Murshidabad University

FACULTY ACADEMIC PROFILE/ CV

Full name of the faculty member: **Samarendra Nath Saha**

Designation: **Assistant Professor**

Contact information: **+91 9775578723/ samar.phy@gmail.com**

Academic qualifications:

College/University from which the degree was obtained	Abbreviation of the degree
Krishnath College	B.Sc. (University Topper)
IIT Kharagpur	M.Sc.

Positions held/ holding:

1. Convenor of the AISHE (WEB-DCF) Committee at Murshidabad University.

2. Convenor of the Students Scholarship Committee (Vivekananda Scholarship, Post Matric Scholarship, Kanyashree, NSP) at Murshidabad University.

3. Convenor of the Students' Progression Committee at Krishnath College.

Research Interests:

Experimental Condensed Matter Physics

- Magnetic Nanomaterials
- Magnetocaloric Effect, Critical Exponent Study
- Double Perovskite and Perovskite Materials
- Charge Transport Mechanism
- Dielectric and Ferroelectric Characteristics

Research guidance:

1. Guided 6 UG students for their DISSERTATION paper.

2. Guided 2 PG students for their DISSERTATION paper.

Projects: Nil

Select list of publications (Only number):

a) Journals: **6**

b) Books/ book chapters: **2**
c) Conference/ seminar volumes: **5**

Membership of Learned Societies:

1. Member of Condensed Matter Research Society

Invited lectures delivered: 4

Awards:

1. I got "**Gold Medal**" for **securing the highest marks in Physics Honours** in the B.Sc. Examination, 2009 of the University of Kalyani.

2. I have got "Akhil Chandra & Chapala Dutta Memorial Medal" from Kalyani Civil Association for securing the **highest marks** in Physics Honours in the B.Sc. Examination, 2009 of the University of Kalyani.

3. I have also got a certificate from the University of Kalyani for securing the **Highest Marks** in Physics Honours in the B.Sc. Examination, 2009 of the University of Kalyani.

4. **Attended 6th INDIA-SINGAPORE JOINT SYMPOSIUM ON PHYSICS OF ADVANCE MATERIALS, 2013** at Department of Physics and Meteorology, IIT Kharagpur, India.

5. **Best poster award** in First International Conference on **EMERGING MATERIALS: CHARACTERIZATION and APPLICATION (EMCA-2014)** at CSIR-Central Glass and Ceramic Research Institute, Kolkata, India.

6. I received **Academic Excellence Award 2024** from Institute of Researchers for **Outstanding Professional and Research Achievements** in the field of Physics.

Other notable activities:

1. Serve free lectures to +2 level students in Daulatabad N.B.S High School and set up a Physics Lab there.

2. Acted as a Judge in the District Level Science Exhibition.

3. 10 years of Research Experience.

4. 12 years of Teaching Experience at the Graduate and Post-graduate levels.

List of Journal Publication/ Conference Papers: (Last ten years)

1. Jagannath Panda, **Samarendra Nath Saha**, Tapan Nath, Critical behavior and magnetocaloric effect in $Co_{50-x}Ni\ Cr_{25}Al_{25}$ (x= 0 and 5) full Heusler alloy system, Journal of Alloys and Compounds ,644, May 2015.

2. Jagannath Panda, **Samarendra Nath Saha**, Tapan Nath, Room temperature giant positive junction magnetoresistance of $NiFe_2O_4$/n-Si heterojunction for spintronics application, Physica B Condensed Matter, 448:184-187, September 2014.

3. Samarendra Nath Saha, Jagannath Panda, Tapan Nath, Structural and Magnetization Behavior of Highly Spin Polarized Co_2CrAl Full Heusler Alloy, AIP Conference Proceedings 1591, 1395, March 2014.

4. S.N.Saha, J. Panda, T. K. Nath, Critical Behavior Near Magnetic Phase Transition in Co_2CrAl Full Heusler Alloy; Advanced Science Letters, Volume 22,Number 1, January 2016, pp. 121-125(5).

5. Sk. Anirban, Rosni Roy, Rajib Mondal, **Samarendra Nath Saha**, Purna Chandra Barman, Charge Transport Mechanism, Dielectric Relaxations and Relaxor Ferroelectric properties of Sm_2MgMnO_6 Double Perovskite, Journal of Solid State Chemistry 329 (2024) 124422.

6. S. N. Saha, P. Halder, Empirical Formula of Lattice Constant and Tolerance Factors of A_2BSbO_7 (A^{3+} = Y, Dy, Gd, Bi; B^{3+}= Fe, Ga) Pyrochlore Solid Solution, Journal of Chemical Crystallography (2022) 52:371–377.

7. S.N. Saha and P. Halder, Tolerance Factors of A_2ScNbO_7 (A^{3+}= Pr, Nd, Eu, Gd, Dy) Pyrochlore Type Oxide, Crystallography Reports, 2022, Vol. 67, No. 7, pp. 1127–1132.