



6. Wiener
Produktionstechnik
Kongress



9. - 10.10.2024

TWIN TRANSITION IN MANUFACTURING



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TWIN TRANSITION IN MANUFACTURING



**Univ.Prof. Dipl.-Ing. Dr.techn.
Friedrich Bleicher**

Europe has a strong tradition in the manufacturing industry that was not born digital, nor adapted to a green economy. The plan of the European Commission to develop a climate-neutral society, the so-called “Green Deal”, is expected to transform the EU into a resource-efficient and competitive economy.

In global volatile markets, highly efficient technologies are a prerequisite to meet sustainability goals. Likewise, the industrial strategy shaping Europe’s future for resilient manufacturing reflects the necessity to deploy digital technologies to enable this change. Accelerating the twin-green and digital – transition will not only require new technologies but will rely on a reskilled workforce.

Green and digital production is likely to turn into a competitive advantage in the future. Front-runners in global value chains will increasingly rely on green supply chains whose production methods can be traced and verified. Suppliers will thus have to comply with green and digital standards to participate in the global economy.

The WPK2024 congress, which is subject to the central theme of the Twin Transition in Manufacturing, reports on the current challenges and enabling technologies on the way toward highly efficient, resilient, and sustainable production. Best practice examples from both industries and research illustrate how smart and circular manufacturing approaches can accelerate the twin transformation.

Take the opportunity to discuss with international experts about these challenges and opportunities. I cordially invite you to attend WPK2024. Together with my organizing team, I would be delighted to welcome you to our event.

Univ.Prof. Dr. Friedrich Bleicher
Head of the IFT of the TU Wien



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EVENT TIMELINE

Tuesday, October 8, 2024: Come Together

TU Wien – TUtheSky Getreidemarkt 9, 1060 Vienna, BA Building, 11. OG

from 18:00	Arrival of Guests
19:00	Welcome address by Professor Friedrich Bleicher
22:30	Estimated end

Wednesday, October 9, 2024: Congress – Day 1

Palais Ferstel – Strauchgasse 4, 1010 Vienna

from 8:00	Arrival of Guests
09:00 - 10:30	Opening and Welcome Address - Keynote Semiconductor Industry
10:30 - 11:00	Coffee break
11:00 - 12:30	Keynote Session 1 - Machine Tools and Production Systems
12:30 - 13:30	Lunch
13:30 - 15:30	Keynote Session 2 - Machine Tools and Production Systems
15:30 - 16:00	Coffee break
16:00 - 17:30	Keynote Session 3 - Primary Shaping and Forming

Wednesday, October 9, 2024: Gala Dinner

Naturhistorisches Museum Wien – Burgring 7, 1010 Vienna

from 18:00	Arrival of Guests
18:30 - 19:30	Special tour of Naturhistorisches Museum Wien
20:00 - 23:00	Gala Dinner



EVENT TIMELINE

Thursday, October 10, 2024: Congress – Day 2

Palais Ferstel – Strauchgasse 4, 1010 Vienna

from 8:00	Arrival of Guests
09:00 - 10:30	Keynote Session 4 - Machining
10:30 - 11:00	Coffee break
11:00 - 12:30	Keynote Session 5 - Machining
12:30 - 13:30	Lunch
13:30 - 15:00	Keynote Session 6 - Machining
15:00 - 15:30	Coffee break
15:30 - 16:45	Keynote Session 7 - Data driven manufacturing

Thursday, October 10, 2024: Get Together

*TEC-Lab Laboratory for Production Engineering
Franz Grill Straße 4, Objekt 221, 1030 Wien*

17:00	Bus transfer from Palais Ferstel to the Laboratory for Production Engineering
from 18:00	Visit the TEC-Lab Laboratory for Production Engineering Networking with catering

VENUES

Vienna, Austria



Known as the heart of Europe, is a city where history and modern life come together beautifully. Its charming old streets and buildings show off its rich past, while the city also embraces innovation and progress. With excellent public transport, plenty of parks, and a lively cultural scene, Vienna offers a perfect mix of tradition and modern life. From cozy coffeehouses to modern art and business, the city values its history while looking towards the future, making it one of the best places to live in the world.

