



SCHOOL OF
BASIC & APPLIED SCIENCES

Handbook of

School of Basic & Applied Sciences

In Pursuit of Excellence in

Education,

Research,

Extension activities



Dayananda Sagar
University Bengaluru

DSU live the dream



www.dsu.edu.in



SCHOOL OF BASIC & APPLIED SCIENCES

- ❖ School of Basic and Applied Sciences **persuades holistic development** of students to their full potential.
- ❖ It provides a platform for the students to choose their career either in academia or an industry
- ❖ The school is intended to offer **thorough training, in various aspects** of basic and applied sciences that are essential to address the contemporary scenarios.
- ❖ In accordance with DSU's vision, the school also encourages budding **'researchers for innovation and startups'**.



VISION

To excel in the field of innovation, teaching and research in the field of basic and applied sciences encompassing physical, chemical, mathematical and biological sciences and to forge connection between academia and industry

MISSION

To foster creativity and impart research aptitude to produce scholarly individuals inclined towards innovation in the field of basic and applied sciences

The aim of the programme is enable the students compete professionally at local, national and global levels. The knowledge that the students gather will help them in confronting all challenges necessary to find a suitable carrier in science at both academic and industrial levels.



Programs offered in SBAS

Sl. No.	Course	Subjects Offered
1	BSc	Biotechnology, Biochemistry, Genetics
		Microbiology, Biochemistry, Genetics
		Biotechnology, Chemistry, Microbiology BSc Honors (4 years) - NEP
2	MSc	Biotechnology
		Microbiology
		Biochemistry Human Genetics
3	PhD	Biotechnology, Microbiology, Biochemistry, Genetics, Chemistry

Curriculum Enrichment

SBAS integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum with the following courses:

- Biosafety, Bioethics, and IPR
- Research Methodology
- Environment and Public Health
- Agricultural and Environmental Microbiology

SBAS assesses the learning levels of the students and organises special programmes for advanced learners and slow learners

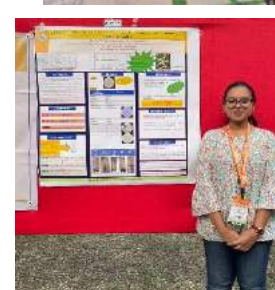
FAST LEARNERS	SLOW LEARNERS
Extra learning material	Remedial extra classes
Journal articles for knowledge enhancement	Make up tests
Mini projects	Individualized learning materials
Participation in conferences, workshops, technical competitions & events	Target specific worksheets
Guided visits to industries to involve in personal discussions	Inspirational talks & lectures
	Exposing to video and audio e-learning materials
	Detailing with more visualization of concepts

MINI-Project Title	Duration
Isolation, optimization and characterization of L-asparaginase from bacteria	August to November 2022
Isolation and characterization of Lipase from bacteria	July to November 2022
Bioconversion of eugenol and ferulic acid to Vanillin using <i>Aspergillus Niger</i>	August to November 2022



Detailing with more visualization of concepts

Students had spent one day in the labs of Centre for Human Genetics (CHG) Bangalore



Students presenting research paper in 108th Indian Science Congress, Nagpur

OUR AIM

Student centric methods

SBAS ensures empowerment through education that includes teaching and learning strategies to develop the skills and abilities of students. This approach involves student participation, learning, and leadership.

Experiential learning, participative learning & problem solving methodologies are used for enhancing learning experiences. We provide skill development hands on workshops, conduct science exhibition, science fests, take for industrial visits besides visit to national research laboratories, etc.




Student Centric Methods



- Skill development hands on workshops
- Seminar -Training
- Training on poster preparation and presentation
- Platform for various exhibitions and competitions
- Training to write book chapters and review articles
- Mini projects for fast learners

Student Clubs of SBAS

Through student club activities, we empower the students to acquire leadership, communication/public speaking and management skills; improve their problem solving ability; gain knowledge in various fields; develop vocational skills; and learn to work as part of a team.

