

**DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE (Autonomous)**

Re-accredited with 'A++' Grade by NAAC Affiliated to University of Madras College With Potential For Excellence (Linguistic Minority Institution)

# NEWC E TIDE

**DEPARTMENT OF  
BIOCHEMISTRY**

Volume: 03 Issue: 01 (June- Dec 2022)

## NOBEL PRIZE WINNERS 2022

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Head, Department of Biochemistry

**Sub Editor:**

Mrs. M. MARIA CAROLINE REBELLOW  
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Assistant Professor,  
Department of Biochemistry



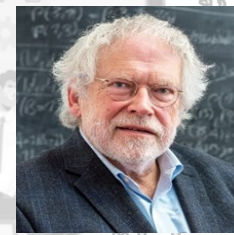
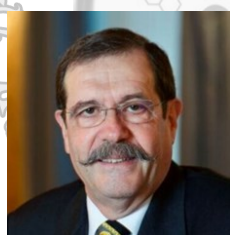
**INSIDE THE ISSUE**

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- **Carolyn R. Bertozzi, Morten Meldal, K. Barry Sharpless**  
in chemistry for the development of click chemistry and biorthogonal chemistry.



- **Alain Aspect, John F. Clauser, Anton Zeilinger**  
in Physics for experiments with entangled photons, establishing the violation of Bell inequalities and pioneering quantum information science



- **Svante Pääbo**  
in Physiology or Medicine for his discoveries concerning the genomes of extinct hominins and human evolution



Dear Readers,

Our biannual magazine "Newcleotide" has grown over the years to have a design of its own.

Enjoy the journey of the images within the pages that speaks about the enriching events, activities and celebrations held in the precincts of our department.

I extend my genuine gratitude to our Honourable Secretary Shri. Ashok Kumar Mundhra, dynamic Principal Dr. S. Santhosh Baboo and respected Head of the Department Dr. P. T. Srinivasan for their constant support and encouragement in all our endeavors.

With the humble hope that you will enjoy and appreciate this issue of "Newcleotide", let me sign off.

Prof. M. Maria Caroline Rebellow

Sub Editor

Editorial Team

Duke Sholto Jeba Thomas -II M.Sc.

Jayalakshmi B -III B.Sc.

Vaishnavi Harinarayanan -II B.Sc.

Gayathri D -I B.Sc.

Meeja V P -I B.Sc.

## NEUBERG CREW

### OFFICE BEARERS FOR THE YEAR 2022-2023



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**Join Secretary, II M.Sc.**



**Ms. B. Jayalakshmi**

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**Ms. Rithika Ramkumar**

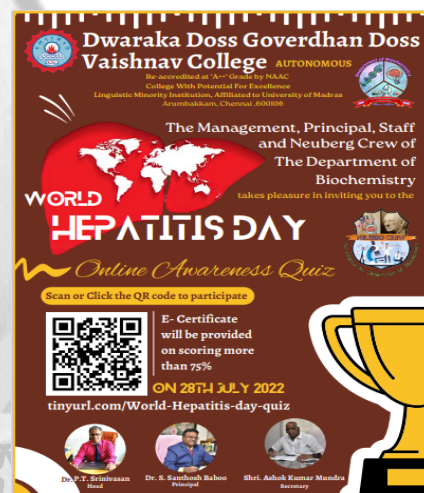
**Treasurer, II B.Sc.**

# DEPARTMENTAL ACTIVITIES

## E-QUIZ ON “WORLD HEPATITIS

### DAY” 2022

The Neuberg Crew organized an Inter-Collegiate **E-Quiz on Hepatitis** to commemorate the “**World Hepatitis Day 2022**” on **28.07.2022** via the Google forms. This quiz was organized to create awareness on Hepatitis to all the younger generation around the globe. Various departments and colleges actively took part in the e-quiz and certificate of appreciation was given to all who scored 75% and above. Among the 231 enthusiastic participants, 5 were faculty and 226 were students of various streams and standards.

