



**Report on
Intellectual Property Rights (IPR's)
of
Anna University, Chennai
(upto 31st December 2021)**

Anna university photo

Centre for Intellectual Property Rights (CIPR)

College of Engineering Guindy,

Anna University, Chennai – 600 025.

e-mail: ciprtm@annauniv.edu; ciprtmau@gmail.com

Phone: 044 - 2235 8574 /75 /76 /77 /78

Intellectual property (IP) refers to creations of the mind such as inventions, literary, artistic works, designs, symbols, names and images. It is necessary to protect these creations in order to enable people to earn recognition or financial benefits. Intellectual property rights (IPRs) have become a central issue in economic development, scientific & technological development, economic co-operation between industrialized and developing countries. However, some people believe that only large companies will get benefits from IPRs. But the truth lies on the fact that commercially profitable ideas or any innovations also emerge from every one of us.

There is apprehension particularly in the educational institutions for registration of IPRs. Faculty members prefer to publish technical papers in scientific journal without knowing that the same can be applied for patent before publication in the scientific journals. In this connection, Centre for Intellectual Property Rights (CIPR), Anna University, Chennai has brought out a “Report on Intellectual Property Rights (IPRs)” for the sixth time to the public to create awareness. In this report, upto December 2021 we had tried to colligate the list of IPR's filed by the faculty members, research scholars and students belongs Anna University. This report will provide a comprehensive list of patents filed and their current status. The report will give an insight of the innovations developed in the respective fields and allow the emerging innovators to understand the white space in the current technology, thus encouraging them to develop their novel ideas.

Dr. M. Kanthababu
Director, CIPR

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1. About Anna University

Anna University was established in 1978 as a unitary type of University. It offers higher education in Engineering, Technology and Allied Sciences relevant to the current and projected needs of the society. Besides promoting research and disseminating knowledge gained therefrom, it fosters cooperation between the academic and industrial communities.

2. About Centre for Intellectual Property Rights (CIPR)

The CIPR, Anna University was established in the year 2005 to create awareness and offer assistance to Academicians, Researchers, Entrepreneurs and Innovators to identify, protect and manage Intellectual Property Rights effectively. The CIPR involved jointly with Tamil Nadu Technology Development and Promotion Centre (TNTDPC) of Confederation of Indian Industries (CII) in conducting many certificates courses on Intellectual Property Rights (IPRs).

CIPR, Anna University, Chennai has been recognized as “Facilitator” for ‘Startups’ by the office of the Indian Patent office, Government of India, New Delhi and established Technology Innovation Support Center (TISC) of World Intellectual Property Office (WIPO) through the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce & industry, Government of India. CIPR has also established of National Research Development Corporation (NRDC) - Anna University (AU) - Innovation Facilitation Centre (IFC) at CIPR.

Objectives of CIPR

- To promote awareness on IPRs among students, research scholars, research & development establishments, faculties of educational institutions, SMEs, large enterprises, Startups, etc.
- To organize short-term courses, seminars, workshops and conferences on IPRs and related activities.
- To protect Intellectual creations of students, research scholars, faculties, scientists, entrepreneurs, industries and others through a streamlined procedure

to register their patents, trademark, copyrights and others IPRs in an effective manner.

Services of CIPR

i. Patents

CIPR carries out extensive Patent Search using free and paid database. We have expertise and experienced professionals to do patent searches, patent specification drafting, patent claims drafting, patent filings and other related works.

ii. Industrial Design

CIPR carries out search and filing services of Industrial design for shape, configuration, pattern, composition of lines, colours, etc. applied to any product(s).

iii. Trademarks

CIPR carries out trademark search and trademark application filing for logo, symbol, design, image, sound, colour, slogan, smell, word, phrase or combination of these elements.

iv. Copyrights

CIPR assists in copyrights filing related to the original work of literary (like poems, books, etc), artistic (like painting, sculptures, photographs, etc), dramatic, musical work, cinematographic films, sound recording, software programme, etc.

v. Conduct of IPR Awareness Programme and Certificate Courses

The CIPR regularly conducts several Awareness program and Certificate Courses to educate the importance of IPRs to students, research scholars, faculties and scientists of R&D institution, Universities, SMEs and large establishments.

