

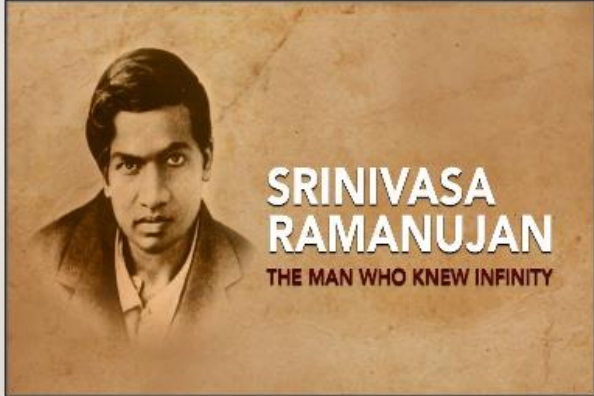
National Mathematics Day Celebration (22nd December 2022)

An Initiative of IQAC, Department of Economics
Department of Computer Studies, CSIBER, Kolhapur

**NATIONAL MATHEMATICS DAY CELEBRATION
(22ND DECEMBER 2022)**
**AN INITIATIVE OF IQAC, DEPARTMENT OF ECONOMICS AND
DEPARTMENT OF COMPUTER STUDIES, CSIBER, KOLHAPUR**

- Resource Person:
Dr. M.V. Ramana Murthy, (Rtd. Professor of
Mathematics and Computer Science, Osmania
University, Hyderabad.

Date: **22/12/2022**
Time: **12:00 to 01:00 pm**
Mode of Session: Online
Meet Link: National Mathematics Day 2022 CSIBER,
Kop
Video call link:
<https://meet.google.com/tzy-cvhp-jfm>



DR. S. P. RATH **DR. T.V.G. SARMA** **DR. P.G. NAIK**
DIRECTOR **COORDINATOR-IQAC** **HEAD - COMPUTERS**

Mathematics is the origin of innovation and creativity.

STUDENTS EXPECT MATH TO BE DIFFICULT

PUTTING MEMORIZATION AHEAD OF UNDERSTANDING

About Ramanujan and Eminent Mathematicians of India

SRINIVASA RAMANUJAN (1887 – 1920) TAMILNADU, INDIA

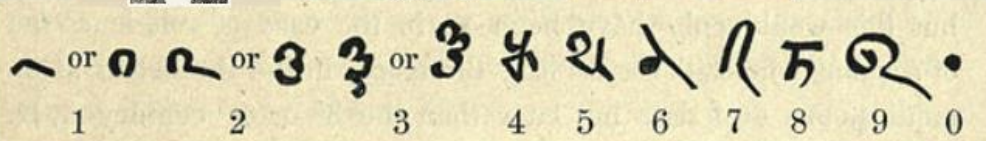
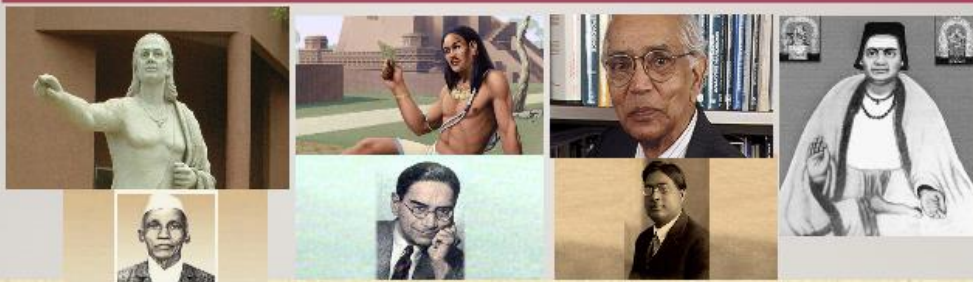
- Indian mathematician with almost no formal training in pure mathematics.
- His contributions in the areas like mathematical analysis, number theory, infinite series, and continued fractions,



Born on December 22, 1887, Srinivasa Ramanujan was a legendary mathematician whose contribution the field led to resolution of many unsolved theorems. His birthday is celebrated as National Mathematics Day.

