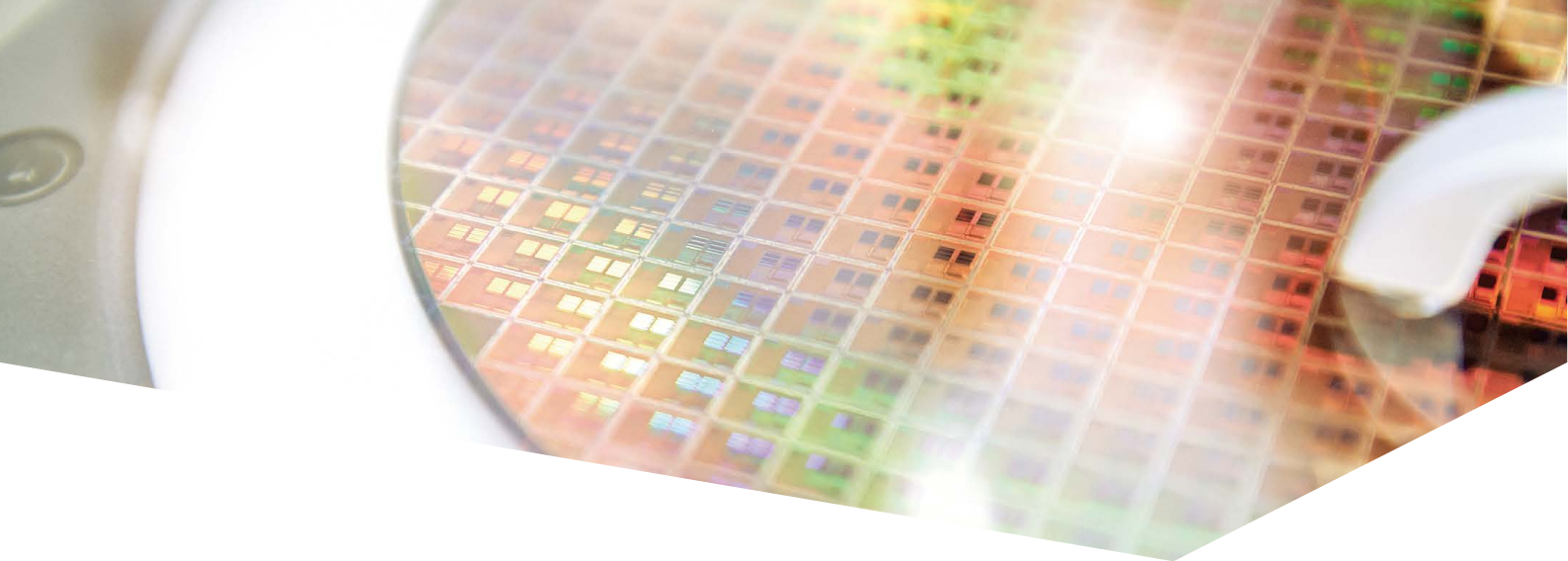




IPCEI MICROELECTRONICS STEM WORKSHOP

# Power MOSFETs and WBG Materials

## 7 June 2023, 9:30-12:30

### Széchenyi István University

M01 in Management Campus building (MC), 9026 Győr, Egyetem tér 1.

Department of Power Electronics and Electric Drives at  
Audi Hungaria Faculty of Automotive Engineering, Infineon  
Technologies Austria AG and Advantage Austria Hungary  
invites you to IPCEI Microelectronics STEM Workshop.

Be welcomed to join our session and discover more about:

- Infineon Technologies Austria AG & IPCEI
- Power MOSFETs & WBG

The workshop is led by Infineon Technologies Austria AG and will delve into the challenges faced and the innovative solutions developed. The participants will learn about power MOSFET electrical behaviour and device physics. The structure of a power MOSFET will be explained together with how this structure influences the electrical performance. The presentation will discuss both planar and trench technologies, and include a brief introduction to charge compensation devices.