Details of IPRs as on December 2020

(Department / Centre wise)

1. Aerospace Engineering

SI. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Registrar, Anna University, Chennai	K.M.Parammasivam, G. Sivaraj, & S. Senthil Kumar	Aerodynamic drag reduction of a hatch back car using base bleed	3777/CHE/2010 & 10/12/2010	Granted & Ceased
2	Registrar, Anna University, Chennai	K.M.Parammasivam, G. Sivaraj, & S. Senthil Kumar	Optimization of vortex generator for "sedan" car model for reduction of aerodynamic drag	3778/CHE/2010 & 10/12/2010	Granted
3	S.Thanigalarasu, Dharmahiner Singh Chand, & R. Asad Ahmed	S. Thanigalarasu, Dharmahiner Singh Chand, & R. Asad Ahmed	Method and device for controlling sonic under -expanded jets	3765/CHE/2015 & 22/07/2015	Amended Examination
4	C. Senthil Kumar, & M. Ramakrishna	C. Senthil Kumar, & M. Ramakrishna	Saw toothed leading edge delta wings	201641018606 & 31/05/2016	Amended Examination
5	C. Senthil Kumar, & M. Ramakrishna	C. Senthil Kumar, & M. Ramakrishna	Sinusoidal toothed leading edge delta wings	201641018605 & 31/05/2016	Amended Examination

6	A. Saravanakumar	B. Madhankumar, A.Saravanakumar, & R. Souhith	Ground testing apparatus for solar sails	201841031722 & 24/08/2018	Amended Examination
7	S. Thanigaiarasu, & K. Rajaguru Nathan	S. Thanigaiarasu, & K. Rajaguru Nathan	Aerodynamically shaped feathered winglets for vertical axis wind turbine	201841033159 & 04/09/2018	Amended Examination
8	Anna University, Chennai	A. Saravana Kumar, & A. Kaviyarasu	Software defined radio-based ground receiving station system for low earth orbit satellites communication	201941027752 & 11/07/2019	FER Issued
9	K. Senthil Kumar, & S. Thamarai Selvi	K. Senthil Kumar, S. Thamarai Selvi, A. Mohamed Rasheed, C.U. Hari, M. Kalaiselvan, Rushendar babu, V. Mathavan, K. Karthik, R. Vasantharaj, S. Arul, D. Velan, A. Abdul Jawad, M. Venketesan, D. Kumaran, R. Madan Kumar	Ground object position annotation using standalone on-board embedded system	201841042082 & 08/11/2018	FER Issued
10	K. Senthil Kumar, & S. Thamarai Selvi	K. Senthil Kumar, S. Thamarai Selvi, A. Mohamed Rasheed, & C.U. Hari	Tethered aerial platform	201841042078 & 08/11/2018	Awaiting Examination

2. Applied Science and Technology

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	R. Ramakrishnan Noel Jacob Kaleekkal T. Sivakumar & D. Mohan	R. Ramakrishnan Noel Jacob Kaleekkal T. Sivakumar & D. Mohan	Mixed matrix polymeric membrane catalytic reactor for carbohydrate valorization and separation and method thereof	201841027725 & 24/07/2018	Granted
2	Anna University, Chennai	S. Kalaiselvam, P. Karuppasamy, & S. Sivanesan	Laser flash thermal diffusivity analyser for the measurement of thermal properties of solid material	201941010365 & 18/03/2019	Amended Examination

3. Bio-Technology

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	K. Sankaran, A. Alagumaruthanayagam, & A. R. Pavankumar	K. Sankaran, A. Alagumaruthanayagam & A. R. Pavankumar	A method to detect the microbial resistance to antibiotics using fluorescence	239/CHE/2009 & 04/02/2009	In Order for grant u/s 43, awaiting NBA Approval
2	Registrar, Anna University, Chennai	T. Elavaransan, A. Alagumaruthanayagam & Dr. K. Sankaran	A method to detect bacterial growth and antibacterial resistance based on fluorescence quenching	1891/CHE/2010 & 02/07/2010	Granted

3	Registrar, Anna University, Chennai	Dr. K. Sankaran, & Shruthi Hamsanathan	A process to enhance the sensitivity of human interferon γ detection in elisa using bacterial lipid modification	2569/CHE/2010 & 03/09/2010	Granted & Ceased
4	Registrar, Anna University, Chennai,	Dr. P. Kaliraj, Dr. J. Madhumathi, Dr. G. Anugraha, & Dr. Prince R. Prabhu	Chimeric peptide vaccines for filariasis	1366/CHE/2011 & 20/04/2011	Granted
5	Registrar, Anna University, Chennai,	Dr. P. Kaliraj, Dr. J. Madhumathi, Dr. G. Anugraha, & Dr. Prince R. Prabhu	Immunogenic composition for lymphatic filarial vaccine	1367/CHE/2011 & 20/04/2011	Granted
6	Registrar, Anna University, Chennai	Dr. P. Kaliraj, Dr. K. Sankaran, Dr. Sharmila Sam, & Dr. I. Christiana	A bacterial lipid modification of a filarial protein to enhance the immune-prophylactic efficacy in animal & humans	2035/CHE/2011 & 15/06/2011	Granted
7	Dr. K. Sankaran, & T. Elavarasan	Dr. K. Sankaran, & T. Elavarasan	Simple and rapid methods for estimation of milk protein	1496/CHE/2015 & 24/03/2015	Amended Examination
8	Anna University, Chennai	T. Akila G. Padmapriya Y. Anitha Janet Roshni J. Tamilselvan Nikhil Sangith Mahalakshmi Natarajan Pandiraj Suppuram	Production of l-2-aminobutyrate from pyruvate / citramalate /citraconate by biotransformation and cell	201841037493 & 04/10/2018	Awaiting Examination
9	S. Ramalingam,	G. Padmapriya, Y. Anitha Janet Roshni, T. Akila, J. Tamilselvan, Pandiraj Suppuram	Production of 2-oxobutanoate using alternative isoleucine biosynthetic pathway	201941000814 & 08/01/2019	Awaiting Examination

