

A Brief Report

On

Two Day International Conference on

“BIOMEDICAL SMART STRUCTURES AND SYSTEMS”

BMSSSS

07th to 08th May 2021

Sponsored by

IEEE Photonics, Robotics & Automation, Engineering in Medicine, Computer Society

Organized by

SAVEETHA ENGINEERING COLLEGE

CHENNAI

Scope of Conference:

The International Conference on Bio Medical Smart Structures and Systems (BMSSS 2021) aims to bring together leading academicians, scientists, researchers and research scholars to exchange and share their innovative ideas, experience and research results about all aspects of Engineering and Technology. This Symposium is to identify and provide feasible solutions to meet ever growing challenges in the field of Bio Photonics, BioMEMS, Nano systems, Artificial Intelligence, System on chip (SOC), Network on chip (NOC), Lab on Chip(LOC), Soft computing, Grid system, Sensor Network, Image & Signal processing etc.,

The Symposium is one of the premier International meet in the field of Engineering & Technology and aims to provide a forum for electrical and electronics engineers and scientists in universities and research centers, utilities and industry to present their work and share information in the area of Biomedical smart structures and systems. BMSSS 2021 will comprise plenary talks and forum discussions, parallel sessions together with poster presentations taking place over 2 days.

Participants:

The programme is open for UG /PG students, research scholars, faculty members and industrialists with any engineering discipline.

Abstract Submission:

Abstract or full paper to be sent through email to organizerbmsss@gmail.com

Registration Fee Details:

- Indian students - Rs 200/ 250
- Foreign students - \$15/ 20

Registration Link:

<https://forms.gle/4wjsCDDtovtkvjxs8>


WhatsApp Group Link:

<https://chat.whatsapp.com/KMu6wla86VcGbJ9xSHIEcS>

Google Meet Link:



<https://meet.google.com/nqh-qxny-pfd>

Brochure:



SAVEETHA AUTONOMOUS ENGINEERING COLLEGE

SEC

SAVEETHA IEEE STUDENT BRANCH ORGANIZES
IEEE PHOTONICS SOCIETY SPONSORED

TWO DAY INTERNATIONAL CONFERENCE/SYMPOSIUM ON

BIO MEDICAL SMART STRUCTURES AND SYSTEMS IC/SBMSSS 21

DATE: 07th & 08th May 2021

ABOUT THE INSTITUTION

Saveetha Engineering College (SEC) was established in 2001 by Dr. N.M. Veeraiyan, Dentist by profession. The College has 12 UG courses & 8 PG Courses including MBA. The college has got accreditation for 5 UG courses in 2018 for three years by NBA and Our college has been ranked 124 by the National Institute Ranking Framework (NIRF) for the academic year 2017-18 among all IITs, Central, State and Private Institutions in India. In the year 2015 our college was awarded the highest grade 'A' with score of 3.19 on a scale of 4 by the National Assessment and Accreditation Council (NAAC) for 5 Years. Our Institution awarded as Autonomous from the academic year 2019-2020. The Department of Scientific and Industrial Research (DSIR), Government of India has recognized the college as a Scientific and Industrial Research Organization (SIRO), considering its potential for Research and Development activities in the year 2013.

SCOPE OF THE CONFERENCE

The International Symposium on Bio Medical Smart Structures and Systems (IC/SBMSSS 20) aims to bring together leading academicians, scientists, researchers and research scholars to exchange and share their innovative ideas, experience and research results about all aspects of Engineering and Technology. This Symposium is to identify and provide feasible solutions to meet ever growing challenges in the field of Bio Photonics, BioMEMS, Nano systems, Artificial Intelligence, System on chip(SOC), Network on chip(NOC), Lab on Chip(LOC), Soft computing, Grid system, Sensor Network, Image & Signal processing etc.

The Symposium is one of the premier International meet in the field of Engineering & Technology and aims to provide a forum for electrical and electronics engineers and scientists in universities and research centres, utilities and industry to present their work and share information in the area of Biomedical smart structures and systems. ISBMSSS 2020 will comprise plenary talks and forum discussions, parallel sessions together with poster presentations taking place over 2 days.

PAPER PRESENTATION

**TRACK 1
BIOMEDICAL SYSTEM**

Bio Smart Systems, Fuzzy Logic / Neural networks, Diagnostic and Therapeutic Instrumentation, Biometric and Biomaterials, Medical Informatics, Telehealth and Telemedicine.

**TRACK 2
HEALTH CARE TECHNOLOGIES**

Nano/Micro Bio Engineering, Tissue/Cellular Engineering, Biomaterials and Artificial Organs Computational Systems, Modeling and Simulation in Medicine, Cardiovascular and Respiratory system Engineering, Neural and Rehabilitation Engineering, Biomedical sensors and Wearable Systems, Biomechanics and control system.

**TRACK 3
BIOMEDICAL IMAGING AND SIGNAL/IMAGE PROCESSING**

3D and Surface Reconstruction, Automatic Image and video Annotation, Medical Image retrieval and Cryptography, Watermarking, Medical image filtering and Enhancement, medical image Segmentation and recognition, Medical Image compression and coding, Medical image feature detection and classification, Super resolution Imaging.

**TRACK 4
ARTIFICIAL INTELLIGENCE MODELS & APPLICATIONS**

Expert Systems/Fuzzy Systems, Artificial Neural Networks/Genetic Algorithms, Machine Learning, and Deep Learning Approaches, Natural Language Processing, Semantic Web Intelligence & Models.

**TRACK 5
COMPUTER VISION**

Biologically Inspired Vision, Gesture and Activity Recognition, Model based Vision, Motion Tracking and Analysis, Motion flow and Visualization, Object detection and Recognition

**TRACK 6
BIOMEDICAL APPLICATIONS**

Augmented and Mixed Reality, Biometrics, Facial Recognition, Gait Analysis, Fall detection and prevention, Mental health and Cognitive Stimulation, Multimedia Databases, Occupational Therapy, Telemedicine, 3D Printing in Medical.

The programme is open for UG /PG student, research scholars, Industrialists with any disciplines.

IMPORTANT DATES

Intimation of Selection 03/05/2021 | Confirmation of participants via E-mail : 04/05/2021

Accommodation will be provided on prior request.

REGISTRATION FEE DETAILS

IEEE Members ₹ 200/- | Non IEEE Members ₹ 250/-

EVENT VENUE

ECE SEMINAR HALL

www.saveetha.ac.in



SEC IEEE STUDENT BRANCH & DEPARTMENT OF ECE, MEDICAL ELECTRONICS & BME

INTERNATIONAL ADVISORY COMMITTEE:

Dr. Xavier Fernando, Ryerson University, Canada.
 Dr. Sureshkumar Tikoo, University of Saskatchewan, Canada.
 Dr. Tom Page, Loughborough University, United Kingdom.
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 Shri. D. Manogar Loganathan, M.D., Serole Tech., Pvt., Ltd. Singapore
 Shri. Neil Armstrong, Tech Mahindra, Client Ministry of Education, Singapore
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 Dr. Thang Ka Fei, Head, School of Engineering, APU, Kuala Lumpur
 Dr. Lai Nai Shyan, Research coordinator, APU, Kuala Lumpur.
 Dr. K. Suresh Manic, National University of science and technology, Muscat.
 Dr. Gomathinayagam, Director General, NIWE, Chennai.
 Dr. G. Giridhar, Deputy Director General, SRRA, NIWE, Chennai
 Dr. Kumarappan, Chairman, IEEE Madras Section.
 Dr. Arunachala Perumal, Chairman, IEEE Photonics Society, Madras Section
 Mr. Purna Chandra Rao, Head, Fermentation and R&D, TEX-Biosciences, Chennai.
 Dr. Doble Mukesh, IIT, Chennai.
 Dr. Srinivasan, IIT, Chennai.
 Dr. S. Ashok, NIT, Calicut, Kerala.
 Dr. S. Kumaravel, NIT, Calicut, Kerala.
 Dr. S. Venkatesan, IIIT-A, Allahabad.
 Dr. N. Kumaravel, Anna University, Chennai.
 Dr. P. Vanajaranjan, Anna University, Chennai.
 Dr. Nithiyavathy, IEEE WIE Chair, Madras Section, Chennai.
 Dr. P. Kumarasamy, Madras Veterinary College, Chennai.
 Dr. S. Umesha, University of Mysore, Mysore, Karnataka.
 Dr. Gundala Harold Philip, Sri Krishnadevaraya University, Anantapur, AP
 Dr. J. Narayanan, Sankar Nethralaya, Chennai, India.

