

Centre for Intellectual Property Rights (CIPR)  
Anna University, Chennai – 600 025

**3.3.2.1:**

(i) Number of Patent Published during the last Five Years

<b>Name of the Applicant</b>	<b>Application Number</b>	<b>Title of the Application</b>	<b>Year of publication</b>
Dr. S. Thanigalarasu, Dharmahiner Singh Chand, R. Asad Ahmed,	3765/CHE/2015	Method and device for controlling sonic under -expanded jets	07.08.2015
Dr. K. Sankaran, T. Elavarasan,	1496/CHE/2015	Simple rapid method for estimation of milk protein	10.04.2015
Dr. S. Kanmani, V. Preethi,	870/CHE/2015	Gas-phase recovery of hydrogen from hydrogen sulphide using photocatalysis	06.03.2015
Dr. K. Malathi, K .P. Jayaram, M. Gulam Nabi Alsath,	5336/CHE/2015	A UHF RFID reader antenna integrated with near field and far field operations	30.10.2015
Dr. K. Malathi, M. Gulam Nabi Alsath, Livya Lawrance,	5337/CHE/2015	A device and method for fabrication of ultra-wide band micro strip grid array antenna (GAA)	30.10.2015

Dr. K. Malathi, R. Vimal Samsingh, S. Esther Florence,	5338/CHE/2015	Method and apparatus for non-destructive testing of composites using planar sensor	23.10.2015
Dr. K. Malathi, S. Esther Florence, R. Vimal Samsingh,	5620/CHE/2015	A method to fully integrate multi-layer woven electro-textile patch antenna	06.11.2015
Dr. K. Malathi, S. Ramparabhu, M. Balaji,	5621/CHE/2015	A method and device for a passive reconfigurable frequency selective surface	06.11.2015
Dr. C. Senthil Kumar, M. Ramakrishna,	201641018606	Saw toothed leading edge delta wings	10.06.2016
Dr. C. Senthil Kumar, M. Ramakrishna,	201641018605	Sinusoidal toothed leading edge delta wings	10.06.2016

Dr. K.M. Parammasivam, B. Navin Kumar,	201641016085	Aerodynamic braking system for wind turbine using chordwise spacing	10.06.2016
Dr. K.V. Radha, V. Thamilselvi,	201641009242	Biosynthesis of silver nanoparticles loaded corncob for effluent treatment	15.07.2016
Dr. K. Malathi, S. Ramprabhu,	201641032341	Polarization independent reconfigurable 3 D frequency selective surface and method thereof	30.09.2016
Dr. Malathi, K. P. Jayaram,	201641032342	A multiservice chipless RFID transponder	30.09.2016

Dr. Malathi, R. Vimal Samsingh, S. Sangeetha, P. Yogeshwari, Saffrine Kingsly,	201641032343	Electromagnetic nondestructive material characterization of dielectrics deploying planar EBG based transmission line sensor	30.09.2016
Dr. Malathi, K. P. Jayaram,	201641032344	A magnetic coupling UHF near field rfid reader antenna deploying CSRR elements	30.09.2016
Dr. Malathi, V. Sangeetha, Saffrine Kingsly, P. Yogeshwari,	201641032345	Planar quad-band rat-race coupler with spurious pass-band suppression	30.09.2016
Malathi Kanagasabai, Yogeshwari Panneer Selvam, P. Sandeep Kumar, Saffrine Kingsly, Sangeetha Subbaraj	201641024647	Dual mode polarization diverse antenna array	31.03.2017
K. Vigneshwaran, A. Sureshkumar,	201641024483	Footboard accident prevention system	31.03.2017