10	Anna University, Chennai	S. Ramalingam T. Akila, G. Padmapriya Y. Anitha Janet Roshini & J. Tamilselvan	Process of producing amino acids from its ketoacid by enzyme amino acid dehydrogenases	201941021876 & 03/06/2019	Amended Examination
11	Anna University, Chennai	S. Ramalingam, Y. Anitha Janet Roshni, S. Shanthy, T. Akila, G.Padmapriya & J. Tamilselvan	Process for producing B – alanine in cell free system enzymatic bio transformation	202041001571 & 14/07/2020	Awaiting Examination

4. Chemistry

SI. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Dr. A. Pandurangan & S. Chandrakishore	Dr. A. Pandurangan & S. Chandrakishore	Novel catalyst-free self seeded method for the production of C-Si-Ge and nanotubes by CVD	5605/CHE/2014 & 07/11/2014	Granted
2	Anna University, Chennai	S. Anandakumar, N. Sundar & S. Johan stanley	Biodegradable barrier coating material	202141038208 & 24/08/2021	FER Issued

5. Chemical Engineering

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Dr. M. Alagar, & S. Devaraju	Dr. M. Alagar, & S. Devaraju	One pot synthesis of novel skeletal modified diamine used as a curative and impact modifier for epoxy resins	3637/CHE/2014 & 25/07/2014	Granted
2	Dr. K.V. Radha, & P. Thyriyalakshmi	Dr. K.V. Radha, & P. Thyriyalakshmi	Synthesis of FMPC and preparation of chitosan – FMPC particles	5144/CHE/2014 & 14/10/2014	Granted
3	Dr. K.V. Radha, & V. Thamilselvi	Dr. K.V. Radha, & V. Thamilselvi	Corncob adsorbent for waste water treatment	201641009242 & 17/03/2016	Granted
4	Noel Jacob Kaleekkal, & D. Mohan	Noel Jacob Kaleekkal, & D. Mohan	Method of preparing fouling resistant polyetherimide mixed matrix membranes	201741031660 & 07/09/2017	Amended Examination

6. Civil Engineering

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	B. Dhayalini, & R. Senthil	B. Dhayalini, & R. Senthil	A biodegradable acoustic panel from small millets husk	201741004535 & 08/02/2017	Granted
2	Anna University, Chennai	G. Beulah Gnana Ananthi, & M.S. Deepak	Cold formed steel hybrid double t box girders	202141013917 & 29/03/2021	Amended Examination

7. Climate Change and Disaster Management

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Anna University, Chennai	K. Palanivelu E. Sachin kuriachan & A. Ramachandran	Method of producing ammonium carbamate from carbon-dioxide and ammonia in a non-aqueous solvent	202041030086 & 15/07/2020	Application in Hearing

8. Computer Science and Engineering

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	S. Chitrakala	S. Chitrakala	Automatic scene understanding assistive system with refreshable tactile device including voice for visually impaired people	201841031721 & 24/08/2018	Amended Examination
2	Anna University, Chennai	P. Uma Maheshwari & S. Rajeswari	An image description generating system and method for visually impaired people	202141013921 & 29/03/2021	FER Issued

9. Crystal Growth

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Registrar, Anna University, Chennai	Dr. J. Kumar, Dr. K. Sankaran, M. Jaya Prakasan, & T. Dhinesh Kumar	A process to characterize biochemical reactions using sensor instrumentation based on capacitance and conductance change	3064/CHE/2010 & 18/10/2010	Granted & Ceased
2	K. Thanigai Arul, S. Narayana Kalkura, J. Ramana Ramya, & E. Manikandan	K. Thanigai Arul, S. Narayana Kalkura, J. Ramana Ramya, & E. Manikandan	Bionano composite coating and its method thereof	201741031668 & 07/09/2017	FER Issued
3	Dr. J. Kumar, & C. Bagavath	Dr. J. Kumar, & C. Bagavath	Disposable nitric oxide sensor construction using gallium nitride nanowires and its method thereof	201741043550 & 05/12/2017	Granted
4	Shubra Singh, Suchita, & Vavilapalli Durga Sankar	Shubra Singh, Suchita, & Vavilapalli Durga Sankar	Method for developing Ca ₂ Fe ₂ O ₅ Nanoparticles for Enhanced Photocatalysis under direct Sunlight	201841028665 & 31/07/2018	Granted
5	Shubra Singh, & Vavilapalli Durga Sankar	Shubra Singh, & Vavilapalli Durga Sankar	Method for synthesis of sillenite bi ₁₂ feo ₂₀ single crystals	201841028670 & 31/07/2018	Granted
6	D. Arivuoli & Preethi Ramadoss	D. Arivuoli & Preethi Ramadoss	Biodegradable sanitary napkin for personal and environmental hygiene and method thereof	201841044636 & 27/11/2018	Granted
7	Anna University, Chennai	D. Arivuoli & Preethi Ramadoss	Flexible and biodegradable polymer composite for sensing sweat glucose	201941048041 & 25/11/2019	Amended Examination

