

SRI VIDYA MANDIR ARTS & SCIENCE COLLEGE (AUTONOMOUS)



[Affiliated to Periyar University, Salem, Tamil Nadu]
[Accredited by NAAC with 'A' Grade with CGPA of 3.27]
[Recognized 2(f) & 12(B) Status under UGC Act of 1956]

Katteri – 636 902, Uthangarai (Tk),
Krishnagiri (Dt), Tamil Nadu, India



INTERNATIONAL CONFERENCE ON INNOVATION AND RELEVANCE IN PLANT SCIENCE AND BIOTECHNOLOGY

(ICPSB - 2021)
MARCH 15-16, 2021



 VIRTUAL MODE



ORGANIZED BY

PG DEPARTMENT OF BOTANY

E-mail ID: icpsbt2021@gmail.com





About the College

The visionary Philanthropists of Sri Vidya Mandir Higher Educational Trust started Sri Vidya Mandir Arts and Science College in Uthangarai in the year 2000 with a noble aim of uplifting the economically and educationally backward districts of Dharmapuri and Krishnagiri into a number one educational destination in Tamil Nadu. The College is situated in a sprawling campus of more than 50 acres. The Eastern Ghats, the Queen of Mountains, has bestowed her inexhaustible nature and favourable climate to the growth of flora and fauna around the year. The College is surrounded by the culturally rich pilgrimage centers Hanumantheertham (2 km) and Theerthamalai (15 km) associated with the famous Epic, the Ramayana. The College is well connected with nearby cities and is located in the Salem – Vellore state highways. At present, the College has the students strength of more than 4,000 and 135 Faculty Members. In 2013, the College is recognized under section 2(f) & 12(B) of UGC Act 1956. The College, as an another feather of crown, secured highest CGPA score in NAAC ('A' Grade, 3.27/4.00) among the Affiliated colleges of Periyar University in the first cycle and also sustained the same till 2025. Recently, our college has conferred with the Autonomous status by the UGC.

About the Department

The Department of Botany was established in the year 2015 – 2016 and recently in the year 2018-2019, it has upgraded into Postgraduate Department. The Department has a magnificent record at Postgraduate level by producing students with University Ranks and several first classes in University examinations. The department has conducted an International Conference and organized many scientific programmes for the welfare of young aspiring minds of rural students. The Department of Science & Technology (DST), Govt. of India has conferred the PG Department of Botany with FIST sponsored Department status. The Department has well qualified, experienced as well as young dynamic teaching faculty members with rich academic and research knowledge. The Faculty members of the department have published many books and research articles in various referred national and international Journals.

About the Conference

Plant science and Biotechnology Conference 2021 (ICPSB 2021) provides a better understanding of broad and novel topics that have been explored in the world within the discipline of Plant Biology and Biotechnology. It discusses trending techniques; scrutinize key challenges and advises effective solutions.

ICPSB 2021 is an International virtual platform that amalgamates world plant science experts of both academics and industries from everywhere in the world. In this August gathering, the virtual mode brings together all the plant biologists, professors, researchers and students to exchange novel ideas, knowledge and innovations specializing in each theory and practices of Plant Biology and Biotechnology, which facilitate to gather in-depth information during the interactive sessions that may be helpful for the betterment of their academic and research activities.

The conference Organizing Committee remains vigilant in monitoring the COVID-19 pandemic and this event is planned as hybrid format with both onsite and virtual versions and will allow participants who cannot be able to join the conference in-person . We hope that our decision will allow much more people to participate in the ICPSB 2021.

Theme Areas

- Biodiversity, Conservation and Sustainable Development
- Bio-prospecting
- Plant-Microbe Interactions
- Nano-Biotechnology
- Emerging trends in Plant Biotechnology and Bioinformatics
- Pharmaceutical and Nutraceutical Products from Plants

