

# DEPARTMENT OF PHYSICS: ANNUAL REPORT 2019-20

## WMO ARTS & SCIENCE COLLEGE, MUTTIL

The academic year 2019-20 of the department started with the commencement of classes for the III and V semester of the BSc programme, as well as the III semester of the MSc programme, on 6th June 2019. The department officially started the I semester of the BSc programme on 2nd July 2019 and the I semester of the MSc programme on 1st August 2019. A detailed overview of departmental activities is given below.

### I. ACADEMIC PROGRAMS OFFERED BY THE DEPARTMENT

Sl. No.	Name of the Program	Aided / self-financing
1	BSc Physics	Aided
2	MSc Physics	Self-financing

### II. STUDENT STRENGTH

Programme	Year	Student strength	Total
BSc Physics	I Year	48	127 (BSc)
	II Year	42	
	III Year	37	
MSc Physics	I Year	16	28 (MSc)
	II Year	12	
TOTAL STUDENTS			<b>155</b>

### III. UNIVERSITY EXAMINATION RESULTS

Programme	No of students attended the examination	No of students passed	Pass %
BSc Physics	37	27	73%
MSc Physics	12	11	92%

### IV. DETAILS OF FACULTIES

Sl. No.	Name of the Faculty	Designation	Qualifications	NET/JRF / GATE/ SET	PhD/ M.Phil.
1	Biju KG	Associate Professor	MSc, MPhil	Nil	MPhil
2	Hashim NK	Assistant Professor	MSc	NET	Nil
3	Joseph MV	Rtd. Professor	MSc	Nil	Nil
4	Nidhin Soman	Assistant Professor	MSc	NET	Nil
5	Febina CK	Assistant Professor	MSc	Nil	Nil
6	Amaya Sivan	Assistant Professor	MSc	Nil	Nil
7	Neeraja Krishna	Assistant Professor	MSc	Nil	Nil
8	Muhammad Javad	Assistant Professor	MSc	Nil	Nil

## V. DEPARTMENTAL ACTIVITIES

### 1. World Environmental Day 2019



World environment day 2019, was celebrated with an invited talk on the topic “Air Pollution- Causes and Controls” on 24-06-19, Monday, with the support of Kerala State Council for Science, Technology and Environment (KSCSTE). Dr. Nishanth P, Dept of physics, Sree Krishna College, Guruvayoor was the resource person

### 2. Interaction with alumni researcher



An alumnus of the department Dr. Najeeb PK, Post. Doctoral Research fellow, at Stockholm University has interacted with the UG and PG students of the department on 02/07/2019. **Dr.Najeeb PK** has Completed PhD from IIST, Trivandrum.

### 3. Poster presentation – lunar landing day



The physics department arranged a poster presentation on 21<sup>st</sup> July 2019, in accordance with the anniversary of the lunar landing of Apollo 11 Mission.

### 4. APJ Abdul Kalam day



On the death anniversary of DR. APJ Abdul Kalam, The department celebrated **APJ day** with a special lab session for III-year BSc physics students on 27<sup>th</sup> July 2019.

### 5. Onam 2019



The Onam 2019 was celebrated in the department in a quite simple manner. In the meeting **Mr. Ashraf Manoth**, Lab assistant of the department is honored for his contributions as a social worker during the flood season.

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### 6. Association inauguration



The Physics association for the academic year 2019-20 was inaugurated on 16/12/2019 by Dr. **Aysha Muhsina**, Assistant Professor, Govt. College, Kalpetta. Dr. KG Biju, HOD presided over the function and the Principal Dr. TP Muhammad Fareed Delivered the principal's remarks. Dr. Aysha Muhsina is an Alumna of the department. In the meeting **Mr. Kiran Divakar**, alumnus of the department is honored for achieving 10<sup>th</sup> Rank in

GATE and 24<sup>th</sup> rank in the CSIR UGC NET/JRF examination. Dr. Aysha Muhsina has delivered a talk on "Introduction to solitons". The association secretary, Mr. Muhammed Mahir, welcomed the gathering.

### 7. Solar Eclipse 2019



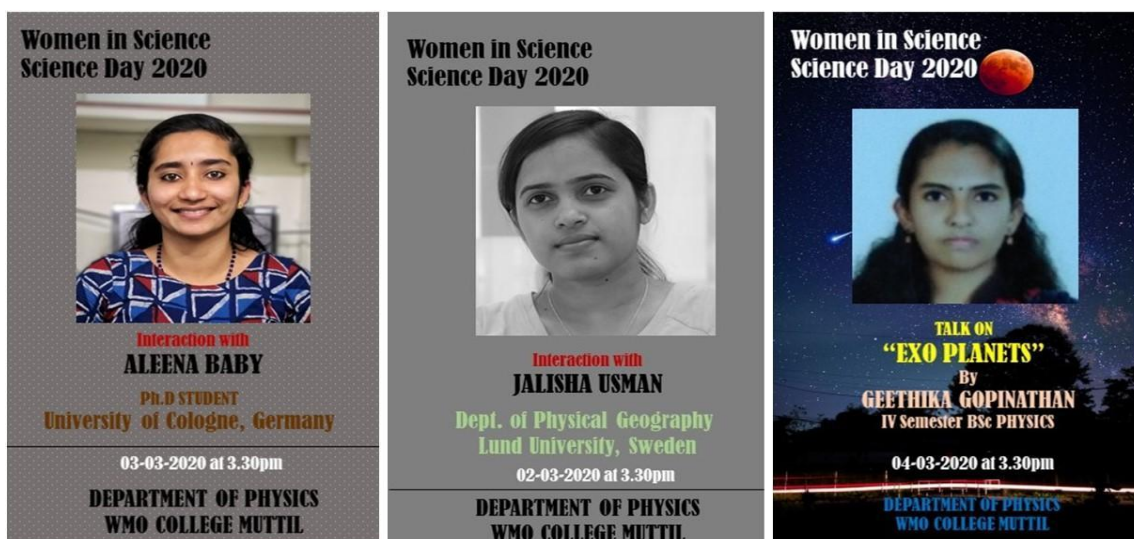
The department arranged facilities at different places in the college to watch the annular solar eclipse on 26<sup>th</sup> December 2019.