Club Name	Department	Activity
Biochimica 	Biochemistry (21.09.22); organized Rasayna in collaboration with Dept. of Chemistry	Commemorated National Food Day Posters, Quiz, Collage etc.
Microbe-Club Siella 	Microfiesta (31.05.22) Microbiology (19.10.22); organized Microzest	Poster presentation; oral presentation; guest talks
Watson & Crick 	Biotechnology (06.04.22) Organized Fervere	Poster presentation; Model Exhibition; guest talks

Support to students

Hands on workshop

SBAS Skill development activities for UG/PG students

Skill development program	Title/Domain	Date	Duration
Genomics	Genomics	2017	2 days
CRISPR	CRISPR/CAS gene editing - potential tools in therapy and diagnostics	25 th to 29 th Jan 2022	5 days
Gene detection	Molecular detection of a target gene by PCR	30 th December 2022 to 1 st Jan 2023	3 days
Mice model	In vivo mice model- Handling, methodologies and guidelines	18 th June to 19 th June 2022	2 days
Animal cell culture	Animal cell culture and its role in R& D with mini project "Primary cell culture from caudal fin explants of Zebra fish"	19 th to 23 rd September 2022	6 days
Bioinformatics	Insilco software and tools	5 th to 10 th September 2022	6 days
Animal Handling	Mice handling and dissection	30 th to 31 st December 2022	2 days
Microbiology	Basic Microbiology Techniques	1 st to 4 th August 2022	4 days
Biotechniques	Biotechniques in Industry	14 th November 2022	1 day



Teaching-Learning Process



Hands on Workshop
"Understanding the Methodologies and Basics of Research with In vivo Mice model"



3 DAYS -HANDS on WORKSHOP on
"Basic Molecular Techniques"-: "Molecular detection of beta lactam antibiotic resistance gene in bacteria".



Hands on workshop- Molecular detection of gene in bacteria

Student Centric Methods

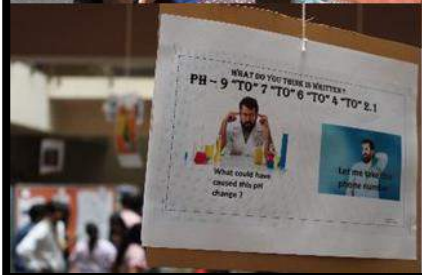
Subject THEME/Title	
Model Exhibition & Poster session	Molecular genetics
Model exhibition	Ingredients & Rules of Central dogma- Molecular Biology
Science Fair	Wonders of Biotechnology
Fest	Rasayana--- Biochemistry
Fest	Microfiesta--- Microbiology
Poster presentation on research article on industrial biotechnology	FERVERE-I--- Industrial Biotechnology
Poster presentation on research article on industrial biotechnology	FERVERE-II-Industrial Biotechnology
Model Exhibition	Cells and Signal Transduction- Cell Biology





Science Exhibition: "Wonders of Biotechnology"

(Vaccine, Stem cells & Regenerative medicine, CRISPR, Oral Insulin)



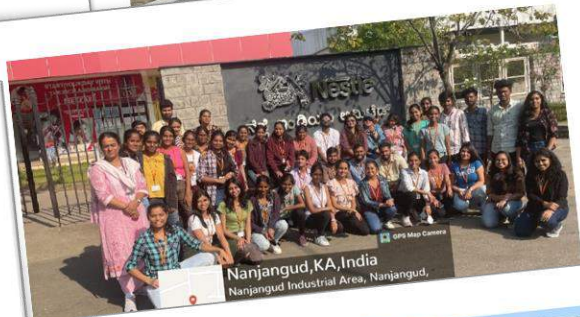
Teaching-Learning Process



Industrial Visits UG & PG students

Nandhini Dairy Visit	10/11/2021-12/11/2022	3 Days
Sula Wineryard Visit	10/11/2021-12/11/2022	3 Days
Bamul Cheese Factory, Kanakapura	30/09/2022	1 Day
Ziest Beer, Bangalore	30/09/2022	1 day
Nestle, Nanjangud, Mysore	18/2/2023	1 day
Merck Pvt Ltd	10/8/2023	1 day

Research Centre Visit	Centre for Human Genetics	2 nd May 2022	1 day
Research Centre Visit	Baxter global research centre at Syngene- Biocon park	12 th January 2023	1 day



Conferences organized by SBAS



Year	Conference theme	National/ International
2018	Advances and Innovations in Biotechnology Multidisciplinary Approaches to Food, Health, Environmental and Energy Issues	National
2019	Frontier Areas in Chemical Biology	National
2020	Advances in plant Biotechnology -2020: Prof A. R. Mehta memorial lecture award Armour -I	National
2020	Translational Research Continuum- TRC 2020	International e-Conference
2021	Impact of Multipronged Approaches of Biotechnology on Mankind	National e-Conference
2023	National conference on contextual approaches in applied microbiology (NCAAM 2023)	National



Student Performance & Learning Outcomes

Student Performance & Learning Outcomes

- Higher studies
- Internship
- Awards & Recognitions
- Placement

In SBAS, we make our students
Globally Competent
by giving a multi-dimensional construct
including a combination of knowledge, skills,
attitudes and values

This multidimensional construct helps them to acquire admissions for higher studies/ internships in other renowned national & international organizations, receive awards in national & international conferences, get placed in reputed national & multinational companies and so on.

