DEPARTMENT OF ELECTRONICS
WMO ARTS & SCIENCE COLLEGE
"education and some more"
Affiliated to University of Calicut
(Aided by Govt. of Kerala)
P.O. MUTTIL, WAYANAD, KERALA - 673122

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ANNUAL REPORT 2022-23

I. FACULTY DETAILS

Sl.No	Name of the faculty	Date of Joining	Total Teaching experience	Total Teaching Experience at WMO college	Highest Qualification
1	Siby Joseph	18/12/1997	27 Years	25 Years	MSc
2	Dr. Nobert Thomas Pallath	10/02/1998	25 Years	25 Years	PhD, MSc
3	Abdul Rasheed	06/07/2012	11 Years	10 Years	MSc, NET
4	Rajsha M.M	07/06/2022	4 Years	1 Year	MSc, NET
5	Sithikraja R	13/09/2021	11 Years	2 Years	MSc, MTech, NET
6	Affrin Faizal	26/09/2022	6 Months	6 Months	MSc
7	Kshema	26/09/2022	9 Months	9 Months	MTech

II. STUDENT DETAILS

Sl.No	Class	Total	Male	Female	PWD	SC	ST
1	D1(2022Admission)	33	22	11	0	1	0
2	D2 (2021Admission)	38	34	4	0	1	1
3	D3 (2020 Admission)	33	25	8	0	2	1
4	I PG (2022 Admission)	11	3	8	0	0	0
5	II PG(2021Admission)	15	1	14	0	0	0

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III. COLLABORATIONS AND LINKAGES
(1) MOU Signed

The Department of Electronics has signed Memoranda of Understanding (MoUs) with several academic institutions and industry partners, further strengthening collaborations in the field during this academic year. The MoUs include agreements with Hafisoft Technologies in Cochin, MES College Marampally, Microtechlabz in Kakkavayal, Bismil Systems in Perinthalmanna, and Prajyothi Niketahan College in Puthukkad. These strategic partnerships aim to foster research and development activities, promote knowledge sharing, and facilitate practical training opportunities for students.

Two MoUs were signed at the inauguration ceremony of the 'Eureka' residential camp on 21st December 2022. Sri. Saneesh A T (Managing Director) on behalf of Hafisoft Technologies (Infopark Campus, Cochin) and Sri Noufal M (Managing Director) on behalf of Microtechlabs (Kakkavyal, Wayanad) were the signatories.

"The MoU will bring new opportunities in the expertise of internship, career opportunities, skill development, and entrepreneurship ideas for the students of BSc and MSc Electronics"- The Principal said in his keynote address.

The MoU Signing Ceremony between Bismil Systems, Prajyoti Niketan College, and WMOC College were held on November 24, 2022, at the Principal's office. The MoU was signed by Dr. Muhammed Fareed T P in the presence of Siby Joseph, Abdul Rasheed, and Hasannul Banna. The key objective to establish this center is to provide technical training access to advanced technologies and mentoring.

The Department of Electronics of WMO Arts and Science College Muttil signed an MoU with the Department of Electronics , MES College Marampally on March 16th, 2023. The MoU signing ceremony was followed by a faculty exchange session on wireless physical layer security, which was led by Dr. Shemi PM, Associate Professor of MES College Marampally.

Through these MoUs, the department aims to create a vibrant ecosystem that nurtures innovation and empowers future professionals in the electronics industry.

(2) Collaborating Activities

As part of the MoUs signed by the Department of Electronics, several activities were conducted to foster collaboration and knowledge exchange with partner institutions and industry.

Firstly, a two-day residential Tech War Room entitled Eureka was organized in association with Hafisoft Technologies. Secondly, a faculty exchange program was initiated with MES Marampally, through which an expert talk on Physical Layer security by Dr. Shemi was conducted. And an internship program was conducted in partnership with Microtechlabz, offering students the opportunity to gain practical experience in PCB designing. This internship aimed to bridge the gap between theoretical knowledge and real-world applications, allowing

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students to develop practical skills and industry exposure. These activities, carried out under the MoUs, played a vital role in enriching the educational experience of students, fostering innovation, and strengthening ties between academia and industry in the field of electronics.

Apart from this, our students participated in various higher end workshops organized by various national institutes such as NIT Karnataka, CSIR, CEERI, Pilani and NIT, Tiruchirappalli in association with SERB, DST. More over our students carrying out their PG project internship at CUSAT and NIELIT Calicut.

