

Sponsored Research and Consultancy Division

Newsletter

Vol:01

Issue: 01(Inaugural issue)

April to October(2021-2022)

MESSAGE FROM THE DIRECTOR



Season's Greetings to everyone!

I extend my heartiest congratulations to the entire team who has worked hard in realizing and releasing the inaugural issue of the SRCD News Letter. SRCD is a oneof-its-kind News Letter, which will share the progress of ongoing research and consultancy projects with everyone, including the alumni and the faculty of BITS Pilani.

The Institute has been proud of its great innovation and research heritage. From faculty to students, everyone is dedicated to adding to this heritage and taking the legacy forward.

I hope this issue will be a harbinger of motivation for all of us.

Thank You

Prof. Sudhirkumar Barai

FROM THE DESK OF ASSOCIATE DEAN, SRCD



Welcome to the inaugural issue of the SRCD Newsletter of BITS-Pilani Pilani campus, Rajasthan. The main objective of this newsletter is to disseminate the status of sponsored research and consultancy project activities to our faculty members and also to our esteemed alumni. This issue mainly highlights the information about research projects sanctioned in the current financial year and statistics about ongoing and applied projects of various departments.

I hope this issue will serve the purpose and based on the feedback received from the readers, some more information will be included in forthcoming issues.

Thank You

Prof. Navneet Gupta

Research Projects



Project Title: Nai Disha Funding Agency: Seth Motilala PG College, Jhunjhunu Sanctioned Amount: ₹4,80,000 Name of PI: Dr. Arya Kumar Designation: Professor Department: Economics & Finance

Abstract: Strategic plan preparation for future growth of the college in the coming 5-10 years. It involved extensive data analysis for the past and interaction with different stakeholders to come out with clear perspective and direction for future growth, including financial implications. Work involved chalking out Vision, Mission, Values and Strategic thrust on five key pillars - Curriculum, Faculty, Admissions, Placements, Alumni.



Project Title: SWATCH Funding Agency: Founding Years Learning Solutions Sanctioned Amount: ₹ 21,37,300 Name of PI: Dr. Navneet Goyal Designation: Professor Department: Computer Science & information Systems

Abstract: The project explores use of AI to make kindergarten schools safer for children. Involves real-time multi-modal analytics. Predictive and descriptive models will be developed and deployed.



Project Title: Metal-catalyzed and Metal-free Strategy for the Synthesis of Modified Bile Acids as Novel Anticancer Agents Funding Agency: Council of Scientific & Industrial Research (CSIR) Sanctioned Amount: ₹27,14,000 Name of PI: Dr. Rajeev Sakhuja Designation: Associate Professor Department: Chemistry

Abstract: The project will identify metal catalyzed/metal-free sustainable synthetic strategies for preparing modified bile acids under mild conditions as potential anticancer agents, and contribute significantly towards the idea of green chemistry.



Project Title: Design, Synthesis, Pharmacokinetic and Pharmacodynamic Evaluation of Acridine and Related Moieties for the Treatment of Alzheimer's Disease Funding Agency: Council of Scientific & Industrial Research (CSIR) Sanctioned Amount: ₹29,32,000 Name of PI: Dr. Paritosh Shukla Designation: Associate Professor Department: Chemistry

Abstract: Following activities will be taken in this project (i) synthesize new acridine type molecules that are active against Alzheimer's disease. (ii) investigation of *in-vitro* Biological, Pharmacodynamic, and Pharmacokinetic properties of the compounds. (iii) docking studies of the new molecules.

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Project Title: Doubling Farm Women's income: Entrepreneurship development through post-harvest and technology integration in arid zone Funding Agency: Department of Science & Technology(DST) Sanctioned Amount: ₹70,20,481 Name of PI: Dr. Srikanta Routroy Designation: Professor Department: Mechanical Engineering

Abstract: In the proposed project, the focus will be on two agriculture produces i.e. Cucumis melo and Pearl Millet. The Artificial Intelligence (AI) based Decision Support System (DSS) will be developed for the supply and demand estimation of these two agriculture produces and their value added products capturing the relevant factors. This will also estimate the impact of proposed solar based process and technology for value added product(s), waste management with integrated farming systems, and optimized supply chain configuration through entrepreneur development at village level for these two agriculture produces.



