Curriculum vitae

Dr. MUHAMMAD IMRAN : Assistant Professor
Department of Physics GC University
Lahore

Personal Information:

Birth Name	Muhammad Imran
Date of Birth	22. 05. 1972
Nationality	Pakistani
Present Address	Department of Physics, GC University Lahore
E-mail;	mimran948@hotmail.com
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Field of Interest: Low Temperature Plasma, Characterization, Material science and application of non-LTE plasmas

Professional Experience:

Assistant Professor of Physics GC University Lahore 4/10/2006 to Date

Lecture in Physics GC University Lahore 9/05/2002 to 3/10/2006

Education:

PhD. Quaid-i-Azam University, Islamabad, Pakistan, “Metrology of 50 Hz pulsed Ar- O2 mixture plasma”

Professional Achievements

Qualify International GRE (Physics) conducted by ETS (USA).

Publish ~ 10 research papers in journals of repute

Won HEC Ph.D. Indigenous fellowship

Teaching Experience:

More than 22 year experience of teaching

Service to GC University

- Member Board of Studies (BOS) of Physics department
- Member Alumni association of Department of Physics GC University Lahore

Memberships:

- Pakistan Physical Society

Publications in International Journals:

1. Spectroscopic study of 50 Hz Pulsed Ar-O_2 Mixture Plasma
   M. Imran, N.U. Rehman, A.W. Khan, M. Zaka-ul-Islam, M. Shafiq and M. Zakaullah
   Radiation Physics and Chemistry **123** (2016) 115,
   https://doi.org/10.1016/j.radphyschem.2016.02.026
2. Correlation between Excitation and Electron Temperature in 50 Hz pulsed Ar-O_2 mixture Plasma
   M. Imran, N. U. Rehman, M. Zaka-ul-Islam, M. Shafiq and M. Zakaullah
   Optik 127 (2015) 3312-3315, https://doi.org/10.1016/j.ijleo.2015.12.068
3. Facile Synthesis of Vanadium Oxide/Carbon Spheres-Doped Nickel Oxide Functioned as a Nanocatalyst and Bactericidal Behavior with Molecular Docking Analysis
   Shair Baz, Muhammad Ikram, Ali Haider, Anum Shahzadi, Anwar Ul-Hamid, Walid Nabgan, Junaid Haider, M. Imran, Thamraa Alshahrani, Francisco Medina, and Muhammad Imran
   ACS Omega ***2023*** 8 *(22), 19474-19485,* 10.1021/acsomega.3c00604
4. Enhanced Industrial Dye Degradation and Antibacterial Activity Supported by the Molecular Docking Study of Yttrium and Carbon Sphere Doped Lanthanum Oxide Nanostructures
   Atiya Ayub, Muhammad Ikram, Ali Haider, Iram Shahzadi, Anwar Ul-Hamid, Anum Shahzadi, Mohammed M. Algaradah, Ahmed M. Fouda, Walid Nabgan, and Muhammad Imran
   ACS Omega **2023** *8* (40), 37564-37572
5. Effective catalytic and antimicrobial performance of multiple phase AgBr and polyacrylic acid doped nickel oxide nanostructures with In Silico molecular docking study
   Zainab Farooq, Iram Shahzadi, Ali Haider, Haya Alhummiany, Anwar Ul-Hamid, Walid Nabgan, Majed A. Bajaber, Muhammad Imran, Muhammad Ikram
   Surfaces and Interfaces 43 **(**2023) 103489,
   https://doi.org/10.1016/j.surfin.2023.103489
6. Raman spectroscopy and electrical properties of polypyrroledoped dodecylbenzene sulfonic acid/Y2O3composites
   Muhammad Irfan, A. Mustafa, A. Shakoor, A. N. Niaz, N. Anwar, M. Imran, A. Majid, Revista Mexicana de F´ısica 70 (2024) 1–7,
   https://doi.org/10.31349/RevMexFis.70.010502
7. Effect of sintering temperature on microstructure, optical and dielectric properties in a low radio frequency range of a BaO:ZnO composite
   Muhammad Haseeb,Muneeb Irshad, Mohsin Saleem, Abid Aleem, Muhammad Ar shad,
   Atif Shahbaz, Muhammad Imran, Rabia Ghaffar, Hafiz
   Ahmad Ishfaq, Abdul Ghaffar, Ceramics International, 49(2023) 33445-33458

https://doi.org/10.1016/j.ceramint.2023.06.069.

