

### **Department of Mathematics**

<b>S.No</b>	<b>Year</b>	<b>Faculty Name</b>	<b>Achievement Type</b>	<b>Remarks</b>
1	2024-2025	Dr. A. Padma	Chairman of the Adjudication Committee	Chairman of the Adjudication Committee for conducting th Ph.D open Viva-Voce on 05-03-2025at Dravidian university
2	2024-2025	Dr. Matam Santoshi Kumari	Best poster Presentation	Best poster Presentation (2nd prize)during 7th Research day at CBIT
3	2024-2025	Dr.A.Padma	Best Teacher Award	Best Teacher Award Honouring of Teacher from Lions Clubs International
4	2023-2024	Dr.V.Sree Ramani	Resource person for Refresher courses	5 <sup>th</sup> to 9 <sup>th</sup> february 2024,Chaitanya Bharathi Institute of Technology (Autonomous),
5	2023-2024	Dr Palle Kiran	Resource person	ICAAM 24, 11-01-2024, Tumkur University
6	2023-2024	Dr Palle Kiran	Guest Lecture	03-05-2024, Gulbarga University
7	2023-2024	Dr Palle Kiran	Guest Lecture	07-08-2023, Rayalaseema University
8	2023-2024	Dr.G.Deepa	Author of Text Book	Applied engineering mathematics, National Paramount Publisher
9	2022-2023	Dr Palle Kiran	Invited Lecture, Gulbarga University	On 11-03-2023 at Gulbgara University.

10		Dr.V.Sree Ramani	Resource Person	SUMMER TECH CAMP-23, 11 <sup>th</sup> May to 27 <sup>th</sup> may,JPS
11		Dr. Ch. Lakshmi Sireesha .	Resource Person	Summer Tech Camp, STEM based Education ,12/06/23, 18/06/23  Jubilee Hills Public School
12		Dr. Ch. Lakshmi Sireesha	Faculty Coordinator	MATHLETS 2K23, SUDHEE, 31 Jan-01 Feb 2023,CBIT Hyderabad
13		Dr.G.Deepa	Text book Author	Applied Engineering Mathematics 978-93-9544- 19-9, 2023, Paramount Publishing House

**Details of patents Filed / Published /Granted and income generated:**

Sr. No.	Year	Title of the Patent	Patent no	Status (Filed/Published/Grante d)
1.	2023- 2024	MHD driven heat and mass transfer problem solving system	202023107628.9	granted
2.		“Advanced Cryptographic Framework Utilizing Abstract Algebraic Techniques”	202441011944	published
3.		Prediction Of Rainfall Using Multiple Linear Regression Model	Application No.202441036144 A	published
4.		Secure File Storage System On Cloud Using Cryptography	Application No.202441011985 A	published
5.		Enhanced Mathematical Model for Predicting Turbulent Magnetohydrodynamics	202341055678	Published

Sr. No.	Year	Title of the Patent	Patent no	Status (Filed/Published/Granted)
		Flow Patterns in Industrial Applications		
6.		A fixed point iteration method for solving nonlinear equations	202341005637	Published
7.		Dr.M. Santoshi Kumari	202341035338	Published
8.		The Influence Of Partial Derivative Precision on Gradient Descent Optimaization In Neural Networks	202441050316	Published
1	2022-2023	A Method For Predicting The Density Of Oxide And Fluoride Glasses Using Artificial Intelligence Techniques	[2023/02828]	Granted
2		Mathematical Models for Predicting and Analyzing Complex Systems.	Application No. 202341030643 A	Published
3		A fixed point iteration method for solving nonlinear equations	202341005637	Published
4		Fast Stastical imaging reconstruction by algebraic reconstruction	202241020086	Published
5		Modelling of Website Using Graph theory	202241045049	Published
6		Enhanced Fixed Point method for efficient Numerical Solution of Nonlinear Integral Equations	202341035338	Filed

Sr. No.	Year	Title of the Patent	Patent no	Status (Filed/Published/Granted)
7		<u>Method And System For Utilizing Symbol Recognition Techniques For Dynamically Assessing Mathematical Expression In Documents</u>	202211000460	Published

From 1<sup>st</sup> August to 30<sup>th</sup> August 2022

- Dr. A. Padma, participated in the 5-Day Faculty Development Programme on “Enhancing Research Eco-system in the Campus” organized by the Research & Development Cell from 22<sup>nd</sup> to 26<sup>th</sup>. August 2022.

