योगः कर्मसु कौशलम्
INDRASHIL UNIVERSITY
A LIFE SCIENCES UNIVERSITY
Sustained Excellence with Relevance

IU Arena

Volume 2, Issue 2, Dec 2021

News at a Glance

MoU with IIT-Guwahati

Dr. J. S. Yadav and Prof. T. G. Sitharam Director of Indian Institute of Technology, Guwahati signed a Memorandum of Understanding (MoU) between IIT-Guwahati and IU on 9-7-2021 via virtual mode.

The objective of MoU is to promote cross-pollination of ideas between faculty, staff and students of both the institutions on teaching-learning, internship and to enhance the technical, social and cultural relationship. The scope of the agreement includes exploring joint PhD and Masters programmes, as well in association with other reputed academic, research and industrial organizations. “It is an opportunity for both the academic institutions to share the resources for the welfare of society and country at large", said Dr. T. G. Sitharam, Director-IIT- Guhawati."I am confident that Indrashil University will give leverage to IITG in return with its strong Industry-academia linkages while providing solutions to them. This is how IITG will also get connected to the strong Industrial base of Gujarat. A win-win association is the charm of this mutual association. As a matter of fact, many ideas grow better when transplanted into another mind than the one where they sprang up." said Dr. J S Yadav, Provost, Indrashil University.

Young Scientist Award:

Dr. Naga Prasad Puvvada from department of chemistry had received “Young scientist award” from Telangana academy of sciences. Dr. Naga Prasad is an active researcher and currently working as assistant professor in indrashil university after completion of DST Inspire Faculty at CSIR-IICT Hyderabad. His research is focused on nanochemistry and biophysics of nanoparticle substrates for therapeutic targeting of disease processes.

From the Provost’s Desk

The year 2021 saw extremities and uncertainties in terms of pandemic and other aspects impacting slew of attacks on the routine academic well as administrative functioning of the university. Amidst all these mayhem, a harbinger of success and positivity kept ray of hope gleaming for the university. During the same period, Young Scientist award, Gold Medal, grants, publications, patents, FDPs, new collaboration etc. indicated our growth vertically and horizontally. Induction of new batches brought in fresh faces with joy to begin their academic endeavor with IU. At the same time, a few completing their educational journey left with beaming confidence to embark on their future paths. Before wrapping, a quote by Swami Vivekananda is worth mentioning:

“We want education by which character is formed, strength of mind is increased, the intellect is expanded, and by which one can stand on one’s own feet”

Welcome to Pro- Vice Chancellor: Dr. Sanjay Garg

Dr. Sanjay Garg is a doctorate in Computer Science and Engineering with 27 years of experience in academics. He is recipient of "Best Engineering College Teacher in Gujarat State Award-2016" by ISTE, New Delhi. He is very proficient in academic process development using OBE and CBCS philosophy with a multidisciplinary approach. He is dexterous having deep knowledge of accreditation and ranking frameworks for Indian Universities. Further, he has a proven track record of research, projects and publications with academic leadership and is Senior Member of IEEE (USA).

Dr. Sanjay Garg
Ph.D. (CSE), SMIEEE, LMCST, LMSSI

Inside this issue

Editorial

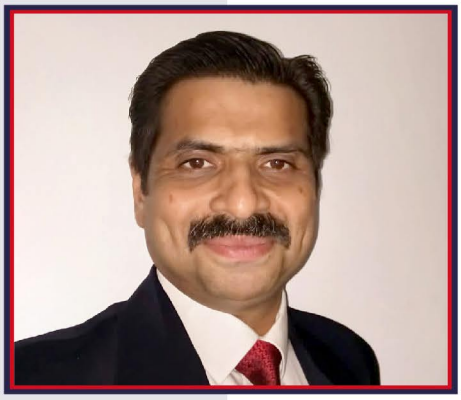
All throughout the period of this issue, I am glad to present before you the spirit of IU which is getting dynamic with each passing year. The permanent features of the Newsletter in this issue once again bring for you newer faces, higher energy and more vibrancy that is visible on the campus. Celebrations at IU, right from indulging into the national festival- Independence day to immersion in Ganeshotsav to flash mob, every activity indicates the indomitable spirit of students and its complementary ecosystem. Besides these, a string of academic activities forecasts the future of IU as one of the brightest in Gujarat region. Collaboration with IIT-Guwahati, National level FDP sponsored by KCG, Webinar series, Expressions, awards and achievements, events have refilled and colored the columns with new information. And the nature as usual, smiled, which is clearly reflected in flora & fauna section.

So enjoy reading,

Namrata Bajaj

Dignitaries on the Campus

Padma Bhushan - Prof. J. B. Joshi
Nuclear Scientist , ICT Mumbai



Dr. Jagdish Khoyani
Centre Head(P&L) Wockhardt Hospital,
Rajkot

Dr. Amit G. Dolia
CEO, BAPS Yogiji Maharaj Hospital,
Ahmedabad

Mr. Pratik Jain
Director of GlobalVox

Mr. Ruru Mehta
Manager L & D, Wockhardt,
Rajkot

Dr. A.C. Brahmbhatt
Professor, Operation Research,
B.K. School of Business Management

Industry Experts

Turning Point- Webinar Series

The ongoing webinar series saw leaders from cadila enriching students' knowledge while sharing their experience and wisdom with students of engineering and science.

Mr. Manu Gupta
VP-IT

Mr. Sachin Mukati
GM Marketing

Mr. Raman Khepar
AVP-Marketing,
CSBU

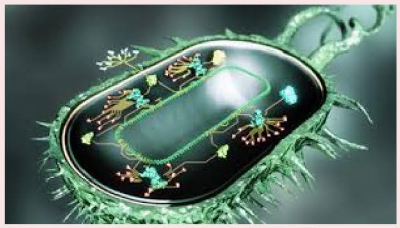
Events

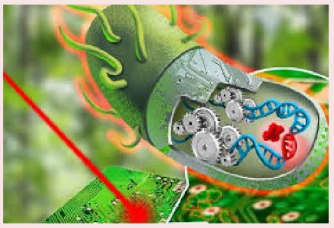
Synthetic Biology: From Lab to Industry:

Department of Biosciences organized an online webinar series on “Synthetic Biology: From Lab to Industry” on 27th – 29th Sept 2021 at Indrashil University, Rajpur, Mehsana. The purpose of the webinar series was to upgrade skills and generate trained human resources in the related sector. The webinar gave an opportunity to experience the synthetic biology paradigm for industrial biotechnology applications.

