

EMC Japan/APEMC Okinawa

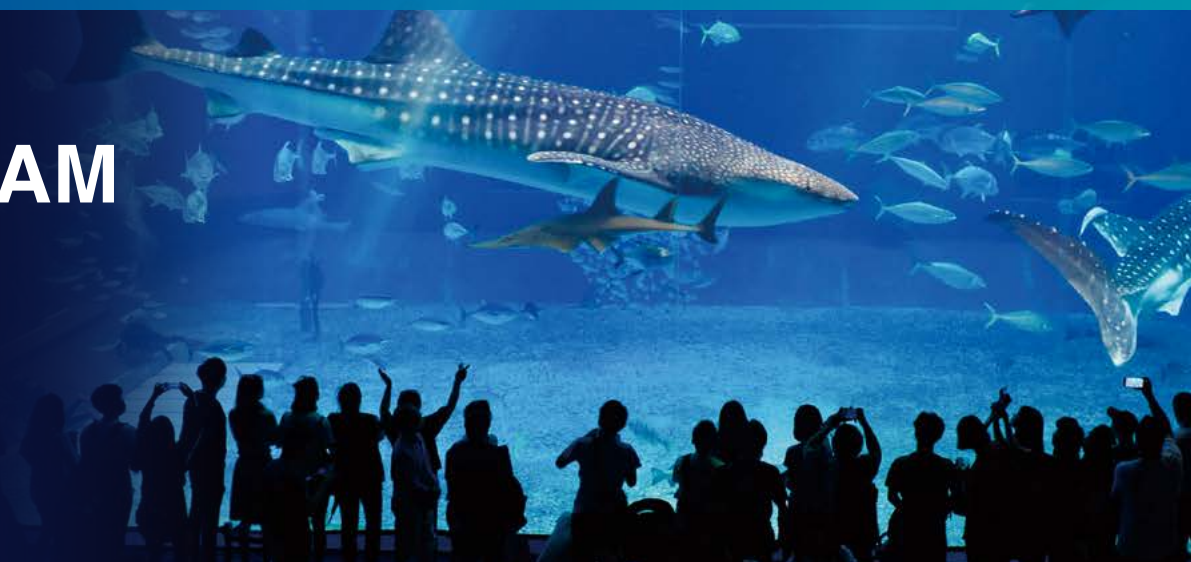
2024 IEEE Joint International Symposium on Electromagnetic Compatibility,
Signal & Power Integrity: EMC Japan / Asia-Pacific International Symposium on
Electromagnetic Compatibility

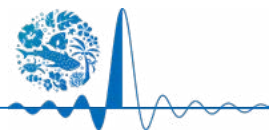
Date: **May 20-24, 2024**

Venue: **Okinawa Convention Center**



PROGRAM





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Message

It is my pleasure to welcome distinguished participants to the 2024 IEEE Joint International Symposium on Electromagnetic Compatibility, Signal & Power Integrity: EMC Japan/Asia–Pacific International Symposium on Electromagnetic Compatibility (EMC Japan/APEMC Okinawa). This symposium marks the second Asia–Pacific EMC Symposium (APEMC) to be held in Japan, following the first symposium in Sapporo in 2019. APEMC held its first symposium in 2008 and has had a significant impact on the development of EMC technology in the Asia-Pacific region to today. It is a great honor to work with APEMC to continue this EMC Japan series in Okinawa, a place renowned for its significant cultural depth and natural beauty.



This symposium is particularly significant because it is financially co-sponsored by IEEE EMC Society, following the previous APEMC in Singapore in 2018. The first EMC Japan, held in Tokyo in 1984, was the first IEEE EMC symposium to be held outside the United States. Since then, the EMC Japan series has been mainly organized by IEICE and has been held every five years in various locations in Japan, such as Tokyo, Nagoya, Sendai, Kyoto, and Sapporo. This year marks the 40th anniversary of the first symposium and the 9th symposium of the EMC Japan series.

The venue, Okinawa, boasts a unique culture that differs from that of mainland Japan in its blend of natural beauty, historical sites, and vibrant traditions. The island is home to several UNESCO World Heritage sites and the rich history and resilient spirit of the Ryukyu Kingdom. The Kariyushi wear I wear is formal Okinawan attire.

This year's APEMC Symposium, the first full-scale gathering since the COVID-19 pandemic, will bring together hundreds of engineers and researchers from many countries and regions. Numerous papers advancing the field of electromagnetic compatibility will be presented. For the participants, it will be a stimulating opportunity to exchange ideas, build collaborations, renew old friendships, and establish new relationships in an environment of intellectual and personal exchange.

I hope that EMC Japan/APEMC Okinawa will be a catalyst for innovative ideas and collaboration that will move the EMC field forward. Let's make the most of this special gathering in Okinawa and deepen our knowledge and connections in the global EMC community.

Sincerely,

豊田 啓孝

Prof. Yoshitaka Toyota
Chair, EMC Japan/APEMC Okinawa



Organizing Committee

Chair: Yoshitaka Toyota (Okayama University)
Co-Chair: Tsuyoshi Funaki (Osaka University)
Co-Chair: Yuichi Hayashi (Nara Institute of Science and Technology)
Secretary: Kengo Iokibe (Okayama University)
Financial Co-Chair: Vignesh Rajamani (IEEE EMC Society)

International Committee

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Co-Chair: Yuki Fukumoto (Kyushu Institute of Technology)
Co-Chair: Wang Jianqing (Nagoya Institute of Technology)
Oversea member: Seungyoung Ahn (Korea)
Oversea member: Nam Kim (Korea)
Oversea member: Niels Kuster (Switzerland)
Oversea member: Yongsun Lee (Korea)
Oversea member: Nicolas Mora Parra (Colombia)
Oversea member: Dan Shi (China)
Oversea member: Joe Wiart (France)

General affairs Committee

Chair: Yuichi Hayashi (Nara Institute of Science and Technology)
Secretary: Kengo Iokibe (Okayama University)
Member: Tadatoshi Sekine (Shizuoka University)
Member: Katsuya Nomura (Kwansei Gakuin University)

Treasurer Sub-Committee:

Secretary: Akiyoshi Tatematsu (Central Research Institute of Electric Power Industry)
Member: Kensuke Teramoto (Central Research Institute of Electric Power Industry)

External Affairs Sub-Committee:

Secretary: Tohlu Matsushima (Kyushu Institute of Technology)
Member: Shuji Taue (Kochi University of Technology)
Member: Yusuke Yano (Nagoya Institute of Technology)

Publicity and Publication Sub-Committee:

Secretary: Sho Muroga (Tohoku University)
Member: Masahiro Kinugawa (The University of Fukuchiyama)
Member: Masashi Kawakami (Osaka Institute of Technology)

Exhibition Sub-Committee:

Secretary: Masato Maruyama (NTT Space Environment and Energy Lab.)

Member: Kimihiro Tajima (NTT Advanced Technology Corporation)

Member: Atsushi Nagao (NTT Space Environment and Energy Laboratory)

Member: Jun Kato

Member: Ryuichi Kobayashi (NTT Advanced Technology Corporation)

Member: Yasunao Suzuki (NTT Advanced Technology Corporation)

Member: Masaharu Sao (NTT Advanced Technology Corporation)

Registration Committee

Chair: Takehiro Morioka (National Institute of Advanced Industrial Science and Technology)

Secretary: Katsumi Fujii (National Institute of Information and Communications Technology)

Member: Nao Takahashi (National Institute of Advanced Industrial Science and Technology)

Technical Program Committee

Chair: Soichi Watanabe (National Institute of Information and Communications Technology)

Co-Chair: Takaaki Ibuchi (Osaka University)

Secretary: Kaoru Gotoh (National Institute of Information and Communications Technology)

Secretary: Yoshiki Kayano (The University of Electro-Communications)

Secretary: Ifong Wu (National Institute of Information and Communications Technology)

Secretary: Koh Watanabe (National Institute of Information and Communications Technology)

Award Committee:

Chair: Takaaki Ibuchi (Osaka University)

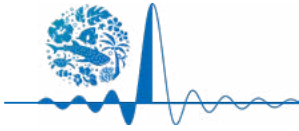
Local Committee

Chair: Takahiro Aoyagi (Tokyo Institute of Technology)

Co-Chair: Ryosuke Suga (Aoyama Gakuin University)

Co-Chair: Hiroshi Suenaga (Panasonic Corporation)

Co-Chair: Masato Saito (University of the Ryukyus)



Sponsors

The organizing Committee for EMC Japan / APEMC Okinawa wishes to thank our sponsors for the support.

