

Organizers



Tokyo Tech



Co-organizer



1st French-Japanese Workshop on Additive Manufacturing

May 10 – 12 and June 1st, 2021 (4 days)

In France : 8:15 am to 12:30 pm, In Japan : 3:15 pm to 7:30 pm

Organized
on line

Organizers

Embassy of France in Japan
Tokyo Institute of Technology
Société franco-japonaise pour les techniques industrielles (SFJTI)



Service pour la
Science et la
Technologie



Tokyo Tech



Co-organizer
















National Institute for Materials Science (NIMS)



Organizing Committee Members

Dr. Sandrine Maximilien, Service for Science and Technology, Embassy of France to Japan
Dr. Laetitia Zaleski, Service for Science and Technology, Embassy of France to Japan
Dr. Kazuaki Inaba, Tokyo Institute of Technology
Dr. Chikyow Toyohiro, SFJTI
Dr. Watanabe Makoto, NIMS

Program Overview

Day 1 – Monday, May 10 th	Day 2 – Tuesday, May 11 th	Day 3 – Wednesday, May 12 th	group discussions	Day 4 – Thursday, June 1 st
 	 	 		 
08:30 15:30  Opening Greetings 08:45 15:45  Plenary session Additive Manufacturing in France and Japan	08:15 15:15  Parallel sessions <ul style="list-style-type: none"> • Metals #1 • Ceramics 	08:15 15:15  Parallel sessions <ul style="list-style-type: none"> • Composites & Biobased materials • Metals #2 		08:30 15:30  Plenary session Intellectual property in France and Japan
				09:20 16:20  Plenary session Restitution of the thematic sessions (Part I)
10:20 17:20 Break / Networking	10:15 17:15 Break / Networking	10:15 17:15 Break / Networking	<i>During the time between day3 and day 4, the co-chairs of every sessions will organize a discussion about the future of the French-Japanese collaboration on additive manufacturing.</i>	10:05 17:05 Break / Networking
10:30 17:30  Plenary session Future and perspectives on additive manufacturing	10:30 17:30  Parallel sessions <ul style="list-style-type: none"> • Bioprinting • Polymers & Gels • AM & Construction 	10:30 17:30  Parallel sessions <ul style="list-style-type: none"> • Around additive manufacturing • Modeling & Monitoring 	<i>Every participant is welcome to take part in the disussion.</i>	10:20 17:20  Plenary session Restitution of the thematic sessions (Part II)
12:00 19:00 Networking	12:30 19:30 Networking	12:30 19:30 Networking		11:00 18:00  Plenary session Final Wrap-Up and announcements
				11:30 18:30 Networking

Summary

Program Overview	2
Day 1 – May 10 th	4
• Opening Greetings	4
• Additive Manufacturing in France and Japan	5
• Future and perspectives on additive manufacturing	6
Day 2 – May 11 th	7
• Parallel session – Metals #1	7
• Parallel session – Ceramics	8
• Parallel session – Bioprinting	9
• Parallel session – Polymers & Gels	10
• Parallel session – AM & Construction	11
Day 3 – May 12 th	12
• Parallel session – Composites & Biobased materials	12
• Parallel session – Metals #2	13
• Parallel session – Around additive manufacturing	14
• Parallel session – Modeling & Monitoring	15
Day 4 – June 1 st	16
• Intellectual property in France and Japan	16
• Restitution of the thematic sessions (Part I)	17
• Restitution of the thematic sessions (Part II)	18
• Final Wrap-Up and announcement	19

🕒 🇫🇷 08:30 – 08:45 🇯🇵 15:30 – 15:45

Opening Greetings



Plenary session

Schedule:

- Languages : French and Japanese with simultaneous translation

🇫🇷 08:30 🇯🇵 15:30



[Kazuya Masu](#)

Tokyo Institute of Technology President

🇫🇷 08:35 🇯🇵 15:35



[SEM Philippe Setton](#)

Ambassador of France to Japan

🇫🇷 08:40 🇯🇵 15:40



[Sandrine Maximilien](#)

