### **Curriculum Vitae**

Dr. Vasu. M, is presently working as an Assistant Professor in the Department of Production Engineering at National Institute of Technology Tiruchirappalli (India). He pursued his B.E. degree in Industrial Engineering & Management from Sri Siddhartha Institute of Technology (SSIT), Tumkur, (VTU) in 2010. Later he joined NITK Surathkal through GATE and completed MTech Manufacturing Engineering in 2012. His enthusiasm in research and development motivated him to continue to doctoral research. He completed his Ph.D. in Mechanical Engineering from National Institute of Technology Karnataka (NITK), Surathkal in the year of 2019. His Area of interest is Machinability studies, Optimization Technique and Additive manufacturing.

- 1. Name: Dr Vasu M
- 2. Designation: Assistant Professor
- Office Address: Room No MTB201, Department of Production Engineering, NIT Trichy, Tanjore Main Road, Thuvakudi Tamilnadu-620015
- 4. Telephone (Direct) (Optional):

Telephone:

Extn (Optional):

Mobile (Optional):9611604276

- 5. Email (Primary): mvasu@nitt.edu
- 6. Field(s) of Specialization: Machinability Studies, Optimization Techniques and Additive Manufacturing
  - 7. Employment Profile

| Job Title           | Employer   | From       | То           |
|---------------------|--|------------|--------------|
| Assistant Professor | National Institute of Technology<br>Trichy (NITT)    | 21/05/2020 | To till date |
| Assistant Professor | Srinivas Institute of Technology<br>(SIT), Mangaluru | 22/07/2013 | 30/06/2015   |



Email (Secondary):

| Assistant Professor | Sri Revana Siddeshwara | 09/07/2012 | 13/07/2013 |
|---------------------|------------------------|------------|------------|
|                     | (SRSIT), Bengaluru     |            |            |

8. Academic Qualifications (From Highest Degree to High School):

| Examination             | Board / University | Year | Division/ Grade       | Subjects                           |
|-------------------------|--------------------|------|-----------------------|------------------------------------|
| Doctor of<br>Philosophy | NITK Surathkal     | 2019 | 1 <sup>st</sup> Class | Machinability<br>Studies           |
| M. Tech                 | NITK Surathkal     | 2012 | 1 <sup>st</sup> Class | Manufacturing<br>Engineering       |
| B. E.                   | SSIT Tumkur, (VTU) | 2010 | 1 <sup>st</sup> Class | Industrial Engg<br>and Management) |

9. Academic/Administrative Responsibilities within the University

| Position   | Faculty/Department/Centre/Institution | From | То           |
|--|---------------------------------------|------|--------------|
| PhD/MS/QIP<br>Admission<br>Committee<br>Member             | Department level                      | 2020 | 2022         |
| Department<br>Project<br>evaluation<br>committee<br>member | Department level                      | 2020 | 2022         |
| PhD/MS/ICCR<br>Admission<br>Committee<br>Member            | Institution level                     | 2022 | To till date |
| NBA work<br>committee<br>member                            | Department level                      | 2022 | To till date |

#### 10. Academic/Administrative Responsibilities outside the University

| Position | Institution | From | То |
|----------|-------------|------|----|
|          |             |      |    |
|          |             |      |    |
|          |             |      |    |

11. Awards, Associateships etc.

| Year of Award | Name of the Award | Awarding Organization |
|---------------|-------------------|-----------------------|
|               |                   |                       |
|               |                   |                       |
|               |                   |                       |

#### 12. Fellowships

| Year of<br>Award | Name of the Fellowship              | Awarding<br>Organization | From<br>(Month/Year) | To<br>(Month/Year) |
|------------------|-------------------------------------|--------------------------|----------------------|--------------------|
| 2010-2012        | GATE scholarship<br>during M.Tech   | MHRD                     | June 2010            | July 2012          |
| 2015-2019        | Institute fellowship<br>during PhD. | MHRD                     | June 2015            | March 2019         |
|                  |                                     |                          |                      |                    |

#### 13. Details of Academic Work

- (i) Curriculum Development
- (ii) Courses taught at Postgraduate and Undergraduate levels

