



Pocket
guide

MC2025
Karlsruhe
Microscopy Conference

31 August–4 September 2025
www.microscopy-conference.de

DREILÄNDERTAGUNG

The MC 2025 is jointly organised by
DGE – German Society for Electron Microscopy e. V.
SSOM – Swiss Society for Optics and Microscopy
ASEM – Austrian Society for Electron Microscopy



European Microscopy Society

Based on the scientific quality, educational merits, international dimension, and student support of the present event, EMS has granted patronage over the Microscopy Conference 2025.

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Seeing beyond

General information	4
Welcome note	6
Programme overview	
Sunday, 31 August	7
Monday, 1 September	8
Tuesday, 2 September	9
Wednesday, 3 September	10
Thursday, 4 September	11
List of scientific sessions	12
Poster sessions	16
Also good to know	18
Social activities	20
Floorplan	22
Sponsors and exhibitors	24
Lunchtime lectures	25
Exhibitors' presentations	28

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Venue

Messe Karlsruhe
Messeallee 1
76287 Rheinstetten | Germany

Date

31 August–04 September 2025

Conference Chairs

Prof. Dr. Christian Kübel

Karlsruhe Institute of Technology (KIT)
Institute of Nanotechnology & Karlsruhe Nano Micro Facility
and Technical University Darmstadt Department
of Materials & Earth Sciences

T.T.-Prof. Dr.-Ing. Yolita M. Eggeler

Karlsruhe Institute of Technology (KIT)
Laboratory for Electron Microscopy (LEM) and
Microscopy of Nanoscale Structures & Mechanisms (MNM)

Prof. Dr. Astrid Pundt

Karlsruhe Institute of Technology (KIT)
Institute for Applied Materials Science (IAM-WK)

Prof. Dr. Rasmus R. Schröder

Cryo Electron Microscopy
Heidelberg University/Medical Faculty

Hosting societies

German Society for Electron Microscopy e. V.
(DGE)



Swiss Society for Optics and Microscopy
(SSOM)



Austrian Society for Electron Microscopy
(ASEM)



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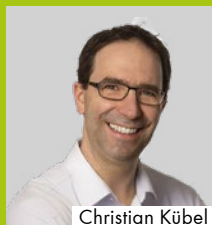
Conference organiser

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Christian Kübel



Yolita M. Eggeler



Astrid Pundt



Rasmus Schröder

DEAR COLLEAGUES AND FRIENDS,

We are delighted to welcome you to the **Microscopy Conference 2025** in the charming city of **Karlsruhe, Germany**. Whether you are a student just beginning your journey into the fascinating world of microscopy, a technician exploring the latest equipment and scientific techniques, or an experienced scientist or renowned expert, this is your European microscopy conference in 2025.

Our goal is to foster an inspiring atmosphere where ideas flourish and new collaborations take root.

In keeping with the tradition of the Dreiländertagung, the Austrian, German, and Swiss Societies for Electron Microscopy (ASEM, DGE, SSOM) proudly set the stage for a vibrant exchange of ideas and innovations driven by a shared passion for science. With more than 1,000 participants joining us from around the world, this is truly a global celebration of microscopy.

Throughout the conference, you are experiencing an exciting scientific programme featuring plenary talks on the most current topics, alongside the latest developments in instrumentation, methods, materials science, and life sciences. Invited talks, oral and poster presentations, award ceremonies, and prize lectures round out this dynamic event.

We are thrilled to have you here in Karlsruhe. Your presence makes this conference a truly special and memorable experience – a unique platform for sharing knowledge, sparking ideas, and building the future of microscopy together.

Warm regards,

Christian Kübel, Yolita M. Eggeler, Astrid Pundt, Rasmus Schröder
Conference Chairs, MC 2025

conference room 1	conference room 2	conference room 10	conference room 4	conference room 12	conference room 7	Foyer dm arena
					09:00–10:45 Workshop 7	
		09:30–12:45 Workshop 3				
	10:00–11:15 Workshop 2		10:00–11:40 Workshop 5	10:00–12:00 Workshop 6		
					11:00–12:45 Workshop 7	
	11:30–12:30 Workshop 2		12:10–13:00 Workshop 5			12:00–13:30 Workshop 8
13:00–17:00 Workshop 1	13:15–14:30 Workshop 2	13:00–17:00 Workshop 4		13:00–16:00 Workshop 6		
			14:00–15:40 Workshop 5		13:45–15:30 Workshop 7	14:00–16:00 Workshop 8
	14:45–16:00 Workshop 2					
			16:00–17:00 Workshop 5		15:45–17:00 Workshop 7	
	16:15–18:30 Board Meeting DGE					
19:00–20:30 Welcome reception Alter Schlachthof 13 (Fleischmarkthalle), 76131 Karlsruhe						