The webinar was divided into 3 categories, each to be Covered over a period of 3 days.

- Fundamental and advances in synthetic biology for industrial applications
- Synthetic biology technologies and biosynthetic pathways
- Role of synthetic biology for production of chemicals





5- Day FDP on Advanced Technologies in Computer Science & Engineering -KCG

Department of Computer Science & Engineering, School of Engineering, Indrashil University organized a 5 – Day Faculty Development Program on “ADVANCED TECHNOLOGIES IN COMPUTER SCIENCE & ENGINEERING” from 30th November - 04th December, 2021. It was sponsored by KCG (Knowledge Consortium of Gujarat) under the scheme of TEERTH (Training for Excellence, Efficiency and Research Towards Higher Education). In the 5-day duration of FDP, topics on Artificial Intelligence,Machine Learning ,Cloud Computing ,DevOps, IOT, SDN, MongoDB, Cyber Security and Blockchain Technology were covered.

Inguration Session

Expressions:

CRISPR-Cas9 Technology for Targeted Genome Surgery:

Dr. Vijai Singh,
Head-Department of Biosciences,
School of Science

The human genome project has improved our understanding and diversified our knowledge. It has accelerated development in several areas of molecular studies including genomics, proteomics, metabolomics and many. In the human gene and genome sequences, it was noticed that even a single gene mutation causes an impairment of the normal genotype of human beings which in turn disrupts gene function that leads to serious diseases such as sickle cell anaemia, beta-thalassemia, muscular dystrophy, and several others. There are over 6,000 known genetic disorders, and new genetic disorders are constantly being described in medical literature. Although more than 600 of these genetic disorders are treatable, around 1 in 50 people is affected by a known single-gene derived disorder, while around 1 in 263 is affected by a chromosomal disorder. A pressing need has arisen to develop a tool and technology for correcting gene mutation for improving human and animal's health and management of diseases.

Genome editing technologies have been on on high priority since the last few decades. It has been used for correcting gene mutations in cells, thereby improving human health. This has helped to rescue original phenotype by even a small percentage following gene correction inside cells leading to improvement in diseased condition to normal healthy conditions upto a certain state. The antecedent genome editing technologies namely, zinc-finger nucleases (ZFNs) and transcription activator-like effector nucleases (TALENs) are synthetic endonucleases that were initially designed to cleave desired DNA sequences for creating double stranded break (DSB) in order to repair damaged DNA sequence. However, the designing of sequence-specific DNA binding proteins is laborious, time-consuming and still very expensive. It requires highly-trained manpower and specialization to perform experiments.

Recently developed, clustered regularly interspaced short palindromic repeats (CRISPRs) and CRISPR-associated proteins (Cas) are RNA-guided adaptive immune system of bacteria and archaea that protects these organisms against the attack of phages and plasmids. The type II CRISPR-Cas9 system utilizes RNA-guided Cas9 endonuclease for the development of a genome editing technology. The global genome editing market size was estimated to be USD 5.1 billion in 2021 which is expected to reach USD 19.4 billion by 2028 with compound annual growth rate of 22.9%. Department of Biotechnology, Government of India, New Delhi has initiated a Genome Engineering Technologies (GET) and their Applications for accelerating the research and innovation in this area. In a very short span of time since its advent, in 2020, Nobel Prize in Chemistry was awarded to Prof. Emmanuelle Charpentier and Prof. Jennifer Doudna for the development of CRISPR-Cas9 technology. CRISPR-Cas9 system had proven to be a key technology for targeted genome editing, acting as a simple, rapid, and cost-effective solution for future innovations.

Mechanism of CRISPR-Cas9 system

It requires Cas9 and sgRNA that should be expressed inside cells which may create a complex that binds on targeted DNA sequence near the NGG (*PAM-protospacer adjacent motif) site. A DSB is generated at the targeted site that can be repaired either by non-homologous end joining (NHEJ) or homology directed repair (HDR). (A) Repair by NHEJ usually results in the insertion or deletion (indel) or frameshift mutation that causes gene knockout by disruption (green). (B) If a donor DNA is provided with end homology this could get inserted at the targeted site to modify a gene by introducing nucleotide changes or gene insertion (blue).

Applications of CRISPR-Cas9 technology

CRISPR-Cas9 technology is simple, cost effective and efficient for mediating targeted genome editing of bacteria, viruses, fungi, algae, cyanobacteria, plant, insects, fish, mammals and many more. Bacteria are one of the oldest organisms on planet. It may be either beneficial or harmful to life. Beneficial bacteria have been used since many centuries in fermentation, organic acids, vitamins production, etc. The production has been improved by using CRISPR-Cas9 system for editing competitive biosynthetic pathways for increasing carbon flux towards the desired biomolecules. While we talk about the merits of such microbes, there also exist a number of microorganism that are pathogenic or harmful to life, and therefore its pathogenicity should be removed by targeting the virulence factors or antibiotics resistance gene to generate a drug-sensitive strain.

Bacteriophage or phage is a virus which specifically kills the target pathogenic bacteria. In a study, phage was engineered with CRISPR-Cas9 system to target pathogenic bacteria without harming the beneficial gut microflora for treating diseases. Currently, besides antibiotics, phage therapy is being investigated as an alternative approach for specific treatment of only pathogenic bacteria. CRISPR-Cas9 system has also been used for removal of several human viruses including HIV-1, hepatitis B virus, human papillomavirus, Epstein-Barr virus, herpes simplex virus and many others from human cells.