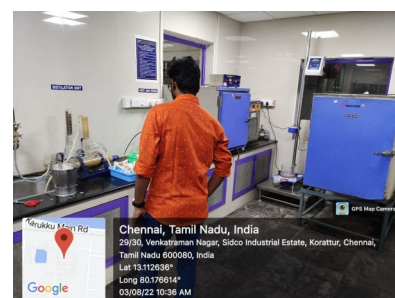
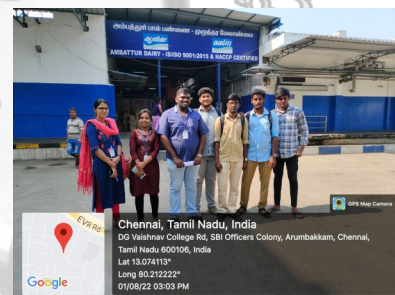


## INTERNSHIP

**Duration** : 15 days - 1.08.2022 to 15.08.2022

**No. of Students** : 20 students of II MSc Biochemistry

Internship gives practical experience and essential skills that one cannot get in classroom. The students of II MSc Biochemistry attended an internship at **AAVIN MILK INDUSTRY** for 15 days. One batch did their internship in Korattur branch and the other in Sholinganallur. Processing of milk in a dairy plant and a detailed knowledge on the products from Aavin; their preparation, manufacturing and exporting were attained. The students were able to learn detailed structure of boiler unit and ETP (Waste Water Recycling Unit). They were also exposed to the nature of work carried out by the employees and how they strive hard to produce quality milk products for serving urban population.



## INDEPENDENCE DAY CELEBRATION

On the 15th of August, our college celebrated our nation's 75th independence day where students and faculty paid tribute to the Nation and the freedom fighters of India. To mark the 75th independence day, a rally was organised on 14th of August and students of various departments actively participated in it. Each department participated in the March past with unique themes great zeal and patriotic fervor on 15th August. Our department of Biochemistry marched with the theme "INVENTIONS AND DISCOVERIES". It was indeed a day filled with pride of belonging to our wonderful motherland.

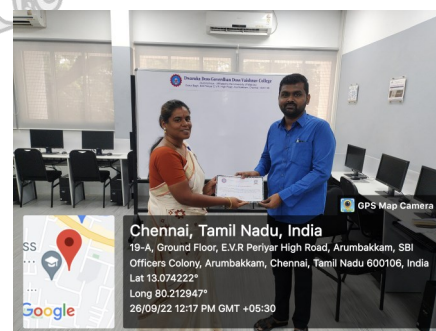


## WORKSHOP EFFECTIVE USAGE OF E-RESOURCES IN RESEARCH

Students were taught to use the library tools for making their own research articles and were enlightened about the free and paid softwares which will be useful for publishing their articles in the workshop held in our college library on 26/09/2022. Later the students were asked to open Google scholar account. They were also given access to portals that were paid by college. The students who answered the questions at the end were gifted with books. Certificates were given by Prof. S. Vaidehi.



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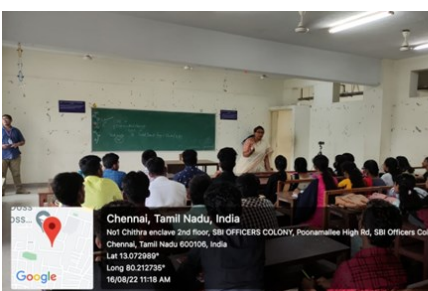
Chennai, Tamil Nadu, India  
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# DEEKSHARAMBH- STUDENT INDUCTION PROGRAMME PRARAMBH-2022

**Prarambh 2022** was organised for 6 Days from **16th to 24th August** with an objective to acclimatize the students to the new environment and get them acquainted with the institution culture.

The **first day** of the programme started with an ice-breaker session with the Faculty members. The session was handled by the department professors. A brief introduction about the course, career opportunities, and the scheme of study for B.Sc. Biochemistry programme was also shared with students. The second session was a talent show which gave them an opportunity to showcase and explore their hidden talents and helped to interact with each other and develop interpersonal skills.

DR.M.DIWAKAR (Research Associate Regenix Super Specialty Laboratories) gave a wide idea about Ayurveda, Siddha, Unani, and compared those with our current day modern medicines in the first session of **second day** programme. The second session was a common Orientation programme held at Dwaraka auditorium in which our beloved secretary Shri. Ashok Kumar Mundhra and our principal Capt. Dr. S. Santhosh Baboo addressed the students and shared few words about our prestigious college and its rules and regulations. The detailed program structure and evaluation criteria were explained by the COE and the guest speaker Dr.Nithya kalyani (Apollo Hospitals) stressed the importance of dedication to one's profession and the need to have proper planning before taking up and implementing any project.