TECHNICAL COMMITTEE:

Dr. K.N. Bhat, IISc, Bangalore.
 Dr. D. Sri Ramkumar, NIT, Trichy.
 Dr. P. Ramesh Babu, Pondicherry Engineering College.
 Mr. Gowtham, Founder President, Intelligent Chip Connections, Singapore.
 Dr. Shauna Robbenolt, Autonomous university of Barcelona, Spain
 Dr. Renyun Zhang, Mid Sweden University, Sweden
 Dr. Chaitanya Indira, CMR Institute of Technology, India
 Nirupam Chakraborti, IIT, Kharagpur, India
 Dr. Pitchai Ramasamy, B.V.Raju Institute of Technology, Hyderabad
 Dr. V. Jeyalakshmi, Anna University

ORGANIZING COMMITTEE:

Chief Patron
 Dr. N.M. Veeraiyan, Founder President & Chancellor, SIMATS
Patrons
 Dr. V. Saveetha Rajesh, Director, SMCH
 Dr. S. Rajesh, Director, SEC
Co-Patrons
 Dr. R. Ramesh, Principal, SEC
 Dr. R. Senthil Kumar, Vice Principal, SEC
Conveners
 Dr. Srigitha. S. Nath, Professor & Associate Dean, ECE/MED & BME
 Dr. M. Moorthi, Prof & Head- MED, SEC SB Advisor
Organizing Secretary
 Dr. S. Praveen Kumar, Professor & SEC SB Counsellor
Program Chair
 Dr. Kanchana, AP/MED
 Dr. Kalaivani, AP/ECE
 Dr. Dhanush, AP/BME
IEEE Coordinators
 Mr. T. Aravind, AP/ ECE
 Mrs. K. Sakthi, AP/ECE
Organizing Coordinators
 Dr. S. Manju, AP/ MED
 Dr. Samuthirapandi, AP/ ECE
 Mr. K. Shankar, AP/BME
Co- Coordinators
 Dr. Sindhiya, Asso. prof/ BME
 Dr. Nagaraj, Asso. Prof/ ECE
 Mr. Madhanlal, AP/MED



MAILING ADDRESS

Dr. M. Moorthi, Prof & HOD, Department of Medical Electronics (ECE)
 Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai | Tamil Nadu 602105, India | Mobile : 9841099062 | Mail: moorthi@saveetha.ac.in

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Session Chairs:



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**INTERNATIONAL CONFERENCE ON
BIOMEDICAL SMART STRUCTURES
AND SYSTEMS 2021**

Sponsored by IEEE Photonics, Engineering in medicine,
Robotics & Automation, Computer Society

SESSION CHAIRS - 07.05.21 & 08.05.21



TRACK 1 : BIOMEDICAL SYSTEM

Dr. A. Vijayalakshmi
Professor/ECE
Vels University
Chennai



TRACK 2: HEALTH CARE TECHNOLOGIES

Dr. M. Sujatha
Professor, ECE
KL University, Vijayawada
Andrapradesh



**TRACK 3: BIOMEDICAL IMAGING AND
SIGNAL/IMAGE PROCESSING**

Dr. G. Kavya
Professor & Head
Department of ECE,
S.A. Engineering College



**TRACK 4: ARTIFICIAL INTELLIGENCE
MODELS & APPLICATIONS**

Dr. T. Manikandan
Prof & Academic Head, ECE
Rajalakshmi Engineering College



TRACK 5: COMPUTER VISION

Dr. P. Kalpana Devi
Asso. Professor/ECE
VelTech University



TRACK 6: BIOMEDICAL APPLICATIONS

Dr. S. J. Kumaresan
Asso. Professor/ECE,
R. M. K Engineering College

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Organizing Committee:

Chief Patron	<ul style="list-style-type: none"> Dr. N.M. Veeraiyan, Founder, President & Chancellor, SIMATS
Patrons	<ul style="list-style-type: none"> Dr. V. Saveetha Rajesh, Director, SMCH Dr. S. Rajesh, Director, SEC
Co-Patrons	<ul style="list-style-type: none"> Dr. R. Ramesh, Principal, SEC Dr. R. Senthil Kumar, Vice Principal, SEC
Conveners	<ul style="list-style-type: none"> Dr. Srigitha S Nath, Professor, Asso. Dean (ECE, MED & BME) Dr. M. Moorthi, Professor & Head (MED), IEEE SB Advisor
Organizing Secretary	<ul style="list-style-type: none"> Dr. S. Praveen Kumar, Professor (ECE), IEEE SB Counselor
Program Chair	<ul style="list-style-type: none"> Dr. D. Kanchana, Assistant Professor, MED Dr. Kalaivani, Assistant Professor, ECE Dr. Dhanush, Assistant Professor, BME
IEEE Coordinators	<ul style="list-style-type: none"> Mr. T. Aravind, Assistant Professor, ECE Mrs. K. Sakthi, Assistant Professor, ECE
Organizing Coordinators	<ul style="list-style-type: none"> Dr. S. Manju, Assistant Professor, MED Dr. Samuthirapandi, Assistant Professor, ECE Mr. K. Shankar, Assistant Professor, BME
Co-Coordinators	<ul style="list-style-type: none"> Dr. Sinthiya P, Associate Professor, BME Dr. Nagaraj, Associate Professor, ECE Mr. U. Madhanlal, Assistant Professor, MED

Participants:

Nearly 150 participants have registered from various academic institutions across the country such as SRM Institute of Science and Technology, Vels University, Jerusalem college of Engineering, Jeppiar Institute of Technology, Dhanalakshmi Srinivasan Engineering College, Vemu Institute of Technology, Velammal Institute of Technology, Avinashilingam Institute of Home Science and Higher Education for Women, Karpaga Vinayaga College of Engineering and Technology, SRM Easwari Engineering College, Vels Institute of Science, Technology and Advanced Studies, SNS College of technology, Easwari Engineering College and Asia Pacific University, Malaysia. Around 76 papers from various academic institutions have been shortlisted for the oral presentation in the conference.

PAPER PRESENTATION

TRACK 1: BIOMEDICAL SYSTEM

Bio Smart Systems, Fuzzy Logic / Neural networks, Diagnostic and Therapeutic Instrumentation, Biometric and Biomaterials, Medical Informatics, Telehealth and Telemedicine.

TRACK 2: HEALTH CARE TECHNOLOGIES

Nano/Micro Bio Engineering, Tissue/Cellular Engineering, Biomaterials and Artificial Organs Computational Systems, Modeling and Simulation in Medicine, Cardiovascular and Respiratory system Engineering, Neural and Rehabilitation Engineering, Biomedical sensors and Wearable Systems, Biomechanics and control system.

TRACK 3: BIOMEDICAL IMAGING AND SIGNAL/IMAGE PROCESSING

3D and Surface Reconstruction, Automatic Image and video Annotation, Medical Image retrieval and Cryptography, Watermarking, Medical image filtering and Enhancement, medical image Segmentation and recognition, Medical Image compression and coding, Medical image feature detection and classification, Super resolution Imaging.

TRACK 4: ARTIFICIAL INTELLIGENCE MODELS & APPLICATIONS

Expert Systems/Fuzzy Systems, Artificial Neural Networks/Genetic Algorithms, Machine Learning, and Deep Learning Approaches, Natural Language Processing, Semantic Web Intelligence & Models.

TRACK 5: COMPUTER VISION

Biologically Inspired Vision, Gesture and Activity Recognition, Model based Vision, Motion Tracking and Analysis, Motion flow and Visualization, Object detection and Recognition

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TRACK 6: BIOMEDICAL APPLICATIONS

Augmented and Mixed Reality, Biometrics, Facial Recognition, Gait Analysis, Fall detection and prevention, Mental health and Cognitive Stimulation, Multimedia Databases, Occupational Therapy, Telemedicine, 3D Printing in Medical.