WS 1	Electron optics and new approaches for spectroscopy in the TEM
WS 2	Materials meets life science microscopy – From critical preparation to advanced microscopy of sensitive/reactive specimens
WS 3	Practical aspects of aberration correction in TEM and STEM
WS 4	Transmission electron microscopy from first principles
WS 5	<i>In-situ/operando</i> TEM and SEM
WS 6	Research data management in microscopy
WS 7	4D-STEM concepts and applications in the physical and life sciences
WS 8	Volume EM in life sciences – Tips and tricks for your sample preparation

dm arena - plenary hall	conference hall	conference room 8/9	conference room 1	conference room 4
08:00–09:15				
Opening & AI on the atomic edge – How autonomous microscopy is accelerating energy materials innovation				
09:15–10:00				
Plenary 1 Extreme objective lenses for outlandish imaging				
10:30–12:30	10:30–12:30	10:30–12:30		
MS 1 Energy-related materials and catalysts	IM 1 Progress in instrumentation and ultrafast EM	LS 1 Structure and functions of cells and organelles: Cryo ET		
12:45–13:45	12:45–13:45		12:45–13:45	12:45–13:45
Lunchtime lecture Thermo Fisher Scientific	Lunchtime lecture JEOL (Germany) GmbH		Lunchtime lecture Carl Zeiss Microscopy Deutschland GmbH	Lunchtime lecture TESCAN GROUP, a.s.
14:00–16:00				
Poster presentations				
16:00–18:00				
Exhibitors' presentations				
18:00–20:00				
AK DPC				

dm arena - plenary hall	conference hall	conference room 8/9	conference room 1	conference room 4
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08:30–09:15

Plenary 2

From correlative microscopy to multimodal discovery: Connecting modalities, bridging scales, enabling insight

09:15–10:00

Plenary 3

Atomic resolution *in-situ* studies of interfacial phenomena

10:30–12:30

MS 2

Metals and alloys

10:30–12:30

IM 2

Advanced spectroscopy

10:30–12:30

LS 2

Structure and functions of cells and organelles: Imaging of large volumes and plastic section tomography

12:45–13:45

Lunchtime lecture
Thermo Fisher Scientific

12:45–13:45

Lunchtime lecture
Carl Zeiss Microscopy Deutschland GmbH

12:45–13:45

Lunchtime lecture
NanoMEGAS SPRL

12:45–13:45

Lunchtime lecture
RIANA*

12:45–13:45

Lunchtime lecture
TESCAN GROUP, a.s.

*Research Infrastructure Access in Nanoscience and Nanotechnology

14:00–16:00

Poster presentations

16:00–18:00

MS 3

Disordered materials

16:00–18:00

IM 3

SEM and FIB developments

16:00–18:00

LS 3

Cryo-EM and image analysis of macromolecules and molecular assemblies

18:15–20:15

AK yDGE

Young Microscopists Symposium

18:15–20:15

AK DPC

dm arena - plenary hall	conference hall	conference room 8/9	conference room 1	conference room 4
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09:00–09:50

Ernst Ruska lecture

Momentum-resolved
STEM – A track in
materials research with
life science
perspectives

10:30–12:30

MS 4

Low-dimensional and
quantum materials

10:30–12:30

IM 4

Emerging techniques
and applications in
4D-STEM

10:30–12:30

LS 4

Correlative microscopy
and multimodal
microscopy

12:45–13:45

Lunchtime lecture
Thermo Fisher
Scientific

12:45–13:45

General Assembly DGE

12:45–13:45

Lunchtime lecture
Carl Zeiss Microscopy
Deutschland GmbH

12:45–13:45

Lunchtime lecture
Leica Mikrosysteme
Vertrieb GmbH

12:45–13:45

Lunchtime lecture
JEOL (Germany) GmbH

14:00–16:00

Poster presentations

16:00–18:00

MS 5

Functional organics,
carbon-based and
hybrid materials

16:00–18:00

IM 5

Beam shaping and
analysis

16:00–18:00

LS 5

Pathology, pathogens
and diagnostics

From 19:00

Conference dinner | ZKM – Zentrum für Kunst und Medien Karlsruhe, Lorenzstraße 19, 76135 Karlsruhe

dm arena - plenary hall	conference hall	conference room 8/9	conference room 1	conference room 4
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08:30–09:15

Harald Rose

distinguished lecture

Electron microscopical
imaging using inelas-
tically scattered
electrons

09:15–10:00

Plenary 4

Probing the molecular
organization of cells
and organelles using
cryo-electron
tomography

10:30–12:30

MS 6

Ceramics, composites
and geoscience – In
memory of Achim
Kleebe

10:30–12:30

IM 6/LS 7

Big data and AI
techniques

10:30–12:30

LS 6

Advances in sample
preparation

12:45–13:45

Lunchtime lecture

Thermo Fisher
Scientific

12:45–13:45

Lunchtime lecture

DECTRIS Ltd.

12:45–13:45

Lunchtime lecture

Leica Mikrosysteme
Vertrieb GmbH

12:45–13:45

Lunchtime lecture

JEOL (Germany) GmbH

14:00–16:00

MS 7

Multi-scale and
correlative *in-situ*/
operando electron
microscopy

14:00–16:00

MS 8

Beyond ideal 2D and
van der Waals
materials: Disorder,
defects, adatoms and
contamination