Service for science and Technology, Embassy of France in Japan

🕒 08:45 – 10:20 🇯🇵 15:45 – 17:20

Additive Manufacturing in France and Japan



Plenary session

- Languages : French and Japanese with simultaneous translation

Schedule:

🇫🇷 08:45 🇯🇵 15:45



Akihiko Okada

Researcher, Technology Strategy Center (TSC) New Energy and Industrial Technology Development Organization (NEDO)

Additive manufacturing in Japan : State of the art and perspectives

🇫🇷 09:05 🇯🇵 16:05



Alain Bernard

Scientific and Pedagogical Adviser at the French Ministry of Higher Education, Research and Innovation, Professor at Centrale Nantes, vice-President of France Additive

Challenges and future trends for research and innovation in Additive Manufacturing

🇫🇷 09:25 🇯🇵 16:25



Yoshinao Mishima

President of Japan Agency for Medical Research and Development, Cross-ministerial Strategic Innovation Promotion Program (SIP) Program Director, Former president of Tokyo Institute of Technology, Emeritus professor Tokyo Institute of Technology

Revolution of materials development by Materials Integration system

🇫🇷 09:45 🇯🇵 16:45



Junichi Sone

Principal fellow CRDS, NIMS Executive vice President Emeritus CRDS, Japan Science & Technology Agency (JST)

How will "manufacturing" change under the SDGs and the Society 5.0 Revolution?

🇫🇷 10:05 🇯🇵 17:05



Adrien Lapeyre

3D Printing Global Market Manager at Arkema

Expanding Industrial Application Fields for Additive Manufacturing with Advanced Materials and Solutions

🇫🇷 10:30 – 12:00 🇯🇵 17:30 – 19:00

Future and perspectives on additive manufacturing



Plenary session

• Languages : French and Japanese with simultaneous translation

Schedule:

🇫🇷 10:30 🇯🇵 17:30



Jean-Yves Marzin

Director of the Institute for Engineering and Systems Sciences CNRS - National Centre for Scientific Research

🇫🇷 10:45 🇯🇵 17:45



Takashi Sato

JEOL Electron Beam 3D

Electron Beam 3D Additive Manufacturing Technology and quality inspection

🇫🇷 11:00 🇯🇵 18:00



Thibaud Fleury

Industrial Partnerships Manager, New materials and processes Division, CEA-Liten CEA Tech CEA

CEA Additive manufacturing activity and collaboration model

🇫🇷 11:15 🇯🇵 18:15



Sébastien Cardet

Dassault Systèmes

Dassault Systemes Marketplace – Connect users to maker

🇫🇷 11:30 🇯🇵 18:30



Jean-Claude André

CNRS, University of Lorraine, Nancy, France



And **Frédéric Demoly**

CNRS, University of Bourgogne Franche-Comté, UTBM, Belfort, France

4D Printing: towards a revolutionary paradigm tectonics

🇫🇷 11:45 🇯🇵 18:45



Takafumi Yamaaki

Application Engineer Nihon Michelin Tire Co, Ltd.

Gunma AM metal platform

🇫🇷 08:15 – 10:15 🇯🇵 15:15 – 17:15

Metals #1



Parallel session

Co-Chairs:

• Language : English

Eric Charkaluk, Senior Research Scientist at CNRS and Associate Professor at Ecole Polytechnique
Makoto Watanabe, Research and Services Division of Materials Data and Integrated System, NIMS

Schedule:

🇫🇷 08:15 🇯🇵 15:15 Introduction of the session by the co-chairs

🇫🇷 08:20 🇯🇵 15:20

**Anne Thenaisie**

Managing Director for Safran Additive Manufacturing

Metal additive manufacturing : finding the way to large scale application

🇫🇷 08:35 🇯🇵 15:35

**Hiroyuki Yasuda**

Osaka University

Additive manufacturing of titanium aluminides for jet engine applications

🇫🇷 08:50 🇯🇵 15:50

**Eric Charkaluk**

CNRS Senior Research Scientist at CNRS and Associate Professor at Ecole Polytechnique

Interest of microstructural studies in AM

🇫🇷 09:05 🇯🇵 16:05

**Shingo Hirose**

AIST

How will "manufacturing" change under the SDGs and the Society 5.0 Revolution?

