









# Department of **FASHION TECHNOLOGY**

**NBA** Accredited **AICTE-CII Mentor Award Winner** 

proudly presents

International Seminar on Wearable Electronic **Textile Materials in the Current ERA - Introduction. Existence & its Future** Development in Clothing





Organised by



वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद

COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH (विज्ञान एवं प्रौद्योगिकी मंत्रालय, भारत सरकार) MINISTRY OF SCIENCE & TECHNOLOGY, GOVT. OF INDIA

in association with



Sona College of Technology

(An Autonomous Institution) TPT Main Road (Junction), Salem-636005. TN. INDIA

#### **About CSIR**

The Council of Scientific & Industrial Research (CSIR), known for its cutting edge R&D knowledge base in diverse S&T areas, is a contemporary R&D organization. CSIR has a dynamic network of 37 national laboratories, 39 outreach centres, 3 Innovation Complexes, and five units with a pan-India presence. CSIR's R&D expertise and experience are embodied in about 3460 active scientists supported by about 4350 scientific and technical personnel as of June 2021.

CSIR covers a wide spectrum of science and technology - from oceanography, geophysics, chemicals, drugs, genomics, biotechnology and nanotechnology mining, aeronautics, to instrumentation, environmental engineering and information technology. It provides significant technological intervention in many concerning societal efforts, which include environment, health, drinking water, housing, energy, farm and non-farm sectors. Further, CSIR's role in S&T human resource development is noteworthy.

Pioneer of India's intellectual property movement, CSIR today is strengthening its patent portfolio to carve out global niches for the country in select technology domains. CSIR filed about 225 Indian patents and 250 foreign patents per year during 2015-20. CSIR has a patent portfolio of 1,132 unique patents in force, out of which 140 patents have been commercialized. CSIR also has 2,587 in force patents granted abroad in multiple countries. Amongst its peers publicly funded research organizations globally, CSIR is a leader in filing and securing patents worldwide.

CSIR has pursued cutting edge science and advanced knowledge frontiers. In 2019, CSIR published 5009 papers in SCI Journals with an average impact factor per paper of 3.714. CSIR has operationalized desired mechanisms to boost entrepreneurship, which could lead to enhanced creation and commercialization of radical and innovations, underpinning disruptive development of new economic sectors. CSIR has put in place CSIR@80: Vision & Strategy 2022 -New CSIR for New India. CSIR's mission is "to build a new CSIR for a new India", and CSIR's vision is to "Pursue science which strives for global impact, the technology that enables innovation-driven industry and trans-disciplinary leadership thereby catalyzing inclusive economic development for the people of India".



CSIR is ranked 37th among 1587 government institutions worldwide and is the only Indian organization among the top 100 global government institutions, according to the Scimago Institutions Ranking World Report 2021. CSIR holds the 7th rank in Asia and leads the country at the first position.

## About Sona College of Technology

Sona College of Technology, one of the top ranking engineering colleges in India, has achieved global identity through its involvement in research in recent technology and successful completion of projects and products.

The college offers Bachelor of Engineering, Master of Engineering and Doctoral Degree (Ph.D) in all major disciplines. Sona which is an ISO Certified Institution, is known for its rich tradition and high values bestowed upon it by its Founder Chairman, Thiru. M.S. Chockalingam.

Sona College of Technology has been accorded recognition as a Scientific and Industrial Research Organisation (SIRO) by the Department of Scientific and Industrial Research, New Delhi. This will entitle Sona to receive administrative support on issues that promote and encourage scientific research activities. The "AICTE – CII Award for Best Industry – Linked Technical Institute in India" and an acclaimed 'A' grade by 'NAAC' stand testimony to the commitment of the college to impart quality education.

The College is equipped with world class infrastructure and highly qualified and experienced faculty members. Sona's sharp focus on quality education and training has turned it into a premier technical institution ensuring good placements in a wide range of companies. In short, Sona stands tall as one of the best institutions for world class professional education.



International Seminar on

#### About the Department of Fashion Technology





The Department of Fashion Technology established in 2001 with B.Sc AFT, thereafter in 2005, **Textile** Technology B.Tech (Fashion Technology) programme was introduced. Well experienced and dedicated faculty team consisting of 7 doctorates and 8 post graduates, out of whom 5 are pursuing PhD programmes are training the students. Well-equipped and spacious laboratories up-to-date machinery and equipment related garment and textile technology. The department is an Anna University recognized Collaborative Research Centre for offering Ph.D programmes. The Department has been awarded 4 times the AICTE-CII Best Industry Linked Technical Institute Award for the years 2016, 2018, 2019 & 2020 and now awarded with AICTE-CII Mentor award. The Department also received AICTE Lilavati Award for Women's Empowerment twice consecutively (2020 & 2021). Faculty of Department of Fashion Technology published more than 150 papers in National and International peer reviewed impact factor journals. Also 3 patents were granted and 14 were filed. Department generated more than Rs. 1 crore as sponsored consultancy. Received grants of around Rs. 2.5 crores from AICTE, DST, IEI, CSIR, MoEF and TNSCST.