Project Title: Characterization of Indigenous Cow's Dung and Urine for Scientific Advancement and Development of Utility Items. Funding Agency: Department of Science & Technology(DST) Sanctioned Amount: ₹31,04,162 Name of Investigators: Dr. Pratik N. Sheth and Dr. Abhishek Suresh Dhoble (IIT BHU) Designation: Associate Professor Department: Chemical Engineering

Abstract: In the present research project, a three-pronged approach is used to establish the supremacy and unique qualities/characteristics of Indigenous cows to cater the needs of the scientific community and fueling further scientific investigation in this area: i) A comprehensive chemical and metabolic profiling of Indigenous cow's dung and urine ii) Novel, high-throughput micro biome characterization iii) An open-access database clubbed with a query-based software tool chain to access the information from anywhere in the world freely. To cater to the needs of the rural population, above detailed characterization studies can be used in the development of many utility products.



Project Title: Multilingual Conversational AI to Enhance Customer Experience Funding Agency: Towards vision technologies (C-Zentrics) private ltd. Sanctioned Amount: ₹18,60,640 Name of PI: Dr Yashvardhan Sharma Designation: Associate Professor Department: Computer Science & Information Systems

Abstract: The project will improve upon customer conversation analysis to ensure and render better customer experience. The system developed would identify hidden context in the conversation and will be able to take actions proactively whether it be related to sales or support. The system will also be able to curate auto generated responses on the basis of real time interaction with the customer. The system should also be self-sufficient to identify the code switching.



Abstract: The objective is to develop a cellular signal scanning tool which is intended to perform 5G synchronization and broadcast signal detection, demodulation and decoding. It is required to develop a system model conforming to 3GPP specification that shall perform scanning function on NR 5G signal under nominal operating condition.



Project-1: Specific Generation and system identification of environmental control system based on requirement analysis and system modeling.
Funding Agency: Defence Research and Development Organization (DRDO)
Sanctioned Amount: ₹22,33,500
Name of PI: Dr. Chennu Ranganayakulu
Designation: Visiting Professor
Department: Mechanical Engineering
Project-2: Technical guidance to Rangsons Thermal Management Projects
Funding Agency: M/s. Rangsons Aerospace Pvt. Ltd. Bangalore
Sanctioned Amount: ₹7,08,000

Abstract Project 1: The object of this project is conceptualization of Environmental Control System for an unmanned combat aircraft being designed by ADE-DRDO. This involves suitable system identification, generation of system specification, generation of component specifications and preparation of flight test plans based on analysis and simulation using Dymola software.

Abstract Project 2: M/s Rangsons Aerospace Pvt. Ltd., Bangalore has got project from DARE-DRDO for design of Aircraft Pod Cooling air cycle machines and from ISRO for design of space man mission capsule. In these thermal manage projects, M/s Rangsons need technical guidance from BITS, Pilani as consultancy project.



Project Title: Gender Advancement for Transformation Institutions (GATI) Funding Agency: Department of Science & Technology (DST)-KIRAN Sanctioned amount: ₹7,99,200 Name of Nodal Officer: Dr. Jyoti Designation: Associate Professor Department: Management

Abstract: Project GATI aims to create an enabling environment for equal participation of women in science, technology, engineering, medicine and mathematics disciplines (STEMM) at all levels, addressing deep-rooted biases and stereotyping.

Project GATI pilots a sustainable self-assessment and accreditation model (as per requirement of National Assessment and Accreditation Council). BITS Pilani being the signatory institution to the GATI charter would be expected to commit to adopting its policies, practices, action plans and institutional culture and would be required to create SMART (Specific, Measurable, Achievable, Relevant and Time-bound) action plans for systemic and cultural transformation in regard to gender equity.



Project Title: Contemporary Earthquake Potential Analysis along the central and Nepal Himalaya Funding Agency: Center for Sustainability Science, Academia Sinica, Taiwan Sanctioned Amount: ₹ 10,93,500 Name of PI: Dr. Sumanta Pasari Designation: Assistant Professor Department: Mathematics

Abstract: The objective of this project is to estimate contemporary earthquake potential along different segments of Central and Nepal Himalaya that fall under the central seismic gap. For this purpose, seismic moment rates for each source zone will be calculated independently from the geodetic (GPS) strain rate and observed earthquake data. The ratio of geodetic to seismic moment rate will be evaluated to examine the accumulated versus released seismic energy. The difference in moment rates will be converted to its equivalent magnitude of the prospective earthquake in each seismogenic source area. The results inevitably contribute to the seismic hazard assessment in the area.