We will also highlight the state of the art of technology and industry of **wide bandgap semiconductors (WBS)**, which are becoming the cornerstones of future power electronics.

Széchenyi István University is located in Győr, at the centre of Central Europe's "golden triangle". We have 45 years of tradition and experience in supporting Hungary's leading industries with a strong focus on vehicle engineering, transportation and telecommunication. As a result, our university has become the primary driver of the regional economy provider for the public service sector and supplies the human resources and training needs for the North-Transdanubian region.

Interested students will be informed about the company Infineon in general, the IPCEI project and the possibility to join IPCEI as an intern or a PhD student.

#### Event Program

|             |                                                                                                                                                                            |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 09:30-10:00 | <b>Registration</b> and Welcome Coffee                                                                                                                                     |
| 10:00-10:10 | <b>Welcome</b> , Prof. Dénes Fodor, Széchenyi István University, Győr Hungary<br><b>Welcome</b> , Philipp Schramel, Austrian Trade Commissioner, Austrian Economic Chamber |
| 10:10-10:40 | <b>IPCEI Presentation</b> and related Internship and PhD topics;<br>Christian Konrad Lehner, Infineon Technologies Austria                                                 |
| 10:40-11:25 | <b>Thematic Session I: Introduction to Power MOSFETs</b> ;<br>Andrew Wood, Infineon Technologies Austria                                                                   |
| 11:25-12:05 | <b>Thematic Session II: Wide Bandgap for Automotive Opportunities for now and the future</b> ;<br>Gerald Deboy, Infineon Technologies Austria                              |
| 12:05       | <b>Networking Lunch</b>                                                                                                                                                    |

Language: English



**Register here per e-mail and secure your place!**

[budapest@advantageaustria.org](mailto:budapest@advantageaustria.org)

Please add as Subject: STEM Workshop

We look forward to meeting you there!

**Contact:** Mr Thomas Szente, T +36 1 461 50 40,  
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Délibáb utca 21, H-1062 Budapest



## Join our Mission Future!

**IPCEI on Microelectronics** is the largest pan-European initiative in the field of microelectronics. It opens up significant opportunities for universities, research institutions, industry representatives, start-ups and engineering students from across Europe to address technological, market and societal challenges that could not otherwise be tackled. Infineon Austria is part of this strategic effort. We call it our Mission Future. You, too, can join our Mission Future and benefit from many opportunities! For more information about our Mission

Future and IPCEI Microelectronics, visit [www.infineon.com/ipceimeaustria](http://www.infineon.com/ipceimeaustria)

**Infineon** is a globally leading semiconductor player with more than 50.000 employees. We are leading in automotive, power management energy efficient technologies and the IoT while Global megatrends underline the increasing importance of microelectronics.

Please note that this invitation is granted subject to being permissible under all existing laws and other regulations applicable to both you and your employer. If you accept our invitation we consider that it meets the requirements of the legal regulation applicable to you and your company and all applicable internal rules and regulations. We remind you that it is your responsibility to check this matter. Please advise if you need additional information for this purpose especially the value associated with the invitation. By registering, you now confirm that the invitation is in accordance with all the rules and regulations of conduct applicable to you.

Bitte haben Sie Verständnis dafür, dass diese Einladung unter dem Vorbehalt steht, dass sie nach den für Sie und Ihren Arbeitgeber jeweils geltenden gesetzlichen und sonstigen Regelungen zulässig ist und dass insbesondere möglicherweise erforderliche Genehmigungen erteilt worden sind. Wir gehen davon aus, dass Sie das prüfen und sicherstellen. Bitte lassen Sie uns wissen, wenn Sie zu diesem Zweck weitere Informationen, insbesondere zu dem mit der Einladung verbundenen Wert, benötigen. Mit Ihrer Anmeldung bestätigen Sie uns, dass Sie die Einladung nach den für Sie geltenden Vorschriften und Verhaltensregeln annehmen dürfen.