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| **GYTI Awardees** | | | | | |
| 1 | Double-disk ultrasonic-assisted magnetic abrasive polishing device | TE | Prateek Kala | IIT-Delhi | Dr P M Pandey |
| 2 | Sway: The rhythm within | SSR | Janhavi Joshi & Nupura Kirloskar | MIT Institute of  Design | Prof Sanjay Jain |
| 3 | Novel technique for energy generation coupled with treatment of waste water and resource-recovery using e-waste as electrode material In microbial fuel cell | MLM | Praveena Gangadharan | IIT-Madras | Dr Indumathi M Nambi |
| 4 | Biodegradable Liposau nanoparticles for photothermal ablation of cancer | TE | Arvind Kumar Rengan & Amir Ali Bukhari | IIT-Bombay | Dr Rohit Srivastava |
| 5 | Targeting lymphatics to treat HIV using lipid-based formulations | TE | Rashmi Jain & Vivek Makwana | B V Patel PERD Centre | Dr Amita Joshi & Dr Manish Nivsarkar |
| 6 | Valproic acid prevents progression of the diabetic nephropathy: Elucidation of molecular mechanisms and proof of concept for promising therapeutic usefulness | TE | Sabbir Khan | NIPER,  SAS Nagar | Dr Gopabandhu Jena |
| 7 | Gift of new abilities | SSR | Shiva Kumar H R | IISc, Bangalore | Dr A G Ramakrishnan |
|  | | | **BIRAC-SRISTI GYTI Awards** | | |
| 8 | Real-time wound management system, wound segmentation &analysis using image processing on mobile platform (Android) | SSR | Abhiraj Gupta | Manipal  Institute of Technology, Delhi | Prof Chandan Chakraborty |
| 9 | Flexicast: A breathable, washable and customised cast for immobilisation of fractured limb | SSR | Jamdade  Nikhil Kailas, Dr Pankaj kumar  K Chhatrala & Devanshi Saksena | Stanford India Biodesign (SIB), New Delhi | Dr Balram Bhargava |
| 10 | Rightbiotic: The fastest antibiotic-finder | TE | Shivani Gupta, D V Padmavathi & Anuradha Pal | Birla Institute of Technology and Science, Pilani, Hyderabad Campus | Dr Suman Kapur |
| 11 | Development of a powerful new antibiotic that kills all drug-resistant bacteria | TE | Venkateswarlu Yarlagadda | Jawaharlal Nehru Centre for Advanced Scientific Research | Dr Jayanta Haldar |
| 12 | Redefined spoon for Parkinson's patient | SSR | Dhyey Mayankkumar Shah, Eepsit Tiwari & Rajesh Patidar | IIT-Gandhinagar | Harish  P M |
|  | | | **Hari Om Ashram Prerit Dr Amulya K N Reddy  GYTI Awards** | | |
| 13 | Evaluation of blood pressure and arterial compliance by the radial arterial pulse-pressure waveform obtained using fibrebragg-grating pulse Recorder | SSR | Sharath U | IISc, Bangalore | Dr S Asokan |
| 14 | Taparch | SSR | Krishna Sai Inkoolu | GITAM University |  |
| 15 | Reduced converters and brushless generators-based standalone microgrid for rural electrification | SSR | Krishan Kant | IIT-Delhi | Prof Bhim Singh |
| 16 | Development of shape-controlled palladium structures as electrocatalysts for fuel-cell applications | MLM | Kranthi Kumar Maniam | IIT-Madras | Dr Raghuram Chetty |
| 17 | Novel nanozyme technology for combating oxidative stress-related disorders | TE | Amit A Vernekar | IISc, Bangalore | Prof G Mugesh |
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|  | | | **GYTI appreciations** | | |
|  |  |  |  |  |  |
| 1 | Food-vending machine for schools | SSR | Subrahmanya Shridhar Shetty, Chandarashekar Moger, Shivanada LC & Udaya G | NMAM Institute of Technology | Pradeep Kanchan |
| 2 | Affordable power-assist for wheelchair | SSR | Karthikeyan S D, Sripriya Kalidoss & Vivek Sarda | IIT-Madras | Dr Sujatha Srinivasan |
| 3 | Rapid diagnosis of brain injury--A novel approach using citrate-capped gold nanoparticles | SSR | Srishti Agarwal | IIT-Hyderabad | Dr Anindya Roy |
| 4 | Prashamana- A smart hospital bed | SSR | Jamdade Nikhil Kailas & Toshib Bagde | IIT-Kanpur | Dr Ramkumar Janakarajan |
| 5 | Suchi-Ahvana | SSR | Pratik Raj, Deepak Nagar & Kewal Chand Swami | IIITDM, Jabalpur | Awadhesh Kumar Singh |
| 6 | Methane-sensing module: From concept to prototype | TE | Anwesha Mukherjee | IISc, Bangalore | Dr Abha Misra |
| 7 | Injection mouldable polymeric composite-based passive polycentric knee joint | MLM | S Arun | IIT-Guwahati | Dr S Kanagaraj |