REGISTRATION

Registration Link: <https://forms.gle/XzkeUQKG8rMX48Jz6>

E-Certificates will be provided for all the participants

EXECUTIVE COMMITTEE

CHIEF PATRON

Thiru. V. CHANDRASEKARAN

Founder, Sri Vidya Mandir Educational Group of Institutions

PATRONS

Thiru. R.P. RAJEE
Secretary

Thiru. P. VENKATACHALAM
Additional Secretary

CHAIRMEN

Dr. T. BALASUBRAMANIAN
Principal

Dr. N. GUNASEKARAN
Vice Principal

ADVISORS

Dr. S. SURESH
Controller of Examinations

Dr. C. RAGAVAN
R & D Co-Ordinator

CHAIRPERSON

Mrs. N. PUSHPALATHA
Assistant Professor & Head
PG Department of Botany

CONVENER

Dr. R. VINOTH KUMAR
Assistant Professor, PG Department of Botany

CO-CONVENER

Dr. V. CHINNADURAI
Assistant Professor, PG Department of Botany

ORGANIZING SECRETARY

Mr. B. SATHISH KUMAR
Assistant Professor, PG Department of Botany

JOINT ORGANIZING SECRETARIES

Mr. K. MURUGESAN
Assistant Professor
PG Department of Botany

Ms. V. DHAARANI
Assistant Professor
PG Department of Botany

Organizing Committee Members – PG Department of Botany

Mrs. S. Praveena
Laboratory Assistant

Ms. S. Priyadarshini
Mr. K. Dinesh Kumar
Mr. C. Kiran Kumar
Mr. P. Surya Kumar
Ms. B. Manjula

Ms. A. Kalaimathi
Ms. C. Madhubala
Mr. K. Vignesh
Mr. A. Manikandan
Ms. K. Anusha

Mr. E. Elavarasan
Ms. S. Sandhiya
Ms. S. Kaviya
Ms. G. Pavithra
Mr. M. Dinesh Kumar

Advisory Committee Members

Prof. Dr. K. Muthuchelian, Pro Vice – Chancellor, Dayananda Sagar University, Bangalore.
Prof. Dr. N. Mathivanan, Registrar i/c, Director CAS Botany, University of Madras, Chennai.
Dr. M. Manivanan, Former Registrar, Periyar University, Salem.
Dr. D. J. Bagyaraj, INSA Honorary Scientist & Chairman, Bangalore.
Prof. Dr. K. Selvam, Professor & Head, Dept. of Botany, Periyar University, Salem.
Prof. Dr. P. Ravichandran, Professor & Head, Dept. of Botany, M.S University, Tirunelveli.
Dr. V. Sivasubramanian, Director, Phycospectrum Environmental Research Centre (PERC), Chennai.
Dr. Kasem Soyong, Associate Professor, KMITL, Thailand.
Dr. Malathi Radhakrishnan, Professor of Biology, Community College, Baltimore City.
Dr. Gaurav Rajauria, Senior Technical Officer, University College of Dublin.
Dr. Rajeev Bhat, Associate Professor, Food Science Department, Fiji National University.
Dr. Arokiyaraj, Associate Professor, Department of Food Science and Biotechnology, Sejong University, South Korea.
Dr. G. C. Abraham, Vice-Principal, The American College, Madurai.
Dr. S. Murugesan, Deputy Head and Associate Professor, Pachaiyappa's College, Chennai.
Dr. S.S. Rathina Kumar, Principal, Sri Subramaniaswamy Govt. Arts College, Tiruttani.
Dr. S. Sahaya Sathish, Dean and Director, Centre for Cryptogamic studies, St. Joseph's College, Trichy.
Dr. K. Vasanth, Assistant Professor, Dept. of Botany, Bharathiar University, Coimbatore.
Dr. Udhy Kumar, Assistant Professor, Dept. of Botany, M.S University, Tirunelveli.
Dr. D. Kandavel, Associate Professor, Dept. of Botany, Periyar EVR College, Trichy.
Dr. K. Perinbam, Associate Professor, Dept. of Botany, Government Arts College, Nandhanam, Chennai.
Dr. Ayyanar, Assistant Professor in Botany, AVVM Sri Pushpam College, Thanjavur.
Dr. A. Selvaraju, Assistant Professor, Dept. of Botany, Govt. Arts & Science College, Idappadi, Salem.

Contact for Correspondence

Dr. R. Vinoth Kumar, Convener (ICPSB-2021)
Assistant Professor, PG Department of Botany
Sri Vidya Mandir Arts & Science College (Autonomous)
Katteri, Uthangarai, Krishnagiri, Tamil Nadu, India
Mobile : +91 8220335350
e-mail: icpsbt2021@gmail.com

Mr. B. Sathish Kumar, Organizing Secretary (ICPSB-2021)
Assistant Professor, PG Department of Botany
Sri Vidya Mandir Arts & Science College (Autonomous)
Katteri, Uthangarai, Krishnagiri, Tamil Nadu, India
Mobile : +91 9043370159
e-mail: icpsbt2021@gmail.com