🇫🇷 09:20 🇯🇵 16:20

**Eric Maire**

MatelS Laboratory Professor and Director

Direct and sintered assisted printing and in situ compression in X Ray tomography

🇫🇷 09:35 🇯🇵 16:35

Japanese Speaker To be Announced

🇫🇷 09:50 🇯🇵 16:50 Q&A

🇫🇷 10:10 🇯🇵 17:10 Conclusion of the session by co-chairs

🕒 08:15 – 10:15 🇯🇵 15:15 – 17:15

Ceramics



Parallel session

Co-Chairs:

• Language : English

Fabrice Rossignol, IRCER Limoges CNRS Senior researcher / Deputy Director Institute of Research for Ceramics

Soshu Kiriwara, Professor of Joining and Welding Research Institute (JWRI), Osaka University

Schedule:

🇫🇷 08:15 🇯🇵 15:15 Introduction of the session by the co-chairs

🇫🇷 08:20 🇯🇵 15:20



Thierry Chartier

Senior Researcher at Institute of Research for Ceramic, CNRS / University of Limoges CNRS

Additive manufacturing to build 3D functional ceramic and ceramic/metal parts : focus on stereolithography

🇫🇷 08:35 🇯🇵 15:35



Soshu Kiriwara

Professor of Joining and Welding Research Institute (JWRI), Osaka University

🇫🇷 08:50 🇯🇵 15:50



Yohann Thimont

Paul Sabatier University CIRIMAT Laboratory, CNRS-Saint Gobain-NIMS, CRISMAT, UMR 6508 CNRS-ENSICAEN

Progress for higher manganese silicide thermoelectric legs elaboration by reactive additive manufacturing

🇫🇷 09:05 🇯🇵 16:05



Teiichi Kimura

Japan Fine Ceramic Center (JFCC)

Development of laser sintering technique for ceramics manufacturing

🇫🇷 09:20 🇯🇵 16:20



Helen Reveron

INSA Lyon Researcher



Laurent Gremillard

INSA Lyon, Research Director

Dense-3D printed ceramics: typical defects and their effects on mechanical properties

🇫🇷 09:35 🇯🇵 16:35



Maxence Bourjol

APAC sales manager at 3D Ceram/Sinto

Ceramics additive manufacturing, a mature technology adapted to mass production

🇫🇷 09:50 🇯🇵 16:50 Q&A

🇫🇷 10:10 🇯🇵 17:10 Conclusion of the session by co-chairs

🕒 10:30 – 12:30 🇯🇵 17:30 – 19:30

Bioprinting



Parallel session

Co-Chairs:

• Language : English

Olivia Kérourédan, Associate Professor - Bordeaux University
Japanese co-chair TBA

Schedule:

🇫🇷 10:30 🇯🇵 17:30 Introduction of the session by the co-chairs

🇫🇷 10:35 🇯🇵 17:35



Toshinori Fujie

Tokyo Institute of Technology Associate Professor

Printed Biomaterials for Healthcare and Medicine

🇫🇷 10:50 🇯🇵 17:50



Olivia Kérourédan

Associate Professor - Bordeaux University

In situ prevascularization designed by Laser-Assisted Bioprinting : Effect on bone regeneration

🇫🇷 11:05 🇯🇵 18:05

Japanese Speaker To be Announced

🇫🇷 11:20 🇯🇵 18:20



Cédric Delattre

Institut Pascal and Member of Institut Universitaire de France Associate Professor



Shinji Sakai

Osaka University Professor

Polysaccharides scaffold using bioprinting technology (PHC SAKURA 2019 : SPHERE project)

🇫🇷 11:35 🇯🇵 18:35



Joséphine Galipon

Keio University Institute for Advances Biosciences Project Research Associate

Bioprinting for biomimetics: smart materials and structured surfaces

🇫🇷 11:50 🇯🇵 18:50



Edwin-Joffrey Courtial

Research engineer at CNRS, Co-Founder and CTO at 3Deus Dynamics

🇫🇷 12:05 🇯🇵 19:05 Q&A

🇫🇷 12:25 🇯🇵 19:25 Conclusion of the session by co-chairs

🕒 10:30 – 12:30 🇯🇵 17:30 – 19:30

Polymers & Gels



Parallel session

Co-Chairs:

• Language : English

Shinjiro Umezu, Waseda University Associate Professor
 French co-chair TBA

Schedule:

🇫🇷 10:30 🇯🇵 17:30 Introduction of the session by the co-chairs

🇫🇷 10:35 🇯🇵 17:35



Hidemitsu Furukawa
 Yamagata University Professor

3D Printing of various gels including foods and soft robots

🇫🇷 10:50 🇯🇵 17:50



Arnaud Spangenberg
 Université Haute Alsace

Challenges for 3D laser micro- and nanoprinting based on multi-photon polymerization

🇫🇷 11:05 🇯🇵 18:05



Shinjiro Umezu
 Waseda University Associate Professor

🇫🇷 11:20 🇯🇵 18:20



Thibaud Fleury
 CEA R&D positioning in polymer additive manufacturing & CEA-HP 3D Print Hub

CEA Additive manufacturing activity and collaboration model

🇫🇷 11:35 🇯🇵 18:35



Fujio Tsumori
 Kyushu University Professor

3D Printing for Soft Actuators Using Magnetic Particles

🇫🇷 11:50 🇯🇵 18:50



Marcos Batistella
 IMT Mines Ales Researcher

Selective laser sintering of polyamide 12: case studies on the influence of additives on polymer sintering and fire behavior of printed parts

🇫🇷 12:05 🇯🇵 19:05 Q&A

🇫🇷 12:25 🇯🇵 19:25 Conclusion of the session by co-chairs

🕒 10:30 – 12:30 🇯🇵 17:30 – 19:30

AM & Construction



Parallel session

Co-Chairs:

• Language : English

Tetsuya Ishida, The University of Tokyo

French co-chair TBA

Schedule:

🇫🇷 10:30 🇯🇵 17:30 Introduction of the session by the co-chairs

🇫🇷 10:35 🇯🇵 17:35



Romain Duballet

XtreeE co-founder

Large scale 3D concrete printing for construction : benefits and limits of disruptive technology

🇫🇷 10:50 🇯🇵 17:50



Tetsuya Ishida

The University of Tokyo

Research activities on 3D printing technology of cementitious materials in Japan

🇫🇷 11:05 🇯🇵 18:05



Arnaud Perrot

Université Bretagne Sud Associate Professor

Scientific challenges of 3D process for building materials

🇫🇷 11:20 🇯🇵 18:20



Minoru Kunieda

Gifu University Professor

Introduction of on-site 3D printer with material jetting technique

🇫🇷 11:35 🇯🇵 18:35



Jean-François Caron

ENPC professor

🇫🇷 11:50 🇯🇵 18:50



Koji Kinomura

Taisei Corporation

Prestressed pedestrian bridge project based on topology optimization design

🇫🇷 12:05 🇯🇵 19:05 Q&A

🇫🇷 12:25 🇯🇵 19:25 Conclusion of the session by co-chairs

🇫🇷 08:15 – 10:15 🇯🇵 15:15 – 17:15

Composites & Biobased materials



Parallel session

Co-Chairs:

• Language : English

[Antoine le Duigou](#), Associate professor at University of South Brittany, Lorient[Masahito Ueda](#), Associate Professor at Nihon University

Schedule:

🇫🇷 08:15 🇯🇵 15:15 Introduction of the session by the co-chairs

🇫🇷 08:20 🇯🇵 15:20

[Todoroki Akira](#)

Tokyo Institute of Technology Professor

Research on 3D Printed Composites in TokyoTech

🇫🇷 08:35 🇯🇵 15:35

[Sofiane Guessasma](#)

INRAe Nantes Researcher

Material discontinuities in additive manufacturing technologies: effect on mechanical performance

🇫🇷 08:50 🇯🇵 15:50

[Shu Minakuchi](#)

University of Tokyo, JAXA Center for Composites (TJCC) Associate Professor

Smart manufacturing/processing science at TJCC

🇫🇷 09:05 🇯🇵 16:05

[Cédric Airaud](#)

Arkema 3D Printing Application and Business Developer

Arkema sustainable solutions for the serial production of durable end-parts using Powder Bed Fusion.