Project Title: Organic Polymers for Photocatalytic Nitrogen Fixation Funding Agency: Science and Engineering Research Board(SERB) Sanctioned Amount: ₹ 1,19,00,000 Name of PI: Dr. Tanmay Banerjee Designation: Ramanujan Fellow Department: Chemistry

Abstract: The objective of the project is to develop efficient, heterogeneous and robust, yet molecularly tunable, nitrogen to ammonia converting "soft" organic polymeric photocatalytic platforms and to develop a thorough photophysical and physicochemical understanding of the structure-property-activity relationship for the photocatalytic activity of such materials.



Project Title: Sertraline intervention for enhancing anti-TB therapeutic regimen (SINERG) Funding Agency: Council of Scientific & Industrial Research (CSIR)-IGIB Sanctioned Amount: ₹ 6,00,000 Name of PI: Dr. Rajeev Taliyan Designation: Associate Professor Department: Pharmacy

Abstract: The objective is to repupose the drugs by evaluating the antidepressant clinical drugs-sertraline for Tuberclosis Myocobacterium infection.



Project Title: Predictor and Analyzer of Security Threats (PAST): A model based risk analysis framework for critical interconnected infrastructures. Funding Agency: IHUB NTIHAC FOUNDATION IIT Kanpur Sanctioned Amount: ₹ 18,14,000 Name of PI: Dr. Rajesh Kumar Designation: Assistant Professor Department: Computer Science & Information Systems

Abstract: The objective of the project is to use cyber-risk management techniques over complex system-ofsystems. The idea is to investigate different domain specific languages to showcase the disruption scenarios and analyze the safety, security, and usability of such infrastructures using statistical model checking techniques.



Project Title: Design and synthesis of coordination polymers conduction Funding Agency: Council of Scientific & Industrial Research (CSIR) under EMR Scheme Sanctioned Amount: ₹ 17,14,000 Name of PI: Dr. Madhushree Sarkar Designation: Associate Professor Department: Chemistry

Abstract: The objective of the proposal includes design and synthesis of porous coordination polymers (CPs) for proton conduction. Design principles will be based on targeting the following features in the CPs: (a) Minimizing the dependence of proton conduction on humidity and (b) Proton conduction under anhydrous condition. Another aim of this project is to correlate the crystal structure of the synthesized CPs with the proton conductivity for understanding the proton transfer pathways.



Project Title: Interdisciplinary Life Science Program for Advanced Research and Education in Epigenetic and Genome editing. Funding Agency: Department of Biotechnology (DBT) Sanctioned Amount: ₹9,01,80,320 Name of Coordinator: Dr. Ashis Kumar Das Designation: Professor Department involved: Biological Sciences and Pharmacy

Abstract: The DBT-BUILDER for BITS Pilani Pilani Campus, is an Interdisciplinary Life Science Program for Advanced Research and Education in Epigenetic and Genome editing in human diseases. The team is consist of faculty from the department of Biological Sciences and the department of Pharmacy. The mandate is to develop an interdisciplinary program in the named area and also enhance training the same.





Project Title: Collating and analyzing multi-modal, multi-lingual data for countering wildlife crime Funding Agency: Google Asia Pacific Pte ltd Sanctioned Amount: ₹7,27,055 Name of PI: Dr. Poonam Goyal Designation: Professor Department: Computer Science & Information Systems

Abstract: The project aims to collate, sync, and analyze multi-lingual, multi-modal wildlife crime data that is present on the web and elsewhere (structured/unstructured). AI predictive and descriptive models will then be built to analyze the data with an overall objective of reducing wildlife crime.



Project Title: Performance improvement of Solar thermal system using magnetic NanoFluids Funding Agency: Department of Science & Technology India-South Africa Sanctioned Amount: ₹ 42,56,588 Name of PI: Dr.Suvanjan Bhattacharyya Designation: Assistant Professor Department: Mechanical Engineering

Abstract: The application of nanofluid in the solar energy field has a promising future. More experimental and numerical work needs to be conducted especially with CPVT systems. So, the objective of the project is to investigate thermohydraulic performance of a solar thermal system by using magnetic nanofluid at different flow regime. A magnetic active vortex generator is also proposed in this study for heat transfer enhancement in heat sinks and heat exchangers.



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Project Title: The System initiative: Systems biology augmented, stem cell- derived, multi tissue panel for rapid screening of drugs as potential COVID-19 treatments Funding Agency: Common wealth scientific and industrial research origination(CSIRO) Australia Sanctioned Amount: ₹ 10,48,000 Name of PI: Dr. S Murugesan Designation: Associate Professor Department: Pharmacy

Abstract: It involves a multidisciplinary/multi-site team developing a rapid screening system with stem cells, systems biology and machine learning approaches and assessing the efficacy of already approved drugs against SARS-CoV-2 virus and all its variants of concern. Three promising candidates that will be subjected to evaluation in human ex vivo models followed to Phase 2-3 trials or human Phase 1 trials.



