

**SETHU INSTITUTE OF TECHNOLOGY**  
 (An Autonomous Institution | Accredited with 'A' Grade by NAAC)  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
 B.E. ECE accredited by NBA, New Delhi under Washington Accord (Tier-I)

**PATENT DETAILS**

| <b>2019-2020</b> |   |             |   |  |                             |
|------------------|---|-------------|---|--|-----------------------------|
| <b>S.No</b>      | <b>Details of patents</b>   | <b>Date</b> | <b>Status<br/>(Filed/<br/>Published/<br/>Granted)</b> | <b>Name of the<br/>Faculty Involved</b>                                  | <b>Income<br/>generated</b> |
| 1.               | E-2/183/2019-CHE /<br>21.02.2019<br><br>A Portable Hand-<br>Held X-Ray Based<br>BMD Meter   | 21/02/2019  | Filed   | Dr.R.Tamilselvi  | -                           |
| 2.               | 20191013978A/<br>17/05/2019<br><br>Smart robotic<br>medical waste<br>segregator   | 17/05/2019  | Published   | Dr.M.Sheik Dawood,<br>Mrs.Helina Rajini Suresh,<br>Ms.Jehosheba Margaret | -                           |
| 3.               | 201941028596/<br>09/08/2019<br><br>To design low cost<br>prototype model for<br>measuring<br>temperature and<br>pulse rate during<br>postpartum | 09/08/2019  | Published   | Dr.A.Muthu Krishnan  | -                           |
| 4.               | 201941035692A/<br>05/09/2019<br><br>A personalized<br>Health care<br>monitoring for<br>Diabetic patients by<br>GIS                              | 05/09/2019  | Published   | Dr.R.Karthick  | -                           |

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|----|---|------------|-------|-----------------|---|
| 5. | 201941036185<br>E-2/2805/2019-<br>CHE/India /<br>09.09.2019<br><br>A Movable<br>Medirobo For<br>Immovable Elderly<br>People | 09/09/2019 | Filed | Dr.R.Tamilselvi | - |
| 6. | E-2/3785/2019-<br>CHE/India 26.11.19<br><br>Non-Invasive Fetal<br>Stress Monitoring<br>Device                               | 26/11/2019 | Filed | Dr.R.Tamilselvi | - |

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| <b>2021-2022</b> |   |             |   |   |                             |
|------------------|---|-------------|---|---|-----------------------------|
| <b>S.No</b>      | <b>Details of patents</b>   | <b>Date</b> | <b>Status<br/>(Filed/<br/>Published/<br/>Granted)</b> | <b>Name of the<br/>Faculty Involved</b> | <b>Income<br/>generated</b> |
| 1.               | 202141003260-<br>23.01.2021<br><br>A wireless<br>interactive IOT<br>service robots for<br>smart home                          | 23/01/2021  | Filed   | Dr.R.Karthick                           | -                           |
| 2.               | 2021100210-<br>01.04.2021-<br><br>IOT Based Virtual<br>Students Monitoring<br>System By Using TF<br>Plus Mini Lidar<br>Sensor | 01/04/2021  | Filed   | Dr.R.Karthika Devi                      | -                           |
| 3.               | 202141026587-<br>02.07.2021<br><br>A roadmap for<br>building an sla<br>management<br>architecture for IOT<br>networks         | 02/07/2021  | Published   | Dr.R.Karthick                           | -                           |

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|----|---|------------|-----------|--|---|
| 4. | 202141030825-<br>09.07.2021<br><br>Intelligent IOT and<br>5G Based Patient<br>care system                                       | 09/07/2021 | Published | Dr.N.R.Indira,<br>Dr.R.Karthick, and<br>Mr.P.Selvaprasanth | - |
| 5. | 202141034488-<br>06.08.2021<br><br>Smart recycle<br>lithium ion battery<br>technology for<br>electric vehicle                   | 06/08/2021 | Published | Dr.R.Karthick  | - |
| 6. | 202141036911-<br>24.09.2021<br><br>5G Technology<br>enabled Smart e-<br>healthcare system                                       | 24/09/2021 | Filed     | Dr.R.Karthick  | - |
| 7. | 202141040284-<br>24.09.2021<br><br>Imaging and Sensing<br>Technologies using<br>deep learning for<br>biomedical<br>applications | 24/09/2021 | Filed     | Dr.R.Karthick, A.Manoj<br>Prabaharan                       | - |

