

Conference News | What you need to know

Munich The fourth conference day will start with a Virtual Coffee Break on the topic of ‘Additive Manufacturing’ and will be presented by Mr. Tenbrock from DMG Mori. You can also look forward to two keynotes from the STC G and STC Dn. In addition, the CMAG/ITP meeting will take place from 14:00 o’clock in the room ‘ModuleWorks’. If you are interested in the future of hydrogen as an energy carrier, we recommend the Virtual Coffee Break at 17:00 o’clock.

Ugliest Tie Contest As usual for the past General Assemblies, we would like to honor the person with the ugliest tie virtually this year. We are looking forward to receiving your pictures that are supposed to send to info@cirp2021.de for participating. The Ugliest Tie Contest takes place on Sunday during the Closing Ceremony.

News of our supporters and corporate partners

Munich Our partner **DMG MORI** has been closely associated with CIRP for many years. DMG MORI is a leading global manufacturer of machine tools. Their integrated automation, digitization and sustainability solutions broaden the company’s core business of turning and milling machines, advanced technologies (Ultrasonic, Lasertec) and additive manufacturing. Their customer-oriented services over the course of a machine tool’s entire lifecycle include training, repair, maintenance and spare parts service.

DMG MORI

The **VDW** (German Machine Tool Builders’ Association) speaks for the German machine tool industry. In 2016, it celebrated its 125th anniversary. Together with the Sector Association Machine Tools and Manufacturing Systems within the VDMA (German Engineering Federation) the VDW comprises some 300 predominantly mid-tier companies. They account for approximately 90 per cent of the sector’s total turnover, which almost reached 12 billion euros in 2020.



News of our partner **ModuleWorks**: Did you know that ModuleWorks has been a corporate member of CIRP since 2014? The combination of research and commercial development is an essential factor that enables us and our partners to get there faster. Read more: www.moduleworks.com/cirp2021

Sightseeing | Glentleiten open air museum

Glentleiten In the extensive museum grounds, about 60 historic buildings from rural areas of Upper Bavaria (region in the south-east of Bavaria) have been reconstructed on 38 hectares, including not only larger farms but also craftsmen’s and small farmers’ estates. More than half of the population lived there in the 18th/19th centuries. Another focus is on rural



70 years of Munich | 1981–1989

1981: Although the museum Neue Pinakothek had only opened on 28th March, it welcomed its 100,000th visitor as early as 11th April.

1984: Last year, first names were selected for 7,197 Munich children. Among boys, the name Florian came first, followed by Michael and Andreas. Among girls, Stefanie was in first place, followed by Katharina and Christiane.

Weather

-  Munich: 32 °C, cloudy
-  Casablanca: 26 °C, sunny
-  Mumbai: 29 °C, cloudy

Today’s paper sessions

- STP Dn | Design
- STC G | Abrasive Process
- STC M | Machines
- STC O | Production Systems and Organizations

CMAG/ITP

- 14:00 – 15:20
Room ‘ModuleWorks’

Highlights of today’s programme

- 13:10 | Keynote G
Room ‘MTU’
- 14:40 | Keynote Dn
Room ‘Fraunhofer’

Today’s Virtual Coffee Breaks

- 12:00 | Additive Manufacturing,
DMG Mori
Room ‘DMG Mori’
- 17:00 | Hydrogen – Fuel of the
Future, TUM (utg)
Room ‘Festo’

technology such as whetstone making, mills, saws and blacksmiths. In addition, several alpine pasture buildings have been constructed. Events such as oldtimer meetings of tractors, charcoal burner week, mill day and many more demonstrate historical crafts such as weaving, saddlery or blacksmith and provide insight into rural life in the past. There is also a folklore collection with over 80,000 historical objects, including furniture, textiles, tools and household goods. On the widely spread terrain of the museum you will find a variety of gardens, forests and meadows with ancient animal species, with spectacular views of the mountains and lakes of Upper Bavaria to be expected everywhere.

Leisure | Bavarian music and dance



Bavaria Alpine folk music has been handed down primarily in the German-speaking alpine countries of Bavaria, Austria, Switzerland and South Tyrol. Alpine folk music has developed through the oral tradition. A typical instrument is the alphorn. Due to its blowing technique, the alphorn belongs to the brass instruments, although it is traditionally made mainly of

wood. Depending on the landscape, it can be heard 5 to 10 km away. It has neither keys, slides nor valves and is therefore limited to the natural tone series.

Normally, music is combined with dancing. Schuhplattler or Schuhplatteln is the name of a dance from the Eastern Alps. The dance is characterized by specific handshakes on the thighs and shoes. In the course of its history, the Schuhplattler was the subject of weighty transformations: Today's practice is a largely standardized group couple dance performed mostly for show. Click here and enjoy Bavarian [music](#) and [dance](#)!

Culture | Bavarian costume

Bavaria Bavarian traditional costume means the traditional costume in the Alpine, Bavarian-speaking area in Bavaria and Austria. Typical components are the Lederhosen and the Dirndl, which are worn especially at the Oktoberfest. Their current appearance originated in the 19th century in the course of the constitution of the Kingdom of Bavaria. However, a uniform Bavarian costume does not exist, rather there are numerous variants. The traditional costume is characterized by rather strict rules. It can vary from region to region, but is very rarely worn in its original form. The characteristics for Dirndl and Lederhosen are similar everywhere. Characteristic of the ladies' costume is the reinforced bodice, tightly laced and decorated with embroidery. The Dirndl origin lies in the Biedermeier period, when the typical women's dresses of the time were supplemented with a blouse and apron. From this, the Dirndl has evolved.



Bavarian Language | Bavarian vs. English

Gwand [gwannd] | clothes

Voiksmusi [foigsmuusi] | folk music

Pflanzerl [pflaantserrl] | meatball

Wenn i moi auf d'wiesn bin, werd i
meine Dracht drogn und da

Voiksmusi zuahearn.

*If I'm ever at Oktoberfest, I'll wear my
bavarian costume and will listen to the
folk music.*

Bavarian food | Fleischpfanzerl

375 g ground meat, 1 white hardened
bread roll, milk, 1 onion, 1 tsp. tomato
paste, 2 tsp. mustard (medium), 1 egg,
1 clove of garlic, pepper, salt,
marjoram, 1 tsp. clarified butter per
meatball

1. Soak the hardened bread in milk.
2. Add to the ground meat the egg, the soaked and well squeezed bread, the diced onion, the tomato paste, the medium hot mustard, pepper, salt, a little marjoram and a clove of pressed garlic. Knead the mixture well and season to taste.
3. Then form the patties and put them in a hot pan. Fry in clarified butter for about 15 minutes, turning several times, at not too high heat.



**Tastes good with bavarian potato
salad, fried potatoes, mashed
potatoes or french fries.**

70 years of Munich | 1981–1989

1985: One of Europe's famous cultural center opens to the delight of all lovers of classical music. The so-called Gasteig includes the Philharmonie and other concert halls located directly on the Isar river.

1987: The green garbage can is introduced in some urban areas. Munich thus makes a first attempt at separate waste disposal.