Each one, Teach one, How to Plant one



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<https://us02web.zoom.us/j/88672225909?pwd=dEZQU3R2Umh3RXJKSHB3ZkFDMDd0QT09>

Meeting ID: 886 7222 5909

Passcode: 901662

E-mail ID: icpsbt2021@gmail.com

A GRAND WELCOME TO ALL



The management, Principal, Staff and Students of Post Graduate
Department of Botany, Sri Vidya Mandir Arts and Science College, Katteri

Cordially invite you for the

**INTERNATIONAL CONFERENCE
ON
INNOVATION AND RELEVANCE IN
PLANT SCIENCE AND BIOTECHNOLOGY
(ICPSB - 2021)**

15-16 March 2021

Venue: College Auditorium (Virtual Mode)

INAUGURAL

Invocation

Lighting the Kuthuvilakku

Welcome Address

Mrs. N. Pushpalatha
Chairperson, ICPSB-2021

Theme of the Conference

Dr. R. Vinoth Kumar
Convener, ICPSB-2021

Presidential Address

Thiru V. Chandrasekaran
Chief Patron, ICPSB-2021
Founder – Sri Vidya Mandir Group of
Educational Institution, Uthangarai, Krishnagiri

Inaugural Address

Dr. T. Balasubramanian
Chairman, ICPSB-2021
Principal
Sri Vidya Mandir Arts & Science College

Felicitation

Mr. R.P. Rajee
Patron, ICPSB-2021
Secretary
Sri Vidya Mandir Arts & Science College

Mr. P. Venkatachalam
Patron, ICPSB-2021
Additional Secretary
Sri Vidya Mandir Arts & Science College

Dr. N. Gunasekaran
Chairman, ICPSB-2021
Vice Principal
Sri Vidya Mandir Arts & Science College

Vote of Thanks

Dr. V. Chinnadurai
Co-Convener, ICPSB-2021.

VALEDICTORY

Invocation

Welcome Address

Mr. K. Murugesan
Joint Organizing Secretary, ICPSB-2021

Presidential Address

Dr. T. Balasubramanian
Chairman, ICPSB-2021
Principal
Sri Vidya Mandir Arts & Science College

Conference Report

Mr. B. Sathish Kumar
Organizing Secretary, ICPSB-2021
Sri Vidya Mandir Arts & Science College

Valedictory Address

Dr. S. Sahaya Sathish
Dean, School of Biological Sciences
Director-Center for Cryptogamic Studies
St. Joseph's College, Trichy

Felicitation

Mr. R.P. Rajee
Patron, ICPSB-2021
Secretary
Sri Vidya Mandir Arts & Science College

Mr. P. Venkatachalam
Patron, ICPSB-2021
Additional Secretary
Sri Vidya Mandir Arts & Science College

Dr. N. Gunasekaran
Chairman, ICPSB-2021
Vice Principal
Sri Vidya Mandir Arts & Science College

Feedback

Vote of Thanks

Ms. V. Dhaarani
Joint Organizing Secretary, ICPSB-2021.

NATIONAL ANTHEM



Programme Schedule

Day 1 (15.03.2021)

INAUGURAL FUNCTION

Time: 9.30 a.m. - 10.30 a.m.



Dr. C. RAMACHANDRAN

Postdoctoral Fellow, Kangwon National University, South Korea

Topic: Development of Value-added synbiotic Enriched Feeds and Foods

Time: 10.30 a.m. – 11.15 a.m.



Dr. SATHIYASEELAN ANBAZHAGAN

Postdoctoral Researcher, Department of Medical Biotechnology,
College of Biomedical Science, Kangwon National University,
South Korea.

Topic: Application of Nanomaterials in Biotechnology and
Biomedicine: An Overview

Time: 11.30 a.m - 12.15 p.m



Dr. VISHNU KIRAN MANAM

Co Founder & Head – R&D Dr Yellapragada Life sciences,
Andhra Pradesh.

Topic: Isolation, Maintenance of Micro-algal Cultures and
their Applications

Time: 01.30 p.m - 02.15 p.m



Dr. S.MALATHY

Assistant Professor, Government Arts College for Men,
Nandanam, Chennai, Tamil Nadu.

Topic: Carbon Foot Print and Climate Change

Time: 02.30 p.m - 03.15 p.m




Dr. BASKARAN PONNUSAMY

Principal Scientist & Head in Biotechnology

Dami Oil Palm Research Station (Dami OPRS), WNB, Australia .

