

Section 1: Policy And Institutionalization Of I&E Activities In HEIs (Academic Calendar Year 2020-21 & 2021-22)

1.1) Adoption Level of Innovation and Entrepreneurship (I&E) Policy in HEIs: Registration; Policy Formulation; Policy Implementation

| Completion of Action Items (status as on 31st October 2022) | Status |
|--|--------|
| Registered in the NISP portal for I&E Policy Adoption | Yes |
| Institute has Formulated an Innovation and Entrepreneurship (I&E) Policy | Yes |
| Institute has Action Plans for Implementation of the I&E Policy | Yes |

Contact:

| | |
|---------------|-----------------------|
| Faculty Name: | Prof. S. Suryakumar |
| Designation: | Professor |
| Email ID: | ssurya@mae.iith.ac.in |
| Mobile No. | 8331036052 |

1.2) Performance Level of Institution's Innovation Councils (IICs) Established in HEIs: Scores and Stars Obtained

| Annual Performances of IIC Institute | Stars Secured |
|--------------------------------------|-------------------|
| IIC 1.0 (2018-19) | 1,2 |
| IIC 2.0 (2019-20) | 0 |
| IIC 3.0 (2020-21) | 4 |
| IIC 4.0 (2021-22) | 0 (On Progress) |

Contact:

| | |
|---------------------------------|---------------------|
| IIC President of the Institute: | B.S. Murty |
| Designation: | Director |
| Email ID: | director@iith.ac.in |
| Mobile No. | 8331036001 |

1.3) Activeness of Trained Innovation Ambassadors in Driving Campus I&E Ecosystems in HEIs: Trained IA/HEI and Nos of Prescribed Activities undertaken by IA

| Sr. No. | Name of the Faculty IA | Level of Training | No of I&E Expert Talks/Sessions Conducted |
|---------|------------------------|-------------------|---|
| 1 | Dr.Deepak John Mathew | Basic | 0 |
| 2 | Mudrika Khandelwal | Basic | 1 |
| 3 | Meduri Praveen | Basic | 0 |
| 4 | Sayak Banerjee | Basic | 0 |
| 5 | Suhanya Duraiswamy | Basic | 1 |
| 6 | Dr. Sudarsanam Putla | Basic | 0 |
| 7 | Sandipan Ray | Basic | 0 |
| 8 | Srikar A V R | Basic | 0 |
| 9 | Abhinav Kumar | Basic | 0 |
| 10 | Abhinav Kumar | Basic | 0 |

1.4) Participation in KAPILA/SIH Program

| | | |
|--|--------|-----|
| HEI Registered in the KAPILA Portal | U-0013 | Yes |
| HEI Participated in the Smart India Hackathon (2022) | U-0013 | No |

Section 2: Teaching and Learning: Academic Programs related to Innovation and Entrepreneurship (I&E) Offered by the HEI

2.1) Academic Courses in Innovation, Entrepreneurship and IPR

| Srno | Title of Course | Course Code | Academic Year | Type of Course | Level of Course | Course Offering Department/ Centre/ Unit Name | Total Credit Score | Course Start Date |
|------|-------------------------------------|-------------|---------------|----------------|-----------------|---|--------------------|------------------------|
| 1 | Entrepreneurial Risk Management | EM5060 | 2021-22 | Core Course | Master | Entrepreneurship and Management | 1 | 11-02-2022 00:00:00 |
| 2 | Operational Entrepreneurship | EM6040 | 2021-22 | Core Course | Master | Entrepreneurship and Management | 3 | 03-01-2022 00:00:00 |
| 3 | Strategic Management | EM6010 | 2021-22 | Core Course | Master | Entrepreneurship and Management | 3 | 03-01-2022 00:00:00 |
| 4 | International Business | EM5030 | 2021-22 | Core Course | Master | Entrepreneurship and Management | 1 | 28-03-2022 00:00:00 |
| 5 | Business Plan Development (Project) | EM4995 | 2021-22 | Core Course | Bachelor | Entrepreneurship and Management | 3 | 03-01-2022 00:00:00 |
| 6 | Introduction to Entrepreneurship | EM3020 | 2021-22 | Core Course | Bachelor | Entrepreneurship and Management | 1 | 03-01-2022 00:00:00 |
| 7 | Competitive Strategy for Startup | EM5010 | 2021-22 | Core Course | Master | Entrepreneurship and Management | 1 | 16-08-2021 00:00:00 |
| 8 | Decision Modelling | EM5050 | 2021-22 | Core Course | Master | Entrepreneurship and Management | 1 | 16-08-2021 00:00:00 |
| 9 | Innovation Management | EM5020 | 2021-22 | Core Course | Master | Entrepreneurship and Management | 1 | 22-09-2021 00:00:00 |

| Srno | Title of Course | Course Code | Academic Year | Type of Course | Level of Course | Course Offering Department/ Centre/ Unit Name | Total Credit Score | Course Start Date |
|------|--|-------------|---------------|----------------|-----------------|---|--------------------|---------------------|
| 10 | Game Theory for Startups | EM5040 | 2021-22 | Core Course | Master | Entrepreneurship and Management | 1 | 01-11-2021 00:00:00 |
| 11 | Introduction to Intellectual Property Rights | EM3030 | 2021-22 | Core Course | Bachelor | Entrepreneurship and Management | 1 | 30-03-2021 00:00:00 |
| 12 | Introduction to Entrepreneurship | EM3020 | 2021-22 | Core Course | Bachelor | Entrepreneurship and Management | 1 | 11-01-2021 00:00:00 |
| 13 | Organizational Theory | EM6370 | 2021-22 | Core Course | Master | Entrepreneurship and Management | 3 | 11-01-2021 00:00:00 |
| 14 | Social Entrepreneurship | EM3010 | 2021-22 | Core Course | Bachelor | Entrepreneurship and Management | 1 | 22-02-2021 00:00:00 |
| 15 | Lean Startups | EM4040 | 2021-22 | Core Course | Bachelor | Entrepreneurship and Management | 1 | 30-03-2021 00:00:00 |



2.2) Non-Academic Courses in Innovation, Entrepreneurship and IPR

| Srno | Title of Course | Academic Year | Type of Certificate Program | Certificate Program/MDP/FDP/EDP Sponsored/Supported by | Certificate Program Offering Department/ Centre/ Unit Name | Program Start Date | Program End Date |
|------|--|---------------|-----------------------------------|--|--|---------------------|---------------------|
| 1 | Analog IC design using free Software Tools | 2020-21 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 02-10-2020 00:00:00 | 02-10-2020 00:00:00 |

| Srno | Title of Course | Academic Year | Type of Certificate Program | Certificate Program/MDP/FDP/EDP Sponsored/Supported by | Certificate Program Offering Department/ Centre/ Unit Name | Program Start Date | Program End Date |
|-------------|---|----------------------|------------------------------------|---|---|---------------------------|-------------------------|
| 2 | Advanced Pedagogies Active Learning Digital Tools | 2020-21 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 05-10-2020 00:00:00 | 05-10-2020 00:00:00 |
| 3 | Aid of Demo Experiments in Teaching Solid Mechanics | 2020-21 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 26-10-2020 00:00:00 | 26-10-2020 00:00:00 |
| 4 | Matrix Analysis using Python | 2020-21 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 03-11-2020 00:00:00 | 03-11-2020 00:00:00 |
| 5 | Probability using Python | 2020-21 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 17-11-2020 00:00:00 | 17-11-2020 00:00:00 |
| 6 | Advanced Algorithms | 2020-21 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 28-11-2020 00:00:00 | 28-11-2020 00:00:00 |
| 7 | 3D Printing Design | 2020-21 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 28-11-2020 00:00:00 | 28-11-2020 00:00:00 |
| 8 | Advanced Pedagogies Active Learning Digital Tools | 2020-21 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 14-12-2020 00:00:00 | 14-12-2020 00:00:00 |
| 9 | Cleaner Technologies for Sustainable Environment | 2020-21 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 21-12-2020 00:00:00 | 21-12-2020 00:00:00 |

| Srno | Title of Course | Academic Year | Type of Certificate Program | Certificate Program/MDP/FDP/EDP Sponsored/Supported by | Certificate Program Offering Department/ Centre/ Unit Name | Program Start Date | Program End Date |
|-------------|--|----------------------|------------------------------------|---|---|---------------------------|-------------------------|
| 10 | Teaching effectiveness including advanced pedagogy techniques | 2020-21 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 06-11-2020 | 00:00:00 |
| 11 | Business Model Innovation (BMI) program | 2021-22 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 17-05-2021 | 00:00:00 |
| 12 | Nonlinear Problems in Mechanical and Physical Systems | 2021-22 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 07-06-2021 | 00:00:00 |
| 13 | Nano materials Nano mechanics and their application in devices and sensors | 2021-22 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 28-06-2021 | 00:00:00 |
| 14 | Energy Conversion and Storage Devices(ECSD21) | 2020-21 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 01-07-2021 | 00:00:00 |
| 15 | Essential Softskills for RD | 2021-22 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 19-03-2022 | 00:00:00 |
| 16 | Future Skill Technologies in 3D Printing Design | 2021-22 | Faculty Development Program (FDP) | Central Govt. Agency | CCE | 19-06-2021 | 00:00:00 |

| Srno | Title of Course | Academic Year | Type of Certificate Program | Certificate Program/MDP/FDP/EDP Sponsored/Supported by | Certificate Program Offering Department/ Centre/ Unit Name | Program Start Date | |
|------|--|---------------|-----------------------------------|--|--|---------------------|--|
| 17 | Deeptech Entrepreneurship Opportunities and Gaps | 2021-22 | Faculty Development Program (FDP) | Central Govt. Agency | IIT Hyderabad Technology Incubation Center | 21-02-2022 00:00:00 | |