Project Title: The System initiative: Systems biology augmented, stem cell- derived, multi tissue panel for rapid screening of drugs as potential COVID-19 treatments Funding Agency: Common wealth scientific and industrial research origination(CSIRO) Australia Sanctioned Amount: ₹ 10,48,000 Name of PI: Dr. Vinti Agarwal Designation: Assistant Professor Department: Computer Science & Information Systems

Abstract: With very few approved therapies available to treat COVID-19, there is an urgent need to identify additional approved drugs i.e. repurpose drugs, especially those that are cost-effective, and able to inhibit viral replication, reduce COVID-19 symptoms, and prevent 'long COVID'. This project involves a multidisciplinary/multi-site CSIRO and BITS team to develop a rapid screening system with stem cells, systems biology and machine learning approaches, and assess the efficacy of already approved drugs against SARS-CoV-2 virus and all its variants of concern in the span of a year.



Project Title: Artificial Intelligence and Block chain Enhanced privacy and security provisioning for healthcare applications Funding Agency: Science and Engineering Research Board (SERB) Sanctioned Amount: ₹ 32,69,396 Name of PI: Dr. Vinay Chamola Designation: Assistant Professor Department: Electrical & Electronics Engineering

Abstract: The objective of this project is to develop artificial intelligence and block chain enhanced privacy preserving and secure operations for healthcare applications. This project is ASEAN Collaborative R&D grant supported project, and involves team members from National University of Singapore (NUS) and Hanoi University of Science and Technology, Vietnam.

Workshop/Seminar conducted through Sponsored Research

Title of Workshop: *BITS Pilani & DRDO Collaborative Interactions* Department: *Mechanical Engineering & Civil Engineering* Date: *April 24, 2021* Venue: *Online* Supported by: *BITS Pilani* Coordinator: *Prof. Chennu Ranganayakulu & Prof. S.B. Singh*

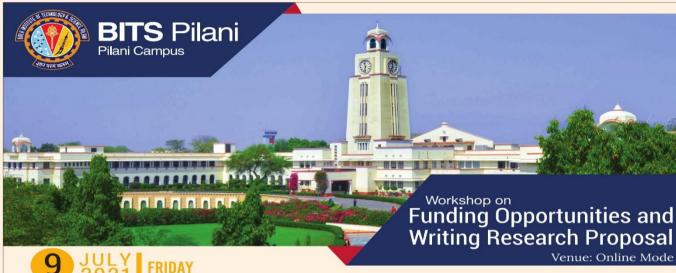
Title of Workshop: Manufacturing: Hindsight to Foresight (3D Printing & Design) Department: Mechanical Engineering Date: July 16,2021 to July 20,2021 Venue: Online Supported by: AICTE Training & Learning (ATAL) Academy Coordinator: Dr. Tribeni Roy

Title of Workshop: *Rehabilitation and Retrofitting of Concrete Structures using FRP Reinforcements* Department: *Civil Department* Date: *July 25,2021 to July 29,2021* Venue: *Online* Supported by: *AICTE Training & Learning (ATAL) Academy* Coordinator: *Prof. S B Singh*

Title of Workshop: Intelligent and Collaborative Robotics Department: Department of Electrical & Electronics Engineering Date: September 13,2021 to September 17,2021 Venue: Online Supported by: AICTE Training & Learning (ATAL) Academy Coordinator: Dr. Meetha.V.Shenoy

April to October (2021-2022)

Workshop Conducted by SRCD on Funding Opportunities and Writing Research Proposal



FRIDAY

Prof. R.N. Saha Acting Vice Chancellor, BITS Pilani 9:30-9:40 AM





Prof. Sudhirkumar Barai Director, BITS-Pilani - Pilani Campus 9:30-9:40 AM



Prof. Navneet Gupta Associate Dean-SRCD, BITS Pilani Finding an appropriate funding agency for your Research Proposal 9:40 -10:00 AM



Prof. Anil Kumar Department of Chemistry, BITS Pilani How to write a successful grant winning proposal 10:00 -10:30 AM



Prof. Anil Gaikwad Department of Pharmacy, BITS Pilani Preparing a Budget for your research proposal 10:30 -11:00 AM



