# S A I D

# VOICES

ISSUE 1 - JULY TO SEPTEMBER, 2021



# DEPARTMENT OF ARCHITECTURE

SAID- SRMIST

The school advocates a design philosophy that draws inspiration from the rich cultural heritage of India while simultaneously embracing the developments in science and technology, to produce architects of international competence. This Newsletter is a testament to the journey embarked by the department to reach out vision.

# XSAID @



### **FEATURED**

PAPER PUBLICATIONS

COA - URBAN STUDIO RESEARCH PROJECT

FACULTY DEVELOPMENT PROGRAM

**COLLOBORATIVE STUDIO** 



# M















HOD MESSAGE
DEPARTMENT OF ARCHITECTURE, SAID



Dr.C.Pradeepa
Professor and Head,
Department of Architecture,
School of Architecture and Interior Design,
SRMIST, KTR

### MESSAGE

The department in the past few months has surged ahead in constructing a large portfolio with various activities accomplished. It has been exciting to finally see our students after more than a year in person and the department has regained its usual vibrancy.

We are thrilled about various research avenues opening up in our department and its impact on students is clearly seen. Academics and students participation in various domains has brought the department many laurels.

We wish our students and faculty members all the very best for achieving their goals and ambitions.



### **CO-ORDINATORS MESSAGE**

DEPARTMENT OF ARCHITECTURE, SAID



Ar. Prashanthini Rajagopal
Assistant Professor



Ar. Nivetha Devi
Assistant Professor

### MESSAGE

The Department has slowly evolved into a hybrid mode of teaching and it has been exciting to see student trickle in in-person. Education has seen a duality of options and professors are enthusiastically keeping the beat for both by restructuring their content and offering multiple avenues of learning.

LEARNING HAS BECOME MULTI-DIMENSIONAL WITH STUDENTS AND PROFESSORS WORKING TOGATHER TO CREATE AN EFFECTIVE MODEL.

The past few months have been packed with activities such as student projects, site visits, research and multitude of events that keeps the department vibrant. Many achievement have been witnessed by students and faculty alike. There is no dearth of talent and creativity in this department and we look forward to finally interacting in person.



### RESEARCH ACTIVITIES

PAPER PUBLICATION, URBAN STUDIO RESEARCH PROJECT, PH.D VIVA VOCE



Sustainable Urban Architecture

Optimization of Building Envelope Towards Energy-Efficient Design

Sudha, G.

DOI 978-981-15-9585-1\_12, © 2021

### PAPER PUBLICATION

Research paper on "Optimization of Building Envelope towards Energy-Efficient Design" has been published in Lecture Notes in Civil Engineering, Volume 114, Springer Nature Singapore.

Buildings and construction account for more than 35% of global final energy use and nearly 40% of energy-related CO2 emissions (Global status report 2017, International Energy Agency for the Global Alliance for Buildings and Construction). Building's envelope contributes significantly to energy consumption, especially in office buildings which use extensive glazed facades. Building envelope largely includes the various components of external façade such as walls, roof, windows and shading elements. The design of building envelope affects visual and thermal comfort in the adjoining spaces. Failure to meet the thermal and visual comfort requirements in indoor spaces results in occupants depending on mechanical conditioning systems and electrical lighting systems which increases the energy consumption in building. Hence, optimizing the envelope system will contribute largely to the energy savings in a building.



Ar. Sudha G Associate Professor This study aims at quantifying the contribution of various envelope components towards the energy optimization of an office building. Building envelope designed for an office occupancy in a warm humid climatic zone has been analysed for its energy performance in terms of various components which include thermal properties of walls, roof and glazing, window-to-wall ratio and shading elements. Analysis has been done by simulating the envelope optimized building design against the base case as prescribed by Energy Conservation Building Code, using an environmental analysis software tool. The results establish the impact of various envelope components on the energy consumption of the building. The findings emphasize the provision of an appropriate shading device as the highest contributor towards achieving the goal of energy efficiency by reducing the solar heat gain. Hence, careful consideration must be given in designing the shading elements in warm humid climatic zone as it can significantly change the performance of other components of an integrated building, namely HVAC and artificial lighting system, resulting in an energy-efficient design.

