

## TCT Japan 2023 Show Report

JTB Communication Design, Inc. / TCT Japan

April. 2023

## Contents



# TCT Japan 2023

e **3D PRINT** 

## Highlight

וסק היס

## TCT Japan 2023 Overview



TCT Japan 2023 -The Event for 3D Printing and Additive Manufacturing Intelligence-Date : February 1<sup>st</sup> (Wed.) ~ 3<sup>rd</sup> (Fri.), 2023 Venue : Tokyo Big Sight (East Hall & Online)

Date	Weather	Number of Visitors	Concurrent exhibitions
February 1 <sup>st</sup> (Wed.)	*	8,653	Surface Technology Creates New Business
February 2 <sup>nd</sup> (Thu.)		10,750	Mems sensing & Network system 2023
February 3 <sup>rd</sup> (Fri.)		11,734	Image: Convertering to functional material 2023       Image: Convertering to functional material 2023       Image: Convertering to functional material 2023         Image: Convertering to functional material 2023       Image: Convertering to functional material 2023       Image: Convertering to functional material 2023       Image: Convertering to functional material 2023         Image: Convertering to functional material 2023       Image: Convertering to functional material 2023       Image: Convertering to functional material 2023         Image: Convertering to functional material 2023       Image: Convertering to functional material 2023       Image: Convertering to functional material 2023         Image: Convertering to functional material 2023       Image: Convertering to functional material 2023       Image: Convertering to functional material 2023         Image: Convertering to functional material 2023       Image: Convertering to functional material 2023       Image: Convertering to functional material 2023         Image: Convertering to functional material 2023       Image: Convertering to functional material 2023       Image: Convertering to functional material 2023         Image: Convertering to functional material 2023       Image: Convertering to functional material 2023       Image: Convertering to functional material 2023         Image: Convertering to functional material 2023       Image: Convertering to functional material 2023       Image: Convertering to functional material 2023         Image: Convertering to functional matering to functional material 2023
For 3 days *total numbers of the concurrent	exhibitions	31,137	Energy and Environment Exhibition





95

Number of Booths



135

Number of Participants





\*total numbers of the concurrent exhibitions \*Including participants online **Conferences/Seminars** 

