

**Patent Details for Verification\_NIRF2024**

**Note: Provide your Institution's Patent details (Only Utility Patents) Discipline-wise as applied for NIRF Ranking each in Separate List/Table (Only Published & Granted during 2020 – 2022 year-wise) strictly in this provided format, and clearly write/mention the Discipline & Institute ID above the List/Table as prescribed. Details of the Design, Trademarks, or Copyrights, and only Filed Patents must be avoided. Those details should not be entered or provided in the list below as those won't be considered for the ranking. Patent details must be submitted along with all the source proofs (attached) like screenshots, pdf, image file from databases like InPASS, WIPO, USPTO, Espacenet, Derwent Innovation, etc. and direct URL/Website links, etc.**

**Discipline Name applied for NIRF2024 Ranking: e.g. IR\_OVERALL / IR\_ENGINEERING / IR\_MEDICAL / IR\_PHARMACY / IR\_DENTAL/IR\_AGRICULTURE**

**Institute ID: e.g. C-00000 / U-00000**

**Provide below the Year-wise Count of Submitted Patent Data by the Institute (2020 to 2022) for NIRF2024 as applied in Discipline-specific:**

| Published_2020 | Published_2021 | Published_2022 | Granted_2020 | Granted_2021 | Granted_2022 | Total Published (2020-2022) | Total Granted (2020-2022) |  |  |  |
|----------------|----------------|----------------|--------------|--------------|--------------|-----------------------------|---------------------------|--|--|--|
|                |                |                |              |              |              |                             |                           |  |  |  |

**Patent Details with proofs (Attach screenshots, pdf, image file, etc.):**

| Sl. No. | Patent Application No. | Status of Patent (Published / Granted) | Inventor/s Name           | Title of the Patent                  | Applicant /s Name           | Patent Filed Date (DD/MM/YYYY) | Patent Published Date / Granted Date (DD/MM/YYYY) | Patent Publication Number / Patent Granted Number | Assignee/s Name (Institute Affiliation/s at time of Application)       | Here, attach Source Proof Screenshots/URL/ Website Links, etc.  |
|---------|------------------------|--|---------------------------|--------------------------------------|-----------------------------|--------------------------------|---|---|--|---|
| 1       | 351225-001             | Granted                                | Dr.S.Joe Patrick Gnanaraj | DUAL SLOPE SOLAR DISTILLATION SYSTEM | 1.Dr.S.Joe Patrick Gnanaraj | 7/10/2021                      | 13/10/2021  | 351225-001  | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625102 | <a href="https://drive.google.com/file/d/1mKSrAvoHS8hK6QKyzkV4-974ysjAogrI/view?usp=sharing">https://drive.google.com/file/d/1mKSrAvoHS8hK6QKyzkV4-974ysjAogrI/view?usp=sharing</a> |
| 2       | 353586-001             | Granted                                | Dr.S.Joe Patrick Gnanaraj | DIE MANUFACTURING MACHINE            | 1.Dr.S.Joe Patrick Gnanaraj | 16/11/2021                     | 23/11/2021  | 353586-001  | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625102 | <a href="https://drive.google.com/file/d/190UrdlqAxIvONSyxdkc3IEtEep04QOUN/view?usp=sharing">https://drive.google.com/file/d/190UrdlqAxIvONSyxdkc3IEtEep04QOUN/view?usp=sharing</a> |
| 3       | 353657-001             | Granted                                | Dr.S.Joe Patrick Gnanaraj | SOLAR WATER                          | 1.Dr.S.Joe Patrick Gnanaraj | 17/11/2021                     | 24/11/2021  | 353657-001  | St.Mother Theresa engineering College,                                 | <a href="https://drive.google.com/file/d/1AxY7QUZk90xHylf3cMG7ECBpFrDkTx9r/view?usp=sharing">https://drive.google.com/file/d/1AxY7QUZk90xHylf3cMG7ECBpFrDkTx9r/view?usp=sharing</a> |