TUtheSky, TU Wien

Getreidemarkt 9, BA, 11.floor, 1060 Vienna

Palais Ferstel

Strauchgasse 4, 1010 Vienna

Natural History Museum Vienna

Maria-Theresien-Platz, 1010 Vienna

TEC-Lab Laboratory for Manufacturing Technology, TU Wien

Franz Grill Straße 4, Object OA, 1030 Vienna

VENUES

TUtheSky, TU Wien

Getreidemarkt 9, BA, 11.floor, 1060 Vienna

TUtheSky, located on the 11th floor of Getreidemarkt 9, offers 230 m² of stunning conference space with breathtaking views of Vienna.

Our top-floor venue is perfect for conferences, providing a panoramic cityscape, especially during sunset. It combines modern facilities with a beautiful setting, making it an exceptional location for any event.



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Your way to us

By subway

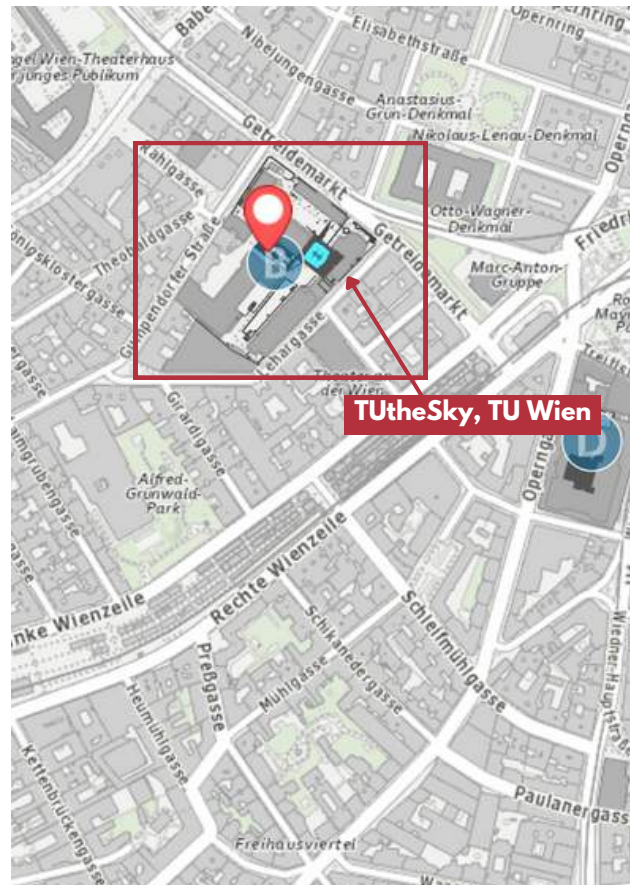
Nearest subway stations:

U1, U4 station Karlsplatz / U2 station Museumsquartier / U3 station Neubaugasse

By car

The nearest parking garage is located right at the Campus Getreidemarkt area.

Access is via Lehargasse (a one-way street, accessible from Gumpendorfer Straße).



Google Map

VENUES

Palais Ferstel

Strauchgasse 4, 1010 Vienna

A historic and elegant venue in the heart of Vienna, known for its grand architecture and rich history. Built in the 19th century, it originally housed the Austrian National Bank and Stock Exchange.

Today, Palais Ferstel serves as a stunning location for events, offering magnificent ballrooms and a beautiful arcade, combining old-world charm with modern amenities.



<https://palaisevents.at/en/palais-ferstel/>

Your way to us

By subway

Nearest subway stations:

U2 station Museumsquartier / U3 station Neubaugasse / U1, U4 station Karlsplatz

By car

The nearest parking garage is located near Palais Ferstel at Strauchgasse 4.

Access is via Tuchlauben, which connects to the main roads leading into the city center.



