



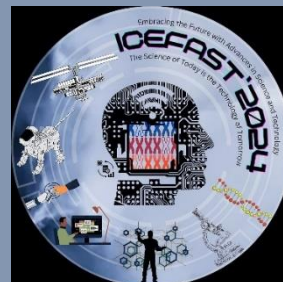
**ETHIRAJ COLLEGE FOR WOMEN  
(AUTONOMOUS)**

**INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON  
“EMBRACING THE FUTURE WITH ADVANCES IN SCIENCE AND TECHNOLOGY”**

**1<sup>st</sup> and 2<sup>nd</sup> February, 2024**

**Organized by:**

Department of Biochemistry  
Department of Microbiology  
Department of Psychology  
Department of BCA  
Department of Mathematics with Computer Applications



**ABOUT THE COLLEGE**

Started by **Thiru V.L Ethiraj**, a magnanimous barrister and philanthropist, Ethiraj College for Women, Chennai provides quality education to women students with the sole mission of empowering them. The college was recognized as “**College with Potential for Excellence**” by UGC and was granted the ‘**A+**’ grade by NAAC in 2023. The college fosters academic excellence, independent thinking and sensitization to social and environmental needs and aims to develop women holistically to achieve success and fulfilment. Seventy-five years since its inception, the college continues to grow to scale greater heights to fulfil its mission

**ABOUT THE CONFERENCE**

**"The most incomprehensible thing about the world is that it is at all comprehensible."**

**Albert Einstein**

From looking at the moon imagining what it would be like to landing on the moon’s south pole, science despite its limitations is a magical gift human have been bestowed with. The groundbreaking discoveries of the past has not only equipped man with the greater understanding of the planet he inhabits but also has been an instrument in making his life longer, healthier, safer, and easier. While we stood in rapt wonder as new discoveries paved way for gaining more knowledge and exercising better control over our environment, we, humbled by the intellect of the cosmos, acknowledge human frailty, and recognize our responsibility in making wise and effective use of scientific and technological tools for innovation and progress. This Multidisciplinary conference brings together Departments of Biochemistry, Microbiology, Psychology, BCA and Mathematics with Computer applications to ignite and rekindle the flame of curiosity and imagination by raising new questions and re-thinking existing assumptions and practices in the fields of life science, social science and technology within the realm of ethics, morality, values and conscience. The technical sessions and scientific paper presentation are aimed at deliberating the endless potential of each of these disciplines in contributing to a sustainable and better future.

**INTERNATIONAL MULTIDISCIPLINARY CONFERENCE**  
**ON**  
**“EMBRACING THE FUTURE WITH ADVANCES IN SCIENCE & TECHNOLOGY”**

**ORGANIZING COMMITTEE**

**CHIEF PATRON**



**Thiru. V. M. Muralidharan**  
Chairman,  
Ethiraj College Trust, Ethiraj College for Women  
Chennai

**PATRON**



**Dr. S. Uma Gowrie**  
Principal & Secretary  
Ethiraj College for Women, Chennai

**CONVENORS**

 <p><b>Dr. K. Krishna Prema</b> Associate Professor &amp; Head, Department of Microbiology</p>	 <p><b>Dr. M. Sujatha</b> Director, Centre for Women Studies(SS) Associate Professor &amp; Head, Department of Biochemistry</p>	 <p><b>Dr. K. Prasanna Lakshmi</b> Associate Professor &amp; Head, Department of Mathematics with Computer Applications</p>	 <p><b>Dr. M. Ramya Maheswari</b> Associate Professor &amp; Head, Department of Psychology</p>	 <p><b>Dr. M. Henila</b> Assistant Professor &amp; Head, Department of Computer Applications (BCA)</p>
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**ORGANIZING SECRETARIES**

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**Dr. K. Jayanthi Rani**, Assistant Professor  
**Mrs. S. Janes Pushparani**, Assistant Professor

**TREASURERS**

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**Dr. S. Vasanthi**, Assistant Professor