Silver Sponsor



Bronze Sponsor

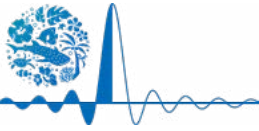


Symposium Sponsor



Media Sponsor





Supporters

Sponsored by

- The Institute of Electronics, Information and Communication Engineers, Communications Society (IEICE-CS)



Financially Co-sponsored by

- IEEE Electromagnetic Compatibility Society



Technically Co-sponsored by

- Technical Committee on EMC of The Institute of Electrical Engineers of Japan
- ISC of Asia-Pacific EMC Symposium (APEMC)



Technically Co-operated by

- IEEE EMC-S Japan Joint Chapter / IEEE EMC-S Sendai Chapter / IEEE Fukuoka Section
- IEICE Kyushu Section
- Technical Committee on MAG of The Institute of Electrical Engineers of Japan
- VCCI Council
- IEC TC77 / TC106



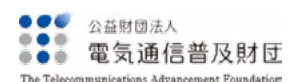
Endorsed by

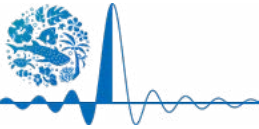
- Ginowan City



Acknowledgement

- KDDI Foundation
- Okinawa Prefecture
- Okinawa Convention & Visitors Bureau
- The Telecommunications Advancement Foundation
- Support Center for Advanced Telecommunications Technology Research, General Incorporated Foundation
- The Foundation for Technology Promotion of Electronic Circuit Board





General Information

1. Registration

Opening Hours:

May 20 2024 (Mon.)	12:00 – 18:00
May 21 - 23 2024 (Tue. – Thu.)	8:20 – 18:00
May 24 2024 (Fri.)	8:20 – 12:00

Registration Desk:

Exhibition Hall, Okinawa Convention Center

2. Venue

Okinawa Convention Center

4-3-1 Mashiki, Ginowan City Okinawa 901-2224, Japan

URL: <https://www.oki-conven.jp/en/>

3. Floor Plan

*Floor Map: Please refer to the page 12 of this handbook.

Technical Sessions (A)	Room A (B1, Building B)
Technical Sessions (B)	Room B (B2, Building B)
Technical Sessions (C)	Room C (B3+B4, Building B)
Technical Sessions (D)	Room D (B5+B6+B7, Building B)
Tutorials and Workshops	Room E (Exhibition Hall)
Plenary Session (May 21)	Theater Hall
Poster Sessions	Exhibition Hall
Exhibition	Exhibition Hall
Coffee Break	Exhibition Hall
Welcome Reception (May 21)	Exhibition Hall and Courtyard
Banquet (May 22)	Laguna Garden Hotel

4. Internet

Free Wi-Fi Service is available throughout Okinawa Convention Center.

1) SSID: Free_WiFi-Convention_Center

Password not required

* Available in all areas of the venue.

2) SSID: Be.Okinawa_Free_Wi-Fi

* If you enter your e-mail address and register for the "Be.Okinawa_Free_Wi-Fi" operated by Okinawa Prefecture, you will be able to use the Wi-Fi each time you connect at hotspot locations.

5. Cloak

The cloak is located in the Exhibition Hall. Valuables cannot be left at the Cloak.

Opening Hours:

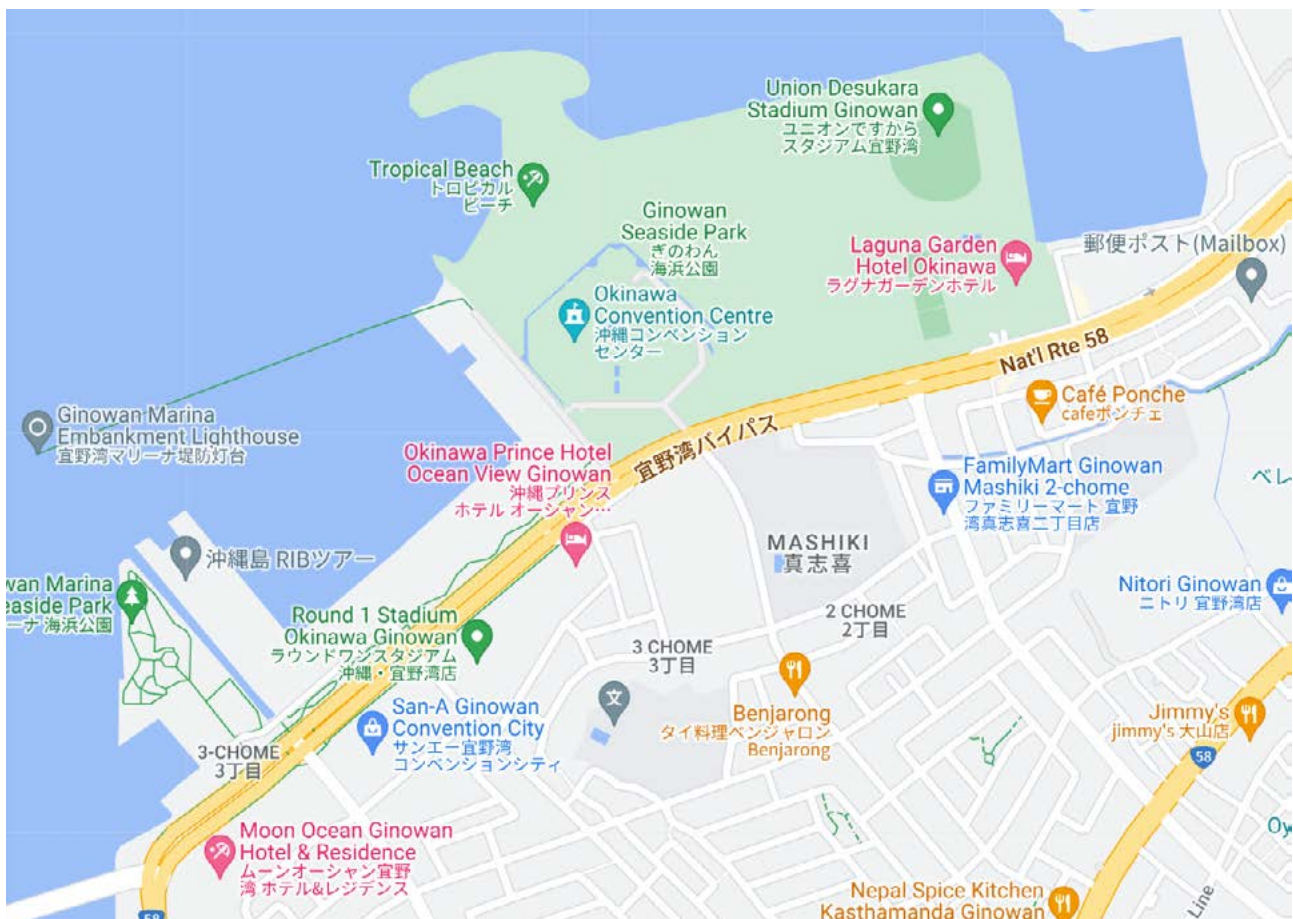
May 20 2024 (Mon.)	13:00 – 18:00
May 21 2024 (Tue.)	8:20 – 20:30
May 22 - 23 2024 (Wed. – Thu.)	8:20 – 18:00
May 24 2024 (Fri.)	8:20 – 13:00

6. Foreign Exchanges and Travelers Checks

No currency exchange services are available at the congress site.

Currency exchange services are available at the nearby "[Okinawa Prince Hotel Ocean View Ginowan](#)".

Bank ATMs are available at the nearby "[San-A Ginowan Convention City](#)".



7. Shuttle Bus Service Days (May 21 & 22)

1) May 21 (Tue.): **Welcome Reception**

Departure	20:00	Okinawa Convention Center
Route		Laguna Garden Hotel Okinawa Prince Hotel Ocean View Ginowan MoonOcean GINOWAN HOTEL & RESIDENCE
Arrival	20:30	Omoromachi Station (Okinawa Urban Monorail)

<https://www.yui-rail.co.jp/en/routemap/omoromachi/?t=timetable>

2) May 22 (Wed.): **Banquet**

Departure	21:00	Laguna Garden Hotel
Route		Okinawa Prince Hotel Ocean View Ginowan MoonOcean GINOWAN HOTEL & RESIDENCE
Arrival	21:30	Omoromachi Station (Okinawa Urban Monorail)

<https://www.yui-rail.co.jp/en/routemap/omoromachi/?t=timetable>

8. Plenary Session

Plenary Session will be held on Tuesday, May 21 from 11:00-12:40 in the Theater Hall.