Section 3: Pre-Incubation and Incubation Infrastructure & Facilities are Currently in Operation to Promote I&E Agenda (AY 2020-21 & 2021-22)

3.1) Existence of Pre-Incubation Facility (Tinkering Lab/Makers' Space/Design Centre/New Gen IEDC/IEDC/EDC/Innovation Cell/Startup Cell) (>= 600 Sq. Ft. Floor Area)

| Sr. No. | Type of the Unit | Name of Unit | In-charge Name | Contact no | Email | Govt. Schem |
|---------|------------------|--------------------------|--------------------|------------|---------------------------|-------------|
| 1 | Startup Cell | E Cell | Shreyansh Agrawal | 8979471587 | ms20btech11021@iith.ac.in | Mentoring S |
| 2 | Innovation Cell | Rural Development Centre | Ramesh G | 0402301660 | rameshg@math.iith.ac.in | Mentoring S |
| 3 | Innovation Cell | TiHAN | Rajalakshmi P | 0402301645 | raji@ee.iith.ac.in | Mentoring S |
| 4 | Innovation Cell | Design Innovation Center | Deepak John Mathew | 0402301640 | djm@des.iith.ac.in | Mentoring S |

| Sr. No. | Type of the Unit | Name of Unit | In-charge Name | Contact no | Email | Govt. Schen |
|----------------|-------------------------|---------------------------------|--------------------------------|-------------------|---------------------------|--|
| 5 | Innovation Cell | Central workshop | Karri Badarinath | 0402301666 | badarinath@mae.iith.ac.in | Pre-Incubati Support (Ide Prototype a Business Pla Developer |
| 6 | Tinkering Lab | Tinkerers lab | Viswanath R R S R Chinthapenta | 0402301666 | viswanath@mae.iith.ac.in | Mentoring S |
| 7 | Innovation Cell | Centre for Continuing Education | Umashankar B | 0402301630 | buma@ce.iith.ac.in | Mentoring S |
| 8 | Innovation Cell | SIC | Kotaro Kataoka | 0402301637 | kotaro@cse.iith.ac.in | Mentoring S |
| 9 | Innovation Cell | Fabless Chip Design Incubator | Siva Rama Krishna Vanjari | 0402301646 | svanjari@ee.iith.ac.in | Mentoring S |
| 10 | Innovation Cell | iTIC incubator | Prof S Surya Kumar | 8331036052 | fic.incubation@iith.ac.in | Mentoring S Grant Suppc Incubation F Support (Ide Prototype a Business Pla Developer Facility Supp (Innovative I Model to St: Market Link: Growth Stage),Inves Angel a |

| Sr. No. | Type of the Unit | Name of Unit | In-charge Name | Contact no | Email | Govt. Schemes |
|---------|------------------|--|----------------|------------|---------------------------|---|
| 11 | Innovation Cell | Center for Healthcare Entrepreneurship | Prof Renu John | 9032316632 | contactus@cfhe.iith.ac.in | Mentoring S Grant Supp Incubation F Support (Ide Prototype a Business Pla Developer Facility Supp (Innovative I Model to Sta Market Link: Growth Stage),Inves Angel a |



3.2) Existence of Incubation Facility (>= 1500 Sq. Ft. Floor Area)

| Sr. No. | Name of Unit | In-charge Name | Contact no | Email | Govt. Schemes |
|---------|--|---------------------------|------------|---------------------------|---|
| 1 | i-TIC Foundation IITH | Prof. S. Surya Kumar | 8331035052 | fic.incubation@iith.ac.in | DST/NSTEDB/NIDHI,MEITY,CSF Resource,Other Central/State |
| 2 | TiHAN | Rajalakshmi P | 0402301645 | raji@ee.iith.ac.in | DST/NSTEDB/NIDHI |
| 3 | Center for Healthcare Entrepreneurship | Renu John | 0402301610 | renujohn@bme.iith.ac.in | DST/NSTEDB/NIDHI |
| 4 | Fabless Chip Design Incubator | Siva Rama Krishna Vanjari | 0402301646 | svanjari@ee.iith.ac.in | DST/NSTEDB/NIDHI |



3.3) Existence of IPR Cell / Patent Facilitation Unit / Technology Transfer Centre at the institute

| Sr. No. | Type of the Unit | Name of Unit | In-charge Name | Contact no | Email | Govt. Schemes |
|---------|------------------|--------------|--------------------|------------|---------------------|-------------------|
| 1 | IPR Cell | IPFC Cell | Dr Pradeep Kumar Y | 83749 9399 | fic.ipfc@iith.ac.in | Mentoring Support |

Section 4: Generation and Support of Ideas / Prototypes / Innovations at HEI and Recognition received (AY 2020-21 & 2021-22)

4) Total no. of Innovations (Verified and Recommended) in Different TRLs (4-9) are Recorded in the YUKTI National Innovation Repository of the IIC Institute (Status as on 31st October 2022)

| Sr. No. | Innovation Name | Developed as part of | FY of Development (FY. 2020-21,2021-22) | TRL Stage | Team Lead/Innovator Name | Current Engage of Team Lead Instit |
|---------|---|---|---|---|--------------------------|------------------------------------|
| 1 | A Hybrid Charging System for Electric Vehicle | Academic Research Assignment/Industry Sponsored Project | 2021-22 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | Dr Rupesh Wandhare | Facul |
| 2 | HAWW- Satirical Boardgame Design | Academic Research Assignment/Industry Sponsored Project | 2021-22 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | Sandra RS | Alum |
| 3 | iV4V (Intelligent Voice for Vision) - An intelligent and reliable audio assistance for visual impairment using AI | Academic Research Assignment/Industry Sponsored Project | 2021-22 | TRL 6 : Prototype system tested in intended environment close to expected performance | K Naveen Kumar | Stude |

| Sr. No. | Innovation Name | Developed as part of | FY of Development (FY. 2020-21,2021-22) | TRL Stage | Team Lead/Innovator Name | Current Engagement of Team Lead Institution |
|---------|--|---|---|---|--------------------------|---|
| 4 | Medicine from the sky - Autonomous vision perception system (AVPS) for medical drone delivery using AI | Academic Research Assignment/Industry Sponsored Project | 2021-22 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | K Naveen Kumar | Student |
| 5 | IITH Smart Parking Solution using AI | Independent Assignment/Non-academic Study Project | 2021-22 | TRL 7 : Demonstration system operating in operational environment at pre-commercial scale | K Naveen Kumar | Student |
| 6 | Rakshak: A mobile robot platform for emergency situations | Independent Assignment/Non-academic Study Project | 2021-22 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | Soham Kulkarni | Student |
| 7 | A Method for Reduction of Residual Stresses in Additively Manufactured Components through Electropulsing | Academic Research Assignment/Industry Sponsored Project | 2021-22 | TRL 7 : Demonstration system operating in operational environment at pre-commercial scale | Prof. S. Suryakumar | Faculty |
| 8 | A Novel Area Filling Approach in Metal Additive Manufacturing for Reducing Substrate Distortion | Academic Research Assignment/Industry Sponsored Project | 2021-22 | TRL 5 : Large scale prototype tested in intended environment | Prof. S. Suryakumar | Faculty |

| Sr. No. | Innovation Name | Developed as part of | FY of Development (FY. 2020-21,2021-22) | TRL Stage | Team Lead/Innovator Name | Current Engage of Team Lead Institution |
|----------------|--|---|--|--|---------------------------------|--|
| 9 | Estimation of Sequence Component Phasor and Frequency using Transformation | Academic Requirement/Study Project | 2021-22 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | C Anirudh | Student |
| 10 | Simple and Efficient control algorithm for Front end converter suitable for Battery charger | Academic Requirement/Study Project | 2021-22 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | Sivakumar gannamraju | Student |
| 11 | Open-world Object Detection | Academic Research Assignment/Industry Sponsored Project | 2020-21 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | Dr Vineeth N Balasubramanian | Faculty |
| 12 | FeGa based magnetostrictive thin films for cantilever based magnetometry – detection of bovine serum albumin | Academic Research Assignment/Industry Sponsored Project | 2020-21 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | JAMMALAMADAKA SURYANARAYANA | Faculty |
| 13 | Swatchh Air | Independent Assignment/Non-academic Study Project | 2020-21 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | Priyabrata Rautray | Student |

| Sr. No. | Innovation Name | Developed as part of | FY of Development (FY. 2020-21,2021-22) | TRL Stage | Team Lead/Innovator Name | Current Engagement of Team Lead Institution |
|----------------|--|---|--|---|---------------------------------|--|
| 14 | A deposition and deformation based additive manufacturing system for fabrication of complex geometries | Academic Research Assignment/Industry Sponsored Project | 2020-21 | TRL 7 : Demonstration system operating in operational environment at pre-commercial scale | Prof. S. Suryakumar | Faculty |
| 15 | Reusable Respiratory Mask With Disposable Filter Element | Academic Research Assignment/Industry Sponsored Project | 2020-21 | TRL 9 : Full commercial application, technology available for consumers | Prof. S. Suryakumar | Faculty |
| 16 | Home-based diagnostic kit for identifying Covid19 (SARS-CoV-2 viral infection) from common flu (influenza viral infection) using RT-LAMP technology. | Academic Research Assignment/Industry Sponsored Project | 2020-21 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | Dr. Gunjan Mehta | Faculty |
| 17 | Cervico-vaginal fluid retriever device for the screening of cervical cancer/CIN/vaginal infections by colorimetric technique | Academic Research Assignment/Industry Sponsored Project | 2020-21 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | Aravind Kumar Rengan | Faculty |