Google Map

VENUES

Palais Ferstel

Strauchgasse 4, 1010 Vienna



Entrance

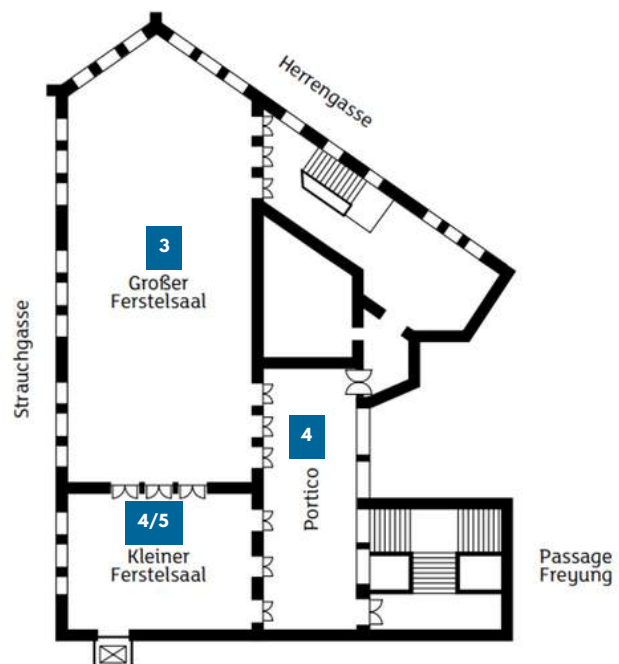
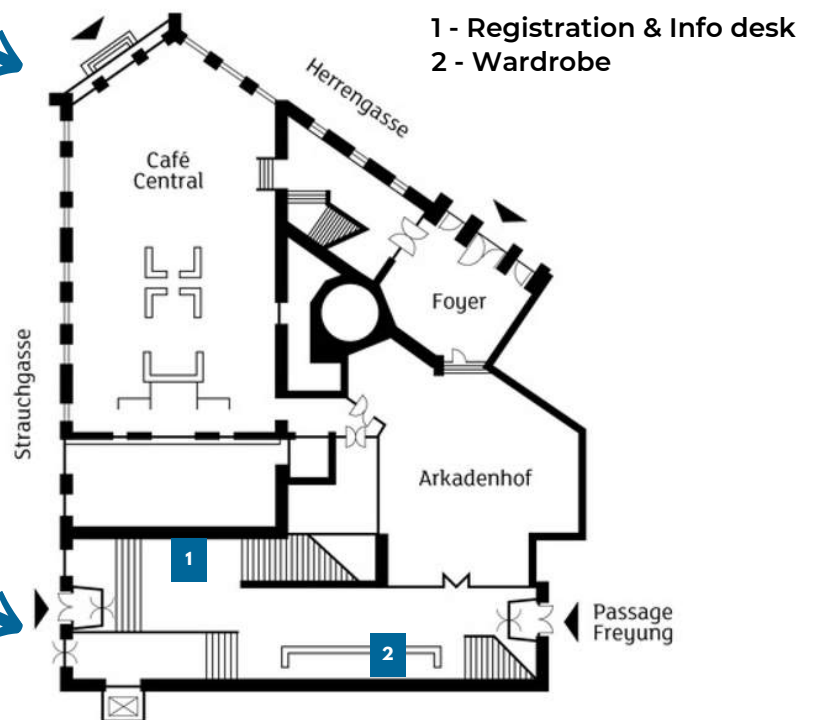
Strauchgasse



<https://www.meinbezirk.at/tag/palais-ferstel>

1st Floor

- 3 - Planary Sessions
- 4 - Coffee Break at "Portico"
- 5 - Lunch at "Kleiner Festsaal"



VENUES

Natural History Museum Vienna

Maria-Theresien-Platz, 1010 Vienna

One of the world's most renowned museums, housing a vast collection of over 30 million objects.

Its iconic building, located in Vienna's Museum Quarter, combines impressive architecture with fascinating displays, making it a must-visit for anyone interested in science, history, and the wonders of nature.



https://wienkultur.info/naturhistorisches_museum/



ATTENTION!

The two museums look nearly identical!

Coming from "Heldenplatz", you are looking at the front of the statue of Maria Theresia. Then the "Naturhistorisches Museum" is to your right.

Following the conference, we will proceed directly to the Natural History Museum in Vienna, passing through the beautiful Hofburg.

Please ensure that you follow the IFT colleagues to reach the appropriate locations.



Google Map

VENUES

TEC-Lab Laboratory for Manufacturing Technology, TU Wien

*Franz Grill Straße 4, Object OA, 1030
Vienna*

A state-of-the-art facility dedicated to advanced manufacturing technology research. The lab plays a key role in fostering innovation and practical applications in manufacturing, providing researchers and students with access to modern equipment and technology for experimental and industrial projects.