Prof. Chandrashekhar Sr. Professor Emeritus, EEE, BITS Pilani Project evaluation process in funding agencies, their expectations and success rates 11:00 -11:30 AM





Prof. Deepak Chitkara Department of Pharmacy, BITS Pilani Getting an Industrial Grant: Process and Approach

Prof. Anshuman Dalvi Associate Dean, Faculty Affairs, BITS Pilani

Industry Immersion Programme: Possible collaboration with Industry

11:30-12:00 Noon

12:00 -12:30 PM

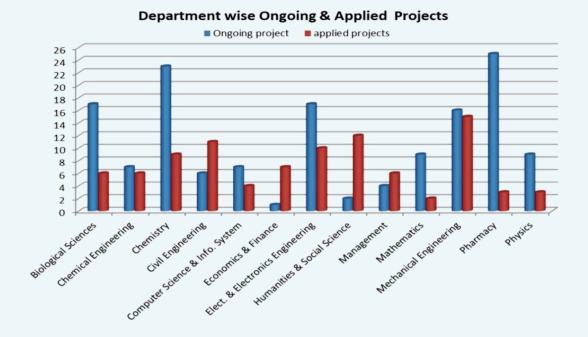


Convener: Prof. Navneet Gupta, Associate Dean-SRCD

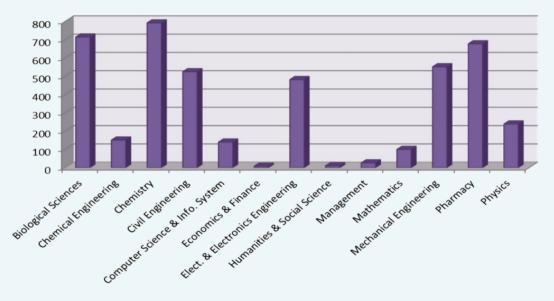
You can access videos of the workshop on SRCD webpage

Link of the videos is https://sites.google.com/pilani.bits-pilani.ac.in/srcd-video/home

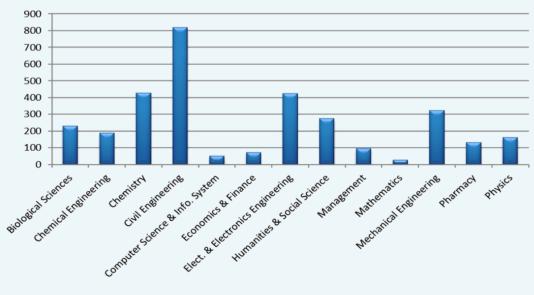
April to October (2021-2022)



Department wise Sanctioned amount (in lakhs) for ongoing projects



Department wise Proposed amount (in lakhs) for Applied projects



April to October (2021-2022)

Patents Granted

Patentee : The Registrar, Birla Institute of Technology Science

Department: Department of Mechanical Engineering

Patent No. : 375419

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Application No.: 2453/DEL/2012