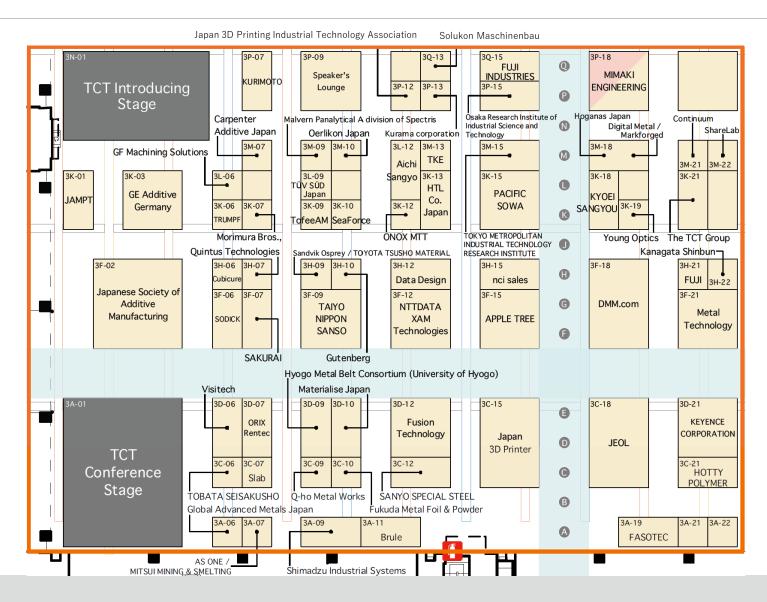


\*Including Introducing Stage

## **Exhibitor List**

Aichi Sangyo	JAMPT	Metal Technology
APPLE TREE	Japan 3D Printer	MIMAKI ENGINEERING
AS ONE	Japan 3D Printing Industrial Technology Association	Morimura Bros.
MITSUI MINING & SMELTING	NAGASE	nci sales
Brule	System Inn Nakagomi	NTTDATA XAM Technologies
Carpenter Additive Japan	Japanese Society of Additive Manufacturing	Oerlikon Japan
Continuum	TACHIBANA ELETECH	ONOX MTT
Cubicure	Kyoei Sangyo	ORIX Rentec
Data Design	J3D	Osaka Research Institute of Industrial Science and Technology
Digital Metal / Markforged	JBM Engineering Corporation.	PACIFIC SOWA
DMM.com	Osaka Yakin Kogyo	Q-ho Metal Works
FASOTEC	NIDEC MACHINE TOOL	Quintus Technologies
FUJI	Mitsubishi Electric Corporation	SAKURAI
UJI INDUSTRIES	Yamaichi Special Steel	Sandvik Osprey / TOYOTA TSUSHO MATERIAL
Fukuda Metal Foil & Powder	Yasojima Proceed	SANYO SPECIAL STEEL
Fusion Technology	INFINI JAPAN	SeaForce
GE Additive Germany	MARUBENI INFORMATION SYSTEMS	ShareLab
GF Machining Solutions	IFUKU SEIMITSU	Shimadzu Industrial systems
Global Advanced Metals Japan	Fuji Koushuha	Slab
Gutenberg	CYFUSE BIOMEDICAL	SODICK
loganas Japan	Takenaka Corporation	Solukon Maschinenbau GmbH
HOTTY POLYMER	Keio University	TAIYO NIPPON SANSO
HTL Co. Japan	YAMAGATA UNIVERSITY	ТКЕ
lyogo Metal Belt Consortium (University of Hyogo)	JEOL	TOBATA SEISAKUSHO
Research Center for Advanced Metallic Materials	JFE Engineering	I ToffeeAM
Hyogo Prefectural Institute of Technology	Kanagata Shinbun	TOKYO METROPOLITAN INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE
Kobe Material Testing Laboratory	KEYENCE CORPORATION	TRUMPF
NISSIN GIKEN	Kurama corporation	TÜV SÜD Japan
Koshuha	KURIMOTO	Visitech
Shinhoukoku Material	KYOEI SANGYOU	Young Optics
Niimi Sangyo	Malvern Panalytical A division of Spectris	
SK Fine	Materialise Japan	🔳 Digital Exhibi

## **Floor Plan**



## Conference Day1 -Market Trends-



#### **Opening remark**

Chief Executive Mr. Duncan Wood

Rapid News Group



Global industry overview : Facts, Figures and Future: Sizing and Forecasting the Global 3D Printing Market CONTEXT Vice President, Global Analysis



AM Market Trend in Japan -2023 is the Year of Steps-

Yano Research Institute Ms. Hiroko Koyama

Mr. Chris Connery



Challenges for the next stage of Additive Manufacturing by Digital Transformation One Additive Inc. Co-Founder / CEO Mr. Daisuke Tsuji



Product development and design using 3D printers YOKOITO INC / NEW CRAFT HOUSE Mr. Hiroshi Mitachi



The need for Industry Transformation in line with market changes and the use of 3 printing PwC Consulting Strategy Consulting (Strategy&)

Mr. Yota Akaji

#### TCT Japan Conference Day 1 [EVALUATION - GLOBAL INDUSTRY OVERVIEW AND BUSINESS CONSIDERATIONS]

Organizer : TCT Japan Cooperation : Japan 3D Printing Industrial Technology Association

#### Panel Discussion

 Facilitator
 ShareLab
 Editorial
 Office

 Panelist
 Gunma
 AM
 Platform
 Mr. I

Gunma AM Platform Mr. Masamichi Ogawa Japan 3D Printing Industrial Technology Association Mr. Koji Mitsumori Hyogo Metal Belt Consortium Dr. AKIHIKO YANAGITANI Japanese Society of Additive Manufacturing Mr. Sawakoshi Toshiyuki

#### e TCT HALL OF FAME MEMBERS SPEECH



## Make a sustainable difference with 3D printing

Materialise NV Founder and CEO Mr. Wilfried Vancraen





## Conference Day2 - Application-

#### **TCT Japan Conference Day 2 [ADOPTION - APPLICATIONS]**

Organizer: TCT Japan Cooperation: Japan 3D Printing Industrial Technology Association



The Role of Additive Manufacturing in Industry 4.0 and Sustainability The Boeing Company





**Development of high-strength Aluminum** alloy by laser-based powder bed fusion Honda R&D Co...Ltd

Mr. Watanabe Hiroyuki



AM is welding itself Mitsubishi Heavy Industries (MHI) Dr. TAKASHI ISHIDE



#### Next-generation metal printed orthodontic device applying digital technology Deutsche Dental & Orthodontic office/ Japanese Association of 3D Printing in Orthodontics

