



Message of the Head of the Department

Dear Readers and Members of Forman family,

Greetings to you from the faculty and staff of the Physics Department (College Section). It gives me immense pleasure to present to you the second edition of the Departmental Annual Newsletter for the session 2021-22. Through this opportunity we want to share with you what we achieve and how we serve through teamwork at Physics Department.

It was a great session for us all as we were finally able to welcome back our entire student body on campus and in our classrooms for the first time since COVID-19. The session included various departmental activities along with the regular services of the department in teaching and student welfare.

Muhammad Iqbal,
Associate Professor and Head of the Department of Physics
Forman Christian College, Lahore

The newsletter highlights some of the things that we have been doing. The Physics Department was also joined this year by five new faculty members and one staff member. They have been working very hard to serve our students, department and institution and I expect great things from them in future as well.

Lastly, I assure you all that we at Physics Department have many more efforts in the works as we continue to serve our students excellence in both BISE results and their personal and professional lives, all the while trying to inculcate in them the core values of FCC.

Thank you!



Annual Departmental Photograph 2022, with the College Vice Rector and the College Coordinator

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An Introduction to the Physics Department

The College Physics Department at Forman Christian College, Lahore is the largest department in the college section in terms of the number of faculty members and academic support staff. Physics Department caters to the academics needs, related to the subject of Physics, of 26 FSc (Pre-Engineering) section, 22 FSc (Pre-Medical) sections and 9 ICS (Physics) sections.

The faculty and staff of the Physics department is always on the forefront when it comes to providing services to the institution. This includes teaching Character Building classes, Proctorial services, duties during College Admissions Campaign and Commencement, and serving in various departmental and college committees. Services are also provided to BISE, Lahore in various capacities.

After joining (the department) as a faculty member, I have firstly witnessed the dedication of my colleagues, and constructive feedback and support regarding effective teaching from the head of department and senior faculty. The other thing that I observed was transparency which I started experiencing from my recruitment process.



Sarosh Inayat
(Lecturer of Physics)
Joined FCC in 2021

Physics Laboratories

Physics experiments are a part and parcel of Physics syllabus for Intermediate students. What is learnt in the theory classes is expected to be demonstrated practically in the laboratories. For facilitating this important area of studies, the Physics department has three large and airy, well-equipped and well-maintained laboratories in Susheela Building (P-Block).

The Physics laboratories have high quality and modern equipment, which helps us in building a strong base of experimental knowledge in Physics for our students. Students usually perform a given experiment in a pair or, in some experiments individually, under the guidance and supervision of our learned faculty and laboratory demonstrators.



Laboratory Demonstrator explaining an optics experiment to the students



Student getting apparatus issued for performing his experiment

Physics Museum

Forman Christian College, Lahore has a long history of quality experimental science education. We have a large collection of scientific equipment and apparatus that was used by faculty and students at FCC more than a hundred years ago. Under the vision of the College Vice Rector, Dr. Ivan Suneel, to protect and restore this treasure, a Physics Museum was formed by the department and was inaugurated in 2020 by the then Rector, Dr. James Tebbe.



Friends of Forman on a visit to College Physics Museum with the HOD, Mr. M. Iqbal



Mr. Tanvir Ahmed, convener of the committee formed by the HOD for restoration and cataloging of Museum items



Faculty and Staff examining antique equipment for cataloging

Character Building Program

In this session, faculty from the Physics Department took Character Building Classes of 13 Sections of various programs. The faculty meets regularly to discuss and reflect on how the classes can be made more and more beneficial for the students. Students of Physics Department Faculty's CB classes also participated in the Character Building Poster Competition and the first prize also came our way. Helpful and Inspirational material is also posted on the Department Notice Boards regularly.



I have been a part of the Physics Department since 2013, and it has been truly a fulfilling and exhilarating experience. While I have been primarily teaching Physics, I have been very fortunate to get various opportunities and avenues through which I have been able to serve the Forman Community. I cannot thank enough my HOD and senior faculty who has always been a source of encouragement and inspiration, and because of their support I am determined to continue to serve Forman Christian College with zeal and sincerity.



Muhammad Umer Chaudhry
(Assistant Professor of Physics and College Deputy Chief Proctor)

Capacity Building

Capacity Building and Brainstorming Sessions at Aug-Sep 2021

In line with the vision of the College Vice Rector and Ma'am Coordinator, the college Physics Department spearheaded by Head of the Department, Mr. Muhammad Iqbal, organized a series of capacity building and brainstorming sessions at the start of the session 2021-22.

The sessions included:

- i. Discussion & Brainstorming on Preferred Teaching Methodologies
- ii. Discussion on online class scheduling, monthly tests & quizzes, and practical classes
- iii. Session on Microsoft Office (HOD, Mr. M. Iqbal)
- iv. Session on BISE Exams Marking Scheme & Paper Pattern (Syed Iftikhar Hussain, Mr. Shoukat Masih & Mr. Arif Allah Rakha)
- v. Session on Google Meet and Moodle (LMS) (Mr. Raheel S. Farhat & Mr. Syed Iftikhar Hussain)
- vi. Syllabus Breakdown Discussion moderated by Mr. Tanvir Ahmed
- vii. Work Ethics, Punctuality and Service (HOD, Mr. Muhammad Iqbal)



Faculty Retreat 2021

Physics Department faculty made useful contributions during the Faculty retreat 2021.

