| | |
|---|---|
| **Name:** | Dr. K. GOBIVEL |
| **Present Position:** | Assistant Professor<br>Selection Grade Scale (SG) |
| **Address:** | Department of Mechatronics Engineering<br>KCG College of Technology<br>Karapakkam, Chennai 600 097 |
| **Contact Info:** | 9445383080 / 8778239006<br>**gobivel@gmail.com** |


## I. EDUCATION

| | |
|---|---|
| **Doctoral Degree (Ph.D.):** | Department of Mechanical Engineering, SSN College of Engineering, Anna University, Jan 2025 |
| **Master's degree (M.E.):** | Manufacturing Engineering, Department of Mechanical Engineering, SSN College of Engineering, Anna University, May 2014 |
| **Bachelor's degree (B.E.):** | Department of Mechanical Engineering, Jaya Engineering College, Anna University, May 2011 |

## II. PROFESSIONAL EXPERIENCE

| Sl. No. | Position | Institute Name | Period |
|---|---|---|---|
| 1. | Assistant Professor – Selection Grade | Department of Mechatronics Engineering, KCG College of Technology | Jul 2025 – Till Now |
| 2. | Assistant Professor – Senior Scale | Department of Mechanical Engineering, KCG College of Technology | Jul 2022 – Jun 2024 |
| 3. | Assistant Professor | Department of Mechanical Engineering, KCG College of Technology | Jun 2015 – Jun 2022 |
| 4. | Project Engineer | TVS Srichakra Ltd (TVS Tyres) | Jul 2014 – Dec 2014 |
| 5. | Production Engineering | Universal Radiators Ltd | Jul 2011 – Jun 2012 |

## III. SCIENTIFIC PAPER PUBLICATIONS

***Corresponding Author**

| **SCI Indexed** | | | | |
|---|---|---|---|---|
| **Paper Title** | **Authors** | **Journal** | **Quartile** | **Impact Factor** |
| Effect of machining parameters on cutting forces, chip microstructure and tool wear in Mg-$ZrO_2$ reinforced MMCs | Vijaysekar KS, **Gobivel K***, Sricharan S, Subramanian BS, Vivek Sridhar | Physica Scripta, IOP Science, 2025 | Q2, SCIE | 2.6 |
| Machinability of Mg-$Al_2O_3$ Nanocomposites: Effects of Volume Percentage and Cutting Inserts | Vijaysekar KS, **K Gobivel*,** J Shrinath, S Rohit Kumar, P Shreenivasan | Journal of Materials Engineering and Performance, Springer, 2025 | Q2, SCIE | 2.0 |
| Assessment of Johnson-Cook material constitutive parameters in finite element simulation of machining Al–SiC metal matrix composite | **K Gobivel***, KS Vijaysekar | Journal of the Brazilian Society of Mechanical Sciences and Engineering, Springer, 2023 | Q2, SCIE | 2.1 |
| Machinability Studies on the Turning of Magnesium Metal Matrix Composites | **K Gobivel***, KS Vijay Sekar | Archives of Metallurgy and Materials, Degruyter, 2022 | Q3, SCIE | 0.70 |
| Impact of cutting forces and chip microstructure in high-speed machining of carbon fiber-epoxy composite tube | Y Allwin Roy*, **K Gobivel**, KS Vijay Sekar, S Suresh Kumar | Archives of Metallurgy and Materials, Degruyter, 2022 | Q3, SCIE | 0.70 |

| **Scopus Indexed** |
|---|
| **Gobivel K**., Vijaysekar, K. S.* (2026) An experimental investigation of process parameters in end milling of SS316 alloy. *AIP Conference Proceedings*. |
| Vijaysekar, K. S., **Gobivel, K***., Selvan, C. P., Ashwinkumaran, S., Adithya, D. B., Chandrapraban, U., & Ragavendar, B. H. (2024). Effects of process parameters on drilling of Magnesium-reinforced with $B_4C$ composite. *Materials Today: Proceedings*. |