Inaugural Function Agenda:



DEPARTMENT OF ECE, MEDICAL ELECTRONICS & BME

Organizes two day International Conference On

Biomedical Smart Structures and Systems: ICBMSSS – 2021

Sponsored by IEEE Photonics, Robotics & Automation, Engineering in Medicine, Computer society

AGENDA

Date: 07.05.2021-Inaugural Function

- 10:00 am - Invocation
- 10:03 am - Welcome Address
Dr. Srigitha.S.Nath, Prof & Asso. Dean/ ECE/MED&BME
- 10:08 am - Lighting Kuthuvilakku
- 10:10 am - Presidential Address
Dr. R Ramesh, Principal, SEC
- 10:15 am - BMSSS 2021 Report
Dr. M.Moorthi, Prof&HOD/MED, SEC
- 10:20 am - Felicitation of Guest
- 10:22 am - Introduction of Chief Guest
Dr. Kanchana, AP/Medical Electronics
- 10:25 am -Inaugural Address
Dr. G. Giridhar
Director, Ministry of New and Renewable Energy (MNRE),
Government of India, New Delhi &
Solar Radiation Resource Assessment (SRRA),
National Institute of Wind Energy(NIWE), Chennai
- 10:30 am -Introduction of Chief Guest
Dr. Manju, AP(SG)/Medical Electronics
- 10:33 am -Keynote Address
Dr. Celia Shahnaz,
Professor, Department of EEE, Bangladesh University of Engineering
& Technology, Dhaka& Chair, IEEE Bangladesh Section,
Talk-Impact of Deep Learning in Healthcare Sector
- 10:45 am -Introduction of Chief Guest
Dr. Kanchana, AP/Medical Electronics
- 10:48 am -Keynote Address
Dr. Somashekhar S. Hiremath
Department of Mechanical Engineering,
Indian institute of Technology Madras
Talk-Applications of Robotics in Health care System
- 11:00 am – Souvenir Release

Inaugural Function Invitation:



SAVEETHA ENGINEERING COLLEGE **AUTONOMOUS**
Affiliated to Anna University | Approved by AICTE

IEEE

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The Management, Faculty and Students of Saveetha Engineering College
Most Cordially invite you to the Inaugural Function of

ICBMSSS 2021

IEEE Photonics Society Sponsored International Conference on
BIOMEDICAL SMART STRUCTURES AND SYSTEMS 2021

AT 10.00 A.M. ON FRIDAY, 7 MAY 2021, AT ECE SEMINAR HALL

CHIEF GUESTS

 Dr. G. Giridhar <small>Director, Ministry of New and Renewable Energy (MNRE), Government of India, New Delhi Solar Radiation Resource Assessment (SRRA) National Institute of Wind Energy (NIWE), Chennai (has kindly consented to be the Chief Guest and deliver the Inaugural address)</small>	 Dr. Celia Shahnaz <small>Professor, Department of EEE, BUET, Dhaka Chair, IEEE Bangladesh Section, Talk-Impact of Deep Learning in Healthcare Sector (will deliver Presidential Address)</small>	 Dr. Somashekhar S. Hiremath <small>Department of Mechanical Engineering Indian Institute of Technology Madras Talk-Applications of Robotics in Health care System (will deliver Keynote Address)</small>
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Patrons

Dr. N.M. Veeraiyan <small>Founder President & Chancellor, SIMATS</small>	Dr. S. Rajesh <small>Director, Saveetha Engineering College</small>	Dr. V. Saveetha Rajesh <small>Director, Saveetha Medical College and Hospital</small>
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will preside over the function

Co-Patrons

Dr. R. Ramesh <small>Principal, Saveetha Engineering College</small>	Dr. R. Senthil Kumar <small>Vice Principal, Saveetha Engineering College</small>
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Conveners

Dr. Srigitha.S. Nath <small>Prof. & Associate Dean, ECE/MED & BME</small>	Dr. M. Moorthi <small>Prof. & Head - MED, SEC SB Advisor</small>	Dr. S. Praveen Kumar <small>Prof. & SEC SB Counsellor</small>
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Day 1 - 07/05/2021 (Friday) - Inaugural Function:

The Department of Medical Electronics, Electronics and Communication Engineering and Biomedical Engineering from Saveetha Engineering College, Chennai have successfully organized two day International Conference on “Biomedical Smart Structures and Systems”, during 7th and 8th May 2021. The Inaugural function for BMSSS Conference began with a formal welcome by **Dr. D. Kanchana, Assistant Professor** in the Department of Medical electronics. The function was inaugurated with an Invocation song of Tamil Thaa Valzthtu, followed by Digital lighting ceremony of Kuthuvilakku. **Dr. S. Manju, Assistant Professor** in the Department of Medical electronics, coordinated the Inaugural function.

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The Welcome address was delivered by **Dr. Srigitha S Nath**, Professor and Associate Dean, Saveetha Engineering College. She extended a warm welcome to the chief guests of the Inaugural function, **Dr. G. Giridhar, Dr. Celia Shahnaz, and Dr. Somashekhar S. Hiremath**. She also thanked Dr. Rajesh, Director, Saveetha Engineering College for his constant support and encouragement in organizing such events. She wished the event a grant success and thanked the participants for their joining the programme.

Dr. Ramesh, Principal, Saveetha Engineering College, has delivered the Presidential address. He focused upon the importance of such conference for students and faculty in the present days. He also emphasized the need to deal with the rapid changes and shifting paradigms in the education field. He explained about how biomedical smart systems could aid in better clinical diagnosis and early treatment. He also wished the organizers for taking up the responsibility in organizing such event and insisted that the event should be made as interactive as possible.

The BMSSS Conference Report was then presented by **Dr. Moorthi M, Professor and HoD**, Department of Medical Electronics, Saveetha Engineering College. He gave a short glimpse of the event including details about the speakers, participants and session chairs for this conference. He then thanked the management and IEEE for their support in organizing this event. He extended his warm welcome to the participants who have joined this programme from all over the country.

The Inaugural address was delivered by **Dr. G. Giridhar, Director, Ministry of New and Renewable Energy (MNRE), Government of India, New Delhi & Solar Radiation Resource Assessment (SRRA), National Institute of Wind Energy (NIWE), Chennai**. He highlighted the significance of such conference to enhance the presentation skills of the young engineering professionals. He wished the organizing team a grand success and congratulated the participants for being shortlisted for oral presentation in the conference. The chief guest was then felicitated with a virtual memento and bouquet as a token of appreciation.