List of Students participated in higher end workshop / internship

Sl.No:	Name of the faculty/ student	Name of the institute with which collaborated	Nature of collaboration	Date from	Date To
1	Aiswarya Mani	NIT Karnataka, Surathkal	KARYASHALA	14-12-2022	21-12-2022
2	Shahana	NIT Karnataka, Surathkal	KARYASHALA	14-12-2022	21-12-2022
3	Silja Babu	CSIR, CEERI, Pilani, Rajasthan	KARYASHALA	08-11-2022	19//11/2022
4	Laiju C.A	NIT, Tiruchirappalli, Tamilnadu	KARYASHALA	05-12-2022	11-12-2022
5	Selman Faris	NIT, Tiruchirappalli, Tamilnadu	KARYASHALA	05-12-2022	11-12-2022
6	Salmabi M.P	NIT Karnataka, Surathkal	KARYASHALA	14-12-2022	21-12-2022
7	Athulya	NIT, Tiruchirappalli, Tamilnadu	KARYASHALA	05-12-2022	11-12-2022
9	Dhilna	NIT, Tiruchirappalli, Tamilnadu	KARYASHALA	05-12-2022	11-12-2022

10	Athulya M	CSIR, CEERI, Pilani, Rajasthan	KARYASHALA	08-11-2022	19//11/2022
11	Anshida K	CSIR, CEERI, Pilani, Rajasthan	KARYASHALA	08-11-2022	19//11/2022
12	Nimitha K V	CSIR, CEERI, Pilani, Rajasthan	KARYASHALA	08-11-2022	19//11/2022
13	Fareeda	NIELIT Calicut	Project internship	01-04-2023	31-05-2023
14	Naja Fathima	NIELIT Calicut	Project internship	01-04-2023	31-05-2023
15	Fathima Febin	NIELIT Calicut	Project internship	01-04-2023	31-05-2023
16	ANSHIDA K	CUSAT	Project internship	01-04-2023	31-05-2023
17	ATHULYA M	CUSAT	Project internship	01-04-2023	31-05-2023
18	NIMITHA K V	CUSAT	Project internship	01-04-2023	31-05-2023
19	NISANA NASREEN C P	CUSAT	Project internship	01-04-2023	31-05-2023
20	RISHVANA JASMIN	CUSAT	Project internship	01-04-2023	31-05-2023
21	SHAHINA T T	CUSAT	Project internship	01-04-2023	31-05-2023
22	HRITHIK RAMESH P	CUSAT	Project internship	01-04-2023	31-05-2023
23	Dil Vahid	Microtechlabz, Kakkavayal	Internship	15-11-2022	30-11-2022
24	Shuhaib T U	Microtechlabz, Kakkavayal	Internship	16-11-2022	01-12-2022

IV. PROGRAMMES CONDUCTED

A) Invited Talks

(1) Invited Talk on Low dimensional material and their Applications in Electronics

On October 14, 2022, the Department of Electronics organized an invited talk by the alumnus Dr. Rinu Abraham on the topic of "Low-Dimensional Materials and Their Applications in Electronics." The event aimed to enhance students' understanding of cutting-edge research and developments in the field.

The program was inaugurated by the Principal, Dr. Muhammed Fareed, and featured speeches by Dr. Vji Paul, Dr. Nobert Thomas Pallath, and Siby Joseph.

Dr. Rinu Abraham, a renowned expert in the field of low-dimensional materials, delivered an insightful talk on the advancements, potential applications, and significance of these materials in the field of electronics. Dr. Rinu Abraham shared his extensive research and expertise, highlighting the unique properties and advantages of low-dimensional materials such as graphene, nanotubes, and nanowires.

The talk focused on the applications of these materials in various electronic devices, including transistors, sensors, optoelectronics, and energy storage systems. Dr. Rinu Abraham's engaging presentation provided students with valuable insights into the future of electronics

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and the potential impact of low-dimensional materials. A total of 70 students and staffs participated in the programme.

(2) Expert Talk on Wireless Physical Layer Securities

The expert talk on Wireless Physical Layer Security by Dr. Shemi P M, Associate Professor at MES College Marampally on 16th March 2023 aimed to provide participants with valuable insights into the field of wireless security, with a specific focus on physical layer security. The talk delved into the challenges and techniques involved in ensuring the confidentiality and integrity of wireless communications at the physical layer. Total of 63 students participate in the talk.

(3) Talk on tiny Machine Learning

The talk on Tiny Machine Learning, conducted by Sri. Chandra Sekharan C. P, on 15/11/2022, was aimed at providing participants with a comprehensive understanding of the emerging field of tiny machine learning and its practical applications.