10. Environmental Studies

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Anna University, Chennai	Dr.N.Vasudevan	A process for the biological treatment of an industrial effluent	1675/CHE/2006 & 13/09/2006	Granted & Ceased
2	Dr.N.Vasudevan, & R. Kanimozhi	Dr.N.Vasudevan, & R. Kanimozhi	A process for the treatment of distillery waste water using aerobic sequencing batch reactor	587/CHE/2009 & 16/03/2009	Granted & Ceased
3	Dr.N.Vasudevan, & R. Kanimozhi	Dr.N.Vasudevan, & R. Kanimozhi	A synthetic carrier for biofilm attachment for wastewater treatment	711/CHE/2009 & 30/03/2009	Granted & Ceased
4	Dr. S. Kanmani, & V. Preethi	Dr. S. Kanmani, & V. Preethi	Gas-phase recovery of hydrogen from hydrogen sulphide using photocatalysis	870/CHE/2015 & 24/02/2015	Granted
5	Dr. N. Vasudevan & G. Sunantha	Dr. N. Vasudevan & G. Sunantha	Method for detecting PFOA and PFOS in water samples using Genetically Engineering Bacterial Biosensor	201841015253 & 23/04/2018	FER Issued
6	Anna University, Chennai	N. Vasudevan & A. Jayshree	A method to manufacture copper nanoparticles by aqua-chemical reduction of copper based salts	201941013817 & 05/04/2019	Amended Examination
7	Anna University, Chennai	N. Vasudevan & A. Jayshree	A method for detection of phthalate esters in drinking water and beverages	201941042605 & 21/10/2019	Amended Examination
8	Anna University, Chennai	Dr.S. Kanmani & Kaviya Piriyan	A scalable compact Uv-Led photo catalytic reactor	201941030202 & 26/07/2019	Awaiting Examination

9	N. Vasudeven, O. Greeshma	N. Vasudeven, O. Greeshma	A process for treating pesticide contaminated water	201941030196 & 26/07/2019	FER Issued
10	N. Vasudeven, O. Greeshma	N. Vasudeven, O. Greeshma	A novel and comprehensive process for production of biogas and fuel oil from used feminine sanitary napkins (UFSN)	201941039118 & 27/09/2019	Amended Examination
11	Anna University, Chennai	N.Vasudevan & R. K. Brinda	Method for mitigation of methane released from agricultural lands	202041020116 & 13/05/2020	Amended Examination
12	Anna University, Chennai	N.Vasudevan & K. Ramya	Two stage process for treating pyrethroid pesticide wastewater using halotolerant bacteria	202041019235 & 06/05/2020	Amended Examination
13	Anna University, Chennai	S. Kanmani & R. Chandra Devi	Hyper cross-linked iron-quercetin-3-malonylglucoside in textile wastewater treatment	202041025020 & 15/06/2020	Amended Examination
14	Anna University, Chennai	Dr.K. Palanivelu & V. Krishnaveni	Method for producing glycerol carbonate by direct carbonation reaction of glycerol and co2 presence of heterogeneous catalyst	202041028146 & 02/07/2020	Granted
15	Anna University, Chennai	S. Narayana Kalkura & P. Sandeep Eswaran	Lyophilized nano – hydroxyapatite a bio friendly adsorbent for fluoride adsorption	202041028142 & 02/07/2020	Awaiting Examination
16	Anna University, Chennai & L&T Construction Limited	S. Kanmani S. Amal Raj, S. Sowndarya, S. Jagannathan Mohamed Salah & P. Ganesh Kumar	Multi-zone attached growth batch bio-reactor & method of biological treatment of domestic wastewater	202041007025 & 19/02/2020	Granted

17	Anna University, Chennai & L&T Construction Limited	S. Kanmani S. Amal Raj, S. Sowndarya, S. Jagannathan Mohamed Salah & P. Ganesh Kumar	Multi-zone attached growth batch bio-reactor & method of biological treatment of domestic wastewater	PCT/IN2020/ 050548 & 24/06/2020	Publication
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11. Electrical & Electronics Engineering

SI. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Anna University, Chennai	Dr. B. Umamaheswari, & J. Kavitha	Homopolar axial flux hub stepper motor	5589/CHE/2013 & 04/12/2013	Granted

12. Electronics & Communication Engineering

SI. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Registrar, Anna University, Chennai	Dr.K. Malathi, M.Gulam Nabi Alsath, & A. K. Shrivastav	Dual band notched dielectric resonator reflect array for C/X band	1374/CHE/2012 & 04/04/2012	Granted

