



# PG DEPARTMENT OF MATHEMATICS COLLABORATION WITH ST.JOSEPH'S COLLEGE OF ARTS & SCIENCE FOR WOMEN, HOSUR

# PRESENTS WORKSHOP on VITAL TOOLS FOR LEARNING MATH



#### **RESOURCE PERSON**

ASST. PROF. DR. V THANGA MURUGESHWARI,
DEPARTMENT OF MATHEMATICS, ST.JOSEPH'S COLLEGE OF ARTS & SCIENCE FOR WOMEN

**VENUE: PG005** 

TIMING: 12.00 PM ONWARDS

FOR ANY QUERIES, PLS CONTACT : MSCMATHS@SFSCOLLEGE.IN
E-CERTIFICATE WILL BE PROVIDED



# 「FRANCIS DE SALES COLLEGE

Permanently Affiliated to Bangalore University | AICTE Approved | Electronic City, Bengaluru - 100

Reaccredited by NAAC with 'B++' Grade || Recognised under section 2(f) & 12(b) of the UGC Act || An ISO 9001: 2015 Certified Institution

### A FRANSALIAN INSTITUTE OF HIGHER LEARNING

#### Workshop on Vital Tools for Learning Math

Title	Vital Tools for Learning Math	
Date Of Events	13/02/2023	
Department /	Ad-Infinitum in association with research 8	
Association	IP Cell	
Venue	PG-005	
Number of	28	
Participants		
Target Audience	PG-Mathematics Students	

Resource Persons	Dr. V. Thangamurugeshwari , B.sc, M.sc,
with Qualification	M.Phil, Ph.D (Maths)
<b>Target Audience</b>	NA

#### Report:

Hon'ble Speaker Dr. V. Thangamurugeshwari is presently working as an Assistant Professor in the Department of Mathematics, St. Joseph's College of Arts and Science for Women, Hosur. She presented seven papers in international conferences and one paper in national conference. She has attended 14 conferences and webinars. She has published 9 papers in UGC care list also.





Desalite

She awarded as **Best Young researcher award 2022-23** for her research contribution in Science and Education under the category of "MATHEMATICS EDUCATION" by Novel Research Academy, Puducherry.

She was also a resource person for "State level workshop on ICT Tools and effective presentation Techniques" delivered a session on ICT in Mathematics, department of computer applications of T John College and E-content development cell held on 21st of October 2022.

One of the paper Context-free edge replacement Graph P system has recognised as best paper in "International conference on Recent Innovation in Science, Engineering and Technology-ICRISET 2021" Jeppiar Institute of Technology, Chennai. She was also a resource person for two Faculty Development Program of "Role of Environment, Climate Change and Biodiversity on India's Economy" and "Application of Mathematical Tools in Research" in the year 2022 in UGC HRDC DAVV, Indore.

Guest Lecture series under Infinity 2023 was organized by Postgraduate Centre on 13<sup>th</sup> to 16<sup>th</sup> of February 2023. Ad-Infinitum Club, Dept. of Mathematics in association with Research & IP Cell organized guest lecture on "Vital Tools for Learning Mathematics" on 13<sup>th</sup> of February.

Lecture focused on the topics of tools to learn mathematics, are Maple, SPSS, Geo Gebra, Math Mechanics, MATLAB, Scilab, Latex, Maxima and etc., that motivate the students to learn Mathematics tools. She explained the outline of Maple, SPSS, Geo Gebra, Math Mechanics, MATLAB, Scilab, Latex, Maxima and Python.

She discussed how to solve matrix problems of more than 3x3 order using Maxima, how to instal maxima, to type and execute maxima she demonstrated and students have done.

She delivered brief information about the Geo Gebra and demonstrated the 3-D problems also. Students have raised the question about parabola problems and she demonstrated the Geo Gebra for Parabola for different values in x as well as y axes

#### **Positive Outcome:**

The objective of Infinity-Guest Lecture Series was to gain knowledge about tools for learning Mathematics. Ad-infinitum Club in association with research & IP cell initiated to understand more about vital tools to learn mathematics. Students are able to install maxima as well as Geo Gebra. They were able to solve problems using the tool maxima and Geo Gebra.