Topic: Innovative Biotechnological Research on Industrial
Production of Cloning of Oil Palm.

Time: 03.20 p.m - 04.05 p.m



Day 2 (16.03.2021)



Dr. S. AROKIA RAJ

Assistant Professor, Dept. of Food Science & Biotechnology,
Sejong University, Seoul, South Korea

Topic: Impact of Herbal Medicine during Covid-19

Time: 09.30 a.m - 10.15 a.m.



Dr. MATHEW DAN

Senior Scientist & Head,
Plant Genetic Resource Division, Jawaharlal Nehru Tropical Botanic Garden
& Research Institute, Palode, Thiruvananthapuram, Kerala.

Topic: A Progression from Classification, Taxonomy to
Systematics

Time: 10.30 a.m. - 11.15 a.m.



Dr. V. S. RAMACHANDRAN

Professor (Retd.) Dept. of Botany,
Bharathiar University, Coimbatore, Tamil Nadu.

Topic: Relevance of Biodiversity Conservation with
Reference to Climate Change

Time: 11.30 a.m - 12.15 p.m.



Dr. MANJU C. NAIR

Assistant Professor, Dept. of Botany,
The Zamorin's Guruvayurappan College, Kozhikode, Kerala.
Topic: Diversity and Distribution of Bryophytes in Kerala
And Its Major Challenges in Conservation

Time: 1.15 p.m. - 2.00 p.m.



Dr. V. RAMESH

Assistant Professor and Head, Dept. of Botany,
Vivekananda College, Madurai, Tamil Nadu.

Topic: Glimpses of Mushroom Cultivation Techniques

Time: 2.15 p.m. - 3.00 p.m.

Valedictory Function

3.30 p.m. onwards



Dr. S. Sahaya Sathish

Dean, School of Biological Sciences
St. Joseph's College, Trichy.

Valedictory Address

CONFERENCE SUMMARY REPORT

INTERNATIONAL CONFERENCE ON INNOVATION AND RELEVANCE IN PLANT SCIENCE AND BIOTECHNOLOGY (ICPSB - 2021)

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<https://us02web.zoom.us/j/88672225909?pwd=dEZQU3R2Umh3RXJKSHB3ZkFDMDd0QT09>

Meeting ID: 886 7222 5909

Passcode: 901662

E-mail ID: icpsbt2021@gmail.com

CONFERENCE SUMMARY REPORT

INTERNATIONAL CONFERENCE ON INNOVATION AND RELEVANCE IN PLANT SCIENCE AND BIOTECHNOLOGY (ICPSB-2021)

The conference was initiated in August 2020 and executive committee was formed from the department along with members from R&D Cell of College. The executive committee identified subject expertise globally, took approval of their willingness to support the conference, and formed an advisory board comprising of 20 members.

The main aim of this conference was to bring together leading academicians, researchers, technocrats, practitioners, and students to exchange and share their experiences and research outputs on all aspects of Plant Science and Biotechnology.

This summary captures the two-day program of Special lectures and keynote addresses, which took place from the 15th to 16th March 2021 virtually. The event brought together around 250 research scholars, members of faculty, students, and key officials nationally and internationally to discuss the recent advances in Plant Science and Biotechnology with focus on sustainability. It concluded with a keynote lecture in valedictory address describing new and noteworthy initiatives relevant to the conference theme.

The first day of the conference started with an inaugural session with a welcome address by Mrs. N. Pushpalatha, Chair of ICPSB- 2021 and Assistant Professor & Head, SVM College, Uthangarai and Dr. R. Vinoth Kumar, Convener ICPBS – 2021 and Assistant Professor, SVM College, Uthangarai explained the theme of conference. This was followed by the Presidential Address by Thiru V. Chandrasekaran, Chief Patron, ICPSB- 2021 and Founder – Sri Vidya Mandir Group of Educational institution, Uthangarai. The inaugural address was delivered by Dr. T. Balasubramanian, Chairman, ICPBS-2021 and Principal, SVM College. Felicitations were given by Mr. R.P. Rajee, Mr. P. Venkatachalam, Patron, ICPSB-2021, Dr. N. Gunasekaran, Chairman, ICPSB-2021, Vice Principal, SVM College and a vote of thanks was proposed by Dr. V. Chinnadurai, Co-Convener, ICPSB-2021.