### PH.D VIVA VOCE

Prof. K. Geetha successfully completed her PhD Viva-Voce examination on her thesis entitled, "Daylighting related studies with the application to Fractal Glazing." The Viva-Voce examination was held on 06 August 2021 via zoom platform. We heartily congratulate Prof. Geetha on this achievement.

Dr.K.Geetha Ramesh Professor





Contents lists available at ScienceDirect

### Journal of Building Engineering

journal homepage: www.elsevier.com/locate/jobe

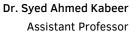


### PAPER PUBLICATION

Research paper on "Effect of marble slurry on the microstructure of cement mortars subjected to salt crystallisation and alternate wetting and drying cycles" has been published in Journal of Building Engineering .

The scarcity of river sand has triggered the utilization of industrial waste to produce concrete and mortars. One such waste is marble slurry, which is being produced in huge quantities during marble processing, was evaluated as a partial substitute to sand for the production of mortars. This study aims to assess the properties of mortar mixes of proportions 1:3 and 1:6 made with dried marble slurry of dolomitic origin by substituting 20 and 30% of fine aggregate. It was observed that mortars could be produced with lesser water content on the incorporation of this waste. This has helped improve compressive strength, while properties like tensile and flexural strengths, water absorption are comparable to conventional mortars.

On examining the microstructure using scanning electron microscopy, Fourier transform infrared spectroscopy, and X-ray diffraction, the augmented formation of tobermorite and gismondine like minerals on cement hydration were detected. Traces of dedolomitization of the dolomitic marble were also identified along with the formation of calcium carboaluminates, enhancing the quality of the microstructure and mechanical performance. While the phenomenon of salt crystallization restricts the usage of dried marble slurry for the production of mortars with a rich mix proportion of 1:3 only, alternating cycles of wetting and drying do not significantly affect the performance of both 1:3 and 1:6 proportions on the usage of dried marble slurry as fine marble slurry.





# COUNCIL OF ARCHITECTURE THE URBAN STUDIO RESEARCH PROJECT

COA - The Urban Studio Research Project: Ground Zero

The Council of Architecture initiative - Urban studio research project: An initiative to engage institutions to proactively act on the issues of built environment of the cities to help them attain the sustainable development goals relevant to the city.

The ground zero discussion was held on16 August 2021 with, the Alumni of Department of Architecture, SAID belonging to the batch 2004 - Ar.Bharathi Devi IAS, GM, TTDC.





Dr. Pradeepa C
Professor and Head



Dr. Shanthi Priya R
Professor



Prof. C T Lakshmanan
Professor



Ar. Sudha G Associate Professor



Ar. Narayani A R
Associate Professor



Ar. Anoop Menon
Assistant Professor



Ar. Prashant
Assistant Professor



**Ar. Harish Raman** Assistant Professor



### **EVENT SPOTLIGHTS**

FACULTY DEVELOPMENT PROGRAMME, WORKSHOP, GUEST LECTURES, ALUMNI TALK

### LEAP NOW, LEARN HOW

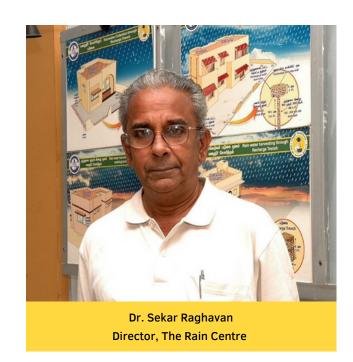
A drop harvested is a crop harvested.

The session was intended to create awareness about RWH systems for private and public areas.

The Ashoka Awardee, Dr Sekar Raghavan, Director of THE RAIN CENTRE, the man who set out on a mission to free our city from water problems spoke about his experience & the challenges he faces in reclaiming Chennai's water table.



Ar. A R Narayani, Associate Professor







Dr. Neha Bansal Professor



**FACULTY DEVELOPMENT PROGRAMME** 

The Council of Architecture Training and Research Centre in association with School of Architecture and Interior Design conducted Five Day Faculty Development Program on "Research Approaches and Methodologies in Disaster Management" between 23rd August - 27th August 2021.