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|----|-------------------|-----------|---------------------------------|--|-----------------------------------|------------|------------|-------------------|---|---|
|    |                   |           |                                 | DISTILLATION SYSTEM                                |                                   |            |            |                   | Vagaikulam,<br>Thoothukuydi-625102  |   |
| 4  | 354578-001        | Granted   | Dr.S.Joe<br>Patrick<br>Gnanaraj | MULTI<br>SLOPE<br>OCTAGONAL<br>DISTILLATION SYSTEM | 1.Dr.S.Joe<br>Patrick<br>Gnanaraj | 1/12/2021  | 8/12/2021  | 354578-001        | St.Mother Theresa<br>engineering College,<br>Vagaikulam,<br>Thoothukuydi-625102 | <a href="https://drive.google.com/file/d/1H31-0no-1XKLBHajt4DOfZnZZwUGz9FO/view?usp=sharing">https://drive.google.com/file/d/1H31-0no-1XKLBHajt4DOfZnZZwUGz9FO/view?usp=sharing</a> |
| 5  | 355584-001        | Granted   | Dr.S.Joe<br>Patrick<br>Gnanaraj | SOLAR<br>WATER<br>DISTILLATION SYSTEM              | 1.Dr.S.Joe<br>Patrick<br>Gnanaraj | 20/12/2021 | 27/12/2021 | 355584-001        | St.Mother Theresa<br>engineering College,<br>Vagaikulam,<br>Thoothukuydi-625102 | <a href="https://drive.google.com/file/d/18NYgI9XhTj5gD8rSjPUPbLr_VCQlpNK/view?usp=sharing">https://drive.google.com/file/d/18NYgI9XhTj5gD8rSjPUPbLr_VCQlpNK/view?usp=sharing</a>   |
| 6  | 355712-001        | Granted   | Dr.S.Joe<br>Patrick<br>Gnanaraj | SOLAR<br>WATER<br>DISTILLATION SYSTEM              | 1.Dr.S.Joe<br>Patrick<br>Gnanaraj | 22/12/2021 | 29/12/2021 | 355712-001        | St.Mother Theresa<br>engineering College,<br>Vagaikulam,<br>Thoothukuydi-625102 | <a href="https://drive.google.com/file/d/1qp5qQWSP-NRaXJE-ADYLB4NKaO-oeYZj/view?usp=sharing">https://drive.google.com/file/d/1qp5qQWSP-NRaXJE-ADYLB4NKaO-oeYZj/view?usp=sharing</a> |
| 7  | 355855-001        | Granted   | Dr.S.Joe<br>Patrick<br>Gnanaraj | TABLE  | 1.Dr.S.Joe<br>Patrick<br>Gnanaraj | 23/12/2021 | 30/12/2021 | 355855-001        | St.Mother Theresa<br>engineering College,<br>Vagaikulam,<br>Thoothukuydi-625102 | <a href="https://drive.google.com/file/d/114aSrNQpiLpR-tDhJQ3I1UjyJbXICtt7/view?usp=sharing">https://drive.google.com/file/d/114aSrNQpiLpR-tDhJQ3I1UjyJbXICtt7/view?usp=sharing</a> |
| 8  | 355878-001        | Granted   | Dr.S.Joe<br>Patrick<br>Gnanaraj | DIE<br>MANUFACTURING UNIT                          | 1.Dr.S.Joe<br>Patrick<br>Gnanaraj | 23/12/2021 | 30/12/2021 | 355878-001        | St.Mother Theresa<br>engineering College,<br>Vagaikulam,<br>Thoothukuydi-625102 | <a href="https://drive.google.com/file/d/14JNym1QLiXBJ6pqALLT83MZw-ae-fqbk/view?usp=sharing">https://drive.google.com/file/d/14JNym1QLiXBJ6pqALLT83MZw-ae-fqbk/view?usp=sharing</a> |
| 9  | 2021410460<br>72A | Published | Dr.P.Ravi<br>ndran              | .SMART IOT<br>BASED<br>MONITORING SYSTEM           | Dr.P.Ravi<br>ndran                | 15/10/2021 | 22/10/2021 | 2021410460<br>72A | St.Mother Theresa<br>engineering College,<br>Vagaikulam,<br>Thoothukuydi-625102 | <a href="https://drive.google.com/file/d/1kbFYPGake_By72A9N5ELu1NgMUEEvGLT/view?usp=sharing">https://drive.google.com/file/d/1kbFYPGake_By72A9N5ELu1NgMUEEvGLT/view?usp=sharing</a> |
| 10 | 2021410435<br>90A | Published | Dr. Joe<br>Patrick<br>Gnanaraj  | .DUAL<br>SLOPE<br>SOLAR<br>DISTILLATION SYSTEM     | Dr. Joe<br>Patrick<br>Gnanaraj    | 28/10/2021 | 5/11/2021  | 2021410435<br>90A | St.Mother Theresa<br>engineering College,<br>Vagaikulam,<br>Thoothukuydi-625102 | <a href="https://drive.google.com/file/d/1OfQIWebN1IreAmXUIs9_IBW7IGYPrs_/view?usp=sharing">https://drive.google.com/file/d/1OfQIWebN1IreAmXUIs9_IBW7IGYPrs_/view?usp=sharing</a>   |
| 11 | 355712-001        | Published | Dr.<br>Karthikeyan              | SOLAR<br>WATER<br>DISTILLATION SYSTEM              | Dr.<br>Karthikeyan                | 22/12/2021 | 29/12/2021 | 355712-001        | St.Mother Theresa<br>engineering College,<br>Vagaikulam,<br>Thoothukuydi-625102 |   |
| 12 | 358476-001        | Granted   | Dr.Kodim<br>unthiri             | Design Patent                                      | Dr.Kodim<br>unthiri               | 6/2/2021   | 13/02/2021 | 358476-001        | St.Mother Theresa<br>engineering College,<br>Vagaikulam,<br>Thoothukuydi-625102 |   |