14:00–16:00

IM 7

Electron
crystallography

16:00–16:30

Awards and Closing

Session		Chairs	Time	Speakers
Opening		Yolita M. Eggeler, Karlsruhe/DE Christian Kübel, Karlsruhe/DE	1 September 08:00–09:15	Christian Kübel, Karlsruhe/DE Yolita M. Eggeler, Karlsruhe/DE Britta Wirtz, Karlsruhe/DE Oliver Kraft, Karlsruhe/DE Steven Richard Spurgeon, Golden, CO/US
Plenary lecture 1	Extreme objective lenses for outlandish imaging	Marc-Georg Willinger, Munich/DE	1 September 09:15–10:00	Lewys Jones, Dublin/IE
Plenary lecture 2	From correlative microscopy to multimodal discovery: Connecting modalities, bridging scales, enabling insight	Rasmus R. Schröder, Heidelberg/DE	2 September 08:30–09:15	Roger Wepf, Brisbane/AU
Plenary lecture 3	Atomic resolution in-situ studies of interfacial phenomena	Gerald Kothleitner, Graz/AT	2 September 09:15–10:00	Maria Varela del Arco, Madrid/ES
Ernst Ruska Lecture	Momentum-resolved STEM – A track in materials research with life science perspectives	Katharina Hipp, Tübingen/DE	3 September 09:00–09:50	Knut Müller-Caspary, Munich/DE
Harald Rose distinguished lecture	Electron microscopical imaging using inelastically scattered electrons	Kerstin Volz, Marburg/DE	4 September 08:30–09:15	Helmut Kohl, Münster/DE
Plenary lecture 4	Probing the molecular organization of cells and organelles using cryo-electron tomography	Thomas Heuser, Vienna/AT	4 September 09:15–10:00	Daniela Nicastro, Dallas, TX/US
Awards and Closing		Yolita M. Eggeler, Karlsruhe/DE Christian Kübel, Karlsruhe/DE	4 September 16:00–16:30	Christian Kübel, Karlsruhe/DE Yolita M. Eggeler, Karlsruhe/DE MC 2027: Bernd Rellinghaus, Dresden/DE

Session		Chairs	Time	Speakers
MS 1	Energy-related materials and catalysts	K. Volz, Marburg/DE D. Wang, Eggenstein-Leopoldshafen/DE	1 September 10:30–12:30	A. Demortière , Amiens/FR S. Helveg , Kongens Lyngby/DK V. Montanelli, Dübendorf/CH T. Lunkenbein, Berlin/DE P. Schweizer, Düsseldorf/DE R. Zandonella, Jülich/DE
MS 2	Metals and alloys	Y. M. Eggeler, Karlsruhe/DE D. Kiener, Leoben/AT	2 September 10:30–12:30	D. S. Gianola , Santa Barbara, CA/US L. Vogl , Düsseldorf/DE H. Groß, Linz/AT L. Schretter, Leoben/AT M. Dierner, Erlangen/DE R. Bueno Villoro, Bochum/DE
MS 3	Disordered materials	M. Peterlechner, Karlsruhe/DE C. Gammer, Leoben/AT	2 September 16:00–18:00	P. Voyles , Madison, WI/US K. Nakazawa , Tsukuba/JP Y. Zou, Jülich/DE S. Kang, Darmstadt/DE H. Rösner, Münster/DE S. M.I. Noisternig, Vienna/AT
MS 4	Low-dimensional and quantum materials	U. Kaiser, Ulm/DE J. Kotakoski, Vienna/AT	3 September 10:30–12:30	B. Hansen Goodge , Dresden/DE R. Sahu, Karlsruhe/DE T. Domröse, Göttingen/DE R. Yu, Beijing/CN S. Taheriniya, Heidelberg/DE P. Haslinger , Vienna/AT
MS 5	Functional organics, carbon-based and hybrid materials	U. Heinemeyer, Ludwigshafen/DE N. V. Tarakina, Potsdam/DE	3 September 16:00–18:00	S. Bals , Antwerp/BE H. Friedrich , Eindhoven/NL P. Banerjee, Kongens Lyngby/DK D. Khaykelson, Rehovot/IL J. A. Kammerer, Berlin/DE Q. Sun, Karlsruhe/DE
MS 6	Ceramics, composites and geoscience – In memory of Achim Kleebe	T. Höche, Halle a. d. Saale/DE D. T. L. Alexander, Lausanne/CH	4 September 10:30–12:30	I. Tanaka , Kyoto/JP L. Molina-Luna, Darmstadt/DE S. Kang, Darmstadt/DE R. Stroud , Tempe, AZ/US P. Jovicevic-Klug, Düsseldorf/DE F. Kleiner, Weimar/DE
MS 7	Multi-scale and correlative in-situ/operando electron microscopy	R. Erni, Dübendorf/CH C. D. Damsgaard, Kongens Lyngby/DK	4 September 14:00–16:00	P. Ferreira , Braga/PT S. Zhang, Düsseldorf/DE N. Sudheer, Karlsruhe/DE K. Elibol, Stuttgart/DE F.-P. Schmidt, Berlin/DE W. Dachraoui, Dübendorf/CH R. A. Armengol, Kongens Lyngby/DK
MS 8	Beyond ideal 2D and van der Waals materials: Disorder, defects, adatoms and contamination	J. C. Meyer, Tübingen/DE T. Susi, Vienna/AT	4 September 14:00–16:00 conference hall	F. Allen , Berkeley, CA/US B. M. Mayer, Vienna/AT D. Mücke, Ulm/DE X. Zhou, Erlangen/DE D. Lamprecht, Vienna/AT M. Schlegel, Tübingen/DE A. J. Schwartz, Karlsruhe/DE