(For details: <https://www.ieice.org/~emc/2024/programs.html>)

9. Exhibition

Exhibition will be held at the Exhibition Hall.

Opening Hours:

May 21 - 23 2024 (Tue. – Thu.)	10:00 – 18:00
May 24 2024 (Fri.)	10:00 – 12:00

10. Symposium Proceedings

URL (Available from Symposium web site): <https://www.ieice.org/~emc/2024/>

Login information can be found on the Registration My Page.

My Page: <https://jform.net/emc2024/mypage.php>

11. Congress Mobile App

EMC Japan/APEMC Okinawa will offer the official application, which will allow participants to search presentations and register their own schedules. It is available on iOS, Android as well as on the internet.

Password: Same as for proceedings



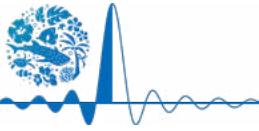
iOS



Android

*To use this service, internet access is required.

*Registered schedules will be synchronized between the app and the web system.



Social Events

Welcome Reception

Date & Time: May 21 (Tue.) 18:30 – 20:00

Venue: Courtyard and Exhibition Hall, Okinawa Convention Center

Fee: Free (included in all registrations)

Symposium Banquet

Date & Time: May 22 (Wed.) 19:00 – 21:00 (Door open: 18:30)

Fee: 15,000JPY

(included in the Registration Fees for "Member" and "Non-Member")

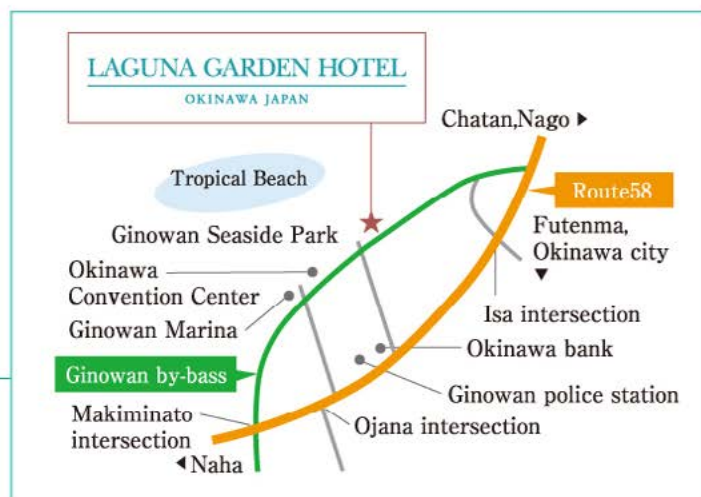
Venue: Laguna Garden Hotel

Access: 4-1-1 Mashiki, Ginowan-shi, Okinawa 901-2224 Japan

<https://www.laguna-garden.jp/en/access/>

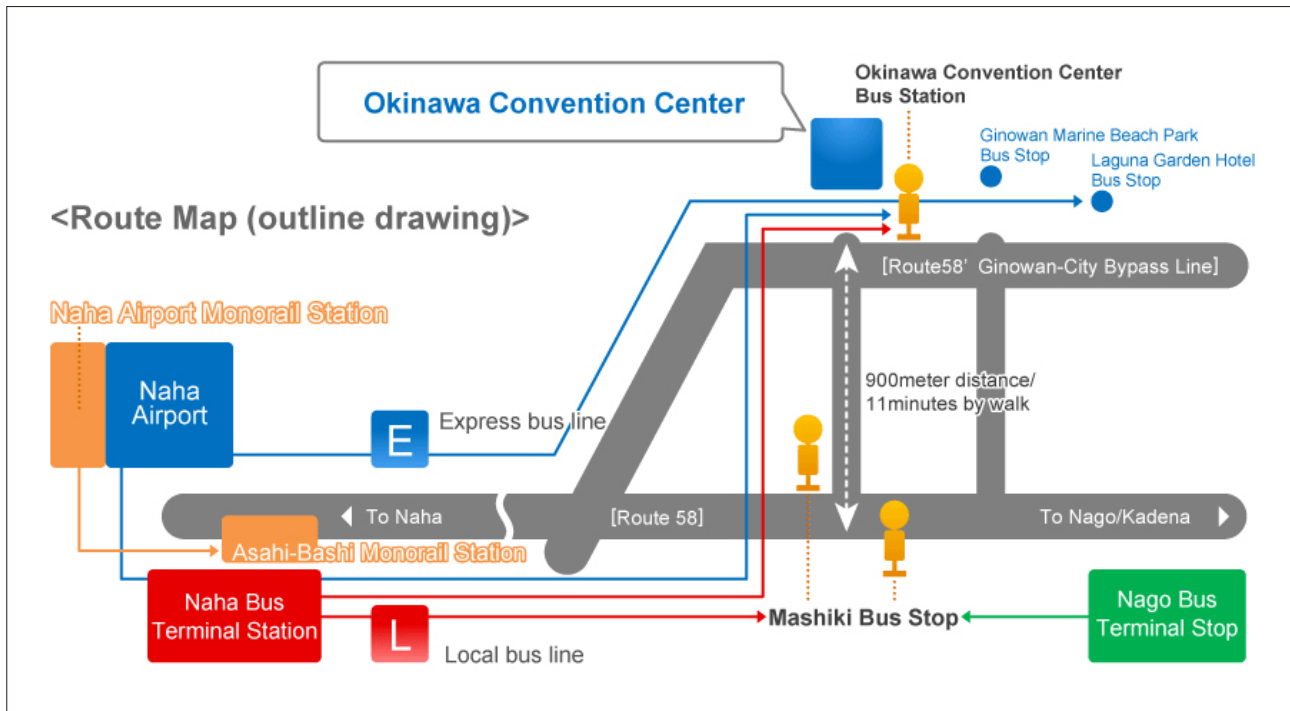
(Approximately 10 min. walk from Okinawa Convention Center)

TEL: +81-98-897-2121





Access



Bus/Monorail

Route number is indicated on the front display of each route bus.
Please pick the appropriate route number.

Access form Naha Bus Terminal Station.

- To the Okinawa Convention Center Bus Stop.
 - Route Number: [No.26](#), [No.43](#), [No.32](#), [No.55](#) (takes from 40 minute to 60 minutes) Fare: 530JPY
 - Route Number: [No.112](#) (takes 50 minute), [No.99](#) (takes 60 minute)
- To the Mashiki Bus Stop
 - Route Number: [No.20](#), [No.77](#), [No.120](#) (takes from 45 minute via Kokusai Street) Fare: 530JPY
 - Route Number: [No.23](#), [No.29](#), [No.63](#) (takes from 35 minute via Kumoji Street) Fare: 530JPY
 - Route Number: [No.31](#) (takes from 50 minute via Kumoji Street) Fare: 530JPY

Access from Naha International Air Port

- 50-70 minutes from Naha International Air Port (Bus Station No 3) to Okinawa Convention Center Bus Stop. Fare: 570JPY
- Route Number: [No.26](#) (50 minutes)
- Route Number: [No.99](#) (70 minutes)

[E Airport Limousine Bus is easy accessible](#)

*Additional note: This limousine liner is not to stop at the convention center, get off at Laguna Garden Hotel bus stop and walk to the center for 10 minutes. (takes from 55 minute) Fare: 600JPY

■ **Access by the monorail** (Asahibasi station and Furushima Station are easy accessible) - [See the route map and operation time table.](#)

- About 11 minutes from the airport to Asahibashi station. Fare: 260JPY. From Asahibashi station to the bus terminal station takes 3 minutes by walk.
- About 21 minutes from the airport to Furushima station. Fare:320JPY. From Furushima station to the convention center takes 15 minutes by taxi.

Access form Nago Bus Terminal Station

■ About 120 minutes from Nago Bus Terminal Station to Mashiki bus stop. Fare: 1,650JPY Route: [No.20](#) and [No.120](#)

*Additional note: 1. The required time is defer according to the traffic situation.2. The operation of bus liner on Saturday, Sunday and public holidays are run in less number than on week days.

