

AKDD ECHOES

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34th Sports Day Ignites Athletic Spirit



Reports on:

- A NATIONAL SCIENCE DAY EXHIBITION BY THE STUDENTS OF PHYSICS, CS, AND MATHS DEPARTMENTS
- "LUMINOUS 2025", A STATE-LEVEL INTERCOLLEGiate FIESTA OF ENGLISH DEPARTMENT

ARTICLES BY STAFF AND STUDENTS



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A report on International Women's Day celebrations held on March 7, 2025, featuring the keynote address of Deputy Collector, Ms. Anitha highlighting women's role in advancing society.

FROM THE EDITOR'S DESK



Dear Readers,

It gives me immense pleasure to present this edition of our college newsletter, which highlights the remarkable achievements and events that have taken place on our campus. This issue showcases the dedication and excellence of our students and faculty in academics, sports, cultural activities, and community engagements.

In the arena of sports, our 34th Sports Day was a grand celebration of athleticism, discipline, and team spirit. One of the standout moments of this season was the seminar on Empowering Women: Cyber Safety, Health, and Financial Literacy, organised in collaboration with the Virudhunagar District Administration. The National Science Day Exhibition ignited a spark of curiosity and innovation among our students. Each of these events was made possible by the tireless efforts of our faculty, and students.

Our staff and students have also contributed articles on several interesting topics, sharing their insights, knowledge, and creative perspectives. These contributions add great value to our newsletter and reflect the vibrant intellectual spirit of our institution.

I hope you find this edition informative and inspiring.
Happy reading!

Warm regards,

A handwritten signature in black ink, appearing to read "A.K.D. Krishnama Raju". It is written in a cursive style with a horizontal line extending from the end of the signature.

A.K.D. Krishnama Raju
Editor

A DAY OF TRIUMPH: 34TH SPORTS DAY IGNITES ATHLETIC SPIRIT



A wave of athletic fervour swept through our college on February 22, 2025, as the institution marked its 34th Sports Day with a vibrant celebration of talent and dedication. The day commenced with a warm welcome from Principal, Dr. M. Lakshmi, setting the stage for a day of spirited competition and camaraderie.

Shri. A.K.D. Krishna Raju, Secretary and Correspondent, delivered an inspiring presidential address. The former Principal, Dr. S. Jamuna delivered a felicitation address. Vice-Principal, Dr. S. Manjula Devi, introduced the esteemed Chief Guest, Mr. A. Jaiganesh, Office Superintendent, Madurai Division, Southern Railways.

Physical Director, Mrs. G. Kanmani, presented the annual report, highlighting the remarkable achievements of the college's athletes. The guest speaker, Mr. Jaiganesh's address resonated deeply with the students. He emphasised the transformative power of sports and underscored the practical benefits of athletics, including quotas for higher education and government exams. He also stressed the valuable life lessons of resilience and perseverance learned through sports.

The day's events were a spectacle of skill and enthusiasm. A captivating march past that set the tone for the celebrations, followed by the symbolic lighting of the Olympic torch. The audience was mesmerised by a series of thrilling



competitions, including running races, drill displays, aerobic routines, *silambam* demonstrations, and yoga performances, each showcasing the students' impressive talents and unwavering passion.

The celebration culminated in a prize distribution ceremony, where athletes were recognised for their achievements. Ms. Karunya Alfin, a student, delivered a heartfelt vote of thanks, expressing gratitude to all the dignitaries, participants, and organisers who contributed to the resounding success of the 34th Sports Day.

The event stood as a testament to the college's commitment to nurturing not only academic excellence but also the physical and mental well-being of its students.

SEEDS OF DISCOVERY: NATIONAL SCIENCE DAY



On March 1, 2025, the college buzzed with excitement as a dynamic science exhibition marked the celebration of National Science Day. Students from the Physics, Computer Science, and Mathematics departments proudly displayed their innovative projects, transforming the venue into a hub of scientific discovery.