8. Structural and electrical characteristics of low doped polyacetylene composites
Y. Wua, W. Abbasb, M. K. Oklac, Y. A. Bin Jardand, J. Ahmadb, A. shakoorb, M. Imrane, and M. Irfan.
Revista Mexicana de F´ısica, 71 041005 1–6
https://doi.org/10.31349/RevMexFis.71.041005

9. Synergistic $CuCo_2O_4$/MWCNT nano composites: advanced electrode materials for energy storage and catalysis applications
Waseem Abbas, Muhammad Irfan, Muhammad Babur, Muhammad Ehsan Mazhar, Javed Ahmad, Komal Ali Rao, Saqlain Haider, Hassan Ali, Muhammad Imtiaz and Muhammad Imran
Journal of material science material in engineering
https://jmsg.springeropen.com/articles/10.1186/s40712-025-00313-9

(10) Effect of pressure and current density on metastable argon dynamics in low-pressure Ar-O_2 plasma
Muhammad Imran, Najeeb Ur Rehman and Niaz Wali, Journal of Physica Scripta
https://doi.org/10.1088/1402-4896/ada315

(11) Structural, electrical, and optical characteristics of polypyrrole-doped DBSA/ZrO_2 nanocomposites
Lei-Cong, Muhammad Irfan, Waseem Abbas, Fatimah Mohammed A. Alzahrani, Sagr Alamri and Muhammad Imran
Discover Materials
https://doi.org/10.1007/s43939-026-00556-z

B.S Students supervised

(1) Zainab Farooq 0509-BH(E)- PHY-19
Catelytic dye degradation and bactericidal behavior of silver bromide/polyacylic acid doped NiO nanoparticles.

(2) M.Fayyaz 0506-BH(E) PHY-19
Facile synthesis of AgBr doped MnO2 for catllyticactivity

(3) Sajjad Hussain 0521-BH-(E)- PHY-19
Catalytic activity RhB of silver and carbon sphere doped Layered Zinc hydroxide

(4) Taha Bin Munawar 0734-BH-PHY-19
Review of Analytical Methods in plasma Diagnostic by Optical Emission Spectroscopy.

(5) M. Fahad 0725- BH- PHY-20
Review of plasma spectroscopy

(6) Dilawar Hussain 1410-BS- PHY-21
Functionalized Ag/MoS_2- $FeCr_2O_4$ for efficient water oxidation

(7) Sehar Fatima 1487-BS- 21
Bifunctional chitosan/derived carbon sphere- $AgFeO_2$ for efficient water oxidation and supercapacitor application

(8) Rehana Nawaz 1484- BS-PHY-21
Molybdenum /Activated carbon embedded CuO/CoO for water splitting

(9) Hurain Noor Younus 1481-BS- PHY- 21
Synergistic effect of starch/PANI –$MnFe_2O_4$ for water oxidation

(10) Aleeza Khuram 1463-BS-PHY-21 Synthesis and characterization of chitosan/ activated carbon- MnO2

(11) M. Ansar 1475-BS- PHY-21 Synthesis and characterizations of graphene oxide and polyaniline doped zinc oxide/cobalt oxide nano composites

(12) Hadiqa Andleeb 1423-BS-PHY-22 Synthesis and characterization of molybdenum disulphide and polyvinylpyrrolidone incorporated bismuth-oxide for electrochemical applications

(13) Saba Shafiq 2089-BS-PHY-22 Synthesis and characterizations of graphitic carbon nitride supported polyvinylpyrrolideone-bismuth oxide for energy conversion

(14) Ftima Zahra 1421-BS-PHY-22 Carbon dots supported polyaniline- CuO/CoO for Energy conversion

M.Phil supervised

(1) Abid Raza Khan 0439-MPHIL-PHY-21
Investigation of nickel and magnesium oxides composites for supercapacitor applications

(2) Atiya Ayub 0444-MPHIL-PHY-21
Enhanced dye degaradation with yttrium and carbon sphere doped La2O3 nanoparticles

(3) Shair Baz 0464- MPHIL-PHY-21
Vanadium and carbon sphere doped nickel oxide used as catalytic dye degrader

(4) Mudassir Hassan 415-MPHIL-PHY-22
Synergistic effect in the catalytic and antimicrobial properties of chitosan and polyacrylic acid capped CdSe quantum dots

(5) Aiman Azam 402-MPHIL-PHY-22
Enhanced RhB dye degradation of starch/PAA-SnFe2O4 nanocubes synthesized via co-precipitation

(6) Abdil Kani Hussein Mohamed 447-MPHIL-PHY-22
Enhanced Catalytic Activity of CuWO4 Incorporated with Thioglycolic Acid and Eudragit

(7) Areej Fatima 412-MPHIL-PHY-23 Optimized graphitic carbon nitride and carbon supported $SnFe_2O_4$ for electrochemical applications