Ramanujan was a self-taught mathematician and is considered one of the greatest Indian mathematicians of all time.

INDIA'S CONTRIBUTION TO THE WORLD OF MATHEMATICS



OTHER EMINENT MATHEMATICIANS OF INDIA

Satyendranath Bose

D. R.
Kaprekar



C.R. Rao

P.C.
Mahalanobis



Harish Chandra



Smt. Shakuntala Devi



Narendra Karmarkar

Preamble:

Math is all about becoming a creative thinker not a calculator.

Mathematics is a language which gives us hope that every problem has a solution

December 22 is celebrated as National Mathematics Day in India. It is the birth anniversary of Mathematician Srinivasa Ramanujan. National Mathematics Day is observed on December 22 every year. This date marks the birth anniversary of legendary mathematician Srinivasa Ramanujan.

During his short but impactful lifespan, Ramanujan worked on theorems that seemed impossible to solve. He is known for the work he did in the areas of continued fractions, Riemann series, elliptic integrals, hypergeometric series and functional equations of the zeta function.

The celebrations aim at spreading awareness about the importance of mathematics and the contributions made by Srinivasa Ramanujan, in the field of mathematics.

Objective

The main objective behind the celebration is to raise awareness among people about the importance of mathematics for the development of humanity ..

The day aims to spread awareness about importance of mathematics & remove the fear associated with maths in minds of people.

It has been correctly said that the book of nature is written in the language of mathematics. Math is the language of universe. So the more equations you know, the more you can converse with the cosmos. Millions saw the apple fall, but Newton asked why.

Mathematics provides an effective way of building mental discipline and encourages logical reasoning and mental rigor. In addition, mathematical knowledge plays a crucial role in understanding the contents of other subjects such as science, social studies, and even music and art.

Mathematics is a powerful tool for global understanding and communication that organizes our lives and prevents chaos. Mathematics helps us understand the world and provides an effective way of building mental discipline. Math encourages logical reasoning, critical thinking, creative thinking, abstract or spatial thinking, problem-solving ability, and even effective communication skills.

Target Audience

PG students of different programmes of CSIBER, Kolhapur.

No. Students Benefited – 100

Content Covered By Dr. Prof. M.V. Ramana Murthy

The talk was presented in two different sessions:

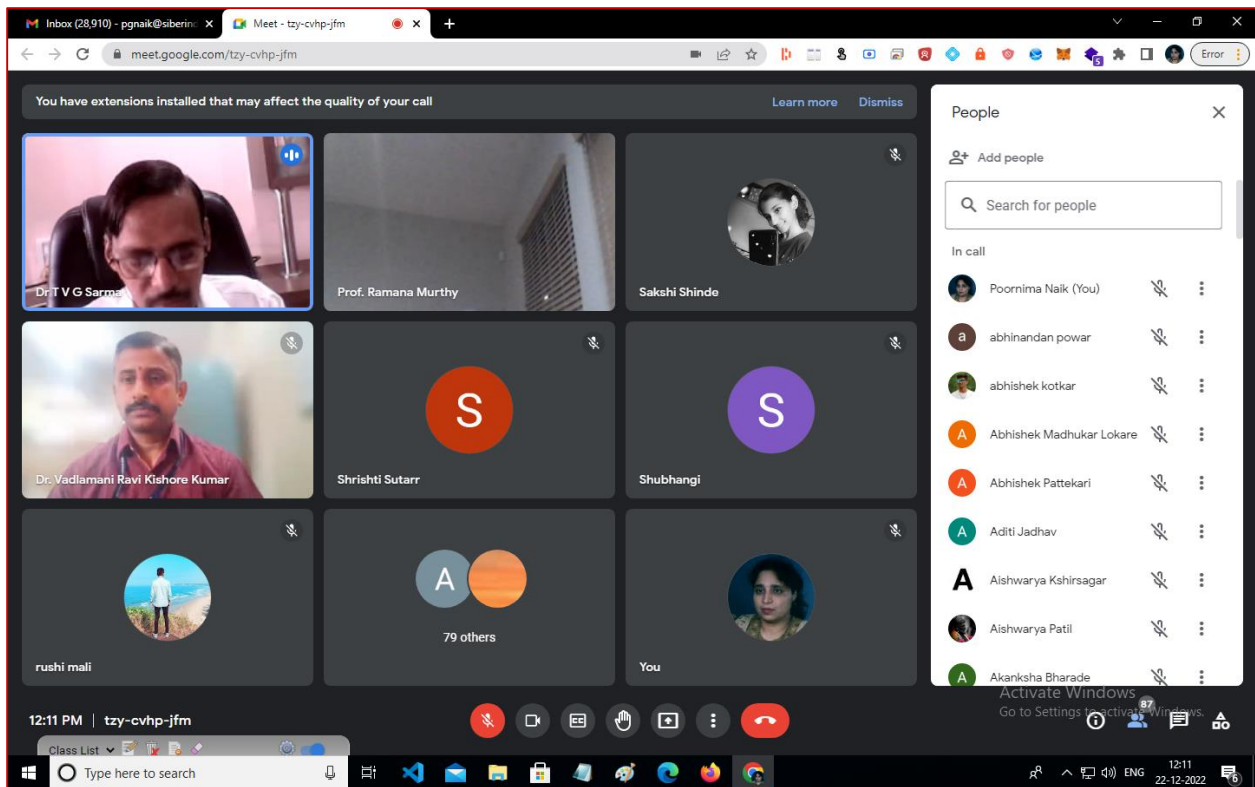
- First session dealt with ‘Relevance of Mathematics to Real World Applications’ and
- Second session dealt with IOT for real world.

