



**Call for *Training and Skill Internship* Positions  
Under *Accelerate Vigyan – VRITIKA* on**

**Bio Tribological study on Hip Implants for Several Gait Activities**

**Organized by**

**Department of Mechanical Engineering, National Institute of Technology Agartala,  
Tripura**

Applications are invited from interested Post Graduate/Ph.D students for **04** Research Internship positions to work under the VRITIKA project titled “**Bio Tribological study on Hip Implants for Several Gait Activities**”, funded by Accelerate Vigyan, SERB, Govt. of India. VRITIKA is the call for initiation and practice in science through Training and Skill Internship. This program aims to provide promising PG students from universities and colleges opportunities to get exposure and hands-on research skill development experience. The event will be conducted offline for **04 to 06 Weeks** at the Department of Mechanical Engineering, National Institute of Technology Agartala, Tripura. For more information about the VRITIKA program, please visit the website: <https://acceleratevigyan.gov.in/programs/abhyas/vritika>

**Eligibility and Application Procedure:**

- Regular postgraduate students pursuing (M.Tech/ME/Ph.D.) in Mechanical/other relevant specializations with a strong orientation toward research.
- Applicants must fill out the application form along with all educational qualifications, certificates, photographs, ID cards, etc. (Annexure-I) and produce an Endorsement cum No Objection Certificate duly approved by the Head of the Department/Institute (Annexure-II) and a signed undertaking form (Annexure-III) by the applicant.
- All documents should be sent to the email [ravivarman@nita.ac.in](mailto:ravivarman@nita.ac.in) as a single pdf attachment with the subject line “Application for Training and Skill Internship Positions - Accelerate Vigyan - VRITIKA.”

**Selection process:**

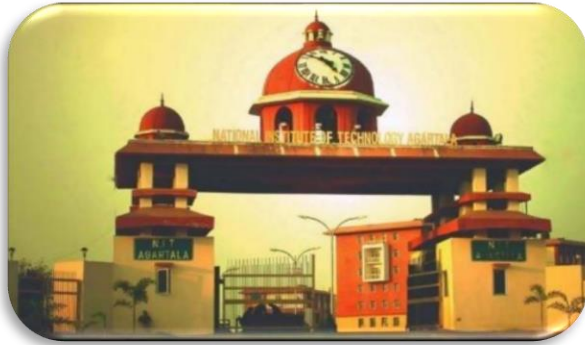
- The Candidates shall be shortlisted based on their academic performance in university examinations (CGPA/ Percentage of marks) and Academic/co-curricular contests participated and other awards/distinctions obtained.

**Nature of Support:**

- The interns will be paid for meeting daily necessary expenses such as stationery, consumables, accommodation, food, etc., as per the norms of the funding agency. Hostel facilities will be provided within the campus.
- No stipend will be provided for the internship.
- For outstation candidates, To and Fro train ticket fare will be reimbursed (as per SERB GOI norms).
- Certificate will be provided on successful completion of this Training and Internship (Submission of work report).

**Details of the Project:**

The need for tribological study on artificial hip transplantation has been increased drastically for the past two years due to the COVID-19 effect. Postoperative COVID-19 contamination is related with advanced rates of cardiopulmonary problems, thromboembolic disease, renal injury infections in patients. The proposed internship is to study the complex motion of hip implants and the effect of functional parameters. Using FEA tool, the wear in implants will be studied and the effects of geometry, loading or lateral head displacement will be examined. The stress and strain studies will be carried out and the tribological effect with the bone surface will be computed for the implant.



### Dates of the Internship:

Last Date for application: **25<sup>th</sup> May 2023**

List of selected students shall be intimated through mail on or before **29<sup>th</sup> May 2023**.

Reporting date for the selected students: **05<sup>th</sup> June 2023**.

Internship Duration: **June-July 2023**.

### Contact Person:

**Dr. Ravivarman R,**

Assistant Professor,

Department of Mechanical Engineering,

National Institute of Technology Agartala,  
West Tripura, India-799046.

Email: [ravivarman@nita.ac.in](mailto:ravivarman@nita.ac.in)

Phone: +91-7598875756

### How to Reach NIT Agartala

**Reaching by Air:** Agartala is connected very well by means of air. Regular flights are available from Delhi, Mumbai, Chennai, Bangalore, Kolkata etc. After reaching the airport, one can book car/auto services (Distance: 30km).

**Reaching by Train:** The nearest station to NIT Agartala is Jirania, just 3km away. However, most train stoppages are at Agartala station situated at Badharghat (Distance: 21km). After reaching the station, one can book car/auto services.

**Reaching By Bus:** Buses are available daily from Guwahati to Agartala. One must get down at Ranir Bazar. From Ranir Bazar, regular auto services are available to NIT Agartala.

**Weather:** Agartala experiences a rainy season in June – July. The temperature will be 30-35°C.

**Places to visit:** Tripura is a state with a collection of hills and places of worship, including its characteristic jungles.