Session		Chairs	Time	Speakers
LS 1	Structure and functions of cells and organelles: Cryo ET	B. Zuber, Bern/CH P. Chlanda, Heidelberg/DE	1 September 10:30–12:30	Z. E. Wang , Cambridge/GB R. A. Frank , Leeds/GB D. Nazari, Illkirch/FR G. G. Ren, Berkeley, CA/US A. Petrovic, Göttingen/DE H. Rosa, Heidelberg/DE
LS 2	Structure and functions of cells and organelles: Imaging of large volumes and plastic section tomography	W. Möbius, Göttingen/DE	2 September 10:30–12:30	A. M. Steyer , Heidelberg/DE A. Müller , Dresden/DE S. Rey, Cambridge, MA/US B. Giepmans, Groningen/NL D. Puchkov, Berlin/DE P. A. Steiner, Linz/AT
LS 3	Cryo-EM and image analysis of macromolecules and molecular assemblies	A. Boland, Geneva/CH L. Sazanov, Klosterneuburg/AT	2 September 16:00–18:00	C. Paulino , Heidelberg/DE I. Vercellino, Jülich/DE M. Wieczorek, Zurich/CH B. Murphy, Frankfurt a.M./DE E. Kandiah, Grenoble/FR D. Barford , Cambridge/GB
LS 4	Correlative microscopy and multimodal microscopy	J. M. Mateos Melero, Zurich/CH P. A. Steiner, Linz/AT	3 September 10:30–12:30	I. Herrmann , Zurich/CH P. Ronchi , Heidelberg/DE T. Kurth, Dresden/DE I. Zykov, Vienna/AT N. Fuchs, Heidelberg/DE H. Ochner, Cambridge/GB
LS 5	Pathology, pathogens and diagnostics	M. Laue, Berlin/DE R. Kain, Vienna/AT	3 September 16:00–18:00	M. Ochs , Berlin/DE B. Giepmans , Groningen/NL M. Laue , Berlin/DE K. Richert-Pöggeler, Braunschweig/DE J. La Roche, Ulm/DE
LS 6	Advances in sample preparation	D. Kolb, Graz/AT K. Hipp, Tübingen/DE	4 September 10:30–12:30	P. S. Erdmann , Milan/IT M. Schifferer , Munich/DE J. Nebesářová, Ceske Budejovice/CZ V. M. Kissling, St. Gallen/CH M. Wachsmuth-Melm, Heidelberg/DE T. Taubitz, Dortmund/DE
LS 7/ IM 6	Big data and AI techniques	C. T. Koch, Berlin/DE	4 September 10:30–12:30	M. Kühbach , Berlin/DE R. Jinschek , Liverpool/GB W. Sohn, Seoul/KR H. Eliasson, Dübendorf/CH M. Zhao, Berlin/DE D. Jannis, Eindhoven/NL

Session		Chairs	Time	Speakers
IM 1	Progress in instrumentation and ultrafast EM	C. Ropers, Göttingen/DE P. Haslinger, Vienna/AT	1 September 10:30–12:30	U. J. Lorenz , Lausanne/CH V. Kumar, Lausanne/CH H. Mba, Strasbourg/FR A. Wendeln, Regensburg/DE F. Börrnert, Heidelberg/DE I. C. Bicket, Vienna/AT A. Lubk, Dresden/DE
IM 2	Advanced spectroscopy	M. D. Rossell, Dübendorf/CH G. Kothleitner, Graz/AT	2 September 10:30–12:30	F. P. Martinez , Barcelona/ES A. Feist , Göttingen/DE D. Pohl, Dresden/DE B. Mendis, Durham/GB A. Kichigin, Erlangen/DE J. Á. Castellanos-Reyes, Uppsala/SE
IM 3	SEM and FIB developments	M. G. Willinger, Munich/DE J. Reuteler, Zurich/CH	2 September 16:00–18:00	U. Golla-Schindler , Aalen/DE D. Ryklin, Heidelberg/DE P.-H. Lu, Jülich/DE J. Donoghue , Manchester/GB A. M. Martinez, Belvaux/LU E. V. Woods, Düsseldorf/DE
IM 4	Emerging techniques and applications in 4D-STEM	K. Müller-Caspary, Munich/DE P. Pelz, Erlangen/DE	3 September 10:30–12:30	C. H. Liebscher , Bochum/DE H. Stahlberg , Lausanne/CH H. L. Robert, Antwerp/BE S. Kang, Darmstadt/DE F. Otto, Berlin/DE S. You, Erlangen/DE
IM 5	Beam shaping and analysis	A. Lubk, Dresden/DE T. Schachinger, Vienna/AT	3 September 16:00–18:00	M. C. Chirita Mihaila , Prague/CZ T. Wagner, Berlin/DE M. Zanetti, Vienna/AT P. Habibzadeh Kavkani, Modena/IT C. Gatel , Toulouse/FR D. Wolf, Dresden/DE T. Fraysse, Toulouse/FR
IM 6/ LS 7	Big data and AI techniques	C. T. Koch, Berlin/DE	4 September 10:30–12:30	M. Kühbach , Berlin/DE R. Jinschek , Liverpool/GB W. Sohn, Seoul/KR H. Eliasson, Dübendorf/CH M. Zhao, Berlin/DE D. Jannis, Eindhoven/NL
IM 7	Electron crystallography	T. E. Gorelik, Jülich/DE E. A. Müller Gubler, Villigen/CH	4 September 14:00–16:00 Conference room 8/9	B. Mendis , Durham/GB S. Plana-Ruiz , Tarragona/ES T. Latychevskaia, Villigen/CH J. Bačovský, Brno/CZ I. Kraus, Erlangen/DE

1 September

Poster session 1	MS1.P01	– MS1.P56	MS 1: Energy-related materials and catalysts
Poster session 2	IM1.P01	– IM1.P16	IM 1: Progress in instrumentation and ultrafast EM
Poster session 3	LS1.P01	– LS1.P03	LS 1: Structure and functions of cells and organelles – Cryo ET
Poster session 4	MS2.P01	– MS2.P44	MS 2: Metals and alloys
Poster session 5	IM2.P01	– IM2.P26	IM 2: Advanced spectroscopy
Poster session 6	LS2.P01	– LS2.P06	LS 2: Structure and functions of cells and organelles – Imaging of large volumes and plastic section tomography
Poster session 7	MSLB.P01	– MSLB.P20	MS Late breaking