Anna University, Chennai & Department of Atomic Energy, Mumbai	201641005129	Mechanical grippers for handling plurality of micro components	08.07.2016
Dr. M. Kanthababu, Dr. S. Gowri, M. Venkateshwaran,	201641018235	Focusing nozzle condition monitoring system of abrasive water jet machine comprising accelerometer	10.06.2016
Dr. M. Kanthababu, Dr. S. Gowri, M. Venkateshwaran,	201641018236	Focusing nozzle condition monitoring unit of abrasive water jet machine comprising sound sensor	10.06.2016
Dr. M. Kanthababu, V. Mohan Kumar, V. Sailesh, G. Anuradha,	201641020717	Smart seat belt system	24.06.2016
Dr. A. Peer Mohamed, Dr. S. Subramanian, P. Kathirvel,	201641027276	Tension roller drafting system to improve yarn quality	08.09.2017

Dr. N. Gobi	201641032148	Construction of polymeric/electrospun composite membrane for water filtration and a method thereof	30.09.2016
Dr. S. Subramanian, Dr. A. Peer Mohamed,	201641043615	Modified cradle and nose bar for apron drafting system	24.11.2017
Noel Jacob Kaleekkal D. Mohan,	201741031660	Method of preparing fouling resistant polyetherimide mixed matrix membranes	22.09.2017
B. Dhayalini, R. Senthil	201741004535	A Biodegradable acoustic panel from small millets husk	31.03.2017
K. ThanigaI Arul, S. Narayana Kalkura, J. Ramana Ramya, E. Manikandan	201741031668	Bionanocomposite coating and its method thereof	22.09.2017
J.Kumar C. Bagavath	201741043550	Disposable nitric oxide sensor construction using gallium nitride nanowires and its method thereof	15.12.2017

Malathi Kanagasabai, P. Sandeep Kumar, E. Lavanya, P. Yogeshwari, S. Sangeetha, Saffrine Kingsly	201741008383	Rhombic compound reconfigurable antenna	24.03.2017
Malathi Kanagasabai, N. Rajesh	201741008376	Integrated vivaldi antenna with switchable radiation pattern	24.03.2017
M. Kanthababu, R. Giri	201741012118	A method for operating optimal assembly sequence in an indexing table using genetic algorithm	21.04.2017
M. Kanthababu, S. Gowri, R. Prabhakaran, K. R. Sunilkumar, M.S. Ajmal Deen Ali	201741016668	Condition monitoring system for focusing nozzle wear in abrasive waterjet machine comprising acoustic emission sensor	19.05.2017
M. Kanthababu, S. Gowri, R. Prabhakaran, K. R. Sunilkumar, M.S. Ajmal Deen Ali	201741016669	Condition monitoring system for focusing nozzle wear in abrasive waterjet machine comprising cutting force dynamometer	19.05.2017

Vaidheeswaran Sivanesan, Subramanian Sundaramoorthy	201741000650	Leakless facial shape fitting component for respirators	27.01.2017
A.J.D Nanthakumar, J. Jancirani	201741036049	A real time adaptable damper	20.10.2017
M. Kanthababu, V. Vidyaa	201741046617	Fatigue testing machine for mechanical microgrippers	05.01.2018
M. Kanthababu V. Vidyaa	201741046610	Micro arc welding machine	05.01.2018
M. Kanthababu, S. Anish Kumar, M. S. Ajmal Deen Ali, R. Madhumathi	201741046614	IoT enabled online condition monitoring of the exhaust gas emission system of the automobiles using gas sensors	05.01.2018
J. Jancirani A. Sangeet Sahaya Jeyangel G. Anandraj	201841001033	Air curtain side skirt for reducing underbody drag	19.01.2018



M. Kanthababu, S. Akash, M. Jeeva, B. Manikandan Shreyas M Kabirdass	201841013438	Internet of things based cam actuated bell	13.04.2018
M. Kanthababu, K. R. Sunil Kumar	201841022047	IOT enabled tool wear condition monitoring system for cnc turning comprising acoustic emission sensor	22.06.2018
M. Kanthababu, K. R. Sunil Kumar	201841022035	OT enabled tool wear condition monitoring system for CNC tuning comprising Accelerometer sensor	22.06.2018
M. Kanthababu, K. R. Sunil Kumar A. Sarath Kumar	201841022038	IOT enabled tool wear condition monitoring system for cnc turning comprising sound sensor	22.06.2018
M. Kanthababu, K. R. Sunil Kumar	201841022044	IOT enabled tool wear condition monitoring system for CNC tuning comprising multiple sensors	22.06.2018
N. Gobi B. Devi	201841025473	Method to synthesis tio2 nanoparticles and lycopene - tio2 nanoparticles complex	13.07.2018