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|----|-----------------|-----------|-------------------------------|---|-------------------------------|------------|------------|-----------------|--|---|
| 13 | 202141036196A   | Published | Dr.C.Subharaj                 | PRODUCTIVITY ENHANCEMENT OF SOLAR DISTILLATION SYSTEM USING HOLLOW BRICKS               | Dr.C.Subharaj                 | 13/08/2021 | 20/08/2021 | 202141036196A   | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625102 | <a href="https://drive.google.com/file/d/1qF534OACrx8mSQRV1fM4oUPDdhSlzR5S/view?usp=sharing">https://drive.google.com/file/d/1qF534OACrx8mSQRV1fM4oUPDdhSlzR5S/view?usp=sharing</a> |
| 14 | 202141039111A   | Published | Maria Antony Sebastin Vimalan | CONSTRUCTION OF LIMESTONE COBBLE SOLAR DISTILLATION SYSTEM                              | Maria Antony Sebastin Vimalan | 25/08/2021 | 3/9/2021   | 202141039111A   | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625104 | <a href="https://drive.google.com/file/d/1na0YdqTfBB6s7PihcnPfx2PovGf285zV/view?usp=sharing">https://drive.google.com/file/d/1na0YdqTfBB6s7PihcnPfx2PovGf285zV/view?usp=sharing</a> |
| 15 | .202141035776A  | Published | Dr. Ramasamy                  | AN INTEGRATED SOLAR DISTILLATION SYSTEM WITH BLACK MARBLE                               | Dr. Ramasamy                  | 6/8/2021   | 13/08/2021 | 202141035776A   | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625105 | <a href="https://drive.google.com/file/d/1_tggvcXyFZBYWJ6xQp7odfj_Kb0SIOeR/view?usp=sharing">https://drive.google.com/file/d/1_tggvcXyFZBYWJ6xQp7odfj_Kb0SIOeR/view?usp=sharing</a> |
| 16 | 202141053543 A  | Published | Dr.P.Ravindran                | .DIRECT DRIVE OCEAN WAVE POWERED FRESH WATER PRODUCTION USING REVERSE OSMOSIS TECHNOLOG | Dr.P.Ravindran                | 25/11/2021 | 3/12/2021  | 202141053543 A  | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625109 | <a href="https://drive.google.com/file/d/1hn-3UezBJtJM2NZBxqi-wjsxz26H0_Pz/view?usp=sharing">https://drive.google.com/file/d/1hn-3UezBJtJM2NZBxqi-wjsxz26H0_Pz/view?usp=sharing</a> |
| 17 | 202141056494Ade | Published | George Klington               | ENERGY EFFICIENT GENETIC ALGORITHM FOR  | George Klington               | 3/12/2021  | 10/12/2021 | 202141056494Ade | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625111 | <a href="https://drive.google.com/file/d/1ctzFUq_x2R3upW1Si8LtG5Tv3GEQHatP/view?usp=sharing">https://drive.google.com/file/d/1ctzFUq_x2R3upW1Si8LtG5Tv3GEQHatP/view?usp=sharing</a> |

