

Where: Tokyo Institute of Technology  
Ookayama Campus  
Ishikawadai Building 3  
Room 304 (3F)

When: 2023 August 29 (Tuesday)  
10:00 – 19:00

Language: English

Contact: Assoc. Prof.  
Yoshihiro MIZUTANI  
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Please register until **August 14th** using the  
following link or QR Code\*:

<https://lnk.tu-bs.de/N1EFM7>

\* The maximum number of  
participants is limited to 40



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# Open Seminar

## Recent Research in Non-Destructive Testing of Composites and Pressure Vessels for Hydrogen Storage

# Program

## Introduction

- 10:00 – 10:15 Welcome  
(Prof. Mizutani, TokyoTech)
- 10:15 – 10:30 Introduction of TUBS and DLR  
(Prof. Hühne, TUBS/DLR)

## Session 1: Structural Health Monitoring of Composites

- 10:30 – 11:00 Multifunctional Composites  
(Prof. A.Todoroki, Tokyo Tech)
- 11:00 – 11:30 Structural Health Monitoring of  
Fibre Metal Laminates using  
Guided Ultrasonic Waves  
(M.Sc. T.Roloff, TUBS)
- 11:30 – 11:45 Coffee Break

## Session 2: Testing of Composite Hydrogen Pressure Vessels

- 12:00 – 12:30 Design and Maintenance of  
Hydrogen Pressure Vessels  
(Prof. Y.Mizutani, Tokyo Tech)
- 12:30 – 13:00 Application of FBG Sensors for  
Microcrack Analysis in CFRP under  
Cryogenic Condition  
(M.Sc. J.Koord, DLR)

**13:00 – 14:00 Lunch Break**

# Program

## Session 3: Crack Arrest Features in Bondlines

- 14:00 – 14:30 Adhesive bonding and crack arrest  
features  
(Dr.Eng. T.Yasuoka, JAXA)
- 14:30 – 15:00 Crack Arrest and Multifunctional  
Bondlines  
(M.Sc. J. Steinmetz, TUBS)
- 15:00 – 15:15 Coffee Break

## Session 4: Characteristics of Polymers

- 15:15 – 15:45 Functionally Graded Polymers and  
their Application  
(Prof. C.Sato, Tokyo Tech)
- 15:45 – 16:15 Polyetherimide based Film Sensors  
for the Curing Process of Fiber  
Reinforced Polymers  
(M.Sc. A. Kyriazis, TUBS)
- 16:15 – 17:00 Discussion
- 17:00 – 19:00 Reception & Networking**