SARANATHAN COLLEGE OF ENGINEERING

VENKATESWARA NAGAR, PANJAPUR TIRUCHIRAPALLI- 620012

DATA SHEET - 2020-21

Name of the Faculty member

: N. Baskar

Name of the Department

: Mechanical Engineering

Qualification:

| Deg | gree | Specialisation | Year of completion | Name of College/University | % of Marks obtained | Class |
|-------|-------|-----------------------------|--------------------|--|------------------------|-------|
| UG | B.E., | Mechanical Engineering | 1992 | Shanmugha College of Engineering, Thanjavur /Bharathidasan University, Trichy | 60.4 | I |
| PG | M.E., | Manufacturing Technology | 1996 | Regional Engineering College (REC), Trichy /Bharathidasan University, Trichy | 61.4 | I |
| Ph.D. | | Production Engineering | 2006 | Regional Engineering College (REC), Trichy / Bharathidasan University, Trichy | Commended | |

Designation while joining SCE: Professor

Date: 23/06/2014

Present Designation

: Professor

Experience:

| | Acad | demic | Ind | ustry | Total |
|-------------|-------|--------|-------|--------|-------|
| | Years | Months | Years | Months | Years |
| After UG | 4 | 6 | | | 4.6 |
| After PG | 9 | 6 | | | 9.6 |
| After Ph.D. | 14 | 2 | | | 14.2 |
| Total | | | | | 28.2 |

I. Details of continuing higher education: NA

II. Prepared and submitted the following for Journal publication:

| Academic Year | Title of the Publication | Name of the Journal | Author/ Co- Author | Impact factor | Status | AU Annexu I/II |
|------------------|---|--|--------------------------|------------------|---|----------------------|
| | A Drilling Operation: A Review | Materials Today: Proceedings | | | Volume 21, Part 1, 2020, Pages 926-933 | Scopus |
| | Multi criteria decision making through TOPSIS and COPRAS on drilling parameters of magnesium AZ91 | Journal of Magnesium and Alloys | | 10.088 | In Print | SCI and Scopus |
| 2020-2021 | Surface Modification method of duplex type stainless steels by the pack boriding process | Hemijska Industrija | Co- Author | 0.627 | Vol.75 No.(3),15 5-166 ,(2021) | Annexure |
| | Research Review in IOT Based Smart Tractor for Field Monitoring and Ploughing | International Journal of Engineering Research and Applications | | | Vol. 11, Issue 2, (Series- I) Februar y 2021, pp. 32- 38 | |
| | Comparison of incremental | Proceedings of the Institution of | | 2.610 | Volume: 235 issue: 8, | Annexure |

| sheet metal forming process using newly designed multipoint tool with the existing single point tool by optimization and characterization methods on austenite stainless steel 202 | Mechanical Engineers, Part B: Journal of Engineering Manufacture | | page(s): 1298- 1308, June 1, 2021. | |
|--|---|-------|---|-------------------------------|
| Evaluation of desirability function approach and grey relation analysis for modeling circularity, perpendicularity and cylindricity in drilling magnesium AZ31 | Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering | 1.620 | Volume: 235 issue: 2, page(s): 238-248, April 1, 2021 | Scopus & Google Scholar |
| Research Review in Experimental Analysis of Al- 6061, Al-2024 in CNC Using MOORA Technique | International Journal of Engineering Research and Applications | | ISSN: 248- 9622, Vol. 11, Issue 3, (Series- I) arch 2021, pp. 36-39 | Z |
| Process Evaluation and Optimization of Friction | International Journal of Rapid Manufacturin | | 1757- 825, Vol. 9, No. 4, pp. 322- 340 (25 | Google Scholar |