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ATTENTION!

A bus transfer will be provided from Palais Frerstel, the conference venue, to the TEC Lab. Please follow the IFT colleagues for assistance.

Your way to us

By car

From A23, take the Landstraßer Gürtel exit (keeping left). Turn left onto Ghegastraße at the first traffic light after the underpass, then turn left onto Arsenalstraße, followed by another left onto Lillienthalgasse. Within the Science Center of TU Wien, take the first right and then an immediate left.

Paid short-term parking can be found on Franz-Grill-Straße; a short-term parking ticket from the City of Vienna is required."



By public transportation

U3 - Schlachthausgasse station -> tram line 18 - Wildganzplatz station
S-Bahn (S7 in the direction of the airport or Wien-Mitte) – St. Marx station -> tram line 18 (in the direction of Burggasse, one stop) – Wildganzplatz station



Google Map



CONGRESS PROGRAM

8:00 - 9:00 - REGISTRATION

9:00 - 10:35 - OPENING & OPENING KEYNOTE

9:00 - 9:10 - Welcome Address - Twin Transition in Manufacturing

Univ.Prof. Dr. Friedrich Bleicher

Head of the Institute of Production Engineering and Photonic Technologies, Technische Universität Wien

9:10 - 9:20 - Opening Address

Prof. Dr.-Ing. Jens Schneider

Rector, Technische Universität Wien

9:20 - 9:30 - Opening Address

Henriette Spyra, MA

Director General Innovation & Technology, Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation & Technology

9:30 - 9:40 - Opening Address

Mag. Gerhard Hirczi

Head of Vienna Business Agency, Managing Director

9:40 - 10:00 - European manufacturing: leading and shaping our green and digital future

Caroline Viarouge

Chief Executive Officer, EIT Manufacturing

10:00 - 10:30 - Digitalisation as enabler to foster the twin transition and ensure competitiveness

Dipl.-Ing. Dr. Sabine Herlitschka, MBA

Chief Executive Officer, Infineon Technologies Austria AG

10:30 - 11:00 COFFEE BREAK

11:00 - 12:30 PLENARY SESSION 1

11:00 - 11:30 The Future of Automotive Production in Europe: Transformation and Challenges at SEAT S.A.

Markus Haupt

Board Member for Production and Logistics, SEAT S.A

11:30 - 12:00 Industrial Intelligence - improving efficiency and sustainability in manufacturing

Dr. Ansgar Kriwet

Member of the Management Board Research and Development, Festo SE & Co.

12:00 - 12:30 Machining Transformation (MX)

Dr. Eng. Masahiko Mori

President of DMG MORI CO., LTD.

DAY 1: WEDNESDAY , 9TH OCTOBER 2024



CONGRESS PROGRAM

12:30 - 13:30 LUNCH

13:30 - 15:30 PLENARY SESSION 2

13:30 - 14:00 - The role of the digital twin for the machine tool business

Dr. Stefanie Frank

Senior Vice President for Machine Tool Systems, Siemens AG

14:00 - 14:30 - Innovative CNC technology for sustainable and highly efficient manufacturing

Dr. Jens Kummetz

Head of Technical Training, DR. JOHANNES HEIDENHAIN GmbH

14:30 - 15:00 - Technical solutions for sector-coupling systems as enablers for a successful energy transition in production

Dr. Chris-Jörg Rosen

Vice President Manufacturing Solutions, Phoenix Contact GmbH & Co. KG

15:00 - 15:30 - The future of machining - Automated today, autonomous soon

Prof. Dr.-Ing. Berend Denkena

Head of the Institute of Production Engineering and Machine Tools, Leibniz University Hannover

15:30 - 16:00 - COFFEE BREAK

16:00 - 17:30 - PLENARY SESSION 3

16:00 - 16:30 - Digital Steel Foundry

Dipl.-Ing. Michael Krainz

Managing Director, voestalpine Foundry Group

16:30 - 17:00 - Data driven process optimization in metal forming

Prof. Dr.-Ing. Wolfram Volk

Chair of Metal Forming and Casting, TUM School of Engineering and Design, Technical University of Munich

17:00 - 17:30 - SMART STAMPING - Adaptive Processes for competitive & sustainable automotive components

