

# 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;	<a href="mailto:mimran948@hotmail.com">mimran948@hotmail.com</a> , 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- O<sub>2</sub> mixture plasma”

### **Professional Achievements:**

Qualified 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-O<sub>2</sub> 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<sub>2</sub> 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/Y<sub>2</sub>O<sub>3</sub>composites

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. Wu, 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 CuCo<sub>2</sub>O<sub>4</sub>/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

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 MnO<sub>2</sub> 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<sub>2</sub>- FeCr<sub>2</sub>O<sub>4</sub> for efficient water oxidation

(7) Sehar Fatima 1487-BS- 21

Bifunctional chitosan/derived carbon sphere- AgFeO<sub>2</sub> 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<sub>2</sub>O<sub>4</sub> for water oxidation

(10) Aleeza Khuram 1463-BS-PHY-21 Synthesis and characterization of chitosan/ activated carbon- MnO<sub>2</sub>

**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<sub>2</sub>O<sub>3</sub> 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<sub>2</sub>O<sub>4</sub> nanocubes synthesized via co-precipitation

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

Enhanced Catalytic Activity of CuWO<sub>4</sub> Incorporated with Thioglycolic Acid and Eudragit