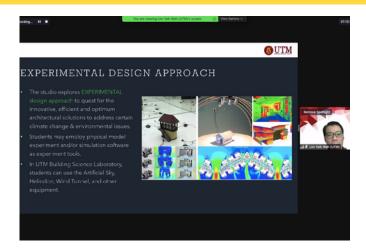
Dr.K.A.Narayana Professor



Ar. Purnachandar Associate Professor

### WORKSHOP FRAP

The Core Working Group (CWG) conducted an virtual workshop - Faculty Refresher and Assimilation Program (FRAP) for faculties of E&T, SRM Institute of Science and Technology, KTR.

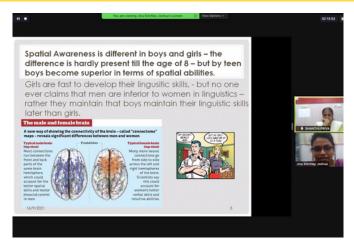


### FACULTY DEVELOPMENT PROGRAMME

The Faculty Development Programme on the Topic "Architectural Design Studio - Exploration and Experimentation in the Design Process" - Virtual Mode was organised for the young faculty members of Schools of Architecture and allied domains in India between 13th to 17th September 2021.

The Theme of the FDP is to explore new concepts, methods and techniques evolved in the design process in Architectural Design Studios to keep pace with the changing scenario in Architectural Education and to enhance the Design teaching Skills for the Faculty Members.

Through a wide range of keynote speeches and discussions, we have presented with new ways to deal with Architectural Design Studio teaching methods and approaches.



We had 65 registered participants from various colleges and university across India and 40+ faculties from School of Architecture and Interior Design, SRMIST, Kattankulathur. 100+ attendees have benefited in many ways from this Faculty Development Program. 10 Invited, Speakers addressed to audience and shared knowledge and rich experience on recent innovations, trends, concerns and challenges in the field of Architectural Design Studio.



Dr. R.Shanthi Priya Professor



Ar. Nivetha Devi R Assistant Professor

### GUEST LECTURE AARUUSH 21'

Ar. Anoop Menon, hosted the Wednesday Speaks on 22nd September 2021 on the topic: "Design Thinking: Applications in Architectural Studio"



Ar. Anoop Menon
Assistant Professor





### **ALUMNI TALK**

A Conversation with Ar. Rajesh Kanagasabai - Architects in Cinema provided students a new and refreshing perspective. I



Ar. A R Narayani Associate Professor



Ar. Anoop Menon
Assistant Professor



Ar. Raja Muthiah Associate Professor



### **COLLABORATIVE ACTIVITIES**

COLLABORATIVE DESIGN STUDIO, INTER-DISCIPLINARY **STUDIO** 



### COLLABORATIVE DESIGN STUDIO (UTM MALAYSIA)

1st Year - B.Arch

The first year B.Arch students have gotten the unique opportunity to learn and interact through a Collaborative Design Studio with Universiti Teknologi Malaysia (UTM). Discussions, lectures, critiques and group work has provided the students with keen insight into the project and viewing the same through multiple perspectives.



Dr. K.Geetha Ramesh Professor





Ar. Narayani A R Associate Professor Associate Professor



Ar. Karthick **Assistant Professor** 



Ar. Manjari K **Assistant Professor** 



Ar. Nirrupama **Assistant Professor** 



Ar. Suraj **Assistant Professor** 

### **COLLABORATIVE DESIGN STUDIO**

Inter- discipilinary Studio Induction

Department of Architecture organized multidisciplinary collaborative studio as a part of an Academic Exercise for II Year M.Arch Programme -(Architectural Design). Students from (Architecture), M.Tech (Structural Engineering) and M.Tech (Energy and Engineering), will form a group and collaborate together to work on Project HIGH RISE BUILDING - where the Architecture students (M.Arch) will focus on Planning and Design, Structural Engineering Students (M.Tech) will focus on various structural systems and Technology and Solar Energy (M.Tech) students will focus on HVAC Design and fluid dynamics.