The talk covered various aspects, including the fundamentals of machine learning, the challenges of deploying machine learning models on resource-constrained devices, and the

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techniques and tools used in tiny machine learning. Final year MSc. Electronics students participate in the program.

B) Workshops

(1) Eureka - Two-day Residential Camp Tech War Room

To mark the 75th anniversary of the invention of the transistor, the Department organized "Eureka"- a two-day residential 'Tech-War Room' in collaboration with Hafisoft Technologies. Selected UG and PG students participated in the program on the 21st and 22nd of December 2022. The participants learned about various phases of embedded system design and development. The program also enhanced essential skills like problem-solving, critical thinking, leadership, and team building.

WMO Arts and Science College Management Committee Muhammad Shah inaugurated the function and Head of Electronics Department Sri Siby Joseph, Dr. Biju KG (IQAC Coordinator), Dr. VG Paul (College Council Secretary), Shri Ashraf V (College Superintendent), Shri Shuaib TU (Student Coordinator) spoke on the occasion.

(2) Workshop on Antenna Design using Ansys HFSS

The Department of Electronics organized a highly insightful workshop on antenna design using Ansys HFSS on 27th January 2023. The workshop aimed to enhance participants' understanding and proficiency in antenna design, leveraging the capabilities of Ansys HFSS software. Dr. Nijas C M, the Application Manager of Ansys HFSS, served as the resource person for the workshop, sharing his expertise and knowledge with the participants.
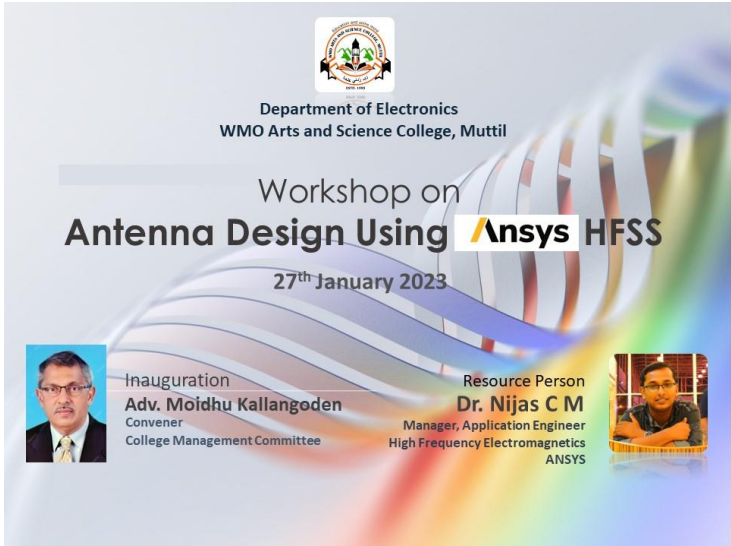
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The event was inaugurated by Adv. Moidu Kallngodan, the College Convener, who emphasized the importance of practical workshops in bridging the gap between theory and application. The workshop provided participants with valuable insights into antenna design principles, simulation techniques, and optimization strategies using Ansys HFSS. Overall, the workshop was a great success in equipping participants with the necessary skills and knowledge to excel in antenna design.

C) Extension Activities

(1) Social Linkages

The Department of Electronics organized a noteworthy social linkage activity, where undergraduate (UG) and postgraduate (PG) students conducted classes in neighboring schools.

On 7th February 2023, Mr. Shuhaib and Mr. Selmann Faris led a session on the introduction to robotics using Arduino at the Government High School in Pariyaram. This session aimed to foster interest in robotics and provide students with a fundamental understanding of Arduino programming.

On 11th March 2023, Hrithik Ramesh, Shahina T T, and Riswana Jasmin conducted a session on basic electronics and Arduino programming at the Government Higher Secondary School in Kottathara.

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The objective of this session was to enhance students' knowledge in electronics and programming. These social linkage activities facilitated knowledge transfer, engaged students in neighboring schools, and promoted a passion for electronics and robotics.

(2) Matrix Tech Expo 2023

The Department of Electronics, in collaboration with Hafisoft Technologies, Delishus from Finland, Wings Sulthan Bathery, Altron Digital Systems Pvt. Ltd., Bismil Systems, and KSEB, successfully conducted the Matrix Tech Expo 2023 on 3rd March 2023.

Muttil Gram Panchayat President Naseema Mangadan inaugurated the event. Matrix 23 expo was organized with the aim to share and learn about the latest technologies and research in the field of electronics to the general public and students. The expo benefitted

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students by providing them an opportunity to meet professionals and experts who can provide guidance and advice on their career paths.

