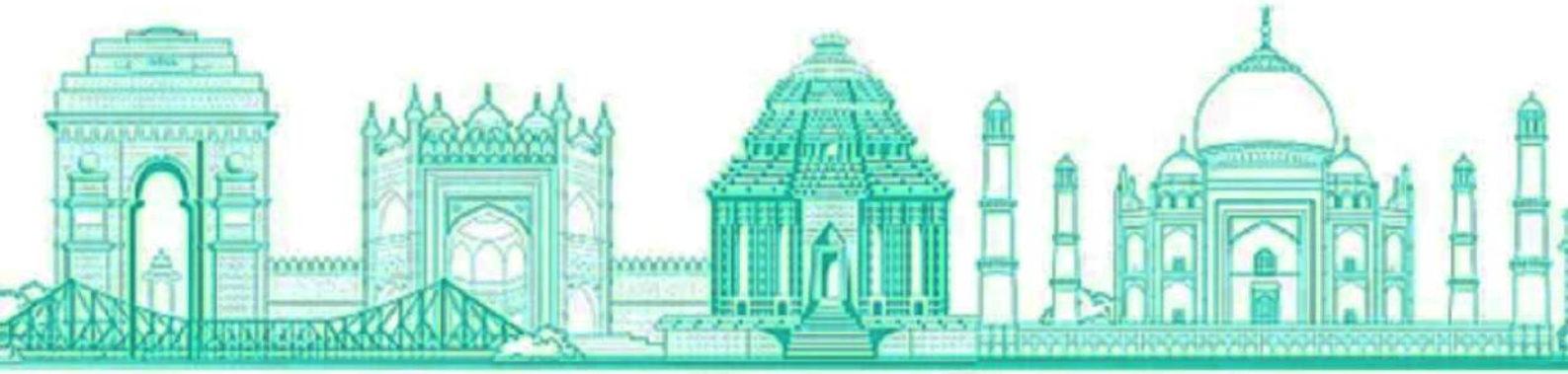
ICFAST 2022

12th India-Japan Science and Technology Conclave

International Conference on Frontier Areas of Science and Technology (ICFAST-2022)

Conference Booklet

Stream-1



Message

Message from Prof. B.J. Rao, Vice Chancellor, University of Hyderabad to the participants of International Conference on Frontier Areas of Science and Technology (ICFAST-2022).

On behalf of the organizers, I extend a warm welcome to all the scientists, researchers, faculty and students from Japan, India and elsewhere to the verdant and naturally endowed campus of University of Hyderabad (UoH). We are extremely proud and happy that IJAA, on behalf of JSPS, has chosen University of Hyderabad to host the 12th edition of the International Symposium ICFAST 2022. I am also happy to note that all the science schools of the University – School of Physics, School of Chemistry and School of Life Sciences have come forward to organize this premier event.

University of Hyderabad, established in 1974 as a Central University, is one of the premier institutions in the country for under-graduate, post-graduate and doctoral level teaching and research. The motto of the University is to disseminate and advance knowledge by providing instructional and research facilities in such branches of learning as it may deem fit and by the example of its corporate life, and in particular to make special provisions for integrated courses in humanities and science in the educational programmes of the University and to take appropriate measures for promoting inter-disciplinary studies and research in the University. Our relentless endeavour to realize these objectives accorded us several international and national recognition. We consistently rank among the top 50 universities in the world which are under 50 years old. In 2019 Government of India accorded UoH the Institution of Eminence (IOE) status in recognition of our standing, ability and potential to move into the league of the world's best institution. Our students are considered assets in all the organizations they associate themselves and our faculty are beacons of knowledge and research achievements who collaborate with eminent researchers across the world.

In the emerging world India and Japan are natural allies in the scientific and technological worlds apart from other spheres of life. Several of our students go on to pursue their research career in Japan and faculty have collaborative work with their counterparts as well. However, the numbers are currently not at the level where it should be considering the synergy between the two countries. I am sure hosting ICFAST 2022 in UoH and other such and related efforts in the future will give a fillip to increasing the numbers to benefit both countries and scientific communities. From this perspective this is an enormous opportunity to showcase our eminent status among scientific peers.

I am sure that the faculty coordinators of the event have made arrangements to ensure a scientifically and collaboratively wonderful event. Wishing them a successful event, I join my faculty colleagues in extending a warm welcome to all the participants of the ICFAST 2022 conference, which I am sure will be mutually and scientifically beneficial to the community at large.

Basuthkar Jagadeeshwar Rao
vice chancellor
University of Hyderabad

Message

Message from JSPS President SUGINO Tsuyoshi on Occasion of IJAA's 12th International Symposium

Writing on behalf of the Japan Society for the Promotion of Science, we are very happy that the Indian JSPS Alumni Association is holding its 12th India-Japan Science & Technology Symposium there in Hyderabad on the theme "International Conference on Frontier Areas of Science and Technology (ICFAST-2022)."

Every year, this symposium enjoys a wide spectrum of participation including students, researchers, university faculty and administrators, and corporate people who gather for it from both in and outside India. It always attracts strong interest and wide attention as an event that strengthens scientific exchange between India and Japan.