## PRARAMBH-2022

The **third day** was vibrant with a personality development session carried out by Dr. M. S. Priyadarshini Head, Department Of Psychology with a general talk about Buddhists principles and a game based on the level of concentration, coordination, mindset. Students got an opportunity to assess their mental ability and locus of control. A skill development programme was conducted by Ms. M. Maria Caroline Rebellow along with core committee members of Neuberg Crew. A number of team games was organised to boost up confidence and understanding of leadership and team work. Students were also educated about poster making with the “Canva” app.

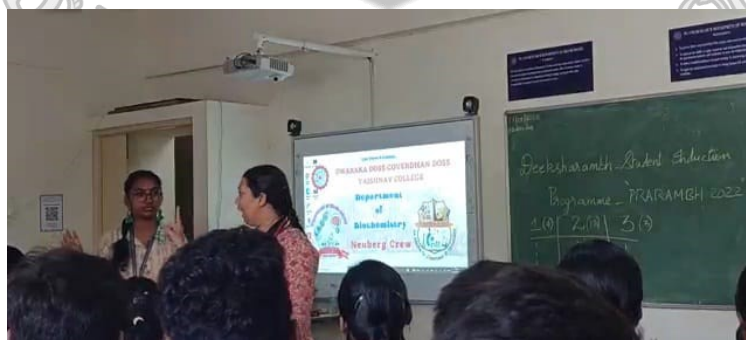
The **fourth day** was an interactive session with the alumni Dr. Ashok Narasimhan (Postdoctoral Fellow, University of British Columbia, Canada), followed by Dr.R. Ramya (Assistant Professor, Department of Biochemistry, JBAS ). They shared their corporate and entrepreneurial experiences and laid stress on the importance of planning and goal setting at the commencement of their B.Sc. BIOCHEMISTRY journey itself. A medley of questions, laughter, sound advice and nostalgia marked the session where the past and the present momentarily blurred. The wise usage of social media could help us to survive in a safer side from those threats was a piece of advice given by Dr. A. Michael. L. Valan (Assistant Professor, Department of Criminology, DDGDVC) in the second session for the day.



## PRARAMBH-2022

The **fifth day** of the programme was an interactive session with our alumni Dr. Prasanna who explained the importance of perseverance in one's life and Mr. Narayanan Pandurangan (Molecular Technologist, Healthcare City, Igenomix, Dubai) who gave the guidance on how to choose our career path, career opportunities after Biochemistry.

Dr. S. Sundarabalan sir (Head, Department of Statistics, DDGDVC) enlightened the students on the significance of statistics in the field of Biochemistry in the first session of sixth day then a common orientation programme was conducted at the Dwaraka Auditorium wherein 1<sup>st</sup> year students were informed about the various clubs in the college which created a great awareness about the various co-curricular and extra activities that could groom them for their overall development.





## INVESTITURE CEREMONY

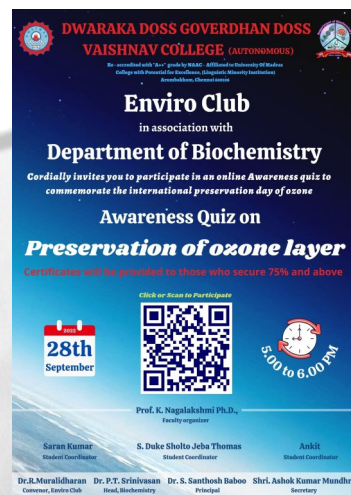
“Leaders are not born they are made from trial and error and from their experiences.” The investiture ceremony of the Neuberg Crew for this year was held on **28<sup>th</sup> September 2022** with great enthusiasm in Vallabhacharya auditorium. To inculcate the leadership qualities in the students the crew elected 6 core members. The ceremony was inaugurated by the Principal Capt. Dr S. Santhosh Baboo, Chief Guest of the day Dr. Rajeswary Hari (Head, Department of Biotechnology, Dr MGR Medical and Research Institute), and our Head of the Department Dr. P.T. Srinivasan. Our Principal Dr. Capt. S. Santhosh Baboo enlightened the audience on leadership qualities and reminisced the contributions of biochemistry department to the development of the college.