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|    |                |           |                            | LOAD BALANCED  |                            |            |            |                |  |   |
| 18 | .202141055746A | Published | Ayyappa Srinivasan         | .GOAT ALGORITHM ENABLED CASCEDED MULTI LEVEL INVERTER FOR DC TO AC                               | Ayyappa Srinivasan         | 3/12/2021  | 10/12/2021 | .202141055746A | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625112 | <a href="https://drive.google.com/file/d/17OBscMq6w805UBvEGG84Yr0C_8bJOGKo/view?usp=sharing">https://drive.google.com/file/d/17OBscMq6w805UBvEGG84Yr0C_8bJOGKo/view?usp=sharing</a> |
| 19 | 202141056110A  | Published | Dr.Ramesh                  | APPLICATION OF 3D PRINTED IOT BASED QUALITY MONITORING SYSTEM 4.0 INDUSTRIAL REVOLUTION APPROACH | Dr.Ramesh                  | 3/12/2021  | 10/12/2021 | 202141056110A  | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625114 | <a href="https://drive.google.com/file/d/1i2XxE6N2y9FvO-z1bhCOAksRzsUA6LCA/view?usp=sharing">https://drive.google.com/file/d/1i2XxE6N2y9FvO-z1bhCOAksRzsUA6LCA/view?usp=sharing</a> |
| 20 | 202141018771 A | Published | Dr.Subaraj                 | CRAB DISTILLATION SYSTEM   | Dr.Subaraj                 | 25/8/2021  | 3/9/2021   | 202141018771 A | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625115 | <a href="https://drive.google.com/file/d/1uvOVncG0wY_eNC-VXWHyljCqBVv-I7p5/view?usp=sharing">https://drive.google.com/file/d/1uvOVncG0wY_eNC-VXWHyljCqBVv-I7p5/view?usp=sharing</a> |
| 21 | 348224-001     | Published | Mr.Joe Patrick gnanaraj    | Design Application   | Mr.Joe Patrick gnanaraj    | 23/08/2021 |            | 348224-001     | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625185 | <a href="https://drive.google.com/file/d/122jmPaIbtD0dDoYqxAeB__fsyfHYZkJ/view?usp=sharing">https://drive.google.com/file/d/122jmPaIbtD0dDoYqxAeB__fsyfHYZkJ/view?usp=sharing</a>   |
| 22 | 353657-001     | Published | Dr.S.Joe Patrick Gnanaraj  | Design of Stepped Basin Type Desalination System   | Dr.S.Joe Patrick Gnanaraj  | 24/11/2021 | 20/01/2023 | 353657-001     | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625186 | <a href="https://drive.google.com/file/d/1OCo1SL4fM-uO771wIP0eUiNh669Tqepx/view?usp=sharing">https://drive.google.com/file/d/1OCo1SL4fM-uO771wIP0eUiNh669Tqepx/view?usp=sharing</a> |
| 23 | 354578-001     | Published | Dr.S. Joe Patrick Gnanaraj | MULTI SLOPE OCTAGONAL DISTILLATION SYSTEM  | Dr.S. Joe Patrick Gnanaraj | 30/11/2021 | 8/12/2021  | 354578-001     | St.Mother Theresa engineering College, Vagaikulam, Thoothukuydi-625187 | <a href="https://drive.google.com/file/d/1iFYv513A7-EwEyrEnQcGrQaLIvAPVX-H/view?usp=sharing">https://drive.google.com/file/d/1iFYv513A7-EwEyrEnQcGrQaLIvAPVX-H/view?usp=sharing</a> |

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|----|-------------------|-----------|----------|---|----------|------------|------------|-------------------|---|---|
| 24 | 2020410405<br>99A | Published | J.Reegan | WIRELESS<br>SENSOR<br>PILLOW<br>FOR SLEEP<br>MONITORIN<br>G AND<br>GESTURE<br>RECOGNITI<br>ON SYSTEM<br>USING<br>EMBEDDED<br>CONTROLL<br>ER | J.Reegan | 18/09/2020 | 25/09/2020 | 2020410405<br>99A | St.Mother Theresa<br>engineering College,<br>Vagaikulam,<br>Thoothukuydi-625195 | <a href="https://drive.google.com/file/d/1dx7RK94vGCAA99MOM2F73fc7UMRLKym3/view?usp=sharing">https://drive.google.com/file/d/1dx7RK94vGCAA99MOM2F73fc7UMRLKym3/view?usp=sharing</a> |
| 25 | 2020410518<br>60A | Published | J.Reegan | IOT BASED<br>AUTOMATI<br>ON OF<br>WATER<br>SUPPLY<br>AND THEFT<br>IDENTIFICA<br>TION  | J.Reegan | 27/11/2020 | 11/12/2020 | 2020410518<br>60A | St.Mother Theresa<br>engineering College,<br>Vagaikulam,<br>Thoothukuydi-625196 | <a href="https://drive.google.com/file/d/1Pub6dyorp9EaZJIKi_w6OGrEu8P12Mnk/view?usp=sharing">https://drive.google.com/file/d/1Pub6dyorp9EaZJIKi_w6OGrEu8P12Mnk/view?usp=sharing</a> |