

Brief Report on  
**Out of the box thinking for problem solving**  
*(28<sup>th</sup> June, 2022)*

*Institution's Innovation Council (IIC),  
KITS Warangal*

&

*Centre for Innovation, Incubation, Research &  
Entrepreneurship (C-I<sup>2</sup>RE)  
KITS Warangal*

*sponsored by*  
**AICTE / MoE's Innovation Cell (MIC)**

# 1. Poster

The poster is a vertical rectangular graphic with a dark blue background and a large yellow curved shape on the right side. At the top, there are four logos: the Government of India emblem, MoE's Innovation Cell logo, the Institution's Innovation Council logo, and the AGTE logo. Below these is the text 'SESSION ON' followed by a large yellow banner with the title 'OUT OF THE BOX THINKING FOR PROBLEM SOLVING'. The date and time are listed as 'TUESDAY 28th - JUNE 2022' and '2:00 PM - 3:00 PM'. A circular portrait of Prof. V Kamakoti is centered. Below the portrait, his name and title are listed. At the bottom, there are social media links for YouTube, Facebook, and Instagram, all pointing to the MHRD Innovation Cell.

Ministry of Education  
Government of India

MoE's INNOVATION CELL  
(GOVERNMENT OF INDIA)

INSTITUTION'S INNOVATION COUNCIL  
(Ministry of Education Initiative)

AGTE  
At the Top of the Education  
We are all there

SESSION ON

**OUT OF THE BOX THINKING FOR PROBLEM SOLVING**

**TUESDAY**  
28th - JUNE 2022

**TIME**  
2:00 PM - 3:00 PM

**PROF. V KAMAKOTI**  
DIRECTOR, IIT MADRAS

JOIN US ON **LIVE** **/MHRDINNOVATION** **/MHRD.INNOVATIONCELL**

## 2. Circular



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE -  
WARANGAL

(An Autonomous Institute under Kakatiya University, Warangal)

Centre for I<sup>2</sup>RE-KITS Warangal

Institution's Innovation Council (IIC 4.0)



No: C-I<sup>2</sup>RE/IIC 4.0/2021-22/13

Date: 27-06-2022

### Circular

Sub: - Request to circulate the information of Out of the box thinking for problem solving to Faculty & Students, reg.,

Greetings everyone!

As part of IIC 4.0, we need to conduct *mandatory activities released by Ministry of Innovation Council (MIC) -India* from time-to-time **for scoring marks and to get good star rating for our institute.**

On 24<sup>th</sup> June, 2022 MIC has shared the details of following MIC driven activity to participate in this month.

1. Session on "Out of the box thinking for problem solving" by Prof. V. Kamakoti, Director, IIT Madras on 28<sup>th</sup> June 2022 from 2.00PM to 3.00PM [YouTube live session at <https://www.youtube.com/watch?v=woztcDDbi74>].

All the faculty coordinators are requested to share the information to their faculty and students and inform them to attend the session in online mode without fail.

It is also requested that; the **faculty and students have to share the screenshot(s) [2 to 5] captured while attending the event** using the following google form along with their details for preparing and submitting the report to MIC-India in our institute IIC portal.

S. No.	Event name	Google form link for uploading photos.
1	Session on "Out of the box thinking for problem solving (28 <sup>th</sup> June, 2022)	<a href="https://forms.gle/oLnGqPIqYQqyXGHw5">https://forms.gle/oLnGqPIqYQqyXGHw5</a>

Thank you very much everyone for your coordination.

Sri. K. Ajith  
Convenor, IIC, KITSW

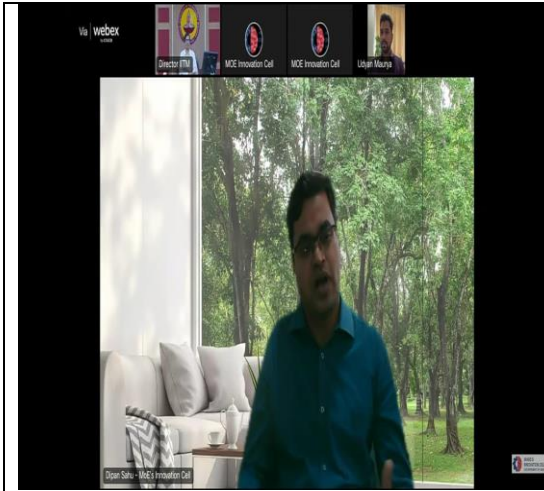
Dr. S. Sunil Pratap Reddy  
President, IIC, KITSW