| Welding Parameters on Aluminium Grade 6061 by Direct Drive Friction | (IJRAPIDM) Inderscience Publishers, | | September 2020) | |
|--|---|-------|--|---|
| Welding Method Mechanical properties and applications of Magnesium alloy - Review | Materials Today: Proceedings, | | Volume 27, Part 2, 2020, Pages 909-913. | Scopu |
| Modeling and Optimization of Hole Accuracy and Drilling Time in Magnesium Az31 Plate | Surface Review and Letters | 1.152 | Vol. 28, No. 07 | Science Citation Index (S Science Citation Index Expande (SCIE) Scopus.(A |
| Performance analysis of solar box preheaters for energy conservation in metal casting | Journal of Rapid Manufacturin g (IJRAPIDM), Inderscience | | Vol. 9, No. 4, pp.361– 371. 25 Septemb er 2020 | Google Scholar |
| textured carbide inserts for machining industrial component | Journal of Rapid Manufacturin g (IJRAPIDM), Inderscience Publishers. | | 1757- 825, Vol. 9, No. 4, pp. 309- 321. 25 Septemb er 2020 | Google Scholar |
| Optimization of | Journal of Manufacturin g Technology Research | | Vol. 12, Iss. 1/2, (2020): 41-56 | Scopus |

| Titanium Grade 2 Materials of Conventional and CNC Machine | | | | |
|--|--|---------------------|--|---|
| Productivity and quality improvement by optimization of milling parameters of super alloy | Materials Today: Proceedings | 33, 7, P 3 | olume , Part 2020, lages 491- | Scopus |
| Optimization of cylindrical grinding process parameters using meta- heuristic algorithms | Indian Journal of Engineering and Materials Sciences (IJEMS) | (2 pp | ol 27, No 2, 2020), 0-389- 395 | SCOPUS (Elsevier), Web of Science (Clarivate Analytics), SCI. |

III. Prepared and presented paper in the following conference: NIL

| Academic Year | Title of the Paper | Organizer | Author/ Co-Author |
|------------------|--------------------|-----------|----------------------|
| - | | (4 | % <u>=</u> |

IV. Attended the following Seminar/Workshop/FDP/STTP

| Academic Year | Topic | Organizer | No of Days |
|------------------|-------------------------------------|--|---|
| 2020-2021 | Basics of Finite Element Analysis-I | National Programme on Technology Enhanced Learning (NPTEL) | 8 Week Course (September 2020 to November 2020) |

V. Publication of Text Books:

| Academic Year | Name of the text book | Publisher |
|------------------|-----------------------|-----------|
| Tear | | |
| - | ž. | |

VI. Details of Patent Filed

| Academic Year | Details of the Patent | Statu |
|------------------|---|-------------------------------------|
| 2020-2021 | Motorized Copper Tubes Instead of Vent Holes in Sand Casting Process | First Examina Repor Submit |
| | Smart Drafting Device | Publishe 16/10/2 |
| | Combination Drill Jig | Firs Examina Repor |

VII. Prepared/helped in preparing the following work for funding agencies:

| Academic Year | Title of the Proposal | Agencies | Author/Investigator | Stati |
|------------------|--|---|----------------------------------|----------------|
| 2020-2021 | Experimental Design, Evaluation and analysis of friction welding joint on AISI D3 Steel (January 2021) | Tamil Nadu State Council for Science and Technology (TNSCST), Chennai | N. Baskar | Resul Await |
| 2020-2021 | Experiment Evaluation, Characterization and Multi Objective Optimization of | Tamil Nadu State Council for Science and Technology | N. Baskar & S. Karthikeyan | Resu |

| | Friction Welding Parameters on Combination of Two Dissimilar Materials. (January 2021) | (TNSCST), Chennai | | |
|-----------|---|---|----------------------------------|--|
| 2020-2021 | Experiment Evaluation, Characterization and Multi Objective Optimization of Friction Welding Parameters on Combination of Two Dissimilar Materials. | The Institution of Engineers (India) R&D Grant-in-aid Scheme, Kolkata. (February 2021) | N. Baskar & S. Karthikeyan | Results Awaited |
| 2020-2021 | Rudiments and Practices of Computational Fluid Dynamics in Thermo-Fluid Analysis | All India Council for Technical Education (AICTE), New Delhi | N. Baskar & A. Mercy Vasan | Completed and fund Received Rs.1,91.567 |
| 2020-2021 | Manufacturing Intelligence in Industry 4.0 | Council of Scientific and Industrial Research Human Resource Development Group CSIR Complex, New Delhi- 110012, India | N. Baskar & M. Ganesan | Results Awaited |