| Sr. No. | Innovation Name | Developed as part of | FY of Development (FY. 2020-21,2021-22) | TRL Stage | Team Lead/Innovator Name | Current Engage of Team Lead Institution |
|---------|--|---|---|---|--------------------------|---|
| 18 | Cervico-vaginal fluid retriever device for the screening of cervical cancer/CIN/vaginal infections by colorimetric technique | Academic Research Assignment/Industry Sponsored Project | 2020-21 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | Aravind Kumar Rengan | Faculty |
| 19 | Automated Billing System | Independent Assignment/Non-academic Study Project | 2020-21 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | Sam Mathew Betson | Student |
| 20 | Save Our Species: An experimental stop motion animation film that expresses the harm done to our planets wild life. | Academic Requirement/Study Project | 2020-21 | TRL 7 : Demonstration system operating in operational environment at pre-commercial scale | Delwyn Jude Remedios | Faculty |
| 21 | nLite360®, is an Intelligent Phototherapy System that provides customized Phototherapy for Jaundice Newborns. | Independent Assignment/Non-academic Study Project | 2019-20 | TRL 6 : Prototype system tested in intended environment close to expected performance | Prasad Muddam | Entrepreneur |

| Sr. No. | Innovation Name | Developed as part of | FY of Development (FY. 2020-21,2021-22) | TRL Stage | Team Lead/Innovator Name | Current Engage of Team Lead Institution |
|----------------|---|---|--|---|---------------------------------|--|
| 22 | superhydrophobic fly-ash powders | Academic Research Assignment/Industry Sponsored Project | 2019-20 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | Atul Suresh Deshpande | Faculty |
| 23 | Fault location Algorithms for power Transmission lines under various divergent conditions | Academic Requirement/Study Project | 2019-20 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | C Purushotham Reddy | Student |
| 24 | Memristor Based Device and Method for Detecting Bovine Serum Albumin (BSA) | Academic Research Assignment/Industry Sponsored Project | 2019-20 | TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype) | JAMMALAMADAKA SURYANARAYANA | Faculty |
| 25 | Fly ash Geopolymer Stabilized Reclaimed Bases (FRB) for Pavements | Academic Research Assignment/Industry Sponsored Project | 2019-20 | TRL 7 : Demonstration system operating in operational environment at pre-commercial scale | Prof. Sireesh Saride | Faculty |
| 26 | Bio-Bricks a sustainable building material | Independent Assignment/Non-academic Study Project | 2019-20 | TRL 5 : Large scale prototype tested in intended environment | Priyabrata Rautray | Student |

| Sr. No. | Innovation Name | Developed as part of | FY of Development (FY. 2020-21,2021-22) | TRL Stage | Team Lead/Innovator Name | Current Engage of Team Lead Institution |
|---------|---|---|---|--|------------------------------|---|
| 27 | Grad-CAM++: Improved Visual Explanations for Deep Convolutional Networks | Academic Research Assignment/Industry Sponsored Project | 2019-20 | TRL 5 : Large scale prototype tested in intended environment | Dr Vineeth N Balasubramanian | Faculty |

Section 5: Start-ups/Ventures Established and Supported at HEI and & Recognitions Received (AY 2020-21 & 2021-22)

5) Total no of Ventures/Startups (Verified and Recommended) are Recorded in the YUKTI National Innovation Repository of the IIC Institute (Status as on 31st October 2022)

| Sr. No. | Startup/Venture Name | Startup/Venture Registered as | CIN No/LLP/OPC/RC No | GST No | FY of Establishment | Startups/Recognitions in DPIIT India |
|---------|---|----------------------------------|-----------------------|--------|---------------------|--------------------------------------|
| 1 | Chefcape enterprises Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U93090TG2020PTC139050 | null | 2021-22 | 2 |
| 2 | iHeal HealthTech Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U74999HP2018PTC006859 | null | 2021-22 | 1 |
| 3 | UrbanBrain Technologies Private Limited | Private Limited Firm (Pvt. Ltd.) | U72900KA2020PTC140930 | null | 2021-22 | 1 |
| 4 | Pravega Bio Private Limited | Private Limited Firm (Pvt. Ltd.) | U72900TG2022PTC163126 | null | 2021-22 | 2 |
| 5 | Power Sense Private Limited | Private Limited Firm (Pvt. Ltd.) | U74999TG2021PTC151665 | null | 2021-22 | 2 |

| Sr. No. | Startup/Venture Name | Startup/Venture Registered as | CIN No/LLP/OPC/RC No | GST No | FY of Establishment | Start/Reco/DPIIT India |
|---------|---|--|-----------------------|--------|---------------------|------------------------|
| 6 | Deusexvolt Electric Private Limited | Private Limited Firm (Pvt. Ltd.) | U50400TG2019PTC133045 | null | 2021-22 | 1 |
| 7 | Milatronics Private Limited | Private Limited Firm (Pvt. Ltd.) | U72900AP2021PTC118570 | null | 2021-22 | 1 |
| 8 | AVIAC Technologies Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U01100TG2021PTC151268 | null | 2021-22 | 1 |
| 9 | Autonomous Logistics Technologies Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U35990TG2016PTC109487 | null | 2021-22 | 1 |
| 10 | UAVIO Labs Private Limited | Private Limited Firm (Pvt. Ltd.) | U31909KA2021PTC145205 | null | 2021-22 | 1 |
| 11 | Rovonize Systems Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U29308KL2018PTC055951 | null | 2021-22 | 1 |
| 12 | Qoptars Private Limited | Private Limited Firm (Pvt. Ltd.) | U31900AS2020PTC020317 | null | 2021-22 | 1 |
| 13 | Adiabatic | Not Yet Registered as an entity | null | null | 2021-22 | 0 |
| 14 | Healer Hoodie | Not Yet Registered as an entity | null | null | 2021-22 | 0 |
| 15 | M/s Cortex N Grey Technologies Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U31909TG2022PTC159459 | null | 2021-22 | 2 |
| 16 | CORTEXNGREY TECHNOLOGIES PRIVTAE LIMITED | Limited Liability Partnership Firm (LLP) | U31909TG2022PTC159459 | null | 2021-22 | 1 |
| 17 | Qoptars Private Limited | Private Limited Firm (Pvt. Ltd.) | U31900AS2020PTC020317 | null | 2021-22 | 1 |
| 18 | AVIAC Technologies Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U01100TG2021PTC151268 | null | 2021-22 | 2 |

| Sr. No. | Startup/Venture Name | Startup/Venture Registered as | CIN No/LLP/OPC/RC No | GST No | FY of Establishment | Start/Reco/DPIIT India |
|----------------|--------------------------------------|--|-----------------------------|---------------|----------------------------|-------------------------------|
| 19 | UAVIO Labs Private Limited | Private Limited Firm (Pvt. Ltd.) | U31909KA2021PTC145205 | null | 2021-22 | 1 |
| 20 | 5N8 Health Solutions Private Limited | Private Limited Firm (Pvt. Ltd.) | U33119TG2022PTC164040 | null | 2021-22 | 2 |
| 21 | MEDIG Inventions Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U74999TG2020PTC146574 | null | 2020-21 | 2 |
| 22 | Stallion Vortex Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U74999WB2019PTC231728 | null | 2020-21 | 1 |
| 23 | Uyirie Logics | Not Yet Registered as an entity | null | null | 2020-21 | 0 |
| 24 | Raibo Systems Private Limited | Private Limited Firm (Pvt. Ltd.) | U74999TG2020PTC139746 | null | 2020-21 | 1 |
| 25 | Humus Biosystems LLP | Limited Liability Partnership Firm (LLP) | AAU-5977 | null | 2020-21 | 1 |
| 26 | Healer Hoodie | Not Yet Registered as an entity | null | null | 2020-21 | 0 |
| 27 | Electra | Not Yet Registered as an entity | null | null | 2020-21 | 0 |
| 28 | VR Smart Dental Implant | Not Yet Registered as an entity | null | null | 2020-21 | 0 |
| 29 | Versanova innovations Pvt Ltd. | Private Limited Firm (Pvt. Ltd.) | U73200TG2021PTC154120 | null | 2020-21 | 1 |
| 30 | Affocuris Technologies Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U33127TG2022PTC158444 | null | 2020-21 | 2 |

| Sr. No. | Startup/Venture Name | Startup/Venture Registered as | CIN No/LLP/OPC/RC No | GST No | FY of Establishment | Startup Recognition DPIIT India |
|----------------|---|--|-----------------------------|---------------|----------------------------|--|
| 31 | MEDIG Inventions Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U74999TG2020PTC146574 | null | 2020-21 | 2 |
| 32 | SKIoT Technologies Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U72900TG2017PTC115022 | null | 2020-21 | 1 |
| 33 | Elkemie Materials and Solutions Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U74994TG2020PTC145797 | null | 2020-21 | 1 |
| 34 | Navier Machines Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U72500TG2020PTC146056 | null | 2020-21 | 1 |
| 35 | Greenpod Labs Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U01100TN2019PTC131954 | null | 2020-21 | 1 |
| 36 | Manali Swing Adventures Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U92419HP2021PTC008510 | null | 2020-21 | 2 |
| 37 | LiqSure Systems Private Limited | Private Limited Firm (Pvt. Ltd.) | U90009TG2022PTC161112 | null | 2020-21 | 1 |
| 38 | Greenspin Sole Proprietorship | Not Yet Registered as an entity | null | null | 2020-21 | 0 |
| 39 | Learn and Empower Private Limited | Private Limited Firm (Pvt. Ltd.) | U72900GJ2020PTC117249 | null | 2020-21 | 1 |
| 40 | Humus Biosystems LLP | Limited Liability Partnership Firm (LLP) | AAU-5977 | null | 2020-21 | 1 |
| 41 | Meghavarna Strategic Technologies Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U72900TG2020PTC140862 | null | 2020-21 | 1 |
| 42 | Tag-Hive Inc. | Private Limited Firm (Pvt. Ltd.) | U72900WB2019FTC231614 | null | 2020-21 | 2 |
| 43 | AI-Genix International Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U24299MH2019PTC325773 | null | 2020-21 | 1 |