Report Prepared by:

(Event Coordinator) Roopa J

Report Verified by: (HOD/Criteria Coordinators)

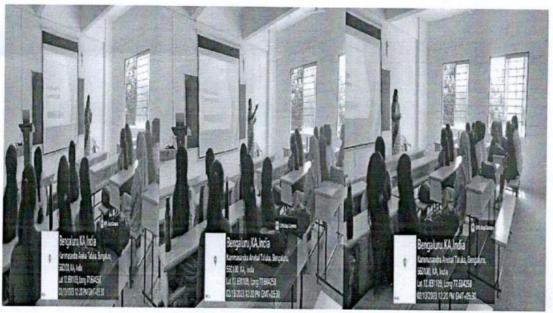
Report Approved by: (IQAC Coordinator)

Report Prepared by: Roopa J (PG-Mathematics)



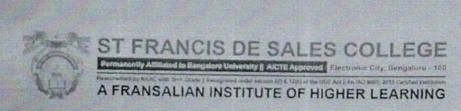
## Geo-tagged photos:







#### Attendance:



#### Department of Mathematics

#### PG-Centre

SLNo	UUCMS REG NO	NAME OF STUDENT	SIGNATURE
	P03M2150010	PRATHIBHA K N	Berli HA KN
2	P03M2150011	ARAVINDA K N	Ajour Mark
3	P03M2150012	SHARANYASHREE M	
4	P03M2150013	SANGELTHAA	Sangar & Con A
5	P03M2150014	PRAMEELAA	The state of the s
6	P03M2150015	HARISH BABUS	Backerhabut
7	P03M2150016	SANJAY KUMAR N	sanjay bumai N
8	P03M2150017	SHREELEKHANS	Charles and I
9	P03M2150018	LALITHA CHAURASIYA	
10	P03M2150019	DELMA-D A	TAXALL
	P03M2150020	NARENDRA D N	Klepale to
12	P03M2150021	TEJASHWINI KAMBAR	Type
13	P03M2150022	SHAILACV	Jaca .
14	P03M2150023	SINDHUC	Atuahus C
15	P03M2150024	CHANDANAAK	Charles A x
16	P03M2150025	MEGHANA M	PM 222
17	P03M2150026	SAHANAS	NA CENTRAL PROPERTY OF THE PARTY OF THE PART
18	P03M2150027	KARTHIKAKN	KATHENK KIN
	Ist somes	Nor .	
	2201105988	SHALINI	01 1-114
2	2201096276	TANUJA V	3halini V
3	2201114638	LEGANIOTA	Hathatikuko
4	2201100333	SHRISTY UPADITYAY	
3	2201102552	CHAITHRAPB	Challes a.p
6	2201064053	KAVYASHREE S B	The state of the s
7	2201099722	SHARMILAK	THE RESERVE THE PROPERTY OF THE PARTY OF THE
8	2201103448	DEEPTHIV	1 offer le 15
9	2201100410	CHAITHRAR	De ot
10	2201103912	SUSEELA	(hall be
			rivels.





# ROOPA J 5 days ago to stjoseph.college10@gmail.co...

#### Dear Sir/Ma'am

Greeting from the Department of Mathematics-PG, St Francis De Sales College, Electronic city, Bangalore

We are very happy to invite Dr.V.ThangaMurugeshwari, Assistant Professor of Mathematics of your institution to act as a Resource Person for the "Infinity Guest Lecture" on the topic of "Vital tools for Learning Math" on 13.02.2023 in our institution at 09:00am. Kindly accept our invitation and permit Dr.V.ThangaMurugeshwari, for the same. It can be considered as a Faculty Exchange Program under MoU. The Attendance certificate will be provided.

waiting for your favorable reply

Thanking you Regards, Roopa J Assistant professor, Department of Mathematics-PG St Francis De Sales College, Bangalore.



Thanga Murugeshwari 5 days ago to me ~

Dear Roopa Mam, Thank you for the invitation.

Regards,
Dr.Thanga Murugeshwari,
Assistant Professor,
Department of Mathematics,
St.Joseph's College of Arts and Science for Women,
Hosur.



#### **Profile:**

Name

: Dr. V. ThangaMurugeshwari.

