISTE workshop on "Engineering Thermodynamics" conducted by Indian Institute of Technology organized by K. S. Rangasamy College of Technology, Tiruchengode from 11<sup>th</sup> to 21<sup>st</sup> December 2012.
- Participated in two week ISTE workshop on "Engineering Mechanics" conducted by Indian Institute of Technology organized by K. S. Rangasamy College of Technology, Tiruchengode from 26<sup>th</sup> November to 06<sup>th</sup> December 2013.
- Acted as Teaching Assistant in two week ISTE workshop on "Fluid Mechanics" conducted by Indian Institute of technology organized by K. S. Rangasamy College of Technology, Tiruchengode from 20<sup>th</sup> to 30<sup>th</sup> May 2014.
- Participated one week FDP on "Insights into quality research and innovation" organized by Research & Development Cell and Institution's Innovation Council of Vivekanandha College of Engineering for Women from 13<sup>th</sup> May 2020 to 20<sup>th</sup> May 2020.
- Participated five days FDP on "Multi objective optimization of Mechanical Engineering Applications" organized by QIS college of Engineering and Technology, ongole, Andra Pradesh, during 08<sup>th</sup> to 12<sup>th</sup> June, 2020.
- 10. Participated one week AICTE sponsored STTP on "Synthesis characterization and its application of nano materials" organized by JNTU, Hyderabad, during 24<sup>th</sup> to 29<sup>th</sup> August, 2020.

- 11.Participated in the 6 -Day (One Week) All India Council for Technical Education (AICTE), New Delhi sponsored online Short Term Training Programme (STTP) Series on Recent Advances in Tribology and Surface Engineering: Series 2 of 4- Tribology of Machine Components and Applied Tribology, organized by the Department of Mechanical Engineering of Saintgits College of Engineering, Kottayam from 14th to 19th September, 2020.
- 12. Participated one week AICTE sponsored STTP on "Innovation in Materials and Industrial Automation (Phase III)" organized by Mechanical Engineering, Dr NGP Institute of Technology, Coimbatore, during 15<sup>th</sup> to 20<sup>th</sup> Febraury, 2021.
- 13. Participated 3 days online FDP on "Application of Artificial Intelligence in Mechanical Engineering" organized by Mechanical Engineering, Dr NGP Institute of Technology, Coimbatore, during 2<sup>nd</sup> to 4<sup>th</sup> June, 2021.
- 14. Participated and successfully completed the 5-day online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 26 July, 2021 to 30 July, 2021.
- 15.Successfully completed the FDP for the NPTEL course Rapid Manufacturing (12 weeks) with **Elite silver** category (12 weeks) during July to October 2021.
- 16. Participated & Completed Successfully one week virtual Faculty Development Programme on "Recent Advances and Applications in Mechanical Engineering" organized by Department of Mechanical Engineering, SRM TRP Engineering College, during 02<sup>nd</sup> March 2022 to 07<sup>th</sup> March 2022.
- 17. Successfully completed the FDP for the NPTEL course Fundamentals of Surface Engineering: Mechanism, Processes and Characterizations (12 weeks) during January to Aril 2022.
- 18. Successfully completed the FDP for the NPTEL course Aluminium based alloys and Metal Matrix Composites (12 weeks) during July to October 2022.
- 19. Successfully completed the FDP for the NPTEL course Inspection and Quality Control in Manufacturing (4 weeks) with elite category during January to February 2023.

#### **13. QEEE Participation:**

- 1. Participated as a faculty in charge for the topic "Fundamental Concepts of Fluid Mechanics" of the initiative in the 5<sup>th</sup> phase between January April 2016.
- Participated as a faculty in charge for the topic "Fundamental Concepts in Fluid Kinematics- Fluid Dynamics" of the initiative in the 5<sup>th</sup> phase between August - October – April 2016.
- 3. Achieved Best Faculty Performer in QEEE for the academic year 2016-2017.

#### 14. Academic Achievements:

- 1. Obtained 100% result in Product Design and Development during May 2014.
- 2. Obtained 100% result in Integrated Manufacturing System during December 2014.
- 3. Obtained 100% result in Composite Materials and Mechanics during May 2015.

## 15. NPTEL Courses Certification

- Successfully completed the course **Rapid Manufacturing** (12 weeks) with **Elite silver** category (12 weeks) during July to October 2021.
- Successfully completed the course **Fundamentals of Surface Engineering: Mechanism**, **Processes and Characterizations** (12 weeks) during January to April 2022.
- Successfully completed the course Aluminium based alloys and Metal Matrix Composites (12 weeks) during July to October 2022.
- Successfully completed the course **Inspection and Quality Control in Manufacturing** (4 weeks) with **Elite** category during January to February 2023.

#### 16. No. of Projects Guided:

Undergraduate: 14

Post graduate: 04

## 17. TNSCST-Tamilnadu Student Project Scheme

• Received grant of 7500/- under student project scheme 2022-23 (TNSCST) for the project "Design and Fabrication of solar powered seed sprayer Machine" (Ref. TNSCST/SPS/BS/2022-2023/EME-0318).

#### 18. Membership in Professional Bodies

- Life Member, Indian Society of Technical Education (ISTE) LM 85070.
- Life Member, International Society in Research and Development (ISRD) M4150901223.

## **19. Subject Handled**

- 1. Basics of Mechanical Engineering
- 2. Engineering Drawing
- 3. Engineering Mechanics
- 4. Fluid Mechanics and Machinery
- 5. Strength of Materials
- 6. Manufacturing Processes
- 7. Machining Processes
- 8. Dynamics of Machinery
- 9. Rapid prototyping
- 10. Product Design and Development
- 11. Composite materials

#### 20. Research Interests

- 1. Metal matrix composites,
- 2. Wear characterization,
- 3. Machining behavior

## 21. Additional Portfolio (except teaching)

- 4. Class Advisor (2012-16 batch & 2016-20 batch/Mentor)
- 5. Department Autonomous Coordinator
- 6. Fast Track courses coordinator
- 7. Department budget coordinator

## 22. Personal Details

Fathers Name	: C. Sellappan	
Date of Birth & Age	: 23.07.1980 & 42 Years	
Gender	: Male	
Marital Status	: Married	
Permanent Address	: 15/92, Ayeepalayam Kattu Kottai,	
	Athanur PO, Rasipuram TK,	
	Namakkal – 637 215,	
	Tamilnadu, India.	