VIII. Details of Ph.D. Guidance:

YES a) Are you eligible for Guideship:

b) If yes, details of Ph.D Guidance:

Guiding: 04 No. of Ph.D.: Guided - 10

NO

| S. No. | Name of the Candidate with Register Number | Title of the Thesis | Name of the University | Date & year Completion |
|--------|--|---|-------------------------------------|--|
| 1. | S. Bharathiraja | Experimental Investigation of Optimum Cutting Parameters for Machining Various Work piece Materials. | SASTRA University, Thanjavur. | July 24th ,2011 |
| 2. | B. Sureshkumar 20092022038 | Comprehensive Analysis of Machining Parameters in Drilling Operations | Anna University , Chennai | May 15 th , 2015 |
| 3. | R. Balasundaram 20092062006 | Discovering Dispatching Rules for Permutation Flow Shop Scheduling Using Data Driven Approach | Anna University , Chennai | July 13 th , 20 1 5 |
| 4. | V. Balasubramanian 20102042005 | Optimization of Technological Parameters and their effects on Process Performance During EDM of Aluminium Silicon Carbide Composite Materials | Anna University , Chennai | January 22 ⁿ , 2016 |
| 5. | R. Gayatri 20105052014 | Comprehensive Performance Analysis of Non- Traditional Algorithmic Parameters for Various Mathematical Models of Machining Processes | Anna University , Chennai | February 10 2017 |

| 6. | S. Kannan 20092012011 | An Experimental Investigation, Analysis, Modeling and Optimization of Face Milling Parameters for Various Work Piece Materials. | Anna University , Chennai | February 28 th , 2017 |
|-----|--|--|---------------------------------|--|
| 7. | M. R. AnanthaPadmanab an 2010S2012001 | Modeling, Investigation and Optimization of Hot Wire Gas Tungsten Welding Process for Austenitic Stainless Steel used in Power Boiler Applications | Anna University, Chennai. | August 17 th , 2017 |
| 8. | R. Rekha 2010S2012014 | Experimental Investigations and Analysis on Cylindrical Grinding of Steel Work pieces Under Dry and Wet Conditions | Anna University, Chennai. | September 27 th ,2017. |
| 9. | K. Ramesh & 20092032026 | Optimization of Sheet Metal Nesting using Traditional and Nontraditional Techniques | Anna University, Chennai | Viva Voce Examination Completed on October, 1st ,2018 |
| 10. | N. Sathiya Narayanan& 1615259141 | Performance Investigation and Analysis of Conventional and Surface Textured Cutting Insert | Anna University, Chennai | Viva Voce Examination Completed on September 11th, 2020. |

Ph.D. Guiding: 4

| S. No. | Name of the Scholar | Date of Registration | Status | |
|--------|---------------------|----------------------|---|--|
| 1. | S. Karthikeyan | January 2017 | Comprehensive Villa Voce Examination completed | |
| 2. | A. Maria Jackson | January 2017 | Comprehensive Vn Voce Examination completed | |
| 3. | P. Sathis Kumar | July 2017 | Comprehensive Vi Voce Examination completed | |
| 4. | K. Ramkumar | January 2015 | Oral Viva voce examination Pan submitted. | |

IX. Contribution to Co-curricular Activities:

| Academic Year | Name of the Activity | Contribution |
|------------------|--|----------------------------|
| 2020-2021 | Preparation of National Assessment and Accreditation Council (NAAC) Documents | NAAC - Overall Coordinator |
| 2020-2021 | National Board of Accreditation (NBA) Compliance Report Preparation | NBA - Overall Coordinator |
| 2020-2021 | AICTE Sponsored One Week Short Term Training Programme (STTP) "Rudiments and Practices of Computational Fluid Dynamics in Thermo-Fluid Analysis" Phase - I (10/05/2021 to 15/05/2021) Phase - II (24/05/2021 to 29/05/2021) Department of Mechanical | STTP - Coordinator |