Contact to the mass transportation services

Okinawa Bus Association	TEL: 098-867-2316
Okinawa Bus Service Center	TEL: 098-867-7386
Okinawa Urban Monorail Incorporated	TEL: 098-856-2630
Airport Limousine Information Center	TEL: 098-869-3301

with your own vehicle/rental car

- Takes about 40 minute (14 km distance) from Naha Airport.
- Takes about 30 minute (10 km distance) from the center of Naha city.
- Takes about 90 minute (56 km distance) from the center of Nago city.

Required time may differ according to the traffic situation.

Information

[Okinawa Rental Car Association](#) TEL: 098-852-0725

Remainder for driving by a rental car

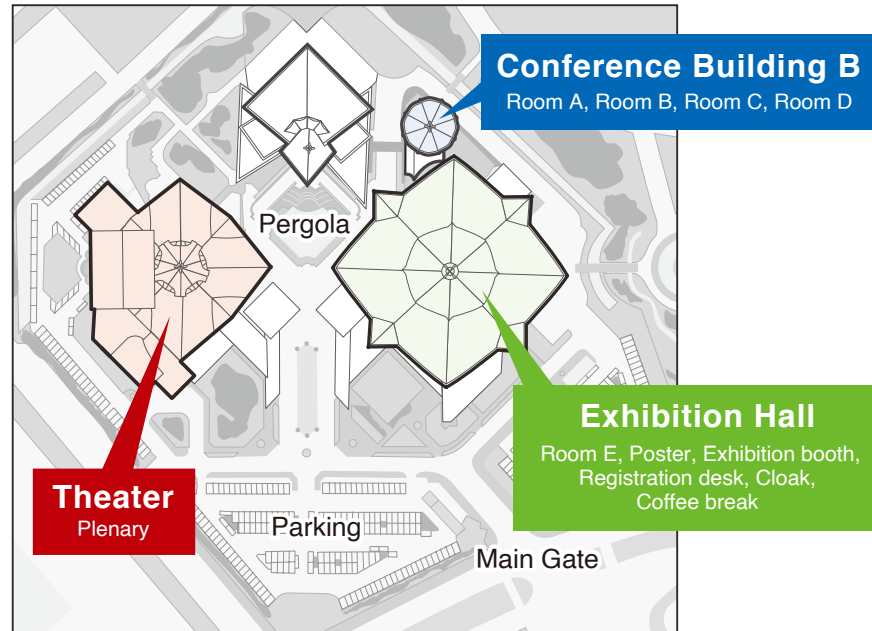
Some area have exclusive bus lanes, and they are not allowed for regular vehicle at morning and evening time on week days (These traffic restriction are not enforced on Saturday, Sunday and public holidays)



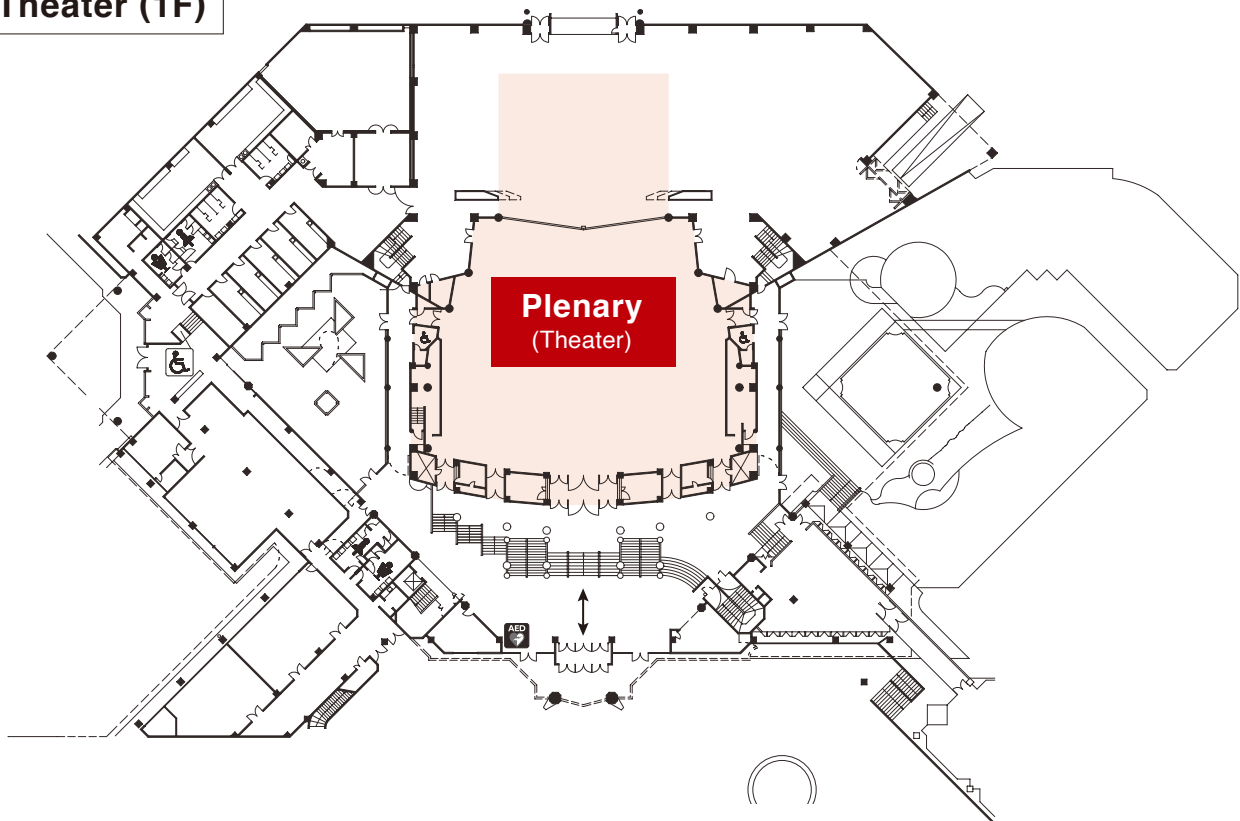
The road where bus lane regulation is enforced (Okinawa Prefectural Police Department HP)



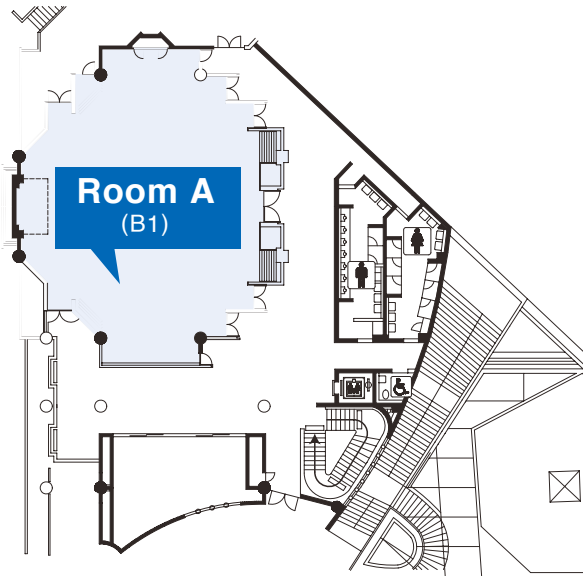
Floor Map



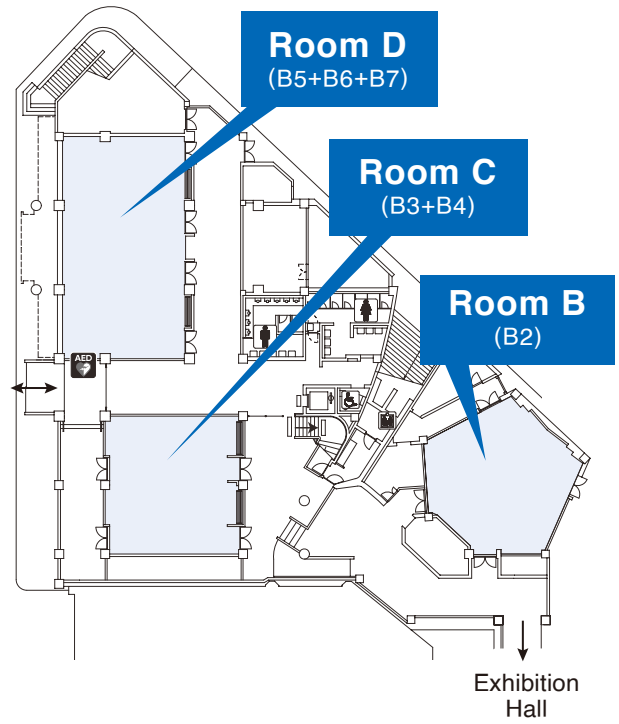
Theater (1F)