The oath taking ceremony marked a significant beginning; it was a solemn occasion where the elected representatives were all prepared to don the mantle of leadership and discharge the responsibilities entrusted upon them. The newly elected candidates swore as our Head of the Department conferred their oath and they signed the pledge. The chief guest Dr Rajeswary Hari shared inspiring ideas and instilled the thirst for carrying out research in the minds of students. The poster for “Cellutions 2022” was released by the honoured chief guest and principal with the faculty and organizers for the Cellutions.



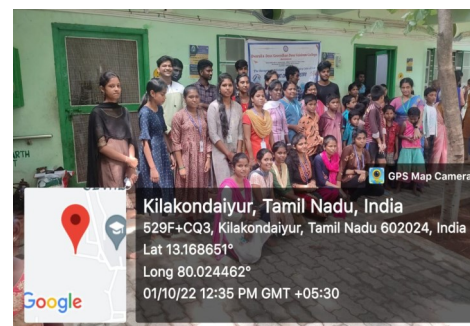
# E-QUIZ ON “PRESERVATION OF OZONE LAYER”

The Enviro Club in association with Neuberg Crew organized an awareness quiz to commemorate the **International Day for the preservation of Ozone layer on 28<sup>th</sup> September 2022**. Students from various departments and colleges actively participated in the E-quiz and certificate of appreciation was given to those who scored 75% and above.



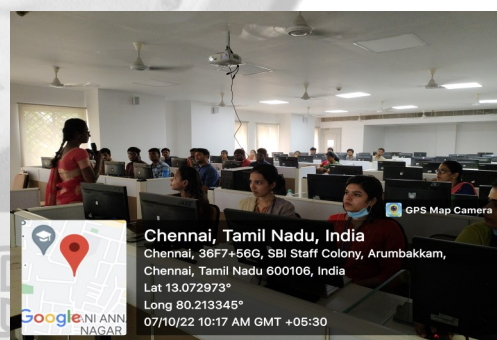
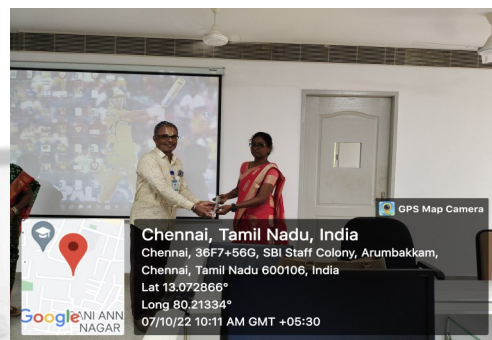
## OUTREACH PROGRAMME - VISIT TO SEVALAYA

On **1<sup>st</sup> October 2022** an outreach programme to commemorate “**International day for elder persons**” was organized by Dr. R Uma and Dr. M. Kavitha. The students were taken to **Sri Ramakrishna Paramahansa Old Age Home, Sevalaya, Kasuva village, Tiruninravur**. The visit was planned to sensitize students about the needs of the diverse people in the society around them. The faculty and students donated groceries, provisions and consumer goods to the elderly people and children residing there and spent an amazing time by performing cultural and planting saplings. The essence was to bring a smile on the faces of the old people there. The geriatric enjoyed the day. The visit was a life-changing experience as it was filled with many emotions and sentiments along with a bunch of valuable life-lessons.



## WORKSHOP

The Neuberg Crew of Post Graduate Department of Biochemistry organised a Workshop on “**STATISTICS USING EXCEL AND SPSS**” on **7<sup>th</sup> October 2022**. The resource person for the day was **Ms Venmani Priya. K**, Assistant Professor, Department of Mathematics, MGR Janaki College of Arts and Science for Women Chennai. Students learnt the tools for statistics in excel and the formulas and methods to implement them on table. They also got a basic idea about IBM and SPSS software. It was an informative event organized by Dr M. Kavitha.