Designation/Present position

: Assistant Professor

Official Address for communication: Department of Mathematics

Email I.D.

: thangammathe05@gmail.com

Mobile No.

9500402807

Broad field of Research

: Formal Languages, Graph

Grammars. Qualification: TNSET-2017 Qualified



Degree	Subject	Institution	Year
Ph.D.	Mathematics	University of Madras.	2017-2021
M.Phil	Mathematics	St. Xavier's College, Palayamkottai	2011-2012
PG	Mathematics	St. Xavier's College, Palayamkottai	2009-2011
UG	Mathematics	Rose Mary College of Arts and Science, Tirunelveli	

Discipline/Area of specialization

: Mathematics/Formal Languages, Graph Grammars.

### Teaching Experience/Employment history

Designation	From	To	University/Institution
Assistant Professor	September 2020	Till Date	St.Joseph's College of Arts and Science for Women, Hosur
Assistant Professor	June 2016	October 2016	C.T.T.E College, Perambur, Chennai.
Assistant Professor	June 2013	October 2013	R.B. Gothi Jain College, Red Hills, Chennai
Part-time Lecturer	June 2012	April 2013	Government College of Engineering, Tirunelveli.

#### Research Experience:

Designation	From	То	University/Institution
Research Scholar	11.05. 2017	05.01.2021	Queen Mary's College-University of Madras

Editorial Activity/Journal Reviewer

: International ICPCIT 2023.

#### International Conferences/ Seminars/ Webinars

#### Presentations: International

- Learning fullerene structure by graph grammars, ICMCE, 3<sup>rd</sup> and 4<sup>th</sup> November 2017, VIT University, Chennai.
- Learning some special graphs using hyperedge replacement, ICDMA, 18<sup>th</sup> -20<sup>th</sup> January 2018,
   Manonmanium Sundarnar University, Tirunelveli
- 3. Context free graph P system, ICETMST, 20<sup>th</sup> and 21<sup>st</sup> December ,2018, JayarajAnnapackiam college, Theni.
- Generation of paths and cycles using hyperedge replacement and their learning, ICCS, 16<sup>th</sup> and 17<sup>th</sup> November, 2018, Loyola College, Chennai.
- Context free Node Replacement Graph P SystemWith Splicing Rules, ICMCE, 21-22
   February 2020, VIT Chennai.
- Context -free Edge replacement Graph P System, International Conference on Recent Innovationin Science, Engineering and Technology - ICRISET-2021", 30.7.202 and 31.07.2021 ,Jeppiaar Institute of Technology.
- 7. Context free Graph P system with Splicing, International Conference "Recent Developments in Pure and Applied Mathematics", 19-21 July 2022, St. Xavier's Conference "Recent Palayamkottai"

Presentations: National

 Grammatical Inference of Paths and cycles using hyperedge replacement, NCMCA, 24<sup>th</sup> and 25<sup>th</sup> January 2018, Womens Christian college, Chennai

#### Confernces/Webinar/Workshop Attended

- 1. Webinar on "Role of IQAC in Quality Assurance", organized by the Internal Quality Assurance Cell (IQAC), on 31/08/2021 between 01:30 PM and 03:00 PM at St. Joseph's College Of Arts and Science for Women Hosur.
- Webinar on "NAAC Pathway to Excellence in Higher Education", organized by the Internal Quality Assurance Cell (IQAC), on 10/07/2021 between 11:00 AM and 12:30 PM at St. Joseph's College Of Arts and Science for Women Hosur.
- 3. Five Days Professional Development Program on Problem SolvingTechniques in Mathematical Analysis held on 1st June to 5th June, 2021, Patrician College of Arts and Science, Chennai.
- Webinar on "Teaching, Learning and Evaluation", organized by the Internal Quality
  Assurance Cell (IQAC), AUXILIUM COLLEGE (AUTONOMOUS) Vellore, in
  association with St. Joseph's College of Arts and Science for Women, Mookandapalli,
  Hosur, under Paramarsh Scheme of UGC, on 27/11/2020 between 3:00 PM and 4:00 PM.
- International Webinar Series," Writing Research project proposal, quality of research articles, training for online teaching and evaluation on 6<sup>th</sup> and 7<sup>th</sup> August, St. Joseph's College (Autonomous), Tiruchirapalli.
- "Tools for Interactive Content Preparation" of National Webinar on "ICT Tools for Teaching-Learning", Organised by Internal Quality Assurance Cell, 24 July 2020 St. Xavier's College (Autonomous), Palayamkottai, Tamilnadu.
- National Webinar on "Modelling and Solving Optimization Problems in Operations,
  Research using Microsoft Excel and Solver" organized by PG and Research Department
  of Mathematics, St. Xavier's College (Autonomous), Palayamkottai on July 27, 2020.
- "International Web Conference on Pure and AppliedMathematics" organized by PG and Research Department of Mathematics, St. Xavier's College (Autonomous), Palayamkottai, on June 23 & 24, 2020.
- Faculty Development Programme organized by Math Metrons, PG & Research
  Department of Mathematics, St. Joseph's College of Arts & Science for Women, Hoself
  on 17/06/2020 & 18/06/2020.
- 10. Webinar on Introduction to the Theory of Automata & its Applications held on 11