| Sr. No. | Startup/Venture Name | Startup/Venture Registered as | CIN No/LLP/OPC/RC No | GST No | FY of Establishment | Startup Recognized by DPIIT India |
|----------------|--|--|-----------------------------|---------------|----------------------------|--|
| 44 | Urdhvam Environmental Technologies Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U74995PN2017PTC172957 | null | 2020-21 | 1 |
| 45 | Flic Farm Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U29100TG2017PTC115935 | null | 2020-21 | 1 |
| 46 | Inclusive Science, Technology, Engineering, and Mathematics Foundation | Private Limited Firm (Pvt. Ltd.) | U80902DL2019NPL351194 | null | 2020-21 | 2 |
| 47 | Easy Krishi Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U74995KA2016PTC093660 | null | 2020-21 | 2 |
| 48 | EF Polymer Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U01110RJ2018PTC062566 | null | 2020-21 | 1 |
| 49 | Trestle Labs Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U74999GJ2017PTC099976 | null | 2020-21 | 1 |
| 50 | MindCrescent Wellness Ventures Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U85191MH2016PTC272582 | null | 2020-21 | 1 |
| 51 | Socratease Edtech India Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U72900KA2019PTC120926 | null | 2020-21 | 1 |
| 52 | Klonec Automation Systems Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U01100KA2017PTC101039 | null | 2020-21 | 1 |
| 53 | Anavi Learning LLP | Limited Liability Partnership Firm (LLP) | AAI-7072 | null | 2020-21 | 1 |
| 54 | Marut Dronetech Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U74999TG2019PTC132342 | null | 2020-21 | 1 |
| 55 | Sascan Meditech Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U33110KL2015PTC068448 | null | 2020-21 | 1 |
| 56 | Ask Techsoft Care Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U85100DL2016PTC309417 | null | 2020-21 | 1 |

| Sr. No. | Startup/Venture Name | Startup/Venture Registered as | CIN No/LLP/OPC/RC No | GST No | FY of Establishment | Startup/Recognition DPIIT India |
|----------------|---|--------------------------------------|-----------------------------|---------------|----------------------------|--|
| 57 | Konexaa Healthcare Technologies Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U33209TN2020PTC137257 | null | 2020-21 | 2 |
| 58 | Shubu Artificial Intelligence Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U72900KA2020PTC139457 | null | 2020-21 | 1 |
| 59 | Neodocs Tech Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U74999MH2020PTC343690 | null | 2020-21 | 1 |
| 60 | Anvayaa Kin Care Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U85300TG2016PTC109270 | null | 2020-21 | 1 |
| 61 | Manentia Advisory Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U74999GJ2020PTC118186 | null | 2020-21 | 1 |
| 62 | Medworld Solutions Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U93090MH2018PTC317520 | null | 2020-21 | 1 |
| 63 | 4basecare Genomics Pvt. Ltd | Private Limited Firm (Pvt. Ltd.) | U74999KA2018PTC112818 | null | 2020-21 | 1 |
| 64 | Pink Parrot LLP | Not Yet Registered as an entity | null | null | 2020-21 | 0 |
| 65 | Zedblox Logitech Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U72200TG2018PTC128291 | null | 2020-21 | 1 |
| 66 | Carbon Hubs Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U29306KA2020PTC131481 | null | 2020-21 | 2 |
| 67 | SRIDEVI MACHINERY WORKS | Private Limited Firm (Pvt. Ltd.) | U29309TG2021PTC154058 | null | 2020-21 | 2 |
| 68 | Cbai Technologies Private Limited | Private Limited Firm (Pvt. Ltd.) | U72501TG2018PTC126638 | null | 2020-21 | 1 |
| 69 | M/s Jivika Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U85300PN2019PTC208771 | null | 2019-20 | 2 |

| Sr. No. | Startup/Venture Name | Startup/Venture Registered as | CIN No/LLP/OPC/RC No | GST No | FY of Establishment | Startup/Recognition DPIIT India |
|----------------|------------------------------------|--|-----------------------------|---------------|----------------------------|--|
| 70 | M/s Aerobiosys Innovation Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U85320TG2019PTC136552 | null | 2019-20 | 2 |
| 71 | M/s Kwayat Medical Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U33309TG2018PTC125627 | null | 2019-20 | 2 |
| 72 | M/s Beablehealth Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U33100TG2017PTC120457 | null | 2019-20 | 2 |
| 73 | M/s Chemioptics Healthcare Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U85100PTC2019136544 | null | 2019-20 | 2 |
| 74 | M/s Nemocare Wellness Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U33309TG17PTC118262 | null | 2019-20 | 2 |
| 75 | M/s Hemac Healthcare Pvt Ltd | Private Limited Firm (Pvt. Ltd.) | U74999TG2018PTC125253 | null | 2019-20 | 2 |
| 76 | Tekra Solutions Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U85100MH2019PTC325065 | null | 2019-20 | 1 |
| 77 | Illenium AI Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U72900TG2019PTC138086 | null | 2019-20 | 1 |
| 78 | Amicrobe Herboceutical | Not Yet Registered as an entity | null | null | 2019-20 | 0 |
| 79 | EaffoCare Innovation Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U73100TG2019PTC131376 | null | 2019-20 | 1 |
| 80 | In5n8 Health Tech LLP | Limited Liability Partnership Firm (LLP) | AAW-9997 | null | 2019-20 | 2 |
| 81 | Skelregen Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U24111TG2019PTC129760 | null | 2019-20 | 1 |
| 82 | Medoja Health Pvt. Ltd. | Private Limited Firm (Pvt. Ltd.) | U73200TG2020PTC145154 | null | 2019-20 | 1 |

| Sr. No. | Startup/Venture Name | Startup/Venture Registered as | CIN No/LLP/OPC/RC No | GST No | FY of Establishment | Startup/Recognition DPIIT India |
|---------|-------------------------------|---------------------------------|----------------------|--------|---------------------|---------------------------------|
| 83 | Greenspin Sole Proprietorship | Not Yet Registered as an entity | null | null | 2019-20 | 0 |

Section 6: Collaboration with Other Incubation Units, HEIs and Industry Associations to Strengthen Better Services and Support to Innovation & Startups at HEI (AY 2020-21 & 2021-22)

6) Collaboration with Other Incubation Units, HEIs and Industry Associations to Strengthen Better Services and Support to Innovation & Startups at HEI (AY 2020-21 & 2021-22)

| Sr. No. | Collaborated Agency Name | Collaborated Agency Type | Period of Collaboration (No. of Years) | Current Status of Collaboration | Date of MOU / Agreement Signed on | View |
|---------|---|--------------------------|--|---------------------------------|-----------------------------------|---------------------------------|
| 1 | Japan's National Institute of Advanced Industrial Science and Technology (AIST) | International Agency | 5 | Active | 23-12-2021 | View (/Upload:) |
| 2 | Commissionerate of Collegiate Education Telangana State (CCETS) | Educational Institute | 3 | Active | 28-04-2022 | View (/Upload:) |

| Sr. No. | Collaborated Agency Name | Collaborated Agency Type | Period of Collaboration (No. of Years) | Current Status of Collaboration | Date of MOU / Agreement Signed on | View |
|----------------|---|---------------------------------|---|--|--|--------------------------------|
| 3 | Centre for Development of Advanced Computing (CDAC) | Govt. Agency (Central) | 5 | Active | 12-09-2020 | View (/Upload: |
| 4 | NMICPS TiHAN Foundation | Incubation Unit | 10 | Active | 12-02-2021 | View (/Upload: |
| 5 | DRDO | Govt. Agency (Central) | 5 | Active | 03-07-2020 | View (/Upload: |
| 6 | Greenko School Of Sustainable Science & Technology | Corporate/Industry Association | 5 | Active | 02-07-2022 | View (/Upload: |
| 7 | ESIC Medical College and Hospital | Educational Institute | 5 | Active | 09-11-2020 | View (/Upload: |
| 8 | IISc Bangalore | Educational Institute | 5 | Active | 29-07-2021 | View (/Upload: |
| 9 | Kepler Aerospace | Corporate/Industry Association | 5 | Active | 16-09-2021 | View (/Upload: |
| 10 | New Frontier Capital Management | International Agency | 5 | Active | 24-04-2020 | View (/Upload: |
| 11 | PharmCADD Co. Ltd | Corporate/Industry Association | 5 | Active | 09-06-2021 | View (/Upload: |
| 12 | Photonics Valley Corporation, Govt of Telangana | Corporate/Industry Association | 5 | Active | 16-06-2021 | View (/Upload: |
| 13 | Indian Institute of Technology Madras | Educational Institute | 5 | Active | 03-12-2020 | View (/Upload: |

| Sr. No. | Collaborated Agency Name | Collaborated Agency Type | Period of Collaboration (No. of Years) | Current Status of Collaboration | Date of MOU / Agreement Signed on | View |
|---------|---|--------------------------------|--|---------------------------------|-----------------------------------|--------------------------------|
| 14 | National Highway Authority of India | Govt. Agency (Central) | 5 | Active | 17-08-2020 | View (/Upload: |
| 15 | University of Hyderabad | Educational Institute | 5 | Active | 11-09-2020 | View (/Upload: |
| 16 | CSIR – North East Institute Of Science And Technology (NEIST) | Govt. Agency (Central) | 5 | Active | 13-06-2022 | View (/Upload: |
| 17 | I'm beside you Inc. | International Agency | 5 | Active | 23-11-2021 | View (/Upload: |
| 18 | NIT Agartala | Educational Institute | 5 | Active | 21-06-2022 | View (/Upload: |
| 19 | NIT Nagaland | Educational Institute | 5 | Active | 11-06-2022 | View (/Upload: |
| 20 | NIT Sikkim | Educational Institute | 5 | Active | 17-05-2022 | View (/Upload: |
| 21 | Kathumandu University, COMS Nepal, IIIT Hyderabad | Educational Institute | 5 | Active | 02-06-2022 | View (/Upload: |
| 22 | Kathmandu University | International Agency | 5 | Active | 02-06-2022 | View (/Upload: |
| 23 | RGUKT | Educational Institute | 3 | Active | 25-08-2021 | View (/Upload: |
| 24 | CfHE Chair Professorship | Corporate/Industry Association | 2 | Active | 01-03-2022 | View (/Upload: |
| 25 | BNV Japan | International Agency | 5 | Active | 01-09-2022 | View (/Upload: |

