



DEPARTMENT ACTIVITIES 2022-2023

**RANI ANNA GOVERNMENT COLLEGE FOR WOMEN**
Re-accredited with A grade by NAAC
Tirunelveli – 627 008
One day Seminar on
World Ozone day
Organized by Department of Physics and Geology
on
16th September, 2022 at 10.00 a.m.
Venue: *College Auditorium*

Resource Person:
Dr. A.N. Seetha Lashmi,
Assistant Professor of Physics,
The M.D.T Hindu College, Pettai,
Tirunelveli -627 010.



Patron:
Dr. C.V. Mythili
Principal

Organizing Committee members:
Dr. K. Pandian
Tmt. S. Muthumala
Ms. C. Anjala mercy
Tmt. S. Muthulakshmi

Co-ordinators:
Dr. M. Darathi
Associate Professor and Head
Department of Physics

Dr. V. Selvam
Assistant Professor and Head
Department of Geology

Organizing Committee members:
Dr. J. Daisy Magdaline
Tmt. S. Vallimeena
Dr. S. Elizabeth Premalatha
Dr. D. Deva jeyanthi
Dr. J.V. Libija
Ms. D. Jancy
Dr. J. Celina Selvakumari
Dr. K. Geetha
Tmt. A. Muthukumari
Tmt. R. Santhana Priya
Tmt. B. Padma

Competition for the students

- Slogan
- Essay writing
- Elocution
- Poster



ONE DAY SEMINAR –WORLD OZONE DAY ON 16TH SEPTEMBER

2022



ASSOCIATION MEETING

TOPIC: *FUNDAMENTALS AND ADVANCES ON ENERGY SOURCES*

Dr. P. SMITHRAJ PREMKUMAR
ASSISTANT PROFESSOR
PG DEPARTMENT OF PHYSICS
St. JOHN'S COLLEGE
PALAYAMKOTTAI



READING

CONTINUOUS BOOK
MARCH 3RD 2023

**BANANA FIBER TRAINING WORKSHOP ATTENDED BY OUR STUDENTS ON
MARCH 3RD 2023**



FIELD VISIT: WIND MILL, ARALVAIMOZHI



OUTREACH

B.Sc Physics students visited the FlorenceSwainson Higher sec school for Deaf, Palayamkottai on 27-2-18. Our students interacted with the school students. The staff members of the school explained the various learning methods of the specially challenged students. Our students performed cultural events to entertain them. Our students contributed the needs of the students.

Paper published (2022 – 2023)

Title of the paper	Author	Name of the journal	Volume, issue and page number	Year
Comparative spectral (FT-IR,FT-Raman,UV)investigations, HOMO-LUMO,NBO and in-silico docking analysis of Nikethamide, niazid and 2-Mercaptonicotinic acid	G.Karpagakalyani	Journal of Molecular structure	1252,132032	2022
Theoretical Prediction for next doubly magic nuclei in Superheavy region (Z=112-112) via alpha radioactivity	R.Revathi	STRAD	9,6,153	2022
Cluster radioactivity of deformed superheavy nuclei- 294_{118} , 296_{120} & 298_{122}	R.Revathi	STRAD	9,10,24	2022
Quantum chemical evaluation, QSAR analysis, molecular docking and dynamics	G.Karpagakalyani	Structural Chemistry	33,2083-2113	2022

investigation of s-triazine derivatives as potential anticancer agents				
Structural elucidation, spectroscopic investigation, in silico docking, and in vitro cytotoxicity studies of chromone derivatives as potential anti- breast cancer agents	G.Karpagakalyani	Journal of Molecular structure	1284,135306,20	2023
Vibrational frequency analysis, DFT and in Vitro fungicidal activity studies of Biphenyl-4-carboxylic acid,2,4-Difluorobiphenyl and 4-Acetylbiphenyl-A comparative study	K.Karpagavalli	Polycyclic Aromatic Compounds		2023

Paper presented (2022 – 2023)

Title of the paper	Author	Title of the seminar	Organized by	Year
Theoretical search for Hyper Deformation in 53_v	M.Abirami Sundari	International conference on “Emerging materials and its applications”(ICEMA-2022)	St.Xavier’s college, Palayamkottai	2022
Role of Fluctuations in the Structural Transitions of Hot Rotating Selenium Nuclei	R.Santhana Priya	International conference on “Emerging materials and its applications”(ICEMA-2022)	St.Xavier’s college, Palayamkottai	2022
Spectral studies, Hyperpolarisability, HOMO, LUMO and reactivity descriptor analysis of (Pyridin-2yl-methyl)(tetrahyd	G.Karpagakalyani	International conference on “Emerging materials and its applications”(ICEMA-2022)	St.Xavier’s college, Palayamkottai	2022

rofur-2yl-methyl)amine				
Theoretical studies on the intermolecular hydrogen bond interactions of 3-formyl-6-methylchromone /water complex:S DFT approach	G.Kirishna Maline	International conference on “Emerging materials and its applications”(ICEMA-2022)	St.Xavier’s college, Palayamkottai	2022
Vibrational spectroscopic analysis of Biphenyl-2-carboxylic acid	K.Karpaga Valli	International conference on “Emerging materials and its applications”(ICEMA-2022)	St.Xavier’s college, Palayamkottai	2022
Giant Dipole Resonance in Heat Fast Rotating nuclei	M.Thamburatty	Recent Developments in Effective materials	Sarah Tucker College	2023
Structural Changes in Hot Rotating Heavy mass nuclei	R.Santhana Priya	Recent Developments in Effective materials	Sarah Tucker College	2023
Jacobian instability in nuclei with very large angular momenta	M.Abirami Sundari	Recent Trends in Physics	Sri Sarada College for women, Ariyakulam	2023
Temperature dependent Level density in heated fast rotating nuclei	M.Thamburatty	Recent Trends in Physics	Sri Sarada College for women, Ariyakulam	2023
Shape evolutions and Fluctuations in hot rotating medium mass nuclei	R.Santhana Priya	Recent Trends in Physics	Sri Sarada College for women, Ariyakulam	2023
Spectral and chemical investigation of	C.Karpagakalyani	Recent Trends in Physics	Sri Sarada College for	2023

2-(BOC-amino)-6-methyl pyridine			women, Ariyakulam	
Structural, Spectral, Quantum chemical exploration and molecular docking study of 6, 8-dichlorochrom 1-2-2-carboxylic acid	G.Kirishna Maline	Recent Trends in Physics	Sri Sarada College for women, Ariyakulam	2023
Interesting facts about radon and thoron	M.Anitha	Recent Trends in Physics	Sri Sarada College for women, Ariyakulam	2023
Vibrational analysis, Quantum chemical computation and docking studies of 4-methyl Phenoxyacetic acid	K.Karpaga Valli	Recent Trends in Physics	Sri Sarada College for women, Ariyakulam	2023

Number of students doing Ph.D. (2020 – till date)

Name of the student	Reg. number	Title of the thesis
M.ANITHA	21211172132007	Assessment of natural radiation due to indoor radon and thoron concentration in and around residential areas of coastal villages in tirunelveli districts using SSNTDs
D.JANCY	22221172132004	Investigation on some Amino acid based single crystals for various applications

Number of PG Projects completed

Year	
2022 – 2023	20