2	Dr. K. Malathi, Aswathy K Sarma, A. Henridass, C. Raviteja, V. Sangeetha, & M. Gulam Nabi Alsath	Dr.K. Malathi, Aswathy K Sarma, A. Henridass, C. Raviteja, V. Sangeetha, & M. Gulam Nabi Alsath	Mutual coupling reduction in MIMO antenna with serpentine type structure resonator	2660/CHE/2014 & 30/05/2014	Granted
3	Dr. K. Malathi, & M. Gulam Nabi Alsath	Dr.K. Malathi, & M. Gulam Nabi Alsath	Shared aperture multi-service antenna design for automotive communications	6413/CHE/2014 & 19/12/2014	Amended Examination
4	Dr.K. Malathi, K .P. Jayaram, & M. Gulam Nabi Alsath	Dr.K. Malathi, K .P. Jayaram, & M. Gulam Nabi Alsath	A UHF RFID reader antenna integrated with near field and far field operations	5336/CHE/2015 & 06/10/2015	Granted
5	Dr.K. Malathi, M. Gulam Nabi Alsath, & Livya Lawrance	Dr.K. Malathi, M. Gulam Nabi Alsath, & Livya Lawrance	A device and method for fabrication of ultra-wide band micro strip grid array antenna (GAA)	5337/CHE/2015 & 06/10/2015	Amended Examination
6	Dr.K. Malathi, R. Vimal Samsingh, & S. Esther Florence	Dr.K. Malathi, R. Vimal Samsingh, & S. Esther Florence	Method and apparatus for non-destructive testing of composites using planar sensor	5338/CHE/2015 & 06/10/2015	Amended Examination
7	Dr.K. Malathi, S. Esther Florence, & R. Vimal Samsingh	Dr. K. Malathi, S. Esther Florence, & R. Vimal Samsingh	A method to fully integrate multi-layer woven electro-textile patch antenna	5620/CHE/2015 & 19/10/2015	Granted
8	Dr.K. Malathi, S. Ramparabhu, & M. Balaji	Dr.K. Malathi, S. Ramparabhu, & M. Balaji	A method and device for a passive reconfigurable frequency selective surface	5621/CHE/2015 & 19/10/2015	Amended Examination

9	Dr.K. Malathi, & S. Ramprabhu	Dr.K. Malathi, & S. Ramprabhu	Polarization independent reconfigurable 3D frequency selective surface and method thereof	201641032341 & 22/09/2016	Amended Examination
10	Dr.K. Malathi, & K. P. Jayaram	Dr.K. Malathi, & K. P. Jayaram	A multiservice chipless RFIP transponder	201641032342 & 22/09/2016	Granted
11	Dr.K. Malathi, R. Vimal Samsingh, S. Sangeetha, P. Yogeshwari, & Saffrine Kingsly	Dr.K. Malathi, R. Vimal Samsingh, S. Sangeetha, P. Yogeshwari, & Saffrine Kingsly	Electromagnetic nondestructive material characterization of dielectrics deploying planar EBG based transmission line sensor	201641032343 & 22/09/2016	Amended Examination
12	Dr.K. Malathi, & K. P. Jayaram	Dr.K. Malathi, & K. P. Jayaram	A magnetic coupling UHF near field RFID reader antenna deploying CSRR elements	201641032344 & 22/09/2016	Granted
13	Dr.K. Malathi, V. Sangeetha, Saffrine Kingsly, P. Yogeshwari & S. Sangeetha	Dr.K. Malathi, V. Sangeetha, Saffrine Kingsly, P. Yogeshwari & S. Sangeetha	Planar quad-band rat-race coupler with spurious pass-band suppression	201641032345 & 22/09/2016	Amended Examination
14	Dr. K. Malathi, P. Yogeshwari P. Sandeep Kumar Saffrine Kingsly, S. Sangeetha, & M. Gulam Nabi Alsath	Dr.K. Malathi, P. Yogeshwari P. Sandeep Kumar Saffrine Kingsly, S. Sangeetha, & M. Gulam Nabi Alsath	Dual mode polarization diverse antenna array	201641024647 & 19/07/2016	Amended
15	Dr. K. Malathi, & N. Rajesh	Dr.K. Malathi, & N. Rajesh	Integrated VIVALDI antenna with switchable radiation pattern	201741008376 & 10/03/2017	Granted

16	Dr.K. Malathi, P. Sandeep Kumar, E. Lavanya, P. Yogeshwari, S. Sangeetha, & Saffrine Kingsly	Dr.K. Malathi, P. Sandeep Kumar, E. Lavanya, P. Yogeshwari, S. Sangeetha, & Saffrine Kingsly	Rhombic compound reconfigurable antenna	201741008383 & 10/03/2017	Granted
17	Anna University, Chennai	S. Poonguzhali, & Neela Harish	A hand gesture recognition system for speech impaired people and a method thereof	201941040877 & 10/10/2019	Amended Examination
18	Anna University, Chennai	S. Poonguzhali, P. Ravichandran, M. Sasikala & S. Dinesh	A Suture force measurement system for surgical procedures	202041023617 & 05/06/2020	FER Issued