Dr. P. Srikanth  
Head, Centre for I<sup>2</sup>RE, KITSW

### 3. List of Participants

S. No.	Participant Name	Roll number / Employee ID number	Department	program and year of study
1.	KATANGURI AJITH	S0972	EEE	
2.	G. SUNIL KUMAR	S0976	EEE	
3.	KANIKARAM RAKESH	B20EE077	EEE	B.TECH. SECOND YEAR
4.	K. Kishor Kumar	S0848	MECHANICAL ENGINEERING	
5.	MD.ASLAM SHAREEF	B21EE086	EEE	B.TECH FIRST YEAR
6.	PITTALA ANIL KUMAR	S1141	MECHANICAL ENGINEERING	
7.	Ashadapu Ansika	B20ce032	CIVIL	B.TECH SECOND YEAR
8.	S SUNIL PRATAP REDDY	S1150	CIVIL	
9.	S SUNIL PRATAP REDDY	S1150	CIVIL	
10.	Kodam Goutham Raju	S1252	IT	
11.	Thallapally Manisha	B20EE111	EEE	B.TECH SECOND YEAR
12.	KOMATI SHARATH CHANDRA	B20CN063L	CSE (N)	B.TECH FOURTH YEAR
13.	SOUMITHRI SRINIJA	B20EE095	EEE	B.TECH THIRD YEAR
14.	Kodati Indu	B21EE044	EEE	B.TECH FIRST YEAR
15.	L HIMA VARSHA	B19EE032	EEE	B.TECH THIRD YEAR
16.	PILLAI KOUSHIK KAMAL	B19EE001	EEE	B.TECH THIRD YEAR
17.	BARKKAM SUPRATHIKA	B20EE088	EEE	B.TECH THIRD YEAR
18.	Apaka sangeetha	B20EE098	EEE	B.TECH SECOND YEAR
19.	N Srikanth	S0974	CIVIL	
20.	B. Jagadish Kumar	S0679	EEE	

# Screenshots from participants



**Think Differently!!!!**

- Lets take numbers 1,3,5,7,9,11,13,15,17,19. Guess what could be the next number in sequence.
- 21 would be anyone's guess. Well it may be right but any other thinking.
- 31 (why?)
- Both the digits need to be odd numbers

Let's take another example.  
Divide the circle into 2 equal parts.

**The Apple-Knife-Stone Theory**

Training the brain to be creative (think unconventionally) is the GEM.

Shift the focus from rote learning to critical thinking, creativity and problem solving – a must for next generation entrepreneurs who are going to solve the multiple social and economic challenges for our country.

MIC Driven Activity on "Out of the box thinking for problem solving"

7,284 watching now Started streaming 11 minutes ago  
Session by: Prof. V.Narasimh, Director, IT Madras...more

**Live chat**  
Top chat 5.4K

Felix Kingston | FELIX KINGSTON, MBCCET

sahana D Gowda | Sahana D Gowda,dept.of cse,bgsit

Chaitanya Krishna.N | gd aftnoon

Suriya Prakash | Dr SNS Rajalakshmi College of Arts and Science,Coimbatore.

sapna kinattinkara | Dr.K.Sapna,Assistant Professor, Department of Environmental Science, PSG college of Arts and Science, Coimbatore

Akshada Zagade | Akshada Zagade from Mumbai University student of MMS in Finance

the madmax

Arifa Bano | Good afternoon sir

Chat publicly as Srinija Sridevi...



2:13 PM

**Out of the Box Thinking Through Mathematics**  
 (An Initiative of IITM Pravartak Technologies Foundation to nurture young minds)

MIC Driven Activity on "Out of the box thinking for problem solving"  
 7K watching · Started 8 min ago

770 Dislike Live chat Share

MHRD Innovation Cell  
 94.5K subscribers

**JEE MAINS 2022**  
 28TH JUNE | SHIFT - 1 PAPER DISCUSS (LIVE)

JEE Main 2022: Paper Solution | 28th

**Out of the Box Thinking Through Mathematics**  
 (An Initiative of IITM Pravartak Technologies Foundation to nurture young minds)

IITM Pravartak is a Section 8B not-for-profit foundation of IIT Madras

7K

**Education based on Stories**

Vimu is asked the question -  $4/17$  or  $4/25$  - which is big?

