

SAI RAJ ALI



» Seeking to be inspired, to envision the unlikely, to work hard for things that are worth it, and to be surrounded by those who bring out the best in me.

CURRENT POSITION

I am currently working as CSIR Senior Research Fellow at the Department of Physics Jamia Millia Islamia Central University, New Delhi, India.

EDUCATION

Ph.D. in Physics

Dept. of Physics JMI, New Delhi, India, Pursuing

» Title of the Thesis: Investigation of the Catalytic Role of Nanostructured Surfaces.

Post Graduation (M.Sc. in Physics)

Dept. of Physics JMI, New Delhi, India, 2016

» Division: First, Percentage: 83.9%

Undergraduation (B.Sc. in Physics Hons.)

Dept. of Physics Shivaji College, Uni. of Delhi, New Delhi, India, 2014

» Division: First, Percentage: 72.7%

Higher Secondary

GBSS School, Rajouri Garden New Delhi, India, 2011

» Division: First, Percentage: 73.4%

Matriculation

GBSS School Mohan Garden New Delhi, India, 2009

» Division: First, Percentage: 86.6%

EXPERIENCE

» Worked as a **Teaching Assistant** for one semester in **Mechanics Lab**, B.Sc.(H) Physics at the Department of Physics Jamia Millia Islamia New Delhi, July-December, 2018.

» Worked as a **Teaching Assistant** for one semester in **Electronics Lab** B.Sc.(H) Physics, at the Department of Physics Jamia Millia Islamia New Delhi, January-June, 2019.

INVITED TALKS/TEACHING ASSISTANT/RESOURCE PERSON

» Invited as **Teaching Assistant** in the workshop on “**Mollywood to Molecular Nodes**” jointly organised by Gdańsk University of Technology, Poland, IRB Barcelona, Spain and Scidart Academy, India held during 8th - 11th September 2022.

» Invited as **Teaching Assistant** in winter school on “**Advanced Molecular Dynamics simulation**” jointly organised by International School of Photonics, Cochin University of Science and Technology (CUSAT), India, Department of Physics and Green Club of thoughts, Kathmandu University, Nepal, held during 6th - 17th Sept, 2021.

» Invited as **Teaching Assistant** in summer school on “**Advanced Molecular Dynamics simulation**” jointly organised by Department of Chemistry, IISER Pune, India, Department of Physics and Green Club of thoughts, Kathmandu University, Nepal, held during 5th - 16th July, 2021.

PERSONAL DETAILS

Sai Raj Ali
 03-07-1993
 Male
 Hindi, English

CONTACT

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RESEARCH INTERESTS

Water Splitting
 CO₂ reduction
 CO-Oxidation
 2D-Materials, MXene
 Electrocatalysis
 Density Functional Theory

PROGRAMMING

>_ Shell Scripting
★★★★★★★★★
</> C, C++, Fortran
★★★★★★★☆☆
</> Python
★★★★★★★☆☆

SOFTWARE EXPERTISE

</> Quantum Espresso, Pwtk
 Latex, Vim, MS Office
 Gnuplot, Grace
 Inkscape, GIMP
 Blender

OPERATING SYSTEMS



ACHIEVEMENTS

- › Qualified National Eligibility Test (NET) examination for lectureship conducted by **Council of Scientific and Industrial Research (CSIR)**: Eligible for a junior research fellowship in India. **All India rank-92**, in December 2016 exam.
- › CSIR-Senior Research Fellowship 2020-2022.
- › Got 2nd position on report submitted in the “**Winter School on Electronic structure and Molecular Dynamic Simulations Using Open Source Softwares: From Theory to Practice**” jointly organized by Parvatibai Chowgule College of Arts and Science, Margao, Goa and Supercomputer Center, Kathmandu University, Nepal held during Sept. 27- Oct. 04, 2020
- › Received “**Best poster**” award at Jamia Millia Islamia University National Symposium on “**Advances in Material Science and Theoretical Physics**” 19-20th February 2020.
- › Got 1st position in “**Powerpoint presentation**” organised by physics society (Invenio 2014) at Shivaji College, University of Delhi.
- › Got 2nd position in “**Science quiz competition**” organised by physics society (Invenio 2014) in Shivaji College, University of Delhi.
- › Got 2nd position in Zonal level “**Science quiz competition**” from GBSS School Rajouri Garden in 2009-10.
- › Got scholarship for obtaining “**99 marks in Social-Science**” in 10th class.
- › Got 1st position in “**Cultural activity**” on 4 Feb 2009 in GBSS School Mohan Garden.
- › Had been selected for “**The Scout Training Camp at Nainital**” from 30/12/2008-03/01/2009.
- › Had been selected by the Directorate of Education (sports branch Govt. of national capital territory of Delhi) for short trekking from “**Rishikesh-Neelkanth Mansarovar-Jhilmil Cave**” from 1 – 4 Oct 2007 and got 1st position.
- › Got 1st position in School level “**Science quiz competition**” in GBSS School Mohan Garden in 2006-07.

SCHOOLS, WORKSHOPS & CONFERENCES ATTENDED

- › One Week National Certificate Program on “Instrumental methods of analysis” virtual mode under MHRD Govt. of India held during 7th - 13th October, 2020.
- › One Week National Faculty Development Program on “Research Ethics and Characterisation Techniques in Materials Science” virtual mode under MHRD Govt. of India held during 9th - 15th September, 2020.
- › National Symposium on “Advances in Material Science and Theoretical Physics” at Jamia Millia Islamia University New Delhi, India held during 19th - 20th February 2020.
- › Winter School on “Materials and Molecular Simulations using Open Source Softwares from theory to practice” at Department of Physics, Bishop Moore College, Mavelikara, Kerala, India held during 16th - 22nd October 2019.
- › Workshop and Symposium on “Advanced Simulation Methods: DFT, MD and Beyond” at IIT Delhi, India held during 6th - 10th March, 2019.
- › International School on “Ion Beams in Material Science” at Inter University Accelerator Centre (IUAC) New Delhi, India held during 3rd - 7th October, 2018.
- › Density Functional Theory for Heterogeneous Catalysis at IIT Guwahati, India held during 6th - 11th August, 2018.

MASTER’S PROJECT

4th - 22nd January, 2016

M.Sc. Orientation Programme

Inter University Accelerator Centre new Delhi

Project title: “Gamma-ray detection and variation in energy resolution with different scintillation detector NaI(Tl), LaBr₃(Ce) and BaF₂”

Supervisor:

Mr. Akhil Jhingan Scientist-G

July 2015 - May 2016

Research towards Master’s Thesis

Centre for Theoretical Physics, Jamia Millia Islamia, New Delhi

Project title: “Newman-Janis Algorithm for Black Hole”

Supervisor:

Prof. Sushant G Ghosh