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## CHIEF GUEST



**Prof.S.P.Thyagarajan,**

*Distinguished Professor & Advisor to Chancellor, Vellore Institute of Technology, Vellore.  
(Former Vice-Chancellor, University of Madras),  
(Former Pro-Chancellor/Dean(Research), Sri Ramachandra University, Porur)  
(Former Chancellor, Avinashilingam Institute for Home Science & Higher Education for Women,  
Coimbatore.)*

## KEYNOTE ADDRESS – INAUGURAL



**Prof. N.Thajuddin**

*Pro-Vice Chancellor  
B.S.Abdur Rahman Crescent Institute of Science & Technology, Vandalur, Chennai.  
(Former Director, National Facility for Marine Cyanobacteria,  
Former Head, Department of Microbiology  
Former Dean, Faculty of Science, Engineering & Technology,  
Bharathidasan University, Tiruchirapalli)*

## VALEDICTORY ADDRESS



**Dr. E.Vivekanandan**

*Advisor & Senior Scientific Consultant  
Bay of Bengal Programme, Inter Governmental Organization.*



INVITED SPEAKERS – DAY 1 [01-02-2024] AND DAY 2 [02-02-2024]

 <p><b>Dr. Balan Rathakrishnan</b> <i>Faculty of Psychology and Education University Malaysia Sabah</i></p> <p><b>TOPIC : “Building Positive Communities and Societies for a Better Future”</b></p>	 <p><b>Mr. ShivaThirumazhusai</b> <i>CEO , Nasotech U.S.A</i></p> <p><b>TOPIC : “Healthcare with On-Device AI”</b></p>	 <p><b>Prof.Dr.U.S.Mahadeva Rao</b> <i>Fakulti Perubatan University Sultan Zainal Abidin Kampus Kota 20400 Kuala Terengganu, Malaysia</i></p> <p><b>TOPIC : “Role of Artificial Intelligence in the development of Herbal Medicine”</b></p>	 <p><b>Ms Lee Wan Zhen</b> <i>Fakulti Sains Kesihatan, Universiti Sultan Zainal Abidin Kampus Gong Badak, 21300 Kuala Nerus Terengganu, Malaysia</i></p> <p><b>TOPIC : “Role of Artificial Intelligence in Physiotherapy among the cerebrovascular Accident patients”</b></p>
 <p><b>Dr. Vivek Misra</b> <i>Assistant Clinical Director and Head Neuromodulation and Clinical Neurosciences, Buddhi Clinic, Chennai</i></p> <p><b>TOPIC : “Stimulating the Brain to Heal the Mind”</b></p>	 <p><b>Dr. Paul Manuel</b> <i>Professor of Information Science Kuwait University Kuwait</i></p> <p><b>TOPIC : “Data Science”</b></p>	 <p><b>Dr. D. Prabhu</b> <i>Head i/c, Department of Microbiology, Dr. ALM PG IBMS, University of Madras, Chennai.</i></p> <p><b>TOPIC : “Automation and Artificial Intelligence applications in Microbiology”</b></p>	 <p><b>Dr.Haleema PK</b> <i>Senior Lecturer, School of Computing and Engineering, University of West London, RAK Branch Campus, U.A.E.</i></p> <p><b>TOPIC : Applications of Mathematics in Industry 4.0 Technologies</b></p>
 <p><b>Dr. Madhavi Rangaswamy</b> <i>Professor and Research Coordinator, Department of Psychology, Christ (Deemed to be University), Bengaluru</i></p> <p><b>TOPIC : “Influences on Decision Making and its Implication for Current and Future Well-Being”</b></p>	 <p><b>Dr. R. John Martin</b> <i>School of Computer Science and Information Technology, Jazan University, KSA, Saudi Arabia.</i></p> <p><b>TOPIC : “AI Unveiled”</b></p>	 <p><b>Dr. Rohini Karunakaran</b> <i>Deputy Dean - Academics &amp; International Affairs, Faculty of Medicine , Aimst University, Malaysia</i></p> <p><b>TOPIC : “ESG Integrated Education - Need of the Hour for Sustainable Future”</b></p>	 <p><b>Dr. T. Vel Murugan</b> <i>Associate Professor, Dept. of Computer Science, D. G. Vaishnav College, Chennai.</i></p> <p><b>TOPIC : “Intelligent Process Automation”</b></p>
 <p><b>Dr.Elangovan Vellaichamy</b> <i>Professor &amp; Head Department of Biochemistry Guindy Campus Controller of Examination i/c ., University of Madras, Chepauk, Chennai</i></p> <p><b>TOPIC : “Gene Therapy :Where we stand ?”</b></p>	 <p><b>Ms. Shikainah Champion Samuel</b> <i>Psychological Therapist, National Health Service, London, UK</i></p> <p><b>TOPIC : “The Neuroscience behind Eye Movement Desensitization and Reprocessing (EDMR)”</b></p>	 <p><b>Dr. S. Bharathidasan</b> <i>Head, Dept. of Computer Science, Loyola College, Chennai.</i></p> <p><b>TOPIC : “Decision Optimization with Genetic Algorithm”</b></p>	