Unakoti . Tripura





**SERB - VRITIKA Program - Accelerate Vigyan Scheme**  
**Training and Skill Research Internship on**

***Bio Tribological study on Hip Implants for Several Gait Activities***

**June – July 2023**

**Organized by Department of Mechanical Engineering,  
National Institute of Technology Agartala, Tripura**

**Annexure-I**

**Application Form**

Attach your  
passport-size  
photograph here

1.	Full Name of the Applicant (As mentioned on your certificates)	
2.	Father's/ Mother's/ Guardian's name	
3.	Date of birth (DD/MM/YY)	
4.	Gender	Male/Female
5.	Nationality	
6.	ID Card Number (Attach Scanned Copy)	
7.	Correspondence Address	
8.	Permanent Address	
9.	Contact Number	
10.	Email Address	

11.	P.G./Ph. D Degree Pursuing	M.Tech./M.E./Ph. D/Others_____
12.	Specialization Subject in P.G	
13.	Name of the Institution/University/College	
14.	Institution/University/College Address	
15.	Name of the Department/School	
16.	Percentage/CGPA in P.G.: (Attach self-attested photocopy of all available mark sheets)	Semester 1: Semester 2: Semester 3: Semester 4:
17.	U.G.	B.Sc. / B.Tech. / B.E. / Others
18.	Specialization Subject in U.G	
19.	Name of the Institution/University/College	
20.	Name of the Department/School	
21.	Percentage/CGPA in U.G. (Attach self-attested photocopy of mark sheets and certificates)	
22.	Percentage/CGPA of marks in 12 <sup>th</sup> STD (Attach self-attested photocopy of mark sheets and certificates)	
23.	Percentage/CGPA of marks in 10 <sup>th</sup> STD	
24.	Name and phone number of the emergency contact person	
25.	Within 2000 characters write: (i) Why are you interested in this Training and Skill Internship? (ii) How will it be beneficial to you? (Attach separate page if required)	

**Declaration:** I agree that all the information mentioned is correct and I shall be liable for the same.

Place:

Date:

Signature of Applicant



## Annexure-II

### **Endorsement cum No Objection Certificate from the Head of the Department**

(To be submitted on University/Institute/College Letterhead)

#### **This is to certify that:**

1. Mr. / Ms. / Mrs. \_\_\_\_\_, is a bonafide student of our University / Institute / College and will assume full responsibility for actively participating in the Training and Skill Internship on “**Bio Tribological study on Hip Implants for Several Gait Activities**” sponsored by SERB under the Accelerate Vigyan Scheme, scheduled between May to July 2023.
2. The Applicant is a Full-time / part-time student of our University/ Institute/ College and enrolled in M.Tech/M.E./Ph.D. Programme in ..... Department.
3. The candidate has secured \_\_\_\_\_ % / CGPA / CPI till date (if applicable).
4. The University/ Institute/ College also endorses the conduct of the applicant to be of the highest order and bears a good moral character.
5. The University/ Institute/ College has “No-Objection” for the candidate’s participation during the above period.
6. If selected for participation, the candidate shall be duly permitted to attend the Training and Skill Internship in physical mode. The University/ Institute/ College may provide the necessary facilitation for this purpose.

Date:

Place:

Signature and Seal with Name

(Head of the Department)



**SERB - VRITIKA Program - Accelerate Vigyan Scheme  
Training and Skill Internship on**

**Bio Tribological study on Hip Implants for Several Gait Activities**

May – July 2023

Organized Department of Mechanical Engineering, National Institute of Technology Agartala,  
Tripura

**Annexure-III**

(Undertaking from the Student Applicant)

1. I hereby provide my consent to participate in the Training and Skill Internship titled “**Bio Tribological study on Hip Implants for Several Gait Activities**” organized by the Department of Mechanical Engineering, National Institute of Technology Agartala, Tripura.
2. Vouch for participating in this Training and Skill Internship wholeheartedly and sincerely attend all the hands-on sessions and presentations with utmost dedication.
3. I shall also be responsible and attentive to involve myself during the discussion/interaction session.
4. I am aware that it is mandatory to attend all the hands-on sessions and seminars/talks compulsorily qualify for the course assessment and submit a report in order to successfully avail the certification.
5. I understand the materials supplied during this Training and Skill Internship are only for educational/academic purposes.
6. Uploading/hosting/sharing any content on any platform shall be unlawful on the grounds of Intellectual Property Rights.
7. Any Proxy participation in the Training and Skill Internship shall invite immediate cancellation of his/her candidature, which shall be reported to the parent institution.
8. I understand that to ensure my physical presence and any support in this regard is to be sought from the applicant’s parent Institution. The organizing institute shall not be liable for the same.
9. I shall strictly follow the COVID guidelines issued by the Government of India and the State of Tripura.
10. I agree to abide by any other terms and conditions of the organizing Institute and SERB.

**Name of the Applicant:** .....

**Date of Birth:** .....

**Programme (M Tech/M.E./Ph. D):** .....

**Institution/College/University:** .....

**Date:**

**Place:**

**Signature of the applicant**