More than forty project exhibitions, technical stalls, technical presentations, open house to electronics lab and technical competitions were held as part of the exhibition. Projects like smart door system, robotic path finder, heart beat sensor, home automation and Personal Assistant Robotic Unit (PARU) were prominent in the exhibition. The exhibition included demonstrations, workshops, game zones, basic electronics ideas, introductions to computer hardware, etc. It also engaged the audience with soothing cultural programmes and art galleries.

About five hundred students from high school, higher secondary school, ITI and polytechnic institutions participated in the program. College Council Secretary Dr. Viji Paul inaugurated the closing ceremony. Siby Joseph, Head of the Department, spoke on the occasion.

(3) State Level Quiz

The Department of Electronics organized an All-Kerala Intercollegiate Electronics Quiz Competition on March 3rd, 2023 at WMO Arts and Science College. Around three hundred B.Sc. Electronics and Physics students from various colleges participated in the preliminary round of this competition that was held online on January 11th, 2023. Out of these, students from seven selected colleges competed in the final quiz round held at the college campus on March 3, 2023. Mohammad Rahees of Malabar College of Advanced Studies bagged the first position and received an amount of Rs. 7500/-. Advaid O C and Adish C Mohan from College of Applied Science, Koothuparambu received the second position and was awarded an amount of Rs.3000/- as a part of the quiz competition. The College Council Secretary Dr. Viji Paul inaugurated the closing ceremony. Siby Joseph, Head of Electronics Department spoke in the program.

(4) KSEB Power Quiz

The KSEB Officers Association, in collaboration with the Department of Electronics, organized the KSEB Power Quiz on 20th October 2022. The quiz witnessed active participation from 43 students. Bineesha K K, Assistant Engineer at KSEB Muttil, served as the quiz master. After a competitive contest, Ajil Prakash from D2 Economics secured the first prize. Athul Gopal from D2 Physics secured the second position.

C) Day Observations

### (1) Onam Celebration

Onam celebration organized by the Department of Electronics on 1st September 2022, emphasizing the key elements of the festivities, including the preparation of the traditional Sadhya feast, the creation of Pookalam (floral carpet), and the cultural programs conducted to honor the occasion.

Students, faculty, and staff actively participated, displaying their talents and keeping the audience enthralled throughout the event.

(2) Kerala Piravi Dinaghosham (Etnic Day Celebration)

Kerala Piravi Day, November 1st which commemorates the formation of the state of Kerala, is a significant occasion celebrated by Department of Electronics as Ethnic Day. It encouraged students and faculty members to embrace their cultural roots and showcase the beauty of Kerala's traditional attire, customs, and art forms.
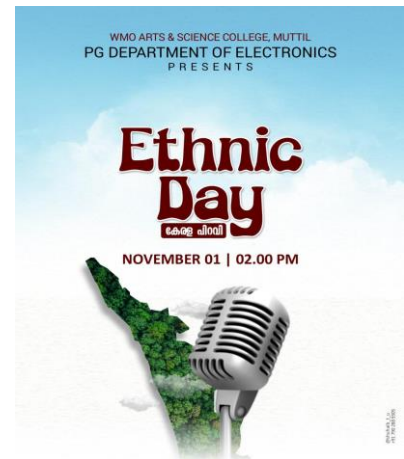
Students and faculty members dressed in vibrant and elegant traditional outfits, representing the diverse ethnic clothing styles of Kerala. The attire included sarees, mundus (dhotis), set mundu, kasavu sarees, and other regional dresses. The colorful costumes added an aura of cultural richness and pride to the event.

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(3) Christmas Celebration

On 22nd December 2022, the Department of Electronics celebrated Christmas. The Christmas celebration was a delightful event filled with fun activities and merry decorations. The Christmas celebration of the Department of Electronics created a warm and joyous atmosphere, fostering a sense of unity and shared happiness among all participants.

(4) Independence Day Celebration

From 19th August 2022 to 22nd August 2022, the Department of Electronics celebrated the 75th anniversary of Independence Day with great enthusiasm through an event titled "Azzadi Ka Amruth Mahotsav."

The celebration encompassed a series of activities and competitions that aimed to commemorate the spirit of freedom and patriotism. Participants engaged in thought-provoking debates, quizz, and face painting competitions that showcased their knowledge, skills, and artistic expressions.

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The event served as a platform to reflect on the significance of independence and the sacrifices made by our freedom fighters. The "Azzadi Ka Amruth Mahotsav" celebration in the Department of Electronics evoked a sense of pride and unity among faculty, students, and participants, fostering a deep appreciation for the country's journey towards freedom and progress.