13. Electronics Engineering

SI. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Anna University, Chennai	M. Ganesh Madhan, S. Piramasubramanian, & K. Jagankumar	A device and method to identify cooking oils by cuvette structured microstrip patch antenna sensor	202141031532 & 14/07/2021	Awaiting Examination

14. Food Technology

SI. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Anna University, Chennai	M. Sukumar, Maria Jenita, U. Lalitha Priya, V. Renuka	Formulation of stable edible oil by incorporating microencapsulated natural polyphenols	201941043744 & 29/10/2019	Awaiting Examination

15. Geology

SI. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Anna University, Chennai	L. Elango, V. K. Haritha & P. Anandharuban	Ground water recharge system using soil ventilation technique	202041019232 & 06/05/2020	FER Issued

16. Instrumentation Engineering

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	K. Kamalanand, & A. Paramasivam	A. Paramasivam, K. Kamalanand, C. Emmanuel & Dr. P. Mannar Jawahar	An apparatus for generation of gastric electric waveforms in normal and abnormal conditions	201841033641 & 07/09/2018	Amended Examination
2	Anna University, Chennai	T. Thyagarajan, Sabitha Ramakrishnan, & G. Anand	Automated external defibrillator system with intelligent ECG detection and automatic vernacular language assistance	201941011910 & 27/03/2019	Amended Examination
3	Anna University, Chennai	Dr. K. Kamalanand, A. Paramasivam, A. Bakiya, C. Emmanuel, K. Ravindranath & Dr. P. Mannar Jawahar	A Signal generating device for calibration of electromyogram (EMG) acquisition devices and a method thereof	202041029694 & 13/07/2020	Amended Examination
4	Anna University, Chennai	K. Kamalanand, A. Paramasivam, V. Rajinikanath, C. Emmanuel, K. Ravindranath & Dr. P. Mannar Jawahar	A galvanic skin response (GSR) signal generating device and method for GSR waveforms recording system	202041029695 & 13/07/2020	Amended Examination

5	Anna University, Chennai	K. Kamalanand, A. Paramasivam, S. Srinivasan, & R. L. J. De Britto	A pneumatic decompression therapeutic device for treatment of localized edema in patients with Lymphatic filariasis	202041033301 & 04/08/2020	FER Issued
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17. Manufacturing Engineering

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Anna University, Chennai & Department of Atomic Energy, Mumbai	Dr. M. Kanthababu, Dr. S. HosiminThilagar, V. Vidyaa, Dr. S. Gowri, Dr. R. Balasubramaniam, Prabhat Ranjan, & Debanik Roy	Mechanical grippers for handling plurality of micro components	201641005129 & 15/02/2016	Amended Examination
2	Dr. M. Kanthababu, Dr. S. Gowri, & M. Venkateshwaran	Dr. M. Kanthababu, Dr. S. Gowri, & M. Venkateshwaran	Focusing nozzle condition monitoring system of abrasive water jet machine comprising accelerometer	201641018235 & 27/05/2016	Application in Hearing
3	Dr. M. Kanthababu, Dr. S. Gowri, & M. Venkateshwaran	Dr. M. Kanthababu, Dr. S. Gowri, & M. Venkateshwaran	Focusing nozzle condition monitoring unit of abrasive water jet machine comprising sound sensor	201641018236 & 27/05/2016	Amended Examination
4	Dr. M. Kanthababu, V. Mohan Kumar, V. Sailesh, & G. Anuradha	Dr. M. Kanthababu, V. Mohan Kumar, V. Sailesh, & G. Anuradha	Smart seat belt system	201641020717 & 17/06/2016	Application in Hearing