PROGRAM SCHEDULE

INAUGURATION

REGISTRATION	9.00-9.30 am
INAUGURATION	9.30 - 11.00 am
INVOCATION	Tamizh Thai Vazhthu
LIGHTING OF KUTHUVILAKKU	
WELCOME ADDRESS	<b>Dr. K. KRISHNA PREMA</b> <i>Associate Professor and Head Department of Microbiology Ethiraj College for Women, Chennai</i>
CONFERENCE OVERVIEW	<b>Dr. M. SUJATHA</b> <i>Director, Centre for Women Studies (SS) Associate Professor and Head Department of Biochemistry Ethiraj College for Women, Chennai</i>
PRESIDENTIAL ADDRESS	<b>Thiru. V.M. MURALIDHARAN</b> <i>Chairman, Ethiraj College Trust, Chennai</i>
SPECIAL ADDRESS	<b>Dr. S. UMA GOWRIE</b> <i>Principal &amp; Secretary Ethiraj College for Women, Chennai</i>
INAUGURAL ADDRESS	<b>Prof. S.P. THYAGARAJAN,</b> <i>Distinguished Professor &amp; Advisor to Chancellor, Vellore Institute of Technology, Vellore. (Former Vice-Chancellor, University of Madras), (Former Pro-Chancellor/Dean(Research), Sri Ramachandra University, Porur) (Former Chancellor, Avinashilingam Institute for Home Science &amp; Higher Education for Women, Coimbatore.)</i>
KEYNOTE ADDRESS	<b>Prof. N.Thajuddin</b> <i>Pro-Vice Chancellor B.S.Abdur Rahman Crescent Institute of Science &amp; Technology, Vandalur, Chennai. (Former Director, National Facility for Marine Cyanobacteria, Former Head, Department of Microbiology Former Dean, Faculty of Science, Engineering &amp; Technology, Bharathidasan University, Tiruchirapalli)</i>
VOTE OF THANKS	<b>Dr. K. PRASANNA LAKSHMI</b> <i>Associate Professor and Head Department of Mathematics with Computer Applications Ethiraj College for Women, Chennai</i>
COLLEGE SONG	