Mr. Shazaib Khurshid gave a presentation on "*Feedback - for the improving non-cognitive skills*".



The 7 QI Skills

-  ME
-  WE
-  WHY
-  WILL
-  WIGGLE
-  WOBBLE
-  WHAT IF

Mr. Muhammad Umer Chaudhry as part of the Character Building Course Content Committee conducted training on "*Teaching the Core Values of Excellence and Service, and also Diversity and Acceptance*".



News and Achievements

Promotions 2021



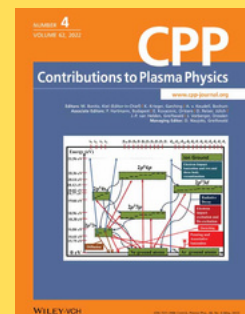
Dr. Naila Noreen got promoted to Associate Professor



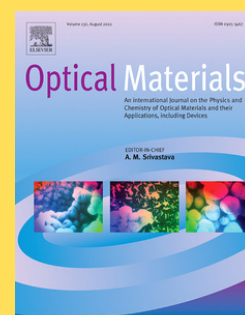
Ms. Ambreen Imran got promoted to Assistant Professor

Publications 2021-22

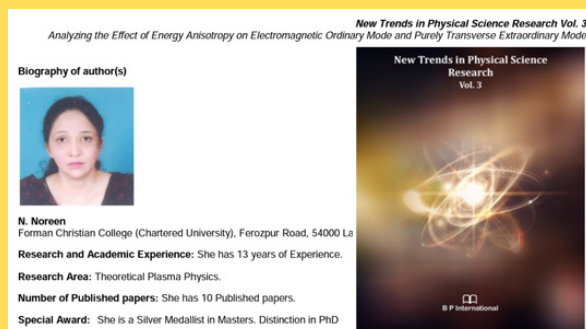
Dr. Naila Noreen published a research paper in the journal Contributions to Plasma Physics, Volume 61, titled "*Excitation of KAWs by streaming ions in a dusty magnetoplasma with generalized (r,q) distribution function.*"



Mr. Shazaib Khurshid published a research paper in the Journal of Optical Materials, Volume 124, titled "*Enhancement in absorption spectrum by ITO coated, down converting glass as a photoanode substrate for efficient PbS/CdS quantum dots sensitized ZnO nano-rods.*"



An article written by Dr. Naila Noreen became a chapter in a UK-published book, 'New Trends in Physical Science Research'. The article was titled "*Analyzing the Effect of Energy Anisotropy on Electromagnetic Ordinary Mode and purely Transverse Extraordinary Mode.*"

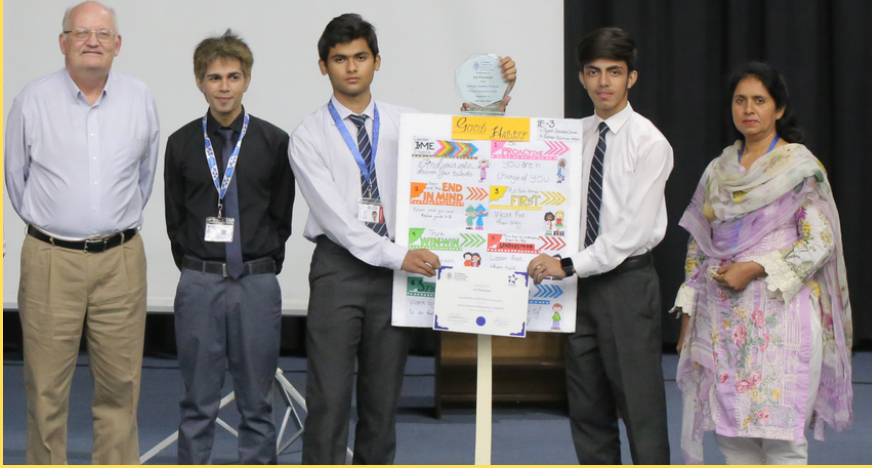


Biography of author(s)



N. Noreen
Forman Christian College (Chartered University), Ferozpur Road, 54000 La
Research and Academic Experience: She has 13 years of Experience.
Research Area: Theoretical Plasma Physics.
Number of Published papers: She has 10 Published papers.
Special Award: She is a Silver Medalist in Masters, Distinction in PhD

News and Achievements



Ms. Ambreen Imran's students of 1st Year E-3 Section won the 1st Prize in the Character Building Poster Presentation Competition, 2022. The topic of their poster was Habits. This feat was possible only through Ms. Imran's guidance and dedication.

