



SRI VIDYA MANDIR ARTS & SCIENCE COLLEGE

(Autonomous)

**(Accredited by NAAC with 'A' Grade [3.27])
(Recognised 2(f) & 12(B) under UGC Act of 1956)**

**Katteri, Uthangarai, Krishnagiri Dt,
Tamil Nadu, India, 636902.**



A TWO DAY INTERNATIONAL CONFERENCE ON NEW TRENDS IN FUZZY LOGIC AND ITS APPLICATIONS

**(ICNTFLA– 2021)
29TH & 30TH JANUARY 2021**

**Organized
by**

Department of Mathematics, Sri Vidya Mandir Arts & Science College, Tamilnadu, India.

in collaboration with

Department of Mathematics, CHRIST deemed University, Bangalore, Karnataka, India.

About the college

The Visionary Philanthropists of Sri Vidya Mandir Higher Educational Trust started Sri Vidya Mandir Arts & Science College in Uthangarai in 2000 with the noble aim of uplifting the economically and educationally backward districts-Dharmapuri and Krishnagiri-into the number one educational destination in Tamil Nadu. The College is surrounded by the culturally rich pilgrimage centres, Hanumantheertham (2 km) and Theerthamalai (15 km), associated with the famous Epic, The Ramayana. The college is housed in a sprawling campus of more than 50 acres. The Queen of Mountains the Eastern Ghats has bestowed her bountiful nature and conducive climate round the year. The college is well-connected with the nearby cities and is located in the Salem – Vellore State Highways. Currently the college has the strength of more than 4300 students and 135 faculty Members. In 2013 our college is recognized 2(f) & 12(B) status by the UGC and as another feather to its crown, for the exceptional progress; in 2015 the college has been accredited by NAAC with 'A' Grade with CGPA 3.27 out of 4.

About our Department

The Department of Mathematics was established in the year 2004 with undergraduate B.Sc. degree in Mathematics with 26 students. The M.Sc. degree is being offered from the year 2007. From the year 2012 onwards, the department has emerged as a full-fledged research department offering M.Phil. Programmes and Ph. D programs from 2016. Since 2004 the department has produced more than 6000 centrums. Now in 2020, the department holds nearly 1000 students with 25 faculties. It provides a teaching learning process to develop the talent through competency building. The department has 11 Ph.D. holders. The department pulsatd seven days National Workshop on *Pure Analysis, Differential Equations and its Applications* in various affiliated colleges under Periyar University, Salem. It's a matter of pride that the department has achieved many successes in the path of education for the welfare of the students. The department students have clinched university ranks (67) including FOUR gold medals. Apart from the academic achievements the department is also taking sincere efforts to develop the multi-disciplinary knowledge of the students by conducting national/international level Conferences, Seminars, Workshops and Cultural programmes yearly with the help of the management. It strives to produce eminent professionals turned to the real time working environment. The department runs to meet out the competent academic environment with adequate labs and library resources to support students in their pursuit of excellence in every sector of life.

About the conference

The International Conference New Trends Fuzzy Logic and its Applications (ICNTFLA– 2021) will be held in Sri Vidya Arts and Science College, Katteri , Tamil Nadu, India during January 29-30, 2021. The conference looks for significant contributions to all major fields of fuzzy sets, Mathematical Modelling and fuzzy soft sets. It is a prestigious event organized with a motivation to provide an excellent international platform for the leading academicians, research scholars, industrial participants and budding students around the world to share their research findings with the global experts. We hope that ICNTFLA-2021 outcome will lead to significant contributions to the knowledge base in these up-to-date scientific fields in scope.

Organizing committee

Chief Patron

Shri. V. CHANDRASEKARAN,

Founder, Sri Vidya Mandir Group of Educational Institutions, Uthangarai.

