

FAHMIDA FAKHERA

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EDUCATION

COMPLETION DATE SEPTEMBER 2022	Master of Science in PHYSICS (Thesis) Jahangirnagar University, Savar, Dhaka 1342, Bangladesh Thesis title "First Principle Insight on the Structural and Optoelectronic Properties of Indium and Sodium Doped Double Perovskites"
2019	Bachelor of Science in PHYSICS Jahangirnagar University, Savar, Dhaka 1342, Bangladesh Grade Point Average (CGPA) of 3.74 out of 4.00
2015	Higher Secondary Certificate Examination (HSC) Holy Cross College, Science, Dhaka Board Grade Point Average (GPA) of 5.00 out of 5.00
2013	Secondary Certificate Examination (SSC) Ideal School And College, Science, Dhaka Board Grade Point Average (GPA) of 5.00 out of 5.00

EMPLOYMENT

APRIL 2020 TO MAY 2020	Citizen Scientist International Astronomical Search Collaboration
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PUBLICATION/SUBMITTED FOR PUBLICATION

1. **Fahmida Fakhera**, Naafis Ahnaf Shahed, Shamima Khanom, Md. Kamal Hossain, Farid Ahmed. *A first-principle study on structural, mechanical, electronic and optical properties of half-metallic CaYSi_2O_6 ($Y = \text{Co, Fe, Mn}$) clinopyroxenes*. **Computational Condensed Matter**, Volume 33, , 2022, <https://doi.org/10.1016/j.cocom.2022.e00749>.
2. **Fahmida Fakhera**, Prianka Mondal, Mst Shamima Khanom, Shariful Islam, Md. Kamal Hossain, Farid Ahmed. *Optical Response and Bandgap Transition in $\text{Cs}_2\text{AgIn}_x\text{Bi}_{1-x}\text{Cl}_6$: The Density Functional Theory Approach*. **Spin-World Scientific**, Under review, **2022**
3. **Fahmida Fakhera**, Kamal Hossain, Mst Shamima Khanom, Farid Ahmed. *Understanding the Impact of Y^{2+} ($Y = \text{Mn, Fe, and Co}$) Cations on Physical Properties of SrYGe_2O_6 Clinopyroxene: A DFT Insight*. **Journal of Physics and Chemistry of Solids**, 1st Revision, **2022**

POSTER PRESENTATION

1. **Fahmida Fakhera**, Shamima Khanom, Farid Ahmed. *Optical Response and Bandgap Transition in $Cs_2AgInxBi_{1-x}Cl_6$: The Density Functional Theory Approach*. **International Colloquium on Authentic Scientific Publications**, , July, 2022

AWARDS & HONORS

2021 TO 2022	National Science and Technology Fellowship Ministry of Science and Technology (Bangladesh)
CERTIFICATIONS	1. Certificate of Attendance, Holy Cross College (2013-2015) 2. Certificate of Merit in 51th Annual Sports Day (Chess) 3. Certificate of achievement (Champion, 2nd Inter Class Debate Competition 2011) 4. Attendee (Debate Workshop 2016)

RESEARCH GRANT

2022	Postgraduate Research Support (Ministry of Science and Technology under the NST Fellowship)
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PROFESSIONAL SKILLS

- Analytic theory
- Data analysis
- Observational data analysis from radio telescope (e.g., Pan-STARRS)
- Oral presentation
- Written communication

COMPUTER SKILLS

PROFICIENT	Material Studio, Origin, MS Word, MS Excel, and MS Powerpoint
BASIC	C and C++

LANGUAGE PROFICIENCY

English, German (A1)

RESEARCH FIELDS

Computational Condensed Matter Physics, Material Science, Semiconducting Materials, Half-metals

REFERENCE

DR. FARID AHMED	Professor Department of Physics, Jahangirnagar University Savar, Dhaka 1342, Bangladesh +880 1817014222; fahmed@juniv.edu
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