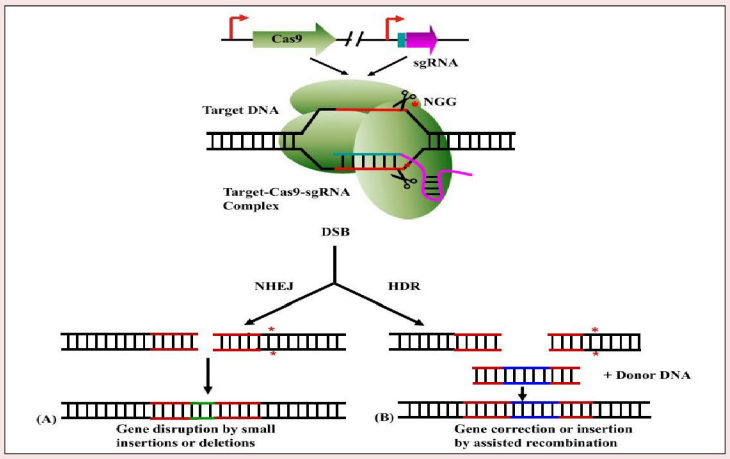


Fig. 1 CRISPR-Cas9 System for targeted Genome Editing

Currently, there is no commercially available medicinal cure to correct a gene mutation that corrects and reverses the abnormality of a gene's function. Devising reprogramming strategies for faithful recapitulation of normal phenotypes is a crucial aspect for directing the reprogrammed cells toward clinical trials. The CRISPR-Cas9 system has been promising as a tool for correcting gene mutations in maladies including blood disorders and muscular degeneration as well as neurological, cardiovascular, renal, genetic, stem cell, and optical diseases. The current acceptance of CRISPR-Cas9 technology has led to a wide number of research facilities using it, employing it directly as well as adapting it to their needs and developing it beyond its current scope. It remains an interesting proposition that development momentum may well increase so that next-generation genome editing technology comes to fruition. Its potential for the creation of novel therapeutic approaches for human diseases offers an inspired future for genome engineering, one that will likely need to balance its curiosity and creativity with respect and care. CRISPR-Cas9 is simple, cost-effective and efficient, and has the potential to be further expanded towards even greater biomedical, therapeutic, industrial and biotechnological applications.

Industry Exposure:

Companies where our Students are Working and also Participating in Placement Drive

CADILA PHARMACEUTICALS LIMITED – The Care Continues...
IFFCO
GLOBAL VOX
TOPS Technologies
ELSNER Technologies Pvt Ltd.
Y CUBE
ACCURATE PHARMACEUTICALS
BHARAT BIOTECH
amneal PHARMACEUTICALS – Generic's New Generation
CPL BIOLOGICALS PVT. LTD.
Apollo HOSPITALS
Emcure – SUCCESS THROUGH INNOVATION
ipca – A dose of life
knovos – Power Over Data
LPL LINCOLN PHARMACEUTICALS LTD. – HEALTHCARE FOR ALL
Piramal Pharma Solutions
Qurious Click – Digital agency
SINCE 1999 WEBLINEINDIA
Unicure – growth through innovation
ACCUPREC RESEARCH LABS PVT. LTD. – Ultimate solution...
GOPINATH CHEM-TECH LIMITED
CEDCOSS – STIMULATING OPEN SOURCE
DAFFODIL
DEEDX CHEMICALS PVT. LTD.
torrent PHARMA
GreenLeaf ENVIROTECH PVT. LTD.
Ingenious Infotech
INTONATION Research Laboratories
APURVI INDUSTRIES – The quality you can trust
Johnson Controls HITACHI
nyusoft solutions IIP
Orena – Crafting Preferred Engineers
Phamson CHEMICALS
RATNAMANI METALS & TUBES LTD.
Jio DIGITAL LIFE
RAPL RESIPOL ADHESIVES PRIVATE LIMITED
SOTAC
SSION – Connecting Life Sciences
Meteoric Biopharmaceuticals
Sunflowee biztech Pvt Ltd
RAMMAM AGRO INDUSTRIES PRIVATE LIMITED
VINITECH Metal Pvt. Ltd.
PAERBIRD TECH
tcs TATA CONSULTANCY SERVICES
TusharR Dye Chem
SoftVan – IT DREAMS TO REALITY
Square Infosoft
MOL MEGHMANI ORGANICS LIMITED

Faculty Achievements

Research Article

- Grieve, S., Puvvada, N., Phinyomark, A., Russell, K., Murugesan, A., Zed, E., & R Brunt, K. (2021). Nanoparticle surface-enhanced Raman spectroscopy as a noninvasive, label-free tool to monitor hematological malignancy. Nanomedicine, 16(24), 2175-2188.
- Maurya, R., Swamy, K. B., Loeschcke, V., & Rajpurohit, S. (2021). No water, no eggs: insights from a warming outdoor mesocosm experiment. Ecological Entomology.1-8. (IF:2.45)
- Koshti, B., Kshtriya, V. S. Nardin-Vebert, C. & Gour, N. (2021). Chemical Perspective of the Mechanism of Action of Antiamyloidogenic Compounds Using a Minimalistic Peptide as a Reductionist Model. ACS Chemical Neuroscience 12, 15, 2851–2864. (IF: 4.59)
- Koshti, B., Kshtriya, V., Walia, S., Bhatia, D., Singh, R. & Gour, N. (2021). Unusual Aggregates Formed by the Self-Assembly of Proline and Hydroxyproline. ACS chemical neuroscience; 12(17):3237-49. (IF: 4.59)
- Kshtriya, V., Koshti, B., Gangrade, A., Haque, A., Ramesh, S., Joshi KB & Bhatia, D. Gour, N.*, (2021). Self-assembly of a benzothiazolone conjugate into panchromatic fluorescent fibres and their application in cellular imaging. New J. Chem,45, 17211-17221 (IF: 3.51)
- Gour, N. and Gazit, E.* Metabolite Assemblies: A Surprising Extension to the Amyloid Hypothesis. Current Opinion in Chemical Biology 2021;64:154-64. (IF 9.869)
- Patel P.G., Gosai H.B., PAnseriya H.Z., Dave B.P., 2021 Bioengineering for L-Asparaginase production by halotolerant Bacillus licheniformis PPD37 strain using statistical approaches – Response Surface Methodology (RSM) and Artificial Neural Network (ANN). Applied Biochemistry and Biotechnology. DOI : 10.1007/s12010-021-03707-5 (IF – 2.920)
- Panseriya H.Z., Gosai H.B.*, Gavali D., Dave B.P., 2021 Assessment, Spatio-temporal Pattern and Water Quality Distribution of Surface Water in West Coast of India. Marine Pollution Bulletin. 170, p.112589. (IF- 5.553)
- A. V. Prabu, G. Sateesh Kumar, Soundararajan Rajasoundaran,Prince Priya Malla, Sidheswar Routray,Amrit Mukherjee,Internet of things-based deeply proficient monitoring and protection system for crop field,18 November 2021,Expert Systems, Wiley,https://doi.org/10.1111/exsy.12876.
- N. Bahadure, Sidheswar Routray, S. Rajasoundaran, A. Jerwin Prabu, V. Pandimurugan, D. Kishore, Investigation of COVID-19 Symptoms Using Deep Learning Based Image Enhancement Scheme for X-Ray Medical Images,International Journal of Biometrics,DOI:10.1504/ijbm.2023.10044238.
- Alok Tripathi, Chaudhery Mustansar Hussain, ZnAl-LDH and B-impregnated polymeric semiconductor (g-C3N4) for solar light-driven photocatalysis to treat phenolic effluent,Sustainable Materials and Technologies,Volume 28,2021,e00266,ISSN 2214-9937,https://doi.org/10.1016/j.susmat.2021.e00266.
- Siddhant B. Patel, Alok Tripathi, Amish P. Vyas,Recent development in the structural modification of graphitic carbon nitride for sustainable photocatalysis: Advances, challenges and opportunities,Environmental Nanotechnology, Monitoring & Management,Volume 16,2021,100589,ISSN 2215-1532, https://doi.org/10.1016/j.enmm.2021.100589.