Dipl.-Ing. Christian Juricek

Manager R&D, MAGNA Cosma

18:00 GALA DINNER

Natural History Museum Vienna

DAY 1: WEDNESDAY, 9TH OCTOBER 2024



CONGRESS PROGRAM

9:00 - 10:30 - PLENARY SESSION 4

9:00 - 9:30 - Efficient Machining Solutions for Sustainable Aircraft Production

Dr.-Ing. Matthias Lange

HO R&T Varel, Premium AEROTEC

9:30 - 10:00 - Extending the application range of cutting

Prof. em. Dr.-Ing. Dr. h.c. Konrad Wegener

Senior Advisor, Inspire-iwf Werkzeugmaschinen Fertigung

10:00 - 10:30 - Efficiency improvements of machining processes based on novel simulation developments and detailed process chain analyses

Prof. Dr.-Ing. Prof. h.c. Dirk Biermann

Institute of Machining Technology, TU Dortmund University

10:30 – 11:00 - COFFEE BREAK

11:00 - 12:30 - PLENARY SESSION 5

11:00 - 11:30 - Adapt, innovate, transform: The future of the machining industry in a volatile world

Dipl.-Ing. Jacek Kruszyński

Member of the Executive Board, Chief Technology Officer

MAPAL Fabrik für Präzisionswerkzeuge Dr. Kress KG

11:30 - 12:00 - Simulation-based Control of Tool Wear and Lifetime for Titanium Machining

Dr.-Ing. habil. Dipl.-Inform. Tobias Surmann

NC- Programming, Airbus GmbH, Business Unit Premium AEROTEC

12:00 - 12:30 - Development and industrial application of digital twins for cutting processes and machine tools

Prof. Kaan Erkorkmaz, PEng

Professor in the Department of Mechanical and Mechatronics Engineering, University of

Waterloo

12:30 - 13:30 - LUNCH

DAY 2: THURSDAY , 10TH OCTOBER 2024



CONGRESS PROGRAM

13:30 - 15:00 - PLENARY SESSION 6

13:30 - 14:00 - Improving machining efficiency by machine system intelligence

Prof. Dr.-Ing. Hans-Christian Möhring

Chair and Director, Institute for Machine Tools Management, University of Stuttgart

14:00 - 14:30 - Innovative PCD tools for the effective processing of ceramic materials

Dipl.-Ing. Jens Boos

Managing Partner, 6C Tools AG

14:30 - 15:00 - Development of process chains, integrating Wire Arc Additive Manufacturing, Multi-Axis Machining and Laser Hardening, for low series parts manufacturing

Prof. Dr. Ir. Bert Lauwers

Academic Director KU for KU Leuven, Kempen-Mechelen & Limburg Dean of the Faculty of Engineering Technology

15:00 – 15:30 - COFFEE BREAK

15:30 - 16:45 - PLENARY SESSION 7

15:30 - 16:00 - Twin Transition in Metrology – Framework for successful implementation

Prof. Dr. Heiko Wenzel-Schinzer

CDO, Wenzel Group

16:00 - 16:30 - Shared data ecosystems - enabler for a green production

Prof. Dr.-Ing. Matthias Weigold

Head of the Institute for Production Management, Technology and Machine Tools, TU Darmstadt

16:30 - 16:45 - Summary and Closing

Univ.Prof. Dipl.-Ing. Dr.techn. Friedrich Bleicher

Head of the Institute of Production Engineering and Photonic Technologies, Technische Universität Wien

17:00 - BUS TRANSFER

18:00 - VISIT THE TEC-LAB

Laboratory for Production Engineering

Franz Grill Straße 4, Object OA, 1030 Vienna

Networking with catering



HOST & ORGANIZATION TEAM



TU Wien

TU Wien is Austria's largest research institution for technology and natural sciences, with over 4,000 scientists across eight faculties. Its research-driven education benefits over 27,000 students in 55 degree programs. As a hub for innovation, TU Wien supports the economy, fosters collaboration, and contributes to societal prosperity.



IFT

The Institute of Production Engineering and Photonic Technologies (IFT) develops innovative manufacturing processes and systems, emphasizing the twin transition in production. It explores digital technologies for optimizing economic and ecological value creation. Alongside education and research, IFT prioritizes technology transfer through industry collaboration.

ORGANIZATION TEAM

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