DAY 1 – 1 <sup>st</sup> FEBRUARY 2024	
TECHNICAL SESSION - I (11.30 - 1.00 pm)	
11.30 - 12. 15 pm  Invited Lecture-1 Online Venue : Main Auditorium	<b>Dr. BALAN RATHAKRISHNAN</b> Faculty of Psychology and Education Universiti Malaysia Sabah <i>TOPIC : “Building Positive Communities and Societies for a Better Future”</i>
12. 15 pm - 1.00 pm  Invited Lecture- 2 Online Venue : Main Auditorium	<b>Mr. SHIVA THIRUMAZHUSAI</b> CEO, Nasotech, U.S.A <i>TOPIC : “ Healthcare with On-Device AI”</i>
1.00 - 2.00 pm	LUNCH BREAK
TECHNICAL SESSION - II (2.00 - 4.00 pm)	
2.00 - 2.45 pm  Invited Lecture-3 & 4 Online Venue : Main Auditorium	<b>Prof. Dr.U.S.MAHADEVA RAO</b> Fakultu Perubatan Universiti Sultan Zainal Abidin, Kampus Kolta 20400 Kuala Terengganu, Malaysia <i>TOPIC : “Role of Artificial Intelligence in the development of Herbal Medicine”</i>  <b>Ms.LEE WAN ZHEN</b> Fakulti Sains Kesihatan Universiti Sultan Zainal Abidin, Kampus Gong Badak 21300 Kuala Nerus, Terengganu, Malaysia <i>TOPIC : “Role of Artificial Intelligence in Physiotherapy among the Cerebrovascular accident patients”</i>
2.00 - 2.45 pm  Invited Lecture-5 Venue : Mini Auditorium	<b>Mr. VIVEK MISRA</b> Assistant Clinical Director and Head Neuromodulation and Clinical Neurosciences, Buddhi Clinic, Chennai <i>TOPIC : “Stimulating the Brain to Heal the Mind”</i>
2.00 - 2.45 pm  Invited Lecture- 6 Online Venue : Steve Jobs Hall	<b>Dr. PAUL MANUEL</b> Professor of Information Science Kuwait University, Kuwait <i>TOPIC : “Data Science”</i>
2.00 - 2.45 pm  Paper Presentation-Mathematics with Computer Applications Venue : Campus II, Room No- A437	<b>Dr. K. JEGANATHAN</b> (Chairperson) Assistant Professor Ramanujan Institute for Advanced Study in Mathematics University of Madras, Chennai
3.00 - 4.00 pm  Invited Lecture-7 Venue : Main Auditorium	<b>Dr. D. PRABHU</b> Head i/c, Department of Microbiology Dr. ALM PG IBMS, University of Madras, Chennai. <i>TOPIC : “Automation and Artificial Intelligence applications in Microbiology”</i>
3.00 to 4.00  Paper Presentation - Biochemistry & Microbiology Venue: Campus I, Room No. 145	<b>Dr. K. VIJAYALAKSHMI</b> (Chairperson) Assistant Professor Department of Biochemistry Faculty of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Chengalpet
3.00 to 4.00  Paper Presentation - BCA Venue: Steve Jobs Hall	<b>Dr. Mrs. SUMATHY KINGSLIN</b> (Chairperson) Associate Professor Department of Computer Science Quaid - E - Milleth Govt. College for Women, Chennai
3.00 - 4.00 pm  Paper Presentation - Psychology	<b>Dr. S. SASIKALA</b> (Chairperson) Assistant Professor and Head i/c. Department of Counseling Psychology