From 1<sup>st</sup> July to 30<sup>th</sup> July 2022

- NS Shashikumar, S Sindhu, M Madhu, BJ Gireesha, Second law analysis of MHD Carreau fluid flow through a microchannel with thermal radiation, Waves in Random and Complex Media, 2022
- Dr. A. Padma, participated in the Two Week International FDP on "Research Perspectives in Mathematics and its Applications" organized by the Department of Mathematics, Sathyabama Institute of Science and Technology, Chennai, from July 4 to July 16, 2022.
- J Bodduna, MP Mallesh, CS Balla, SA Shehzad, Activation Energy Process in Bioconvection Nanofluid Flow Through Porous Cavity, **Journal of Porous Media**, Volume 25, Issue 4, 2022, pp. 37-51

From 1<sup>st</sup> June to 30<sup>th</sup> June 2022

- A.Padma, published a paper Title: “Product of M-series and Srivastava’s polynomials with generalized fractional integral operators” Materialstoday: Proceedings(ScienceDirect), volume 51,part 1,2022, page 607-610.
- Jamuna Bodduna, Chandra Shekar Balla, Mallesh MP, Impact of inclination angle on thermo-bioconvection of nanofluid containing gyrotactic microorganisms saturated in porous square cavity, Iranian Journal of Numerical Analysis and Optimization, June 2022, APTSMS- ICMRSE-2022, DOI: 10.22067/IJNAO.2022.76732.1146, APTSMS-ICMRSE-2022, Osmania University
- Dr. V. Siva Kumar Reddy, Dr. G. Madhava Rao, **Dr. B. Chandra Shekar**, Dr. V. Dhanunjana

Chari, A Machine Learning Based Approach To Plot Graphs Based On Statistical Data Analysis Of Patients Suffering From Cancer Due To Alcohol Consumption 202241035667A Date: 22/06/2022

- Ramesh Alluguvelli, Chandra Shekar Balla, Kishan Naikoti, Bioconvection in Porous Square Cavity Containing Oxytactic Microorganisms in the Presence of Viscous Dissipation, **Discontinuity, Nonlinearity, and Complexity**, Volume 11, Issue 2, pp. 301-313, 2022

From 1<sup>st</sup> May to 30<sup>th</sup> May 2022

- R Alluguvelli, CS Balla, K Naikoti, OD Makinde, Nanofluid Bioconvection in Porous Enclosure with Viscous Dissipation, **Indian Journal of Pure & Applied Physics**, Volume 60(1), 78 – 89, 2022
- Palle Kiran., Gravitational Modulation Effect on Double-Diffusive Oscillatory Convection in a Viscoelastic Fluid Layer. *J of Nanofluids*, 11, 263-275 (2022)
- Dr.G.Deepa,“ Heat and Mass Transfer solution of MHD Absorbing Convective Flow Past an Exponentially Accelerated Vertical Plate”, *Indian Journal of Natural Sciences*, ISSN: 0976 – 0997, pp.42296-42308. (2022)
- Khasim Ali, Y. Rajashekhar Reddy, and Chandra Shekar Balla, Influence of Exponential Space Based Heat Source on Unsteady Couette Nanoliquid Flow, **Journal of Nanofluids**, 11, 237–244, 2022

From 1<sup>st</sup> April to 30<sup>th</sup> April 2022

- **Dr.V.Sree Ramani** and 9 others Fast statistical imaging reconstruction by algebraic reconstruction technique <http://202241020086date:2/4/22>, *Recreating medical visuals*, 15/4/22 ~~From 1<sup>st</sup> March to 30<sup>th</sup> March 2022~~
- Dr G Narsimlu, participated one week online faculty Development programme on “Mathematics for a better world” from 21/03/2022 to 26/3/2022.
- Mr M Amarnath, participated one week online Faculty Development Programme on “Mathematics for a Better World”, 21-03-2022 to 26-03-2022.
- Dr P Kiran, participated Two week FDP on ‘Emerging trends and modeling in advanced materials and design’, March 22 april 1 2022.
- Dr P Kiran, attended Two week FDP online certificate course on ‘Numerical & engineering computation optimization for physicist and sciences & engineering using Scilab’ Feb 21 to 5 march 2022.
- Dr P Kiran, attended One week FDP on IOT from Feb 28 to march 4 2022.

