

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 , dr.m.imran@gcu.edu.pk
Cell No.	0300 4406977

Field of Interest: Low Temperature Plasma, Characterization, Material science and application of non-LTE plasmas

Professional Experience:

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

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

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) held on April 2010.

Publish ~ 9 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-O₂ 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-O₂ 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 Alhummany, 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 Física 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 Arshad, 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 Física

71 041005 1–6

<https://doi.org/10.31349/RevMexFis.71.041005>

9. Synergistic CuCo₂O₄/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>

B.S Students supervised

(1) Zainab Farooq 0509-BH(E)- PHY-19

Catalytic dye degradation and bactericidal behavior of silver bromide/polyacrylic acid doped NiO nanoparticles.

(2) M.Fayyaz 0506-BH(E) PHY-19

Facile synthesis of AgBr doped MnO₂ for catalytic activity

(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/MoS₂- FeCr₂O₄ for efficient water oxidation

(7) Sehar Fatima 1487-BS- 21

Bifunctional chitosan/derived carbon sphere- AgFeO₂ 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- MnO_2

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 degradation with yttrium and carbon sphere doped La_2O_3 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- SnFe_2O_4 nanocubes synthesized via co-precipitation

(6) Abdil Kani Hussein Mohamed 447-MPHIL-PHY-22

Enhanced Catalytic Activity of CuWO_4 Incorporated with Thioglycolic Acid and Eudragit