To effectively advance science, the free and diverse ideas of researchers must be respected and their activities must be given sustained support. This symposium provides an important platform for the participants to share information on a wide range of science and technology being advanced through cutting-edge research in India and Japan. While addressing the importance of basic research and basic science, the symposium offers a valuable opportunity to consider the state of scientific cooperation enjoyed between our two countries.

Though I merely state the obvious, India is one of Japan's most important partners in both the scientific and many other areas of bilateral exchange. A great many joint research projects have and are being carried out between our countries, producing results that advance science and benefit society. As one vehicle of exchange, the Inter-university Exchange Project, spearheaded by Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT), has steadily advanced the exchange of many excellent students between India and Japan. The achievements that they have and will make provide foundations for propelling exchange between our nations long into the future. I look forward to the continued thriving of our scientific partnership.

The persistent effect of the new coronavirus pandemic has hampered active international exchange among researchers. Before the pandemic occurred, more than 4,500 researchers from other countries were invited and came to Japan each year through JSPS's international exchange programs. Concurrently, about the same number of Japanese researchers were dispatched abroad. Among the researchers coming to Japan, more than 1,700 of them were invited from India. Building networks while in Japan, many of these researchers return home to engage in joint projects with Japanese colleagues.

Established in 2006, IJAA is the organizer of this symposium. It is JSPS's sixth official alumni association of researchers who have stayed in Japan while participating in JSPS programs. In addition, IJAA is both the first JSPS alumni association to be established in Asia and in a country without a JSPS overseas office. We at JSPS are very proud of IJAA and

its members—the way in which you exert an independent spirit and boundless energy in developing and carrying out your alumni activities.

Beginning with your Department of Science and Technology (DST), various organizations in India have cooperated with JSPS over long years in supporting the implementation of joint research and the holding of seminars. We are very happy that JSPS's cooperative relationships with Indian research organizations have been strengthened through the various ways they provide support.

Lastly, I wish to extend our heartiest thanks to IJAA president Dr. Sakthi Kumar and to Dr.Venkataiah Gorige and all of the alumni for the tremendous job you've done in organizing what promises to be a superb symposium. I pray for IJAA's sustained growth and progress and look forward to the contributions you will continue to make to advancing scientific exchange between India and Japan.

SUGINO Tsuyoshi
President
Japan Society for the Promotion of Science

भारत के राजदूत
AMBASSADOR OF INDIA

सत्यमेव जयते

भारत का राजदूतावास
Embassy of India
2-2-11 Kudan Minami, Chiyoda-ku
Tokyo 102 0074

MESSAGE

I congratulate the Indian JSPS Alumni Association (IJAA) for organizing the 12th India-Japan Science and Technology Seminar on 9-10 September 2022 in association with the University of Hyderabad. The theme of the Seminar – International Conference on Frontier Areas of Science and Technology (ICFAST) – has great relevance to India-Japan collaboration in the field of Science and Technology. Today scientific and technological endeavour is breaching new frontiers, bringing in its wake both opportunities and challenges.

I sincerely hope that the Seminar will provide innovative information to the scientific community in India and Japan and help develop collaboration and partnership between institutes of the two countries.

I am confident that the 12th India-Japan Science and Technology Seminar will be a great success.

5/9/22

(Sanjay Kumar Verma)

Tokyo
05 September 2022

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Message

I am really happy to invite you all for Indian JSPS Alumni Association's (IJAA), 12 th India – Japan Science and Technology seminar, that IJAA is organizing in collaboration with university of Hyderabad at Hyderabad during September 9-10, 2022 and our annual get together. This seminar we are conducting under the celebration of 70 th Anniversary of India-Japan Diplomatic Relations as well as 75th Anniversary of Independence of India. IJAA is really committed to spread and augment S&T collaboration between India and Japan and for achieving the same, we had conducted 11 India-Japan S&T seminar in various places in India and 1 S&T seminar in Tokyo. Ever increasing number of participants in our seminar, clearly says that we have achieved our goal.

This time our South Chapter of IJAA is organizing the seminar in Hyderabad. IJAA is very much thankful to Dr. Venkataiah Gorige and his team for organizing our 12th seminar in Hyderabad.

Once again I welcome all delegates to our seminar and hope that it would provide a great experience.

Prof. D. Sakthi Kumar,
Chairman,
Indian JSPS Alumni Association

Professor, Bio Nano Electronics Research Center,
Toyo University, Kawagoe, Saitama, Japan

12th India-Japan Science and Technology Conclave

International Conference on Frontier Areas of Science and Technology (ICFAST-2022)

School of Physics [SoP]

University of Hyderabad [UoH]

C.R. Rao Road, Gachibowli, Hyderabad-500046, India

September 09-10, 2022

Conference Venue: Auditorium and Seminar Room, School of Life Sciences [SLS], University of Hyderabad

Stream – 1 (Chemistry, Life Sciences, Medical Sciences & Interdisciplinary)

Schedule of the Program for Day-1 (09 September 2022)