(5) 75th Anniversary of Transistor Invention

To mark the 75th anniversary of the invention of the transistor, the Department organized "Eureka"- a two-day residential 'Tech-War Room' in collaboration with Hafisoft Technologies during 19th December 2022 to 22nd December 2023. Also conducted a state level Quiz competition on 3rd March 2023.

(6) National Science Day

As part of national science day celebration, the Department of Electronics, in collaboration with Hafisoft Technologies, Delishus from Finland, Wings Sulthan Bathery, Altron Digital Systems Pvt. Ltd., Bismil Systems, and KSEB, successfully conducted the Matrix Tech Expo 2023 on 3rd March 2023.

D) Curriculum Enrichment Programmes

The Department of Electronics has been actively organizing Curriculum Enrichment Programmes to provide additional learning opportunities and enhance the educational experience for students.

(1) Literature Review Presentation

One such programme is the Literature Review Presentation, where students present their findings and analysis of relevant research papers and scholarly articles. This activity helps them develop critical thinking skills, research abilities, and effective communication.

The students of 2nd year MSc Electronics presented literature review on previously published works based on different prominent topics like IOT, Robotics, Embedded System, AI, etc. The session was conducted on 10th January 2023 at Intelligence Machine Lab. Organizing literature review enhances presentation skills and helps the students to get project-based ideas.

(2) Industrial Visit

The department arranged an industrial visit (part of syllabus) to Mangalore University for the final year BSc Electronics students during. A group of thirty-two students and three faculty members participated in the visit. They visited the research facilities in and around the department of Electronics like the Nanotechnology lab, Antenna lab, MSc lab, IoT lab, IBM center of excellence, Central computer lab, Microtron, DST PURSE lab, CARER lab, CARRT and Material science research lab of Mangalore University.

(3) Edison Intelligent Machines Pathway

Lastly, the department offers the Edison Intelligent Machines Pathway, a specialized program that focuses on the design, development, and programming of intelligent machines.

Dr. Sabu M K, Professor, Department of Computer Applications, CUSAT Inaugurated the Edison Intelligent Machines Pathway at WMO College, Muttil on January 6th, 2023. The pathway is set up in front of the Intelligent Machines Lab for displaying new and innovative projects developed by UG and PG Electronics students.

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(4) Experience Sharing of participants on Karyshala held at CSIR CEERI Pilani, Rajasthan
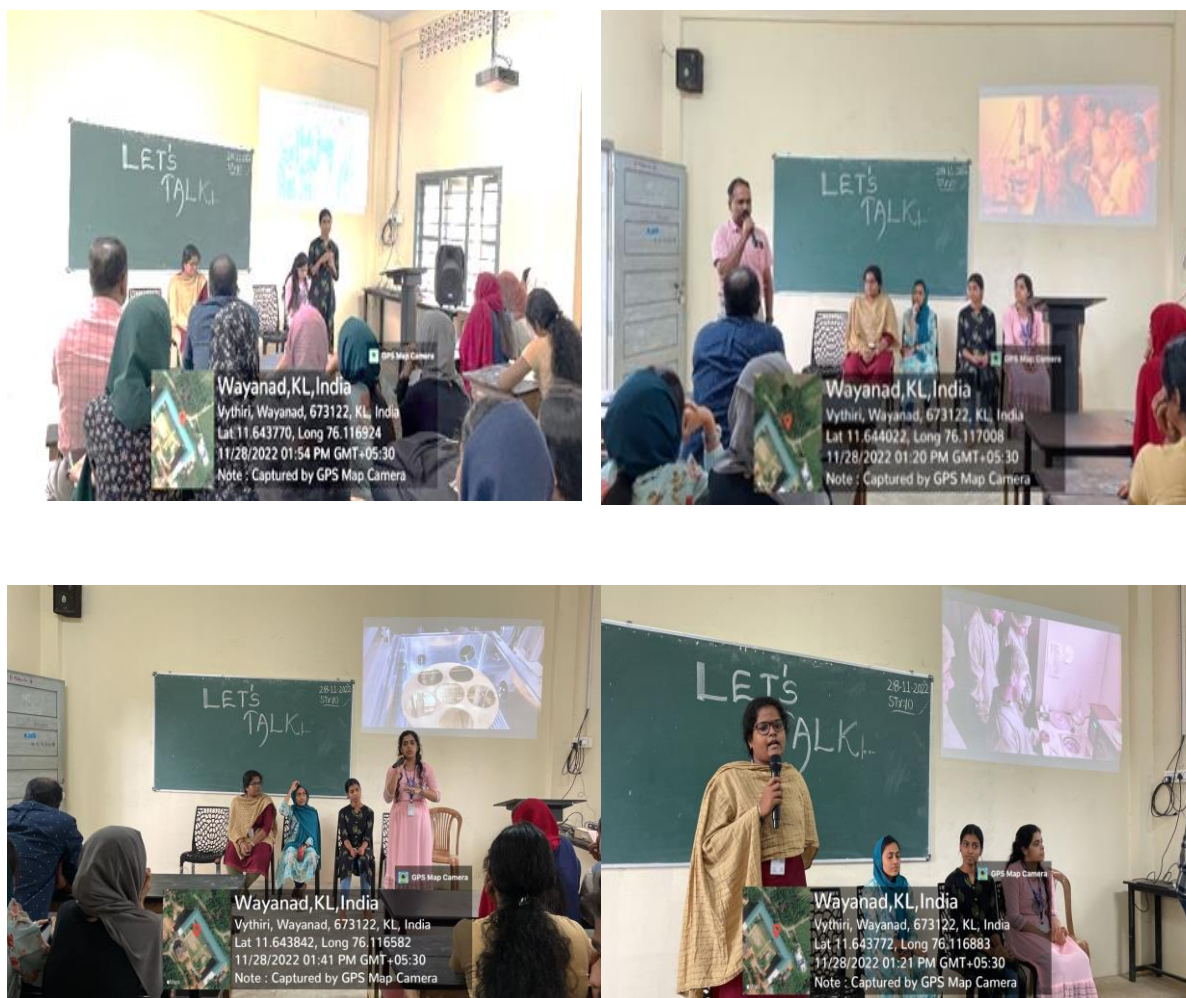