| | Engineering Saranathan College of Engineering, Tiruchirappalli, Tamil Nadu, India. | |
|-----------|--|--|
| 2020-2021 | Reviewer of Journals | 1.Part B: Journal of Engineering manufacture. 2.Silicon 3.Applied Soft Computing 4. The international journal Mechanical Sciences 5.Nature |
| 2020-2021 | One Week Online Faculty Development Programme (FDP) "Evolving Trends in Research" Department of Mechanical Engineering Agnel Institute of Technology & Design, Goa, India. Date: 26/08/2020 | Resource Person Topic: Recent Research in Mechanical Engineering |

Signature of the Staff with date

SARANATHAN COLLEGE OF ENGINEERING VENKATESWARA NAGAR, PANJAPUR TIRUCHIRAPALLI- 620012

DATA SHEET 2020-2021

Name of the Faculty member:

Dr.M.V.Suganyadevi

Name of the Department

Electrical and Electronics Engineering

Qualification

Ph.D

| Degree | | Specialisation | Year of completion | Name of College/University | % of Marks obtained | Class |
|-----------------------|------|----------------|--------------------|--|---------------------------|-------------------------------|
| Dip. | - | | completion | Conege/Oniversity | Obtained | |
| UG | B.E | EEE | 2006 | Pallavan College of Engineering, Kanchipuram | 83 | Ist class with Distn |
| PG | M.E | Power System | 2009 | Thiagarajar College of Engineering, Madurai | 9.34 | Ist class with Distn |
| Ph.D | Ph.D | Power System | 2015 | Anna University, Chennai | 9 | Ist class with Distn |
| Others (if any) | - | | | | | Distri |

Designation while joining SCE: Associate Professor

Date: 05.06.2017

Present Designation: Associate Professor

Since:05.06.2017

Experience:

| | Academic | | Industry | | Total | |
|------------|----------|------------|----------|--------|---------------|--|
| | Years | Months | Years | Months | | |
| After UG | 1 | 9 - | | | 1 | |
| After PG | 6 | - | | | 6 | |
| After Ph.D | 6 | 1 | | | 6 yr 1 month | |
| Total | 13 | 1 | | | 13 yr 1 month | |

I. Details of continuing higher education:

P.G. :

Ph.D:

II. Prepared and submitted the following for Journal publication:

| Academic Year | Title of the Publication | Name of the Journal | Author/ Co- Author | factor | Status | Annen In |
|------------------|---|--|--------------------------|--------|-----------|----------|
| | Using Soft Computing Techniques The Measurement Of Voltage Stability Of The Power System | International Journal of Electrical Engineering & Technology | Author | 1.67 | Published | Scopus |
| 2020-2021 | Detection and classification of multi-complex power quality events in a smart grid using Hilbert–Huang transform and support vector machine | Electrical Engineering- Springer | Co Author | 1.18 | Published | Annj |
| | A study of UPQC: emerging mitigation techniques for the impact of recent power quality issues | Circuit World | Co Author | 1.7 | Published | - Ann 1 |
| | Development of IoT Architecture for Physically Challenged People Using BLYNK Server | Bioscience Biotechnology Research Communications | Co Author | 5.09 | Published | Scopus |
| | Active Bridges Based Bidirectional DC-DC Converter for Solar PV | IEEE Xplore | Co- author | - | Published | Scopus |

| application | | | | | |
|--|--|---------------|------|------------------------------|--------------------------|
| Password based circuit breaker operation for the safety off line man during maintenance work | International Journal of Engineering Research and Applications | Co- author | 0.2 | Published | UGC- Care II Group |
| Modeling and performance investigation of UPQC integrated IEEE 14 bus system with the novel combination of controllers | Advances in Fuzzy System | Co- author | 0.82 | Accepted for Published | Ann-1 |
| Performance enhancement of BLDC motor using PID controller | International Journal of Power Electronics and Drive Systems | Co- author | 1.98 | Accepted for Published | Scopus |