#### About the Seminar

International Seminar on

"WEARABLE ELECTRONIC TEXTILE MATERIALS IN THE CURRENT ERA- INTRODUCTION, EXISTENCE AND ITS FUTURE DEVELOPMENT IN CLOTHING" is to bring together the stakeholders from academia, industry and other sectors of textile and Fashion Technology. This international seminar mainly focuses on Wearable Electronic Textiles (E-Textiles) which are fabrics/garments that serves as intelligent personal assistant and also focuses on "Smart Textiles" in which the wearable system is attached technologically to the dress materials for transmission lines and embedded connectors. The vision behind wearable computing foresees future electronic systems to be an integral part of our everyday outfits. electronic systems will be characterized by their ability to automatically recognize the activity and the behavioral status of their own user as well as of the situation around her/him, and to use this information to adjust the systems configuration and functionality.



It can detect abnormal and unforeseen situations by monitoring physical parameters along with other symptoms. Apart from these wearable E-textiles excels in the field of medical, military, sports, etc. The major objectives of this international conference are to address the role of Wearable Electronic Textiles and its applications. The seminar contains the keynote speeches which are delivered by the eminent personalities from top ranked institutes and industries.

## Objectives



- To facilitate the presentation of a diverse range of thought-provoking findings from young scientists, researchers, academicians, and industry leaders on a single podium.
- To expose the students, academic and industrial delegates to the emergent developments in the fields of wearable electronic textile materials, as well as to examine practical challenges and goals.
- To provide a good venue for academic experts, and industry specialists to present their key note speech and research work to develop new products and find solutions to global concerns relating to wearable electronic textile materials.

#### Beneficiaries

Garment manufacturers, industry personnel, budding entrepreneurs, faculty, students and research scholars of textile, garment and fashion related field will be benefited from the enlightening inputs of the seminar.

#### **Expected Outcomes**

The participants, at the end of this seminar will have a thorough understanding and knowledge on wearable electronic textile materials. This in turn will help them to use these inputs in their relevant fields.

### **Registration Fees**

International Delegates : 100/- USD
National Delegates : 750/- INR
Industrial Delegates : 750/- INR
Academicians : 500/- INR
Students : 300/- INR
(per participant)

## **Registration Links**



https://forms.gle/FzxXG68XfP4UiMhR7

#### **Organizing Committee**

#### **Chief Patrons**

Mr. C. Valliappa, Chairman, Sona Group of Institutions, Salem

Mr. Chocko Valliappa, Vice-Chairman, Sona Group of Institutions, Salem

Mr. Thyagu Valliappa, Vice-Chairman, Sona Group of Institutions, Salem

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Ms. M. Rashma, Assistant Professor / FT

Mr. K. Sivakumar, Assistant Professor / FT

Mr.M.R.Karthikeyan, Assistant Professor / FT

#### **KEYNOTE SPEAKERS**



Day 01 - 26.08.2022



**Dr. Milos Popovic** 

Director, University Health Network's KITE Research Institute (UHN-KITE),
Professor, University of Toronto

Title: FabrIc - Based REsearch (FIBRE) Platform



Mr. Prashant Verma Consultant, Kamalatech, Ahmedabad, Gujarat

Title: E-textile and Smart Clothing



Dr. Pandiyarasan Veluswamy

Assistant Professor / ECE
IIITDM - Design and Manufacturing, Kancheepuram
Title: Smart Textiles in Wearable Technology:
Materials to Devices

Day 02 - 27.08.2022



Dr. Azadeh Yadollahi

Senior Scientist, University Health Network's
KITE Research Institute (UHN-KITE),
Associate Professor, University of Toronto
Title: The Application of Novel Wearable Technologies
for assessment of Cardio-Respiratory Function



Dr. Rashmi Thakur

Assistant Professor / FT, NIFT, Mumbai Chief Operating Officer, Smart Wearable Systems Incubator Title: Cross Disciplinary Approach for Smart Textile Wearables



Dr. L. Ashok Kumar

Professor / EEE, PSG College of Technology, CBE
Title: Methods for Developing
Wearable Electronic Products



Dr. D. Samuel Wesley

Professor / FT, NIFT, Chennai Title : Wearable Technology for Garment Fit Analysis