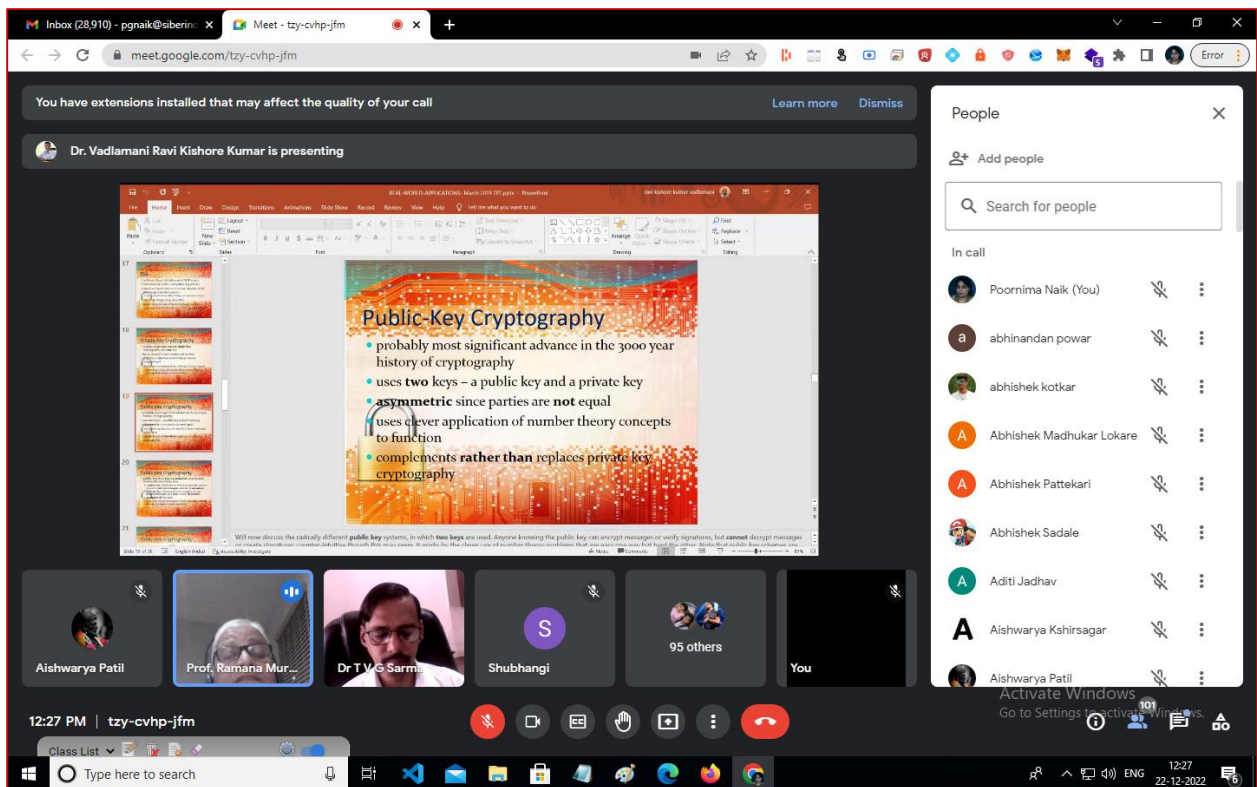
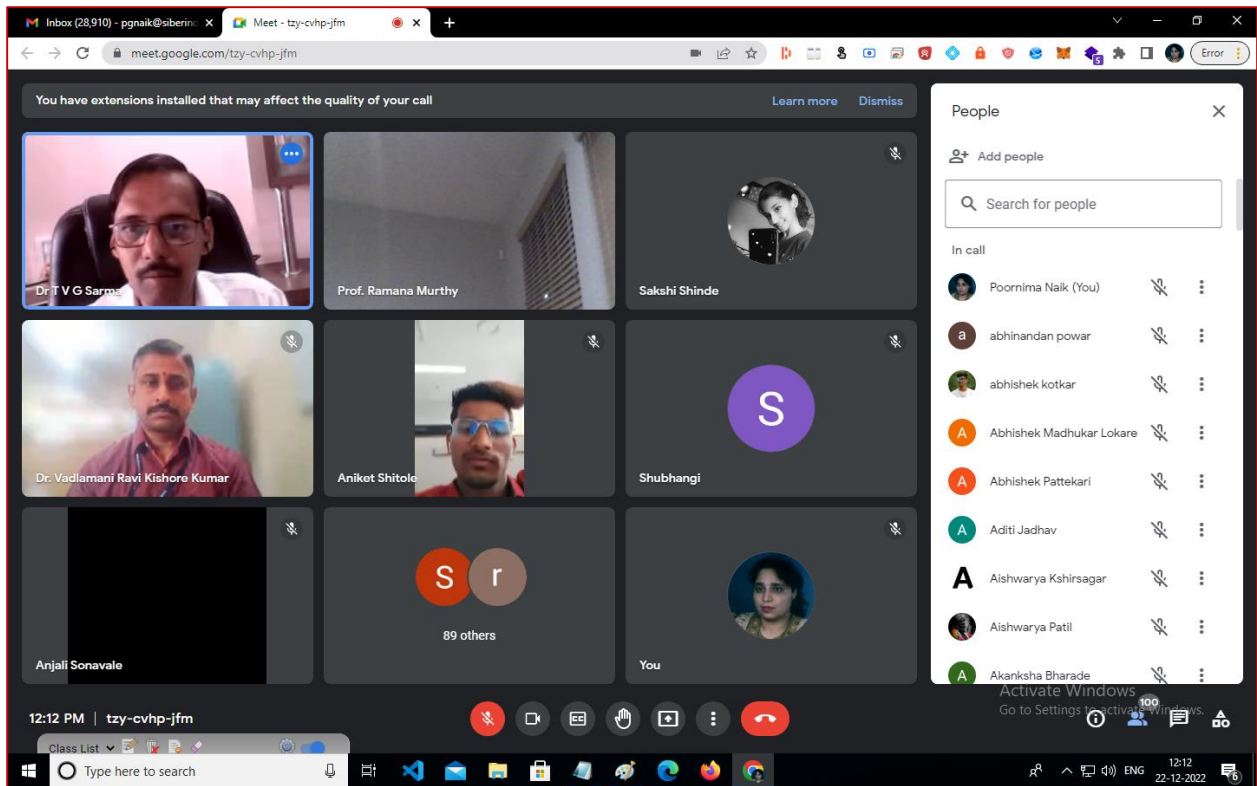
During his talk in first session, Dr. Prof. M.V. Ramana Murthy emphasized on role of mathematics in different computer disciplines such as computer security, machine learning, IOT etc. He further discussed how mathematics can be leverages in computr security for secure transmission of data over a public channel. Role of mathematics in digital signature, sources of security issues, future of security were discussed at length. The key generation and data encryption and decryption using RSA algorithm was demonstrated with suitable examples.