The exhibition's inauguration by the Secretary and Correspondent, Shri. A.K.D. Krishnamaraju sparked enthusiasm, with an inspiring address that championed student research and the pursuit of innovative discoveries. The diverse range of projects highlighted the depth of knowledge and passion for scientific exploration within the college community. The exhibition showcased a remarkable array of student innovations, including an agri-sector app, earthquake alert sensor networks for disaster preparedness, automated water filling systems with alarm alerts for resource optimisation and overflow prevention, gas leakage detection devices for enhanced safety, voice changer technology exploring digital signal processing, and treasure finding algorithms, and demonstrating practical applications of mathematics.

COMPUTER SCIENCE ASSOCIATION



On March 6, 2025, the Computer Science Department hosted a dynamic association event that ignited a passion for technology. Special guest, Mr. Rajesh Kumar delivered an enlightening speech on artificial intelligence, demystifying its complex functionalities and showcasing its diverse applications across various fields. His presentation served as a catalyst for discussion, inspiring students to explore the vast potential of AI.

The event featured a series of engaging competitions, providing students with a platform to demonstrate their technical prowess and creativity. Participants competed in paper presentations, web designing, debugging challenges, and e-waste photography. Winners were recognised for their outstanding achievements with certificates and prizes.

The event began with a warm welcome address by student Ms. Joylin. The Principal, Dr.M. Lakshmi delivered the presidential address. Academic Advisor Sankaranarayanan extended his best wishes, and Assistant Professor Ms. Ruth introduced the special guest. Student Ms. Selin Swetha concluded the proceedings with a heartfelt vote of thanks. The event successfully fostered a spirit of innovation and collaboration, showcasing the cutting-edge work being done in the field of computer science.

LUMINOUS 2025: A SPARK OF LITERARY AND ARTISTIC TALENT



On March 5, 2025, the English Department sparked a creative explosion with "Luminous 2025," a state-level intercollegiate fiesta that brought together students from various colleges. The event, centered on the theme of "Ecocentric Literature," provided a platform for students to showcase their diverse talents in a variety of engaging competitions.

The event marked insightful paper presentations, imaginative literary parades, vibrant face paintings, innovative model displays, and energetic western dance performances. Their efforts were rewarded with certificates and prizes.

The Chief Guest, Dr. K. Muthamil Selvi, Head and Associate Professor of the PG and Research Department of English at The Standard Fireworks Rajaratnam College For Women, Sivakasi, offered a compelling exploration of "Ecocentric Literature," delving into its historical context, key authors, and contemporary relevance. She highlighted its role in fostering environmental consciousness and promoting sustainable practices.

The Principal, Dr. M. Lakshmi, delivered an inspiring presidential address, and former Principal Dr. S. Jamuna, delivered a warm felicitation. Ms. R. Lakshmi, Head of the English Department, introduced the esteemed chief guest.

BBA ASSOCIATION



On March 4, 2025, the Department of Business Administration orchestrated a vibrant BBA Association event, centered on the theme of "Unique Identity". The event served as a platform for intellectual discourse and creative expression, highlighted the importance of individuality in various sectors.

The keynote address, delivered by Dr. R. Rajesh Ramkumar, Assistant Professor from Ayya Nadar Janaki Ammal College's Department of Business Administration, captivated the audience. He elucidated the significance of a unique identity as a distinguishing mark, essential in fields ranging from documentation and technology to telecommunications and business. He also emphasized how a distinct identity sets entities apart, fostering recognition and trust.

The event's competitive spirit was ignited through a series of engaging contests: paper presentations, poster presentations, short films, and photography. Students showcased their skills and creativity, vying for recognition and prizes. The winners were awarded certificates and prizes. The Principal, Dr. M. Lakshmi delivered presidential address. Academic Advisor Sankaranarayanan offered his best wishes, and Head of the Department, Dr. S. Manjula Devi, introduced the Chief Guest and addressed the students.