The department organized an experience-sharing session "let's talk" to provide an opportunity for the postgraduate students – Ms.Athulya, Ms. Namitha, Ms.Anshidha and Ms. Silja to share their experiences about the hands-on internship training they attended. The internship training was the fabrication of Semiconductor devices and it was held at CSIR- Central Electronics Engineering Research Institute Pilani, Rajasthan. The session providing an opportunity for an exchange of views, experiences, and basic procedures of semiconductor fabrication. The students also got to learn about the exposure an internship will give.

E) Other Activities

(1) Association Inauguration

The "Electronics Association 2022-23" was formally inaugurated on 16th March 2023 by Dr. Shemi P M, Associate Professor, MES College Marampally. In her inaugural address, Dr. Shemi expressed her thoughts on emerging higher education qualities and innovative teaching methods that differ from conventional teaching methods.

She also gave brief information about career opportunities in the field of electronics. Dr. Viji Paul, Associate Professor, presided over the session. Ashraf Vazhayil, College Office Suprendent, Ayyoob of 2nd year M.A Arabic, Union Magazine Editor, and Hassanal Banna MCC , Technical Assistant, rendered felicitations.The function ended with a vote of thanks by Muhammed Salih of 2nd B.Sc. Electronics, Association Secretary.
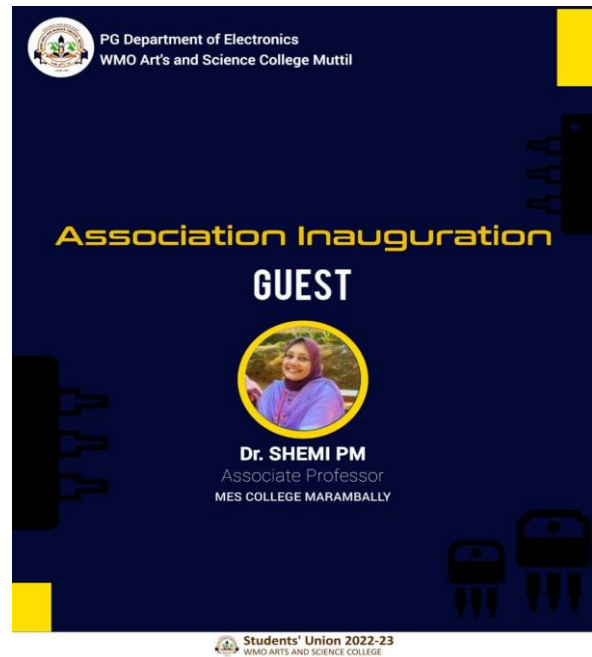
(2) Newsletter Releasing and Certificate Distribution

Department of Electronics, 'Electro-News 2021-22' was released on 18th December 2022 at 10:30 am by Dr. T P Muhammed Fareed, Principal, WMO Arts and Science College, Muttil at the College Auditorium. The newsletter was presented to Mr. Muhammed Yoosuf E, CEO, of WMO, with all the faculties and students of the department as the audience. "Electro-News" provides an in-depth overview of the prior year's activities and offers fiscal transparency to the efforts provided by the department.