Dr. Shuji Yamaguchi



**GE Additive Sponsored Lecture** Development of Die steel-based powder for mold and metal AM application expansion

GE Additive Mr. Tatsuya Hongo Daido Steel Co., Ltd Mr. Koichiro Inoue

#### The future drawn by Additive Manufacturing -to achieve both economic growth and solving social issues-

Organizer: Japan Society of Additive Manufacturing, TCT Japan Cooperation: METI KANSAI, Kansai DX Implementation Initiative, Kansai-3Dtechnology Project



Greetings

The Kansai Bureau of Economy, Trade and Industry (METI-KANSAI)

Mr. Hiroyoshi KUROKI



**3D Food Printers for Solving Problems** and Co-Creating New Values Yamagata University

Prof. Furukawa Hidemitsu



**Seeds Paper Pavilion** 

Mr. Atsushi Yamazaki

Takenaka Corporation



Building a new industry of Bio 3D Printing Technology. Creation of functional 3D organ /tissue for regenerative medicine. Cyfuse Biomedical K.K. (Japanese corporation)

Ms. AKIEDA Shizuka



#### Possibility of building a regional resource recycling system with 3D printing

Keio University Digital Manufacturing and Design Research Center for Emergent Circularity

Mr. Ryohei Yuasa

## **Conference Day3** -Advanced research and development cases-



#### 3D Printing Architecture: Towards Circularity and Resource Efficiency in Architecture by AM

Singapore University of Technology & Design, Architecture and Sustainable Design, Associate Professor

Prof. Carlos Banon



#### Anisotropic Custom Design by Metal 3D Printing

Osaka University Division of Materials and Manufacturing Science, Graduate School of Engineering Professor

Prof. Hiroyuki Yasuda



### Introduction of "The Japanese Institute of Additive Manufactuing"

Mr. Maekawa Atushi



#### Development of functional transparent silica glass with various shape using 3D laser fabrication method Global Innovation Center KYUSHU UNIVERSITY

Prof. SHIGERU FUJINO



#### **Frontiers in Topology Optimization**

The University of Tokyo Graduate School of Engineering, Department of Strategic Studies, Institute of Engineering Innovation and Department of Mechanical Engineering Associate Professor

Prof. Takayuki Yamada

#### TCT Japan Conference Day 3 [OPTIMIZATION - BREAKTHROUGHS AND FUTURE OPPORTUNITIES]

Organizer: TCT Japan

Cooperation : Japan 3D Printing Industrial Technology Association



#### Current Status and Future Prospects of Powder Bed Fusion Bonded Metal Fabrication Technology Using Electron Beam

Tohoku University Institute for Materials Research Prof. Chiba AKIHKO



A Practical Guide to 3D Printing Japan 3D Printing Industrial Technology Association Researcher

Mr. Kiyoshi Yamaguchi



## 3D Printing Technical and Business Trend in Europe and US

Japan 3D Printing Industrial Technology Association

Mr. Hideaki Oba



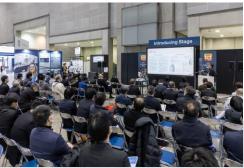
#### Why is it necessary to form a network with digital manufacturing technology at its core in order to solve recent social issues?

Yamagata University Open Innovation Platform General Creative Manager, Professor of Industry Relations Dr. Sakai Shinri

