

Midhun K Madhu

Computational Biology Researcher

Lab 202, AB2, IISER Bhopal, Madhya Pradesh, India, 462066

(+91) 974 495 1075

midhunk16@iiserb.ac.in

midhunkidangoor@gmail.com

EDUCATION

Indian Institute of Science Education and Research (IISER), Bhopal
Madhya Pradesh, India

August 2011 - May 2016

CGPA: 8.4/10

Bachelor of Science - Master of Science (BS-MS) in Biological Sciences with a minor in Mathematics

Holy Cross HSS, Cherpunkal
Kerala, India

June 2009 - March 2011

Percentage: 95

Higher Secondary Education (Science and Computer Science as majors)

Holy Cross HSS, Cherpunkal
Kerala, India

March 2009

Percentage: 90

Secondary School Leaving Certificate (SSLC)

EXPERIENCE

Graduate Research — Indian Institute of Science Education and Research (IISER), Bhopal

On the topic “Allosteric Regulation in G protein-Coupled Receptors” under the mentorship of Dr. Rajesh K Murarka, Associate Professor, Computational biophysics and soft matter group.

December 2016 - Present

MS Thesis — Research Indian Institute of Science Education and Research (IISER), Bhopal

On the topic “Prediction of Antigenicity of Proteins Using Machine Learning Techniques” under the guidance of Dr. Vineet K Sharma, Associate Professor, Metabiosys Lab.

May 2015 - March 2016

Summer Internship — Institute for Intensive Research in Basic Sciences (IIRBS), Kerala

Under the guidance of Dr. I. Ibnusaud, Director, IIRBS, Mahatma Gandhi University, Kerala

May 2012 - June 2011

AWARDS AND FELLOWSHIPS

- ★ CSIR-UGC Junior Research Fellowship and Eligibility for Lectureship (NET)
— December 2015
- ★ 3rd Prize In National Level Essay Writing Competition, on the topic 'Healthcare' held by IMPRINT INDIA, Ministry of Human Resource Development, India
— September 2015
- ★ Innovation in Science Pursuit for Inspired Research (INSPIRE) Fellowship Department of Science and Technology(DST), India.
— August 2011

SKILLS AND TECHNIQUES

Languages	English (fluent), Malayalam (native), Hindi (basic)
Programming	Python, Perl, R, Matlab
OS / Software	Microsoft Office, Amber, Pymol, Visual Molecular Dynamics
Techniques	Machine learning, Molecular Dynamics Simulation, Graph and information theoretical analysis techniques
Online certifications	<ul style="list-style-type: none">• MATLAB Basics course by Mathworks• Machine Learning course by Sololearn• Python 3 Tutorial course by Sololearn

RESEARCH PUBLICATIONS

1. Gupta, Ankit, Ahmad Ahmad, Dipesh Chothwe, Midhun K. Madhu, Shireesh Srivastava, and Vineet K. Sharma. "Genome-scale metabolic reconstruction and metabolic versatility of an obligate methanotroph. Methylococcus capsulatus str. Bath." PeerJ 7 (2019): e6685.
2. Gupta, Sudheer, Midhun K. Madhu, Ashok K. Sharma, and Vineet K. Sharma. "ProInflam: a webserver for the prediction of proinflammatory antigenicity of peptides and proteins." Journal of translational medicine 14, no. 1 (2016): 178.
3. Gupta, Sudheer, Ashok K. Sharma, Vibhuti Shastri, Midhun K. Madhu, and Vineet K. Sharma. "Prediction of anti-inflammatory proteins/peptides: an in silico approach." Journal of translational medicine 15, no. 1 (2017): 7.
4. Gupta, Sudheer, Parul Mittal, Midhun K. Madhu, and Vineet K. Sharma. "IL17eScan: a tool for the identification of peptides inducing IL-17 response." Frontiers in immunology 8 (2017): 1430.

CONFERENCES

Oral Presentations

- ★ Inter-Disciplinary Exploration in Chemistry (I-DEC 2018), held at Visitors' Hostel, IISER BHOPAL during December 06-08, 2018
- ★ Annual Biology Meet organized by IISER Bhopal held in January 2020

Poster presentation

- ★ Recent Advances in Dynamics at the Interface of Chemistry and Biology (DICB 2019), held in the Faculty Hall, Indian Institute of Science, Bengaluru during February 18-20, 2019

REFEREES

[Dr. Rajesh K. Murarka](#)

Associate Professor

Department of Chemistry, IISER Bhopal

E-Mail: rkm@iiserb.ac.in

Phone: +91 755 269 1319

[Dr. Vineet K Sharma](#)

Associate Professor

Department of Biological Sciences, IISER Bhopal

E-Mail: vineetks@iiserb.ac.in

Phone: +91 755 269 1401