Expert Talk

- Invited talk on “Implementation of artificial neural network in bioprocess design” at AICTE-ISTE Refresher Program on “Computational Methods for Analyzing, Modelling and Predicting the behavior of exploitative or applicatory biological systems” organized by VVP Engineering College, Rajkot on 22nd – 29th December 2021.
- Dr. Vijai Singh had delivered a talk on “Engineering of E. coli for biotechnological applications at the Department of Microbiology, MS University, Vadodara on 8th October 2022.

Patents

- Singh V., Gohil N., Bhattacharjee G. (2021). Production of prodigiosin from Serratia marcescens using soybean meal as prime source of nutrition. Indian patent application number: 202121025727.
- Singh V., Gohil N., Gohil J., Bhattacharjee G., Maurya R., Pandey VC., Khambhati K. (2021). Synthesis of silver nanoparticles using Serratia marcescens and their antibacterial activity against bacterial pathogens. Indian patent application number: 2021210033341.
- Manna, Manpreet Singh; Sharma, Meenakshi; Kumar, Arvind; Sharma, Reecha; Balusamy, Balamurugan;Shankar, Lakshmi; Chaudhary, Sumit; R., Lakshmana Kumar and Kallam, Suresh. Customized Identity Management Systems (CIMS) for Smart City Infrastructure Platform through Blockchain

Articles

- Gohil N., Bhattacharjee G., Gayke M., Narode H., Alzahrani KJ., Singh V*. (2021). Enhanced production of violacein by Chromobacterium violaceum using agro-industrial waste soybean meal. Journal of Applied Microbiology
- Bui LM, Thi Thu Phung H, Ho Thi TT, Singh V, Maurya R, Khambhati K, Wu CC, Uddin MJ, Trung DM, Chu DT. (2021) Recent findings and applications of biomedical engineering for COVID-19 diagnosis: a critical review. Bioengineered. 12(1):8594-8613.
- Haq S., Sarodaya N., Karapurkar JK., Singh V., Bae YS., Kim KS., Ramakrishna S., (2021). CYLD destabilizes NoxO1 protein by promoting ubiquitination and regulates tumorigenesis. Cancer letters. 525:146-157.
- Antao AM., Kaushal K., Das S., Singh V., Suresh B., Kim KS., Ramakrishna S. (2021). USP48 governs cell cycle progression by regulating the protein level of aurora B. International Journal of Molecular Sciences 22:8508.
- Águila-Almanza E, Hernández-Cocoletzi H, Rubio-Rosas E, Calleja-González M, Lim HR, Khoo KS, Singh V, Maldonado-Montiel JC, Show PL. (2021). Recuperation and characterization of calcium carbonate from residual oyster and clamshells and their incorporation into a residential finish. Chemosphere 132550.
- Chu D.-T., Singh V*. (2021). Obesity and hypertension in Asia: Current status and challenges. The Lancet Regional Health-Western Pacific 15:100243.
- Chung, I., Zhou, K., Barrows, C., Banyard, J., Wilson, A., Rummel, Atsushi Mizokami, Sudipta Basu, Poulomi Sengupta, Badaruddin Shaikh, Shiladitya Sengupta, Diane R. Bielenberg, and Bruce R. Zetter, B. R. (2020). Unbiased phenotype-based screen identifies therapeutic agents selective for metastatic prostate cancer. Frontiers in Oncology, 10.
- Torris, A., Nair, S., KP, R. M., Sengupta, P., & Badiger, M. (2021). Mechanical and microstructural studies in a polysaccharide-acrylate double network hydrogel. Journal of the Mechanical Behavior of Biomedical Materials, 124, 104839.

Books

- Anjana Kiritsinh Vala, Dushyant R. Dudhagara and Bharti Dave (Eds) Marine Microbial Bioremediation (2021), ISBN:978-0367425333., Taylor and Francis Group, CRC Press
- Singh V., Kumar A (2021). Advances in Bioinformatics. ISBN 978-981-336-191-1. Springer Nature.
- Singh V (2021). Reprogramming the Genome: CRISPR-Cas-based human disease therapy. ISBN: 9780323853248 Academic Press, Elsevier
- Bhosale Rajesh and Vijai Singh (2021) Advances in Aggregation Induced Emission Materials in Biosensing and Imaging for Biomedical Applications - Part A, Progress in Molecular Biology and Translational Science, Academic Press.