RISE AND SHINE: WOMEN EMPOWERMENT



On March 7, 2025, International Women's Day was commemorated with an inspiring celebration, highlighting the remarkable strength and resilience of women and their pivotal role in advancing society.

Deputy Collector, Ms. Anitha, the esteemed special guest, delivered a powerful keynote address. She underscored the importance of women facing challenges with unwavering courage, emphasising that the advancement of women directly contributes to the prosperity of the world. Her words resonated deeply with the audience, inspiring a sense of empowerment and determination.

The Principal, Dr. M. Lakshmi warmly welcomed the gathering, setting a positive tone for the event. Vice-Principal, Dr. S. Manjula Devi introduced the special guest, providing context for the significance of her address. Student Chairman, Ms. Sri Rajalakshmi concluded the celebration with a heartfelt vote of thanks, expressing gratitude to all who contributed to the event's success. The Women's Day celebration served as a powerful reminder of the importance of gender equality and the remarkable contributions of women to society.

PATHWAYS TO CAREER SUCCESS



On March 6, 2025, students of AKDDR College received invaluable career insights during a dedicated guidance programme. The event aimed to equip students with the knowledge and tools necessary to navigate their professional journeys.

Virudhunagar District Chief Officer, Ms. Priyadarshini, the esteemed special guest, delivered an insightful address on career development. She provided practical guidance on effective preparation strategies and methods for successfully tackling government exams, empowering students to pursue their aspirations with confidence.

Principal, Dr. M. Lakshmi warmly welcomed the gathering. The Secretary and Correspondent, Shri A.K.D. Krishnamaraju, delivered the presidential address. Head of the Physics Department, Ms. M. Jennifer, introduced the event, and highlighted the importance in shaping students' futures.

Student Chairman, Ms. Sri Rajalakshmi concluded the programme with a heartfelt vote of thanks, expressing gratitude to the guest speaker and organizers. The career guidance programme proved to be significant steps in helping students to chart their course towards successful and fulfilling careers.

This era we live in is a learners' paradise

by Mr. G. Sankaranarayanan, Educational Consultant

Last week, I crossed a personal milestone in my learning journey. I successfully completed an online course. While I've enrolled in countless courses across various MOOC platforms over the years, I couldn't recall ever completing even one.

But this time it was different, primarily due to two factors: 'peer presence' and a physical classroom equipped with a smart board. My fellow learners were a group of first and second-year B.A. English students from our college. (In fact, the course was theirs, and I joined as a volunteer student.) The course was 'Word Forms and Simple Present Tense', offered by the University of California, Irvine, on Coursera (<https://www.coursera.org/learn/word-forms-simple-present-tense>).

It was a very simple course, and we opted to audit it for free, so we received no certificates. But there was a great sense of accomplishment even for the students, as it was their first-ever online course. To celebrate the completion of the course, we enjoyed Elite cupcakes during our final session!

It was not merely about completing the course. There were a few other things that made the project quite memorable. Firstly, there was no set deadline for completion. It was at our own pace. Our philosophy was 'less is more' - we spent so little time on lecture videos - and more time on sharing notes and discussions. There was just one class per week, each lasting no more than an hour. It was the world's slowest pace - it took us over two months to complete the 9-hour course. It felt like adopting Gandhi's timeless advice: "Learn as if you were to live forever".

A cornerstone of the project was the Cornell Note-Taking method (the first session of the program was entirely dedicated to this technique). This method involves dividing a notebook page into three sections: two columns (one narrow and one wide) and a broad row at the bottom. The wider column, on the right, was used for taking detailed notes, while the narrower "Cue" column on the left served to record main points, questions, or doubts. The bottom section was reserved for summarising what we learned in our own words. We took notes during the lectures. Even one idea per lecture was also okay. No big deal about the quantity of the learning. We were the most content classroom. But it is mandatory for every student to summarise their

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learning on the same day - "as if you were to die tomorrow", borrowing Gandhi's words. And finally, and most importantly, we followed Spaced Repetition to make the knowledge last long. The technique involved revising the notes from each class in a structured manner: the first revision on the third day, the second on the fifth day, the third on the seventh day, and then again one week later. This revision cycle could be repeated forever.