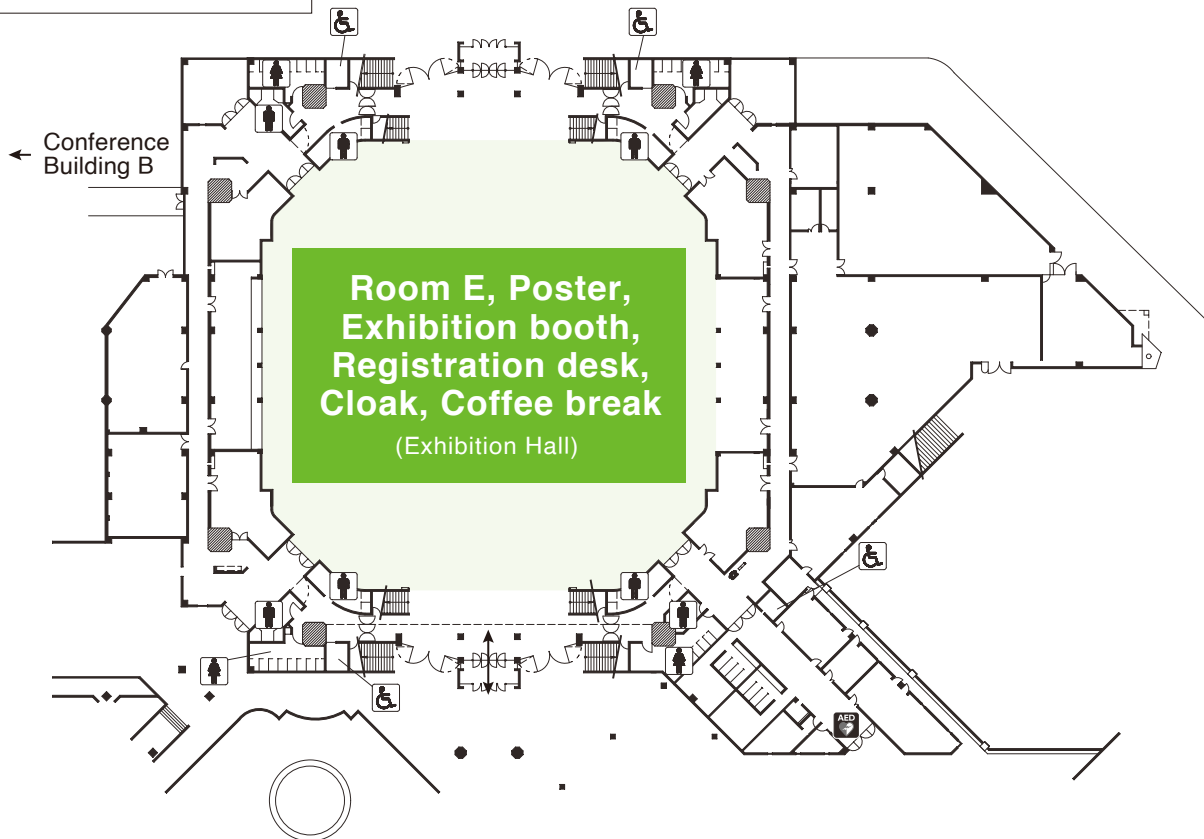
Conference Building B (2F)

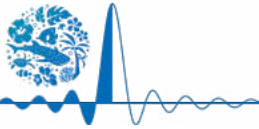


Conference Building B (1F)

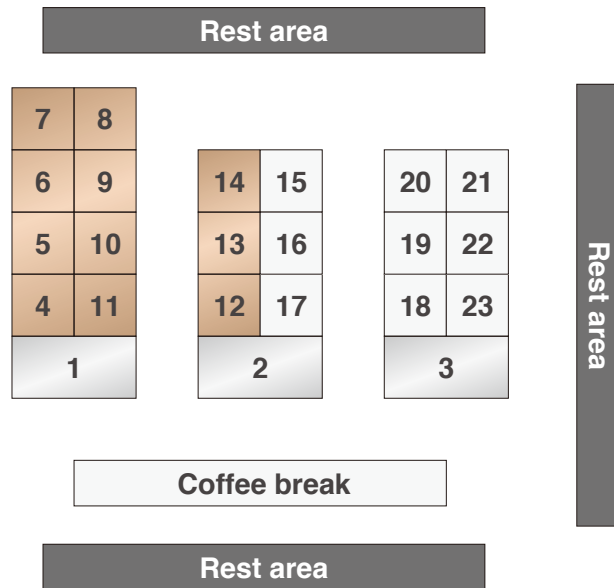


Exhibition Hall





Exhibition Hall



Booth No.	Silver Sponsor
1	National Institute of Information and Communications Technology
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3	Rohde & Schwarz Japan K.K.
Booth No.	Bronze Sponsor
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13	Shanghai Lioncel Electromagnetic Technology Co., Ltd
14	VCCI Council
Booth No.	Exhibition Booth
15	HANWA ELECTRONIC IND. CO., LTD.
16	Montena Technology
17	Techno Science Japan Co.,Ltd./ Techno Science Systems Co.,Ltd
18	TOKIN Corporation
19	Wavecrest K.K.
20	EMC Japan/APEMC Okinawa

Booth No.	Sponsor	
21	Sponsor	IEEE EMC Society
22	Symposium Sponsor	ETS-Lindgren
23	Media Sponsor	Safety & EMC Magazine
Supporter		
	Sponsored by	The Institute of Electronics, Information and Communication Engineers, Communications Society (IEICE-CS)
	Financially Co-sponsored by	IEEE Electromagnetic Compatibility Society
	Technically Co-sponsored by	ISC of Asia-Pacific EMC Symposium (APEMC)
		Technical Committee on EMC of The Institute of Electrical Engineers of Japan
	Technically Co-operated by	IEEE EMC-S Japan Joint / Sendai Chapter
		VCCI Council
		Technical Committee on MAG of The Institute of Electrical Engineers of Japan
	Acknowledgement	Okinawa Convention & Visitors Bureau
		The Telecommunications Advancement Foundation
		Support Center for Advanced Telecommunications Technology Research, General Incorporated Foundation
		KDDI Foundation
		The Foundation for Technology Promotion of Electronic Circuit Board



Day 1 : May 20 (Mon.)

Time		Room A	Room B	Room C	Room D	Room E
14:10 - 16:10	PM1	MonPM1A [Special Session] Recent Research Trends in Offensive Electromagnetic Information Security Supporting Hardware as the Root of Trust (1)	MonPM1B [Special Session] Biomedical applications of electromagnetic field	MonPM1C [Special Session] EMC Issues Related to Common-Mode Noise (1)	MonPM1D [Special Session] EMC on aviation field	
16:10 - 16:40		Coffee Break				
16:40 - 18:00	PM2	MonPM2A [Special Session] Recent Research Trends in Offensive Electromagnetic Information Security Supporting Hardware as the Root of Trust (2)		MonPM2C [Special Session] EMC Issues Related to Common-Mode Noise (2)	MonPM2D [Special Session] Measurement techniques underpinning EMC reliability	



Day 2 : May 21 (Tue.)

Time		Room A	Room B	Room C	Room D	Room E	Theater	Poster	
08:50 - 10:30	AM1	TueAM1A [Regular Session] Electromagnetic Environment	TueAM1B [Regular Session] EMC Management	TueAM1C [Special Session] ESD measurements & countermeasures (1)	TueAM1D [Special Session] Maintaining a safe electromagnetic environment in medical and healthcare settings	TueAM1E [Tutorial Session] The importance of performing combined tests with emphasis on EMC, Functional Safety, Ionizing Radiation and Aging			
10:30 - 11:00		Coffee Break							
11:00 - 12:40	AM2						Plenary Session		
12:40 - 14:10		Lunch							
14:10 - 16:10	PM1	TuePM1A [Regular Session] Signal and Power Integrity (1)		TuePM1C [Special Session] ESD measurements & countermeasures (2)	TuePM1D [Special Session] EMC Challenges inside Industrial UAVs_Mitigating Mobile Communication Interference	TuePM1E [Tutorial Session] Status of CISPR 32 Ed.2.0 operations in Japan and initiatives toward the next term's revisions to CISPR 32 (1)~The VCCI Council's activities~		Poster Session (1)	
16:10 - 16:40		Coffee Break							
16:40 - 18:00	PM2	TuePM2A [Regular Session] Signal and Power Integrity (2)			TuePM2D (17:00-18:00) [Private Seminar sponsored by Dassault Systemes K.K.] Introduction about antenna design and EMC simulation technic by using electromagnetic simulation software CST Studio Suite (in Japanese)	TuePM2E [Tutorial Session] Status of CISPR 32 Ed.2.0 operations in Japan and initiatives toward the next term's revisions to CISPR 32 (2)~Initiatives conducted for four years in preparation for deliberating on revisions to CISPR 32 Ed.3.0~			
18:30 - 20:00		Welcome Reception Venue: Courtyard and Exhibition hall							



Day 3 : May 22 (Wed.)