(3) Honoring NCC Cadet Mr. Basil Mathai

Cdt. Basil Mathai, a second-year electronics graduate student who participated in the New Delhi Republic Day Parade, was honored by the department on 3rd march 2023.

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(4) Alumni Interaction

2008-2011 batch Alumni Ms. Neethu Mohan and Mr. Jayesh delivered talks on carrier opportunities and higher studies for the BSc Electronics students on 13/12/2022,and 29 students participated in the programme.

(5) Higher studies provided at Canada and other abroad universities after graduation and post-graduation – Seminar

A session was conducted by the department regarding the higher studies provided at Canada and other abroad universities after graduation and post-graduation. The session was handled on January 17th, 2023 at 3.30 pm in the college dialogue hall. Total of 32 students participated.

(6) Peer Learning - Arduino Class

Ms. Athuliya MSc. Electronics final year student took a class about Arduino for the final year BSc. Electronics students.

IV. STUDENTS APPEARED/ QUALIFIED IN JAM/NET/ CIVIL SERVICE EXAMINATIONS ETC.

Sl.No	Name of the student	Examination appeared	Whether qualified or not
1	Silja babu	NTA NET	No
2	Selma Bi M P	NTA NET	No
3	Salma A	NTA NET	No
4	Selman Faris	NTA NET	No
5	Laiju C A	NTA NET	No
6	Muhammed	NTA NET	No
7	Aiswarya Mani V K	NTA NET	No
8	Atrhulya Das	NTA NET	No
9	Jumana	NTA NET	No
10	Dilna	NTA NET	No
11	Shahana	NTA NET	No
12	Athulya M	NTA NET	No
13	Shahina T T	NTA NET	No

VI. CONTRIBUTIONS FROM ALUMNI

Sl. no:	Nature of the activity	Contribution received	Remarks If any
1	Seminar	Invited Talk on Low dimensional material and their applications in Electronics	Dr. Rinu Abraham, scientist in Carrer de la Technologia, Spain.
2	Alumni Interaction	Career Orientation Class	Jayesh T S and Neethu Mohan
3	Finacial support for State Level Quiz Competition	7500/- Rupees	Shameer O K, Delishus, Finland
4	Finacial support for Matrix Tech expo	5000/- Rupees	Sharafudheen, Altron Private Limited

VII. GANTS IF ANY RECEIVED FROM INDIVIDUALS/ GOVERNMENT/ MANAGEMENT/ NGOS/ KSCSTE

Sl. No	Purpose	Amount received	Agency from which the fund received.
1	State Level Quiz Competition	7500	Delishus, Finland
2	Matrix Tech Expo	5000	Hafisoft Technologies, Ernakulam
3	Matrix Tech Expo	5000	Altron Private Limited
4	Matrix Tech Expo	1000	Wings, Sulthan Batheri
5	Eureka Tech War room, Residential Camp	10000	DDF collected from PG students
5	Matrix Tech Expo	15000	DDF collected from PG students

VIII. FACULTY PARTICIPATION IN SEMINARS/ WORKSHOPS

Sl.No	Name of the faculty	Name of the seminar/ Workshop/ conference	Participant/ Presented paper/ Resource Person	Date of the programme	Geographical coverage (National/ International /Regional)
1	Abdul Rasheed	Three Day Workshop on IOT through Arduino and Raspberry Pi organized by Malabar College, vengara	Resource Person	25/10/2022 to 27/10/2022	State Level
2	Siby Joseph	Invited talk on Bio fuels organized by department of chemistry, WMO college	Resource Person	10/08/2022	
3	Sithikraja.R	INUP-i2i Familiarization Workshop on Nanofabrication Technologies	Participant	23/01/2023 to 25/01/2023	National

4	Sithikraja.R	UGC-STRIDE sponsored International conference on Recent trends in Speech Processing, Signal Analysis and Acoustics, Wayanad, India.	presented paper	24/04/2023 TO 30/04/2023	International