Patron

Thiru. R. P. RAJEE

Secretary, Sri Vidya Mandir Arts & Science College, Uthangarai

Thiru. K. VENKATACHALAM

Additional Secretary, Sri Vidya Mandir Arts & Science College, Uthangarai

Chairmans

Dr. T. BALASUBRAMANIAN, M.Sc., M.Phil., Ph.D.

Principal, Sri Vidya Mandir Arts & Science College, Uthangarai.

Dr. N.GUNASEKARAN, MA., M. Phil., Ph.D.

Vice Principal, Sri Vidya Mandir Arts & Science College, Uthangarai.

Head Department of Mathematics

Dr. C. RAGAVAN, M.Sc., M.Phil., Ph.D.

Assistant Professor, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai.

Conveners

Dr. JOSEPH VARGHESE, M.Sc., M.Phil., Ph.D.

Professor, Department of Mathematics, Christ University, Bengaluru.

Dr. S. SENTHILKUMAR, M.Sc., M.Phil., Ph.D.

Assistant Professor, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai.

Dr. M. KAVIYARASU, M.Sc., M.Phil., Ph.D.

Assistant Professor, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai.

Organizing Secretaries

Mr. J. VENKATESAN, M.Sc., M. Phil., (Ph.D).

Assistant Professor, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai.

Mr. M. BALAMURUGAN, M.Sc., M.Phil., (Ph.D).

Assistant Professor, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai

Ms. A. PRABHAVATHI, M.Sc.

PG Student, Department of Mathematics, Sri Vidya Mandir Arts & Science College, Uthangarai.

Organizing Committee members

Dr. P. Palani

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Mr. S. Vinothkumar

Dr. S. Munirathinam

Ms. K. Kasthuri

Mr. S. Ponnurangan

Mis. G. Ellammal

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Dr. M. KAVIYARASU. Cell: 7010711025,

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Advisory Committee

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Dr. C. Selvaraj, Periyar University, Salem
Dr. A. Muthusamy, Periyar University, Salem
Dr. Eswari Prem, Govt Arts College (Men), Krishnagiri
Dr. A. Solairaju, Jamal Mohamed College, Tiruchirappalli
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Dr. B. Venkateswarlu, GITAM University, Bengaluru
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Dr. Dipak Ranjan Biswal, Hindol College Khajurikata, Odisha
Dr. N. Anitha, PG Extension Center, Dharmapuri
Dr. D. Jaya shree, Government Arts & Science College, Hosur, India.
Dr. R. Shenbagavalli, M.G.R College, Hosur
Dr. M. Rajeshwari, M.G.R College, Hosur
Dr. M. Adhyanan, Post-Doctoral Researcher, RIFM China
Dr. Utnal Badvakar, Bankura Sammilani College, West Bengal

Senior Scientific Committee

Dr. O.D.Makinde, Stellenbosch University, South Africa
Dr. Ejanul Haque, RMIT University, Melbourne, Australia
Dr. Kar-Ping, Shum, Yunnan University, China
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Dr. Anas Al-Masarwah, Malaysia University, Thailand
Dr. Ronnason Chinram, Prince of Songkla University, Thailand
Dr. G. Muhiuddin, University of Tabuk, Saudi Arabia
Dr. Al-Kadi, Taif University, Saudi Arabia
Dr. Mohamed E. A. Elanir, University of Tabuk, Saudi Arabia

Call for papers

The authors are requested to submit their original research papers through online submission. Selected papers are published in Scopus Journals by register themselves after notification. Relevant topics include but are not limited to:

- Fuzzy set theory
- Fuzzy soft sets theory
- Fuzzy Algebra

Registration: No Registration fees and E-Certificate will be provided to the active participants.