5	M. Kanthababu, K. Vigneshwaran, & A. Sureshkumar	M. Kanthababu, K. Vigneshwaran, & A. Sureshkumar	Footboard accident prevention system	201641024483 & 18/07/2016	Granted
6	Dr. M. Kanthababu, & R. Giri	Dr. M. Kanthababu, & R. Giri	A method for operating optimal assembly sequence in an indexing table using genetic algorithm	201741012118 & 04/04/2017	Amended Examination
7	Dr. M. Kanthababu, Dr. S. Gowri, R. Prabhakaran, K. R. Sunilkumar, & M.S. Ajmal Deen Ali	Dr. M. Kanthababu, Dr. S. Gowri, R. Prabhakaran, K. R. Sunilkumar, & M.S. Ajmal Deen Ali	Condition monitoring system for focusing nozzle wear in abrasive waterjet machine comprising acoustic emission sensor	201741016668 & 12/05/2017	Granted
8	Dr. M. Kanthababu, Dr. S. Gowri, R. Prabhakaran, K. R. Sunilkumar, & M.S. Ajmal Deen Ali	Dr. M. Kanthababu, Dr. S. Gowri, R. Prabhakaran, K. R. Sunilkumar, & M.S. Ajmal Deen Ali	Condition monitoring system for focusing nozzle wear in abrasive waterjet machine comprising cutting force dynamometer	201741016669 & 12/05/2017	Granted
9	Dr. M. Kanthababu, & V. Vidyaa	Dr. M. Kanthababu, & V. Vidyaa	Fatigue testing machine for mechanical microgrippers	201741046617 & 26/12/2017	Amended Examination
10	Dr. M. Kanthababu, & V. Vidyaa	Dr. M. Kanthababu, & V. Vidyaa	Micro arc welding machine	201741046610 & 26/12/2017	Amended Examination
11	Dr. M. Kanthababu,	Dr. M. Kanthababu, S. Anish Kumar, M. S. Ajmal Deen Ali, & R. Madhumathi	lot enabled online condition monitoring of the exhaust gas emission system of the automobiles using gas sensor	201741046614 & 26/12/2017	Amended Examination

12	M. Kanthababu	M. Kanthababu, S. Akash, M. Jeeva, B. Manikandan & Shreyas M Kabirdass	Internet of things based cam actuated bell	201841013438 & 09/04/2018	Amended Examination
13	Dr. M. Kanthababu	Dr. M. Kanthababu, K. R. Sunil Kumar & A. Sarath Kumar	IOT enabled tool wear condition monitoring system for CNC turning comprising sound sensor	201841022038 & 13/06/2018	Amended Examination
14	Dr. M. Kanthababu	Dr. M. Kanthababu, & K. R. Sunil Kumar	IOT enabled tool wear condition monitoring system for CNC turning comprising acoustic emission sensor	201841022047 & 13/06/2018	Amended Examination
15	Dr. M. Kanthababu	Dr. M. Kanthababu, & K. R. Sunil Kumar	IOT enabled tool wear condition monitoring system for CNC tuning comprising Accelerometer sensor	201841022035 & 13/06/2018	Application in Hearing
16	Dr. M. Kanthababu	Dr. M. Kanthababu, & K. R. Sunil Kumar	IOT enabled tool wear condition monitoring system for CNC tuning comprising multiple sensors	201841022044 & 13/06/2018	Amended Examination
17	M. Kanthababu	M. Kanthababu, S. Akash, & G. Nikitha	An automatic stair climbing unmanned vehicle system for payload delivery	201941016050 & 23/04/2019	Amended Examination
18	M. Kanthababu	M. Kanthababu, S. Sri Ranganathan, R. Ranjani, U. Sivaramakrishnan, & N. Naveen Kumar	An interactive lamp system for communication between users without using smart mobile communication devices	201941027751 & 11/07/2019	Amended Examination
19	M. Kanthababu	M. Kanthababu & J. Indumathi	Internet of things (iot) based bath assisting machine	201941042975 & 23/10/2019	Amended Examination

20	Anna University, Chennai	Dr. M. Kanthababu S. Ganeshmani A. Jeeva S. Kathiresan & M. Sabarinath	A vehicle speed monitoring and controlling system using geofencing technology and a method thereof	202041025876 & 19/06/2020	Awaiting Examination
21	Anna University, Chennai	Dr. M. Kanthababu, A. Agnes Meritta Steffy, Praveen G. Kumar, R.S. Subashini	A system for automatic detection of vehicular accidents and a method thereof	202041025878 & 19/06/2020	FER Issued
22	Anna University, Chennai	Dr. M. Kanthababu Pradeepa Barkave K Swarna Latha G Kaushik R Joelken Nithilan Baskar	A system for monitoring exhaust of the vehicle based on IOT and a method thereof	202041025872 & 19/06/2020	Amended Examination
23	M. Kanthababu	M.Kanthababu, K. Pradeepa Barkave, T.K Ravishankar, G. Swarna Latha, Sneha Hariharan	A system and method for automatic retraction and retrieval of two wheelers side stand	202141029017 & 29/06/2021	Awaiting Examination