Section 7: Intellectually Property (IP) Generated and Commercialization

7.1) IPR Filed and Published (Copyrights & Design only)

| Sr. No. | Title/Name of IP (Copyright/Design Only) | Type of IP | IP Registration Number of Copyright/Design | Date of Filed/Published | Has this IP(Copyright & Designs Only) been Commercialized/Transferred to Industry/Startup/Society? |
|---------|--|------------|--|-------------------------|--|
| 1 | Respiratory Mask | Design | 329983001 | 12-06-2020 | No |
| 2 | Respiratory Mask | Design | 329984001 | 12-06-2020 | No |
| 3 | Spindle Based Seating Furniture | Design | 360489001 | 23-03-2022 | No |

7.2) Patents Filed by HEI

| Sr. No. | Title/Name of Patent | IP Registration Number | Date of Filed/Published |
|---------|--|------------------------|-------------------------|
| 1 | Ferroelectric Polymer (?-Pvdf) For Control And Mitigation Of Microbes Under Small Voltage Signals | 202041050666 | 03-12-2020 |
| 2 | High Entropy Alloy And Quinary Alloy Nanowires | 202043041990 | 28-09-2020 |
| 3 | Method Of Receiving Signal Stream And A Receiver | US 17/058,273 | 24-11-2020 |
| 4 | Decellularized Corneal Matrix Based Hydrogel, Bioink Formulation And Methods Thereof | US 16/981,957 | 17-09-2020 |
| 5 | "Non-Invasive System For Detection Of At Least One Severe Acute Respiratory Syndrome Coronavirus 2 " | 202043039581 | 14-09-2020 |
| 6 | A Non-Invasive System For Detection Of At Least One Analyte | 202041037641 | 01-09-2020 |
| 7 | Method And System For Dynamic Selection Of Functional Split For Cloud Radio Access Network | 202041036210 | 22-08-2020 |
| 8 | An Improved Sequential Batch Reactor For Wastewater Treatment | 202041031706 | 24-07-2020 |
| 9 | Methods And Systems For Improving Coverage Of A Cellular Network | 202041034036 | 08-07-2020 |

| Sr. No. | Title/Name of Patent | IP Registration Number | Date of Filed/Published |
|----------------|--|-------------------------------|--------------------------------|
| 10 | Hybrid Polymeric Nanoformulations For The Treatment Of Retinoblastoma By Chemo/Photothermal Therapy | 202041001986 | 16-01-2020 |
| 11 | A Footwear And A Method Of Manufacturing Thereof | 202041047879 | 03-05-2021 |
| 12 | A Device Configurable In A Microscope For Real Time Testing And Imaging Of A Sample | 202041053912 | 11-12-2020 |
| 13 | Method And System Of Pre-Coding A Waveform For Synchronization In A Communication Network | 202042045110 | 16-10-2020 |
| 14 | Method And System For Transmitting And Receiving A Waveform With Low Papr | 202042025341 | 16-06-2020 |
| 15 | "Reusable Respiratory Mask With Disposable Filter Element" | 202041023866 | 06-07-2020 |
| 16 | Method And System For Transferring Data Between Distributed Unit And Radio Unit | 202041021530 | 20-05-2020 |
| 17 | Method And System For Designing A Waveform For Data Communication | 202148016050 | 05-04-2021 |
| 18 | Method And System For Classifying Speed Of A User Equipment | US 17/257,967 | 01-05-2021 |
| 19 | Method And System For Scheduling A Pool Of Resources To A Plurality Of User Equipment'S | US 17/264,067 | 28-01-2021 |
| 20 | Pharmaceutical Compositions And Delivery Systems For Prevention And Treatment Of Candidiasis | US 17/276,478 | 15-03-2021 |
| 21 | System And Method For Performing Efficient Scheduling In Cloud Radio Access Network | 202141020062 | 01-05-2021 |
| 22 | Techniques For Real Time Aquarate Geo Referencing Objects Using Lidar | 202141020099 | 03-05-2021 |
| 23 | Metal - Co2 Battery With Co2 As An Energy Carrier For Mars Exploration | 202041016948 | 20-04-2020 |
| 24 | Hierarchical Three-Dimensional Hybrid Carbon Microelctrode Arrays As An Anode For Energy Storage Devices | 202041023243 | 06-03-2020 |
| 25 | A Methodology For Transfer Of Knowledge From Data-Rich Domains For Thermal Image Processing . | 202011032663 | 30-07-2020 |
| 26 | Miniaturized Microscope Device And Method Thereof. | 202041030727 | 18-07-2020 |

| Sr. No. | Title/Name of Patent | IP Registration Number | Date of Filed/Published |
|----------------|---|-------------------------------|--------------------------------|
| 27 | Reconfigurable Unmanned Aerial Vehicle (Uav) Within Flight Adaptive Multimotor And Method Thereof | 202141027004 | 17-06-2021 |
| 28 | Autonomous Uav Design For Detection And Tracking Of Beyond Visual Range Non-Stationary Targets | 202141032206 | 16-07-2021 |
| 29 | Methods Of Production Of Pencil Needle Powder Based Graphite-Silica Composite Electrode | 202141012545 | 23-03-2021 |
| 30 | Microfluidic Platform For Three-Dimensional Cell Culture And Multi-Drug Testing And Methods Of Fabrication Thereof (Provisional Patent) | 202141030041 | 05-07-2021 |
| 31 | A Hybrid Charging System | 202111023691 | 27-05-2021 |
| 32 | A System And Process For Segregation Of Low Ash Clean Coal From Coal Tailings | 202031005007 | 05-02-2020 |
| 33 | Method For Wireless Communication Using Beamformed Physical Downlink Control Channel (Pdcch) | US 17/290,290 | 30-04-2021 |
| 34 | Method Of Determining Modulation And Coding Scheme (Mcs) And A System Thereof | US 17/284,230 | 09-04-2021 |
| 35 | Method And System For Generating A Transmit Waveform For Reference Sequences | US 17/284,050 | 09-04-2021 |
| 36 | Method And System For Scheduling A Pool Of Resources To A Plurality Of User Equipment'S | US 17/264,067 | 28-01-2021 |
| 37 | Method And System For Designing A Waveform For Data Communication | US 17/333,650 | 28-05-2021 |
| 38 | Method And System For Designing A Waveform For Data Communication | US 17/333,654 | 28-05-2021 |
| 39 | Fabrication Of Pcb Sunstrate Based Low Cost Multichannel Device For Bio Sensing | 202141053633 | 22-11-2021 |
| 40 | Conductive Nanofiber Based Chemiresistive Sensors For Blosensing | 202141053627 | 22-11-2021 |
| 41 | A Chemi Capacitive Non Invasive System For Detection Of Atleast One Analyste | 202141053604 | 22-11-2021 |
| 42 | A Chemi Capacitive Non Invasive System For Detection Of Atleast One Analyste | 202141054695 | 29-11-2021 |

| Sr. No. | Title/Name of Patent | IP Registration Number | Date of Filed/Published |
|----------------|---|-------------------------------|--------------------------------|
| 43 | Method And System For Designing A Waveform For Data Communication | 202148016040 | 05-04-2021 |
| 44 | Method For Allocating Resources To A Plurality Of Users By A Base Station | US 17/172,404 | 10-02-2021 |
| 45 | A Novel Algal-Bacterial Photo-Bio Tower For Waste Water Treatment | 202141059299 | 20-12-2021 |
| 46 | Silk Fibroin Microfiber Reinforced Polycaprolactone Composites | 202141055556 | 30-11-2021 |
| 47 | Reconfigurable Logic Via Gate Controlled Skyrmion Motion | 202141057701 | 11-11-2021 |
| 48 | Znsno3/In2O3 Core-Shell Nanofibers, Method Of Preparing Them And Their Uses | 202141056630 | 06-12-2021 |
| 49 | Nb-Iot And Gnss Chip Design And Architecture | 202141034798 | 02-08-2021 |
| 50 | Method And System For Generating A Waveform In A Communication Network | US 17/601785 | 06-10-2021 |
| 51 | Chemiresistive-Paper-Based Biosensor For Detection Of A Biomarker | 202141054721 | 26-11-2021 |
| 52 | Electrospun Macroencapsulation Devices For Islet Cell Transplantation In The Treatment Of Diabetes Mellitus | 202141039638 | 01-09-2021 |
| 53 | Modified Peg-400 (Mpeg-Aa Complex) And Uses Thereof | 202141003895 | 28-01-2021 |
| 54 | System And Method For Hyperspectral Imager Interface On Uav For Data Acquisition | 202141042862 | 22-09-2021 |
| 55 | Optimum Strain Gradient For Strong Electro-Mechanical Coupling | 202111048321 | 22-10-2021 |
| 56 | Method And System For Generating A Waveform Using A Precoder | 201941038805 | 26-03-2021 |
| 57 | A Deposition And Deformation Based Additive Manufacturing System For Fabrication Of Complex Geometries | 201941016062 | 25-12-2020 |
| 58 | A Method For Discrimination Of Filled And Unfilled Grains Of Rice Using Thermal Images | 201941019196 | 20-11-2020 |
| 59 | Lora Mote | 201941030150 | 29-01-2021 |
| 60 | Method And System For Generating A User Equipment (Ue) And A Base Station (Bs) | 201941009771 | 11-01-2021 |
| 61 | Plant Derived Fluorescent Nanoparticles For Treatment Of Cancer | 201941030649 | 03-02-2021 |