III. Prepared and presented paper in the following conference:

| Academic Year | Title of the Paper | Organizer | Author/ Co-Author Co-Author | |
|------------------|---|--|-----------------------------------|--|
| | Active Bridges Based Bidirectional DC-DC Converter for Solar PV application | Smart Electronics and Communication (ICOSEC) | | |
| | Internet of Things Based Advanced Energy Meter | ICECES 20, Saranathan College of Engineering | | |
| | Design and Development of Sepic Converter Fed BLDC Motor Driver for Photovoltaic Application | ICECES 20, Saranathan College of Engineering | Author | |
| | "Using Soft Computing Techniques the Measurement of Voltage Stability of the Power System" | ICECES 20, Saranathan College of Engineering | Author | |
| 2020-2021 | Active Bridges Based Bidirectional DC-DC Converter | ICECES 20, Saranathan College of Engineering | | |
| 202 | Modeling and Performance Investigation of UPQC | Smart Technologies in Electric Vehicles and Power Grid (STEP- | Co-Author | |

| Integrated IEEE 14 I With the Novel Com Controllers | Engi Venl Engi 2021 | cateswara neering, cateswara neering, P | Colleg Pennalu Colleg ennalur or | r, Sri ge of 1 27-Jan- | |
|---|------------------------------|--|---|------------------------------|-----------|
| | roller for Engi | 18 111 | Lifeigy | System | Co-Author |

IV. Attended the following Seminar/Workshop/FDP/STTP

| Academic Year | Topic | Organizer | No o Days |
|------------------|---|------------------------|--------------|
| • | Internet of Things | ATAL | 5 |
| 121 | AICTE sponsored online STTP on Novel Design & Control Strategies and Innovative Technical Practices in LV/HV Modern Switchgear (Phase II) | SCE | 6 |
| 2020-2021 | Patent Drafting for Beginners-NPTEL | NPTEL | 14 |
| 20. | Emotional Intelligence | ATAL | 5 |
| | Research Opportunities, Challenges in Power Electronics for EV and Its Impact on Smart Grid | AICTE- Margadharsan | 6 |

V. Publication of Text Books:

| Academic Year | Name of the text book | Publisher |
|------------------|--|--|
| 2020-2021 | Advances in Engineering Technology - Volume - 4 | AkiNik Publications |
| | (Chapter 5: Evaluation of Voltage Stability Margin in Deregulated Power Market) | |
| | Design and Performance analysis of Multiobjective optimization using PSO and | Scrivener Publishing WILEY (Scopus Indexed and Web of Science) |
| | SVM for PSS tuning in SMIB system" in Book Title: Artificial Intelligent Techniques for Wireless Communication and Networking, 2021 | Accepted for Publication |

VI. Details of Patent Filed

| Academic Year | Details of the Patent | Status |
|------------------|--|-----------------------------|
| | Published a Patent in the title of "Brain Cancer Detection and Analysis with Advanced Imaging Technologies IOT" in Intellectual Property India. Application Number: 202041043071 | Published in IPR Website |

VII. Prepared/helped in preparing the following work for funding agencies:

| Academic Year | Title of the Proposal | Agencies | Author/Investigator | Status Under review | |
|------------------|---|--------------|---------------------|---------------------|--|
| 2020-2021 | Real time design and development of Solar Photovoltaic powered SEPIC-UPQC as a unique custom power device | DST- WOSB | Mentor | | |
| | Real time design and development of Solar Photovoltaic powered SEPIC-UPQC | DST-SJ | Investigator | Under Review | |

VIII. Details of Ph.D Guidance:

a) Are you eligible for Guideship:

| YES | NO |
|-----|----|
| | |

b) If yes, details of Ph.D Guidance:

| S.No | Name of the Scholar | Date of Registration | Status |
|------|---------------------|----------------------|------------------------|
| 1. | S.Gomathi | Jan 2013 | Completed on Oct 2020 |
| 2. | R. Kishore Kumar | July 2016 | Confirmation Completed |
| 3. | N.Ananthan | Jan 2016 | Confirmation Completed |
| 4. | C.K.Hema Priya | Jan 2018 | Completed on Aug 2021 |

| | | Jan 2018 | Confirmation |
|----|---------------------|------------------------|-----------------------|
| 5. | C.Pearline Kamalini | | Confirmation Complete |
| | | Jan 2018 | Confirmation Complete |
| 6. | S.Murugesan | | Complete |
| | | Jan 2019 | Confirmation Complete |
| 7. | T.Tamilarasan | | oinpleto |
| | | Jan 2021 | Course Work Complete |
| 8. | Thenmozhi | | |
| | | July 2021 | Registered. |
| 9. | A.R.Danila Shirly | 0.7×1500 4 10°0 | |
| | | | |

