

Dr. Sunil Kumar Singh

Assistant Professor
Department of Mechatronics and Automation Engineering
Indian Institute of Information Technology,
Bhagalpur, Bihar-813210
E-mail: sksingh.me@iiitbh.ac.in,
sksitg1@gmail.com,
Mobile: +91-7002397649

EDUCATION

DOCTOR OF PHILOSOPHY

Branch: Mechanical Engineering

College/ University: Indian Institute of Technology Guwahati, India

Thesis title: “*Showing widely different lateral sway in angled-plane parallel-plane scissor linkages through equations of mechanics.*”

BACHELOR OF TECHNOLOGY

Branch: Aeronautical Engineering

College Name: Feroze Gandhi Institute of Engineering and Technology

University: Gautam Buddha Technical University, Lucknow, U.P., India

Aggregate: 70.68%

AREA OF INTEREST

Kinematics, Static balancing, Design of linkage, Solid modelling, Design and simulation of linkages.

PERSONAL SKILLS

- Proficient in programming languages, namely **Matlab, Mathematica**.
- Proficient in CAD software namely **Solid Edge, Creo, Solidworks**.
- Proficient in simulating software **MSC Adams, Abaqus, Ansys**.

TEACHING EXPERIENCE

- Teaching Assistance from **23 July, 2013 to 20 July, 2018** at IIT Guwahati.
- Teaching from **24 July, 2018 to 31 December, 2020** at IIIT Bhagalpur as visiting faculty.
- Subjects taught
 1. **Engineering Graphics.**
 2. **Renewable Energy.**
 3. **Engineering Mechanics**
 4. **Fluid Mechanics**
 5. **Kinematics of Machinery**
 6. **Dynamics of Machinery**
 7. **Engineering Graphics Lab.**
 8. **Mechanical Workshop Lab**
 9. **Simulation Lab**
- Member on **INTRODUCTION TO ROBOTICS** workshop organised by Dr. Gaurav Kumar at IIIT Bhagalpur during 8-10 March, 2019.

- Member on **INTRODUCTION TO MATLAB AND ITS APPLICATIONS** workshop organised by Dr. Dheeraj Kumar Sinha at IIIT Bhagalpur during 29-30 March, 2019.

ADMINISTRATIVE POSITION AND ADDITIONAL RESPONSIBILITIES

- Library In-charge (August 2018 to June 2022).
- Faculty Advisor, Mechatronics Engineering (January 2018 to December 2020).
- Warden of IIT Bhagalpur Hostel 2 & 3 (July 2019 to July 2021)

JOURNAL PUBLICATION

1. S. K. Singh and S. Deepak R, “Analytical reasons for smaller lateral sway in angled-plane scissor linkage”, *Journal of Mechanisms and Robotics*, October 2020; 12(5): 051001.
2. Tameshwer Nath and Sunil Kumar Singh, “Nitinol shape memory alloy spring: A review” *Indian Journal of Engineering and Materials Sciences: CSIR*, Vol. 28, October 2021, pp. 446-453, IF:0.881

INTERNATIONAL / NATIONAL CONFERENCE

1. S. K. Singh and S. Deepak R, Design and fabrication of a partially statically balanced scissor linkage made of bamboo pieces, *3rd International and 18th National Conference on Machines & Mechanisms*, BARC Mumbai, December 13-15, 2017.
2. S. K. Singh and S. Deepak R, “Ranking multiple static balancing solutions on the basis of friction overcoming effort”, *5th International Conference on IFToMM Asian Mechanism and Machine Science*, IISc Bengaluru, India, December 17-20, 2018.

ACHIEVEMENT AND PARTICIPATE

- Got 2nd **prize in Student Mechanism Design Contest** conducted as a part of International Conference on Machines and Mechanisms 2017.