2 September

Poster session 8	MS3.P01	– MS3.P08	MS 3: Disordered materials
Poster session 9	IM3.P01	– IM3.P24	IM 3: SEM and FIB developments
Poster session 10	LS3.P01	– LS3.P13	LS 3: Cryo-EM and image analysis of macromolecules and molecular assemblies
Poster session 11	MS4.P01	– MS4.P22	MS 4: Low-dimensional and quantum materials
Poster session 12	IM4.P01	– IM4.P34	IM 4: Emerging techniques and applications in 4D-STEM
Poster session 13	LS4.P02	– LS4.P18	LS 4: Correlative microscopy and multimodal microscopy
Poster session 14	MS5.P01	– MS5.P08	MS 5: Functional organics, carbon-based and hybrid materials
Poster session 15	IM5.P01	– IM5.P05	IM 5: Beam shaping and analysis
Poster session 16	LS5.P01	– LS5.P02	LS 5: Pathology, pathogens and diagnostics
Poster session 17	IMLB.P01	– IMLB.P12	IM Late breaking

3 September

Poster session 18	MS6.P01	– MS6.P12	MS 6: Ceramics, composites and geoscience – In memory of Achim Kleebe
Poster session 19	IM6.P01	– IM6.P13	IM 6/LS 7: Big data and AI techniques
Poster session 20	LS6.P01	– LS6.P06	LS 6: Advances in sample preparation
Poster session 21	MS7.P01	– MS7.P35	MS 7: Multi-scale and correlative in-situ/ operando electron microscopy
Poster session 22	MS8.P01	– MS8.P05	MS 8: Beyond ideal 2D and van der Waals materials: Disorder, defects, adatoms and contamination
Poster session 23	IM7.P01	– IM7.P05	IM7: Electron crystallography
Poster session 24	LSLB.P01	– LSLB.P07	LS Late breaking



Abstractbooklet

The conference proceedings will be available online on the conference website: www.microscopy-conference.de for all participants at the beginning of the conference.



App

You can download the Microscopy Conference 2025 mobile app, which allows you to set up your personalised event programme, browse the programme, get to know the exhibitors and interact with other attendees. You can download the app by scanning the QR code on your mobile or tablet device, or by searching for 'Conventus' in your app store and installing the MC 2025 event.



Awards & Prizes

Best Poster Award

The Microscopy Conference will award prizes for the best posters displayed during the conference.

One poster of each session will be awarded. The posters are selected according to their scientific content, originality, and design. The selection will be done by the session chairs. The conference participant presenting the poster must be a student or a PhD candidate. The winners will be announced during the Conference Dinner on Wednesday evening.

Best Oral Presentation

This year, the three best oral presentations per topic will also be honoured. This is an audience award! The winners will be selected via online voting by the participants and will be announced during the Closing Ceremony on Thursday afternoon.



Best Image Contest "Art in Science"

The Microscopy Conference will again award prizes for impressive microscope images of scientific and/or artistic value. Acceptable categories are original micrographs or processed micrographs.

Each participant can submit one image. The suggested format is A4 or similar.

The participation requires submission of the micrograph through the conference website, and during the on-site conference registration submission of two printed copies of the image with a title.

All entries will be judged both from the scientific and/or artistic point of view. First, second and third place will be awarded. The winners will be announced during the Conference Dinner.

In addition to a small prize money, all winners will receive a certificate.



Catering

Free lunches (lunch boxes) will be offered to all delegates by the companies during the lunchtime lectures, which will be held Monday to Thursday. For a detailed listing of all lunchtime lectures please refer to pages 25 and 26.

Coffee, tea, and water will be available throughout the day at no charge. During the morning, fruits will be offered, and in the afternoon, a variety of snacks. Additionally, the booths in the industrial exhibition will also tempt you with some delicious treats.



Certificate of Participation

You will automatically receive your certificate of participation by email shortly after the conference.



WiFi and Internet Area

Wireless network will be available throughout the whole building free of charge.

There are two options for WiFi:

- 1) You are using the free WiFi provided by Messe Karlsruhe. Please note that you can only use this for 4 hours per day.

- 2) Use the conference WiFi.

The login details are:

WiFi Microscopy2025
Password Karlsruhe



Welcome Reception

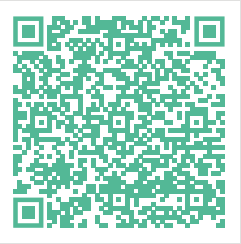
After your arrival on Sunday, we invite you to socialise with your colleagues and other delegates in a pleasant atmosphere with some drinks and snacks.

31 August 2025 | from 19:00

Alter Schlachthof 13 (Fleischmarkthalle) | 76131 Karlsruhe



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After Work Party by Zeiss

1 September 2025 | 18:00-20:00

At booth no. 3

Conference Dinner

Karlsruhe says "Hello"!

Join us for an enjoyable evening at the Center for Art and Media Karlsruhe. A dinner buffet and drinks are included in your ticket. (Separate registration is required.)

As the evening unfolds, enjoy great music from our live DJ "Mitchy" and the opportunity to dance into the night.

3 September 2025 | from 19:00

ZKM | Zentrum für Kunst und Medien Karlsruhe

Lorenzstraße 19 | 76135 Karlsruhe



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28 August - 5 September 2026 | Liverpool, UK



Join us for the 21st International Microscopy Congress, landing in Liverpool!