08:30 - 09:00		**Registration** [*for guests*]	
Session-I Venue: SLS Auditorium	**Inauguration** 09:00 - 09:40	Inauguration by Hon. Ambassadors of Japan and India, President (JSPS), Vice-Chancellor (University of Hyderabad), President of the IJAA, General Secretary of the IJAA, Dean (School of Physics, UoH), and Convener (ICFAST-2022)	
Chairperson: **Prof. B J Rao** **VC, UoH**	**Keynote Lecture** 09:40 - 10:40	Prof. G. Ravindra Kumar TIFR (M), India	*Science with Extreme Laser Light (SELL)*
10:40-11:00		**High Tea**	
Session-II (A) **(Chemistry)** Venue: SLS Auditorium Chairperson: **Prof. Aanunay Samanta** **UoH, India**	11:00 - 11:30	Prof. Rajadurai Chandrasekar UoH, India	*Mechanophotonics & Crystal-photonics foundry: A Roadmap to All-Organic, Single-Crystal, Photonic Integrated Circuits*
	11:30 - 12:00	Prof. Vijayamohanan Pillai IISER (T), India	*Simultaneous doping and un-zipping of carbon nanotubes at room-temperature in different electrolytes*
	12:00 - 12:30	Prof. D. B. Ramachary UoH, India	*Discovery of sustainable organocatalytic reactions: expansion of substrate/catalysts scope*
	12:30 - 13:00	Prof. Chilla Malla Reddy IISER (K), India	*Adaptive soft molecular crystals: from bending to self-healing*
13:00-14:00		**Lunch & University booths**	
14:00-16:00		**Poster Session and University booths**	

15:00 – 16:00		**IJAA Executive and General Committee meeting (Only for IJAA members)**	
Session-III (A) **(Life Sciences)** Venue: SLS Auditorium Chairpersons: **Prof. Appa Rao P & Prof. S Rajagopal UoH, India**	16:00 - 16:30	Prof. Deepak Sharma IMTECH, India	*The cell-penetrating peptide penetratin prevents neurodegeneration in mice models of Parkinson's disease*
	16:30 - 17:00	Prof. Jagadis Gupta Kapuganti NIPGR, India	*Nitric oxide signaling in plants and its role in plant tolerance to low oxygen stress*
17:00-17:15		**Tea**	
Session-IV **(Cultural Program)** Venue: DST Auditorium, UoH Chairpersons: **Prof. J Anuradha UoH, India**	17:15 - 18:30	Team from Sarojini Naidu School of Arts and Communication, UoH, India	*Cultural Program*
19:00-21:00 Venue: Ellaa Hotel, Gachibowli, Hyderabad		**Gala Dinner**	

Schedule of Program for Day-2 (10 September 2022)

09:00 - 09:10		**Registration** [*for guests*]	
Session-I: Venue: SLS Auditorium & Seminar Hall Chairpersons: **Prof. D Basavaiah UoH, India**	**Keynote Lecture** 09:10 - 09:55 (*online*)	Nobel Laureate Prof. Ryōji Noyori Nagoya Univ., Japan	*Where am I from? Where are you going?*
Session-II: (A) Venue: SLS Auditorium Chairpersons: **Prof. Anand K Kondapi, UoH, India**	10:00 - 10:30	Prof. Rajender K. Motiani RCB, India	*Calcium dynamics: a critical regulator of human skin pigmentation*

10:30-10:45		**Tea**	
Session-III (A) **(Chemistry and Biology)** Venue: SLS Auditorium Chairperson: **Prof. T P Radhakrishnan UoH, India**	10:45 - 11:15	Prof. Kana M. Sureshan IISER (TVM), India	*Gels and their Applications*
	11:15 - 11:45	Prof. Melepurath Deepa IIT-H, India	*Solution Processed High Performance Devices: Solar Cells and Photoelectrochromic Devices and Photo-supercapacitors*
	11:45 - 12:15	Prof. S. Venkata Mohan CSIR-IICT (H), India	*Low-carbon and green hydrogen production through a biorefinery approach*
	12:15 - 12:45	Prof. Kundan Sengupta IISER (P), India	*Lamins – mechanoprotector of the nucleus*
12:45-14:00		**Lunch, Poster &University booths**	
Session-IV (A) **(Life Sciences and)** Venue: SLS Auditorium Chairpersons: **Prof. N Siva Kumar & Prof. Krishnaveni Mishra UoH, India**	14:00 - 14:30	Prof. Ullas Kolthur Seetharam TIFR (M), India	*Investigating order in chaos: Unraveling emergent mechanisms that cumulatively dictate aging and emergence of diseases*
	14:30 - 15:00	Prof. M. Subba Reddy CDFD, India	*Mapping interaction network of human phosphatases*
	15:00 - 15:30	Prof. Subba Rao IISc, India	*Golgi localized small G-protein regulates cell adhesion*
	15:30 - 16:00	Prof. Renu John IIT-H, India	*Quantitative Phase Microscopy for Clinical Diagnosis*
16:00-16:15		**Tea**	
Session-V (A) **(Interdisciplinary Topics)** Venue: SLS Auditorium Chairpersons: **Prof. Prakash Babu & Prof. K Srinivasulu, UoH India**	16:15 - 16:45	Prof. Yuichiro Takahashi RIIS, Japan	*Structure and dynamics of photosystem I supercomplex in the green alga Chlamydomonas reinhardtii*
	16:45 - 17:15	Prof. Aki Yonehara Toyo Univ., Japan & IIT-D, India	*A mechanism and impact of translocal learning: A trial of international educational exchange program between India and Japan*
	17:15 - 17:45	Prof. Eri Ikeda IIT-D, India	*Global economy and economics*
Venue: SLS Auditorium	17:45-18:00	*JST Presentation: Sakura Science Program*	
	18:00-18:15	*NEDO Presentation: Introducing NEDO activities and opportunities for India-Japan joint programs*	
18:15-19:00 Venue: SLS Auditorium		**Poster Award and Concluding Session**	

