

## **FACULTY PROFILE**



### **Personal Details:**

Name: Dr. Madhu Sarwan  
Designation: Assistant Professor  
Department: Department of Physics, Barkatullah University.  
E mail ID: **madhusarwan@gmail.com**  
Phone: 8305334471, 9424973315  
Fax:

### **Academic Details:**

Experience: (a) Research : 11 Years  
(b) Teaching : 7 Years  
NET/JRF: -  
PDF: 2016-2019 at Barkatullah University  
PhD: Barkatullah University, Bhopal (2015)  
M. Sc. 70 %, Ist Div., Bhopal University, Bhopal (2005).  
B. Sc. 63 %. Ist Div Bhopal University, Bhopal (2003)

### **Awards/Fellowships/Training/Workshops attended:**

- a. Best poster award (18-19 March 2019), Organized by IQAC, Barkatullah University, Bhopal.
- b. Post-Doctoral Fellowship, No. F. /PDFSS-2015-17-MAD-11704, UGC, New Delhi (2016-2019).

#### c. Training/ workshop attended:

- Organized one week national workshop on Semiconductor Devices and Nuclear Physics from 13 December 2021 to 18 December 2021 at Govt. College Harrai, Chhindwara M.P.
- Orientation course at Teaching Learning Centre, Ramanujan College, University of Delhi, 10 November to 09 December 2020.
- Refresher course in physics, organized by Human Resource Development Centre, University of Hyderabad from 05th to 17th December, 2022.

- 10th Faculty Induction Programme (FIP) (Guru Dakshata) from (09-01-2024 to 05-02-2024) organized by UGC - Human resource development centre, Devi ahilya vishwavidyalaya, indore (m.p).

**Research Interests:**

Condensed Matter Physics:

- High Pressure Structural Phase Transition in Solids.
- Relative stability of Structures
- Mechanical Properties
- Semiconductors
- Elastic Properties under High pressure
- High Temperature Phase Transition
- Half Heusler Alloy and magnetic properties
- Full and Quaternary Heusler Alloy
- Spintronic materials

**Research Projects:**

- a. Ongoing: Seed money project funded by B.U. Bhopal (2025-2027)
- b. Completed:
  - i. Major Research Project UGC, New Delhi (2010-2012) At B.U. Bhopal.
  - ii. Major Research Project funded by UGC, (SAP) New Delhi (2012-2014) At B.U. Bhopal.

**Publications:**

- a) National: 01
- b) International: 16

**Citations:** 163

**h-index:** 8

**i10-index:** 7

**Conference Attended:**

- a) National: 01
- b) International: 20

**Member of Professional bodies:**

- Member Centre Board of studies in Physics, M.P. Higher Education, Bhopal.
- Member Indian Knowledge System, B.U, Bhopal.