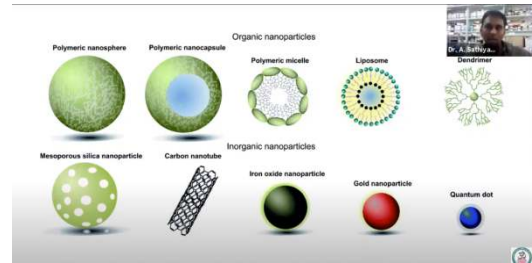
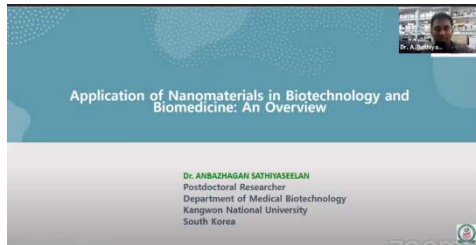


The Special lectures followed the inaugural session. The two-day conference comprised of ten special lectures, five in each day. The conference was structured to foster discussion between participants.

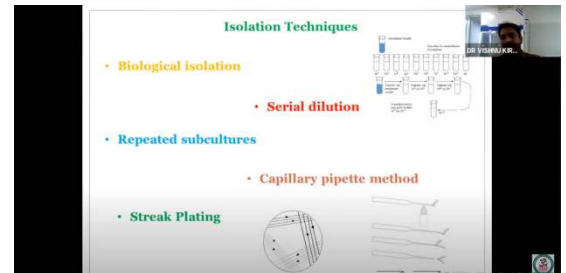
Day 1

1. Development of Value-added symbiotic Enriched feeds and foods.

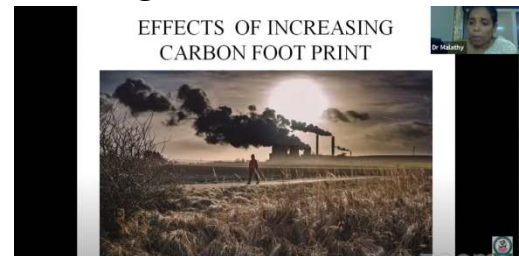
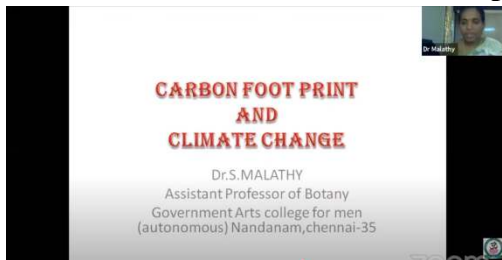
2. Applications of Nanomaterials in Biotechnology and Biomedicine: An Overview



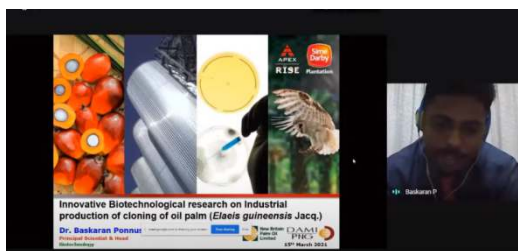
3. Isolation, Maintenance of micro-algal Cultures and their applications.



4. Carbon footprint and climate change



5. Innovative Biotechnological Research on Industrial Production of Cloning of Oil Palm.



Day 2

6. Impact of Herbal Medicine during Covid-19

Impact of Herbal Medicine in COVID 19TM

S Arokiyaraj
 Assistant Professor, Sejong University, Republic of Korea
 Verified email at sejong.ac.kr
 Microsome · methanogen · antibacterial · silver nanoparticle · phyto chemical

THE WORLD INDEXING SERVICES
 401-500th World University Rankings 2020 = 102nd Asia University Rankings 2018

Cited by: **1014** (Since 2015)
 Altmetric: 19
 H-index: 27

கற்றிவல எளியினும் கேட்க அடக்கொருவர்கு ஓற்கத்தின்
 ஊற்றாந் துணை (Although a man be without learning, let him listen,
 that will be the him a staff in adversity)

Dr. S Arokiyaraj

- Thrombosin, Methanogen, ...
- Lungs, GI tract, Kidneys, and Blood vessels
- ACE2
- Angiotensin (I)
- Angiotensin (II)
- SARS-CoV-2
- Inflammasome
- Interleukin
- Respiratory Distressing Syndrome

ACE2 is a vital element in a biochemical pathway that is critical to regulating processes such as blood pressure, wound healing and inflammation, called the renin-angiotensin-aldosterone system (RAAS) pathway.