These were all simple, time-tested ideas. Having experienced its benefits firsthand, I sincerely hope every student is given the opportunity to try it, even in a small way.

Coming to think of it, the biggest benefit with MOOCs is the exposure we get to great lectures - and, on crucial topics that may not be included in their board or university curriculum. For instance, a topic like Computational Thinking could be missing in the UG syllabus, but it is available online. Completing such a course can fundamentally reshape a student's perspective on programming.

The MOOCs era likely began with MIT announcing its Open Courseware (<https://ocw.mit.edu/>) portal in 2000. It was revolutionary that anyone, anywhere in the world, could access a live MIT course, including its structure, lecture videos, learning materials, and notes. Subsequently, other platforms emerged, followed by a surge in offerings. Now, access to knowledge on virtually any subject is available free of charge. All that's needed is an internet connection, interest, and, as I've now learned, a supportive classroom environment with fellow learners.

Only those who grew up in the 80s - in a small town, can truly grasp the learner's paradise that students live in today. When I was in school, we had only two science study guides: Vetri and Selection. The bookstores sold either this or that. Their locations were such that students coming from the northern part of town (Palayapalayam) had Selection Notes and those from the south (Pudupalayam) had Vetri Notes. We would look on with envy when a classmate possessed both these guides. Thankfully, that kind of severe scarcity of materials is a thing of the past.

A Trip and a Lifetime of Memories



P. Revathi
Assistant Professor of Physics

The sun had barely risen when my alarm buzzed. The soft golden light peeked through my window, mixing with the morning mist. Today was special—another trip with my students. This time, we were heading to Kodaikanal, a place that held so many memories from my own school days.

As I got ready, I thought back to my first long trip—a one-day school tour that started in the early hours of the morning, just like today. Now, years later, I was on the other side, leading a group of students, watching their excitement, and knowing that one day, they too would look back on this trip with nostalgia.

Capturing Moments at Silver Falls

By 6:30 AM, we reached Silver Falls, where we stopped to take photos. The cascading water shimmered in the morning light, and students eagerly posed for pictures, capturing the beauty of the moment. Some stood in awe, taking in the fresh air and the scenic surroundings, while others focused on getting the perfect selfie. I smiled as I watched them. These little moments—laughing, posing, capturing memories—are the ones that stay with us forever.

Breakfast at Kurinji Andavar Temple

At 7:00 AM, we arrived at Kurinji Andavar Temple, a serene place nestled in the hills. The temple, dedicated to Lord Murugan, had a peaceful ambiance, with mist rolling over the landscape.

As the students explored the temple, I reminded them of the significance of the Kurinji flower, which blooms once every twelve years—a beautiful symbol of patience and rarity. After offering prayers, we had our breakfast nearby. The warmth of the food and the crisp mountain air made the simple meal feel special.

Exploring the Solar Observatory

By 9:00 AM, we reached the Kodaikanal Solar Observatory. This was the highlight of the trip, and I could see the curiosity in my students' eyes as they stepped inside.

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For two hours, we explored:

The Solar Telescope, used to study the Sun's surface and atmosphere. The Spectrohelioscope, which helps in analysing the Sun's magnetic field. The Solar Chromosphere Telescope, used to observe the Sun's outer layers.

Students interacted with scientists and researchers, asking questions and gaining insights into solar astronomy. As I listened to their discussions, I realized how much I had changed—from once being a student who found these lectures boring to now appreciating the value of learning.

A Detour Through Kodaikanal's Iconic Spots

As we were about to leave, our driver suggested, "Mam, this is a students' trip. We still have time. Why not take them on a round trip to see the main five places?"