Registration is free link here: <https://forms.gle/vknSqVof8vTPFb3E6> . Session Link: <https://meet.google.com/nqo-fvsr-cvt>

Programme Schedule

DAY- I (29.01.2021)	
Time	Session
9.30 am	Inaugural function
10.15 to 11	Dr. A. SOLAIRAJU Topic: Neutrosophic fuzzy technique in decision making problems
11.10 to 11.55	Dr. SANTANU ACHARJEE Topic: Statistical concepts of intuitionistic fuzzy soft theory via utility
12 to 12.45	Dr. S. P. TIWARI Topic: Fuzzy relation: A notion unifying several fuzzy theories
2 to 2.45	Dr. G. MUHIUDDIN Topic: Fuzzy soft set theory applied to BCK/BCI-Algebra
3 to 3.45	Dr. JOSEPH VARGHESE Topic: News developments in the fuzzy transportation problem
4 to 4.45	Dr. A. FELIX Topic: Fuzzy multi criteria decision-making techniques and their applications
DAY- II (30.01.2021)	
10 to 10.45	Dr. KAVIKUMAR JACOB Topic: Introduction to neutrosophic sets and system
11 to 11.45	Dr. D. EZHILMARAN Topic: Research on rough set theory
12 to 12.45	Dr. K. MOHANA Topic: Fuzzy set theory
1.45 to 2.30	Dr. S. SATHISH KUMAR Topic: Recent research trends and technology
2.45 to 3.30	Dr. D. JAYA SHREE Topic: Fuzzy sets in applications
3.45 to 4.30	Dr. C. RAGAVAN Topic: Development of New Fuzzy Algebra and its Applications
4.30	Valedictory

Invited speakers



Dr. G. MUHIUDDIN

Associate Professor
Department of Mathematics
University of Tabuk
Saudi Arabia.

Topic: Fuzzy soft set theory applied to BCK/BCI-Algebra



Dr. KAVIKUMAR JACOB

Professor of Mathematics
Faculty of Applied Science and
Technology, Universiti Tun Hussein Onn
Malaysia.

Topic: Introduction to neutrosophic sets and system



Dr. S. SATHISH KUMAR

Associate Professor
Asia Pacific University of
Technology and Innovation,
Kulalumpur, Malaysia.

Topic: Recent research trends and technology



Dr. S. P. TIWARI

Associate Professor
Department of Mathematics
& Computing IIT (ISM)
Dhanbad, India.

Topic: Fuzzy relation: A notion unifying several fuzzy theories



Dr. SANTANU ACHARJEE

Assistant Professor
Department of Mathematics
Gauhati University
Guwahati, Assam, India

Topic: Statistical concepts of intuitionistic fuzzy soft theory via utility



Dr. A. SOLAIRAJU

Associate Professor
Department of Mathematics
Jamal Mohamed College
Tiruchrapalli, India.

Topic: Neutrosophic fuzzy technique in decision making problems



Dr. JOSEPH VARGHESE

Professor
Department of Mathematics
Christ University
Bengaluru, India.

Topic: News developments in the fuzzy transportation problem



Dr. D. EZHILMARAN

Assistant Professor Senior
Department of Mathematics
School of Advanced Science
VIT University, Vellore, India.

Topic: Research on rough set theory



Dr. A. FELIX

Assistant Professor
School of Advanced Science
Department of Mathematics
VIT University Chennai, India

Topic: Fuzzy multi criteria decision-making techniques and their applications



Dr. K. MOHANA

Assistant Professor
Department of Mathematics
Nirmala College for Women
Red Fields, Coimbatore.

Topic: Fuzzy set theory



Dr. D. JAYA SHREE

Assistant Professor
Department of Mathematics
Government Arts & Science
College, Hosur, India.

Topic: Fuzzy sets in applications



Dr. C. RAGAVAN

Assistant Professor
Department of Mathematics
Sri Vidya Mandir Arts and Science
College, Krishnagiri, India

Topic: Development of New Fuzzy Algebra and its Applications

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3.45 to 4.30	Dr. C. RAGAVAN Topic: Historical development of fuzzy set
4.30	Valedictory

Report on

A Two day International Conference on 'New Trends in Fuzzy Logic and its Applications (ICNTFLA – 2021)

29th and 30th January, 2021

Organized by



**PG and Research Department of Mathematics
Sri Vidya Mandir Arts and Science College
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Uthangarai – 636 902, Krishnagiri, Tamil Nadu, India

In collaboration with



**CHRIST (Deemed To Be University),
BENGALURU, KARNATAKA, INDIA**

Convener's of the Conference

Dr. Joseph Varghese, M.Sc., M.Phil., Ph.D.