R. Ramakrishnan Noel Jacob Kaleekkal T. Sivakumar D. Mohan	201841027725	Mixed Matrix Polymeric Membrane Catalytic Reactor for Carbohydrate Valorization and Separation and Method thereof	27.07.2018
Shubra Singh, Suchita, Vavilapalli Durga Sankar	201841028665	Method for developing Ca <sub>2</sub> Fe <sub>2</sub> O <sub>5</sub> Nanoparticles for Enhanced Photocatalysis under direct Sunlight	03.08.2018
Shubra Singh, Vavilapalli Durga Sankar	201841028670	Method for synthesis of sillenite Bi <sub>12</sub> FeO <sub>20</sub> single crystals	03.08.2018
A. Rajadurai, Suresh Patil	201841028671	Chlorine-Doped Tin Monoxide the D Type transparent conducting particles and manufacturing process thereof	03.08.2018
N.Gobi S.Arun Karthick	201841029428	Multifunctional nanocomposite nanofibrous filter for aerosol filtration, chemical and biological protection	17.08.2018

A. Saravanakumar Madhankumar, & K.Saravanakumar, Souhith	201841031722	Ground Testing Apparatus for Solar Sails	31.08.2018
S. Chitrakala	201841031721	Automatic scene understanding assistive system with refreshable tactile device including voice for visually impaired people	31.08.2018
N. Vasudevan G. Sunantha	201841015253	Method for detecting PFOA and PFOS in water samples using Genetically Engineering Bacterial Biosensor	07.09.2018
S. Thanigaiarasu, & K. Rajaguru Nathan	201841033139	Aerodynamically Designed Variable Trailing Edge Serrations for Vertical Axis Wind Turbine Blades	14.09.2018
S. Thanigaiarasu, K. Rajaguru Nathan	201841033159	Aerodynamically shaped feathered winglets for vertical axis wind turbine	14.09.2018
S. Thanigaiarasu, S. A. Dawn Pradeeb	201841033156	Effect of nozzle rotation on mixing characteristics of subsonic jets	14.09.2018
S. Thanigaiarasu S. Venkataramanan	201841033145	Vortex Generators in Increasing the mixing characteristics of high speed jets	14.09.2018

K. Kamalanand, A. Paramasivam, C. Emmanuel P. Mannar Jawahar	201841033641	An apparatus for generation of gastric electric waveforms in normal and abnormal conditions	14.09.2018
N. Gobi R. Senthil	201841033152	Blended Suture for Surgical Application and a preparation process thereof	14.09.2018
J Jancirani. A. Sangeet Sahaya Jeyangel G. Anandraj	201841039705	Conduit side skirt for underbody drag reduction	26.10.2018
D. Arivuoli Preethi Ramadoss	201841044636	Biodegradable sanitary napkin for personal and environmental hygiene and method thereof	07.12.2018
S. Ramalingam	201941000814	Production of 2-oxobutanoate using alternative isoleucine biosynthetic pathway	24.01.2020
Anna University, Chennai	201941004031	Visual acuity computation using sweep vep	07.02.2019
Anna University, Chennai	201941010365	Laser flash thermal diffusivity analyser for the measurement of thermal properties of solid material	10.05.2019