After a quick discussion, we agreed. From Rose Garden to Moir Point, we passed through some of Kodaikanal's iconic spots:

- Pillar Rocks, towering stone formations shrouded in mist.
- Guna Cave, mysterious and eerie, made famous by cinema.
- Pasumai Palla Thaakku, a lush green valley.
- Pine Forest, with its tall, majestic trees.

Some students were excited, eager to take in every sight. Others, uninterested, chose to stay on the bus. I didn't blame them—sometimes, we don't realize the value of a place until years later. I thought to myself, How many of these students will return to Kodaikanal after their college days? How many will stay in touch with their friends?

Life moves on. But if they ever come back here, their first trip—the laughter, the friendships, the silly moments—will come rushing back.

Cherish Every Moment

As the bus made its way back, I leaned against the window, watching the mist dance around the hills. I remembered my Zoology teacher's words from years ago:

"Life happens once. Enjoy it your way, however you want to."

And I had.

Yet from the start of this Kodaikanal trip, I kept recalling all my past visits—to this very place with friends, family, my better half, my baby boy, and my students (both boys and girls). Each trip gave me special memories, but my first trip remains the most special to me. Yes! As this trip comes to an end, I truly miss my crime partners—my friends.

As I looked around at my students, I knew one thing for sure—these moments, these trips, these shared experiences, would stay with them forever. Because in the end, that's what life is all about: Cherishing every moment. Laughing, loving, and living.

The Power of Progress: Happy Women's Day!

Ms. G.Vaitheeswari

Assistant professor of English

Today, March 8th, we celebrate International Women's Day. I've received numerous messages from friends, colleagues, and relatives, but I couldn't help but wonder: are all women truly happy? As I read through the messages, I felt a sense of dissatisfaction. Simply wishing others a happy Women's Day through messages isn't enough. We need to acknowledge the struggles women face and work towards creating a more equitable society.

As the Tamil phrase goes, "மங்கயராய் பிறப்பதற்கு நல்ல மாதவம் செய்திட வேண்டும்" ("We need to create a good environment for women to thrive"). But are we doing enough?

As women, we face numerous challenges, starting from within our own families. We must fight for our rights, our voices, and our freedom. But is society truly supportive of our aspirations?

Let's take inspiration from the lives of bold and successful women:

- Rani Lakshmibai, the Queen of Jhansi, who fought against British colonial rule and became a symbol of Indian independence.
- Malala Yousafzai, the Pakistani activist who defied the Taliban and advocated for girls' education, winning the Nobel Peace Prize in 2014.
- Mary Kom, the Indian boxer who overcame poverty and societal expectations to become a six-time world champion.

These women, and many more like them, are testaments to the strength and resilience of women around the world.

So, on this Women's Day, let's go beyond just wishing each other well. Let's pledge to create a world where women can thrive, without fear of judgment, oppression, or violence. Let's work together to create a brighter, more equitable future for all women.

The Curious World of Non-Newtonian Liquids

G. Dharini

III B.Sc Physics

Imagine a liquid that becomes thicker when you stir it, or one that flows like water when poured slowly, but turns into a solid when poured quickly. Welcome to the fascinating world of non-Newtonian liquids!

What are Non-Newtonian Liquids?

Non-Newtonian liquids are fluids that don't follow the usual rules of fluid dynamics. Unlike water or oil, which flow at a consistent rate regardless of pressure or stress, non-Newtonian liquids change their viscosity (thickness) in response to force or stress.

Examples of Non-Newtonian Liquids

- Ketchup becomes thinner when shaken or stirred
- Corn starch mixture becomes thicker when stirred or agitated
- Oobleck mixture of corn starch and water becomes solid when subjected to pressure or stress

The Science Behind Non-Newtonian Liquids

Non-Newtonian liquids exhibit unique properties due to the arrangement of their molecules. When subjected to stress or force, the molecules in non-Newtonian liquids rearrange themselves, changing the fluid's viscosity.

Conclusion: Non-Newtonian liquids are a fascinating class of fluids that challenge our understanding of the physical world. Their unique properties make them useful in a range of applications, from cosmetics to engineering.