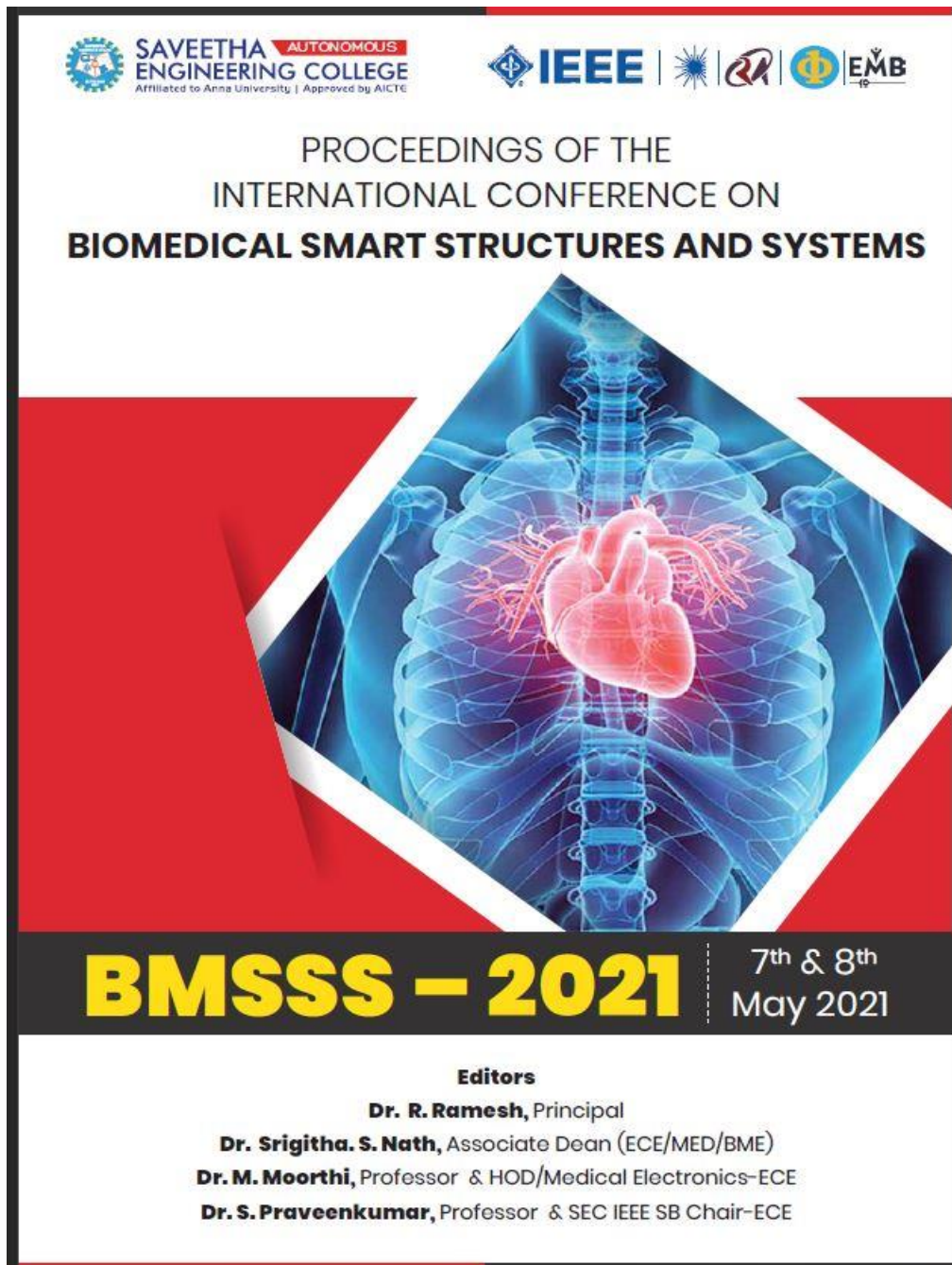
The Presidential address was delivered by the chief guest, **Dr. Celia Shahnaz, Professor, Department of EEE, BUET, Dhaka & Chair, IEEE Bangladesh Section**. She talked about the challenges and requirements of the medical community in diagnosing diseases. She also highlighted the role of engineers in aiding clinical diagnosis using image processing algorithms and green computing techniques. She then wished the organizers and participants for successful completion of this event. The chief guest was then felicitated with a virtual memento and bouquet as a token of appreciation.

The Keynote address was delivered by the chief guest, **Dr. Somashekhar S. Hiremath, Department of Mechanical Engineering, Indian Institute of Technology Madras**,

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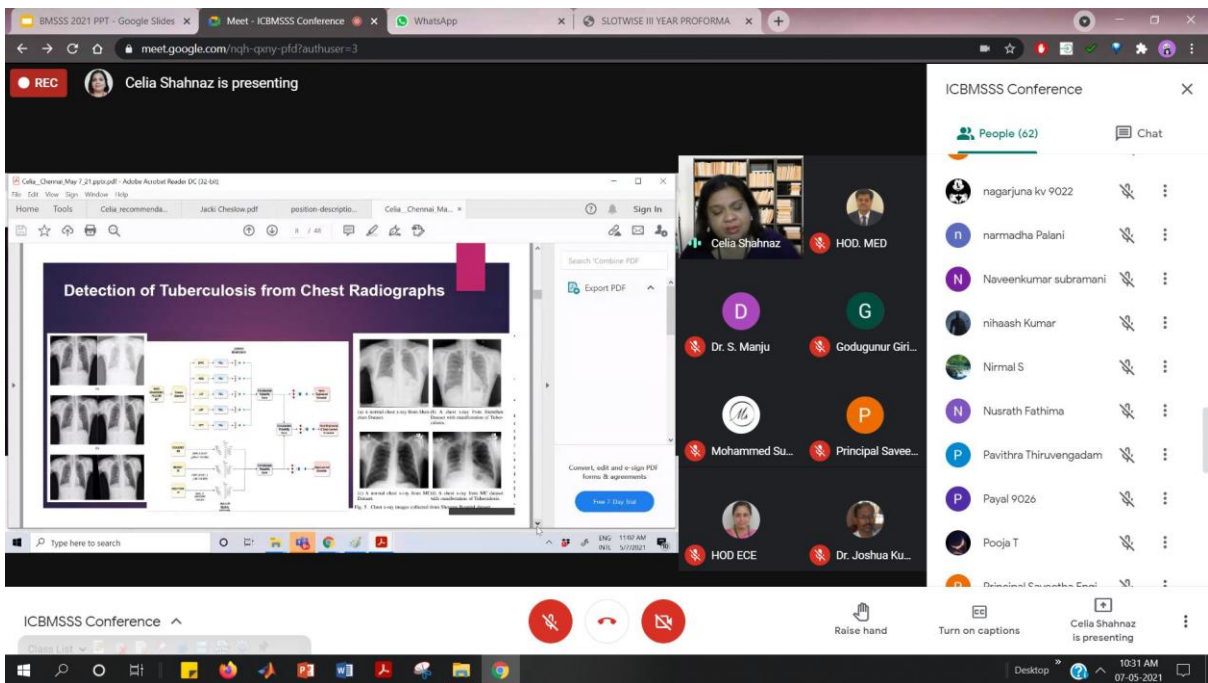
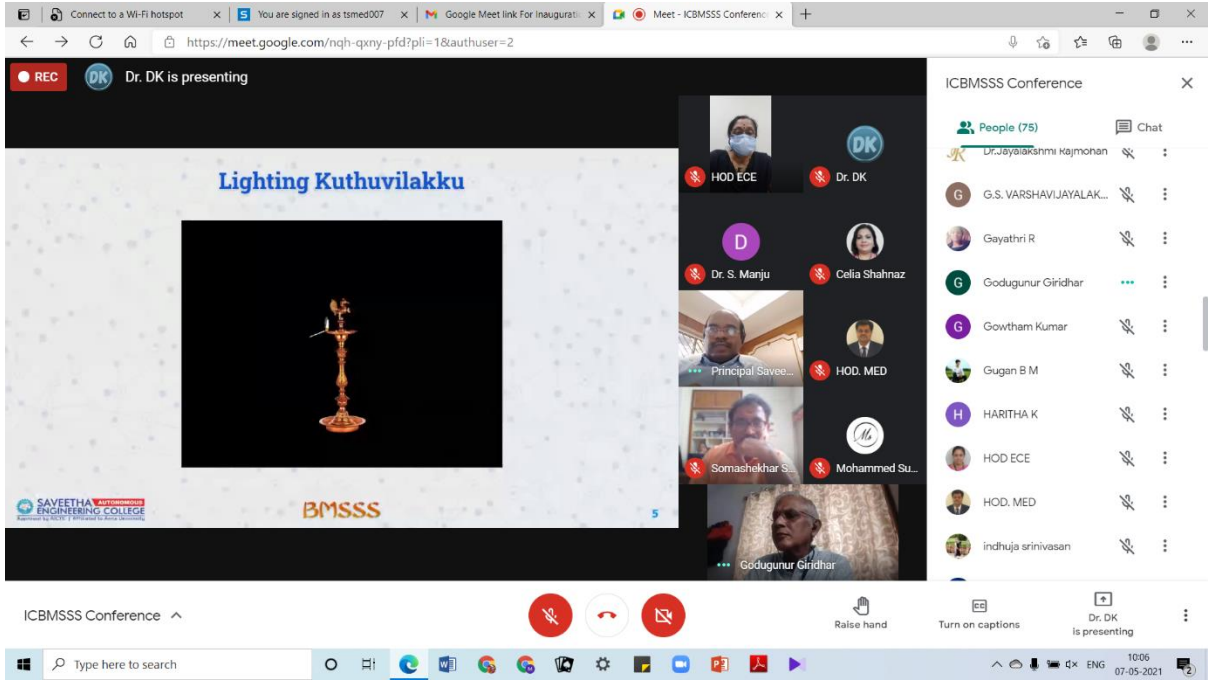
Chennai. He delivered an exceptional talk on the recent advancements in the medical device design industry. He also showed various device prototypes development in various IITs across the country. He encouraged the student community to design their own medical device prototypes for the various problems faced in the society. The chief guest was then felicitated with a virtual memento and bouquet as a token of appreciation. The Inaugural function ended with the release of the BMSSS 2021 Conference proceedings as souvenir.