#### **Under Graduate Levels**

- 1. Introduction to production Engineering
- 2. Engineering Graphics
- 3. Work design and Facility Planning
- 4. Industrial Engineering Lab
- 5. Manufacturing Technology-1 Lab

#### **Post Graduate Levels**

- 1. Advanced Operation Research
- 2. Operation Management Lab
- (iii)Projects guided at Postgraduate level
  - 1. Shubham Bhardwaj (214220026) "Manpower optimization using MOST study in the logistic center of an automobile company". (2022)
  - 2. Vaibhav Gokul Kodape (214220029) "Analysis and Prediction of Warehouse Demand Using Historical Data with the Help of Machine Learning" (2022)
  - 3. Vikas Jaiswal (214220031) "Logistics Improvement on Assembly Lines" (2022)

(iv)Other contribution(s)

### Project guided undergraduate Level

- N. Murali Krishna (114117052), Ragavendar. S (114117068), Satheesh. S. D (114117078) "Demand Forecasting and Optimization for A Crowd-Sourced Last-Mile Delivery Company – A Comparative Study" (2021).
- 2. K Sohith (114118042), Seedi Vinay (114118081), S Vinay (114118092), K Prasanth (114118049) "*Influence of Reinforcement of Filler in PETG on its Properties*" (2022).

| Title of Project | Funding Agency | Duration |    | Status             |
|------------------|----------------|----------|----|--------------------|
|                  |                | From     | То | Ongoing/ Completed |
|                  |                |          |    |                    |
|                  |                |          |    |                    |
|                  |                |          |    |                    |
|                  |                |          |    |                    |

14. Details of Major R&D Projects

15. Number of PhDs guided

| Name of the PhD<br>Scholar           | Title of PhD<br>Thesis    | Role (Supervisor/ Co-<br>Supervisor) | Year of<br>Award |
|--------------------------------------|---------------------------|--------------------------------------|------------------|
| Mr Surjeet Singh Bedi<br>(414120008) | Additive<br>manufacturing | Supervisor                           | On going         |
|                                      |                           |                                      |                  |
|                                      |                           |                                      |                  |

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

| Date (s)                       | Title of<br>Activity | Level of<br>Event<br>(Internation<br>al/ National/<br>Local) | Role<br>(Participant/<br>Speaker/<br>Chairperson,<br>Paper<br>presenter,<br>Any other) | Event Organized<br>by  | Venue  |
|--------------------------------|----------------------|--|--|--|--|
| March<br>10th-<br>12th<br>2017 | Conference           | Internationa<br>I  | Paper<br>presenter   | International<br>Conference on<br>Emerging<br>Trends in<br>Materials and<br>Manufacturing<br>Engineering | NIT<br>Tiruchirap<br>palli,<br>Tamilnad<br>u India |
| Nov                            | Conference           | Internationa   | Paper  | International  | IIT  |

|          |            | Γ.           | _         |               |            |
|----------|------------|--------------|-----------|---------------|------------|
| 30th-    |            |              | presenter | Conference on | Roorkee,   |
| Dec 2nd  |            |              |           | Advances in   | India      |
| 2017     |            |              |           | Matorials     |            |
| 2017     |            |              |           | Materials     |            |
|          |            |              |           | &Processing:  |            |
|          |            |              |           | Challenges &  |            |
|          |            |              |           | Opportunities |            |
| Jan 29th | Conference | Internationa | Paper     | Advances in   | NITK       |
| to 31st  |            | 1            | presenter | International | Surathkal, |
| Jan -    |            |              |           | Conference on | India.     |
| 2018     |            |              |           | Design,       |            |
|          |            |              |           | Materials &   |            |
|          |            |              |           | Manufacture   |            |
| March    | Symposiu   | Internationa | Paper     | 8th           | Kumamot    |
| 13th -   | m          | 1            | presenter | International | 0          |
| 15th     |            |              |           | Engineering   | University |
| 2019     |            |              |           | Symposium     | , Japn     |