Competitive Exam	Qualified
NET	2
GATE	4
GRE	4
JAM	6
IELTS	6
TOEFL	1
State Govt. Exam	1
Others	9

Student Performance & Learning Outcomes

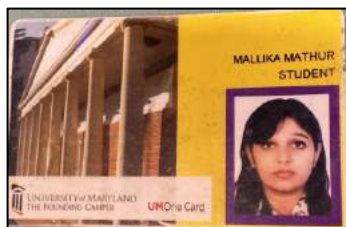


Higher Studies—National & International

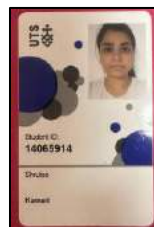
SBAS students		National/International Institution	
Mayur Bajaj	BSc	IISER, Tirupati	Integrated PhD
Sunil Kumar	BSc	IIT, Roorkee	MSc
Himabindu P	BSc	IBAB	MSc
Kartik R S	BSc	TIFR	MSc
Srashti Birla	BSc	JNCASR-Bangalore	MSc
Mallika	BSc	University of Baltimore	MSc
Shrutee Kumari	BSc	University of Technology, Sydney (UTS)	MSc
Vanyaa Surana	BSc	University of Manchester	MSc
Vyshnavy Srinivasan	BSc	University of Leeds, UK	MSc
Baishali Chakraborty	BSc	Symbiosis School of Biological Sciences, Pune	MSc
Ayushi	BSc	Long Island University	MSc
Tejaswini S	BSc	University of Chester	MSC
Pooja Javalagi	BSc	University of Manchester	MSc
Neetu M	BSc	University of Innovation	MSc
Manu Manjunath Kanti	MSc	Medical University of Graz, Graz, Austria	PhD
Rashmi	MSc	University of Glasgow	PhD



Sunil Kumar
IIT



Mallika Mathur
USA



Shrutee Kumari
Australia



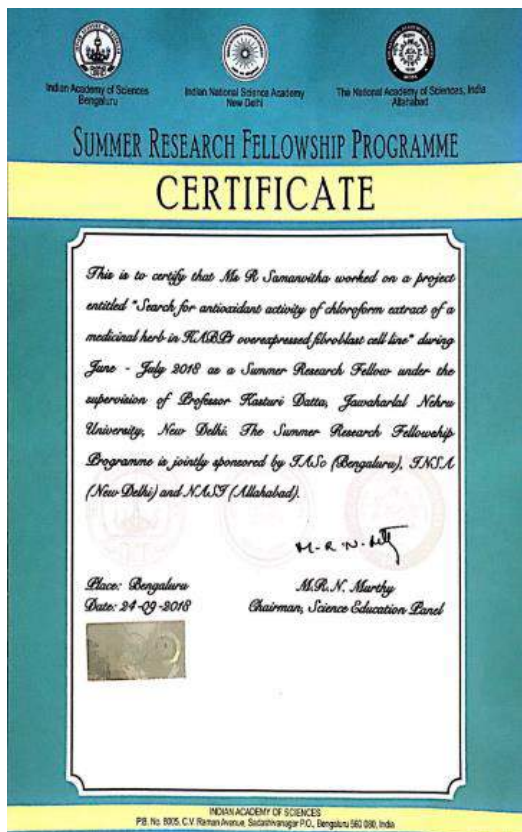
Manu Manjunath Kanti
Austria



Student Performance &
Learning Outcomes

INTERNSHIP

SBAS students- selected for INSA fellowship Summer Research Fellowship from Science Academics



2022

SBAS students have been awarded research fellowship (INSA- IASc- NASI Summer Research Fellowship) from Indian Science National Academy for summer internship.

Miss. R Sai Keerthana, MSc student of Department of Biotechnology got selected on 12th April 2022 and successfully completed two months period of internship in Delhi University (1st August to 30th September 2022).