| 8 | Fabrication of nano object-imaging probe using simple &fast hydro -mechanical etching technique | TE | Fazle Kibria | University college of Science & Technology, University of Calcutta | Rajib Chakraborty |
| 9 | Biomechanical investigation of extracorporeal irradiation therapy in malignant bone tumours | TE | Sakshi Chauhan and K Manoj (AIIMS) | IIT-Delhi | Dr Anamika Prasad and Dr Shah Allam Khan |
| 10 | Tedkit — An audio tactile storybook for visually-impaired children | SSR | Ankita Gulati and Neil Shah | IIT-Delhi | Dr M Balakrishan |
| 11 | Rapid non-invasive diagnostics kits for diabetics patients to check glucose level thrice a day | SSR | Vijay Yadav | ICT, Mumbai | Dr Prajkta Jain |
| 12 | Electrospun cellulose acetate nanofibres for female-hygiene applications | SSR | Shital Yadav, Illa Mani Pujitha & Tulika Rastogi | IIT, Hyderabad | Chandra Shekhar Sharma |
| 13 | Recyclable porous sheets for low-cost water filter | MLM | Abhishek Gandhi | IIT-Delhi | Dr Naresh Bhatnagar |
| 14 | Effect of encapsulated linseed oil to enrich cardiac and brain lipids with Omega-3 fatty acids in rats | MLM | D Sugasini | CSIR-CFTRI, Mysore | Dr B R Lokesh |
| 15 | Linearly-polarised planar inverted F-antenna for GPS and worldwide interoperability for microwave-access applications | TE | Mayank Agarwal | IIT(BHU), Varanasi | Dr Manoj Kumar Meshram |
| 16 | Virtual reality-based minimally-invasive surgical simulator with haptics feedback | MLM | Raghu Prasad MS | IIT-Madras | Dr M Manivanan |
| 17 | Energy-efficient robust controller for autonomous underwater vehicle | MLM | Meenakshi Sarkar | CSIR — Central Mechanical Engineering Research Institute | Dr Sambhunath Nandy & Dr Sankar Nath Shome |
| 18 | One drug to cure them all | TE | Chandradhish Ghosh | Jawaharlal Nehru Centre for Advanced Scientific Research | Jayanta Haldar |
| 19 | Use of high-nutrient, low-cost natural materials for preparation of well-engineered emulsions for variety of applications | SSR | Lad Virangkumar Nanubhai | Sardar Vallabhbhai National Institute of Technology, Surat | Prof Z V P Murthy |
| 20 | Development of membrane technology for industrial progress, societal benefit and environmental safety | MLM | Siddhartha Moulik, Y V L Ravikumar, M Madhumala & D Manjunath | CSIR-Indian Institute of Chemical Technology | Dr S Sridhar |
| 21 | Utilisation of marine algae as substrate and methanogen inhibitor in microbial fuel cell | TE | Rajesh P P & Jadhav Dipak A | IIT-Kharagpur | Prof M M Ghangrekar |
| 22 | Inch-worm mechanism for solar panel-cleaning robot | MLM | Bhivraj Suthar | IIT-Delhi | Prof S Mukherjee & Prof Viresh Dutta |
|  | | | **BIRAC-SRISTI GYTI appreciations** | | |
| 23 | Algiculture | SSR | Abhitha R | IISc, Bangalore | Dr H N Chankaya |
| 24 | A novel process to commoditise carbon dioxide gas into fuels and high-value nutraceuticals at commercially-viable scale | TE | Dilip Singh | DBT-IOC Center for Advanced Bio -energy Research | Dr Ansu  S Mathur & Dr Deepak K Tuli |
| 25 | Development of X-ray visible polymers via in situ Iodination-crosslinking for non-invasive real-time imaging | TE | Paulomi Ghosh & Arun Prabhu Rameshbabu | IIT-Kharagpur | Dr Santanu Dhara |
| 26 | Clubfoot deformity-measuring device | SSR | Dr Kanwaljit Singh | IIT-Delhi | Prof Alok  R Ray& Dr P M Pandey |

**SRISTI Sanman awardees**

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| **Name** | **Award application** |
| Shri Arvind Bhai Vallabh Bhai Marvaniya | Carrot farmer |
| Ms Braille Yadeshwari | Writes spiritual books in Braille |
| Shri D Dhanapalan | Documented traditional ethno-veterinary practices |
| Shri Daripalli Rammiah | Tree planter |
| Mr Genabhai Patel | Pomegranate farmer |
| Mr Harsukhbhai Dobriya | Bird conservator |
| Shri Jayaraman | Conserving and improving productivity of traditional paddy varieties |
| Shri Karthikeyan | Innovations in agricultural implements |
| Smt Rajeshwari | Nutritious food preparations using millets, entrepreneur |
| Mr Samatbhai Zada | Organic farmer |
| Mr Sandeepbhai Karbhari Gund | Initiative of a digital school |