Souvenir Release:



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Screenshots from the Inaugural function are attached below:



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WELCOME

"Applications of Robotics in Healthcare System"

<https://meet.google.com/nqh-qxny-pfd>

Somashekhar S

Precision Engineering & Instrumentation Laboratory
 Department of Mechanical Engineering
 Indian Institute of Technology Madras, Chennai – 600 036
 MSR:310; 044-2257 4681; 0944 52 65 688

The screenshot shows a Google Meet interface with a presentation slide. The slide features images of various robots and prosthetics. The meeting controls at the bottom show 'REC' is on, and the presenter is 'Somashekhar S IITM'. The participant list on the right includes Dr. DK, Akshaya 1001, Alagu Meenal, Benil Richards, Bharath Rock, Celia Shahnaz, and Deepavarshni V.

Robots as a Caretakers and playing with pet using Cyborg

The screenshot shows a Google Meet interface with a presentation slide. The slide features images of robots in various settings, including one interacting with a pet. The meeting controls at the bottom show 'REC' is on, and the presenter is 'Somashekhar S IITM'. The participant list on the right includes Mosie S, N Divya, nagarjuna kv 9022, narmadha Palani, Naveenkumar subramani, Nirmal S, Pavithra Thiruvengadam, Pooja T, and Prince Sanjay kumar.

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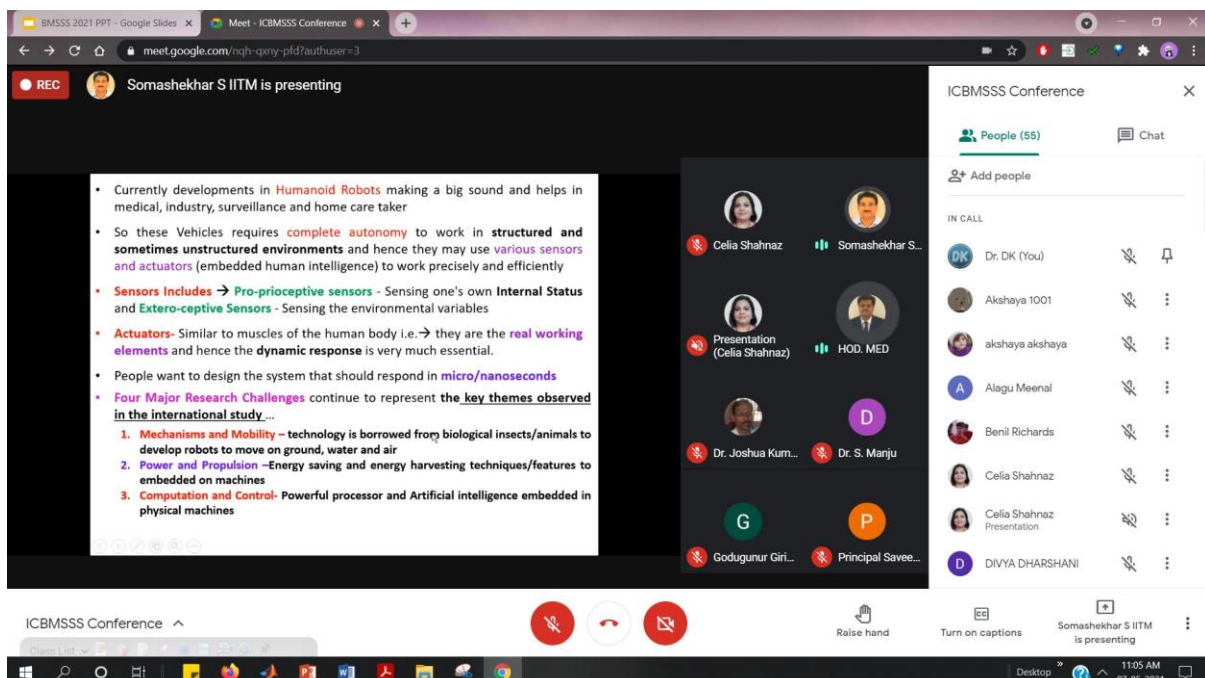
Day 1 - 07/05/2021 (Friday) - Session I:

Meet Link: <https://meet.google.com/dqj-kwfg-vwb>

The first session of day 1 had around 12 technical paper presentations out of which one paper was selected as best paper. The session chair was **Dr. Vijayalakshmi, Professor/ ECE, Vels University, Chennai**. She has evaluated the presentation based on novelty, technical relevance and the presentation skills of the participants. Out of the papers presented in Track 1, the paper titled “Soil Moisture Monitoring System using Arduino Uno” was awarded the best paper award.



Screenshot from Track I presentation is attached below:



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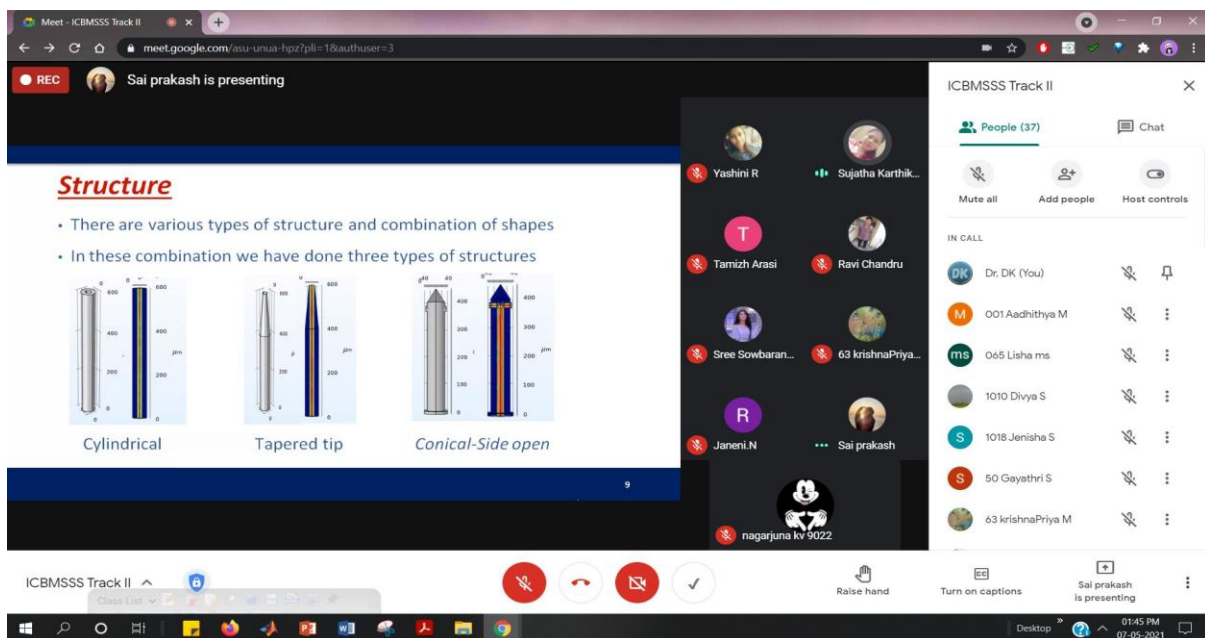
Day 1 - 07/05/2021 (Friday) - Session II:

Meet Link: <https://meet.google.com/asu-unua-hpz>

The second session of day 2 had around 15 technical paper presentations out of which one paper was selected as best paper. The session chair was Dr. M. Sujatha, Professor, ECE, KL University, Vijayawada, Andhra Pradesh. She has evaluated the presentation based on novelty, technical relevance and the presentation skills of the participants. Out of the papers presented in Track 2, the paper titled “Structural and Microfluidic Analysis of Microneedle Array for Delivery of Insulin” was awarded the best paper award.