🇫🇷 09:20 🇯🇵 16:20

[Masahito Ueda](#)

Nihon University Associate Professor

🇫🇷 09:35 🇯🇵 16:35

[Mael Farinas](#)

Composite Manufacturing Solutions, Coriolis Composite Sales Engineer

Automated fibre placement for thermoplastics materials and innovative preforms

🇫🇷 09:50 🇯🇵 16:50 Q&A

🇫🇷 10:10 🇯🇵 17:10 Conclusion of the session by co-chairs

🇫🇷 08:15 – 10:15 🇯🇵 15:15 – 17:15

Metals #2



Parallel session

Co-Chairs:

• Language : English

Akihiro Chiba, IMR, Tohoku University - Professor**Damien Fabregue**, INSA Lyon Professor, Vice-President for International Affairs, Deputy director of the IIA ElyT Global with Tohoku University

Schedule:

🇫🇷 08:15 🇯🇵 15:15 Introduction of the session by the co-chairs

🇫🇷 08:20 🇯🇵 15:20

**Kenta Aoyagi**

Tohoku University

Development of Auto-Process Mapping System for Powder Bed Fusion Additive Manufacturing

🇫🇷 08:35 🇯🇵 15:35

**Patrice Peyre**

PIMM Lab (Paris) CNRS Research Director

🇫🇷 08:50 🇯🇵 15:50

**Yoshiki Hashizume**

Toyo Aluminium

**Guilhem Roux**

CEA

CEA R&D positioning in metal additive manufacturing, and example of collaboration with Toyo Aluminium

🇫🇷 09:05 🇯🇵 16:05

**Axel Dubois**

SLS France

How to certify a patient specific orthopedic and 3D printed implant in a context of mass production under economic constraints and new European regulation

🇫🇷 09:20 🇯🇵 16:20

**Makoto Watanabe**

NIMS

🇫🇷 09:35 🇯🇵 16:35

**Stephane Gorsse**

ICMCB Bordeaux Professor

Additive manufacturing of high entropy alloys

🇫🇷 09:50 🇯🇵 16:50 Q&A

🇫🇷 10:10 🇯🇵 17:10 Conclusion of the session by co-chairs

🇫🇷 10:30 – 12:30 🇯🇵 17:30 – 19:30

Around additive manufacturing



Parallel session

Co-Chairs:

• Language : English

Jacques Babaud, Nihon Michelin Tire Co, Ltd. - AM Business Manager

Toyohiro Chikyow, National Institute for Materials Science (NIMS)

Schedule:

🇫🇷 10:30 🇯🇵 17:30 Introduction of the session by the co-chairs

🇫🇷 10:35 🇯🇵 17:35



Fabien Guillemot

Poietis (4D Bioprinting) CEO

Presentation of the new next-generation bioprinting (NGB) platform

🇫🇷 10:50 🇯🇵 17:50



Naoyuki Nomura

Tohoku University, Japan Society of Powder and Powder Metallurgy Professor

Challenges of powder fabrication for additive manufacturing

🇫🇷 11:05 🇯🇵 18:05



Laurent Prost

Air Liquide Group Manager, Material Science, Innovation Campus Tokyo

🇫🇷 11:20 🇯🇵 18:20



Yoko Hirono

DMG MORI CO., LTD. General Manager, AM Development Center

Applications for Directed Energy Deposition

🇫🇷 11:35 🇯🇵 18:35



Jacques Babaud

Nihon Michelin Tire Co, Ltd. AM Business Manager

Automation, Quality and HSE for AM by Michelin

🇫🇷 11:50 🇯🇵 18:50

Japanese speaker TBA

🇫🇷 12:05 🇯🇵 19:05 Q&A

🇫🇷 12:25 🇯🇵 19:25 Conclusion of the session by co-chairs

🕒 10:30 – 12:30 🇯🇵 17:30 – 19:30

Modeling & Monitoring



Parallel session

Co-Chairs:

• Language : English

Alain Bernard, Scientific and Pedagogical Adviser at the French Ministry of Higher Education, Research and Innovation, Full Professor at Centrale Nantes, vice-President of France Additive

Kentaro Shinoda, Senior Researcher at the National Institute of Advanced Industrial Science and Technology (AIST)

Schedule:

🇫🇷 10:30 🇯🇵 17:30 Introduction of the session by the co-chairs

🇫🇷 10:35 🇯🇵 17:35

**Koichi Ohtomi**

Meiji University Visiting researcher

🇫🇷 10:50 🇯🇵 17:50

**Christophe Tournier**

ENS Paris-Saclay Professor

🇫🇷 11:05 🇯🇵 18:05

**Kentaro Shinoda**

National Institute of Advanced Industrial Science and Technology (AIST) Senior Researcher

Functional Design of Ceramic Coatings and Additive Manufacturing

🇫🇷 11:20 🇯🇵 18:20

**Céline Deloffre**

CEA-List, Program Manager, Additive Manufacturing

Additive manufacturing monitoring: a deluge of data to treat

🇫🇷 11:35 🇯🇵 18:35

**Kaita Ito**

NIMS (National Institute for Materials Science) Senior researcher

🇫🇷 11:50 🇯🇵 18:50

**Abhijit Chatterjee**

Dassault Systèmes Industry Process Consultant Senior Manager, BIOVIA Global

Converting Materials to Parts through a Digitally Connected Additive Manufacturing Platform

🇫🇷 12:05 🇯🇵 19:05 Q&A

🇫🇷 12:25 🇯🇵 19:25 Conclusion of the session by co-chairs

🕒 🇫🇷 08:30 – 09:20 🇯🇵 15:30 – 16:20

Intellectual property in France and Japan



Plenary session

Co-Chairs:

• Language : English

[Amandine Montredon](#), regional advisor at the national institute for intellectual property

Schedule:

🇫🇷 08:30 🇯🇵 15:30



[Junko Sugimura \(Tentative\)](#)

Japan Patent Attorneys Association President

🇫🇷 8:45 🇯🇵 15:45



[Isabelle Guillaume](#)

INPI (National Institute of Industrial Property) Head of the mechanical division

🇫🇷 09:00 🇯🇵 16:00 Q&A

🕒 09:20 – 10:05 🕒 16:20 – 17:05

Restitution of the thematic sessions (Part I)



Plenary session

• Language : English

Schedule:

- 🇫🇷 09:20 🇯🇵 16:20 Restitution of the [Metals](#) sessions
- 🇫🇷 09:35 🇯🇵 16:35 Restitution of the [Ceramics](#) session
- 🇫🇷 09:45 🇯🇵 16:45 Restitution of the [Bioprinting](#) session
- 🇫🇷 09:55 🇯🇵 16:55 Restitution of the [Polymers & Gels](#) session

🕒 10:20 – 11:00 🕒 17:20 – 18:00

Restitution of the thematic sessions (Part II)



Plenary session

• Language : English

Schedule:

- 🇫🇷 10:20 🇯🇵 17:20 Restitution of the [AM & Construction](#) sessions
- 🇫🇷 10:30 🇯🇵 17:30 Restitution of the [Composite & biobased Materials](#) session
- 🇫🇷 10:40 🇯🇵 17:40 Restitution of the [Around additive Manufacturing](#) session
- 🇫🇷 10:50 🇯🇵 17:50 Restitution of the [Modelling and monitoring](#) session

🕒 🇫🇷 11:00 – 11:30 🇯🇵 18:00 – 18:30

Final Wrap-Up and announcement



Plenary session

• Language : English

Schedule:

🇫🇷 11:00 🇯🇵 18:00



Didier Marty-Dessus

Embassy of France in Japan Counsellor for Science and Technology

Tools for French-Japanese scientific cooperation

🇫🇷 11:10 🇯🇵 18:10

French and Japanese speaker TBA

Final Wrap-Up

🇫🇷 11:25 🇯🇵 18:25



SFJTI – speaker TBA

Final Greetings

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