IX. Contribution to Co-curricular Activities:

| Academic | Name of the Activity | Contribution | | |
|----------|--|--|--|--|
| Year | Department Committee member of AICTE sponsored International Conference 2020 | Helped by coordinating the program and reviewed the papers for the EEE panel. | | |
| w. | NAAC | Criteria 3 and 6.5 data collection and consolidation | | |
| | | Department Coordinator | | |
| | NBA Compliance Report | Preparation & Submission of B2.6 | | |
| | Committee Member of AICTE sponsored | Helped by coordinating the program and | | |
| | STTP | arranging expert members for the session | | |
| 2021 | Earth Day ENERGATHON 20 by IGEN Association | Participated in Genius Record Mee | | |
| 2020-202 | An Effective Pedagogy Practice | Gave a lecture as a resource person in AICTE-ISTE Induction/Refresher Program at KLNCE | | |
| | Patent Filling in India | Gave a seminar at ICE department, SCE | | |
| | AICTE Sponsored ICECES 20, Saranathan College of Engineering | Department Coordinator | | |
| | Contemporary Research and Cutting Edge Technology in Electrical Engineering | Chief Editor of the Book Chapter under Central West Publisher, Australia | | |
| . | AICTE sponsored online STTP on Novel | Session In charge | | |

| Design & Control Strategies and Innovative Technical Practices in LV/HV Modern Switchgear | |
|---|---|
| 14 Days FDP on "Electrical Paradigm Shift to Cyber Physical Systems and Contemporary Research in Electrical & Electronics Engineering" | Session In charge |
| Modernization of Power Electronics Lab for Integration of Renewable Energy Sources | Department Coordinator |
| International Virtual Conference on Science and Engineering and Technology -2021 | Acted as Panel Member of the conference |

Signature of the Staff with date

Dr.M.V.Suganyadevi

SARANATHAN COLLEGE OF ENGINEERING

VENKATESWARA NAGAR, PANJAPUR TIRUCHIRAPALLI- 620012

DATA SHEET

Name of the Faculty member: P. Aravind

Name of the Department: Instrumentation and Control Engineering

Qualification:

| Degree | | Specialization | Year ofcompletio n | Name of College/University | % of Marks obtained | Class |
|--------------------|--------|---|--------------------------|---|---------------------------|-------|
| Dip. | ICE | Instrumentation and Control Engineering | 2005 | Srinivasa Polytechnic College | 83.88% | I |
| UG | B.Tech | Electronics and Instrumentation Engineering | 2008 | SASTRA University | 7.11cgpa | I |
| PG | M.E | Control and Instrumentation Engineering | 2013 | J J College of Engineering & Technology, Anna University | 8.06cgpa | I |
| Ph.D. | | Faculty of Electrical Engineering (Instrumentation and Control Engineering) | 2020 | Anna University | Complete d | |
| Others (if any) | MBA | General (HR) | 2010 | Alagappa University | 58% | II |

Designation while joining SCE: Assistant Professor

Date:11.12.2019

Present Designation: Assistant Professor

Since:2019

Experience:9 years and 09 months

| | Academic | | Industry | | Total |
|-------------|----------|--------|----------|--------|--------------------|
| İ | Years | Months | Years | Months | |
| After UG | 02 | | | | 2 years |
| After PG | 06 | 07 | | | 6 years & 7 months |
| After Ph.D. | 01 | 02 | | | 1 year & 2 months |
| Total | 9 | 09 | | | 9 years & 9 month |

