

SPEAKERS' CONTACT & PRESENTATION DETAIL FORM

Composite Technology Seminar & Expert Forum

Republic Polytechnic / GMI Aero / Melchers, 10 February 2020

Full Name / Title (e.g. Mr, Miss, Mrs, Ms, Dr, Prof)	Mr Loh Chi Jie	Speaker Photo
Company / University / Center / Department	Siege Advanced Manufacturing	
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TITLE OF PRESENTATION (15 words or less)

Additive Manufacturing and Rapid Prototyping of Composite Structures

PRESENTATION ABSTRACT (200 words or less)

- **Intro to Commonly Used Composite Materials for Additive Manufacturing and Rapid Prototyping**
 - **Onyx**
 - **Carbon Fiber**
 - **Kelvar**
 - **Fiberglass**
- **Challenges of Using Composite Materials for Additive Manufacturing**
 - **Composites needs to be printed continuously**
 - **Powder based filaments are not considered composites**
- **Manufacturing of Composite Materials using Direct Additive Manufacturing Methods**
 - **Continuous Fiber Printing**
- **Manufacturing of Composite Materials using Additive Manufacturing Aided Methods**
 - **3D Printed Mold**
 - **3D Printed Scaffold**

SPEAKER BRIEF BIOGRAPHY (120 words or less)

- Graduated from NUS Mechanical Engineering in 2017
- Founded a 3D printing company in 2017 while I was an undergraduate in NUS – grew from 1 printer to over 50
- Initiated a research project on computer vision
- Was a guest speaker at several institutions including NUS and NYP on the topic of 3D printing and 3D design
- Taught 3D design courses at several MOE schools