Mr. Muhammad Fasih Iqbal, Roll No. 25-02138 (E-1) secured 1098/1100 in Lahore Board examination 2021 and stood first among FCC students. He secured 100% marks in Physics (200/200). He also got Rs. 36000/- per annum merit scholarship from BISE, Lahore for four years (entire duration of his study of mechanical engineering). Mr. Fasih's Physics instructor was Mr. Muhammad Iqbal.



Mr. Saad bin Zahid, Roll No. 26-01129 (M-1) secured highest marks amongst FCC students in Pre-Medical discipline with full marks 85/85 in Physics. His total marks were 500/505. Mr. Saad's Physics Instructor was Mr. Raheel Shamir Farhat.



I have been working in the department of Physics for over 8 years and this is a second home to me. The faculty and staff members not only help and facilitate but they also motivate and support each other for development. I have always felt that we are more than a department, we are a family.



Raheel Shamir Farhat
(Assistant Professor of Physics and Advisor Formanites Intermediate Physics Society)



Mr. Muhammad Umer Chaudhry honored by respected Rector, Dr. Addelton and University Vice Rector, Dr. Trimble for his contributions to CLT

News and Achievements



Mr. Syed Iftikhar Hussain who is doing his Doctoral Studies from the University of Engineering and Technology (UET), Lahore, has completed his course work.



Mr. Waqas Shabbir received his MPhil. degree from National University of Science and Technology, Islamabad. He worked as research associate on a project on entanglement of composite bosons, funded by HEC.



Mr. Raheel Shamir Farhat has also started his Doctoral Studies from Forman Christian College (A Chartered University), Lahore.

Faculty Members who joined Physics Department in 2021



Ms. Komal Yousaf



Mr. M. Usman Yousaf



Mr. Sarosh Inayat



Mr. Ahmad Awan



Welcome Lunch Party arranged for new faculty members



Mr. Ghulam Murtaza



Community Service

Armacost Coaching Classes

Mr. Raheel Shamir Farhat, Ms. Ambreen Imran and Mr. Shoukat Masih taught at the Armacost Coaching Classes that were arranged by the Church Relation Office.



Pre-College Summer Coaching Classes

Mr. Shoukat Masih, Mr. Raheel Shamir Farhat, Mr. Arif Allah Rakha and Ms. Ambreen Imran has been actively participating in the activities of the Summer Coaching Classes that are arranged by Church Relation office.

Faculty - Pre College Summer Coaching Classes 2022				Faculty - Pre College Summer Coaching Classes 2022			
 Pheba Philip Lecturer - English	 Zeeshan Sardar Lecturer - English	 Yousaf Kamran Lecturer - English	 Julia Austin HOD & Assistant Professor - Maths	 Raheel Shamir Assistant Professor - Physics	 Atif Shakeel Sarola Assistant Professor - Economics	 Rizwan Sabir Assistant Professor - Commerce	 Maria Yousaf Assistant Professor - Computer Sciences
 Sharoon Anjum Lecturer - Maths	 Shoukat Masih Assistant Professor - Physics	 Ambreen Imran Assistant Professor - Physics	 Arif Allah Rakha Assistant Professor - Physics	 Tauseef Ittikhar Lecturer - Biology	 Meshezabel Vivian Lecturer - Biology		

FORMAN CHRISTIAN COLLEGE
FORMAN CHURCH RELATIONS OFFICE

Formanites Intermediate Physics Society (FIPS)

Advisor: Raheel Shamir Farhat, Co-Advisors M. Usman Yousaf, Waqas Shabbir

Welcoming First Year Students

Formanites Intermediate Physics Society (FIPS) in collaboration with the Formanites Mathematics Society and Intermediate Social Science Club welcomed the first year students.



It has been great working in FIPS as a Vice President ... This experience taught control and manage in an efficient way... As a whole, it was a year full of adventure.

Shaban Maseeh (27-01834)
Vice President –
Formanites Intermediate
Physics Society (FIPS)

My experience of working with FIPS was terrific. It was a great opportunity to (learn to create) balance between studies and co-curricular activities. The responsibilities given to me by the society advisors helped me in enhancing my organizing skills. Working with this society has given me a sense of achievement and team work.

Shayaan Asif (26-03522)
Activities Co-ordinator –
Formanite Intermediate
Physics Society (FIPS)

Annual Physics Quiz Competition

Formanites Intermediate Physics Society arranged an “Annual Quiz Competition” for first year and second year students. The quiz was designed keeping in mind the multiple choice questions according to BISE examination. The students from various sections of both first year and second year enthusiastically participated in the quiz competition.

Formanites Intermediate Physics Society (FIPS)



Annual FIPS Physics Competition being held in P-block Auditorium

Lecture on "How to attempt your Physics BISE Examination"

This lecture was conducted by Mr. Arif Allah Rakha with senior faculty members as panelists to answer the questions of the students. The talk included various presentation methodologies for board examination and some tips to manage time. The talk was attended by the large number of students. The students were highly motivated by the talk and found it very helpful.