Professor, Department of Mathematics, Christ University, Bengaluru.

Dr. S. Senthilkumar, M.Sc., M.Phil., Ph.D.

Assistant Professor, Department of Mathematics,
Sri Vidya Mandir Arts & Science College, Uthangarai.

Dr. M. KAVIYARASU, M.Sc., M.Phil., Ph.D.
Assistant Professor, Department of Mathematics,
Sri Vidya Mandir Arts & Science College, Uthangarai.

Organizing Secretaries of the Conference

Mr. J. VENKATESAN, M.Sc., M. Phil., (Ph.D).
Assistant Professor, Department of Mathematics,
Sri Vidya Mandir Arts & Science College, Uthangarai.

Mr. M. BALAMURUGAN, M.Sc., M.Phil., (Ph.D).
Assistant Professor, Department of Mathematics,
Sri Vidya Mandir Arts & Science College, Uthangarai

Ms. A. PRABHAVATHI, M.Sc. PG Student,
Department of Mathematics,
Sri Vidya Mandir Arts & Science College, Uthangarai.

Conference Report

International Conference in Sri Vidya Mandir Arts and Science College

The PG & Research Department of Mathematics of Sri Vidya Mandir Arts & Science College has organized A Two day International Conference on 'New Trends in Fuzzy Logic and its Applications (ICNTFLA – 2021) on 29.01.2021 & 30.01.2021. The Inaugural Function was held on 29.01.2021 at 9.30 am with the welcome address and Focal Theme of the Conference was presented by Dr. M. Kaviyarasu, PG & Research Department of Mathematics. Thiru. V. Chandrasekaran, Founder of the College delivered the Presidential Address.

Mr. R.P. Rajee, Secretary of the College, Mr. P. Venkatachalam, Additional Secretary felicitated the gathering and, congratulated the Principal and Conference Organizers for their proficient efforts to organize the event of this magnificent shindig in a short span. Dr. T. Balasubramanian, Principal of the College delivered the Felicitations Address. During his speech, he emphasized the applications of Mathematics.

Subsequent to the Inaugural Function, Technical Sessions of the Conference were preceded. Dr. A. SOLAIRAJU, Associate Department of Mathematics, Jamal Mohamed College, Tiruchrappalli, India. Topic: Neutrosophic fuzzy technique in decision making problems.

The second lecture was delivered by Dr. SANTANU ACHARJEE, Assistant Professor, Department of Mathematics, Gauhati University, Guwahati, Assam, India. Topic: Statistical concepts of intuitionistic fuzzy soft theory via utility

Followed by the third lecture was delivered by Dr. S. P. TIWARI, Associate Professor, Department of Mathematics & Computing IIT (ISM), Dhanbad, India. Topic: Fuzzy relation: A notion unifying several fuzzy theories.

During the Second Session after the lunch break the fourth lecture was delivered by Dr. G. MUHIUDDIN, Associate Professor, Department of Mathematics, University of Tabuk, Saudi Arabia. Topic: Fuzzy soft set theory applied to BCK/BCI-Algebra.

The fifth lecture was delivered by Dr. JOSEPH VARGHESE, Professor, Department of Mathematics, Christ University, Bengaluru, India. Topic: News developments in the fuzzy transportation problem.

The sixth lecture was delivered by Dr. A. FELIX, Assistant Professor, School of Advanced Science, Department of Mathematics, VIT University Chennai, India. Topic: Fuzzy multi criteria decision-making techniques and their applications.

Continue to the second Session Paper were presented by the presenters in different genres.