S No	Keynote Lectures		
1	Science with Extreme Laser Light (SELL)		G. Ravindra Kumar
2	Where am I from? Where are you going?		Ryoji Noyori
	Invited Lectures		
1	IL-01	Mechanophotonics & Crystal-photonics Foundry: All-Organic, Single-Crystal, Photonic Integrated Circuits	Rajadurai Chandrasekar
2	IL-02	Simultaneous Doping and Un-zipping of Carbon Nanotubes at Room-temperature in Different Electrolytes	Vijayamohanan K Pillai
3	IL-03	Discovery of Sustainable Organocatalytic Reactions: Expansion of Substrate/Catalysts Scope	Dhevalapally B. Ramachary
4	IL-04	Adaptive Soft Molecular Crystals: From Bending to Self-Healing	C Malla Reddy
5	IL-05	The cell-penetrating peptide penetratin prevents neurodegeneration in mice models of Parkinson's disease.	Deepak Kumar Sharma
6	IL-06	Nitric oxide signaling in plants and its role in plant tolerance to low oxygen stress	Kapuganti Jagadis Gupta
7	IL-07	Calcium dynamics: a critical regulator of human skin pigmentation	Dr. Rajender K Motiani
8	IL-08	Gels and their Applications	Kana M. Sureshan
9	IL-09	Solution Processed High Performance Devices: Solar Cells and Photoelectrochromic Devices and Photo-supercapacitors	Melepurath Deepa , Ankita Kolay, Debanjan Maity, Aparajita Das
10	IL-10	Low-Carbon and Green Hydrogen Production Through a Biorefinery Approach	Dr. S Venkata Mohan , Ankita Kolay, Debanjan Maity, Aparajita Das
11	IL-11	"Lamins - mechanoprotector of the nucleus"	Kundan Sengupta,
12	IL-12	Investigating order in chaos: Unraveling emergent mechanisms that cumulatively dictate aging and emergence of diseases	Ullas Kolthur-Seetharam
13	IL-13	Mapping Interaction Network of Human Phosphatases	Maddika Subba Reddy
14	IL-14	Golgi localized small G-protein regulates cell adhesion	Subba Rao Gangi Setty
15	IL-15	Quantitative Phase Microscopy for Clinical Diagnosis	Renu John , Aswathy Vijay, Vikas Thapa, Ashwini S. Galande
16	IL-16	Structure and dynamics of photosystem I supercomplex in the green alga Chlamydomonas reinhardtii	Yuichiro Takahashi
17	IL-17	A mechanism and impact of translocal learning: A trial of international educational exchange program between India and Japan	Aki YONEHARA
18	IL-18	Global economy and economics	Eri Ikeda

Poster presentation			
Chemistry			
1	CI-01	Additive engineering in MAPbBr3 single crystals for tunable high order harmonics	SarvaniJowharKhanam, MuraliBanavoth

2	CI-02	Facile synthesis of Ni-Cr bimetallic oxide grafted with ethylenediamine for sequestration of Malachite Green from aqueous solution	Md AtifQaiyum, DrSoumenDey
3	CI-03	Dissolution of soft magnetic FeSiAl alloy cores from spent printed circuit boards and synthesis of α-Fe2O3 nanoparticles for methylene blue dye degradation	Dinesh Patil , M.B.Sridhara,J.Manjanna
4	CI-04	Synthesis, Structural Design and Effect of Substituents on Acylhydrazones: Evaluation of Cytotoxicity, Cytocompatibility and Hemolytic Activity: Structure-Activity Relationship Using DFT and in silico Molecular Docking Studies	VinodkumarP.Sajjana , PrabhuodeyaraM.Gurubasavaraj
5	CI-05	Synthesis and electrical properties of Nanocrystalline CuTiO3 for fuel cell applications	MubeenHJakati , NaeemakhtarMomin,J.Manjann
6	CO-01	A Unified Radical Sulfonylation-Cyclization of 1,6-Enynes with Sodium Sulfinates: A General Access for the Synthesis of Sulfonylated Benzofurans and its analogues	Arram HarithaKumari , RajuJannapuReddy
7	CO-02	Design, Synthesis, Optimization and In-vivo Validation of New Imidazopyridine Scaffold as Dual hTLR7 and hTLR9 Antagonists	Nirmal Dasa, , PurbitaBandopadhyay, SwarnaliRoy, BishnuPrasadSinha
8	CO-03	Target Based Design Synthesis and Development of Small Molecules for Treatment of Non-Alcoholic Fatty Liver Disease (NAFLD)	SunnyGoon a,c, DipayanSarkar a, SaheliChowdhuri
9	CO-04	A “chemical switch” to convert a TLR7 agonist into an antagonist and structural optimization leading to dual TLR7/9 antagonist relevant to psoriasis model	Dipika Sarkar , DeblinaRaychaudhuri et al
10	CO-05	Development of a chemical biology tool enabling reversible optical control of protein labeling: A promising new direction in photopharmacology	Himadri SekharSarkar TakatoMashita et al
11	CO-06	Design, synthesis, and antimicrobial evaluation of novel 10-undecenoic acid based lipidic triazoles against plant pathogens	Gandhi B,a Greeshma K, Durga PrasadRuvulapalli, ShivaShankerKaki
12	CO-07	Design, synthesis, and antimicrobial evaluation of novel 10-undecenoic acid based lipidic triazoles against plant pathogens	Gandhi B, a Greeshma K, Durga PrasadRuvulapalli, ShivaShankerKakia
13	CO-08	Synthesis of Novel Indolizine Derivatives with Biological Activity	TairabiKhanadal , PramodNPatil,BasavarajPadmashali
14	CO-09	Efficient Synthesis of Functionalized pyrrolo[1,2-a]quinolines and their biological profile	PramodNPatil , TairabiKhanadal,BasavarajPadmashali
15	CO-10	Biodegradable-Biocompatible Renewable Amino Acid Derived Polyhydroxyurethanes	BantumelliPrasannatha, Billa NarasimhaRao, Chiranjeevi Padala, et al
16	CO-11	Additive-Free Efficient and Regioselective Construction of Functionalised Isoxazolines from Chloro-Oxime and Boc-Anhydride	RaghuramaiahMandadapu, Mangala Phadte
17	CO-12	Hydrogen Bond Assisted Reactivity of Ylideneketonitriles with 1°Amines: A Chemo Selective Synthesis of 2-Pyridone and 2-Aminopyridine Derivatives.	DamodarKaruturi, Mahesh Kalbagh PrashanthaKamath VenunathHapse et al