Book Chapters

- Gosai H.B., Patel P.G., Trivedi H.B., Joshi U., 2021. Role of Biodegradable Polymer-Based Biomaterials in Advanced Wound Care. Eds. Kothari V., Kumar P. In: Wound Healing: Current Research Status and Future Directions. (pp.599-620) Springer Nature, Singapore.
- Vala A.K., Trivedi H.B., Gosai H.B., Panseriya H.Z., Dave B.P., 2021. Biosynthesized silver nanoparticles and their therapeutic applications. Eds. Verma S.K., Das A.K. In: Biosynthesized nanomaterials. 24, Pp.547-584.
- Trivedi H.B., Das A.K., Verma S.K., Gosai H.B., Vala A.K., Dave B.P., 2021. Biosynthesized nanoparticles derived from marine habitat and their interactions with plants. Eds. Verma S.K., Das A.K. In: Biosynthesized nanomaterials. 24.
- Bandyopadhyay, S., Kalangi, S. K., Singh, V., & Bhosale, R. S. (2021). Introduction to aggregation induced emission (AIE) materials, Progress in Molecular Biology and Translational Science, Academic Press.
- Patel H., Shakhreliya S., Maurya R., Pandey VC., Gohil N., Bhattacharjee G., Singh V*. (2021). CRISPR-Assisted Strategies for Futuristic Phytoremediation. In Pandey VC (eds). Assisted Phytoremediation, pp 203-220.

- Singh V*. (2021). An introduction to CRISPR-Cas Systems for genome reprogramming of mammalian cells. In: Singh V (eds) Progress in Molecular Biology and Translational Science 181:1-13.
- Mani I., Arazoe T. Singh V*, (2021). CRISPR-Cas systems for genome editing of mammalian cells. In: Singh V (eds) Progress in Molecular Biology and Translational Science. 181:15-30.
- Gohil N., Bhattacharjee G., Lam NL., Perli SD., Singh V*. (2021). CRISPR-Cas Systems: Challenges and Future Prospects. In: Singh V. (eds) Progress in Molecular Biology and Translational Science 180:141-151.
- Bhattacharjee G., Gohil N., Lam NL., Singh V*. (2021). CRISPR-based diagnostics for detection of pathogens. In: Singh V. (eds) Progress in Molecular Biology and Translational Science 181:45-57.
- Poulomi Sengupta (2021), Nanotechnology in hard tissue repair -. "Nanotechnology in Medicine and Biology", edited by professors Huinan Liu, Tolou Shokuhfar, Sougata Ghosh. Publication house: Elsevier.

Research Grant

Dr. Poulomi Sengupta, Asst. Professor (Chemistry) received research grant on "Increasing the therapeutic index by changing the shape of nanostructures" by SERB, Scheme SRG, Amount: 24 lakhs.

Students` Achievements

- Mr. Aaradhya Bhatnagar and Mr. Dhruv Patel selected as Campus Ambassador by the Collector and District Election Officer for IU to create awareness about voting and election among the students.

- Ms. Bharti Kosti, Ph.D. student received SHODH (Scheme of Developing High-quality research) from the Department of Education, Government of Gujarat.

- Mehul Chauhan of M.Sc. Microbiology Sem III, completed International online certificate course on 'Microbial inoculant technology' conducted by Dept. of Microbiology, Sacred Heart College, Tirupattur, TN. It had duration of 2 months – 1st July to 31st August, 2021

- Kshipra Pandey of M.Sc. Microbiology Sem III, opined her views which was published in Times of India, Ahmedabad Mirror in the feature – Student's views on 'Is holding religious festivals more important than citizens' safety during pandemic?

- Mr. Ajay Patel, Ph.D. student received SHODH (Scheme of Developing High-quality research) from the Department of Education, Government of Gujarat.

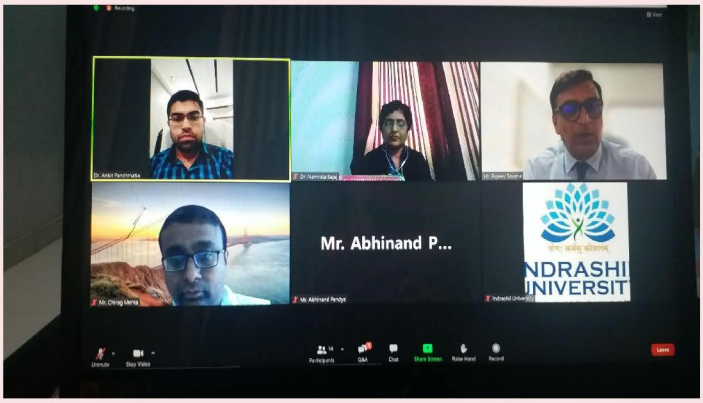
- Payal Patel, received award during Rapid Oral Presentation on 'Characterisation and purification of L-asparaginase derived from marine bacteria and its cytotoxicity against cancer cell line' at International Congress of Malaysian Society for Microbiology 2021 (ICMSM), held on 29-30th September 2021.

- Payal Patel won Poster Presentation Award on 'Bioengineering for L-asparaginase production using Bacillus licheniformis strain using statistical approaches' at 7th International Conference on Fuzzy System and Data Mining (FSDM 2021), held on 26-29th October, 2021.

Activities on Campus

Online Webinar- Empathy to Prevent Suicides

Indrashil university hosted a webinar jointly with Cadila Pharmaceuticals to mark World Suicide Prevention Day on 10th Sepetember, 2021.

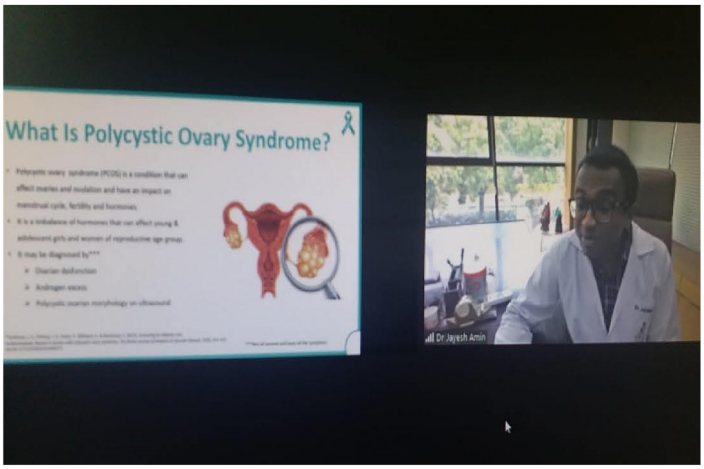


Ahmedabad's leading psychiatrist Dr. Ankit Panchmatia, the keynote speaker of the webinar, spoke about the symptoms and causes of suicidal tendencies and measures that can help in preventing suicides.