In the second day technical sessions of the conference was initiated by Dr. KAVIKUMAR JACOB, Professor of Mathematics, Faculty of Applied Science and Technology, Universiti Tun Hussein Onn, Malaysia. Topic: Introduction to neutrosophic sets and system.

Dr. D. EZHILMARAN, Assistant Professor Senior, Department of Mathematics, School of Advanced Science, VIT University, Vellore, India. Topic: Research on rough set theory

Dr. K. MOHANA, Assistant Professor, Department of Mathematics, Nirmala College for Women, Red Fields, Coimbatore. Topic: Fuzzy set theory

Dr. K. MOHANA, Assistant Professor, Department of Mathematics, Nirmala College for Women, Red Fields, Coimbatore. Topic: Fuzzy set theory.

Dr. D. JAYA SHREE, Assistant Professor, Department of Mathematics, Government Arts & Science College, Hosur, India. Topic: Fuzzy sets in applications.

Dr. C. RAGAVAN, Assistant Professor, Department of Mathematics, Sri Vidya Mandir Arts and Science College, Krishnagiri, India. Topic: Development of New Fuzzy Algebra and its Applications.

Totally around 491 participants and 105 paper presenters from around 49 universities and colleges have enthusiastically participated in the conference.

As per the written feedback of the professors, scholars and students, the International conference on New Trends in Fuzzy Logic and its Applications has served its purpose sharing knowledge and wisdom in the field of Fuzzy Logic and its Applications and made it a grand success.

The Valedictory Function of the Conference was scheduled at 4.30 pm on 30.01.2021 with the welcome address by A. Prabhavathi, M.Sc., Mathematics.

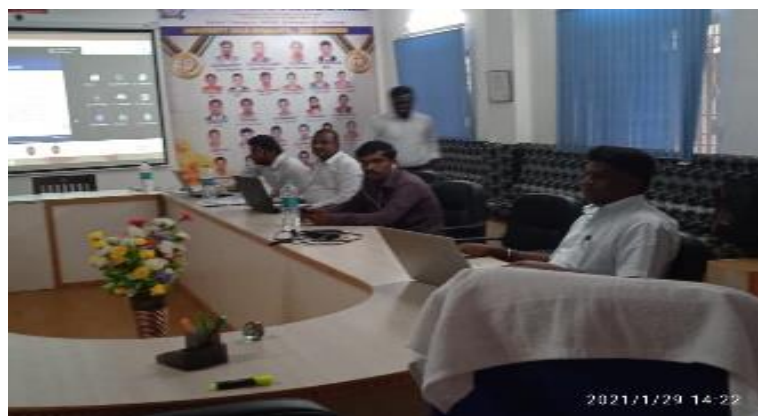
The Convenor and Organizing secretary of the Conference, Dr. S. Senthilkumar, in his conference report, on behalf of the management, the principal, expressed a note of gratitude to all the eminent Professors, scholars and students who have come over from various institutions and Universities of different states and foreign countries. He also conveyed hearty thanks to all the committee members and students of the Mathematics department, for their tireless service and co-operation, the HODs and faculty members from other department of SVM College. And also thanked the Press personals, audio, video persons and all those who helped to make the conference a grand success.

Dr. JOSEPH VARGHESE, Professor, Department of Mathematics, Christ University, Bengaluru, India, in his valedictory address, appreciated that this kind of International conferences are rarely conducted with quality research papers, but this college has made it so successfully.

Dr. KAVIKUMAR JACOB, Professor of Mathematics, Faculty of Applied Science and Technology, Universiti Tun Hussein Onn, Malaysia felicitated over the conference, praising the wonderful organization of this conference.

At the end, Mr J. Venkatesan, Assistant Professor of Mathematics delivered Vote of Thanks. And the program ended with National Anthem.

A Two day International Conference on 'New Trends in Fuzzy Logic and its Applications (ICNTFLA – 2021)



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