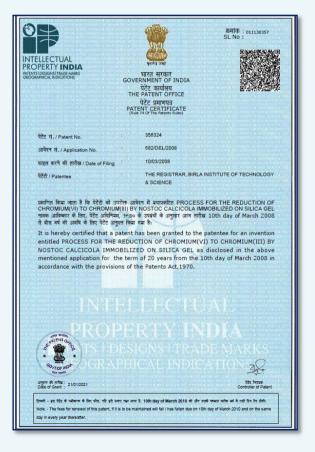
Date of Filing : 06/08/2012

Title: Surface Modification of Hafnium Oxide for Microfluidic Applications

Date of Grant: August 25, 2021

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	पेटेंट सं. / Patent No.	: 375419	
	आवेदन सं, / Application No.	: 2453/DEL/2012	
	फाइल करने की तारीख / Date of Filing	: 06/08/2012	
	पेटेंटी / Patentee		ISTITUTE OF TECHNOLOGY
	OXIDE (HFO2) FOR MICROFL उपबंधों के अनुसार आन तारीख 6th c है।	सरोक्त आवेश्य में वयाप्रवर्षित SURFACE MO UIDIC APPLICATIONS नामक आविष्कर वं day of August 2012 से क्षेस चर्म की अन patent has been granted to the p	के लिए, पेटेंट अथिनियम, १९७० के पि के लिए पेटेंट अनुदत्त किया गया
	OXIDE (HFO2) FOR MICROFLI उपयंगे के अनुसार आज तारीख 6th c है। It is hereby certified that a entitled SURFACE MODIFIC APPLICATIONS as disclosed	UIDIC APPLICATIONS नामक आविष्कार व day of August 2012 से बीस वर्ष की अन	के लिए, पेटेंट अपिनियम, १९७० के षि के लिए पेटेंट अनुदत्त किया गया atentee for an invention D2) FOR MICROFLUIDIC tion for the term of 20
	OXIDE (HFO2) FOR MICROEL garaê ở 과명돼? এল চার্মির Ghr c h It is hereby certified that a entitled SURFACE MODIFIC APPLICATIONS as disclosed years from the 6th day of Patents Act, 1970.	UDIC APPLICATIONS বাদক আৰিব্যে day of August 2012 से জैस मर्प सी आन patent has been granted to the p CATION OF HAFNIUM OXIDE (HFC d in the above mentioned applica	के लिए, पेटेंट अपिनियम, १९७० के षि के लिए पेटेंट अनुदत्त किया गया atentee for an invention D2) FOR MICROFLUIDIC tion for the term of 20
	তxDE (IFF02) FOR MURROEL বুৰুৰ ৰ অনুৰাগ বাগ বিধি 6 th c ক It is hereby certified that a entitled SURACE MODIFIC APPLICATIONS as discloses years from the 6th day of Patents Act, 1970.	UDIC APPLICATIONS বাদক আৰিব্যে day of August 2012 से জैस मर्प सी आन patent has been granted to the p CATION OF HAFNIUM OXIDE (HFC d in the above mentioned applica	के लिए, पेटेंट अविनियम, १९७० के वि के लिए पेटेंट अनुदत्त किया गया atentee for an invention D2) FOR MICROFLUIDIC tion for the term of 20

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Patentee : The Registrar, Birla Institute of Technology Science

Department: Department of Biological Sciences

Patent No. : 356324

Application No.: 582/DEL/2008

Date of Filing : 10/03/2008

Title: Process for the Reduction of Chromium (vi) to Chromium (iii) by nostoc calcicola immobilized on silica gel

Date of Grant: January 21,2021

Media Coverage

Scientists join hands to repurpose Covid drugs

TIMES NEWS NETWORK

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Bengaluru: Scientists from Australia's national science agency CSIRO and BITS-Pilani, a premier institute in India, will collaborate to repurpose drugs for Covid-19.

BITS pharmaceutical and data scientists will be working with CSIRO researchers and Monash Institute of Pharmaceutical Sciences (Australia) to create a unified, annotated and searchable database of 'Open Access Drugs' held by the Griffith Institute for Drug Discovery 'Compounds Australia' facility in Queensland, a statement shared with STOI read.

CSIRO and Australia's Medical Research Future Fund recently announced an AUS 1.7 million initiative to use systems biology and machine-learning approaches on stem-cell derived panels of human tissues for rapid screening of approved drugs

CSIRO and Australia's Medical Research Future Fund recently announced an AU\$ 1.7 million initiative to use systems biology and machinelearning approaches on stemcell derived panels of human tissues for rapid screening of approved drugs



BITS pharmacy professor S Murugesan, who is an associate investigator of the CSIRO project, and his data science colleague Vinti Agarwal, are looking for research fellows to join this initiative, the statement added. The project is led by India-origin professor SS Vasan, who is CSIRO's project leader for Covid-19.

Stating that in addition to vaccines, there was an urgent need for safe, effective and affordable Covid-19 treatments that specifically targeted the virus, Vasan said: "A great strategy to find potential treatments is to repurpose drugs already approved for other diseases, but the current methods to do this are expensive, timeconsuming and not fit for purpose." The new initiative, he added, will enable scientists to develop a multi-tissue drugscreening tool, tailored for infections by SARS-CoV-2 and all its variants of concern, which could help fast track drugs for phase II and III human clinical trials and minimise the need for animal trials

इंडियन कोंडिंग वर्कशॉप फॉर किडस का शभारभ पिलानी (सीमा सन्देश

सं.)। बिट्स पिलानी, पिलानी परिसर टीचिंग लर्निंग सेंटर (टी.एल.सी), स्कूल के बच्चों के लिये 7 दिवसीय कार्यशाला इंडियन कोडिंग वर्कशॉप फॉर किडस का शुभारंभ किया गया। कक्षा छेठी से