2018

Miss. Samanvitha, BSc student was awarded the summer research fellowship and completed the internship in Jawaharlal Nehru University (JNU), New Delhi in 2018- with project "Search for antioxidant activity of chloroform extract of a medicinal herb in HABP overexpressed fibroblast cell line"



Internship Project Title	Organisation/Company	Place
QC - Insulin Department	Biocon Ltd, Hosur Road, Electronic City	Bangalore
Biochemical Analysis of Desiccation Tolerance in Eragrostiella brachyphylla	Tumkur University	Tumkur
R & D	Himalaya Drug Company	Bangalore
Animal Cell Culture Recombinant DNA Technology	Internal Stemcell Services Ltd., Shreedhar Bhat's Laboratory	Bangalore
Estimation of PHC & PAH contents from edible clam and tar ball collected from Caranzalem beach Goa	CSIR - National Institute of Oceanography	Goa
Study on PIA1/PIA2 Glycoprotein Polymorphism in Myocardial Infraction	NTHRYS Biotech Labs	Hyderabad
Heightened Circulating levels of Antimicrobial Peptides in Strongyloides Stercoralis infection and Reversal Following Anthelmintic treatment	National Institute of Health - International Centre for Excellence in Research	Chennai
Pathology	BGS Global Institute of Medical Science	Bangalore
Formation of Biofuels	Karnataka State Council for Science and Technology, IISC, GKVK Campus, UAS	Bangalore
Animal Cell Culture	Internal Stem cell Services Ltd.,	Bangalore
Characterizing Chronotype and sleep pattern of individuals across India	(NSU) JNCASR	Bangalore
Pathology characteristics	BGS Global Institute of Medical Science	Bangalore
Purification & Biophysical Characterisation of Substrate specificity of vacuolar soluble protein from T. brucei (IAS/INSA Approved candidate)	Internal Centre for Genetic Engineering and Biotechnology (ICGEB)	New Delhi
Role of diet manipulation in the regulation of lifespan in fruit flies drosophila melanogaster	Internal Centre for Genetic Engineering and Biotechnology (ICGEB) Indian Academy of Sciences,	Bangalore

Student Performance & Learning Outcomes



PhDs awarded from SBAS



S. No	Name of the PhD scholar	Name of the guide/s	Title of the thesis	Year of registration	Year of PhD awarded
1	Shwetha V	Dr. Sunil S More Dr. Gautham S.A	Preparation and cocktails of extracts from medicinal plants as first aid formulation for snakebites	2016-17	2020
2	Spoothi B.C.	Dr. Sunil S More Dr. Arpan Maity	Investigations on intestinal neuropeptides as anti-colitogenic agents in ulcerative colitis: implications on mitochondrial function for the maintenance of colon epithelial tract .	2016-17	2020
3	Pankaj Satapathy	Dr. Farhan Zameer Dr. Sunil S More	Phytobioactive Intervention on Diabetic Neuropathy and Microbiome Dysfunction in Drosophila	2017-18	2021
4	Sumalatha Rani Talapathi	Dr. Sunil S More Dr. Narasimha Rao	Crystal structure determination and biophysical characterization of cyclin dependent kinase 2 with small molecule inhibitors for structure guided drug design	2017-18	2022
5	Anirudh Gururaj Patil	Dr. Farhan Zameer Dr. Sunil S More	Phytochemical interventions in Lithiatic Drosophila model and its related microbiome	2018-19	2022
6	Prakruthi	Dr. Sunil S More, Prof. V Krishna Murthy	In vitro and in vivo assessment of fabricated protein polysaccharide scaffolds for enhanced bone regeneration	2018-19	2022
7	Hari Priya	Dr. Sunil S More	Assessment of Anti-Atherosclerotic Activity from Plant Juices of Ayurvedic Reputes in Cell Lines and Mice Model	2018-19	2022
8	Sharad Singh	Dr. Sunil S More	Dominance of KH-Type Splicing Regulatory Protein in neuroinflammation mediated through manganese-induced neurotoxicity	2017-18	2023

Patents

One patent filed on "methods of fabricating a protein-polysaccharide scaffolds" from SBAS

Controller General of Patents, Designs & Trade Marks



सत्यमेव जयते
G.A.R.6
[See Rule 22(1)]
RECEIPT



Docket No 26887

Date/Time 2023/03/16 07:15:25

Sr. No.	Ref. No./Application No.	App. Number	Amount Paid	C.B.R. No.	Form Name	Fee Payment	Remarks
1	202341017601	TEMP/E-1/19677/2023-CHE	1600	11796	FORM 1	Full	METHOD OF FABRICATING A PROTEIN-POLYSACCHARIDE SCAFFOLD
2	E-106/1550/2023/CHE	202341017601	0	-1	FORM28	Full	

TransactionID	Payment Mode	Challan Identification Number	Amount Paid	Head of A/C No
N-0001116497	Online Bank Transfer	1603230000648	1600.00	1475001020000001

Student Performance & Learning Outcomes



National Fellowships



Government of India
Ministry of Science & Technology

Department of Science & Technology

Innovation in Science Pursuit for Inspired Research (INSPIRE)



INSPIRE Awardee- PhD scholars



2020
Ms. Manjushree H. K



2022
Ms. Harshitha N



2023
Ms. Adrija Saha



Conferences Awards

Best paper
awards= 28



NIMHANS



IISc



Mysore University



IISc



Environmental & Energy Issues (AEI)
Jointly Organized by
Applied Sciences, Dayananda Sagar College
of Engineering, Dayananda Sagar College
of Technology (India)
&
Association of Biotechnologists (India)



AMI



AMI



IISc

School of Basic & Applied Sciences

Placement of Students



2020



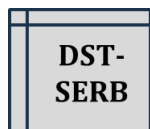
2021



2022



RESEARCH, INNOVATION & EXTENSION



DSU has been providing financial assistance to the faculty members in form of SEED grants that has aided the establishment of research in SBAS.