### 8. Study Tour



The department conducted a study tour to **Kodaikanal solar observatory**, under Indian Institute of Astrophysics and Astronomy (IIA) in January 2020. 32 students of Final year BSc physics students and 04 Faculty members participated.

9. Women in Science-Science Day 2020



The department of physics celebrated the science day 2020 with various programmes. On 28/02/2019, the department organized a **video presentation on “Women in Science”**. Ms **Jalisha TK**, Research scholar of Lund University, Sweden and an alumna of the department interacted with the students on 02/03/2020 about her research works. A similar session was conducted on 03/03/2020, in which another alumna, **Ms. Aleena Baby**, Research scholar, University of Cologne, Germany interacted with the students. On 04/03/2020, **Ms. Geethika Gopinath**, IV semester BSc physics, Delivered a talk on “Exoplanets”.

10. World Wet Land Day Celebration 2020



The department of physics in association with the department of Chemistry organized a talk on the topic “**WetLand EcoSystems**”. **Dr. AS Maheswari**, Head, Department of Zoology, Seethalakshmi Ramaswamy college, Thiruchirapally was the resource person. Prof. Thomas Thevara, Head

of the chemistry department welcomed gathering and Dr. Biju KG, head of physics department presided over the function.

## **VI. TEACHERS ATTENDED VARIOUS PROGRAMMES:**

1. **Mr. Hashim NK** has attended the two-day workshop on LATEX at Government Arts & Science College, Meenchantha.
2. **Mr. Muhammad Javad** attended the ICTE workshop conducted at Farook College, Kozhikode.
3. **Mr. Muhammad Javad** has attended the seminar on physics fundamentals at Nilgiri Arts & Science College.

## **VII. PAPER/ POSTER/ INVITED TALKS BY FACULTY:**

1. Biju KG et.al presented a poster entitled “GMRT unveils the longest uninterrupted ~650 Kpc jet of a Giant radio galaxy”-, in the conference on ‘A Centenary of Astrophysical Jets: Observations, Theory, and Future Prospects’, which is held between 23-26th July 2019 at the SKA Global Headquarters, Jodrell Bank Observatory, UK.
2. Biju KG delivered an invited talk entitled “Formation of elements in the Universe” in the workshop “Concepts in Astrophysics” conducted at Marthoma college, Chungathara on 26-11-2019.
3. Biju KG has delivered an invited talk entitled “Formation of elements in the Universe” in the seminar on “Astrophysics” conducted at Govt. college, Mananthavady on 23-01-2020.
4. Biju KG has delivered an invited talk entitled “Formation of elements in the Universe” in connection with science day at Govt. college, Madappally on 04-03-2020.

## **VIII. ACHIEVEMENTS OF STUDENTS:**

1. Mr.Abdul Khadar (II BSC physics ) Secured first prize in the science quiz competition conducted at Mary Matha College, Mananthavady.
2. Mr. Abdul Khadar and Fayis(both II BSC physics ) were selected as the best team in the marketing competition conducted at Imam Gazali college, Anjukunnu.
3. Ms. Geethika Gopinath of II BSc physics secured II prize in the essay competition conducted by the Forests and wildlife.
4. The students of the physics department actively participated in the F zone competition and bagged many prizes.
5. A large fraction of the students of the department are members of NSS, NCC and Bhoomitra Sena Club.
6. A large fraction of the students served as volunteers on the district disaster management team during the flood in 2019.

## **VIII. POSITIONS HELD BY FACULTY MEMBERS**

1. Mr. Biju KG selected as a member of UG Board of studies, University of Calicut.

2. Mr. Biju KG is the chairman of even semester UG CV/CMV camps of Calicut University in the Wayanad region.
3. Mr. Biju KG is the chairman of UG physics Practical examinations of Calicut University in the Wayanad region.
4. Mr. Biju KG served as the IQAC Coordinator.
5. Mr. Biju KG is a member of the College Council.
6. Mr. Hashim NK is the officer in charge of NCC.
7. Mr. Hashim NK is the coordinator of the Basic amnesties cell of the college.

### **IX. BEST PRACTICES**

- The department collects used books from senior students and gives them to students.
- The department has arranged an honesty shop, where students will get paper, pen, pencil, rubber, etc., and the money can be deposited in the box there. This is introduced to inculcate moral values like honesty, trust and self-respect in the students.