Maths and Science

Ms. Ramya Shri

II Maths

Maths and science play a crucial role in both the medical and architectural and also in many fields. They are foundational in helping professionals in these areas make informed decisions, solve problems, and ensure accuracy.

- Medical imaging: Techniques such as MRI, CT scan, X-ray rely heavily on mathematics, particularly in the form of algorithms and geometry.
- Medicines are often round and oval-shaped: Because ease of swallowing: Round and oval shapes are generally easier to swallow compared to other shapes like squares or irregular shapes.

Science is at the heart of medical advancements and daily practices. Like Biology, chemistry, physics, genetics and biotechnology.

Architectural fields:

In architecture, mathematics is used for everything from design to construction. It is heavily used in creating functional, sustainable, and safe buildings. Here are some key areas of applications of mathematics in building design and construction:

- Structural analysis
- Geometry and Design
- Building information modeling (BIM)
- Construction management. For example, pyramids have 3-dimensional geometric shapes. They were built with geometric methods. Their volumes have been denoted as $(1/3) * \text{base area} * \text{height}$.

From Campus to Clouds



Ms. V. Shri Rajalakshmi
III Physics

On March 4th, 2025 we went to Kodaikanal for an industrial visit to solar observatory. The Kodaikanal Observatory of the Indian Institute of Astrophysics is located in the beautiful Palani range of hills in Southern India. It was established in 1899. Kodaikanal was chosen for its clear skies, low humidity and minimal fog. These observatories use specialised telescopes and instruments to observe various phenomena on the Sun's surface, in its atmosphere, and in the surrounding space.

A 4-inch refractor telescope with an objective lens of 5 feet focal length was brought to the site in 1898 from Madras for visual observations of solar disk. This is one of the oldest telescopes of Kodaikanal. Direct photography of the sun commenced at Kodaikanal in August 1903. Exposure time used was around 1 ms, and the solar images were of 8-inch diameter. This telescope was upgraded later to a 6-inch objective with a focal length of 8 feet. The new 6" telescope started its operations from 31st July 1912. The camera used to photograph the solar images had a metal plate as focal plane shutter. We observed the sun under this telescope.

The tunnel telescope uses a siderostat consisting of a 60 cm diameter plane mirror mounted on 11 m tall tower platform to direct sunlight into a 60 m long underground horizontal 'tunnel'. A 38 cm aperture f/90 achromatic lens forms a 34 cm diameter solar image at the focal plane. The telescope has an option to mount a 20 cm achromat, which provides an f/90 beam to form a 17 cm image. A Littrow-type spectrograph is the main instrument of the telescope. This telescope view showed us the 5th layer of the sun.

A astronomy museum on campus displays include astronomy posters, movies, with few models, and a live solar image and the display of Fraunhofer spectrum.

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The Observatory features a popular astronomy museum on campus for visitors. The displays are mainly pictorial, supported by a few models and old instruments like the transit instrument made in 1857. A live solar image and the Fraunhofer spectrum are also presented. Transit instrument is a telescope to measure the time of transit of an astronomical object across the meridian of the observer. This is an important tool in Positional astronomy, the study of positions and motions of astronomical objects.

Our trip to Kodaikanal was an incredible experience filled with joy, laughter, and unforgettable moments with friends and staff. We explored some of the most beautiful spots, including Silver Falls, Kurinji Andavar Temple, Suicide Point, Moir View, Guna Cave, and the Pine Forest. The journey from our college to Kodaikanal was lively, with music and dance adding to the excitement.

This memorable trip was made possible by the unwavering support of our staff, and I sincerely thank our Secretary & Correspondent, Shri A.K.D. Krishnama Raju, for providing us with this wonderful opportunity. My heartfelt gratitude goes to our Principal, Dr. R. Lakshmi, for her continuous encouragement. I also extend my sincere thanks to our department HODs and staff members for their efforts in organising this industrial visit.