Screenshot from Track II presentation is attached below:

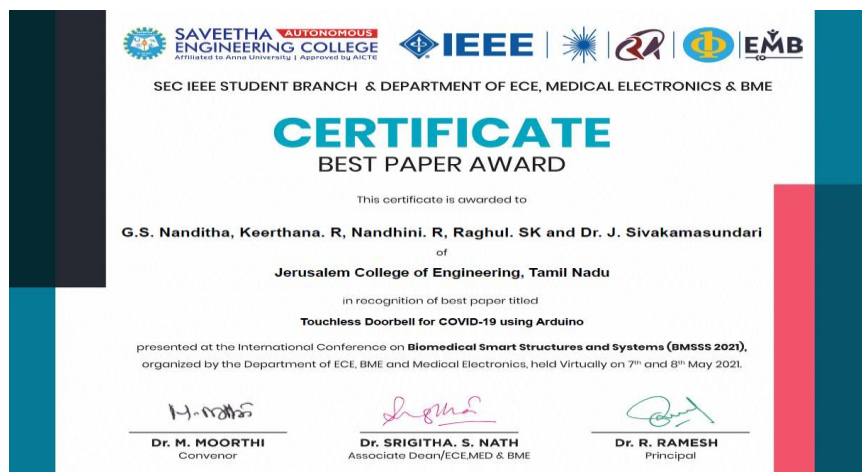


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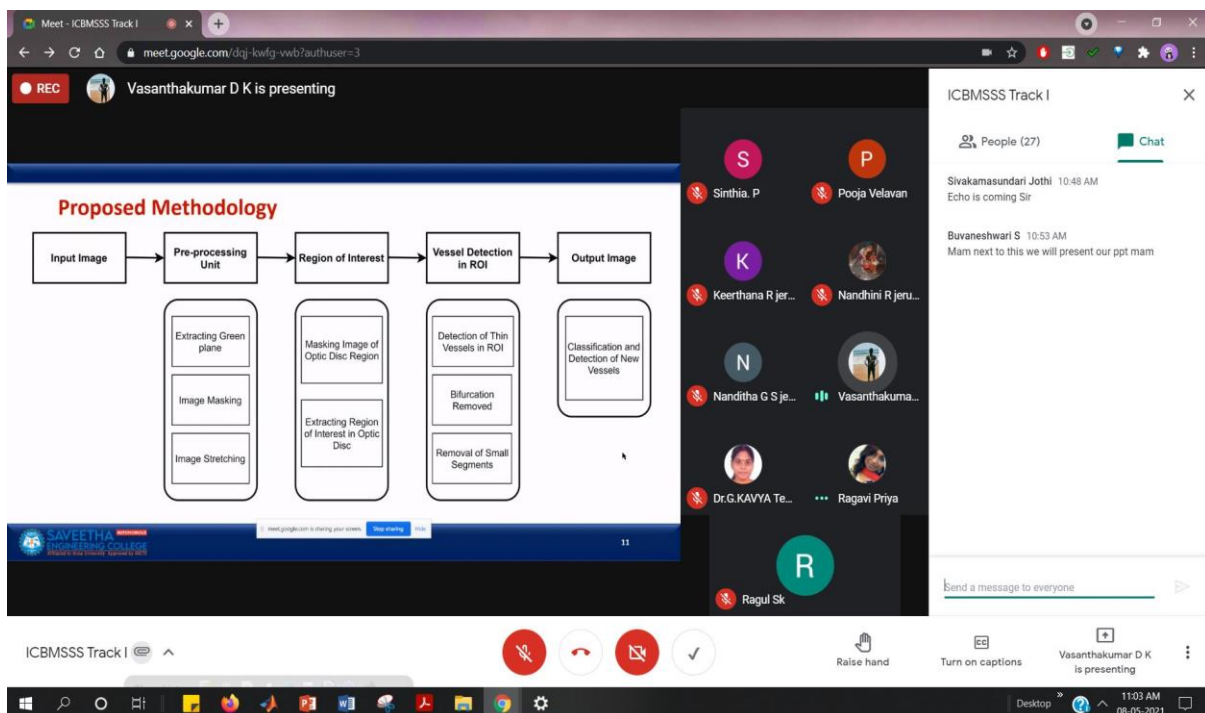
Day 1 - 07/05/2021 (Friday) - Session III:

Meet Link: <https://meet.google.com/khx-psee-uxu>

The third session of day 1 had around 15 technical paper presentations out of which one paper was selected as best paper. The session chair was **Dr. G. Kavya, Professor and Head, Department of ECE, S.A. Engineering College, Chennai.** She has evaluated the presentation based on novelty, technical relevance and the presentation skills of the participants. Out of the papers presented in Track 3, the paper titled “Touchless Doorbell for COVID-19 using Arduino” was awarded the best paper award.



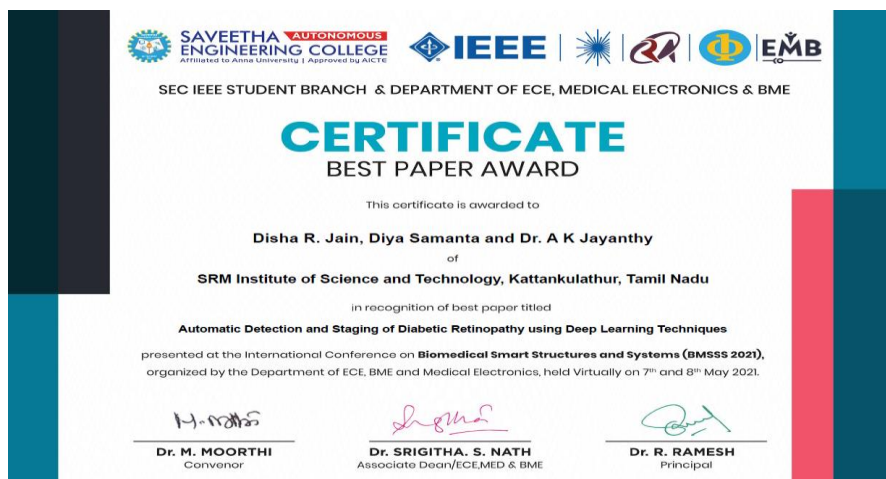
Screenshot from Track III presentation is attached below:



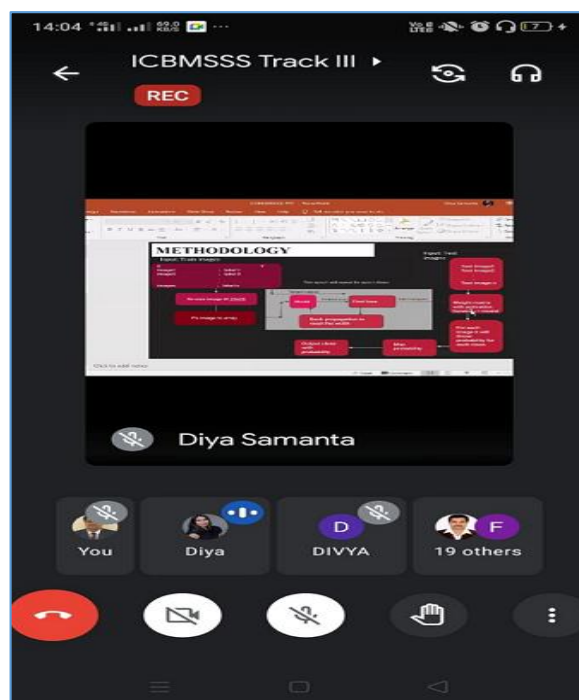
Day 2 - 08/05/2021 (Saturday) - Session IV:

Meet Link: <https://meet.google.com/dqj-kwfg-vwb>

The fourth session on day 2 had around 15 technical paper presentations out of which one paper was selected as best paper. The session chair was Dr. T. Manikandan, Prof & Academic Head, ECE, Rajalakshmi Engineering College, Chennai. He has evaluated the presentation based on novelty, technical relevance and the presentation skills of the participants. Out of the papers presented in Track 4, the paper titled “Automatic Detection and Staging of Diabetic Retinopathy using Deep Learning Techniques” was awarded the best paper award.