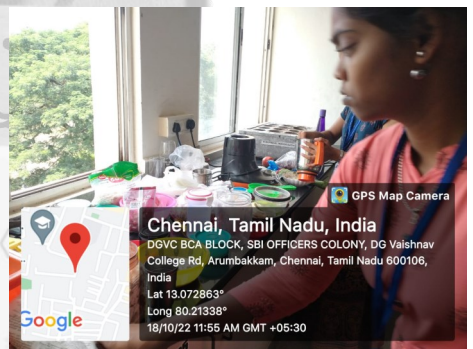
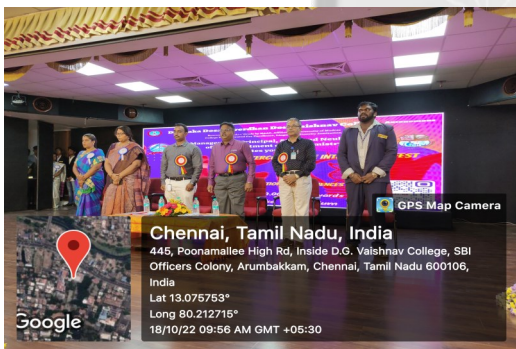
## AWARENESS PROGRAMME ON ENVIRONMENTAL SOLUTIONS

The **Enviro Club** in association with the **Neuberg Crew**, **Department Of Biochemistry** organised an **AWARENESS PROGRAMME ON ENVIRONMENTAL SOLUTIONS** on **11<sup>th</sup> October 2022**. The guest speakers for the day were **Mr R. Dhinaakar** (CEO & Founder Yatha Green Council of India), **Dr. C. Arulvasu** (Coordinator – Tamilnadu EIACP – Ministry of Environment, Forest & Climate Change India), and **Ms Anusuya Manickam** (Environmental Engineer Yatha Green Council of India). The speakers enlightened the participants about the current environmental issues and the ways to tackle them. The prizes were distributed for winners of the Ozone day quiz and Yathra Green Council of India events.

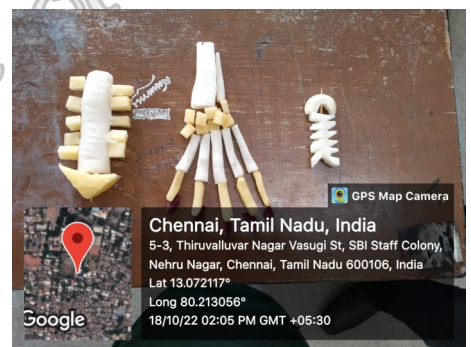


# CELLUTIONS 22

The gala event of the Department of Biochemistry for the year “Cellutions 22” the much awaited Inter-collegiate Intellectual Fest was organized by the Neuberg Crew on 18<sup>th</sup> October , with the theme **DIVERSITY, INTERDEPENDENCE, and EVOLUTION of LIFESCIENCE**. The fest witnessed an overwhelming response from 550 participants belonging to various colleges and schools across the city. The Intellectual fest was inaugurated by Dr. Phani Nagaraja Setty; Head-Strategic Initiatives (Genomics) at Lifecell International Pvt, Ltd. Dr. Phani is a highly motivated scientist with 13 publications, and a patent. Our special guests and alumni served as judges for various events.

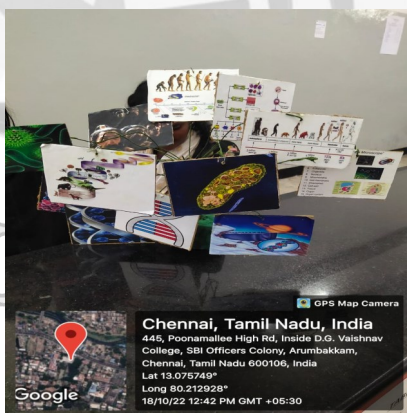


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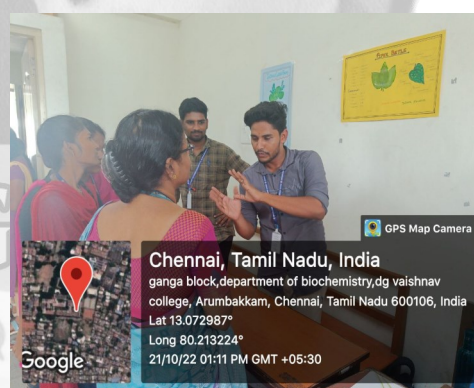
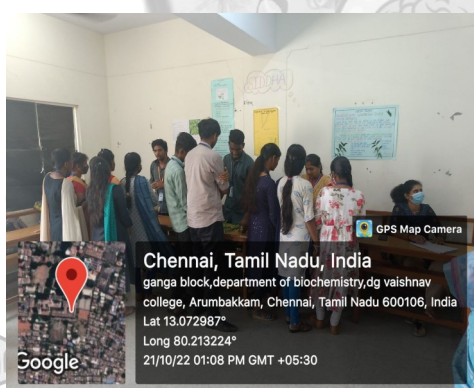
## CELLUTIONS 22