Dr. C. Pradeepa HoD



Dr. R. Shanthi Priya **Professor** 





Prof. Aravind **Associate Professor** 



Ar. Balamaheswaran **Assistant Professor** 



### **CONSULTANCY PROJECTS**

**VENDHAR SQUARE** 

### **VENDHAR SQUARE**

Public Realm Design

### Activity Schedule:

- 1. 05 Jul 2021 Ground Zero discussion.
- 2. 12 Jul 2021 Site Inspection.
- 3. 13 Jul 2021 Discussion with the Museum curator @ SAID
- 4. 24 Jul 2021 Discussion with the Museum curator @ Spurtank Road
- 5. 23 Aug 2021 Presentation of concepts to Founder Chancellor















Ar. Anoop Menon
Assistant Professor



Ar. Prashant
Assistant Professor



Ar. Harish Raman Assistant Professor



### **DEPARTMENT ACTIVITIES**

MERIT SCHOLORSHIP, GRIEVANCE REDRESSAL COMMITTEE, RESEARCH SUPERVISOR, FACULTY ACHIEVEMENTS, ONAM CELEBRATIONS

### MERIT SCHOLORSHIP

The following students from III, IV and V year B.Arch received "PERFORMANCE BASED MERIT SCHOLARSHIP" for scoring CGPA above 8.

### 3rd Year

1.Suren Adithyaa S	- 9.45
2. Niveditha Muralidharan G M	- 9.10
3. Sheaba Hameed	- 9.10
4th Year	
1.Khushi Suraj	- 8.39
2. G Yokesh	- 8.36
5th Year	
1.V Amrutha	- 8.25
2. Amrutha T V	- 8.23
3. Mohit Choubey	- 8.06

## GRIEVANCE REDRESSAL COMMITTEE

Prof. C. Pradeepa has been appointed as a grievance redressal committee member.

### RESEARCH SUPERVISOR

Prof. C. Pradeepa has been recognized as a PhD Research Supervisor in the Department of Archtiecture to guide PhD candidates.



**Dr.C.Pradeepa**Professor and Head

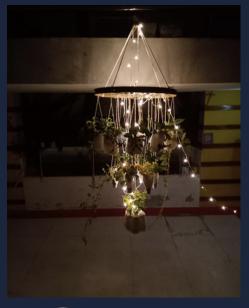
### **FACULTY ACHIEVEMENTS**

### ENVIRONMENTAL PSYCHOLOGIST

Ar.Anju Sara, Assistant Professor published an article entitled, "Why is Environment Good for Mental Health" in Whiteswan Foundation. The article was an interview with Adithi Venkatwaran to explain the benefits of spending time amidst nature to our mental health and ways to bring nature closer to home.

### **JOSH**

Ar. Grace Ansica, Assistant Professor had participated in JOSH - Teachers Day Celebrationorganised by Directorate of Student Affairs, SRMIST and won the award for Wealth from waste competition.





**Ar. Anju Sara Abraham** Assistant Professor



### **ONAM CELEBRATIONS**



















### STUDENT ACTIVITIES

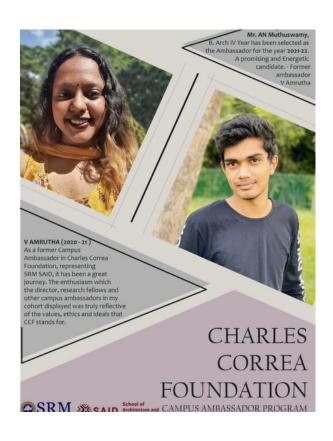
FIRST YEAR INDUCTION PROGRAMME, NASA, CHARLES CORREA FOUNDATION, INDUSTRIAL VISIT

### **NASA**

Ms. Abinaya Ravichandran, 3rd Year B.Arch has been selected as EVENT HEAD for NASA - National Architecture Student Association.

# CHARLES CORREA FOUNDATION

Mr.Muthuswamy from B. Arch IV year has been choosen as the Charles Correa Ambassador for the upcoming year 2021 - 2022.



### **INDUSTRIAL VISIT**

B.Arch IInd Year students have been taken for a case study - Sketching trip to Mahabalipuram and Dakshin Chitra.













### 1st YEAR B.ARCH - INDUCTION PROGRAMME











Department of Architecture was ecstatic to welcome our first years and a fun orientation program has been conducted for the benefit of the students by introducing them to many facets of the field. Lectures, movie screening, macrame, math exercises, miniature modelling and illustration workshops were organized.



# **VOICES**

# **ISSUE 01**



*EDITORIAL* Ar. Nivetha Devi | Ar.Prashanthini