Screenshot from Track IV presentation is attached below:



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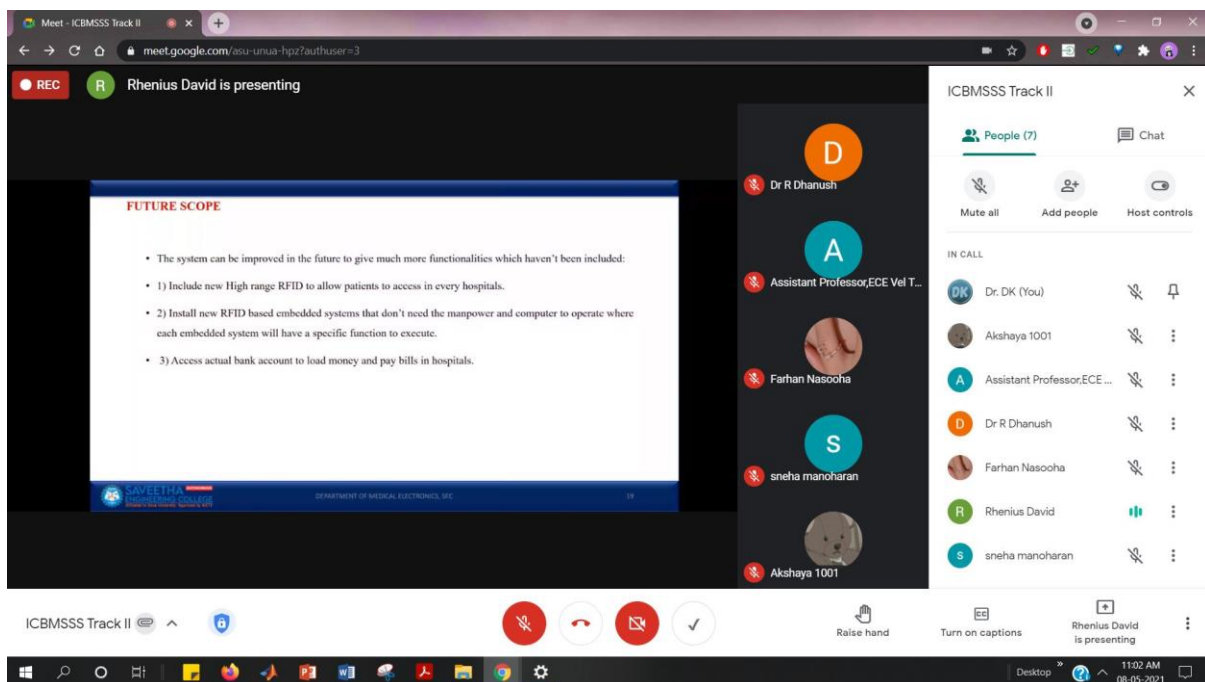
Day 2 - 08/05/2021 (Saturday) - Session V:

Meet Link: <https://meet.google.com/asu-unua-hpz>

The fifth session on day 2 had around 15 technical paper presentations out of which one paper was selected as best paper. The session chair was **Dr. P. Kalpana Devi, Asso. Professor/ECE, VelTech University, Chennai**. She has evaluated the presentation based on novelty, technical relevance and the presentation skills of the participants. Out of the papers presented in Track 5, the paper titled “Women Security System based on Voice Recognition Alert using IoT” was awarded the best paper award.



Screenshot from Track V presentation is attached below:



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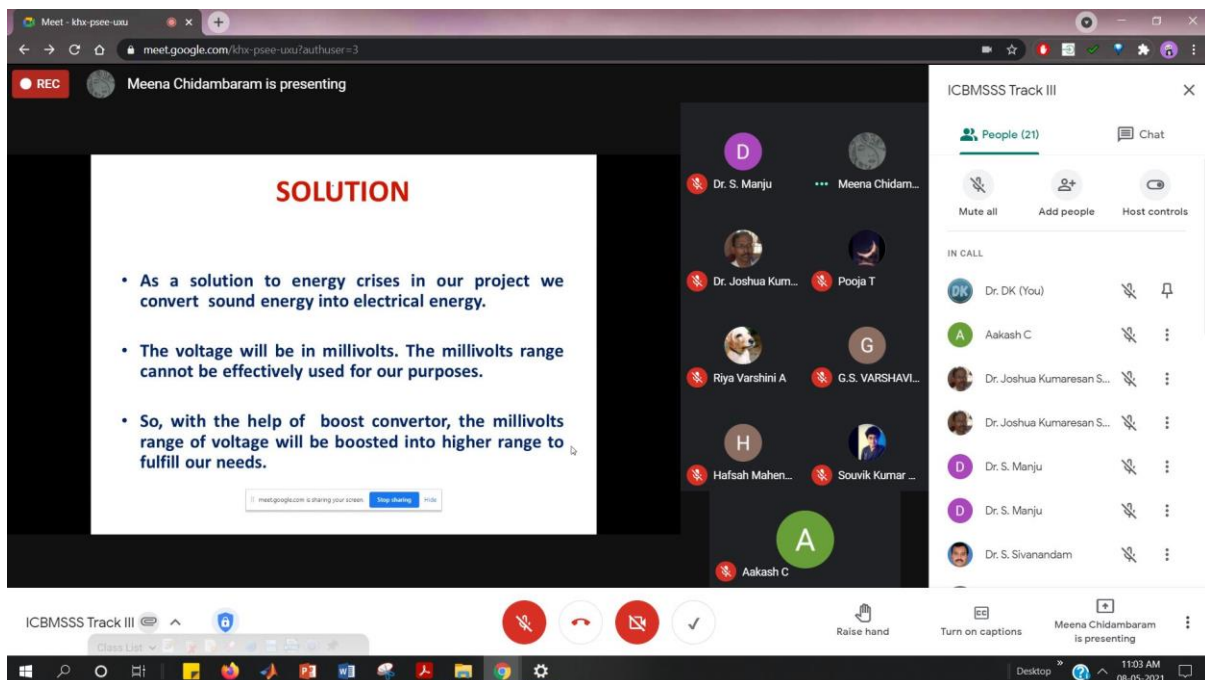
Day 2 - 08/05/2021 (Saturday) - Session VI:

Meet Link: <https://meet.google.com/khx-psee-uxu>

The sixth session on day 2 had around 15 technical paper presentations out of which one paper was selected as best paper. The session chair was **Dr. S. J. Kumaresan, Asso.Professor/ECE, R.M.K Engineering College, Chennai**. He has evaluated the presentation based on novelty, technical relevance and the presentation skills of the participants. Out of the papers presented in Track 6, the paper titled “Identification and Classification of Malignant Skin Lesions of The Anterior Torso using CNN” was awarded the best paper award.



Screenshot from Track VI presentation is attached below:



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Day 2 - 08/05/2021 (Saturday) - Valedictory Function:

Valedictory Function Agenda:



DEPARTMENT OF ECE, MEDICAL ELECTRONICS & BME

Organizes
two day International Conference
On
Biomedical Smart Structures and Systems: ICBMSSS – 2021
Sponsored by IEEE Photonics, Robotics & Automation, Engineering in
Medicine, Computer society

AGENDA

Date: 08.05.2021 - Valedictory Function

02:00 pm -BMSSS 2021 Report

Dr. M.Moorthi, HOD/MED

02:05 pm- Felicitation of Guest

02:07 pm - Introduction of Chief Guest

Dr. Kanchana, AP/Medical Electronics

02:10 pm -Valedictory Address

Dr.Arunachala Perumal C

Professor/ECE,SA Engineering College

Chair,IEEE Photonics Society,Madras Section

02:15 pm -Best Paper Presentation Award

02:18 pm -Distribution of Certificates

02:20 pm- Group Photo session

02:22 pm -Vote of Thanks

Dr. Manju, AP(SG)/Medical Electronics

02:30 pm - National Anthem

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Valedictory Function Invitation:



The poster is a blue-themed invitation for the ICBMSSS 2021 conference. It features the logos of Saveetha Engineering College, IEEE, and EMB at the top. The text reads: 'SEC IEEE STUDENT BRANCH & DEPARTMENT OF ECE, MEDICAL ELECTRONICS & BME. The Management, Faculty and Students of Saveetha Engineering College Most Cordially invite you to the Valedictory Function of ICBMSSS 2021. IEEE Photonics Society Sponsored International Conference on BIOMEDICAL SMART STRUCTURES AND SYSTEMS 2021. AT 2.00 P.M. ON SATURDAY, 8 MAY 2021, AT ECE SEMINAR HALL'. The Chief Guest is Dr. Arunachala Perumal C, Chair, IEEE Photonics Society, Madras Section. Patrons include Dr. N.M. Veeraiyan, Dr. S. Rajesh, and Dr. V. Saveetha Rajesh. Co-Patrons are Dr. R. Ramesh and Dr. R. Senthil Kumar. Conveners are Dr. Srigitha.S. Nath, Dr. M. Moorthi, and Dr. S. Praveen Kumar.