The auditorium was houseful with participants in a festive mode. “It’s always important to invest in young talents and the talents of tomorrow.” The fest had 6 online events for school-level contestants and the Prize winners were awarded at the inauguration by the Chief Guest. A total of 18 events split up into 6 Online events, 7 Onstage events, 5 Offstage events were organized for college students. Huge and enthusiastic participation of students, in various events added excitement towards the fest. Dr. Seema Alice Mathew, Oral and Maxillofacial Surgeon at Ragas Dental College and Hospital was the guest for the valedictory ceremony. She has an ardent passion for her work, which has got recognition through various articles and publications. The auditorium was filled with cheers and roars as the Chief Guest gave away the prizes to winners of all 18 events. “Everyone has a will to win, but very few have the will to prepare to win.” The overall trophy for the “CELLUTIONS 22” was won by SDNB VAISHNAV COLLEGE FOR WOMEN.



## AYURVEDIC EXPO

The students of I MSc Biochemistry organised an **AYURVEDIC EXPO** on **21<sup>st</sup> October 2022** with the theme '**MEDICINAL PLANTS**'. The plants were categorised based on their usage in different traditional systems of medicine in India namely Ayurveda, Siddha and Unani. Students gave a detailed explanation about the name, bioactive compounds and the medicinal properties of the plants they displayed.



## ECOFRIENDLY INITIATIVE

The department of biochemistry donated the plant saplings as a part of GREEN INITIATIVE started by the Library of DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE



## STUDENTS ACHIEVEMENT

	<p><b>KHUSHBU KUMARI. S (II M.Sc., 21E4705)</b>  <b>2<sup>nd</sup> prize</b>                      International conference on Innovations in Applied sciences,                      Mahalakshmi college, Avadi on 03.02.2023</p>
	<p><b>SNEHA. P (II M.Sc., 21E4708)</b>  <b>3<sup>rd</sup> prize</b>                      National conference on Integrative approach for conservation                      of life systems, Ethiraj college for women on 05.01.2023-                      06.01.2023</p>
	<p><b>NETRA SHREE. K (III B.Sc., 20E2407)</b>  <b>1<sup>st</sup> prize</b>                      Quiz competition, International conference on Sir. C. V. Ra-                      man, Arivial sangam and IGCAR Kalpakkam on 05.11.2022  <b>1<sup>st</sup> prize</b>                      International conference on Innovations in applied sciences,                      Mahalakshmi college, Avadi on 03.02.2023</p>
	<p><b>Rithika. R ( II B.Sc., 21E2714 )</b>                      Qualified <b>zonal level</b> in Vande Bharatam Nritya Utsav 2023,                      Conducted by Government of India and had been selected for                      state level competition to be held on 01.12.2022</p>
	<p><b>MADHAVAN. S (II B.Sc., 21E2725)</b>                      Has been selected as the NSS deputy administrative secretary,                      DDGDVC, 2022-2023</p>
	<p><b>SHANDHINI N (I B.Sc., 22E2720)</b>  <b>2<sup>nd</sup> prize</b>                      Interdepartmental V'FEST (Solo classical Dancing), VIE club,                      DDGDVC on 10.09.2022</p>
	<p><b>MITHRAN.R (I B.Sc., 22E2735)</b>  <b>1<sup>st</sup> prize</b>                      Interuniversity Commex'2022 , SRM, Ramapuram on                      23.09.2022</p>

## FACULTY ACHIEVEMENTS



**DR. P.T.SRINIVASAN, HEAD OF THE DEPARTMENT**

has been honoured with **BEST HOD OF THE YEAR AWAR (2022)** ,Research Education Solutions, M.S Swaminathan School of Agriculture, Odisha

**DR. SANGEETHA SATHYANARAYAN**  
has been endowed with **OUTSTANDING RESEARCH SUPERVISOR AWARD (2022)**, Research Education Solutions, M.S Swaminathan School of Agriculture, Odisha



**DR K.NAGALAKSHMI**

has won the **BEST PAPER AWARD-2022**, International conference organized by SRM Arts and Science College July,2022 and also accoladed with **RESEARCH EXCELLENCE AWARD-2023**, Institute of Scholars.