Time		Room A	Room B	Room C	Room D	Room E
08:50 - 10:30	AM1	WedAM1A [Regular Session] Nanotechnology & Advanced Materials (1)	WedAM1B [Regular Session] EMF Safety & Biomedical Issues (1)	WedAM1C [Regular Session] EMC Measurements (1)	WedAM1D [Special Session] Automotive EMC	WedAM1E [Tutorial Session] EMC Fundamentals Sponsored by IEEE EMCS EDCOM (1)
10:30 - 11:00		Coffee Break				
11:00 - 12:40	AM2	WedAM2A [Regular Session] Nanotechnology & Advanced Materials (2)	WedAM2B [Regular Session] EMF Safety & Biomedical Issues (2)	WedAM2C [Regular Session] EMC Measurements (2)	WedAM2D [Special Session] EMI and IEMI in Advanced Power Applications	WedAM2E [Tutorial Session] EMC Fundamentals Sponsored by IEEE EMCS EDCOM (2)
12:40 - 14:10		Lunch				
14:10 - 16:10	PM1	WedPM1A [Regular Session] Signal and Power Integrity (3)	WedPM1B [Regular Session] EMF Safety & Biomedical Issues (3)	WedPM1C [Regular Session] High Power Electromagnetics (1)	WedPM1D [Special Session] Emerging EMC Technologies in Power Electronics	WedPM1E [Workshop Session] Reverberation Chambers: RC you there!
16:10 - 16:40		Coffee Break				
16:40 - 18:00	PM2	WedPM2A [Regular Session] Signal and Power Integrity (4)	WedPM2B [Regular Session] EMF Safety & Biomedical Issues (4)	WedPM2C [Regular Session] High Power Electromagnetics (2)		WedPM2E [Workshop Session] Near Field Scanning and Related Techniques
19:00 - 21:00		Banquet Venue: Laguna Garden Hotel "Hagoromo"				



Day 4 : May 23 (Thu.)

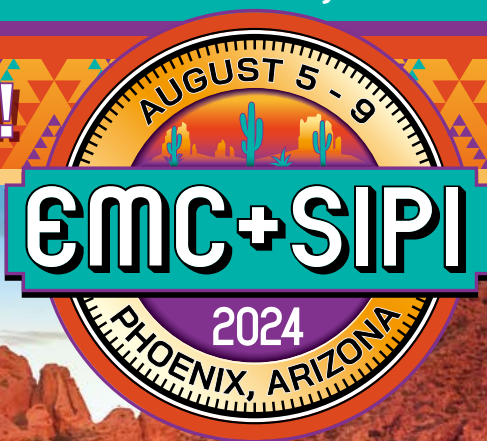
Time		Room A	Room B	Room C	Room D	Room E	Poster	
08:50 - 10:30	AM1	ThuAM1A [Regular Session] EMC for Emerging Wireless Technologies (1)	ThuAM1B [Regular Session] EMI Control (1)	ThuAM1C [Regular Session] Low Frequency EMC (1)	ThuAM1D [Special Session] Advances in terahertz technologies for exposure assessment and biomedical research (1)	ThuAM1E [Workshop Session] Novel EMC Measurement Test Techniques: Advances in EMC Site Validation in ANSI C63 Standards		
10:30 - 11:00		Coffee Break						
11:00 - 12:40	AM2	ThuAM2A [Regular Session] EMC for Emerging Wireless Technologies (2)	ThuAM2B [Regular Session] EMI Control (2)	ThuAM2C [Regular Session] Low Frequency EMC (2)	ThuAM2D [Special Session] Advances in terahertz technologies for exposure assessment and biomedical research (2)	ThuAM2E [Workshop Session] Update on Automotive EMC Design and Test Methodologies for Modern Connected and Electric Vehicles		
12:40 - 14:10		Lunch						
14:10 - 16:10	PM1	ThuPM1A [Regular Session] Signal and Power Integrity (5)	ThuPM1B [Regular Session] EMI Control (3)	ThuPM1C [Regular Session] EMC Measurements (3)	ThuPM1D [Special Session] Monitoring of EMF exposures in real daily lives	ThuPM1E [Workshop Session] Developments and Interoperability of (micro)-grids in Indonesia	Poster Session (2)	
16:10 - 16:40		Coffee Break						
16:40 - 18:00	PM2							



Day 5 : May 24 (Fri.)

Time		Room A	Room B	Room C	Room D	Room E
08:50 - 10:30	AM1	FriAM1A [Regular Session] Computational Electromagnetics (1)	FriAM1B [Regular Session] Spectrum Engineering (1)	FriAM1C [Regular Session] Power Electronics EMC (1)	FriAM1D [Special Session] Protection performance and components technology against HEMP, HPEM and IEMI	FriAM1E [Workshop Session] Innovative Wireless Test Methodologies for 5G New Radio and mmWave Applications
10:30 - 11:00		Coffee Break				
11:00 - 12:40	AM2	FriAM2A [Regular Session] Computational Electromagnetics (2)	FriAM2B [Regular Session] Spectrum Engineering (2)	FriAM2C [Regular Session] Power Electronics EMC (2)	FriAM2D [Special Session] Reverberation chamber	FriAM2E [Tutorial Session] Metamaterials and EBG as EMC Solutions to Space Com & 5G Advanced

REGISTRATION IS OPEN!



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During the Welcome Reception, Gala Dinner, and Young Professionals and Women in Engineering events.

BRING THE FAMILY

And Experience Phoenix, Arizona, in the stunning Southwest Sonoran Desert. Companions are invited to join the Social Events and fun area tours.

EMC EUROPE 2024



International Symposium and Exhibition on Electromagnetic Compatibility

September 2-5, 2024, Bruges, Belgium



REGISTRATIONS ARE NOW OPEN

Registrations for the EMC Europe 2024 are now open! Make sure to secure your spot in the upcoming symposium by visiting our registration page <https://emceurope2024.org/registration-2/>

IMPORTANT DEADLINES AND DATES

- Notification of Paper Acceptance: April 29, 2024
- Reduced Registration Fee: May 31, 2024
- Final Paper Submission: May 31, 2024
- Exhibition Application: June 30, 2024
- EMC Europe 2024 Symposium: September 2-5, 2024

We are thrilled to welcome the following keynote speakers to EMC Europe 2024!

- Ioannis Bitsios (European Commission, European Research Executive Agency, Unit REA.A1 MSCA Doctoral Networks)
- Rob Kleihorst (Philips Healthcare)

NEW! SOCIAL EVENTS

• Young Professional (YP) Social Event

We are excited to introduce the YP social event for the first time in the history of the EMC Europe symposium. Join us for an evening of games, dinner and drinks, where you can connect with fellow YPs, continue conversations from the Welcome Reception on Tuesday 3 September, and form new friendships.

• Women in Engineering Social Event

Join us on Monday 2 September in the late afternoon for a guided walk in the historical city of Bruges to connect with women from all over Europe. The guided city walk will be followed by an informal dinner in Bruges.