| Sr. No. | Title/Name of Patent | IP Registration Number | Date of Filed/Published |
|----------------|--|-------------------------------|--------------------------------|
| 62 | Platelet-Rich Plasma Based Formulations For Treating Wounds And A Method For Preparation Thereof | 201841042298 | 17-07-2020 |
| 63 | Polycaprolactone-Bioactive Glass Composite Scaffolds And 3D Printable Filaments, Applications And Preparation Methods Thereof | 201841041833 | 08-05-2020 |
| 64 | Detection Kit For Diagnosis Of Cervical Cancer By Quantification Of Visual Inspection Of Acetic Acid | 201841016604 | 08-05-2020 |
| 65 | Pharmaceutical Compositions And Delivery Systems For Prevention And Treatment Of Candidiasis | 201841034939 | 20-03-2020 |
| 66 | 5G New Radio Physical Random Access Channel (Nr-Prach) Receiver | 201841034881 | 20-03-2020 |
| 67 | Liposomal Nanoformulations For Treatment Of Cancer | 201841032747 | 06-03-2020 |
| 68 | Non-Invasive Iot Enabled Power Monitoring Using A Split Architecture For Centralized Voltage Measurement | 201841029505 | 31-07-2020 |
| 69 | Method And System For Scheduling A Pool Of Resources To A Plurality Of User Equipment'S Fully Non-Invasive Self-Sustaining Current Monitoring Device Using Magnetic Flux Based Energy Harvesting | 201841029885 | 14-02-2020 |
| 70 | Fully Non-Invasive Self-Sustaining Current Monitoring Device Using Magnetic Flux Based Energy Harvesting | 201841029504 | 31-07-2020 |
| 71 | Fluorescent Polyethylene Glycol | 201841030149 | 14-02-2020 |
| 72 | High Energy Lithium Ion Cell | 201841024810 | 07-02-2020 |
| 73 | Method And System For Classifying Speed Of A User Equipment | 201841028421 | 31-01-2020 |
| 74 | Corrosion Protected Positive Grid For A Lead-Acid Battery | 201841025931 | 17-01-2020 |
| 75 | Domain Wall Tunnelling And Logic Operations In Ferromagnetic Nanostructures | 201941048936 | 28-05-2021 |
| 76 | Memristor Based Device And Method For Detecting Bovine Serum Albumin (Bsa) | 201941034084 | 26-02-2021 |
| 77 | A System For A Sheet Metal Working And A Process Thereof | 201941008005 | 04-09-2020 |
| 78 | Single Step Electrochemical Synthesis Of Nanocrystalline Multicomponent Alloy Thin Films/Coatings In An Aqueous Medium | 201941013178 | 09-10-2020 |

| Sr. No. | Title/Name of Patent | IP Registration Number | Date of Filed/Published |
|----------------|--|-------------------------------|--------------------------------|
| 79 | System And Method For Generating Reference Signals With Low Peak-To-Average Power Ratio (Papr) Waveform | 201841040625 | 01-05-2020 |
| 80 | Method And System For Generating A Waveform In A Communication Network | PCT/IN2020/05 | 25-09-2020 |
| 81 | Method For Wireless Communication Using Beamformed Physical Downlink Control Channel (Pdcch) | PCT/IN2020/05 | 06-05-2020 |
| 82 | Method Of Determining Modulation And Coding Scheme (Mcs) And A System Thereof | PCT/IN2019/05 | 22-05-2020 |
| 83 | Method And System For Generating A Transmit Waveform For Reference Sequences | PCT/IN2019/05 | 07-05-2020 |
| 84 | Pharmaceutical Compositions And Delivery Systems For Prevention And Treatment Of Candidiasis | PCT/IB2019/05 | 26-03-2020 |
| 85 | Method And System For Detecting Physical Random Access Channel (Prach) Transmission From Multiple User Equipment'S | PCT/IN2019/05 | 19-03-2020 |
| 86 | Method And System For Scheduling A Pool Of Resources To A Plurality Of User Equipment'S | PCT/IN2019/05 | 13-02-2020 |
| 87 | Method And System For Classifying Speed Of A User Equipment | PCT/IN2019/05 | 06-02-2020 |
| 88 | A QR-CODE, BLOCKCHAIN AND GEO-FENCED SELF LEARNING SMART MEDICAL IOT SYSTEM FOR ESTIMATING THE AVAILABILITY OF HOSPITAL BEDS, AN EMERGENCY HUMAN LOGISTIC VEHICLE ROUTING & THEREOF. | 202141038429 | 25-08-2021 |
| 89 | DETECTION OF ANONYMOUS ACTIONS IN VIDEO SURVEILLANCE USING CONVOLUTIONAL NEURAL NETWORKS | 202141030798 | 09-07-2021 |
| 90 | A CONTACTLESS MOBILE-HEALTH SYSTEM OF DIGITAL MEDICAL/VACCINATION RECORDS & MOBILIVITY OF TRAVELERS WITH MULTILAYER BIOMETRIC ENABLED COULD BLOCKCHAIN. | 202141013898 | 29-03-2021 |
| 91 | THERMOSENSITIVE HYDROGEL FOR CANCER THERAPEUTICS AND METHODS OF PREPARATION THEREOF | 202041021283 | 20-05-2020 |
| 92 | Method for 3d-ic design using dynamic libraries and a system therefor | 201711015607 | 18-10-2021 |
| 93 | Partitioning and placement method and system for 3d-ic design | 201711015615 | 17-02-2022 |
| 94 | Method and a system for fault tolerance in 3d-ics | 201711038800 | 17-05-2021 |