**DR. G. SRIRAM PRASATH**  
has published a book - "**BIOMOLECULES -LABORATORY MANUAL**", Lambert Academic publishing-ISBN 9786205496466 (Year -2022) along with M.V. Dass Prakash, K. Amudha, B. Durga



## FACULTY PARTICIPATION

PROGRAMME	NO. OF PROGRAMMES ATTENDED
FDPs	16
Seminar	2
International Conference	9
National Conference	2
Workshop	8
Refresher Course	1
Online Certificate course	1



## PAPERS PUBLISHED

**Sriram Prasath G, Maria Caroline Rebellow M, Durai Muthumani G., Divya M, Satya Sri P and Dass Prakash M.V.** “Phytochemical, Antioxidant and Antiproliferative Properties of *Linum usitatissimum* (Flax) Seed Extract”. *International Journal of Zoological Investigations*, 2022 Vol. 8, Special Issue, 18-27.

Prakash M.V. Dass, **Prasath G. Sriram** and Mani G. Durai Muthu. “Evaluation of Antioxidant and Cytotoxic Potency of *Thespesia populnea* Leaf Extract”. *International Journal of Zoological Investigations*, 2022, Vol. 8, Special Issue, 39-45.

P Saranraj , Alaa M Alrudainy , **G Sriram Prasath** , M Manigandan , P Sivasakthivelan. “Effect of *Trichoderma reesei* and earthworm co-inoculation on organic matter, carbon and NPK content in market compost”. *International Journal of Entomology Research*, 2022, 7 (11), 120-122

P Saranraj , Samer S Alshkarchy, **G Sriram Prasath**, M Manigandan, P Sivasakthivelan. “Combined effect of *Pleurotus sajor-caju* and earthworm in reduction of physical characteristics, cellulose, hemicellulose and lignin content in coir pith compost”. *International Journal of Entomology Research*, 2022, 7 (11), 117-119.

**Dr G.Sriram Prasath, Mrs S.Vaidehi** published an article titled “Pharmacological properties of fisetin” in *Advances in Pharmaceutical sciences*, JPS scientific Publications, ISBN: 978-93-91342234 (December 2022)

**Dr Sangeetha Sathyanarayan, Mrs S.Vaidehi** published an article titled *Biological Activities and Medicinal Properties of *Andrographis echoides** , *Advances in pharmaceutical* ,JPS scientific Publications, ISBN: 978-93-91342234. (December 2022)

## PAPERS PRESENTED

**Mrs S.Vaidehi** has presented paper titled “*A comparative study of air pollution tolerance index in plants in the International conference on Green technology, Agriculture information technology Business management & social sciences*” organized by Research Education Solution, Society for Ecological Sustainability, Centurion university M.S Swaminathan School of agriculture, Odisha on 16.07.2022 & 17.07.2022

## BOOK CHAPTERS PUBLISHED

**G. Sriram Prasath, S. Vaidehi, A. Dinesh and B. Jayalakshmi.** “Pharmacological properties of fisetin”, *Advances in Pharmaceutical Sciences*, 2022 (Volume - 2), ISBN: 978-93- 91342-23-4.

**Dr. D. Saravanan.** Glomerulonephritis – Bright’s disease, *Advances in Pharmaceutical Sciences*, ISBN – 978-81-951323.

**Dr. D. Saravanan.** Polycystic ovarian syndrome and its pathogenesis, *Advances in Pharmaceutical Sciences*, ISBN – 978-81-951323.

**Rebellow, M.M.C.** Biomedical Applications of *Enicostemma littorale* Leaves. In: Baskar, C., Ramakrishna, S., Daniela La Rosa, A. (eds) *Encyclopedia of Green Materials*. Springer, Singapore, 2022, ISBN-978-981-16-4921-9.