The Valedictory function was conducted in the presence of **Dr. Arunachala Perumal C, Chair, IEEE Photonics Society, Madras Section, Chennai**. In his valedictory address, Dr. Arunachala Perumal started with congratulating coordinators and the organizing committee for the successful conduct of this Virtual Conference. He emphasized the need of such programs as they provide a unique opportunity to explore the boundaries of what is currently known in various domains of Engineering and Technology, through a range of research experiences. He also mentioned that such programs provide a common platform to discuss and learn new methodology to upgrade ourselves.

After the valedictory address, **Dr. Moorthi, Professor and Head of the department of Medical electronics, Saveetha Engineering College**, presented the BMSSS 2021 Conference report which gave a glimpse of the two day event. He also acknowledged the support of

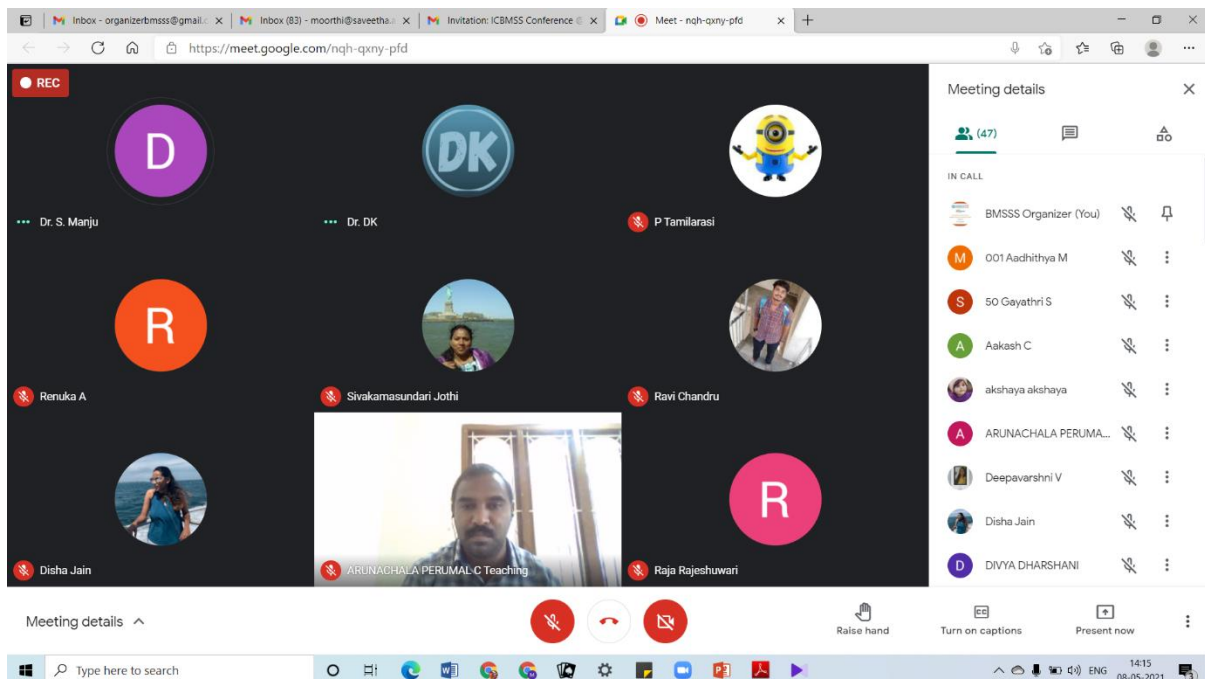
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academicians and technical experts from various renowned organizations and Universities as speakers for this programme. He thanked the speakers and participants for their active involvement and participation throughout the programme. He then felicitated the chief guest with a virtual memento and bouquet as a token of appreciation.

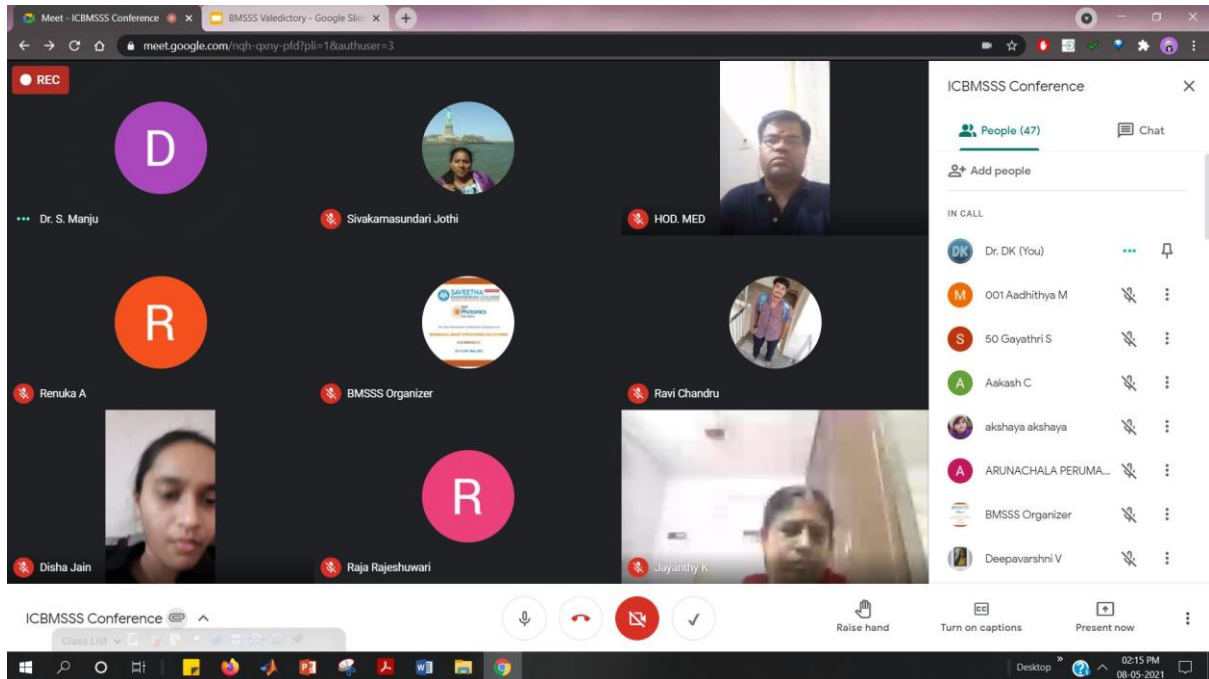
The function ended with a vote of thanks presented by Program Chair, **Dr. Kanchana** on behalf of the Department of Medical electronics, ECE and BME. She thanked Dr. Rajesh, Hon. Director of Saveetha Engineering College, for giving an opportunity to organize this virtual conference on “Biomedical Smart Structures and Systems”, and Dr. Ramesh, Principal of Saveetha Engineering College, for his constant support and motivation.

She also thanked Dr. Senthil Kumar, Vice Principal of Saveetha Engineering College, for his valuable guidance and suggestions, Dr. Srigitha S Nath, Associate Dean, Dr. Praveen Kumar, Expert Member, HoDs, All teaching and Non-Teaching Staff of Saveetha Engineering College for their kind cooperation in making this event a grand success. On behalf of the organizing committee, she extended a special thanks to IEEE for granting the permission for organising this event.

Following the vote of thanks, there was a group photo session. The valedictory function concluded with singing of the National Anthem. The screenshots from Day 6 Valedictory Function are attached below:



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Outcomes:

At the end of this conference, the participants

1. Gained experience on paper writing and presentation skills
2. Understood the wide scope for research in health care sector in terms of medical imaging software and hardware.