The second session was completely devoted to real world applications and role of mathematics in the implementation in agricultural domain, missile launching. Dr. Prof. M.V. Ramana Murthy started the session the 10 key mathematical equations that changed the course of history. The highlight of the session was discussion of IoE challenges, futures, IoT environment, IoT protocol, IoT device life cycle, IoT development tools, IoT applications, IoT hardware, middleware and their integration. The session concluded with few real life applications of IoT in environmental monitoring, IoT platform for wireless monitoring environment, IoT Application in Agriculture Sector (Using Spectral Clustering and Divide and Conquer Algorithms)

To conclude, the session was extremely informative, thought provoking and was a real tribute to Ramanujan, a great Indian Mathematician of all times.

Photo Gallery





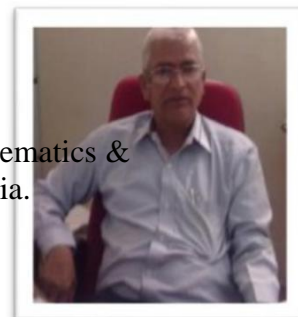
About Resource Person



CURRICULUM-VITAE

Prof. M.V. Ramana Murthy, Ph.D

Former Professor in Computer science, (Associate Dean) Faculty of Computing and Information Technology, King Abdul Aziz University, Rabigh campus, Jeddah, K S A.mail:mv.rm50@gmail.com, worked as Prof & Head, Dept. Of Mathematics & Computer Science, Univ College For Science, Osmania University, Hyderabad, India. Presently working at MGIT, Hyderabad as professor & HoD in M&H.



Mobile Telephone number- +966 565092923, +91 9441187914.

Nationality: INDIAN

Educational Qualifications:

- Awarded Doctor of Philosophy by Osmania University in the year 1986.

- First Class Post Graduate in Mathematics from Osmania University in 1981.
- First Class Bachelor of Science from Osmania University in 1978.

Conferences/Workshops Conducted:

- ❖ Delivered keynote address in The Intl. future trends in Computer Science at Babasheb Naik Inst.of . Engg& Technology at Pusad, Nanded March 2014
- ❖ Delivered Inaugural address of Intl .conf on Recent advances in cloud computing organized by IIT-Powai and Horizon institute Mumbai Feb 2014.
- ❖ Member of the organizing committee of the National Workshop on Computational Methods in Continuum Mechanics held at Osmania University, Hyderabad-7 in 1990.
- ❖ Organized National Workshop on Object Oriented computing in Applicable Mathematics, held at Osmania University Hyderabad-7.March, 1997.
- ❖ Organized a seminar on I.T.Trends in the New Millennium at Dept. of Mathematics O.U. 7th March, 2000.
- ❖ Organized a seminar on E.-Commerce application to Banking Sector on 23rd May, 2000.
- ❖ Organized Int conference on Recent advances in Fluid mechanics, 23-24 Dec 2010 at Osmania university, Hyderabad.
- ❖ Conducted National work shop on .Net technology,Oct 2010.
- ❖ Conducted National work shop on Computer Networks Nov 2010.
- ❖ Conducted Int workshop on Mathematical modeling andContinuummechanics 18-22 Dec 2010.

Research Experience:

Having 38years of research Experience in the following fields.