| |
|---|
| Vijaysekar, K. S., **Gobivel, K***., Selvan, C. P., Krishnanand, M., Malarmathi, E., Mohamed Saajid, N., & Mohanraj, A. (2024). Investigation into the end-milling Parameters of Mg/$B_4C$ metal matrix composites. *Engineering Proceedings*, *61*(1), 33. |
| Vijaysekar, K. S., & **Gobivel, K***. (2023). Experimental and numerical investigations in the turning of 42CrMo alloy steel. *Materials Today: Proceedings*. |
| Charukesh, S., **Gobivel, K***., Gowtham, K., Saikiran, E., & Niveshith, V. K. (2023). Understanding the process parameters on milling of Ti/$B_4C$ metal matrix composite. *Materials Today: Proceedings*. |
| **Gobivel, K***., & Vijaysekar, K. S., (2022). Investigation on the effect of TiN and Al2O3 coated tools in the Machining of Ti-6Al-4 V alloy. *Materials Today: Proceedings*, *62*, 920-924. |
| Vijaysekar, K. S., **Gobivel, K***., Goutham, G. R., Elangovan, P. P., & Babu, N. N. (2022). Cutting forces and tool wear studies on machining of Hastelloy X. *Materials Today: Proceedings*, *62*, 852-857. |
| **Gobivel, K***., & Vijaysekar, K. S., (2022). Influence of cutting parameters on end milling of magnesium alloy AZ31B. *Materials Today: Proceedings*, *62*, 933-937. |
| **Gobivel, K***., Vijaysekar, K. S., & Prabhakaran, G. (2021). Impact of cutting parameters on machining of Ti-6Al-4V alloy: an experimental and FEM approach. *International Journal for Simulation and Multidisciplinary Design Optimization*, *12*, 2. |
| **Gobivel, K***., Vijaysekar, K. S., Prabhakaran, G., & Elankavi, R. S. (2020, April). Experimental investigations on orthogonal turning of Inconel 718 with TiAlN coated tool. In *Materials Science Forum* (Vol. 979, pp. 142-148). Trans Tech Publications Ltd. |
| **Gobivel, K***., Vijay Sekar, K. S., & Prabhakaran, G. (2018). Finite Element Analysis of High-Speed Machining of CFRP Material. In *Advances in Materials and Metallurgy: Select Proceedings of ICEMMM 2018* (pp. 137-147). Singapore: Springer Singapore. |

## IV. RESPONSIBILITIES

**Funding Project Coordinator – Institute level (2022 to Till Now):** Mailing funding alerts, documenting funding project reports from PI's, maintaining records, providing validated data for institution accreditation process and rankings.

**Virtual Lab Nodal Coordinator (2021 to 2024):** In collaboration with NIT Surathkal and IIT PALS, developed and deployed few experiments on local host to simulate experiments virtually. Institute level coordinate and outreach v-lab activities.

**Department level research coordinator (2024 to Till Now):** Coordinated departmental research activities, documentation, and data management under mechatronics department.

**Department level training and placement coordinator (2017 to 2023):** Managed student placement activities, training programs, and industry interaction under mechanical department.

**NBA Accreditation - Criteria 3 (2017 to 2021):** Led documentation, data collection, and compliance processes for NBA Criteria 3 under mechanical department.

**QS I-Gauge:** Worked on institute-level research parameters, including data collection, validation, and documentation for ranking metrics.

## V. AREAS OF INTEREST

- ✓ FE Modelling & Simulation (Software's: ABAQUS & ANSYS)
- ✓ Machining
- ✓ Manufacturing
- ✓ Composite Materials & its Processing, Testing & Characterization

## VI. EDITOR & REVIEWER PANEL

- ✓ **Serving as Guest Editor (2024 to Till Now)** – Topical Collection: Research Progress in Machining, Machine Tool Vibrations, Welding Processes, and Computational Simulations, **Journal of Visualized Experiments (JoVE)**
- ✓ **Reviewer** for multiple **peer-reviewed international journals**, evaluating manuscripts in my areas of expertise.

## VII. ACHIEVEMENTS

- ✓ Secured distinction with a university rank during postgraduate studies.
- ✓ Received appreciation and accomplishment recognition for institute level contributions towards QS I-Gauge research parameters.

**Dr. K. GOBIVEL**