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

| Title of Activity | Level of Event    | Date             | Role         | Venue      |
|-------------------|-------------------|------------------|--------------|------------|
|                   | (International/   | (S)              |              |            |
|                   | National/ Local)  |                  |              |            |
| One day Workshop  | Local (Department | 27 <sup>th</sup> | Co-Ordinator | NIT Trichy |
| on                | Level)            | January          |              | (Virtual   |
| JMP Software      |                   | 2022             |              | Mode)      |
|                   |                   |                  |              |            |
|                   |                   |                  |              |            |

#### 18. Invited Talks delivered

| Topic                          | Date                            | Inviting Organization             |  |  |  |
|--------------------------------|---------------------------------|-----------------------------------|--|--|--|
| Machinability Studies: EN 47   | 01/06/2020                      | Ballari Institute of Technology & |  |  |  |
| Spring Steel                   | Management, Ballari Karnat      |                                   |  |  |  |
| Machinability Studies on EN 47 | Sri M Visvesvaraya Institute of |                                   |  |  |  |
| Spring Steel                   |                                 | Technology, Bengaluru Karnataka   |  |  |  |
| Machinability studies using    | 09/06/2021                      | RNS Institute of Technology,      |  |  |  |
| optimization technique         |                                 | Bengaluru Karnataka               |  |  |  |
| "Next generation of Adopting   | 14/07/2021                      | Marian Engineering College,       |  |  |  |

| manufacturing System | Thiruvananthapuram, Kerala |  |
|----------------------|----------------------------|--|
|                      |                            |  |

#### 19. Membership of Learned Societies

| Type of Membership (Ordinary<br>Member/ Honorary Member / Life<br>Member ) | Organization                            | Membership No. with date      |
|--|---|-------------------------------|
| Associate Member   | The Institution of<br>Engineers (India) | AM1953969 Date:<br>03/09/2020 |

#### 20. Academic Foreign Visits

| Cou        | ntry     | Duration of Visit | Programme |               |             |
|------------|----------|-------------------|-----------|---------------|-------------|
| Japan,     | Kumamoto | March 13th -15th  | 8th       | International | Engineering |
| University |          | 2019              | Symposium |               |             |

### 21. Publications

### (A) <u>Refereed Research Journals</u>:

| Author(s)                                 | Title of Paper  | Journal                          | Volume<br>(No.) | Page<br>numbers | Year | Impact<br>Factor of<br>the Journal<br>(Optional) |
|---|---|----------------------------------|-----------------|-----------------|------|--|
| <b>Vasu M,</b> H<br>Shivananda<br>Nayaka, | Investigation<br>of<br>machinability<br>characteristics<br>on EN47 steel<br>for cutting<br>force and tool<br>wear using<br>optimization<br>technique        | Material<br>Research<br>Express  | 5               | 066501          | 2018 | SCIE 1.15  |
| <b>Vasu M,</b> H<br>Shivananda<br>Nayaka  | Comparative<br>study of<br>coated and<br>uncoated tool<br>inserts with<br>dry machining<br>of EN47 steel<br>using Taguchi<br>L <sub>9</sub><br>optimization | AIP<br>Conference<br>Proceedings | 1943            | 020063          | 2018 | Scopus   |

|   | technique  |   |                                 |                       |      |   |
|---|--|---|---------------------------------|-----------------------|------|---|
| <b>Vasu M,</b> H<br>Shivananda<br>Nayaka  | Investigation<br>of Cutting<br>Force Tool Tip<br>Temperature<br>and Surface<br>Roughness<br>during Dry<br>Machining of<br>Spring Steel     | Materials<br>Today:<br>Proceedings            | 5.2                             | 7141-<br>7149         | 2018 | Scopus  |
| <b>Vasu M,</b> H<br>Shivananda<br>Nayaka  | Comparative<br>study of<br>turning<br>process on<br>EN47 spring<br>steel with<br>different nose<br>radii using<br>statistical<br>technique | Materials<br>Today:<br>Proceedings            | Vol 5,<br>Issue<br>9, Part<br>1 | P<br>16893-<br>16903  | 2018 | Scopus  |
| <b>Vasu M,</b> H<br>Shivananda<br>Nayaka  | Turning<br>process on<br>EN47 spring<br>steel with<br>different tool<br>nose radii<br>using OFAT<br>approach                               | Advances in<br>Modelling<br>and<br>Analysis A | Vol.<br>55, No.<br>2            | P 43-46               | 2018 | MIAR<br>Google<br>Scholar<br>CrossRef<br>Portico<br>CNKI<br>Scholar |
| <b>Vasu M</b> ,<br>Shivananda<br>Nayaka H,<br>Pradeep V<br>Badiger,<br>Vinyas M | Machinability<br>studies on<br>EN47 spring<br>steel by<br>optimization<br>technique<br>during dry and<br>wet condition                     | IJMMT   | Vol. XI,<br>No. 2               | ISSN<br>2067–<br>3604 | 2019 | Scopus  |