18. Mechanical Engineering

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Dr. D. Sangeetha, & Swaminathan Elamathi	Dr. D. Sangeetha, & Swaminathan Elamathi	A process for preparation of sulphonated polymer membrane	2734/CHE/2008 & 07/11/2008	Granted & Ceased
2	Dr. D. Sangeetha, Santhanam Senthil Kumar, Srinivasan Guhan, & Lakshmanan Babu	Dr. D. Sangeetha, Santhanam Senthil Kumar, Srinivasan Guhan, & Lakshmanan Babu	Design and development of a proton exchange membrane fuel cell stack	1544/CHE/2010 & 03/06/2010	Granted
3	Registrar, Anna University, Chennai	Dr.D.Sangeetha, & A. Sivasankaran	A method of performance of a cation exchange membrane in a microbial fuel cell to generate electricity	321/CHE/2011 & 03/02/2011	Amended Examination
4	Registrar, Anna University, Chennai	Dr. D. Sangeetha, & R. Vinodh	A novel anion exchange membrane for fuel cell application	580/CHE/2011 & 28/02/2011	Application in Hearing
5	Registrar, Anna University, Chennai	Dr. S. Madhavan, Dr. S. Balasivandha Prabu, Dr. K.A. Padmanabhan & Dr. L. Karunamoorthy	A resinod bonded in situ TIB2 based ceramic grinding wheel and method of making the same	3494/CHE/2013 & 02/08/2013	Amended Examination
6	Dr. D.Sangeetha, & Ayyaru Sivasankaran	Dr. D.Sangeetha, & Ayyaru Sivasankaran	Sulphonated polyether –ether-ketone/ sulphonated tio2 composite as proton exchange membrane for microbial fuel cell	3031/CHE/2014 & 23/06/2014	Granted
7	M. K.anthababu, K. Vigneshwaran, & A. Sureshkumar	M. Kanthababu, K. Vigneshwaran, & A. Sureshkumar	Footboard accident prevention system	201641024483 & 18/07/2016	Granted

19. Medical Electronics

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Anna University, Chennai	Dr.S.Shenbaga Devi, Ronnie Jacob George, & Parveen Sen	Visual acuity computation using sweep vep	201941004031 & 01/02/2019	Awaiting Examination

20. Physics

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Anna University, Chennai	M. Chitra & I. Davis Jacob	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	201941046038 & 13/11/2019	Amended Examination

21. Production Technology

SI. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	A.J.D Nanthakumar, & J. Jancirani	A.J.D Nanthakumar, & J. Jancirani	A real time adaptable damper	201741036049 & 11/10/2017	Amended Examinaton
2	J. Jancirani A. Sangeet Sahaya Jeyangel, & G. Anandraj	J. Jancirani A. Sangeet Sahaya Jeyangel, & G. Anandraj	Air curtain side skirt for reducing underbody drag	201841001033 & 10/01/2018	Amended Examination
3	A. Rajadurai, & Suresh Patil	A. Rajadurai, & Suresh Patil	Chlorine-doped tin monoxide the p-type transparent conducting particles and manufacturing process	201841028671 & 31/07/2018	FER Issued
4	J .Jancirani, A.Sangeet Sahaya Jeyangel, & G.Anandraj	J .Jancirani, A.Sangeet Sahaya Jeyangel, & G. Anandraj	Conduit side skirt for underbody drag reduction	201841039705 & 22/10/2018	Granted

22. Textile Technology

Sl. No	Name of the Applicant (s)	Name of the Inventor (s)	Title	Application No. & Patent Filed Date	Current Status
1	Anna University, Chennai	Dr. A. Peer Mohammed, Dr. S. Subramanian, & T. Sureshram	Point fluted bottom rollers for roller drafting system of yarn spinning and preparatory machines	1231/CHE/2008 & 21/05/2008	Granted & Ceased
2	Dr. S. Subramanian, & S. Kubera Sampath Kumar	Dr. S. Subramanian, & S. Kubera Sampath Kumar	Nanomaterial based multilayer wound dressing system	2285/CHE/2014 & 08/05/2014	Amended Examination
3	P. Pathalamuthu, A. Siddharthan, & Dr. V. R. Giridev	P. Pathalamuthu, A. Siddharthan, & Dr. V. R. Giridev	Spirograph based mechanical assembly for fabrication testing and measurement of product with near uniform characteristics	5603/CHE/2014 & 07/11/2014	Granted
4	Dr. A. Peer Mohamed, Dr. S. Subramanian, P. Kathirvel & V. Preethi	Dr. A. Peer Mohamed, Dr. S. Subramanian, P. Kathirvel & V. Preethi	Devices to reduce inter fibre friction in roller drafting system for yarn manufacture	201641027276 & 10/08/2016	Amended
5	Dr. N. Gobi	Dr. N. Gobi	Construction of polymeric/electrospun composite membrane for water filtration and a method thereof	201641032148 & 21/09/2016	Amended
6	Dr. S. Subramanian, & Dr. A. Peer Mohamed	Dr. S. Subramanian, & Dr. A. Peer Mohamed	Modified cradle and nose bar for apron drafting system	201641043615 & 21/12/2016	Amended
7	N. Gobi & B. Devi	N. Gobi & B. Devi	Method to synthesis tio2 nanoparticles and lycopene - tio2 nanoparticles complex	201841025473 & 09/07/2018	Granted
8	N. Gobi & R. Senthil	N. Gobi & R. Senthil	Blended Suture for Surgical Application and a preparation process thereof	201841033152 & 04/09/2018	FER Issued

9	N.Gobi & S.Arun Karthick	N.Gobi & S.Arun Karthick	Multifunctional nanocomposite nanofibrous filter for aerosol filtration, chemical and biological protection	201841029428 & 06/08/2018	Granted
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