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| 8.  | <p>202141047296-<br/>29.10.2021</p> <p>Pop-out &amp; Sink-in<br/>Holographic<br/>Augmented Reality<br/>and Virtual Reality<br/>Device for use<br/>without 3D glasses<br/>for simultaneous<br/>viewing by multiple<br/>persons.</p> | 29/10/2021 | Filed | Mr.P.Selvaprasanth                 | - |
| 9.  | <p>202141047297-<br/>05.11.2021</p> <p>Machine learning<br/>technique and system<br/>for solving a<br/>prediction problem</p>  | 05/11/2021 | Filed | Dr.R.Karthick                      | - |
| 10. | <p>202141052091-<br/>12.11.2021</p> <p>Data-driven<br/>approaches for cyber<br/>defense of battery<br/>energy storage<br/>systems</p>  | 12/11/2021 | Filed | Dr.R.Karthick,<br>Mr.N.Sathiyathan | - |

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|-----|---|------------|-------|--|---|
| 11. | 202141049769&29.1<br>0.2021<br><br>Automates<br>Identification &<br>repair of defects in<br>Lithium-Ion<br>Batteries Using AI | 26/11/2021 | Filed | Ms.N.Kani<br>amudham                                   | - |
| 12. | Temp/E-<br>1/63574/2021-CHE<br>02.12.2021<br>Go Green Sanitary<br>Pads  | 02/12/2021 | Filed | M.Parisa beham, R<br>Tamilselvi, Hemalatha &<br>T.Ruba | - |

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| <b>2022-2023</b> |  |             |   |   |                             |
|------------------|--|-------------|---|---|-----------------------------|
| <b>S.No</b>      | <b>Details of patents</b>  | <b>Date</b> | <b>Status<br/>(Filed/<br/>Published/<br/>Granted)</b> | <b>Name of the<br/>Faculty Involved</b> | <b>Income<br/>generated</b> |
| 1.               | 202241007597<br><br>MI based patient<br>healthcare<br>monitoring system  | 25/02/2022  | Published   | Mr.P.Selva Prasanth<br>Dr.R.Karthick    | -                           |
| 2.               | 202241008530 A<br><br>ARTIFICIAL<br>INTELLIGENCE-<br>BASED LIFETIME<br>PREDICTION AND<br>DEPLOYMENT<br>STRATEGY FOR<br>WIRELESS<br>SENSOR<br>NETWORK | 04/03/2022  | Published   | Dr. T. VENKATESH<br>KANNA               | -                           |
| 3.               | 202241021684<br><br>Smart City Power<br>Management System<br>using 5G<br>Technology  | 13/05/2022  | Filed   | Mrs.P.DEEPA                             | -                           |

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|----|---|------------|-------|-------------------------|---|
| 4. | 202341036558<br><br>Method of<br>controlling an<br>Apparatus for<br>generating Electrical<br>power and methods<br>of power recovery | 26/05/2023 | Filed | Mr. A. Manoj Prabakaran | - |
|----|---|------------|-------|-------------------------|---|

## PATENT DETAILS

| 2023-24 |  |   |                |             |                                    |
|---------|--|---|----------------|-------------|------------------------------------|
| Sl. No  | Name of the Inventors  | Title of the patent   | Patent No      | Month/ Year | Status( Filled/ Published/Granted) |
| 1.      | Dr. R. Tamilselvi<br>Dr.M. Parisa Beham<br>Mr.S.M.Seeni Mohamed<br>Aliar Maraikkayar<br>Mrs. A. Sabah AFroze<br>Ms. K. Shanmugapriya | System And Device For Amniotic Fluid Measurement  | 202341054676 A | 01/09/2023  | Published                          |
| 2.      | Dr. M. Parisa Beham<br>Mr. S. M. Seeni Mohamed<br>Aliar Maraikkayar<br>Dr. R. Tamilselvi   | An Apparatus For Cotton Crop Monitoring System In Argo-Field Through Sensors                    | 202341054677 A | 01/09/2023  | Published                          |
| 3.      | Dr. M. Sheik Dawood<br>Dr. M. Pandimadevi<br>Dr. M. Fathu Nisha<br>Mr. A. Manoj Prabakaran   | Method Of Controlling An Apparatus For Generating Electric Power And Methods Of Power Recovery. | 202341036558   | 01/09/2023  | Published                          |
| 4.      | Mr. S. Selvakumar  | Ai Based Street Light On/Off Based On The Object Detection                                      | 202341078494   | 18/11/2023  | Filled                             |
| 5.      | Mr.P.Selva Prasanth  | Automatic Electric Vehicle driving method based on AI   | 202341084575   | 11/12/2023  | Published                          |

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|----|---|--|------------|------------|---------|
| 6. | Dr.J.Rajalakshmi<br>Mrs.M.Maheswari<br>Mr.T.Muthuraja | Miniaturized<br>high gain<br>antenna for IoT<br>device | 409954-001 | 09/03/2024 | Granted |
|----|---|--|------------|------------|---------|