18	CO-13	Reagent-Based Diversity-Oriented Synthesis Approach to Fused 1,4-Dihydropyrimidines, Dihydroisoxazolines, 2,3-Dihydrofurans, Substituted 4H-pyran and Cyclohexane-1,3-diones from 2-(2,2,2-trifluoro-1-aryl-ethylidene)cyclohexane-1,3-diones as Scaffold	Mahesh RKalbagh MeguovilieSachu DamodarKaruturi, et al
19	CO-14	Dual Metallation in a Two-Dimensional Covalent Organic Framework for Photocatalytic C–N Cross-Coupling Reactions	AyanJati, a Kaushik Dey, MaryamNurhuda, c Matthew A.Addicoat, RahulBanerjee
20	CO-15	Enantioselective C–H bond functionalization of aromatic ketones with 1,6-enynes via photoredox/cobalt dual catalysis	KakoliMaji , PradipRamdasThorve,PramodRai,BiplabMaji
21	CO-16	A Biogenic Cu2O/Cu Nanocatalyst for Sonogashira and Chan-Lam Cross Coupling	Dr. UtpalBora
22	CO-17	[DDQM][HSO4] Ionic liquid as a Bifunctional Catalyst for the Synthesis of 2- Phenylquinazolin-4(3H)-ones under Microwave Irradiation	DigantaSarma
23	CO-18	Mn(OAC)3-Promoted Cycloannulative-Sulfonyl Migration of (E)-β-Iodovinyl Sulfones with 2-(arylethynyl)phenols for the Synthesis of Chromene Derivatives.	Jangam JagadeshKumar, RajuJannapuReddy
24	CO-19	Pd-Catalyzed Interrupted Benzofuran-Vinylation of 2-(Arylethynyl)-phenols/anilines with (E)-β-Iodovinyl Sulfones to Access 2,3-Disubstituted	NunavathSharadha, RajuJannapuReddy
25	CP-01	Insights into the Cren7 mediated structural stabilization of DNA in Crenarchaea	Geethika K , AngelRoseThomas,T.Srividya Vyjayanthi,SoumitS.Mandal
26	CP-02	A Minimum Energy Path Exploration of Chemical Reaction Mechanisms Through the FFoRCE Method	Dudam Praveen , K.V.JovanJose
27	CP-03	A New Recurrent Neural Network (RNN)-Based Method for Designing Onsite Druglikeness Molecules	SrinivasaraoMande , K.V.JovanJose
28	CP-04	A Rapid Deep-Learning Algorithm to Predict Systematic Growth Patterns of Atomic Clusters	Sridatri Nandy , K.V.JovanJose
29	CP-05	Feature Vector Driven Global Optimization of Molecular Cluster	Gunjan RajendraRamteke , K.V.JovanJose
30	CP-06	Base-triggerable lauryl sarcosinate-dodecyl sulfate catanionic liposomes. Structure, biophysical characterization, and drug entrapment/release studies	Chinapaka Ravindar , S.ThirupathiReddy,DokkuSivaramakrishna,DeepthiPriyankaDamera, Musti J.Swamy
31	CP-07	Purification, Biophysical Characterization, Lipid Binding Properties and Chaperone-like Activity of The Major Donkey Seminal Plasma Protein, DSP-1	Sk Alim, SudheerK.Cheppali,MustiJ.Swamy
32	CP-08	Modeling Covid-19 transmission dynamics using diffusion based hybrid model	H. Rahaman , D.Barik
33	CP-09	Phase Behaviour and Supramolecular Organization of O-acyl-β-alaninols and Characterization of Equimolar Catanionic Complex	Suman KumarChoudhury , D.Shivaramakrishna,M.J.Swamy
34	CP-10	De novo design of peptides as hydrolase model	Kalpana Kumari , Vibin Ramakrishnan
35	CP-11	Effect Of Macromolecular Crowding On Lectin-Carbohydrate Interaction	Sneha Banerjee , MustiJ.Swamy