SBAS has received external funding projects close to 2 crores from Govt agencies (DST-SERB, VGST, KSTePS etc.) for taking forward research in diverse domains of life sciences.

SBAS research work has been published in peer reviewed international journals including Q1 journals, has received awards in various national/international conferences, published patent, etc.



Sl. No.	TITLE OF THE PROPOSAL	NAME OF THE PRINCIPAL INVESTIGATOR
1	Development of carotenoid rich Artemia salina as an Aqua-feed for the Aquaculture sector	Dr. Shristi Ram
2	Standardization and Validation of Fluorescent Polarization Assay (FPA) for the diagnosis of human brucellosis	Dr. Triveni K
3	Development of alternative therapeutic strategies to combat multi drug resistant (MDR) bacterial pathogens	Dr Susweta Das
4	Microbial Production of PUFA	Dr. Archana S. Rao
5	Modulating the phage-bacteria quorum: A novel biocontrol of bacterial plant diseases	Ajay Nair
6	ZnO-curcumin nanocomposite loaded hybrid fish collagen thin film for chronic wound healing	Dr. Sangeetha Gowda K R

Major research projects sponsored by Government agencies



विज्ञान एवं प्रौद्योगिकी विभाग
DEPARTMENT OF
SCIENCE & TECHNOLOGY



Government of Karnataka
VISION GROUP ON SCIENCE AND TECHNOLOGY
Department of Information Technology, Biotechnology and Science and Technology

S.No	Name of the Project	Name of the PI/Co-PI	Year of Award	Funding Agency	Duration of the project	Funds provided (In Lakh)
1	Isolation of therapeutic cryptic peptides involved in blood pressure regulation from marine industry waste	Dr. Pradipta Banerjee	2015	VGST, Govt. of Karnataka	3 Years	30.00
2	Purification and preparation of nano cocktail of active principles of folk medicinal plants as first-aid formulation for snake bite victims	Dr. Sunil More Dr. Gautham S A	2016	DST-SERB	3 years	28.53
3	Investigations on intestinal neuropeptides as anticarcinogenic agents on mitochondrial function for the maintenance of colon epithelial tract in ulcerative colitis.	Dr. Sunil S More Dr. Gautham S A Dr. Arpan Kumar Maiti	2017	DST-SERB	3 years	39.14
4	Isolation of Matricryptic peptides from marine industry waste involved in nanocrystal hydroxyapatite and fabrication of a peptide based osteointegrative implant coating.	Dr. Pradipta Banerjee	2017	DST-SERB	3 years	34.4
5	Immobilized microbial consortium for pesticide bioremediation in Ginger cultivated soils of Karnataka	Dr. Shobha K Jayanna	2017	KSTePS, Govt. of Karnataka	2 years	20.00
6	Separation of Biobutanol via Scalable Approach of Pervaporation: To be a Viable biofuel for future.	Dr. Santosh Choudhari	2019	DST-SERB	3 years	40.90
7	Standardization and validation of fluorescent polarization assay for the diagnosis of brucellosis	Dr. Triveni K Dr. Susweta D M	2022	VGST, Govt. of Karnataka	1 year	3.00

Students research projects (Funded)