Dr. Panchmatia noted that the number of suicides in India had increased by 30% during the Covid-19 pandemic and attributed the surge to various factors such as financial problems, economic uncertainty, loss of a loved one, etc.

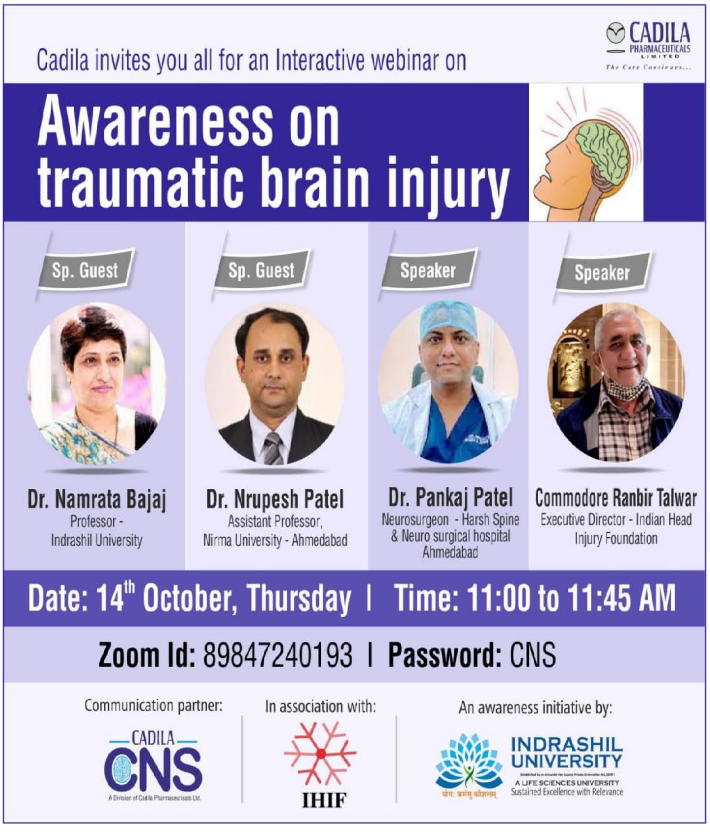
PCOS awareness webinar for women

IU organized an online webinar for the common health issues among women- PCOS. Famous gynecologist, Dr. Jayesh Amin from Wings Women Hospital addressed the issues among all ages of women. He discussed the symptoms, causes and preventive measures on the disease.



Online Webinar- Traumatic Brain Injury

Indrashil University organized Webinar on " Awareness on Traumatic Brain Injury" in association with Cadila Pharmaceuticals Ltd. and IHIF (NGO) on OCtober 14, 2021. Dr. Pankaj Patel, Neurosurgeon and Comm. Ranbir Talwar were the key speakers of the webinar sensitizing IU students related to prevention and care related to Brain Injury.



The Periodic Table Puzzle

Students of the Department of Chemistry participated in the competition 'The Periodic Table Puzzle'conducted on 19th July, 2021 by Dr. Poulomi Semgupta. The highest scorers were rewarded. This activity was conducted to increase their motivation towards pursuing Pure/Applied Chemistry in the future.

World Environment Day

On the occasion of 5th June, Indrashil university celebrated World Environment Day for encouraging students on awareness and action to protect the environment. Teaching as well as non-teaching staff actively participated in the tree plantation and distribution of medicinal plant saplings to the staff at the Campus.



International Yoga Day

Indrashil University marked the 'International Yoga Day' with a session by Yoga Trainer- Dr. Priti Suthar on 21st June, 2021 She explained each Aasana with its impact on the human body and the correct way of practice. Warm-up exercises, Surya Namaskar and various types of Pranayam were explained and performed by her. The event was organized online over zoom and was screened live in the seminar hall for the participants. It was attended enthusiastically by the key officials, management, faculty, R & D team, students and staff.





Independence Day

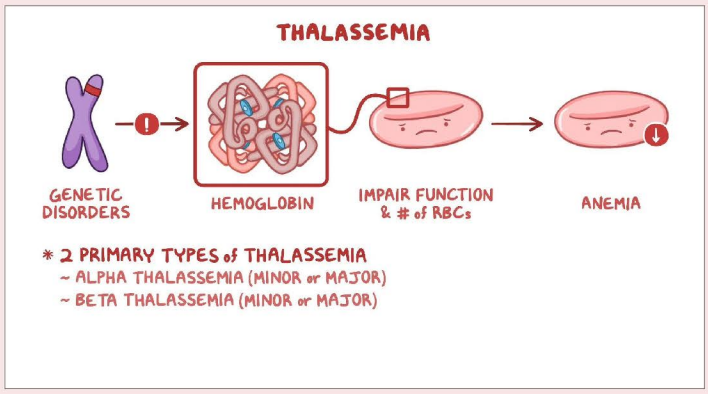
75th Independence Day: IU celebrated Independence Day on August 15, 2021 with flag hoisting by the Provost – Dr. J. S. Yadav. It was followed by National Anthem sung by the students and staff at the campus. Besides these, online cultural program was also conducted which was attended enthusiastically by the key officials, faculty, R & D team, students and staff.



Sadbhavna Diwas

Sadbhavna Diwas: IU organized Sadbhawna Diwas (Online) on August 21, 2021 under 'Azadi Ka Amrut Mahotsav', slated by AICTE/UGC. A prayer was played on the occasion and was followed by an address by Dr. Arun Kumar on the importance of Sadbhavna. It was attended by faculty, students and R & D.

Thalassemia/sickle cell prevention control and Research program



Indrashil university along with the Indian Red Cross Society -Gujarat took an initiative to check all the girl students for Thalassemia, hemoglobin, and their iron level under the community connect program.

Teacher's Day

Indrashil university student cell organized teachers day on the occasion of Teacher's day, 5th September. Students organized games, singing activities for the teachers. Faculties also, actively participated in the events and encouraged the students.

Pic. Teacher's Day Celebration on 6-9-2021 wherein students marked the occasion with various cultural performances, games and address by the Provost, Deans and Management.

Lead Vocalist of IU

Cultural Club organized event on 11-9-2021 offline as well as online wherein Singing competition was organized which saw active participation and attendance by the students.