7.3) Patent Published / Granted Data

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|---------|------------------------------------|--|-------------------------|-------------------------------|--|---------------------------------|----------------------|
| 1 | 107075173 | Cellulose acetate based non-woven nanofiber matrix with high absorbency properties for female hygiene products | 28-06-2019 | Granted | 2019 | Applicant | View |
| 2 | 11153891 | Method for scheduling data by network node aggregated with lte and wi-fi protocol stacks | 19-10-2021 | Granted | 2021 | Applicant | View |
| 3 | 2548707 | Cellulose acetate based non-woven nanofiber matrix with high absorbency properties for female hygiene products | 16-09-2020 | Granted | 2020 | Applicant | View |
| 4 | 386021 | A method of producing lipid-based nanocapsules without temperature cycling and the product thereof | 07-01-2022 | Granted | 2022 | Applicant | View |
| 5 | 11012263 | Method and apparatus for a cluster specific cloud radio transmission and reception | 18-05-2021 | Granted | 2021 | Applicant | View |
| 6 | 10257776 | Method of performing cell search by user equipment (UE) | 09-04-2019 | Granted | 2019 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|---------|------------------------------------|--|-------------------------|-------------------------------|--|---------------------------------|----------------------|
| 7 | 388842 | CELLULOSE ACETATE BASED NON-WOVEN NANOFIBER MATRIX WITH HIGH ABSORBENCY PROPERTIES FOR FEMALE HYGIENE PRODUCTS | 09-02-2022 | Granted | 2022 | Applicant | View |
| 8 | 10812300 | Method and transmitter for generating a waveform with optimized papr | 20-10-2020 | Granted | 2020 | Applicant | View |
| 9 | 6668454 | Method and system for designing a waveform for data communication | 18-03-2020 | Granted | 2020 | Applicant | View |
| 10 | EP 3 289 739 | Method and system for designing a waveform for data communication | 19-08-2020 | Granted | 2020 | Applicant | View |
| 11 | 10374843 | Method and system for designing a waveform for data communication | 06-08-2019 | Granted | 2019 | Applicant | View |
| 12 | 388018 | Lateral reinforcement system and method for concrete structures | 31-01-2022 | Granted | 2022 | Applicant | View |
| 13 | 10448407 | Interference cancellation enhancement in HetNets through coordinated SIMO/MIMO interference codes | 15-10-2019 | Granted | 2019 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|---------|------------------------------------|---|-------------------------|-------------------------------|--|---------------------------------|----------------------|
| 14 | 10191943 | Decorrelation of user-defined function invocations in queries | 29-01-2019 | Granted | 2019 | Applicant | View |
| 15 | 368357 | Interference management for a distributed spatial network | 02-06-2021 | Granted | 2021 | Applicant | View |
| 16 | 342262 | AN ORDERED REDUCED SET SUCCESSIVE DETECTOR FOR LOW COMPLEXITY, QUASI-MIMO DETECTION | 31-07-2020 | Granted | 2020 | Applicant | View |
| 17 | 202141038429 | A QR-CODE BLOCKCHAIN AND GEO-FENCED SELF LEARNING SMART MEDICAL IOT SYSTEM FOR ESTIMATING THE AVAILABILITY OF HOSPITAL BEDS, AN EMERGENCY HUMAN LOGISTIC VEHICLE ROUTING & THEREOF. | 03-09-2021 | Published | 2021 | Applicant | View |
| 18 | 202141030798 | DETECTION OF ANONYMOUS ACTIONS IN VIDEO SURVEILLANCE USING CONVOLUTIONAL NEURAL NETWORKS | 23-07-2021 | Published | 2021 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|---------|------------------------------------|---|-------------------------|-------------------------------|--|---------------------------------|----------------------|
| 19 | 202141013898 | A CONTACTLESS MOBILE-HEALTH SYSTEM OF DIGITAL MEDICAL/ VACCINATION RECORDS & MOBILITY OF TRAVELERS WITH MULTILAYER BIOMETRIC ENABLED CLOUD BLOCKCHAIN | 09-04-2021 | Published | 2021 | Applicant | View |
| 20 | 202041021283 | THERMOSENSITIVE HYDROGEL FOR CANCER THERAPEUTICS AND METHODS OF PREPARATION THEREOF | 26-11-2021 | Published | 2021 | Applicant | View |
| 21 | 201711015607 | Method for 3d-ic design using dynamic libraries and a system therefor | 18-10-2021 | Published | 2021 | Applicant | View |
| 22 | 201711015615 | Partitioning and placement method and system for 3d-ic design | 17-02-2022 | Published | 2022 | Applicant | View |
| 23 | 201711038800 | Method and a system for fault tolerance in 3d-ics | 17-05-2021 | Published | 2021 | Applicant | View |
| 24 | 201741042270 | Composition, method and kit for rapid risk stratification of traumatic brain injury | 31-05-2019 | Published | 2019 | Applicant | View |
| 25 | 201811020381 | 3d stacked multifunctional flexible sensor device | 06-12-2019 | Published | 2019 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|----------------|---|--|--------------------------------|--------------------------------------|---|--|----------------------|
| 26 | 201841009835 | Decellularized corneal matrix based hydrogel, bioink formulation and methods thereof | 20-09-2019 | Published | 2019 | Applicant | View |
| 27 | 201841011114 | An airborne vacuum cleaner | 27-09-2019 | Published | 2019 | Applicant | View |
| 28 | 201841013261 | Apparatus and methods for label-free morphological evaluation of human sperm | 11-10-2019 | Published | 2019 | Applicant | View |
| 29 | 201841015128 | Method and electronic device for gender detection of humans in one or more images | 25-10-2019 | Published | 2019 | Applicant | View |
| 30 | 201841020438 | A method of receiving signal stream and a receiver thereof | 06-12-2019 | Published | 2019 | Applicant | View |
| 31 | 201841023467 | Dense medium cyclone for near gravity coal fraction separation | 27-12-2019 | Published | 2019 | Applicant | View |
| 32 | 201947006811 | System And Method to Generate a Waveform In a Communication Network | 01-03-2019 | Published | 2019 | Applicant | View |
| 33 | 410014 | Biopolymer-based nanoparticles and a method of preparing the same | 27-10-2022 | Granted | 2022 | Applicant | View |
| 34 | 3443714 | Method and transmitter for generating a waveform with optimized papr | 02-02-2019 | Published | 2019 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|----------------|---|---|--------------------------------|--------------------------------------|---|--|----------------------|
| 35 | 3497828 | System and method to generate a waveform in a communication network | 19-08-2019 | Published | 2019 | Applicant | View |
| 36 | 11381437 | System and Method to Generate a Waveform in a Communication Network | 05-07-2022 | Granted | 2022 | Applicant | View |
| 37 | 202043041990 | HIGH ENTROPY ALLOY AND QUINARY ALLOY NANOWIRES | 28-09-2020 | Published | 2020 | Applicant | View |
| 38 | 202043039581 | Non-Invasive System For Detection of At Least One Severe Acute Respiratory Syndrome Coronavirus 2 | 14-09-2020 | Published | 2020 | Applicant | View |
| 39 | 202041037641 | A Non-Invasive System for Detection of At Least One Analyte | 01-09-2020 | Published | 2020 | Applicant | View |
| 40 | 202041001986 | HYBRID POLYMERIC NANOFORMULATIONS FOR THE TREATMENT AND MANAGEMENT OF RETINOBLASTOMA | 16-01-2020 | Published | 2020 | Applicant | View |
| 41 | 202042045110 | METHOD AND SYSTEM OF PRE-CODING A WAVEFORM FOR SYNCHRONIZATION IN A COMMUNICATION NETWORK | 16-10-2020 | Published | 2020 | Applicant | View |
| 42 | 202042025341 | Method And System for Transmitting And Receiving A Waveform With Low PAPR | 16-06-2020 | Published | 2020 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|----------------|---|---|--------------------------------|--------------------------------------|---|--|----------------------|
| 43 | 202041023866 | REUSABLE RESPIRATORY MASK WITH DISPOSABLE FILTER ELEMENT | 06-07-2020 | Published | 2020 | Applicant | View |
| 44 | 202041021530 | METHOD AND SYSTEM FOR TRANSFERRING DATA BETWEEN DISTRIBUTED UNIT AND RADIO UNIT | 20-05-2020 | Published | 2020 | Applicant | View |
| 45 | 202148016050 | METHOD AND SYSTEM FOR DESIGNING A WAVEFORM FOR DATA COMMUNICATION | 05-04-2021 | Published | 2021 | Applicant | View |
| 46 | 202041023243 | HIERARCHICAL THREE-DIMENSIONAL HYBRID CARBON MICROELECTRODE ARRAYS AS AN ANODE FOR ENERGY STORAGE DEVICES | 06-03-2020 | Published | 2020 | Applicant | View |
| 47 | 202141032206 | AUTONOMOUS UAV DESIGN FOR DETECTION AND TRACKING OF BEYOND VISUAL RANGE NON-STATIONARY TARGETS | 16-07-2021 | Published | 2021 | Applicant | View |
| 48 | 202031005007 | A SYSTEM AND PROCESS FOR SEGREGATION OF LOW ASH CLEAN COAL FROM COAL TAILINGS | 05-02-2020 | Published | 2020 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|---------|------------------------------------|--|-------------------------|-------------------------------|--|---------------------------------|----------------------|
| 49 | 202141053633 | FABRICATION OF PCB SUBSTRATE BASED LOW COST MULTICHANNEL DEVICE FOR BIOSENSING | 22-11-2021 | Published | 2021 | Applicant | View |
| 50 | 202141053627 | CONDUCTIVE NANOFIBER BASED CHEMIREISTIVE SENSORS FOR BLOSENSING | 22-11-2021 | Published | 2021 | Applicant | View |
| 51 | 202141053604 | A CHEMI-CAPACITIVE NON-INVASIVE SYSTEM FOR DETECTION OF AT LEAST ONE ANALYTE | 22-11-2021 | Published | 2021 | Applicant | View |
| 52 | 202141054695 | A CHEMI-CAPACITIVE NON-INVASIVE SYSTEM FOR DETECTION OF AT LEAST ONE ANALYTE | 29-11-2021 | Published | 2021 | Applicant | View |
| 53 | 202148016040 | METHOD AND SYSTEM FOR DESIGNING A WAVEFORM FOR DATA COMMUNICATION | 05-04-2021 | Published | 2021 | Applicant | View |
| 54 | 202141056630 | "ZnSnO3/In2O3 CORE-SHELL NANOFIBERS, METHOD OF PREPARING THEM AND THEIR USES" | 06-12-2021 | Published | 2021 | Applicant | View |
| 55 | 202141054721 | CHEMIREISTIVE-PAPER-BASED BIOSENSOR FOR DETECTION OF A BIOMARKER | 26-11-2021 | Published | 2021 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|----------------|---|---|--------------------------------|--------------------------------------|---|--|----------------------|
| 56 | 201941016062 | A Deposition and Deformation Based Additive Manufacturing System For Fabrication Of Complex Geometries | 25-12-2020 | Published | 2020 | Applicant | View |
| 57 | 201941019196 | A method for discrimination of filled and unfilled grains of rice using thermal images | 20-11-2020 | Published | 2020 | Applicant | View |
| 58 | 201841042298 | Platelet-rich plasma based formulations for treating wounds and a method for preparation thereof | 17-07-2020 | Published | 2020 | Applicant | View |
| 59 | 201841041833 | Polycaprolactone-bioactive glass composite scaffolds and 3d printable filaments, applications and preparation methods thereof | 08-05-2020 | Published | 2020 | Applicant | View |
| 60 | 201841016604 | Detection kit for diagnosis of cervical cancer by quantification of visual inspection of acetic acid | 08-05-2020 | Published | 2020 | Applicant | View |
| 61 | 201841034939 | Pharmaceutical compositions and delivery systems for prevention and treatment of candidiasis | 20-03-2020 | Published | 2020 | Applicant | View |
| 62 | 201841034881 | 5g new radio physical random access channel (nr-prach) receiver | 20-03-2020 | Published | 2020 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|----------------|---|--|--------------------------------|--------------------------------------|---|--|----------------------|
| 63 | 201841032747 | Liposomal nanoformulations for treatment of cancer | 06-03-2020 | Published | 2020 | Applicant | View |
| 64 | 201841029505 | Non-Invasive IOT Enabled Power Monitoring Using A Split Architecture For Centralized Voltage Measurement | 31-07-2020 | Published | 2020 | Applicant | View |
| 65 | 201841029885 | Method And System for Scheduling A Pool of Resources To A Plurality Of User Equipment's | 14-02-2020 | Published | 2020 | Applicant | View |
| 66 | 201841029504 | Fully Non-Invasive Self-Sustaining Current Monitoring Device Using Magnetic Flux Based Energy Harvesting | 31-07-2020 | Published | 2020 | Applicant | View |
| 67 | 201841030149 | Fluorescent polyethylene glycol | 14-02-2020 | Published | 2020 | Applicant | View |
| 68 | 201841024810 | High energy lithium ion cell | 07-02-2020 | Published | 2020 | Applicant | View |
| 69 | 201841028421 | Method And System For Classifying Speed of A User Equipment | 31-01-2020 | Published | 2020 | Applicant | View |
| 70 | 201841025931 | Corrosion protected positive grid for a lead-acid battery | 17-01-2020 | Published | 2020 | Applicant | View |
| 71 | 201941008005 | A System for a Sheet Metal Working and a Process Thereof | 04-09-2020 | Published | 2020 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|----------------|---|--|--------------------------------|--------------------------------------|---|--|----------------------|
| 72 | 201941013178 | Single Step Electrochemical Synthesis of Nanocrystalline Multicomponent Alloy Thin Films/Coatings In An Aqueous Medium | 09-10-2020 | Published | 2020 | Applicant | View |
| 73 | 202041050666 | Ferroelectric Polymer (?-Pvdf) For Control And Mitigation Of Microbes Under Small Voltage Signals | 10-06-2022 | Published | 2022 | Applicant | View |
| 74 | 202041036210 | Method And System For Dynamic Selection Of Functional Split For Cloud Radio Access Network | 25-02-2022 | Published | 2022 | Applicant | View |
| 75 | 202041034036 | Methods And Systems For Improving Coverage Of A Cellular Network | 11-02-2022 | Published | 2022 | Applicant | View |
| 76 | 202041053912 | A Device Configurable In A Microscope For Real Time Testing And Imaging Of A Sample | 17-06-2022 | Published | 2022 | Applicant | View |
| 77 | 202041016948 | Metal - Co2 Battery With Co2 As An Energy Carrier For Mars Exploration | 22-10-2021 | Published | 2021 | Applicant | View |
| 78 | 202011032663 | A Methodology For Transfer Of Knowledge From Data-Rich Domains For Thermal Image Processing . | 04-02-2022 | Published | 2022 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|----------------|---|--|--------------------------------|--------------------------------------|---|--|----------------------|
| 79 | 202041030727 | Miniaturized Microscope Device And Method Thereof. | 04-02-2022 | Published | 2022 | Applicant | View |
| 80 | 202141055556 | Silk Fibroin Microfiber Reinforced Polycaprolactone Composites | 08-04-2022 | Published | 2022 | Applicant | View |
| 81 | 202141057701 | Reconfigurable Logic Via Gate Controlled Skyrmion Motion | 28-01-2022 | Published | 2022 | Applicant | View |
| 82 | 202141003895 | Modified Peg-400 (Mpeg-Aa Complex) And Uses Thereof | 29-07-2022 | Published | 2022 | Applicant | View |
| 83 | 201941038805 | Method And System For Generating A Waveform Using A Precoder | 26-03-2021 | Published | 2021 | Applicant | View |
| 84 | 201941030150 | Lora Mote | 29-01-2021 | Published | 2021 | Applicant | View |
| 85 | 201941009771 | Method And System For Generating A User Equipment (Ue) And A Base Station (Bs) | 11-06-2021 | Published | 2021 | Applicant | View |
| 86 | 201941030649 | Plant Derived Fluorescent Nanoparticles For Treatment Of Cancer | 05-02-2021 | Published | 2021 | Applicant | View |
| 87 | 201941048936 | Domain Wall Tunnelling And Logic Operations In Ferromagnetic Nanostructures | 28-05-2021 | Published | 2021 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|----------------|---|---|--------------------------------|--------------------------------------|---|--|----------------------|
| 88 | 201941034084 | Memristor Based Device And Method For Detecting Bovine Serum Albumin (Bsa) | 26-02-2021 | Published | 2021 | Applicant | View |
| 89 | 201841040625 | System And Method For Generating Reference Signals With Low Peak-To-Average Power Ratio (Papr) Waveform | 01-05-2020 | Published | 2020 | Applicant | View |
| 90 | WO/2021/059297 | Method And System For Generating A Waveform In A Communication Network | 01-04-2021 | Published | 2021 | Applicant | View |
| 91 | WO/2020/225825 | Method For Wireless Communication Using Beamformed Physical Downlink Control Channel (Pdcch) | 12-11-2020 | Published | 2020 | Applicant | View |
| 92 | WO/2020/100170 | Method Of Determining Modulation And Coding Scheme (Mcs) And A System Thereof | 22-05-2020 | Published | 2020 | Applicant | View |
| 93 | WO/2020/089931 | Method And System For Generating A Transmit Waveform For Reference Sequences | 07-05-2020 | Published | 2020 | Applicant | View |
| 94 | WO/2020/058836 | Pharmaceutical Compositions And Delivery Systems For Prevention And Treatment Of Candidiasis | 26-03-2020 | Published | 2020 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|----------------|---|--|--------------------------------|--------------------------------------|---|--|----------------------|
| 95 | WO/2020/053900 | Method And System For Detecting Physical Random Access Channel (Prach) Transmission From Multiple User Equipment'S | 19-03-2020 | Published | 2020 | Applicant | View |
| 96 | WO/2020/031210 | Method And System For Scheduling A Pool Of Resources To A Plurality Of User Equipment'S | 13-02-2020 | Published | 2020 | Applicant | View |
| 97 | WO/2020/026266 | Method And System For Classifying Speed Of A User Equipment | 06-02-2020 | Published | 2020 | Applicant | View |
| 98 | US 17/058,273 | Method Of Receiving Signal Stream And A Receiver | 24-11-2020 | Published | 2021 | Applicant | View |
| 99 | US 16/981,957 | Decellularized Corneal Matrix Based Hydrogel, Bioink Formulation And Methods Thereof | 17-09-2020 | Published | 2021 | Applicant | View |
| 100 | US 17/257,967 | Method And System For Classifying Speed Of A User Equipment | 01-05-2021 | Published | 2021 | Applicant | View |
| 101 | US 17/264,067 | Method And System For Scheduling A Pool Of Resources To A Plurality Of User Equipment'S | 28-01-2021 | Published | 2021 | Applicant | View |
| 102 | US 17/276,478 | Pharmaceutical Compositions And Delivery Systems For Prevention And Treatment Of Candidiasis | 15-03-2021 | Published | 2022 | Applicant | View |