KSCST

Government of Karnataka



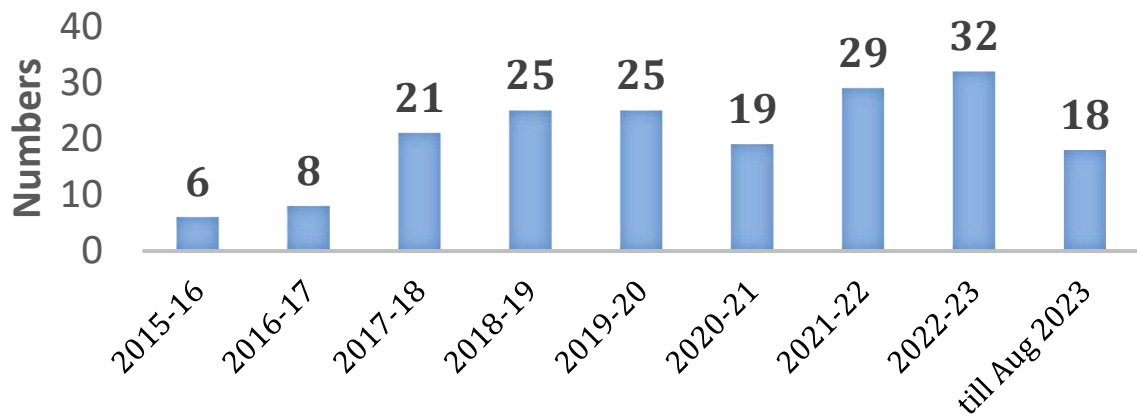
S.No	Name of the Project	Name of the PI/ Co-PI	Year of Award	Amount Received (In Lakh)
1	Isolation Of Cellulolytic Microbes And Role Of Microbes In Biodegradation Of Invasive Weed Species For Ethanol Production	Dr. Anand Prakash	2016	0.12
2	Coffee Pulp And Areca Nut Husk - A Potential Source Of Cellulosic Feed Stock For Bioethanol Production Using Microbial Consortia	Dr. Gautham S A Dr. Savitha G	2016	0.13
3	Screening and Isolation of cellulolytic and lignolytic bacteria from gut of composting earthworm – an aid in pretreatment of biomass for biofuel production	Dr. Anu Sharma	2017	0.09
4	Characterization of actinomycetes and its role in biofuel production using <i>Mimosa pudica</i>	Dr. Anand Prakash Dr. Gautham S A	2017	0.10
5	A remedial approach using novel microorganisms to minimize the industrial effluent containing heavy metals to water bodies of Bangalore	Dr. Shilpa B M Dr. Manjula N G	2021	0.06
6	Evaluation of Domestic Coffee and Tea Waste for the Management of Common Diseases of Garden Plants	Dr. Archana S Rao Dr. Ajay Nair	2022	0.04
7	Bioremedial approach for synthetic malachite green dye from the industrial effluents by potential dye degrading bacteria	Dr. Shilpa B M Dr. Manjula NG	2022	0.12
8	Development of novel pervaporation membranes for the separation of biobutanol: "to be a viable next generation biofuel"	Dr. Santosh Choudhari	2022	0.08
9	Waste biorefinery using a microalgae - bacteria consortium for treatment of dairy effluent.	Dr. Shristi Ram Dr. Archana S Rao	2023	0.08



PUBLICATIONS

FACULTY RESEARCH PUBLICATIONS IN INDEXED INTERNATIONAL JOURNALS

(N=183)

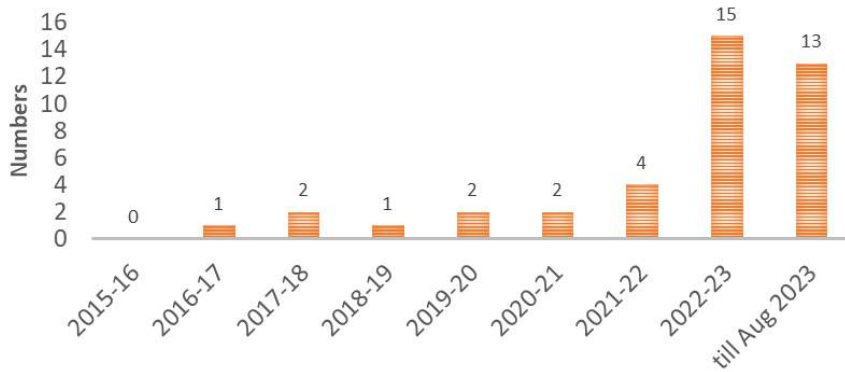


Impact factor range

1 to 25

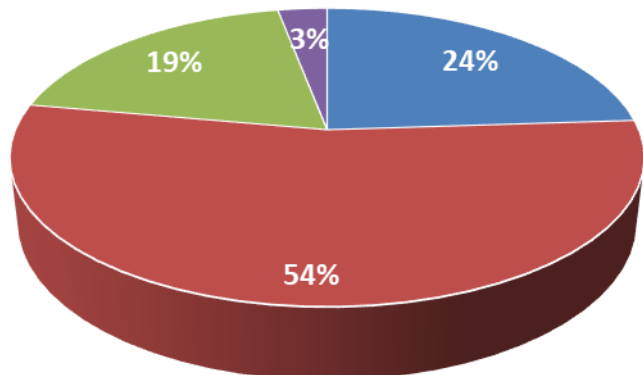
BOOK CHAPTERS

BOOK CHAPTERS (N=40)