The exchange of oxygen and carbon dioxide between the lungs and blood vessels occurs across the epithelial lining in the lung.

Its primary effector hormone, angiotensin II (ANG II), not only mediates immediate physiological effects of vasoconstriction and blood pressure regulation, but is also implicated in inflammation, endothelial

7. A Progression from Classification, Taxonomy to Systematics

A Progression from Classification, Taxonomy to Systematics

Mathew Dan
 Research Scientist & Head,
 Forest Ecology, Diversity & Conservation,
 Forest Ecology, Diversity & Conservation,
 Forest Ecology, Diversity & Conservation, Garden and Research Institute,
 Palakkad, Thrissur District, Kerala 688 002

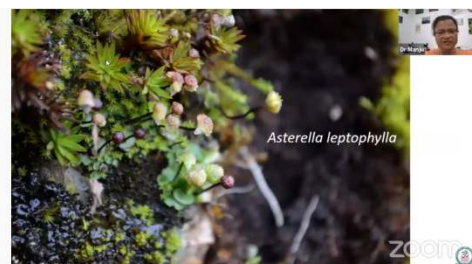
Mimosa acuminata Colla.
Mimosa bahiana Colla.
Eriosema superbum (Roxb.) Chesman

8. Relevance of Biodiversity Conservation with Reference to Climate Change

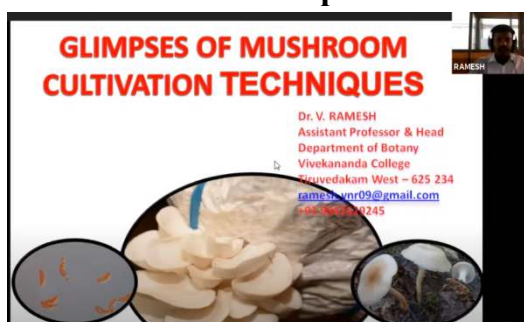
The Relevance and Importance of BIODIVERSITY CONSERVATION With reference to climate change- A CASE STUDY FROM THE WESTERN GHATS

Dr. V.S. Ramachandran
 Formerly Professor
 Department of Botany
 Bharathiar University
 Coimbatore - 641 046
 E-mail: vsrbotany@gmail.com

9. Diversity and Distribution of Bryophytes in Kerala and its Major Challenges in Conservation



10. Glimpses of Mushroom Cultivation Techniques.

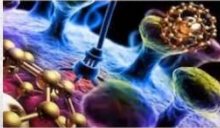


The two-day Conference ended with a valedictory session. The welcome speech in the session was delivered by Mr. K. Murugesan, Joint Organizing Secretary, ICPSB – 2021 & Assistant Professor. This was followed by a Presidential address by Dr. T. Balasubramanian, Chairman, ICPBS-2021 and Principal, SVM College. The conference report was summarized by Mr. B. Sathish Kumar, Organizing Secretary, ICPSB – 2021 & Assistant Professor. This was followed by a valedictory address by Dr. S. Sahaya Sathish, Dean, School of Biological Sciences, Director- Center for Cryptogamic Studies, St. Joseph's College, Trichy. Felicitations were given by Mr. R.P. Rajee, Mr. P. Venkatachalam, Patron, ICPSB-2021, Dr. N. Gunasekaran, Chairman, ICPSB-2021, Vice Principal, SVM College.






GREEN NANOTECHNOLOGY –
A new hope to medical Science



Dr. S. SAHAYA SATHISH
Dean
School of Biological Sciences
St. Joseph's College (Autonomous)
Tiruchirappalli – 620002
Tamil Nadu
sahayasathish@yahoo.in
Mob : 8124053341

Nanoparticle Biosensors

Antibodies can be anchored to nanoparticle surfaces to collect specific proteins.



Target protein capture with MMP probe

Target protein PSA

In this example, the nanoparticle is magnetic, allowing it to be separated and analysed.

A few delegates gave a feedback on the Conference and after that the overall conference report was summarized by Mr. B. Sathish Kumar, Organizing Secretary, ICPSB – 2021 & Assistant Professor. Finally, the session concluded with a vote of thanks proposed by Mrs. V. Dhaarani, Joint Organizing Secretary, ICPSB – 2021 & Assistant Professor.

The two day International Conference was ended with a National Anthem.

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