- 2020, Department of Mathematics, Queen Mary's College (Autonomous).
- 11. Participated two days National Workshop on "Mathematics using Maxima" organized by Math Metrons, Department of Mathematics, St. Joseph's College of Arts & Science for Women, Hosur on 15<sup>th</sup> & 16<sup>th</sup> June 2020.
- 12. Participated two days Faculty development program on "Mathematics using Python" organized by Euclid's Club, Department of Mathematics, St. Joseph's College of Arts & Science for Women, Hosur on 17<sup>th</sup> & 18<sup>th</sup> June 2020



- 13. Participated one day Faculty Development Program on "TOOLS FOR DIGITAL ERA" organized by the Department of Mathematics, St. Joseph's College of Arts and Science for Women, Hosur on 18<sup>th</sup> September 2021.
- Participated in "IP Awareness/Training program under National Intellectual Awareness Mission" organized by Intellectual Property Office, India on 14th November 2022.

#### List Of Publications:

- Emerald Princess Sheela J. D. and Thanga Murugeshwari V., Learning Some Special Graphs Using Hyperedge Replacement, Proceedings of International Conference on Discrete Mathematica and its Applications, International J. Math. Combin. Special Issue 1, 68-77, 2018.
- Thanga Murugeshwari .V and Emerald Princess Sheela J. D., Grammatical Inference
  of Paths and cycles using hyperedge replacement, Proceedings of the National
  Conference on Mathematics and Computer Applications, Womens Christian College,
  2018.
- Thanga Murugeshwari .V and Emerald Princess Sheela J. D., Learning Fullerene Structures by Graph Grammars, *Journal of Computer and Mathematical Sciences*, Vol 10(2), 270-278, February 2019.
- Thanga Murugeshwari .V and Emerald Princess Sheela J. D., Generation of Paths and
  cycles using hyperedge replacement and their learning, *International Journal of*Computer Science and Engineering, Vol 7, Issue-3, March 2019.
- Thanga Murugeshwari .V and Emerald Princess Sheela J. D., Context free graph P system, International Journal Of artificial Intelligence and Soft computing, Vol 7, No.1, 2019.
- JebaJesintha ,Emerald Princess Sheela J. D., Thanga Murugeshwari .V and C.D. Devadharshini, Generation of Cm.Pn graphs using graph P system, Bulletin of pure and applied sciences,.
- Dr. V.Thanga Murugeshwari, Context -free Edge replacement Graph P System, Journal of Xi'an Shiyou University, Natural Science Edition, Vol 18. Issue 05, May 2022
- V.Thanga Murugeshwari, M.Shobanapriya, B.Abhinaya, Certain Iterative methods to solve system of equations by Python Programming, Data Analytics and Artificial Intelligence Vol:3(2), 2023, ISBN:978-81-948459-4-2.

Parveen P

9. M.Shobanapriya, V.Thanga Murugeshwari, S, Rezvana

Programming to solve Linear equations by Gaussian methods







who Rayse

St. Francis de Sales Coll:
Electronics City Post, Bangalore - 560 100.