I. Details of continuing higher education:

P.G. :

Ph.D.:

II. Prepared and submitted the following for Journal publication:

| Academic Year | Title of the Publication | Name of the Journal | Author/ Co-Author | Impact factor | Status | AU Annexu re I/II |
|------------------|---|---|--|------------------|---------------|----------------------------|
| 2020-21 | State Feedback Controller Design for Dissolved Oxygen Parameter using Paper Mill Effluent in a Semi-Batch Fermenter | Indian Chemical Engineering Journal | J. Sumathi, P. Aravind, M. Arulmozhi, T. Senthilkumar, S. Sundaram | 1.09 | Submitt | SCI Indexed |
| 2020-21 | Technology Development Of Automated Contactless Hand Sanitizer Dispenser System With Ir Sensor And Based On A Pic Microcontroller | Medical Journal of Dr. D.Y. Patil Vidyapeeth University | suleyman malikmyradovich nokerov, perman ezizgulyyevich hojagulyyev, geldi hydyrnyyazovich durdyyev, Aravind pitchai venkataraman,khalid ali khan, yazmuhammet guvanjov, shanazar esenovich arazgeldiyev | 0.3 | Submitt | Scopus |
| 2020-21 | A Hybrid State Feedback Controller Design for Two Different Dynamic Systems | International Journal of Operational Research | P Aravind, Veeramani V, S M Girirajkumar | 0.54 | Publishe d | Scopus |
| 2020-21 | Design and Analysis of Unhurried Heat Process using Various Control Strategies | International Journal of Innovative Research in Electrical, Electronics, Instrumentatio | P. Aravind, N K Sai Hari Prashad, M S Charukanth, M Pratheep, D Nirmal Kumar | 7.122 | Publishe d | DoI |

| | | n and Control Engineering (IJIREEICE) | | | | |
|---------|--|---|--|-------|---------------|-----|
| 2020-21 | Design and Analysis of PI Controller for a Two Tank Non- Interacting Process System | International Journal of Innovative Research in Electrical, Electronics, Instrumentatio n and Control Engineering (IJIREEICE) | Akil Sanjeev M,Arawinthan R, Karthikheyen S, Dr.S.M.Girirajkumar , Aravind P | 7.122 | Publishe d | DoI |
| 2020-21 | IMC Based PI Controller for a Two Tank Interacting Process System | International Journal of Innovative Research in Electricals, Electronics, Instrumentatio n and control Engineering | Akil Sanjeev M,Arawinthan R, Karthikheyen S, Dr.S.M.Girirajkumar , Aravind P | 5.524 | Publishe d | DoI |
| 2020-21 | Solar powered water skimming robot with remote control Access | International Journal of Innovative Research in Electrical, Electronics, Instrumentatio n and Control Engineering | P. Aravind, M. Felixnirmaldoss, B. Nazeer Ahamed, R. Siva Perumal | 5.524 | Publishe d | DoI |
| 2020-21 | Remote Controlled Solar Powered Water Trash Collector | International Journal of Advanced Research in Electrical, Electronics and Instrumentatio | B. Nazeer Ahamed, M. Felixnirmaldoss, R. Siva perumal, Dr. P. Aravind | 5.524 | Publishe d | DoI |

^{**}Google Scholar citations as on 16.08.2021, G. index- 142, H-index- 6, i10 index- 2