(B) <u>Conferences/Workshops/Symposia</u> Proceedings

| Author(s)                         | Title of<br>Abstract/<br>Paper            | Title of the<br>Proceedings                | Page<br>numbers | Conference<br>Theme | Venue                  | Year                   |
|-----------------------------------|---|--|-----------------|---------------------|------------------------|------------------------|
| Vasu M,<br>Shivananda<br>Nayaka H | Investigation<br>of Cutting<br>Force Tool | International<br>Conference<br>on Emerging | 7141-<br>7149   |                     | NIT<br>Tiruchirappalli | March<br>10th-<br>12th |

|  | Tip<br>Temperature<br>and Surface<br>Roughness<br>during Dry<br>Machining of<br>Spring Steel  | Trends in<br>Materials and<br>Manufacturing<br>Engineering  |                       |                                  | 2017                                       |
|--|---|---|-----------------------|----------------------------------|--|
| Vasu M,<br>Shivananda<br>Nayaka H          | Comparative<br>study of<br>turning<br>process on<br>EN47 spring<br>steel with<br>different<br>nose radii<br>using<br>statistical<br>technique                               | International<br>Conference<br>on Advances<br>in Materials<br>&Processing:<br>Challenges &<br>Opportunities | 16893-<br>16903       | IIT Roorkee                      | Nov<br>30th-<br>Dec<br>2nd<br>2017         |
| Vasu M,<br>Shivananda<br>Nayaka H          | Comparative<br>Study of<br>Coated and<br>Uncoated<br>Tool Inserts<br>with Dry<br>Machining of<br>EN47 Steel<br>Using<br>Taguchi L <sub>9</sub><br>Optimization<br>Technique | Advances in<br>International<br>Conference<br>on Design,<br>Materials &<br>Manufacture                      | 1943,<br>020063       | NITK<br>Surathkal                | Jan<br>29th<br>to<br>31st<br>Jan -<br>2018 |
| H<br>Shivananda<br>Nayaka<br>and Vasu<br>M | Turning<br>process on<br>EN47 spring<br>steel with<br>different tool<br>nose radii<br>using OFAT<br>approach  | 7th<br>International<br>Engineering<br>Symposium  | P 43-46               | Kumamoto<br>University,<br>Japan | March<br>7th -<br>9th<br>(2018)            |
| Vasu M,<br>Shivananda<br>Nayaka H          | Machinability<br>Studies on<br>EN47 Spring<br>Steel by<br>Optimization<br>Technique   | 8th<br>International<br>Engineering<br>Symposium  | ISSN<br>2067–<br>3604 | Kumamoto<br>University,<br>Japan | March<br>13th -<br>15th<br>(2019)          |

| During Dry<br>and Wet |  |  |  |
|-----------------------|--|--|--|
| Condition             |  |  |  |

#### (C) Books & Monographs

| Author(s)   | Title of<br>Book/Monograph   | Name of<br>Publishers          | Year of<br>Publication | ISSN/ISBN<br>Number |
|---|--|--------------------------------|------------------------|---------------------|
| Athul Joseph,<br>Vinyas<br>Mahesh,<br>Vishwas<br>Mahesh,<br>Dineshkumar<br>Harursampath,<br><b>Vasu</b><br>Mallesha | Role of 3D Printing in<br>the Fabrication of<br>Composite Sandwich<br>Structures | Taylor and<br>Francis<br>Group | 2022                   | 9781003143031       |
|   |  |                                |                        |                     |
|   |  |                                |                        |                     |