CONTACT INFORMATION

- Symposium Website: www.emceurope2024.org
- Conference Venue: www.bmccbruges.com
- What's on in Bruges: www.visitbruges.be
- Conference Chair: Davy Pissoort (davy.pissoort@kuleuven.be)
- Technical Program Chair: Tim Claeys (tim.claeys@kuleuven.be)
- Exhibition & Sponsorship Chair: Marc Le Roy (marc.le.roy@comtest.eu)
- On-line Conference system: www.conftool.org/emceurope2024
- Contact & Information (for admin and financial support): info@emceurope2024.org



2025 ASIA-PACIFIC INTERNATIONAL SYMPOSIUM ON ELECTROMAGNETIC COMPATIBILITY (APEMC)

The 2025 Asia-Pacific International EMC Symposium and Exhibition will be held in Taipei, Taiwan, from May 19 to 23, 2025. The symposium aims to share recent advances in all aspects of EMC in the Asia-Pacific region, to respond to the EMC requirements for all rising technologies, and to link up the international EMC community closely. The symposium will cover the entire scope of EMC; especially, it will offer a rich technical program of the highest quality, lectures presented by distinguished speakers from all over the world, and a broad forum for interacting between academia and industry. We wish to invite all prospective authors and experts to submit original papers on their latest research. We also encourage proposals for special sessions, workshops, tutorials, and exhibitions.

May 19 - 23, 2025
@ Taipei, Taiwan

LEARN MORE on APEMC
<http://www.apemc2025.org/>



TOPICS INCLUDE AND ARE NOT LIMITED TO

- ▶ EMC Standard and Management
- ▶ EMC Measurement and Instrumentation
- ▶ Electromagnetic Environment
- ▶ Transient EMC
- ▶ Power System EMC and Smart Grid
- ▶ System Level EMC and Protection
- ▶ Transportation EMC
- ▶ Antenna and Wave Propagation
- ▶ Electronic Packaging EMC
- ▶ Integrated Circuit EMC
- ▶ Signal Integrity and Power Integrity
- ▶ EMC in Wireless Communication, Artificial Intelligence of Things (AIoT), and 5G/6G Smart Poles
- ▶ Computational Electromagnetics
- ▶ Biomedical Electromagnetics
- ▶ EMC in Nanotechnology and Advanced Materials
- ▶ Wireless Power Transfer
- ▶ Aerospace EMC

ORGANIZER

- ▶ General Chair: **Hsi-Tseng Chou** / National Taiwan University
- ▶ Organization Committee Chair: **Cheng-Nan Chiu** / Yuan Ze University
- ▶ TPC Chair: **Ding-Bing Ling** / National Taiwan University of Science and Technology

IMPORTANT DATES

- ▶ Preliminary Paper Submission Deadline: Oct. 31, 2024
- ▶ Acceptance Notification: Jan. 16, 2025
- ▶ Final Paper Submission Deadline: Feb. 9, 2025

APEMC'25 SECRETARIAT

 **BORIS@TL.NTU.EDU.TW**

 **+886-2-3366-1365**



EMC Europe 2025

September 1 - 5, Paris, France

International Symposium and Exhibition on Electromagnetic Compatibility

IMPORTANT DEADLINES AND DATES

Special Session Proposals: **January 13, 2025**

Paper Submission Deadline: **February 17, 2025**

Workshop & Tutorial Proposal Submission Deadline: **March 31, 2025**

Notification of Paper Acceptance: **April 28, 2025**

Registration of participants: **April 1, 2025 (starting date)**

Reduced Registration Fee: **June 2, 2025**

Final Paper Submission: **June 2, 2025**

Exhibition Application: **June 27, 2025**

CONTACT INFORMATION

Symposium Website: www.premc.org/emceurope2025

What's on in Paris: <https://parisjetaime.com/eng/>

On-line Conference system: www.conftool.org/emceurope2025

Contact & Information (for admin and financial support):

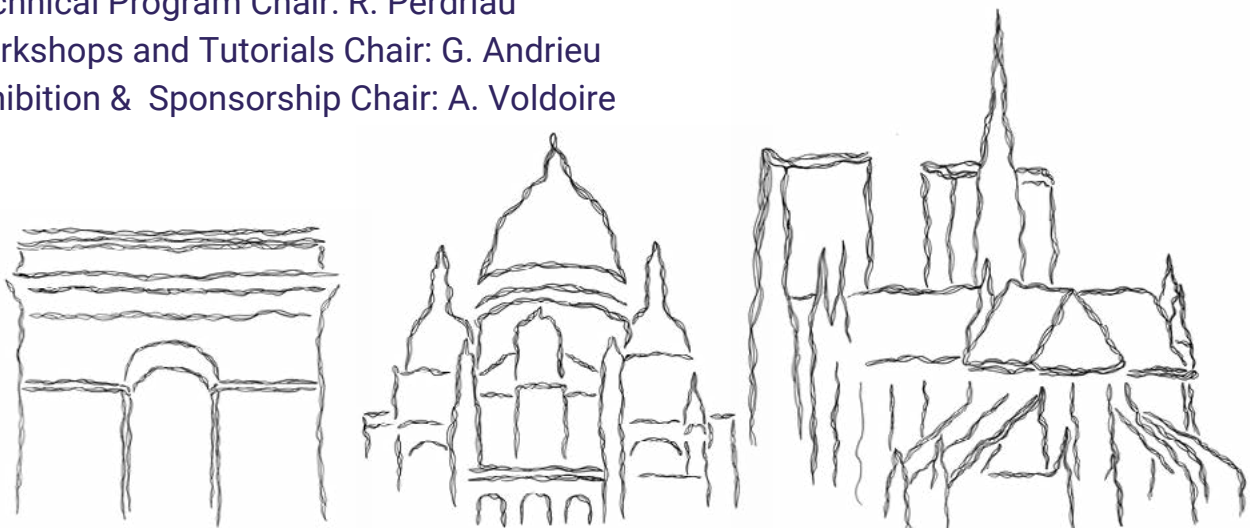
emceurope2025@premc.org

Conference Chair: P. Besnier

Technical Program Chair: R. Perdriau

Workshops and Tutorials Chair: G. Andrieu

Exhibition & Sponsorship Chair: A. Voltaire



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Imagine a world where the flow of information is no more.
What would it mean if communications just stopped?

Our lives, even their most everyday moments,
have taken shape through a succession of endeavors and innovations.

Our passion is to keep people in comfort and security
and co-create a vibrant society, one full of curiosity.
We will always pursue a freer, more expansive future.

We are transcending boundaries, forging connections,
and liberating people from constraints.

**Beyond human intelligence,
co-create new standards for future society.**

NICT





The NTT-AT EMC Center was established in 1993 as the first EMC technology consulting center in Japan specializing EMC solutions for telecommunication problems, based on NTT Laboratories' technologies. Main businesses of EMC Center are NTT-TR* test, VCCI conformity test, electromagnetic environment investigation, medical equipment interference investigation, EMC countermeasure goods sales, SAR measurement support, technical support for NTT laboratories / NTT group companies, EMC international standardization work (IEC / CISPR, ITU-T, ITU-R) etc.

In this exhibition, we introduce the following products.

- Soft error testing of communication equipment caused by neutrons derived from cosmic rays,
- EMC Testing Services (Emission, Immunity, Overvoltage),
- Tissue Equivalent Liquids for SAR(Specific Absorption Rate) Measurement,
- Low-noise & low-power-consumption LED light for iDC,
- Electromagnetic Emanation Security Device - SecureHider®.

*NTT-TR: NTT Technical Requirements.
<https://group.ntt/en/procurement/supplier/>

About us :
EMC center,
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https://www.ntt-at.com/product/list_emc_solutions.html
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Tel: +81-120-057-601, Fax: +81-120-057-602,
3-9-11 Midori-cho, Musashino-shi,
Tokyo 180-8585 JAPAN

10 m SEC (NTT Musashino Lab.)



Soft error testing

Test Technology

Reproduction experiments are difficult because the occurrence probability in nature is low. Soft error is reproduced instantly by irradiating the natural world **100 million times** the neutron!

Operation Room
Confirm the countermeasure operation

Shielding wall

Reproduction of Soft error

Neutron generator, Neutron, proton, Small accelerator, Irradiating Room

International standardization

The ITU (International Telecom-Union) establishes recommendations for measures design methods, test methods, and quality standards for communication equipment.