Poster-Making Competition

A competition was organized on the theme of "Coronavirus outbreak in India: Rise and Fall". The students of B.Sc. and M.Sc. participated in the poster presentation competition on 14th September, 2021.

National Engineers' Day

National Engineers' Day was celebrated on 15th September, 2021 wherein the School of Engineering hosted series of activities- Poster, Quiz and Treasure hunt competitions etc. which saw enthusiastic participation of students. Mr. Pratik Jain (CEO, GlobalVox Inc.) was invited as a Keynote speaker on the occasion

National Sports Day

National Sports day was celebrated at indrashil University on 28th August, 2021 with great fervor. Various competitions were held where students participated actively and it culminated in Prize Distribution for all the winners.

Athlete Fest

Athlete Fest was organized on 18th September, 2021 under "**Azadi Ka Amrut Mahotsav"** where students participated in 100 m race, Long Jump and Discus Throw. The event ended with 'Tug of War' between faculty and students.

Ganesh Utsav

Indrashil university student club organized Ganesh Utsav at the campus. Students, teaching and non-teaching staff actively participated in the celebration. Ganesh Utsav was Celebrated from 10th-15th September, 2021.

Eco Club

IU Wildlife Week

Indrashil University, Department of Biosciences celebrated Wildlife week from 6 th October to 8 th October 2021 to create awareness among IU students for protecting and preserving the country's fauna. Various activities were organised on this occasion. A guest lecture by wildlife expert Dr. I.R. Gadhvi from Bhavnagar University was also conducted.

Community Connect Project

COVID-19 Vaccine Awareness Program:

Students of B.Sc. Semester III, Biosciences, and Chemistry worked for Community connect project- Vaccination awareness. Students visited their society for vaccination awareness. Urban students made posters for awareness campaigns on social media platforms.

Awareness for Malnutrition

Students of semester III and IV of Biosciences participated in street play as part of a community connect program under the banner 'Quit Malnutrition India'. The group performed skit in hospital and primary school of Rajpur to create awareness and sensitization among the people against malnutrition and hidden hunger which are casually ignored and cause of many diseases.

Cleanliness Drive

Indrashil university organized a cleanliness drive at Untava Village. Students participated with kids of school for cleanliness rally. They made posters as well as chanted slogans for creating and sensitizing people of the village for the importance of cleanliness.

Science Club Activity

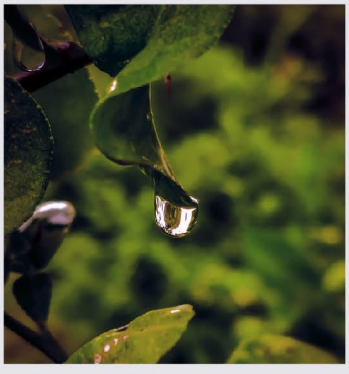
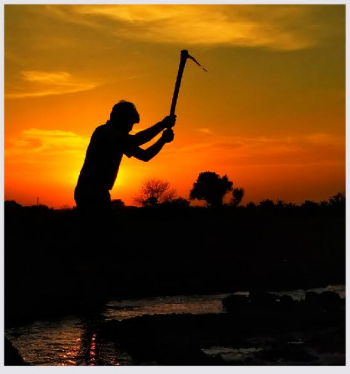
Students Explaining About Hepatitis

The Science Club of Indrashil University organized an Activity for awareness among students. The activity aimed to sensitize community for Hepatisis vaccines and its importance 16th July, 2021. In this activity they reached out (with precautions) to the mass and found out the real reason behind the inhibition for vaccination. They also interacted with the local people through posters, videos, slideshows, etc. At the same time, the students were evaluated by their creativity, practicality, and originality in the making of posters and videos. Students also realized the importance of science and technology for solving the most pressing problems in the world.


Photography Club

Photography Competition:



The Photography Club of the university organized an event for the entire IU members on October 23, 2021. It was open to all i.e. Students, Teaching, and Non-teaching Staff. There were three themes (1. Nature, 2. Black & White and Macro). A total of 61 participants, including the students and staff, participated with 102 photographs. The judges (total 5) from different departments of the university selected 10 best photographs including 1 photograph as the outstanding photograph of the event.

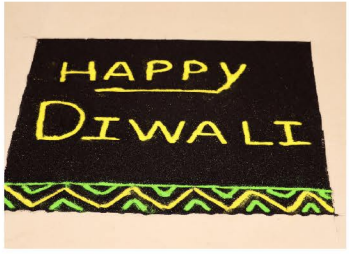
Poster competition- Coronavirus Outbreak in India: Rise and Fall

School of Sciences organized poster presentation competition (a step towards the awareness) for the students. In this competition, the students of the Chemistry and Bioscience participated in the online event.


Dipawali Celebrations

Indrashil university actively celebrated Dipawali. All students, faculties and non teaching staff participated in celebration by wearing ethnic dress and distribution of sweets.






Kakaba Hospital Health Camp

IU students participated in the heatlh camp organised by Kakaba & CSR team of Cadila Pharma on 18th November, 2021. The students were guided by Dr. Bharat of Kakaba Trust about the importance of Health camp in the benefit of villagers.

The Fiesta Cup Football Match

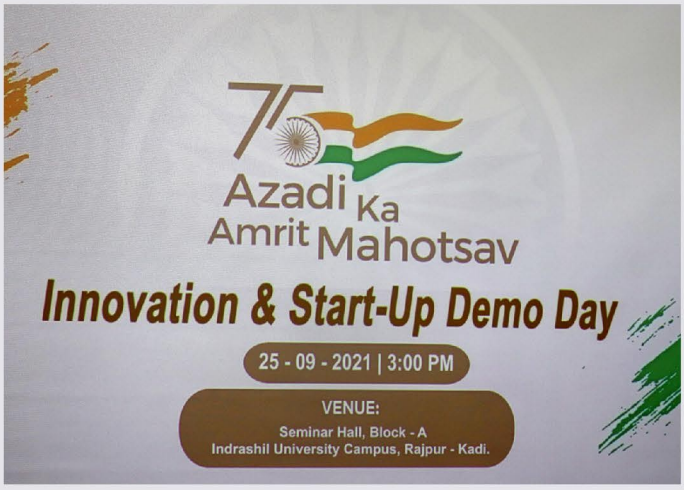
IU students participated in the Fiesta cup Football Match on 21st November, 2021. A total of 32 teams participated in which IU finished in the 8th position.