Scan the QR code or visit www.imc21.org.uk for the latest updates and to sign up to our mailing list

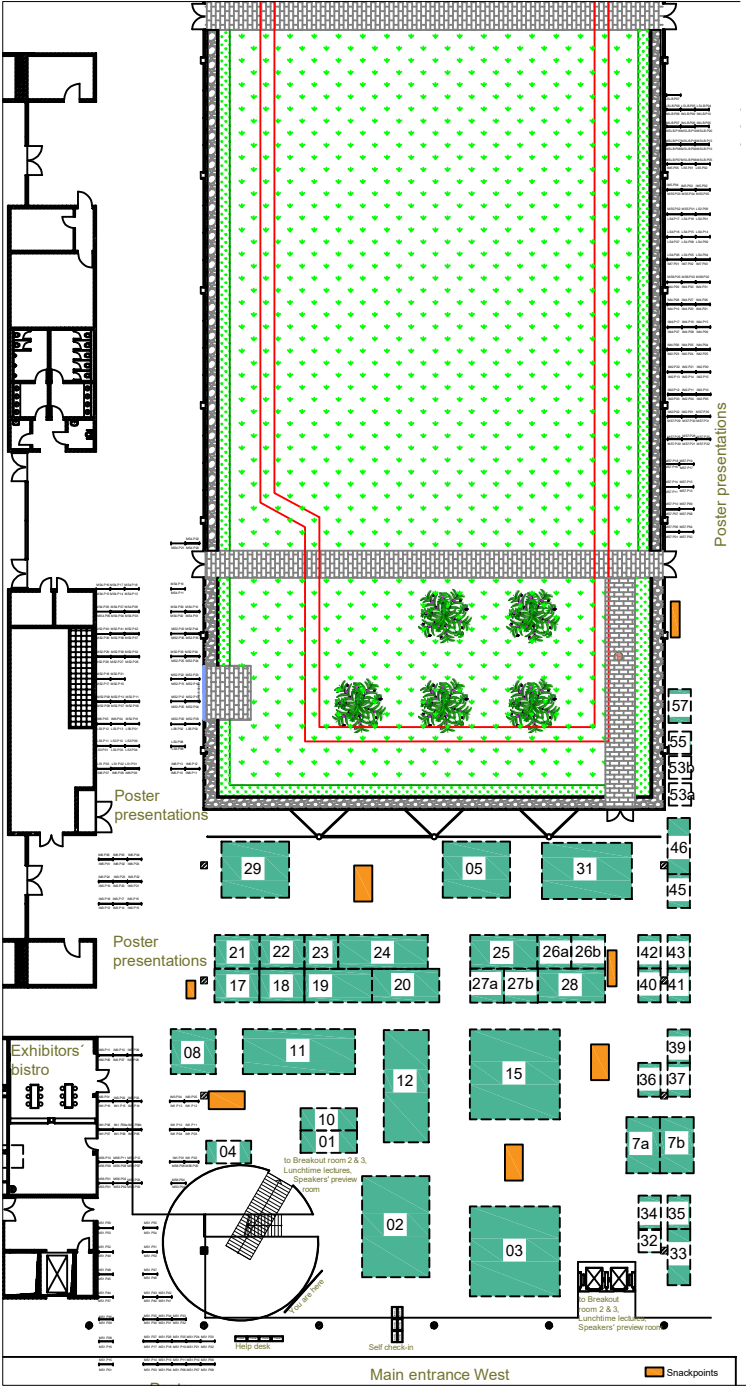
Tescan

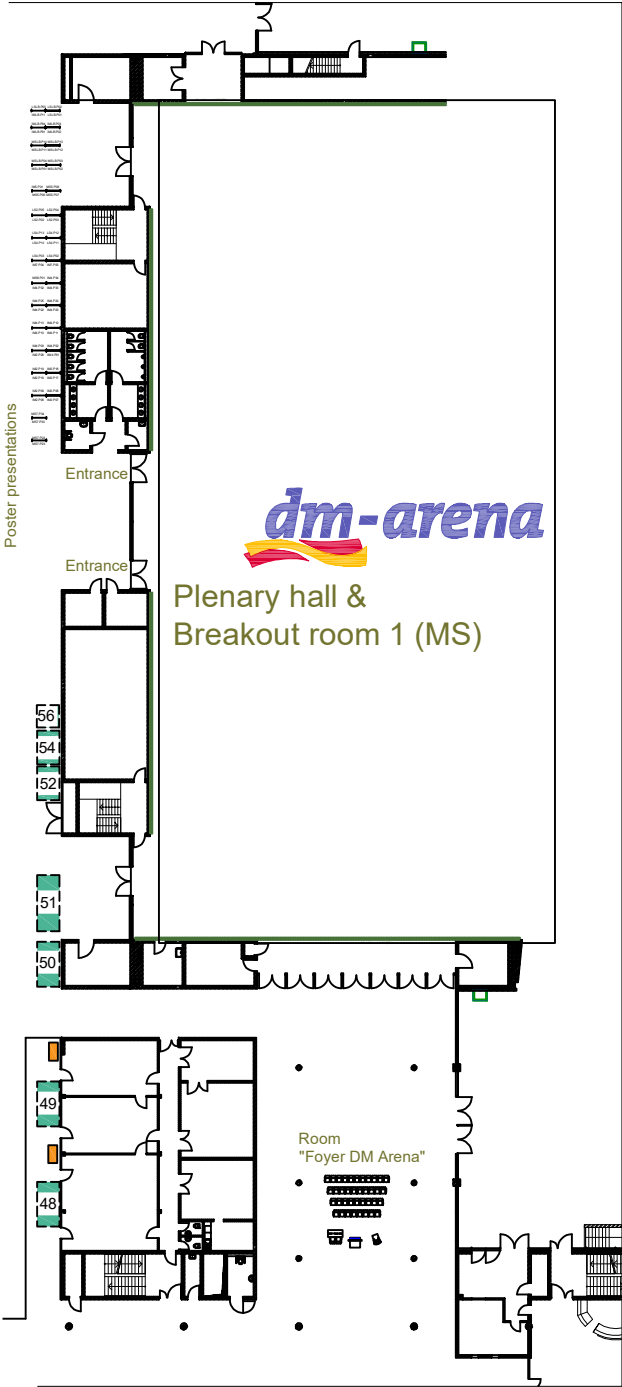
Join Us at
MC2025 Karlsruhe

Accelerating the Art of Discovery



Connect with us to hear our fresh
perspective on electron microscopy —
streamlined, connected, collaborative.





LIST OF EXHIBITORS

COMPANY	BOOTH NO	COMPANY	BOOTH NO
Andreas Mattil - Technischer Vertrieb	37	Leica Microsystems	5
BALTIC Preparation / Safematic	17	Mel-Build	26a
Bestron(Beijing) Science and Technology	23	Micro to Nano	49
Bethge Center für Microcharacterization	40	NanoMEGAS	27a
Carl Zeiss Microscopy Deutschland	3	NORCADA	50
CIQTEK	28	Oxford Instruments	7a
CRYTUR	21	PLANO	19
CWM Chemnitzer Werkstoffmechanik	20	PNDetector	10
DECTRIS	41	point electronic	7b
Delong Instruments	51	Protochips	22
DIAPACK Laborwaren und Verpackungen	32	Quantum Design	24
Diatome / Science Services	1	Quantum Detectors	25
ElanTech UG / NewTec Scientific	52	Renishaw	54
Elektronenmikroskopie Museum Nürnberg e.V.	53b	RJL Micro & Analytic	39
EMSIS	27b	S3-alliance	35
FAIRmat, MatWerk, NFDI4BioImaging	57	Schaefer Technologie	45/46
FIB/W.A.V.E./MendeSystemelektronik	8	Semplor	34
Gatan	29	Service 4 Science	55
Hitachi High-Tech Europe	31	Single Particle	26b
Hummingbird Scientific	48	SmarAct	43
IMC/IUCR	56	Stemberk	36
JEOL (Germany)	12	Systron EMV	33
Kammrath & Weiss	20	Target- Messtechnik	4
Kleindiek Nanotechnik	42	Technoorg Linda	11
		TESCAN	15
		Thermo Fisher Scientific	2
		TVIPS	18
		VitroTEM	53a

SPONSORS

Stefan Mayer Instruments	Universidad Autónoma de Madrid
Swiss Nanoscience Institute (SNI)	

MONDAY, 1 SEPTEMBER

Thermo Fisher Scientific dm-Arena/Plenary Hall

What's new in volume EM and cryo-electron tomography?