From 1<sup>st</sup> February to 30<sup>th</sup> February 2022

- Dr.M.Ganeshwar Rao, Participated in one week FDP on 'Mathematical Relevance to AI and ML' from 7<sup>th</sup> to 12<sup>th</sup> Feb 2022
- Dr P Suresh, participated 10- Days online FDP on "Mathematical Relevance to Artificial Intelligence and Machine Learning" during 07-02-2022 to 17-02-2022.
- Dr Palle Kiran, attended one week FDP on 'Research Methodology' from 07-02-2022 to 14-02-2022.
- Dr G Narsimlu, attended Five day Natinal Level FDP on 'RECENT TRENDS IN MATHEMATICS' during 14/02/2022 to 18/02/2022.
- Dr M Madhu, participated three week FDP on 'Numerical & Engineering Computation, Optimization for Physicists, Scientists & Engineers using open-source- SCILAB' from 21-02-2022 to 05-03-2022.
- Dr P Suresh, participated two weeks (40 hours) online certificate course on " Numerical & Engineering Computation, Optimization for Physicists, Scientists & Engineers using Open-Source-SCILAB", 21-02-2022 to 05-03-2022.
- Dr. B Chandra Shekar, participated two week online certificate course on 'Numerical & Engineering Computation, Optimization for Physicists, Scientists & Engineers using Open-Source-SCILAB' from 21/02/2022 to 05/03/2022.
- Dr Palle Kiran, attended One Week Online Faculty Development Programme on "Artificial Intelligence for IoT Services in Cloud: Techniques & Applications", 28-02-2022 to 4-03-2022.
- Mr M Amarnath, attended National level FDP on "Recent Trends in Mathematics" from 14-02-2022 to 18-02-2022.
- Mr M Amarnath, participated (2 week) 40-Hour Online FDP on "Mathematical Relevance to Artificial Intelligence and Machine Learning", 07-02-2022 to 17-2-2022.

From 1<sup>st</sup> January to 30<sup>th</sup> January 2022

- **Dr. G. Deepa** and others Patent number: 02/2022, Method and system for utilizing symbol recognition Techniques for Dynamically assessing Mathematical expression in Documents 202211000460, 04/01/2022
- Dr G Narsimlu, Participated AICTE - Sponsored n One-week refresher program on 'electronic CKT Analysis with MATLAB' during 27/12/2021 to 01/1/2022.
- Dr G Narsimlu, participated one week FDP on 'Math Modeling and Computational Modeling' from 24/01/2022 to 28/01/ Jan 2022.
- Dr P Kiran, attended One week FDP on Research methodology, Jan 17 to 21 2022.

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From 1<sup>st</sup> December to 30<sup>th</sup> December 2021

- Dr. A Padma Reddy, presented paper entitled “Application of Health Care System for Cancer Patients” at the international conference on Material Science and Manufacturing (ICMSME-2021) held at Sri Shakhi Institute of Engineering and Technology, Coimbatore on 10<sup>th</sup> -11<sup>th</sup> , December 2021
- Dr K Sharada participated in the online international FDP on **The Role of Linear Algebra in Machine Learning, Artificial Intelligence & Data Science** organised by Department of Mathematics and Humanities, Computer science engineering and Information Technology, Mahatma Gandhi Institute of Technology(A), Gandipet, Hyderabad, 500075, held during 29<sup>th</sup> NOV to 3<sup>rd</sup> DEC 2021.
- Dr. G. Deepa participated in Online International Faculty Development Program on “The Role Of Linear Algebra In Machine Learning, Artificial Intelligence & Data Science”, organized by the Departments of Mathematics and Humanities, Computer Science Engineering and Information Technology, Mahatma Gandhi Institute of Technology, Hyderabad held from 29 th November, 2021 to 3 rd. December 2021