## **TCT Introducing Stage**

2/1	11:20-11:50	AS ONE / MITSUI MINING & SMELTING	High-quality ceramic 3D printing technology and the entrustment service
	13:00-14:00	Carpenter Additive Japan	Carpenter powders for rapidly growing AM applications
	14:40-15:10	Japan 3D Printer / Markforged JAPAN	Introducing Markforged Carbon Fiber 3D Printing AM solutions
	15:45-16:45	Materialise NV / Materialise Japan	Materialise CO-AM, Enabling the Factory of the Future
	10:30-11:00	Continuum	Recycling: Path to Sustainability
	11:20-11:50	TAIYO NIPPON SANSO	Application development and Design Innovation by Support-less Additive Manufacturing
2/2	13:00-13:30	FUJI	Combination of "Metal 3D Printer" and "5 Axis Machining" Makes A Brand New Technology Possible
2/2	13:50-14:20	Osaka Research Institute of Industrial Science and Technology	Introducing ORIST "Technology Research & Innovation Center for 3D Printing"
	14:40-15:10	Shimadzu Industrial Systems	Introduction; Vacuum and Sintering Furnace for VHS-CUBE,
	15:30-16:00	EOS GmbH	Introduction of technology development and innovation projects undertaken by EOS
	10:30-11:00	Oerlikon Japan	Latest Oerlikon AM solution in Germany and USA
	11:20-11:50	Digital Metal / Markforged	Digital Metal's Fast and Highly Detailed Metal Binder jet 3D printing and its Applications at Production Scale - presented by Markforged
2/3	12:10-12:40	DataDesign	Realization of cost reduction/ROI improvement by utilizing 3D printers as jig production machines
	13:00-13:30	TRUMPF	TRUMPF 100 - Celebrating 100 years! The latest laser technologies and applications to Additive Manufacturing
	13:50-14:20	TÜV SÜD Japan	AM final production processes - Implementation of ISO/ASTM 52920 and Quality assurance
	14:40-15:10	Japan 3D Printer / ASICS / LUXCREO	ASICS ACTIBREEZE 3D PRINTED SANDAL - COOLEST SANDAL TO HELP A RECOVERING ATHLETE'S BODY AND MIND AFTER PERFORMANCE





## Promotion

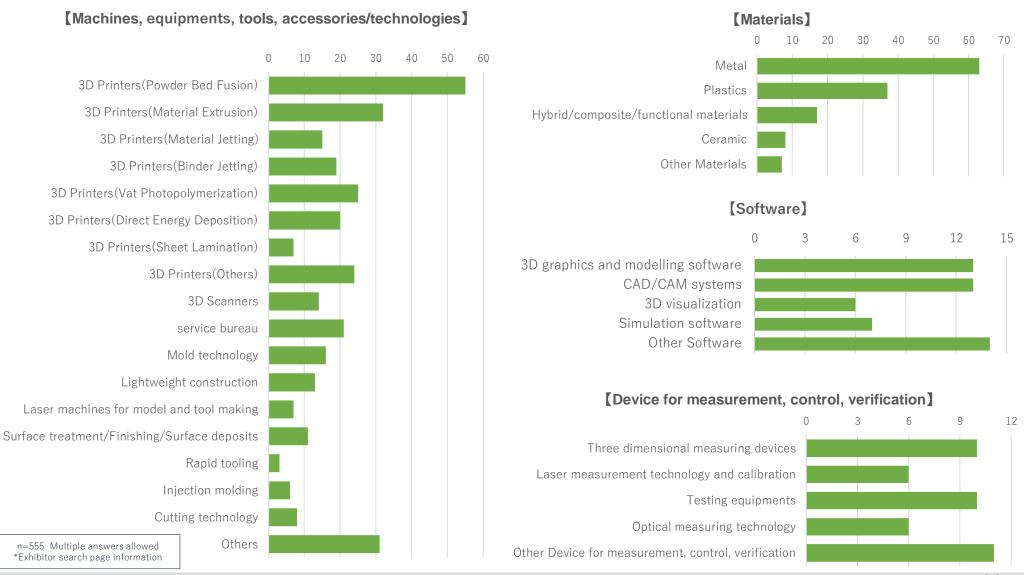
Free Invitation letter (JP)		E-mail Newsletters	Advertisement					
30プリンターとAM関連技術にかから Na・ワービスが一時に東まる和示会 30以上のグローバルSDプリンタープランドが集結 和の変界知道のとの目前的な意味とす	8@##F&リードする1000社以上が集結 14展示会同時開催!	over <b>12,000</b> Subscribers*	Banner	Newspaper				
		*Directly posted and distributed to previous participants, visit registrants, related exhibition, etc.	3D ブリンタ × 自動車業界 最新活用事例がわかる。 2023.2.1 ** 3 * ###2:07#0+ #38-# (###################################	<image/> <image/>				
	最新情報は各展示会公式ホームページをチェック!	Press Releases	2023.2.1・3,東京ビッグサイト					
over <b>70,000</b> d	istributed*							
<b>Digital ver.</b> https://www.tctjapan.jp/TC	T2023 invitation ip.html	PRTIMES		IL-CUSSITHPEOTOFIC/FIO/2000				
"TCT Magazine" Japan Edition limited distribution								
tct Japan Edition 特別号		Organizer's interview article	SNS					
		<b>≫ ShareLab</b> NEWS	Official Twitter @TCT Japan (Introduced exhibitors/seminars)					
+	NTURNAT ANTANANY RAVA GAAN GETTA AFFECTA AFFECTA	In addition, we have conducted PR activities in media outlets such as the following. <b>The Kanagata Shinbun, monodukuri.com, Itmedia(MONOist),</b>						

i-MAKER, Printing Journal, MarkLines, Google search advertising, etc.