IMPACT FACTOR OF JOURNALS



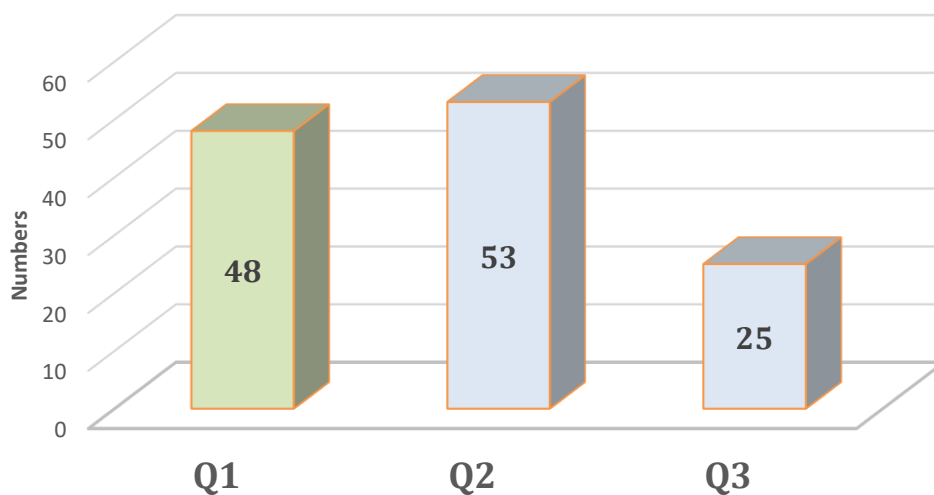
■ Less than 1 ■ 1 to 5
■ 5 to 10 ■ Greater than 10

Avg. H-Index **9.83**

Avg. i-10 Index **9.65**

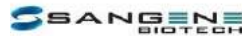
Total Citations **4795**

NUMBER OF PUBLICATIONS



Journal Name	IF
Coordination Chemistry Reviews	24.883
Nature Communications	17.694
Journal of Experimental & Clinical Cancer Research	12.658
Biotechnology Advances	10.744
Current Opinion in Biotechnology	10.279

MoUs and Collaborations



Lab to lab Collaborations



University College Dublin
Ireland's Global University

UAB
THE UNIVERSITY OF ALABAMA AT BIRMINGHAM



UNIVERSITY OF
Nebraska
Medical Center

جامعة نجران
NAJRAN UNIVERSITY



JSS
ACADEMY OF HIGHER
EDUCATION & RESEARCH
(DEEMED TO BE UNIVERSITY) MYSURU



AURIGENE
Accelerating Discovery

JGI JAIN



SBAS- Distinctiveness



To bring like-minded researchers from various fields/ disciplines/ departments under one umbrella to pursue research in a collaborative and a multidisciplinary approach.

“Microbiology, with focus on the study of Extremophiles for Bioremediation to reduce the impact of anthropogenic activities for sustainable environment, health-care, and exploration of industrial bio-Products”

THRUST AREAS

Extremophiles

Industrial enzymes

Bioremediation

Therapeutic solutions for MDR-pathogens

Biomaterials



Extremophiles Research Domain

Research Status: Since Aug. 2020

Instrument Procured	Thermocycler PCR and consumables (Instrument) Financial Support: DSU Management (Seed Grants)
PhD Research Scholars (active)	Extremophile Research (1); Medical Research (4)
Publications	23 PUBLICATIONS ; Springer / Elsevier; Book Chapters (WILEY/Springer)
M.Sc. Projects	Extremophile Research (3); Medical Research (4)
Future projects in the pipeline	43 →6 th Sem. MSc Student Major Projects Proposed
National Conference	CONTEXTUAL APPROACHES IN APPLIED MICROBIOLOGY 8-9 June, 2023: 3 parallel sessions- 5 key note addresses- ➤ 100 articles received for oral presentations ➤ 150 posters will be displayed and presented
Patent	BIOMATERIAL PATENT:Filed- Published and is in examination process





NSS ACTIVITIES



Name of the activity	Organizing unit/ agency/ collaborating agency	Year of the activity
Village adoption	NSS Wing of SBAS, DSU has adapted Shanubhoganahalli for five years.	2018
Eye testing campaign	NSS, School of Basic and Applied Sciences	2018
Blood donation camp	School of Basic and Applied Sciences in collaboration with the Lions Club, Jayanagar, Sagar Blood Bank and the Red Cross Society	2019
NSS Camp	School of Basic and Applied Sciences	2019
Blood donation camp	School of Basic and Applied Sciences in collaboration with Rashthrothana Blood Centre and Sagar Hospital.	2022



CAMPS-NSS student volunteers along with NSS members of SBAS faculties, will help in cleaning the village, creating awareness in students and village community about many social issues like hygiene, women health, education, dowry etc through speaking, enacting street dramas, using banners etc.