From 1<sup>st</sup> November to 30<sup>th</sup> November 2021

- Dr. A Padma Reddy, participated in five-day FDP on “NBA Accreditation Process & SAR File Preparation “ under AIVTE Margadarshan Scheme conducted by Anurag University, Hyderabad during 8<sup>th</sup> to 12<sup>th</sup> November 2021.
- Dr. G. Deepa participated in five-day FDP on “Computational Mathematics and Recent Advances in Management Principles” held from 15/11/2021 to 19/11/2021 organized by Department of Management Studies and Department of Mathematics, at Swami Keshav Anand Institute of Technology Management & Gramatan, Jaipur.
- Dr. G. Deepa attended a one day webinar on “National Conference on Moral Values and Relevance of Swami Vivekananda’s Thought in the Present World " held on 2<sup>nd</sup> November 2021 organized by the Swami Vivekananda Centre for Higher Research and Education, Alagappa University, Karaikudi

From 1<sup>st</sup> October to 30<sup>th</sup> October 2021

- Dr G. Deepa attended a one day webinar on “An Overview Of Mathematical Sciences-Trb Aspirants ” held on 25th October 2021 organized by the Department of Mathematics , Kongu Engineering College.
- Dr G. Deepa Participated in the ‘National webinar on “Fixed Point Theory and its Applications” during October 10-12, 2021, organized by the Department of Mathematics,Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

From 1<sup>st</sup> September to 30<sup>th</sup> September 2021

- Dr B Chandra Shekar published a paper, “Numerical solution of transient Fe<sub>3</sub>O<sub>4</sub>-EG nanofluid flow past the Couette channel associated with radiation”, International Journal of Ambient Energy, (SCOPUS, WoS Journal) DOI: 10.1080/01430750.2021.1970623
- Dr B Chandra Shekar, participated one week FDP on Software Tools for Mathematical Education organised by Department of Mathematics, Bannari Amman Institute of Technology, Sathyamangalam and Providence College for Women, Coonoor, Tamil Nadu, India from 30th Aug to 05 Sep 2021.
- Dr. K Sharada, completed the course[online] **“Orientation toward technical education and curriculum aspects”** of NITTT ,Sept 2021 and **“Technology enabled learning and Life- long self-learning”** of NITTT , Sept 2021
- Dr. Mamta Thakur and Mr M Amarnath has participated in National level online One Week Faculty development programme "Machine Learning & Deep Learning" under DBT-Star college scheme,organized by Department of Computer science 27<sup>th</sup> SEP TO 1<sup>ST</sup> October,2021.
- Dr. K. Sharada and Dr. Mamta Thakur Participated in Three Day Online Workshop on Universal Human Values-II: Understanding Harmony organised by Chaitanya Bharathi Institute of Technology(A), Gandipet, Hyderabad, 500075, held during 20<sup>th</sup> to 22<sup>nd</sup> September 2021.
- Dr. Mamta Thakur attended two day national webinar on “Bridging the challenges in research with mathematics-A pedagogical approach ”from 20-21 sept. 2021 organised by St. Ann’s college for women , Mehdiapatnam, Hyderabad.
- Dr A Padma and Dr G. Deepa Participated in One Week Virtual International Lecture Workshop on "New Advances in Mathematical and Computational Sciences " (NAMCS-2021) Organized by Department of Applied Mathematics, Yogi Vemana University, Kadapa - 516005, A.P., INDIA during 13.09.2021 to 18.09.2021.
- Dr G. Deepa Participated in the ‘National webinar on Cryptography’t ” during September 10-12, 2021, organized by the Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon in collaboration with Indian Institute of Information Technology, Lucknow
- Mr M Amarnath has participated in One Week Virtual International Lecture Workshop on "New Advances in Mathematical and Computational Sciences " (NAMCS-2021) Organized by



Department of Applied Mathematics, Yogi Vemana University, Kadapa - 516005, A.P., INDIA  
during 13.09.2021 to 18.09.2021

- Dr. Swatmaram published a paper, Title: Unique Common Tripled Fixed Point for Three Mappings in Gb-metric Spaces Journal: Mathematics and Statistics 9(5): 835-852, 2021 , ISSN: 2332-2144,DOI: 10.13189/ms .2021.090524
- Dr B Chandra Shekar presented paper entitled “Numerical Simulation of Effect of Activation Energy on Bioconvection due to gyrotactic microorganisms” in 3<sup>rd</sup> International Conference on Mathematical, Physical and Computational Sciences organized by Aurora Degree & PG College, Telangana on 27-28 Aug 2021.