Dr. Alexander Rigort (Planegg-Martinsried/DE)


 ThermoFisher
SCIENTIFIC
JEOL (Germany) Conference Hall

Automated TEM-Control with PyJEM
Dr. Julius Bürger (Freising/DE)


 JEOL
Solutions for Innovation

Workflows (FIB / CLEM /Cryo) with the new integrated TEM JEM-120i
Dr. Emanuel Katzmann (Freising/DE)

Carl Zeiss Microscopy Deutschland Conference Room 1

Beyond electron microscopy – workflows to and beyond FESEM/FIB-SEM
Dr. Markus Boese (Oberkochen/DE)


 ZEISS

Seeing beyond

TESCAN Conference Room 4

Proven to Lead: TESCAN FIB-SEM Makes Complex Tasks Accessible with Automated Workflows—from Large-Area Studies to Nanoscale Preparation
Martin Sláma (Brno/CZ)


 TESCAN
PERFORMANCE IN NANOSPACE

TUESDAY, 2 SEPTEMBER

Thermo Fisher Scientific dm-Arena/Plenary Hall

Advanced sub subsurface analysis with the innovative auto cross-section software application
Dr. Min Wu (Copenhagen/DK)


 ThermoFisher
SCIENTIFIC
Carl Zeiss Microscopy Deutschland Conference Hall

Automation and AI for advanced electron microscopy
Martina Schenkel (Oberkochen/DE)


 ZEISS

Seeing beyond

NanoMEGAS Conference Room 8/9

Recent advances in precession enhanced electron diffraction applications for nm scale analysis
Speaker to be announced


NanoMEGAS
Advanced Tools for electron diffraction
RIANA Conference Room 1

RIANA – Research Infrastructure Access in Nanoscience and Nanotechnology
Gaston García, Gregor Hlawacek, Vittorio Morandi (Madrid/ES)


 RIANA
TESCAN Conference Room 4

Boosting the productivity of multimodal STEM while democratizing analytical 4D-STEM
Daniel Nemecek (Brno/CZ)


 TESCAN
PERFORMANCE IN NANOSPACE

WEDNESDAY, 3 SEPTEMBER

Thermo Fisher Scientific dm-Arena/Plenary Hall

Advanced AI-powered segmentation and 3D visualization for life and materials sciences