YOGA



SPORTS




CULTURAL FEST



100% faculty members are with PhD



Sl. No	Faculty Name	Institution- MSc/PhD/Post PhD experience	Research Expertise
1.	 Dr. Sunil S More	Karnataka University	➤ >20 years- Venom and therapeutics, Industrial Enzymes, Cancer Biology, Toxicopathology  
2.	 Dr. Aneesa Fasim	Osmania University & Indian Institute of Science (IISc)	➤ 15 years-Protein Biochemistry, Industrial Biotechnology, Extremophiles & Biomaterials in wound healing  
3.	 Dr. Santosh Choudhari	Karnataka University; Myongji University, South Korea, Trinity College, Dublin, & University College Dublin, Ireland	> 15 years -Polymer Chemistry  
4.	 Dr. Susweta Das	NEHU; Assam University; Centre for Human Genetics (CHG), ICAR-NIVEDI & JNCASR	> 15 years -Infectious disease, host pathogen interaction, Antibacterial therapeutics/drug delivery & Vaccine  
5.	 Dr. Archana S Rao	Mangalore University & ICAR-Indian Institute of Horticultural Research (IIHR), Bangalore	> 10 years -Plant pathology, Agriculture Microbiology, & Extremophiles  
6.	 Dr. Ajay Nair	Bangalore University, University of Otago, New Zealand. Oklahoma Medical Research Foundation (OMRF), United States	> 10 years- Genomics of Complex Diseases ;Evolutionary Genetics  
7.	 Dr. Dinesh S.M	University of Mysuru, Yenepoya Medical College, Yenepoya University, & K S Hegde Medical Academy, Nitte University, Mangalore	> 10 years -Genomic Medicine; Medical Genetics
8.	 Dr. Ganapati Bhat	Karnataka University, University of Nebraska Medical Center (UNMC), USA; Complex Carbohydrate Research Centre, University of Georgia, USA	> 10 years -Protein Chemistry & engineering, Cancer Glycobiology & therapeutics
9.	 Dr. Manjula N G	Gulbarga University & National Institute of Mental Health and Neurosciences (NIMHANS). Bangalore	> 10 years- Medical Microbiology, Immunology, Extremophiles 

Sl. No.	Faculty	Institution-MSc/PhD/Post PhD experience	Research Expertise
10.	 Dr. Vineetha M. S	Bangalore University & Jain University, Bangalore	> 5 years- Industrial Biotechnology; Toxicology; Enzymology
11.	 Dr. Triveni K	University of Mysore, Jain University, ICAR-NIVEDI & Indian Veterinary Research Institute (IVRI), Bangalore	> 5 years- Immunodiagnostic Development  
12.	 Dr. Shristi Ram	Jiwaji University, Gwalior & CSIR-Central Salt & Marine Chemicals Research Institute (CSMCRI), Gujrat	> 5 years - Process Optimization; Bacterial Carotenoids  
13.	 Dr. Arpi Dey	VIT, Tamil Nadu & Maharaja Sayajirao University of Baroda, Gujarat	>5 years-Reproductive Endocrinology; Ethnopharmacology
14.	 Dr. Bhavya J	Bangalore University & Jain University, Karnataka	>5 years-Enzymology, Toxicology, and phytochemistry
15.	 Dr. Sangeetha Gowda K R	Kuvempu University, Karnataka.	> 5 years –Bioinorganic Chemistry & Nanomaterials 
16.	 Dr. Pronama Biswas	Calcutta University & IIT, Madras	> 5 year –Cancer & Rare disease genetics 
17.	 Dr. Moulika Bhattacharyya	Calcutta University, IIT, Madras, TIFR- Hyderabad, University of Windsor, Canada, Universidad de Castilla-La Mancha, Spain	> 5 years – Organometallic Chemistry & Main group chemistry.



School of Basic & Applied Sciences

SBAS has taken progressive shift towards becoming a research-centric school; through improvement in quality of education & research by faculty members having PhD degrees & Post doc experience who are taking forward research work and training students in diverse areas of research with seed grant besides extramural research grants.

We provide a holistic environment to students to flourish in education, sports, cultural activities for their all round development.

SBAS aims for continuous improvements in all functional aspects of the University and is leading to the benchmarking of university on par with global standards, with the scope for further incremental improvements

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