IX. FACULTY PARTICIPATION IN FACULTY DEVELOPMENT PROGRAMME

Sl.No	Name of the faculty	Name of the course	Date of commencement of the programme	Date of completion of the programme
1	Kshema	One Week FDP on Research Methodology and Technical writing Skills	24/04/2023	30/04/2023
2	Abdul Rasheed	One Week FDP on Research Methodology and Technical writing Skills	24/04/2023	30/04/2023
3	Siuthikraja R	One Week FDP on Research Methodology and Technical writing Skills	24/04/2023	30/04/2023
4	Raj Sha M.M	Six day training programme on Computer interfaced Science Experiments Using ExpEyes	06/05/2023	13/05/2023
5	Abdul Rasheed	Two week interdisciplinary refresher course in Advanced Research Methodology	23/01/2023	06/02/2023
6	Raj Sha M.M	FDP - Three Day Hands-on	15/02/	17 /02/2023

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		Workshop to Build Realistic AI Models	2023	

X. DETAILS OF PROJECT WORK

Sl.No:	Title of the project	Programme UG/PG	Name of the student	Name of the supervisor	Institute of the supervisor
1	Personal Assistant Robotic Unit	UG	Dil Vahid R B Ajay RB Nithin R R Ruthin N	Siby Joseph	WMO Arts and Science College
2	Industrial Protection System	UG	Shibulal K Arjun Sivaraman Dhanilka Prakash Nandhana S Sasikumar	Siby Joseph	WMO Arts and Science College
3	IoT Based Smart Door Bell	UG	Paulson C Bince Muflih P t Ashif Aslam Jusaila M T	Dr. Nobert Thomas Pallath	WMO Arts and Science College
4	Smart Blind Stick	UG	Muhammed Shamil A K Mariyam Sithara Shahana Nasmi Shonith Krishna P S	Dr. Nobert Thomas Pallath	WMO Arts and Science College

5	Home Automation	UG	Sanjid P Misriya Rahman K K Anusha Achuthan Muhammed Fanish K Muhammed Shabin	Dr. Nobert Thomas Pallath	WMO Arts and Science College
6	RFID Access Control System with Datalogger	UG	Shuaib T U Jouhar V Aadarsh N Muhammed Shanif K	Abdul Rasheed	WMO Arts and Science College
7	GSM - GPS BAsed Bus Tracking System Using Arduino Microcontroller	UG	Muhammed Amjath K Anandhu C R Nihal Nazer Sumayya	Raj Sha M M	WMO Arts and Science College
8	Air Gesture Mouse	UG	Rashad Malik Muhammed Sahad A p Ajnas P S Muhammed Afsal A	Sithik Raja	WMO Arts and Science College
9	Evaluation Of DBS Wind Measurement Technique in Different Beam Configurations for a VHF Wind Profiler	PG	Athila Jasmin	Rakesh V	Cochin University Of Science And Technology
10	Aspect Sensitivity Measurement of Wind	PG	JAMEELA K	Rakesh V	Cochin University Of

					Science And Technology
	Profiler At 205 MHz Frequency Installed at Cochin Coastal Region				
11	Performance Evaluation of 3 Beam and 4 Beam Method For Wind Estimation from Wind Profilers	PG	SHABNA U	Rakesh V	Cochin University Of Science And Technology
12	Study Of Refractive Index Structure Constant Variation Using 205 MHz Wind Profiler Installed at Cochin During Premonsoon and Monsoon	PG	SHADIYA K	Dr. Manoj M G	Cochin University Of Science And Technology
13	Study Of Refractive Index Structure Constant Variation Using 205 MHz Wind Profiler Installed at Cochin During Premonsoon and Monsoon	PG	SWARNA BABU K K	Dr. Manoj M G	Cochin University Of Science And Technology
14	Performance Analysis of Wind Profiling Radar with Different Tilting Angles	PG	SREEDEVI T P	Rakesh V	Cochin University Of Science And Technology
15	Study On the Variations in Refractive Index Structure Parameters During Post Monsoon and Winter Using GPS Radiosonde Datasets	PG	ANUSREE P M	Dr. Manoj M G	Cochin University Of Science And Technology
16	Animal Repeller	PG	ARUN M V	Mr. Abdul Rasheed	Cochin University Of Science And Technology

17	Obstacle Avoidance Mobile Robot Using arduino	PG	AYESHA NIHALA	Mr. Sibi Joseph	WMO Arts and Science College, Muttil
18	Variations in Refractive Index Structure Parameters During Pre Monsoon and Monsoon Using GPS Radiosonde Datasets	PG	Abida M S	Dr. Manoj M G	Cochin University Of Science And Technology

XI. UNIVERSITY RESULT

Programme	No. of Students Appeared	No. of Students Passed	Pass Percentage
BSc Electronics (2020 Admission)	33	11	33
MSc Electronics (2020 Admission)	10	5	50