- Computational Fluid Mechanics
- Computational Bio-Fluid Mechanics
- Artificial Intelligence and Expert Systems
- Geographical Information Systems
- Neural Networks
- Data Securities

- IOT

I have supervised 63 candidates for their **Doctoral** thesis in the areas of

- Computational Fluid Mechanics.
- Bio-Fluid Mechanics.
- Digital Image Processing, (Construction of Edge enhancement filters) implemented in Java.
- Neural Networks.
- Network securities.
- Optical computing.
- Mathematical modelling
- ***I have 315 Research Publications to my credit in the above said fields.***

Also in the above areas I have supervised five candidates for their dissertation work of Master of Philosophy (M.Phil.).

In addition to this I have supervised several projects of M.Sc.,(Computer Science) in different areas with front-end tools as Visual Basic and C,C++ and Java Programming Languages.

The following Patents were awarded

1. *RAMALINGAM-RAMANA MURTHY Traffic Management System for Urban Intersection no. 3204/CHE/2012.*
2. *RAMALINGAM-RAMANA MURTHY Traffic Management System for Urban Pedestrian Crossing no. 5103/CHE/2012.*
3. *Besides these two, two more Patents one from US, and other from BRITAN I have in the Domain of Network Securities in Collaboration with DRDO along with my student DR. Gopal Krishna Murthy.*
4. Buoyancy Effects on MHD Chemically Reacting and Radiating Casson Fluid past a Permeable Stretching Sheet in a Porous Medium, 202141022953, 11-06- 2021
5. Real Time Multi Class Cardio Arrhythmia Classification, Based on DNN Implemented in the IOT Cloud Platform, No.202141038591A, DOP:03.09.2021
6. Smart Agriculture using sensors in Internet of Things (IOT), No.202141042980, DOP:22.09.2021
7. Image Processing Technique for Surface Crack Detection in Buildings, No:202141036924A, DOP:24.09.2021

Conferences/Workshops Attended/contributed:

- Delivered inaugural address on Deployment Effects on MEDC Protocol at University of Bostn, USA, 2018.
- Delivered the Inaugural address on the first international conference in “ Emerging Trends in Science, technology and management”, April 21-22, 2013 Singapore.
- Delivered Key Note Address on Role of .Net for real world applications at University of Albama, USA. 2008.
- Delivered a key note address On Geo spatial Technologies and applications held at Sri Padmavathi Mahila univ. Tirupati on 09 jan 2014.
- ❖ Delivered an invited talk at IntConf on Computer applications in Industry and engineering held at Los Angeles , California , U S A during 25-27 Sept 2013 conducted by ISCA
- ❖ Delivered Key Note Address at National Conference on Mathematical Modeling in GIS at VikramSimhapuri University on October 2010.
- ❖ I AEngg conference (IEEE) Univ of California, Berkly, CA, U S A 2010.
- ❖ Int conference on Recent advances in Fluid mechanics, Dec 23-24 ,2010.
- ❖ Software Engg. Society s SDPE conference 09 Montgomery Alabama USA in 2009.
- ❖ Chaired the Technical Session ICORG during February 2001.
- ❖ Represented the 2nd International Conference on Systemic, Cybernetics and Informatics during July 2001 at Orlando, Florida.
- ❖ Second International Conference on Flow interaction held at University of Tescmuch, Berlin in 1997.
- ❖ First Computing Conference on Flow Interaction held at Hong Kong in 1994.
- ❖ Indian Computing Congress 1990 held at Hyderabad.
- ❖ National Workshop on the Computational Methods in Continuum Mechanism held in 1990 in Osmania University Hyderabad.

- ❖ National Conference on Heat and Mass Transfer held at Regional Engineering College Warangal in December, 1986.
- ❖ INDO-FRENCH INSTRUCTIONAL WORKSHOP ON computational method in Nonlinear Partial Differential Equations held at TATA INSTITUTE OF FUNDAMENTAL RESEARCH CENTER I.I.Sc., Bangalore in 1986.
- ❖ Australian Fluid Mechanics Conference held in December 1986 at Auckland, Newzeland.
- ❖ 13th National Conference on Fluid Mechanics and Fluid Power held at Sri Krishna Devaraya University, Ananthapur in 1985.
- ❖ National Workshop on Heat and Mass Transfer held at Sri Krishna Devaraya University, Ananthapur in 1985.