36	CP-12	Study of Transport Properties of a Driven Brownian Ratchet in a Rough Periodic Potential	ArchanaG.R., DebashisBarik
37	CP-13	Micromechanically-Powered Rolling Locomotion of Twisted-Crystal Optical-Waveguide-Cavity as a Mobile Light Polarization Rotor	Mehdi Rohullah , VuppuVinayPradeep, et al
38	CP-14	Micromanufacturing of Geometrically- and Dimensionally-Precise Molecular Single-Crystal Photonic Micro-Resonators via Focused Ion Beam Milling	VuppuVinayPradeep , RajaduraiChandrasekar
39	CP-15	A Generalized Langevin Equation Approach for Barrier Crossing Dynamics in Conformational Transitions of Proteins	Vishal Singh , ParbatiBiswas
40	CP-16	The importance of d-metal Ion in determining the Fate of NIR emission from LnIII ions: Ligand Influence Versus Electronic Configuration	SatyenSaha, Abhineet Verma
41	CP-17	Ferrous ion - Carboxylate coordination-based crosslinking in XNBR	SurajW.Wajge , ChayanDas
42	CP-18	Regulating the 'Locally excited states' to facilitate spin-flip processes in efficient 'acceptor free' TADF emitters	Madalasa Mondal, RatheeshKVijayaraghavan
43	CP-19	Organic Spiral waveguides for Photonic Circuit Applications	AvuluVinodKumar, RajaduariChandrasekar
44	CP-20	ANTI-INFLAMMATORY, ANTI-CANDIDAL ACTIVITY AND INSILICO PREDICTION OF PHARMACOKINETIC PROPERTIES OF NARDOSTACHYS JATAMANSI	Beena Rachotimath, BasavarajPadmashali
Life Science / Bioscience			
45	LA-01	Knockdown of Sperm associated antigen 11 A (Spag11a) enhances the susceptibility of epididymis and prostate to chemically induced carcinogenesis	Aisha Jamil, SureshYenugu
46	LA-02	Bioaccumulation of heavy metals in different fishes of Gangetic river system in Varanasi and its health risk assessment	Gautam GeetaJ. aBhargawiMishra, VijayNathMishra
47	LA-03	Chromatin Association Dynamics Of Wip1	VaishnaviVaradarajan a, BJRao
48	LA-04	Mechanistic Insights on Mitochondrial Transport Defects in P301L Neurons	AnusrutiSabui a, MitaliBiswas, PramodRajaramSomvanshi, PrasadTammineni
49	LA-05	Role of hydrophobic hydration on the cold-induced denaturation of protein	SanjayKumar , N.PrakashPrabhu
50	LBC-01	Restoration of Mitochondrial Fusion Reduces Ovarian Cancer Progression by modulating AMPK/mTOR/ERK axis	Rahail Ashraf , SanjayKumar
51	LBC-02	Refolding and Biophysical characterization of leptospiral complementRegulator-acquiring protein A (LcpA)	Umate NachiketShankar , PankajKumar,Mohd.Akif
52	LBC-03	Regulation of protein homeostasis via SUMOylation in Candida glabrata	Dipika Gupta , RenuShukla,KrishnaveniMishra
53	LBC-04	Hydroxynitrile Lyase Employed Asymmetrization of Environmentally Challenging Aliphatic Aldehydes Into Value Added Chiral β-Nitroalcohols	GhufranaAbdusSami , SantoshKumarPadhi
54	LBC-05	Podocyte Derived TNF-α Mediates Monocyte Differentiation and Contributes to Glomerular Injury	Sumathi RaviRaj, RajkishoreNishad,AtreyaS.VPaturi,AnilKumarPasupulati