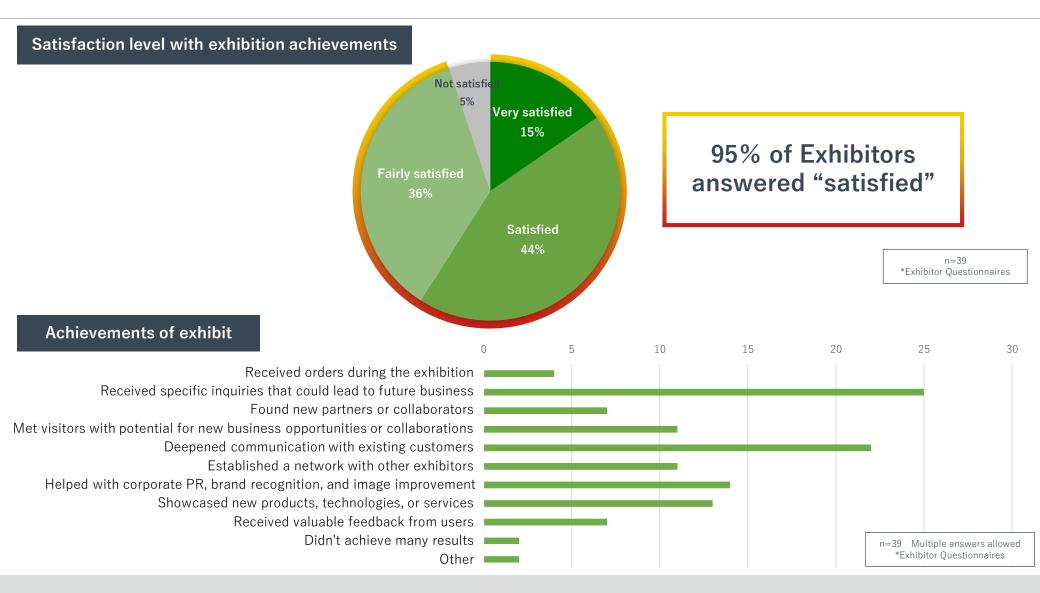
## Scenery of the venue



## Product/Technology



## Satisfaction level with exhibition achievements



## **Exhibitors' Feedback**

It was great to have the opportunity to speak with people we wouldn't normally encounter and heard their specific needs, such as **major heavy industry manufacturers and aerospace industry professionals**.

Thanks to the size and high profile of the exhibition, we were able to connect with **unexpected industry professionals.** 

By demonstrating the machines in action, we were able to **seize opportunities to approach new clients** who could experience the benefits firsthand.

There were several projects that led to meetings immediately after the exhibition ended.

We were able to meet a metal AM user whom we had not been in contact with before.

Lots of visitors with basic knowledge attended.

We were satisfied with both quality and quantity of visitors.

The information gained at the exhibition seems to be **immediately applicable to our future marketing activities**.

We are very satisfied as there were many visitors from our target market.

Two **media companies featured us** in their articles, and the resulting impact was significant, **leading to many inquiries and developing into business negotiations**.