No.	Title	Date
K.124	Overview of particle radiation effects on telecommunication systems	Dec. 2016
K.130	Neutron irradiation test methods for telecommunication equipment	Nov. 2017
K.131	Design methodologies for telecommunication systems applying soft error measures	Nov. 2017
K.138	Quality estimation methods and application guidelines for mitigation measures based on particle radiation tests	Nov. 2018
K.139	Reliability requirements for telecommunication systems affected by particle radiation	Nov. 2018

MEASURING EQUIPMENT FOR EMC TESTING

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Make ideas real



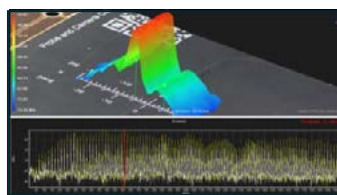
ESD/EMIの全てを**可視化**する事が出来る
唯一のツールです。

▼注目ポイント

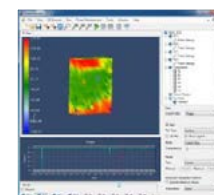
- 【Point1】 **最大40GHz**まで対応。(近傍界/位相の可視化)
- 【Point2】 位相を基に**近傍界から遠方界へSim**を実行可能。
- 【Point3】 ESD/RFの**耐量をマッピング**し問題箇所を特定。
- 【Point4】 **電流拡散経路**を可視化。
- 【Point5】 **ESDガンテストの自動化**により効率化。

これらの機能で問題箇所への

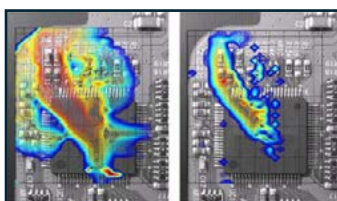
「ピンポイント」かつ**「本質的」**な対策が可能！



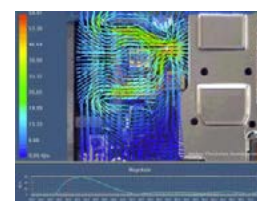
【近傍界スキャン/位相スキャン】



【近傍界から遠方界へのSim】



【ESDスキャン耐量マップ】



【ESD電流経路可視化】



【ガンテストの自動化】

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SIMULIA Regional User Meeting 2024

- 2024年6月21日(金)
- ANAインターコンチネンタルホテル東京, 107-0052 港区, 日本

 SIMULIA



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- 構造解析、流体・音響解析、電磁界解析におけるユーザー企業講演

We are experts in conducting EMC evaluation testing for automotive components

Dealing with various automotive EMC regulations

Services

- Measuring noise and signals of electric/electromagnetic waves emitted from electrical/electronic products
- Testing how electric/electromagnetic waves disrupt electrical/electronic products' normal operation
- Providing consultation for EMC testing

Facilities

Types of facilities	Number of chambers/rooms
Semi-anechoic chamber	15
Shielded room	11
Room with ground plane floor	4

DENSO EMC ENGINEERING SERVICE CORPORATION

Location: 1-1, Showa-cho, Kariya, Aichi 448-8661, Japan
URL: <https://www.emces.co.jp/en/>

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Product Categories



EMC

Global solutions



- Emission
- Immunity
- Fast Measurements
- Compliant Tests

Modularity is no more a dream



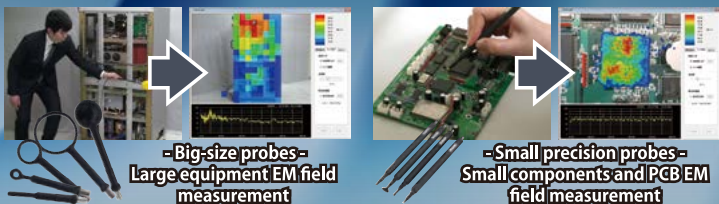
Narda Safety Test Solutions S.r.l.
 Via Benessea 29/B
 17035, Cisano sul Neva (SV) - Italy
Phone: +39 0182 58641
Email: nardait.support@narda-sts.it
Website: www.narda-sts.it

Electromagnetic Field Visualization System



EPS-02Ev3

EPS is an EMC/EMI debugging tool enabling designers to rapidly perform pre-measurement, failure point identification, and improvement efficiency confirmation in EMC/EMI countermeasure process of product design. The software detects location of the probe by color detection* through the camera image, performs real-time frequency analysis of the measured signal and displays the electromagnetic field strength superimposed on the actual image of the measured object in form of a heat map.

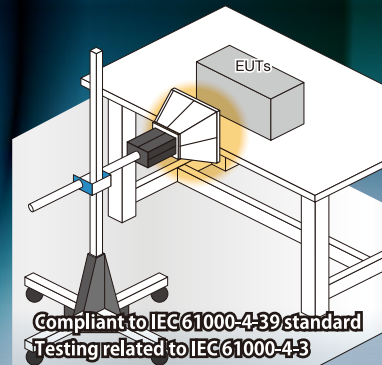
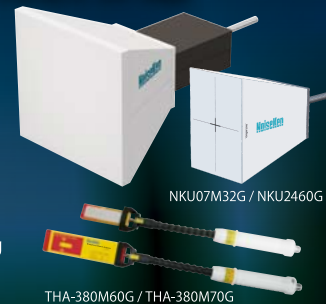


- Big-size probes -
Large equipment EM field measurement

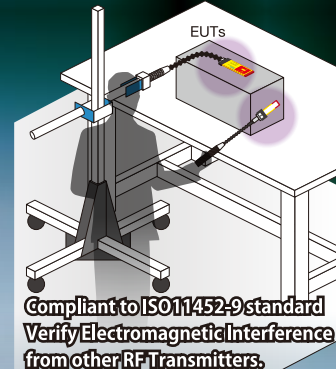
- Small precision probes -
Small components and PCB EM field measurement

Broadband Sleeve Antenna TEM Horn Antenna

Broadband sleeve antenna and TEM horn antenna has been developed for efficient immunity testing against hand-held transmitters and cellular phones. In the conventional strong electromagnetic field immunity test in the near field, it was necessary to replace the antenna according to each frequency, which required a lot of labor and time. This new antenna is a single antenna solution eliminating the need for antenna changes and dramatically reducing the test time.



Compliant to IEC 61000-4-39 standard
Testing related to IEC 61000-4-3



Compliant to ISO11452-9 standard
Verify Electromagnetic Interference from other RF Transmitters.

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<http://www.noiseken.com>

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OTOWA ELECTRIC CO., LTD.



Shanghai Lioncel Electromagnetic Technology Co., Ltd.

Overview

Since its foundation in 2008, Shanghai Lioncel Electromagnetic Technology Co., Ltd has grown into a leading hi-tech enterprise dedicated to research and development of EMC testing technology as well as the manufacture of EMC immunity test equipment in accordance with IEC 61000-4 series basic standards, automotive components relevant test standards, military equipment test standards and so on. In addition, it has greatly enriched the product line to have launched distinctive GTEM cells and integrated conducted immunity test equipment in conformance to such standards as IEC 61000-4-6, ISO 11452-4 and GJB 151B-CS114.

In recent years, it has made significant progress in planning and construction of EMC laboratories including test sites and test systems to satisfy the higher requirements of the customers.

Business Contact

- Provision of immunity test equipment in accordance with IEC 61000-4 series basic standards.
- Provision of test equipment in accordance with ISO 11452, ISO 7637, ISO 10605 and ISO 16750-2 standards.
- Provision of transient susceptibility test equipment of CS106, CS112, CS115 and CS116 in accordance with GJB 151B-2013.
- Planning and construction of anechoic chambers, electromagnetic shielding enclosures, EMI measurement systems and EMS test systems.



Sincere invitation

We sincerely invite you to join our agent team for broad cooperation and bright future.

It would be appreciated that you could email us your information in detail at sales@emclioncel.com. We will reply you as soon as possible.



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The VCCI mark is a proof of security showing our environment is protected from the effects of EMI!



RF anechoic chamber for testing electromagnetic interference

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Battery Management System

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Electric Coolant Heater

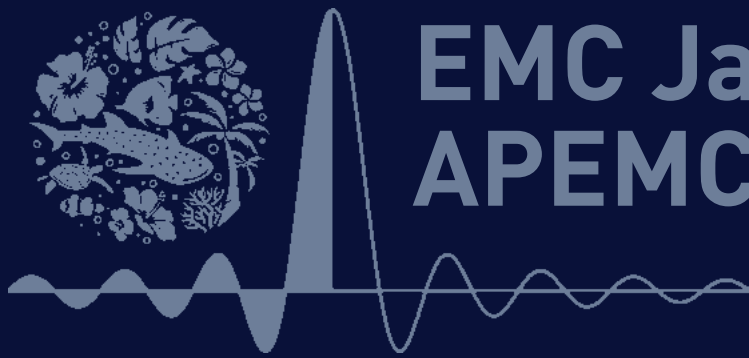
Electric Compressor

Coolant HUB

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Official HP
<https://www.sanden.co.jp/english/index.html>





EMC Japan/ APEMC Okinawa

EMC Japan/APEMC Okinawa Organizing Committee