55	LBC-06	Beta N-acetyl-hexosaminidase from Snake Gourd: Purification and Biochemical Characterization	KavyashreeSakharayapatnaRanganatha , NadimpalliSivaKumar
56	LBC-07	Proteomic study of purified alpha-mannosidase from bitter gourd seeds: understanding possible potential application in plant glycosylation	ShivaranjaniVutharadhi , SivaKumarNadimpalli
57	LBC-08	Characterization of Lysosomal Enzymes From Hydra: An Attempt to Understand the Role of Lysosomal Enzymes During Hydra Regeneration	Lakshmi SurekhaKrishnapati , PoornaManasaBhamidimarri,SivaKumarNadimpalli
58	LBC-09	Characterization of cyanobacterial isocitrate dehydrogenase enzyme under the influence of citrate	BalakyntiewshishaLyngdohKynshi, MayashreeB.Syiem
59	LBC-10	Zn Tolerance Exhibited By Carbon And Nitrogen Fixation Machinery Of A Cyanobacterium Isolated From Coal Mine Wastewater: A Potential Zn Bioremediator	Sukjailin Ryntathiang , MeguovilieSachu,MayashreeB.Syiem
60	LBC-11	Toxicity of the herbicide 2,4-D on cyanobacterial CO2 and N2 fixations is mediated via molecular interaction with some vital proteins	MeguovilieSachu , MayashreeB.Syiem
61	LBC-12	Enzymatic And Non-Enzymatic Antioxidant Response To Cd2+ Stress In A Cyanobacterium	Lanakadaphi RangatChullai , MeguovilieSachu,MayashreeB.Syiem
62	LB-01	Comparative Analysis of Relative Efficacy of Synthetic and Natural Drugs in Endometriosis Through Computational Approach	Indra Singha, RanjitShaw PrithaSahab , KrishnaKumarOjhac , RadhaChaube
63	LB-02	Metastable Intermediates During Fibril Formation of Mutant Forms α-Synuclein and Their Relation with Fibril Stability and Disease Progression	G. Priyanka , ArchiSaurabh,N.PrakashPrabhu
64	LB-03	An in-silico investigation on the role of Oleuropein aglycone on the aggregation propensity of α-Synuclein	PriyankaBorah, VenkataSatishKumarMattaparthi
65	LB-04	Effect of pY39 Post-translational modification on the interactions between α-Synuclein and Lipid Membrane	DorothyDas , VenkataSatishKumarMattaparthi
66	LB-05	Immunoinformatics Analysis of Antigenic Epitopes and Designing of aMulti-epitope Peptide Vaccine from Putative Nitro-reductases of Multi-epitope Peptide Vaccine from Putative Nitro-reductases of	Mohd Shiraz , SurabhiLata,PankajKumar,UmateNachiketShankar,Mohd.Akif,
67	LB-06	CHOLAR: Characterization of lncRNA from raw reads	Haneesh Jindal , AnubhaDey,ManjariKiran
68	LB-07	Screening Of Disease Candidates in Hepatocellular Carcinoma by Gene Ontology inferred through a Protein-Protein Interaction Graph	SatyaKiranVeera a, V.SivaRanjani b, S.B.Rao c, PManimaran d
69	LB-08	Effect of mutations on the RBD of spike protein on its interaction with the ACE2 receptor of human host	Chainee Das , VenkataSatishKumarMattaparthi
70	LB-09	Microsatellite Based Molecular Diversity Among Selected Segregants Derived from Mahateora X Biol-212 and Berhampore Local X Mahateora In Grasspea	Pratik Saha , SayaniBandyopadhyay,RaghunathSadhukhan,Md.NasimAli
71	LB-10	Assessing Biochemical Descriptors Affecting Fibre Quality of Tossa Jute	SayaniBandyopadhyay, Pratik Saha et al

72	LB-11	Differential Effect Of Dihydric Alcohols On Thermo- And Cryo-Stability Of Apo-myoglobin	Subhasree Ghosh , N.PrakashPrabhu
73	LB-12	Characterization of leishmanial arginyl synthetase for the development of novel therapeutics	FouziaNasim , InsafAhmedQureshi
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75	LB-14	Utilization Of Tannery Solid Waste For Enzyme Induced Carbonate Precipitation Process	ParthasarathyBaskaranSujiritha , VijanLalVikash et al
76	LB-15	Preferential Anti-Apoptotic and Imaging Potentials of Dual Acting Oleyl Chitosan Coated Quercetin Nanocomposite:In Vitro Perspectives	ThiagarajanHemalatha , NumbiRamuduKamini et al
77	LB-16	Fleshings Extract As An Alternate Nitrogen Source For Production Of Industrial Enzymes	Mannankatti Ramkumar , PuhazhendiPuhazhselvan et al
78	LB-17	Preparation and Characterization of Bioactive Composite Material for Tissue Regeneration Application	VinayagamurthyKalaiselvi , VijanLalVikash et al
79	LB-18	Genetically Encoded Fluorescent Protein as a Sensor for Cancer Theranostics	Suresh Prem, PachaiyappanMohandass et al
80	LB-19	Enzyme mediated Biofuel production using nanomaterials	ShubhashreeBarik, Dr.MoumitaSaharay
81	LB-20	Role of dengue virus capsid protein on mitochondrial homeostasis	Preeti Chauhan , Dr.M.Vekataramana
82	LB-21	Designing Inhibitors Against Cathepsin Targeting HIV-1 Viral Infection	Sarita Swain, SatyajitMukhopadhyay,Anand K.Kondapi
83	LB-22	Importance of Mitochondrial Electron Transport Chain in Sustaining Brassinosteroid Enhanced Photosynthesis in Arabidopsis thaliana Mesophyll Protoplasts	Kandarpa Mahati , KolliparaPadmasree
84	LB-23	Structural and functional attributes of Microrchidia family of chromatin remodelers	Chutani,Namita , Singh,A.K.,Kadumuri,R.V.,Chavali,S.,Pakala,S.B.
85	LB-24	iMCLAPE: A multi-class classifier for epistatic interaction	AnubhaDey , ManjariKiran
86	LB-25	AN ORIGINAL GREEN ENGINEERED SILVER NANOPARTICLES OF SPONDIAS PINNATA LEAVES & ITS APPICATIONS – AN ECO-FRIENDLY APPROACH	V ArunReddy , DrTSowmya, VNarmada, DrESujatha c
87	MS-01	A Tendon Substitute For Orthopaedic Reconstructive Surgery - Acellular Tissue Matrix With Phyto-extract of Cuminium cyminium	NivedithaK, ResmiRajalekshmi, RoyJosephb, AnnieAbraham, AnnieJohn
88	MS-02	Treatment of Ischemic Brain Injury with optimized mesenchymal stem cells and their secretome through the intermittent hypoxic physiological environments	Subathra Radhakrishnana,, CatherineAnnMartin , SubbarayaNarayanaKalkura ,
89	MS-03	Mobile Health (mHealth) Technology for Non-Communicable Disease Services: Enhancing the Performance of Community Health Workers.	ShanmugaapriyaSellathamby , MohamedRel
90	MS-04	Streptozotocin-induced Animal Model as a model to study Diabetic Complications	J.Ram MukkaRaju , AtharHSiddiqui