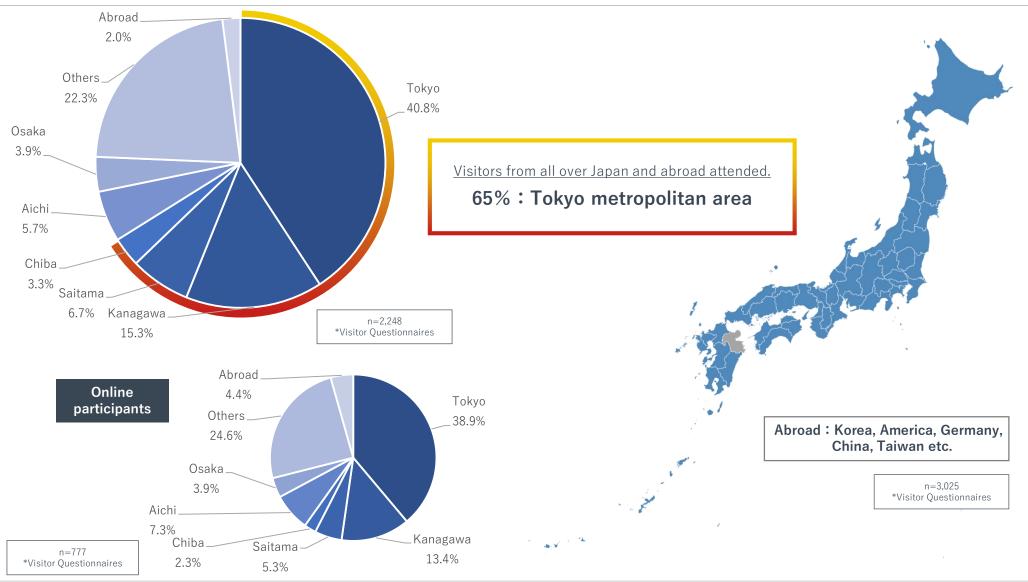


n=39 \*Exhibitor Questionnaires Conference Stage

## **Visitor Data**

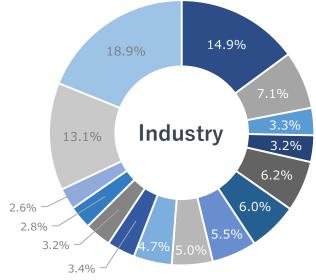
#### **Visitor Data**

## Regions

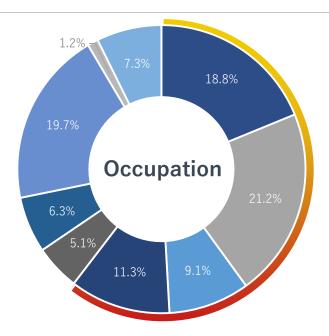


#### **Visitor Data**

## Industry/Occupation



- Precision Equipment / Industrial Machinery / Robotics
- Automobile / Logistics / Transporting
- Aerospace
- Medical Device
- Electronics / Home Appliance
- Organic Material / Chemical
- Iron and Steel / Non-ferrorus Metal
- Printing / Converting business, Converting business on commission
- University / Research Organization
- Construction / Real estate
- Electron / Magnetic / Metal / Inorganic Material
- Information / Communication / Networking Service
- Clothing / Grocery
- Trading / Distributor / Retailing
- Others



- Research & Development
- Designing / Producing / Manufacturing
- Production Management / Technology Management
- CEO / CFO / CTO / President / Executive
- Business Development
- Marketing
- Sales/Service
- Student
- Others

19

## - NEXT SHOW -

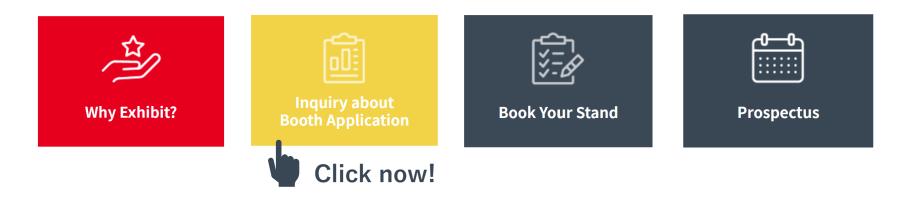


## TCT Japan 2024

-The event for 3D Printing and Additive Manufacturing Intelligence-

Date : January 31<sup>st</sup> (Wed.) ~ February 3<sup>rd</sup> (Fri.), 2024 Venue : Tokyo Big Sight (East Hall)

## Application is now open via online!



## Contact

## **TCT Japan Secretariat**

PIC: Madoka Hibi, Yuko Hanaoka, Masaya Yamagata

JTB Communication Design Co., Ltd. Trade Show Division, Business Promotion Department

Celestine Shiba Mitsui Building 12F, 3-23-1 Shiba, Minato-ku, Tokyo, Japan 105-8335

JTB Building 8F, 2-1-25 Kyutaromachi, Osaka Chuo-ku, Osaka, Japan 541-0056

TEL: + 81-3-5657-0765 E-mail: tctjapan@jtbcom.co.jp