III. Prepared and presented paper in the following conference:

| Academic Year | Title of the Paper | Organizer | Author/ Co-Author |
|------------------|---|---|---|
| 2020-21 | State Feedback Controller Design for Dissolved Oxygen Parameter using Paper Mill Effluent in a Semi-Batch Fermenter | NIT, Tiruchirapalli | J. Sumathi, P. Aravind, M. Arulmozhi, T. Senthilkumar, S. Sundaram, |
| 2020-21 | Single Layer Tri- UWB Patch Antenna for Osteoporosis Diagnosis and Measurement of Vibrational Resonances in Bio- Medical Engineering for Future Applications | Arya College of Engineering & IT, 42 RIICO Industrial Area, Kukas, Jaipur, | Khalid Ali Khan, P. Aravind |
| 2020-21 | Practical Identification of two tank system, in 3rd International Conference on "New Scientific Creations In Engineering and Technology | Nadar Saraswathi College of Engineering and Technology, Theni, Tamil Nadu | S.M. Girajkumar, Akil Sanjeev MArawinthan R, Karthikheyen.S, Aravind.P, |
| 2020-21 | IMC based PI controller for a two tankInteracting process system | Nadar Saraswathi College of Engineering and Technology, Theni, Tamil Nadu | S.M. Girajkumar, Akil Sanjeev MArawinthan R, Karthikheyen.S, Aravind.P, |
| 2020-21 | Design and Analysis of Advanced Control Strategies for Heat Transfer Process with Variable | Nadar Saraswathi College of Engineering and Technology, Theni, Tamil Nadu | Aravind P, Sai Hari Prashad N, Pratheep M, Nirmal Kumar D, Charukanth M S, |

IV. Attended the following Seminar/Workshop/FDP/STTP

| Academic Year | Торіс | Organizer | No of Days |
|------------------|--|-------------------|---------------|
| 2020-21 | NPTEL course in Chemical Process Control, IIT Bombay, Dec 2020 (8 weeks- 1 FDP) | IIT Bombay, NPTEL | 8 weeks |

V. Publication of Text Books:

| Academic Year | Name of the text book | Publisher |
|------------------|--|----------------------|
| 2020-21 | Book Series Title: Algorithms for Intelligent Systems (AIS), Book Title: Recent Trends in Communication and Intelligent Systems. ISBN: 978-981-16-0167-5, Hardcover ISBN: 978-981-16-0166-8, Series ISSN: 2524-7565, XII chapters and pages 178, DOI: 10.1007/978-981-16-0167-5. | Book Series Springer |

VI. Details of Patent Filed:

| Academic Year | Details of the Patent | Status | |
|---------------|-----------------------|--------|--|
| NIL | NIL | NIL | |

VII. Prepared/helped in preparing the following work for funding agencies:

| Academic Year | Title of the Proposal | Agencies | Author/Investigator | Status |
|------------------|--|----------|---------------------|---------|
| 2020-21 | Solar powered water trash cleaner Using IoT | TNSCST | Author | Applied |
| 2020-21 | Design and analysis of advanced control strategies for heat transfer process with variable delay. | TNSCST | Author | Applied |

VIII. Details of Ph.D. Guidance:

| S.No | Name of the Scholar | Date of Registration | Status |
|------|---------------------|----------------------|--------|
| NIL | NIL | NIL | NIL |

IX. Contribution to Co-curricular Activities:

| Academic Year | Name of the Activity | Contribution | |
|------------------|---|--|--|
| 2020-21 | Guest Lecture | Topic "Application of fractional order PID controller" | |
| 2020-21 | 3 Days FDP organized on Latest Innovative Techniques in Engineering | Supported for entire programme | |
| 2020-21 | NI Training Support | Arranging and conducting Labview training to students | |

X. Contribution to Extracurricular Activities:

| Academic | Name of the Activity | Contribution | |
|-----------------|---------------------------------|--|--|
| Year 2020-21 | NAAC Department Coordinator | Periodical submission of Departmental NAAC Data to NAAC coordinators on time and consolidation of NAAC Criteria 6 for whole college and submitted to NAAC website | |
| 2020-21 | NBA Department Coordinator | Data sheet preparation, collection and verification of documents 2020-2021 academic year | |
| 2020-21 | NIRF submission | Details prepared and submitted to Dr. Rajkumar/EEE for NIRF submission | |
| 2020-21 | Autonomous application process | Documents are submitted to committee on time | |
| 2020-21 | Poster presentation competition | Supported for Poster presentation competition | |

XI. Stayed beyond working hours to do the following works:

| Academic | Nature of work | Hours |
|-----------------|--|---|
| Year 2020-21 | Departmental level HoD assigned works, NAAC, NBA,NIRF and others | Depends upon need to complete the work stayed after working hours and worked in home. |

Signature of the Staff with date