Startup and Innovation Activities

AIC-ISE foundation in collaboration with Indrashil Innovative Foundation-SSIP organized a Novel Idea Competition-2021 on 25th September, 2021 wherein 12 teams participated from the IU.

- Dr. Haren Gosai (Faculty), Dharti Gandhi, Devarsh Anadharia, Mehul Chauhan Dharini Patel

Title: Indrashil fermentations- A bio surfactants Provider, Herbal sugar candy



- Dr. Kiran Patruni (Faculty), Vishva Shah, Nivedita Tripathi, Akanksha Singh, Raj Dave, Nikhil Rajput

Title: Development and characterization of bio Edible plastic from mix blends of carrageenan

Title: Temporary Oxygen Support System

- Dr Vijai Singh (Faculty) Shweta k Parmar, Nirjari Mehta, Jinali Shah, Rajeshree Shiyal

Title: Herbal plant assisted treatment of Type 2 Diabetes

- Dr. Siddhant Patel (Faculty), Nirmal Naikar, Ronak Thakur, Parvez Rajput

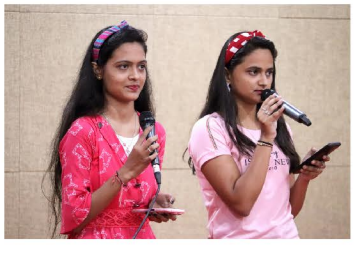
Title: Vegan leather

Sepsivac Nasal Spray

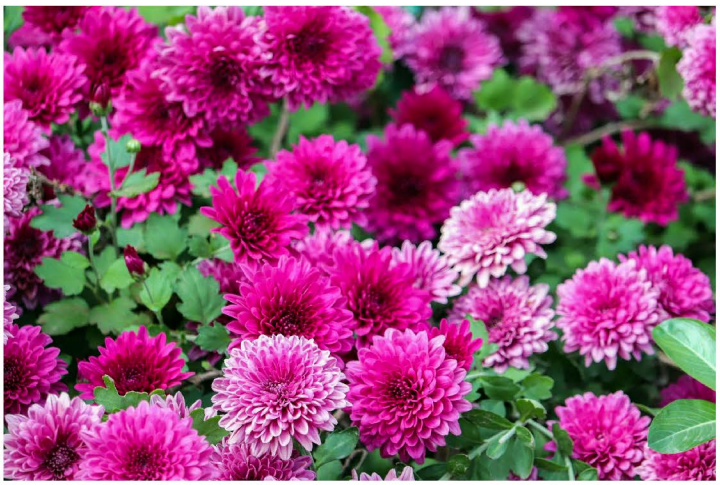
Indrashil University organized a special drive to enhance the immunity of its faculty and staff. In association with its parent company-Cadila Pharmaceuticals, Sepsivac Nasal-Spray was administered to all the employees for strengthening their immune system. A lot of enthusiasm was observed among the staff for this noble initiative.

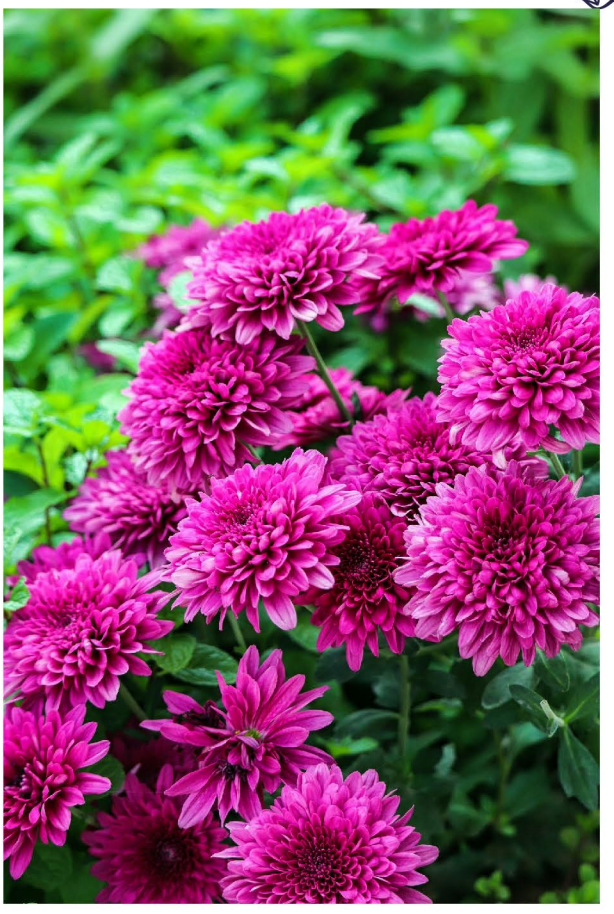
Induction Program

Indrashil University organized its 4th Induction programme in hybrid mode with both online and offline on 1st and 4th October, 2021 recpectively . Prior to it a Pre- induction programme commenced from 24th to 30th September, 2021 with various expert lectures. On 4th October, 2021 students were welcomed to the campus with a flash mob performed by their seniors. This was followed by inaugural session and series of activities lined up till evening. The students filled the registration form ,had campus tour like visiting library, Laboratory, Departments. Post lunch they participated in Quiz , Fun Activities and Talent Show which saw their active & enthusiastic involvement. the event ended with singing national anthem by all the students.



Flora & Fauna





INDRASHIL UNIVERSITY
A LIFE SCIENCES UNIVERSITY
योगः कर्मसु कौशलम्

Campus Address
Rajpur, Taluka-Kadi, Dist.: Mehsana-382740, Gujarat, India.
Contact No.: +91-6359102727
Email: admission@indrashiluniversity.edu.in
Website: www.indrashiluniversity.edu.in

For more details, log on to:
www.indrashiluniversity.edu.in

/IndrashilU @indrashil_u indrashil.university

For Private Circulation Only

For more details, please visit our website:

www.indrashiluniversity.edu.in

Edited by Dr. Namrata Bajaj

Published by Indrashil University

Indrashil University, Rajpur, Taluka: Kadi, Dist.: Mehsana-382715

Phone: 02764-278813-15