Venue 1: Mini Auditorium	University of Madras, Chennai
3.00 - 4.00 pm  Paper Presentation -Psychology Venue 2: Shyam Kothari hall	<b>Dr. A.Zarina</b> (Chairperson) Associate Professor and Head Department of Psychology (Aided) Women's Christian College, Chennai
3.00 - 4.00 pm  Paper Presentation-Psychology Venue 3: Campus II, Room No A220	<b>Dr. H. SAIGEETHA</b> (Chairperson) Associate Professor and Head Dr. Ambedkar Government Arts College, Chennai
3.00 - 4.00 pm  Paper Presentation -Psychology Venue 4: Campus II, Room No A235	<b>Dr. R.Subashree</b> (Chairperson) Assistant Professor and Head Department of Psychology Madras School of Social Work, Chennai
<b>DAY 2 - 2<sup>nd</sup> FEBRUARY 2024</b>	
<b>TECHNICAL SESSION - III (9.30 to 10.15 am)</b>	
9.30 - 10.15 am  Invited Lecture- 8 Online Venue : Main Auditorium	<b>Dr.HALEEMA. P. K</b>  Senior Lecturer School of Computing and Engineering University of West London RAK Branch Campus, U.A.E. <i>TOPIC : “Applications of Mathematics in Industry 4.0 Technologies”</i>
9.30 - 10.15 am  Invited Lecture-9 Venue : Mini Auditorium	<b>Dr. MADHAVI RANGASWAMY</b>  Professor and Research Coordinator, Department of Psychology Christ (Deemed to be University), Bengaluru <i>TOPIC : “Influences on Decision Making and its Implication for Current and Future Well-Being”</i>
9.30 -10.15 am  Invited Lecture-10 Online Venue: Steve Jobs Hall	<b>Dr. R. JOHN MARTIN</b>  School of Computer Science and Information Technology Jazan University, KSA, Saudi Arabia <i>TOPIC : “AI Unveiled”</i>
<b>TECHNICAL SESSION - IV (10.15 - 11.00 am)</b>	
10.15 - 11.00 am  Invited Lecture-11 Online Venue : Main Auditorium	<b>Dr. ROHINI KARUNAKARAN</b>  Deputy Dean - Academics & International Affairs Faculty of Medicine, AIMST University Malaysia <i>TOPIC : “ ESG Integrated Education - Need of the Hour for Sustainable Future”</i>
10.15 - 11.00 am  Poster Presentation Venue : Library	<b>Mrs. GHAYATRI SWETHA KUMARI</b> (Chairperson) Assistant Professor and Head Department of Psychology MOP Vaishnav College, Chennai
10.15 - 11.00 am  Invited Lecture- 12 Online Venue : Steve Jobs Hall	<b>Dr. T. VEL MURUGAN</b>  Associate Professor Department of Computer Science D. G. Vaishnav College, Chennai <i>TOPIC : “Intelligent Process Automation”</i>
11.00 - 11.30 am	TEA BREAK
<b>TECHNICAL SESSION - V (11.30 - 12.15 pm)</b>	
11.30 - 12.15 pm  Invited Lecture- 13 Venue : Main Auditorium	<b>Dr.ELANGO VAN VELLAICHAMY</b> Professor & Head, Department of Biochemistry Controller of Examination i/c. University of Madras, Chepauk, Chennai



	<i>TOPIC : “Gene Therapy :Where we stand ?”</i>
11.30 - 12.15 pm  Invited Lecture- 14 Online Venue : Mini Auditorium	<b>Ms. SHIKAINAH CHAMPION SAMUEL</b> Psychological Therapist National Health Service, London, UK <i>TOPIC : “The Neuroscience behind Eye Movement Desensitization and Reprocessing (EDMR)”</i>
11.30 - 12.15 pm  Invited Lecture-15 Venue : Steve Jobs Hall	<b>Dr. S. BHARATHIDASON</b> Head, Department of Computer Science Loyola College, Chennai <i>TOPIC : “Decision Optimization with Genetic Algorithm”</i>



**2<sup>nd</sup> FEBRUARY 2024**  
**VENUE: MAIN AUDITORIUM, 2.00-3.00 pm**

**INVOCATION**

**WELCOME ADDRESS**

**Dr. M. RAMYA MAHESWARI**  
*Associate Professor & Head  
Department of Psychology  
Ethiraj College for Women, Chennai*

**CONFERENCE REPORT**

**Dr. M. HENILA**  
*Assistant Professor & Head  
Department of BCA  
Ethiraj College for Women, Chennai*

**SPECIAL ADDRESS**

**Dr. S. UMA GOWRIE**  
*Principal & Secretary  
Ethiraj College for Women, Chennai*

**VALEDICTORY ADDRESS**

**Dr. E.VIVEKANANDAN**  
*Advisor and Senior Scientific Consultant  
Bay of Bengal Program  
Inter-Governmental Organization*

**PRIZE DISTRIBUTION**

**VOTE OF THANKS**

**Dr.V. GAYATHRI**  
*Associate Professor  
Department of Microbiology  
Ethiraj College for Women, Chennai*

**COLLEGE SONG**