नवीं के छात्र इस कार्यशाला में भाग ले रहे हैं। कुल मिलाकर, भारत भर से 80 छात्र प्रतिभागियों के रूप में कार्यशाला में भाग ले रहे हैं। कार्यशाला में कई सैद्धांतिक और व्यावहारिक सत्र होंगे, जिसमें कम्पयुटर विभाग बिट्स पिलानी के प्रोफेसरों द्वारा प्रभावी विज्ञान कौशल के कई पहलुओं पर चर्चा की जायेगी। यह कार्यक्रम स्कूल के बच्चों को प्रयोगों के माध्यम से कम्पयूटर कोडिंग के कौशल सीखने में मदद करेगा। कम्पयूटर कोडिंग सिखने के माध्यम से उनके दिमागी कौशल को मजबूत करेगा तथा उन्हें अपनी रचनात्मकता को अपनाने में सहायक होगा। कार्यशाला का शुभारंभ प्रोफेसर पुष्पलता, संकाय प्रभारी, टी.एल.सी ने अपने स्वागत भाषण के साथ किया। प्रो पुष्पलता ने कार्यशाला के संचालन के बारे में चर्चा की और बताया कि सरकार द्वारा शुरू की गई नई शिक्षा नीति लक्ष्यों को प्राप्त करने में बिटस पिलानी का यह एक और प्रयास है। पिलानी परिसर के निदेशक प्रोफेसर सुधीर कुमार बरई ने स्कूली बच्चों को संबोधित किया और बताया कि कोडिंग को न जानना भविष्य में डिजिटल निरक्षरता के रूप में जाना जाने वाला अशिक्षा का दूसरा रूप होगा।

कार्यशाला संयोजकों की सदस्या डॉ तमाली भट्राचार्य ने नई शिक्षा नीति के दृष्टिकोण से कोडिंग के महत्व पर चर्चा की। उन्होंने कंप्यूटर प्रोग्रामिंग सीखने लिए छात्रों को प्रेरित और उत्साहित करने के लिए कुछ दिलचस्प वीडियो भी दिखाए। इस कार्यशाला के संयोजक सदस्य डॉ आशुतोष भाटिया ने कोडिंग कौशल के महत्व और कैसे कोडिंग कौशल छात्रों को उनके भविष्य में मदद कर सकती हैं के बारे में विस्तृत चर्चा की। इस दौरा एक सैद्धांतिक सत्र प्रोफेसर जे.पी. मिश्रा द्वारा संचालित एल्गोरिथ्म और फ्लो चार्ट की शुरूआत के साथ किया गया तथा उन्होंने कंप्यूटर के आंतरिक घटक कैसे काम करते हैं और सी कंप्यूटर प्रोग्रामिंग मूल विषयों पर भी विस्तृत चर्चा की जो की प्रतिभागी छात्रों को अत्यंत रोचक लगी ।

सेमीकंडक्टर मैटेरियल डिवाइसेज एण्ड एप्लीकेशंस में बढ रही भारत की भागीदारी

पिलानी@पत्रिका.बिटस संस्थान में बैंडगैप सेमीकंडक्टर मैटेरियल डिवाइसेज एण्ड एप्लीकेशंस आत्म निर्भर भारत एक कदम की ओर विषय पर सेमिनार का आयोजन

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किया गया। संस्थान के इलेक्ट्रिकल एण्ड इलेक्ट्रॉनिक्स इंजीनियरिंग विभाग द्वारा आयोजित ऑन लाईन सेमिनार का शुभारंभ संस्थान निदेशक प्रो.सुधीर कुमार बर्र्ड ने किया। एकेडमी ऑफ साइटिफिक एण्ड इनोवेटिव रिसर्च के चांस्लर प्रो. चन्द्रशेखर एवं एसएलपीएल नई दिल्ली के निदेशक डा. डीएस रावल विशिष्ट अतिथि थे।अतिथियों ने सेमीनार का शुभारंभ करते हुए ब्रैंडगैप सेमीकंडक्टर सामग्री एवं उपकरणों के निर्माण तथा उपयोग में भारत के रूख से जुड़ी जानकारी देते हुए इस प्रकार के उपकरणों के निर्माण में भारत के आत्मनिर्भर बनने की दिशा में किए जा रहे प्रयासों की जानकारी दी। यूटा विश्व विद्यालय के प्रो. श्रीराम कृष्णामूर्थी ने गैलियम ऑक्साइड आधारित उपकरण निर्माण एवं चुनौतियों पर अपने विचार साझा किए। आईआईटी रूड़की के प्रो. रमेश चन्द्र ने ऊर्जा भंडार उपकरणों की आवश्यकता आईआईटी वाराणसी के प्रो. सत्यब्रुत जीत ने गैस सेंसिंग ऑर फोटो सेंसिंग अनुप्रयोगों के बारे में जानकारी दी। सेमिनार में आईआईटी बैंगलोर के डा. दगबिजॉय एन.नाथ,डीआरडीओ के डा. सुदीप्तो भट्टाचार्य ने भी विचार साझा किए । इससे पहले कार्यक्रम संयोजक प्रो.धीरेन्द्र सिंह ने आयोजन से जडी जानकारी दी।