Anna University, Chennai	201941011910	Automated external defibrillator system with intelligent ecg detection and automatic vernacular language assistance	10.05.2019
Anna University, Chennai	201941013817	A method to manufacture copper nanoparticles by aqua-chemical reduction of copper based salts	10.05.2019
M. Kanthababu	201941016050	An automatic stair climbing unmanned vehicle system for payload delivery	17.05.2019
Anna University, Chennai	201941021876	A process of producing aminoacids from its ketoacid by enzyme amino acid dehydrogenases	05.06.2020
Dr. M. Kanthababu	201941027751	An interactive lamp system for communication between users without using smart mobile communication devices	02.08.2019
Anna University, Chennai	201941027752	Software defined radio-based ground receiving station system for low earth orbit satellites communication	02.08.2019
N. Vasudeven, O. Greeshma	201941030196	A process for treating pesticide contaminated water	08.05.2020
Anna University, Chennai	201941030202	A scalable compact Uv-Led photo catalytic reactor	09.08.2019

N. Vasudeven, O. Greeshma	201941039118	A novel and comprehensive process for production of biogas and fuel oil from used feminine sanitary napkins (UFSN)	08.05.2020
Anna University, Chennai	201941040877	A hand gesture recognition system for speed impaired people and a method thereof	25.10.2019
Anna University, Chennai	201941042605	A method for detection of phthalate esters in drinking water and beverages	01.11.2019
Dr. M. Kanthababu	201941042975	Internet of things (iot) based bath assisting machine	01.11.2019
Anna University, Chennai	201941046038	Method of growing metal oxide micro particles on pencil graphite as a binder free electrode for a coaxial asymmetric super capacitor(Casc)&method for fabricating the same	29.11.2019
Anna University, Chennai	201941048041	Flexible and biodegradable polymers composite for sensing sweat glucose	26.06.2020

### 3.4.3.1

(ii) Number of Patent Awarded during the last Five Years

<b>Name of the Patenter</b>	<b>Patent Number</b>	<b>Title of the patent</b>	<b>Year of Award of patent</b>
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Tata Consultancy Services, Anna University, Chennai	US 13/194,706	System and method for classification of moving object during video surveillance	14.07.2015
Tata Consultancy Services, Anna University, Chennai	CN201110184660	A system and method for classification of moving object during video surveillance	03.06.2015
Registrar, Anna University, Chennai,	275504	Chimeric peptide vaccines for lymphatic filariasis	09.09.2016
Registrar, Anna University, Chennai,	278637	Immunogenic composition for lymphatic filarial vaccine	30.12.2016
Registrar, Anna University, Chennai,	276679	A bacterial lipid modification of a filarial protein to enhance the immune-prophylactic efficacy in animal & humans	04.11.2016
Tata Consultancy Services & Anna University, Chennai	EP11169344A	A system and method for classification of moving object during video surveillance	18.10.2017

Registrar, Anna University, Chennai,	291589	A method to detect bacterial growth and antibacterial resistance based on fluorescence quenching	19.01.2018
Mark Crocker, Rodney Andrews, A. Pandurangan, Dali Qian,	US12942396	Method for production of germanium nanowires encapsulated within multi-walled carbon nanotubes	24.04.2018
Dr.N. Vasudevan, V. R. Manoj,	295017	A method for the treatment and recirculation of aquaculture wastewater	06.04.2018
Tata Consultancy Services, & Anna University, Chennai	299550	A system and method for classification of moving object during video surveillance	21.07.2018
Dr. S. Kanmani	308383	Gas Phase recovery of Hydrogen from hydrogen sulphide using photo catalyst.	28.02.2019
Malathi Kanagasabai, Jayaram K P, and M.Gulam Nabi Alsath	322861	A UHF RFID reader antenna integrated with near field and farfield operations	15.10.2019



Dr. D.Sangeetha, & Ayyaru Sivasankaran	313707	Sulphonated polyether –ether-ketone/ sulphonated tio2 composite as proton exchange membrane for microbial fuel cell	04.06.2019
Dr. M. Alagar, & S. Devaraju	305656	One pot synthesis of novel skeletal modified diamine used as a curative and impact modifier for epoxy resins	14.01.2019