From 1<sup>st</sup> August to 30<sup>th</sup> August 2021

- Dr. Mamta Thakur participated and presented abstract titled “Impact of blended learning in the study of engineering mathematics” during 3<sup>rd</sup> Research day in CBIT
- Dr. Mamta Thakur attended 7 day FDP from 19—25<sup>th</sup> August 2021 on “Quality research paper writing and publishing in High impact journals” organised by Assam downtown university , Guwahati Assam
- Dr. A. Padma , participated in one -week FDP on Scientific Documentation using LaTeX(SDL-2021) organised by SRSK Engineering college, Bhimavaram during 9 to 14 August 2021.
- Dr. A Padma Published published a paper in Hindawi, Abstract and Applied Analysis, Volume 2021. Article ID 9961013, Title: The Marichev- Saigo-Maeda Fractional Calculus Operators Pertaining to the V-Function, 12 August 2021
- Dr.G.Deepa participated in two week FDP on " “Research Advances in Mathematics and its Applications” organized by the Department of Mathematics, Sathyabama Institute of Science and Technology, Chennai from 2<sup>nd</sup> -14<sup>th</sup> August 2021

From 1<sup>st</sup> July to 30<sup>th</sup> July 2021

- Dr.G.Deepa participated in one day National webinar on "Latest Technological Tools for Teaching and Learning & Positive (LTTTLPT-2021)" organized by the Department of Mathematics and Physics in collaboration with IQAC on 24<sup>th</sup> July 2021.
- Dr.G.Deepa participated in Three day National e-Workshop on “Sagemath” organized by the Department of Mathematics,Thassim Beevi Abdul Kader College for Women, Kilakarai, held from 22nd – 24th July 2021.
- Dr. A Padma, Dr.G.Deepa and Mr.M Amarnath participated in one Week Faculty Development Program on “Recent Trends Application of Mathematics” organized by the Department of Freshman Engineering,Chadalawada Ramanamma Engineering College, Tirupati from 12<sup>th</sup>-17<sup>th</sup> July 2021.
- Dr A Padma has presented a paper at the 6<sup>th</sup> International Conference on Communication and

Electronics System (ICCES 2021) organised by PPG Institute of Technology, Coimbatore, Tamil Nadu during 8 – 10, July 2021

- Dr. A Padma, Title: Effective Cleaning System Management using JSP and Servlet Technology, Proceedings of the 6<sup>th</sup> International Conference on Communication and Electronics System (ICCES 2021) IEEE Xplore Part Number:CFP@IAWO-ART, ISBN:978- 0-7381-1405-7
- Dr.G.Deepa participated in one day National level webinar on “Semi Numerical Method for Class of Boundary Value Problem for Nonlinear Ordinary Differential Equations” organized by the Department of Mathematics, Shree Khasgatesh College of Arts, Commerce and Science, Vijayapur, Talikoti, Karnataka on 7<sup>th</sup> July 2021.
- Dr. A Padma and Dr.G.Deepa participated in Nine-day National level online Faculty Development Program (FDP) on “Foregrounding the Spectrum of Character Building in Modern Human Life” organized by the Department of Humanities and Sciences, Balaji Institute of Technology and Science, Hyderabad from 25<sup>th</sup> June to 3<sup>rd</sup> July 2021
- Dr. Mamta Thakur published a chapter with title “Transition to online teaching using innovative technologies “ in the book titled “The opportunities of uncertainties :flexibilities and adaptation needed in current climate (Volume -2) <https://www.lulu.com/en/us/shop/mr-v-parthiban-and-dr-a-sivakumar-and-dr-shahana-a-m/the-opportunities-of-uncertainties-flexibility-and-adaptation-needed-in-current-climate-volume-ii-ict-and-engineering/ebook/product-v22z62.htm>