बिट्स पिलानी में तीन दिवसीय अंतरराष्टीय सम्मेलन हुआ

पिलानी | बिट्स में टिचिंग लर्निंग सेंटर के राष्ट्रीय सम्मेलन का बेस्ट इनोवेटिव टिचिंग h अंतरराष्ट्रीय तत्वावधान आयोजन किया गया। स्ट्रेजिस-आईसीओएन-बिट्स-2021 विषय पर स्ट्रेजिस-आईसीओएन-बिट्स-2021 विषय पर हुए सम्मेलन में प्रो. पुष्पलता ने स्वागत किया। मुख्य अतिथि हुस्टन विश्वविद्यालय यूएसए के प्रो. अनिल भौमिक एवं विशिष्ट अतिथि इंद्रप्रस्थ सूचना प्रौद्योगिकी संस्थान के संस्थापक निर्देशक प्रा. पंकज जलोटे थे। सम्मेलन में 11 देशों व भारत के 80 संस्थानों के प्रतिभागियों ने भाग लिया। संचालक डॉ. निरकुंश दत्ता ने सम्मेलन के मुख्य सत्रो की जानकारी दी। सम्मेलन में 160 नुख्य संत्रा का जानकारा दा। सम्मलन क दारीन 98 शोध पत्र प्रस्तुत किए गए। सम्मेलन में 160 प्रतिभागियों ने भाग लिएगा। कार्यवाहक कुलपति प्रो. आरएन साहा व बिट्स निदेशक प्रो. सुधीर कुमार बर्र्ड ने जुनौतियों पर प्रकाश डाला।

5जी एंड बियोंड कम्युनिकेशंस विषय पर पिलानी में वर्चुअल संगोष्ठी हुई

बिट्स पिलानी इलेक्टॉनिक्स इलेक्टिकल व इलाक्ट्रकल व इलक्ट्रानक्स इंजीनियरिंग विभाग के तत्वावधान र्पलम् मार्ग व रुपलम् स्विमान इंजीनियरिंग विभाग के तत्वाकशान में 5जी एंड थियौंड कम्युनिकेशंस टेक्नेलॉजी एंड येल विषय पर व्युंडेश्ल सिरंपीजियम का उद्घटन किया गया। सिंपीजियम का उद्घटन क्रिया परा। सिंपीजियम का उद्घटन व्युंडेश्र से वा वारलेस संचार के शुरुआती सफर व ऐतिहासिक पुष्ठभूमि पर प्रकाश डाला। प्रो. एस गुरुनारायणन ने वक्ताओं का रवागत किया। प्रो. एचडी माधुर ने विभाग की कार्यीवधि व उपलक्तियों



चर्चा करते बिट्स के अधिकारी व अन्य।

पर प्रकाश डाला। आईआईटी मद्रास के ईई विभाग के ग्रो. के गिरिधर ने बियांड 5जी टेक्नोलॉजी के बारे में विस्तार से जानकारी दी। सेमसंग आर एंड डी बैंगलोर के निदेशक रलाकर राव ने 5जी एड डा बगलार के नदशक रलाकर राव न 5आ टर्मिनलों व नेटवकों से परे एआई के क्षेत्र व विषय पर प्रकाश डाला। विग्रो फेलो व चौफ आर्किटेक्ट सुभाष मॉडल, रोहित पांडे, पवन कैवाराम सहित अन्य लोगो ने सिंगोूजियम के विषय के विभिन्न पहलुओं पर चर्चा की।

स में माईक्रविव संचार पर b

सुपार कुमार सः उन्होंने 至 गरे के हुए

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SRCD Newsletter

Useful links of SRCD

Link to apply for New Project Proposal to External Funding Agencies

https://forms.gle/t7Ks7HLpofSAx7Pt8

Link to take Administrative Approval for procurement (Equipment, Consumables Etc.)

https://ipcservices.bits-pilani.ac.in/BAS/



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