

# Fully Funded Doctoral Course Position in Computational Biomechanics & Biomimetics

## About Position:

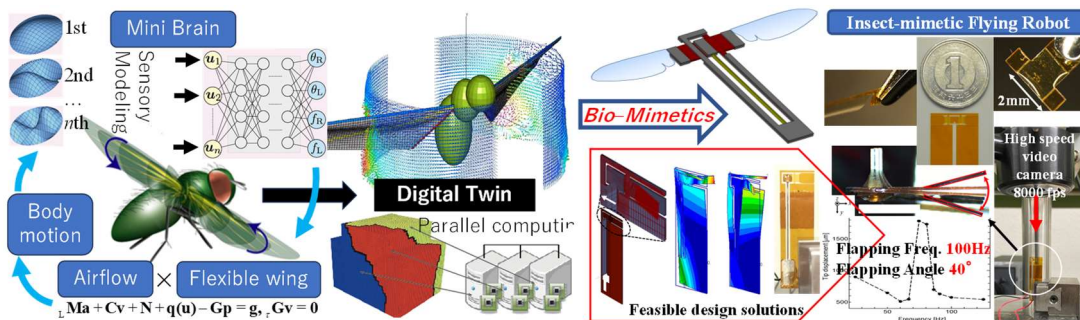
Fully funded doctoral course position is available for Computational Multi-Physics Coupled Analysis Laboratory from iART Program (<https://www.iizuka.kyutech.ac.jp/iart>) of Kyushu Institute of Technology, Japan. One successful candidate will carry out his research in the area of biomechanics and biomimetics using computational mechanics.

## Research Interest:

The advantages of flight over other forms of locomotion lead to the dispersal of flying insects all over the world. They can perform extreme aerial maneuvers with robustness using their flapping wings. Their flight abilities have become increasingly refined through a long period of natural selection. It is expected from emulating nature's time-tested forms, functions, and strategies in insects with understanding their underlying principles and mechanisms that we find sustainable solutions, which are engineering alternatives to nature's solutions, and we solve practical problems. Since this concept is multidisciplinary, the computational approach or Computational Biomechanics & Biomimetics is essential.

The research topics include, but not limited to:

- Numerical model, algorithm, and method for coupled airflow, flexible wings, body motion, and control in flying insects
- Mechanism of maneuverability in flying insects
- Design and fabrication of insect-mimetic robots



Further information is available on

- Our Lab HP: <http://www-solid.mse.kyutech.ac.jp/en/>
- Google scholar: [https://scholar.google.jp/citations?user=\\_dQZFj4AAAAJ&hl=ja&oi=ao](https://scholar.google.jp/citations?user=_dQZFj4AAAAJ&hl=ja&oi=ao)
- Our mini-symposium in conference: <https://www.wccm2022.org/minisymposia0405.html>  
<https://cfc2023.iacm.info/event/area/d5a7b66a-0807-11ed-b993-000c29ddfc0c>
- Special issue in journal: [https://www.mdpi.com/journal/biomimetics/special\\_issues/M9110WVU2D](https://www.mdpi.com/journal/biomimetics/special_issues/M9110WVU2D)

**Funding:**

- ✓ 145,000 Yen/month
- ✓ Free for admission and tuition fees
- ✓ Round-trip air ticket to Japan

**Qualification:**

- ✓ Earned a master's degree in Mechanical Engineering, Applied Mathematics, Physics, or a closely related field
- ✓ Graduate and be able to enter Kyushu Institute of Technology in October 2025
- ✓ The average GPA at Graduate School must be at least 2.4 on a 3.0 scale  
Or grades are in the top 30% of a grade rank of the class (department)
- ✓ English proficiency test equal CEFR B2 level up  
Or Japanese (JLPT) N2 level up

**Application:**

The interested candidate should email Prof. D. Ishihara at [ishihara.daisuke399@mail.kyutech.jp](mailto:ishihara.daisuke399@mail.kyutech.jp) with the subject "Doctoral Course Application", including a brief cover letter, your resume or CV, transcripts, and English (CEFR B2 is required) or Japanese ability. Online interview will be given to the selected candidate who submitted the application.

**Due Date:** 30th November, 2024

The review of applications will commence immediately and will continue until the position is filled.

General information for campus life can be available from our university web page:  
<https://www.kyutech.ac.jp/english/campuslife/>

We are looking forward to receiving your application!

Daisuke Ishihara, Ph.D., Professor  
Department of Intelligent and Control Systems  
Graduate School of Computer Science and System Engineering  
Kyushu Institute of Technology  
680-4 Kawazu, Iizuka, Fukuoka 820-8502 Japan  
Phone: +81(948)29-7768  
Email: [ishihara.daisuke399@mail.kyutech.jp](mailto:ishihara.daisuke399@mail.kyutech.jp)