Dr. Jan Giesebrecht (Berlin/DE)

ThermoFisher
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Carl Zeiss Microscopy Deutschland Conference Room 8/9

Lightfield 4D – Keeping pace with the pulse of life

Dr. Frank Vogler (Oberkochen/DE)



Seeing beyond

Leica Microsystems Conference Room 1

Workflow solution for preparing environmentally sensitive battery samples for SEM

Cyrine Charni (Paris/FR)



JEOL (Germany) Conference Room 4

Magnetic and beam-sensitive samples in S/TEM – Probing challenging materials from the mesoscale down to the atomic scale

Dr. Julius Bürger (Freising/DE)



Light elements, low concentrations and chemical states – Analyzing challenging samples in scanning electron microscopes

Dr. Serguei Matveev (Freising/DE)

THURSDAY, 4 SEPTEMBER

Thermo Fisher Scientific dm-Arena/Plenary Hall

Streamlining serial section imaging with thermo scientific™ maps array tomography software

Dr. Tilman Franke (Planegg-Martinsried/DE)

ThermoFisher
SCIENTIFIC

DECTRIS Ltd. Conference Room 8/9

The next level of EM data processing: Ready-to-use workflows scalable to your dataset's needs

Fabian Eistenstein (Zurich/CH), Camilli Buhl Larsen (Baden-Dättwil/CH)

Oliver Florianin Harder (Lusanne/CH), Ludmilla Leroy (Baden-Dättwil/CH)



Leica Microsystems Conference Room 1

Integrated solutions for serial sectioning and cryo- EM with UC envuity

Dr. Andreia Pinto (Heidelberg/DE)



JEOL (Germany) Conference Room 4

JEOL's PS500i FIB-SEM and 120i TEM linkage system

Dr. Emanuel Katzmann, Dr. Tristan Harzer (Freising/DE)



IMC 22

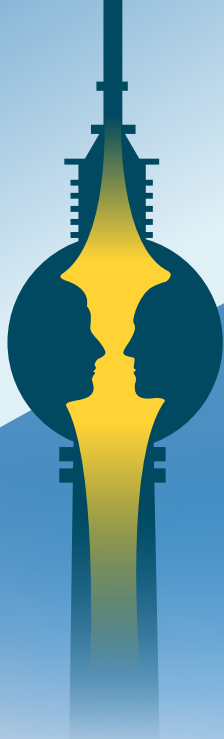
Berlin 2031
23–29 August

imc22.de

100 YEARS
electron
microscopy

22nd International Microscopy Conference

*See you
in Berlin
in 2031!*



Exhibitors' presentations

Date Monday, 1 September

Time 16:00 – 18:00

Room conference hall

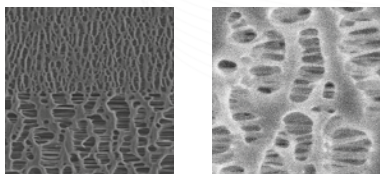
16:00 – 16:10	Thermo Fisher Scientific
16:10 – 16:20	Delong Instruments a. s.
16:20 – 16:30	Kleindiek Nanotechnik GmbH
16:30 – 16:40	DIAPACK Laborwaren und Verpackungen e.K.
16:40 – 16:50	DECTRIS Ltd.
16:50 – 17:00	Target Messtechnik
17:00 – 17:10	Carl Zeiss Microscopy Deutschland GmbH
17:10 – 17:20	CIQTEK Co., Ltd.
17:20 – 17:30	PNDetector GmbH
17:30 – 17:40	Quantum Detectors
17:40 – 17:50	Tescan Group a.s.
17:50 – 18:00	Oxford Instruments GmbH

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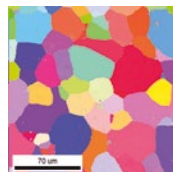
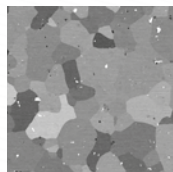
Battery separator foils with their distinct nanostructures



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Aluminium plate after Ar-ion polishing and its EBSD inverse pole figure

Global

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Microscopy Conference Dresden Germany



MC²⁰²⁷ Dresden

29 August until
2 September 2027

www.microscopy-conference.de



DEUTSCHE GESELLSCHAFT FÜR
ELEKTRONENMIKROSKOPIE

Venue

Messe Dresden
Messering 6
01067 Dresden | Germany

Conference Chairs

Prof. Dr. **Thomas Müller-Reichert**
Technische Universität Dresden
Faculty of Medicine Carl Gustav Carus
Core Facility Imaging (CFI)

Dr. Bernd Rellinghaus

Technische Universität Dresden
Director of Dresden Center for
Nanoanalysis (DCN)

Programme and Topics

The scientific programme will offer a variety of plenary lectures, scientific sessions, and poster presentations as well as lunchtime lectures covering the following topics:

- Materials Science
- Life Sciences
- Instrumentation and Methods

Abstract Submission and Registration

The registration and the abstract submission will be available from autumn 2026. Further details, as well as the abstract topics and guidelines will then be published on the conference website **www.microscopy-conference.de**.

Industrial Exhibition and Symposia

The conference will host an extended exhibition, which will bring together manufacturers and suppliers in the field of microscopy. Latest developments and new applications will be highlighted during lunchtime lectures. Interested companies are invited to request information on the sponsoring modalities from the conference organisation Conventus.

Professional Conference Organiser

Conventus Congressmanagement & Marketing GmbH
Sabrina Heinrich
mc@conventus.de | conventus.de