7.3K

**The Next Question**

Sujatha arranged a party of 17 people. → Got a Pizza and divided into 17 parts → Only 13 turned out. ↓ How much is left over?

2:33 PM

**A Quick Question**

- Which one is smaller
  - $17/32$ ,  $19/36$ ,  $13/28$ ,  $21/40$  (Answer in 2 seconds)
- It is  $13/28$  (Only number less than  $1/2$ )

**Description**

**MIC Driven Activity on "Out of the box thinking for problem solving"**

MHRD Innovation Cell

1.9K Likes    6,966 Viewers    28 Jun 2022

Session by : Prof. V Kamakoti, Director, IIT Madras  
 MIC Driven Activity for Quarter 4 of IIC4.0(2021-2022)

**Structure**

- Levels 1 & 2: 10 weeks, 15 topics for each level and about 10 hours of recorded lectures for each level
- Levels 3 & 4: 10 weeks, 20 topics for each level and about 10 hours of recorded lectures for each level
- Periodic assignments, evaluation, assessment and answers

**Live chat**  
 Live chat 6.3K

Welcome to live chat! Remember to guard your privacy and abide by our Community Guidelines.

[LEARN MORE](#)

Kishor Kumar K. Kishor Kumar, Assistant Professor, MED, KITSW

Chat publicly as Kishor Kumar...

2:44 PM

2021

82%

Via webebox

Director TM

**Live chat**  
Top chat 6.2K

- Dr. L.P. Singh *Great session*
- MANASA MUMMIDI *thank you sir*
- hemavathi pv *thank u sir*
- MAHASAKTHI THANDAYOUTHAM *Sakthi, KJISL Institute of Technology*
- prodipita goswami *thanku sir*
- Dr.V Gajapathy *Professor of Management, Dr V Gajapathy, Professor, School of Management, Presidency University, Bangalore*
- S.R. VIDHYA *Thank you sir. Very Informative sir.*
- Gurusamy Jeyakumar *Thank u so much sir*
- Susheelkumar Sreedharan *Great Session Sir*
- neha maurya fybms 18 *thank you sir*

Chat publicly as Khoja aslam...

15:12 | 64.0KB/s

Via webebox

Director TM

## Towards a CREATIVE INDIA

எண்ணெய் ஏனை எழுத்தென்ப இவ்விரண்டும் கண்ணெயை வாழும் உயிரககு - tirukkural

traditional games such as Pallanguzhi that imbibe Mathematical insights and manipulations through games. Ali goli mane in Karnataka, Vamana kuntalu in AP, Kuzhippara in Kerala.

**Live chat replay**  
Top chat replay

of civil engineering , Swami Vivekananda University , Barrackpore

Via webebox

Director TM

## The Next Question

Is 13/17 greater than 21/25 ?

Instead of division the brain will start thinking as follows

Via webebox

Director TM

## Story Telling – Paan and pongal

- 8 more grand children arrive on Day 2
- Same amount of Pongal distributed to 25 Grandchildren on Day 2
- Each will get 4/25
- Which day Vinu got more?

7.1K

Via webebox

Director TM

## Interesting momentum

- A) Using exactly 4 numeral symbols of 3s and arithmetic operations or functions, one can get the value of 27 as follows:  $33 - 3 = 27$
- B) Using exactly 3 numeral symbols of 3s and arithmetic operations, one can get the value of 27 as follows:  $3^3 \cdot 3 = 27$
- C) Using exactly 2 numeral symbols of 3s and arithmetic operations, one can get the value of 27 as follows:  $3^3 \cdot 3 = 27$
- Here comes the atom bomb 💣
- D) Using exactly 1 numeral symbol of 3 (only one) and arithmetic operations, one can get the value of 27. How? This will be death in level 3 of COBIT in the topic Number Builder

7.1K

Via webebox

Director TM

## Towards Creative India Keep Enjoying Mathematics!