91	MS-05	A gelatin based 3D matrix with adipose derived stem cells and exclusive ascorbic acid signalling emerged as a novel neural tissue engineering construct	Catherine AnnMartin , SubathraRadhakrishnan , et al
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93	MS-07	Revisiting the Effects of Ocimum sanctum Shade-Dried Leaves Powder on Body Length and Wing Length of Drosophila melanogaster	SanjaySaraswati , SudiptaSaraswati
94	MS-08	New approach for Dry Eye Diagnosis: using Tear Film Lipid Layer Thickness and Meibomian Gland Loss	SandhyaEsam , GeetaK.Vemuganti , Dr.Nagaraju.Konda , Dr.SwatiSingh
95	MS-09	Dimensions of access to mobile based tobacco cessation services among Municipal waste workers in Hyderabad, Telangana.	Laxmi RamithaKoneti , C.T.Anitha
96	MS-10	Internalization of exosomes in Retinoblastoma tumor progression	AttemJyothi , Dr.GeetaKVemuganti
97	MS-11	Ocular Surface Analyser as an emerging diagnostic modality for Dry Eye Disease and Meibomian Gland Dysfunction	Dr. YashAgarwal , Dr.GautamSinghParmar
98	MS-12	Application of Technology for Diagnostics Devices and Tools for Life Sciences	AnshuSarje , AnjaliSingh,VamsidharNayak
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100	MS-14	In-vitro model to study Clostridium sporogenes interaction with the gut epithelial cells.	MoonMoonBaglari , Dr.AMayaNandkumar et al
101	MS-15	Screening the Perception of Quality of Life among Parents of Retinoblastoma(Rb) Survivours of 2-5 years of age group in Tertiary Care Eye Hospital in Hyderabad: A Crossectional Study	Krishnasri Padamandala , Rolika Bansal, et al
102	MS-16	Mobile Based Health Interventions for Health Promotion among adults with Non-alcoholic Fatty Liver Disease.	Vemuganti
103	MS-17	*Analysis of Wing Expansion Behaviour in Rice Grasshopper Hieroglyphus banian*	Kamala Soren , SudiptaSaraswati
104	MS-18	Prevention and Control of Workplace Violence Among Health Care Professionals: Use of Technology	Gadapati Suresh , Prof.ShamannaBR
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106	LP-02	Functional elucidation of a Phosphorus starvation inducible Respiratory burst oxidase SlRbohH gene in the reprogramming of root system architecture.	Akash , RahulKumar
107	LP-03	Genetic polymorphism revealed by RAPD and ISSR markers in different accessions of Pterocarpus santalinus L.	PriyankaS. , PattanaikS., PadmajaG.
108	LP-04	Silencing of a ripening-associated UDP-glycosyltransferase SlUGT1 gene leads to inhibited ripening in tomato fruits	Stuti Kujur , RahulKumar
109	LP-05	Cryo-milled nano-DAP for enhanced growth of plants	Naorem RonaldReaganSingha, SreedharaSudhakaraSarma et al

110	LP-06	Insights into the chitin-active repertoire of Paenibacillus sp. LS1 and its implication in chitooligosaccharides production	Saumashish Mukherjee , JogiMadhuprakash
111	LP-07	Understanding[RK1] the genetic regulatory mechanism controlling PUE and PAE upon mycorrhizal colonization in tomato	Rajatsrivastava, GayathriAG,Rahulkumar
112	LP-08	Heterologous expression of Melon Necrotic Spot Virus recombinant Coat Protein for invitro assembly studies	SwatiVerma , Dr.GopinathKodetham
113	LP-09	Insights into the chitinolytic machinery of Streptomyces sp. UH6	Lal Duhsaki , JogiMadhuprakash
114	LP-10	Molecular cloning and characterization of a new chitinase from Flavobacterium johnsoniae	VandhanaTM , JogiMadhuprakash
115	LP-11	Understanding PGPR Mediated Salt Stress Tolerance In Tomato Plants	KoyelBardhan , JogiMadhuprakash
116	LP-12	Azolla plants attenuate Aluminium toxicity in Rice plants, and escalate their development under acidic soil conditions	Karishma Agarwal , MarkkandanGanesan
117	LP-13	Tolerance of cotton to Aluminum is regulated by GhMATE1 and overexpression of GhMATE1 intensifies acid soil tolerance of Arabidopsis	AtreyeeSurRoyChowdhury , MarkkandanGanesan