| Sr. No. | Patent Registration Application No | Patent Title | Patent Application Date | Status of Patent Applications | Patent Published / Granted Calendar Year | Institute applied the Patent as | View |
|----------------|---|--|--------------------------------|--------------------------------------|---|--|----------------------|
| 103 | US 17/290,290 | Method For Wireless Communication Using Beamformed Physical Downlink Control Channel (Pdcch) | 30-04-2021 | Published | 2021 | Applicant | View |
| 104 | US 17/284,230 | Method Of Determining Modulation And Coding Scheme (Mcs) And A System Thereof | 09-04-2021 | Published | 2021 | Applicant | View |
| 105 | US 17/284,050 | Method And System For Generating A Transmit Waveform For Reference Sequences | 09-04-2021 | Published | 2022 | Applicant | View |
| 106 | US 17/264,067 | Method And System For Scheduling A Pool Of Resources To A Plurality Of User Equipment'S | 28-01-2021 | Published | 2021 | Applicant | View |
| 107 | US 17/333,650 | Method And System For Designing A Waveform For Data Communication | 28-05-2021 | Published | 2021 | Applicant | View |
| 108 | US 17/333,654 | Method And System For Designing A Waveform For Data Communication | 28-05-2021 | Published | 2021 | Applicant | View |
| 109 | US 17/172,404 | Method For Allocating Resources To A Plurality Of Users By A Base Station | 10-02-2021 | Published | 2021 | Applicant | View |
| 110 | US 17/601,785 | Method And System For Generating A Waveform In A Communication Network | 06-10-2021 | Published | 2022 | Applicant | View |

7.4) IP Commercialized and Transferred to Industry/Startup

| Sr. No. | Name of Technology Licenced/Transferred/Commercialized | Technology Type | Patent/Licence Holder name (Institute Co-ownership is Must) | Technology Transferred to | Name of Licensee |
|---------|--|------------------------|--|---------------------------|--|
| 1 | 5G Stack licended on July 2021 | IP/Patented Technology | IIT Hyderabad (Inventor: Prof. Kiran Kumar Kuchi) | Start-up | WiSig Networks Pvt Ltd |
| 2 | IIT Hyderabad (Inventor: Dr. Debraj Bhattacharyya) Kaashyap Envergy Infrastructure Pvt Ltd (Inventor: Mr. Kiran Kumar Kurilla) | IP/Patented Technology | IIT Hyderabad (Inventor: Dr. Debraj Bhattacharyya) Kaashyap Envergy Infrastructure Pvt Ltd (Inventor: Mr. Kiran Kumar Kurilla) | Start-up | Kaashyap Envergy Infrastructures Private Limited |

Declaration

To,
The ARIIA Committee
MHRD's Innovation Cell
New Delhi


Joint Declaration by the Head of the Institute and Nodal Officer

Dear Sir,

Herewith, myself **Prof. B. S. Murty** (Head of Institute) and **Mr. Priyotosh Bandyopadhyay** (Nodal Officer) jointly declaring on behalf of our institute is that all the information submitted are true and correct to best of our knowledge.

Thank you

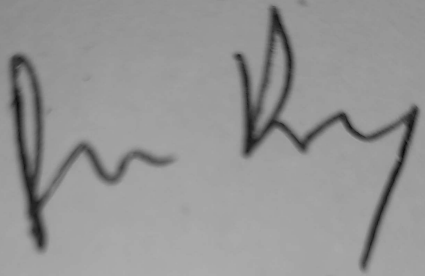
The Head of Institute



14-10-22
Prof. B S Murty

Prof. B. S. Murty,
Head of the Institution,
Indian Institute of Technology Hyderabad,
Hyderabad, Telangana

Nodal officer



14/10/22

Mr. Priyotosh Bandyopadhyay,
Nodal Officer,
Indian Institute of Technology Hyderabad,
Hyderabad, Telangana