

# PROGRAM

## Engineering 4.0 and The Internet of Everything

Day 1 - 24.11.2022

14.00 – 14.40 Official opening

Session Chair: Assist. Prof. Dr. Mladen Mladenov

PLN: Plenary

- Assoc. Prof. Dr. Vasil Galabov – Dean of FDIBA, Technical University – Sofia, Bulgaria
- Mr. Mortiz Seiler - Head of Economic and Science Section at German Embassy in Sofia, Germany
- Prof. Dr. Thomas Heupel - Prorektor Research, FOM Essen, Essen, Germany
- Mr. Ivan Petkov – Director of 73 High School - Sofia, Member of the Board of Trustees of FDIBA, Bulgaria

14.40 – 15.00 Coffee break

- 15.00 – 15.20

**China is just one of Germany's major trading partners**

Prof. re. Dr. habil. Dr.h.c.mult. Franz Peter Lang, FOM University of applied Sciences, Germany  
(peter.lang@fom.de)

- 15.20 – 15.40

**Möglichkeiten und Grenzen des Einsatzes von Life Cycle Costing in China – Evaluation anhand eines konkreten Unternehmensbeispiels**

Shi Cheng - Hochschule Bonn-Rhein-Sieg, Prof. Dr. Thomas Heupel - FOM Hochschule Essen, Essen, Germany (thomas.heupel@fom.de)

- 15.40 – 16.00

**Europäische und sumerische Zivilisationsprozesse**

Mr. Krasimir Krivodolsky, University of Forestry, Sofia, Bulgaria (krasiborisov56@gmail.com)

- 16.00 – 16.20

**Cyberattacks as Digital Weapons against the IT Critical Infrastructure Case Study: Cyberattacks on IT Infrastructure of Albanian Government**

Dr. Elijor Vila, University of Elbasan "Aleksandër Xhuvani", Albania (elijor.vila@uniel.edu.al)

- 16.20 – 16.40

**Concepts of Regional Skilled Worker Development in STEM**

Mr. Christoph Hohoff, FOM Hochschule gGmbH, Germany ([christoph.hohoff@fom.de](mailto:christoph.hohoff@fom.de))

- 16.40 – 17.00

**Productive teaming – a glance at a world beyond Industry 4.0**

Prof. Dr. Dr. Marco Ragni - Chemnitz University of Technology, Prof. Dr. Frank Ortmeier - Otto-von-Guericke-Universität Magdeburg, Germany ([frank.ortmeier@ovgu.de](mailto:frank.ortmeier@ovgu.de))

- 17.00 – 17.20

**Approaches to coping in a crisis situation**

Mr. Radoslav Keremidchiev, Technical University of Sofia, Bulgaria (rkeremidchiev@yahoo.com)

**17. 20 – 17. 30 Coffee break****Session Chair: Assoc. Prof. Dr. Dr. Milena Krumova**

- **17.30 – 17.50**

**Wirtschaftliche Effizienz in der Elektroenergetik aus erneuerbaren Energiequellen**

Assoc. Prof. Dr. Zvetelina Gankova – Ivanova - Technical University – Gabrovo, Bulgaria

- **17.50 – 18.10**

**Natural Gas: Trends of Business Model Changes**

Mr. Nikolay Kambosev, Technical University of Sofia, Bulgaria (kambosev@gmail.com)

- **18.10 – 18.30**

**Innovative business models to deliver critical system services through battery-based energy storage**

Ms. Irena Beloreshka, NEK EAD, Bulgaria (irena.beloreshka@gmail.com)

- **18. 30 – 19.00**

**Discussion****Day 2 - 25.11.2022****Session Chair: Assoc. Prof. Dr. Dr. Milena Krumova**

- **09.00 – 09.20**

**Electronic waste management: A review of the limiting factors and robotic solutions**

M.Sc. Dimitar Iliev, Technical University of Sofia, Bulgaria (dimitar.iliev@fdiba.tu-sofia.bg)

- **09.20 – 09.40**

**Not up for electric? Empirical study to identify barriers to acceptance of electromobility**

Mr. Steffen Berg - FOM Hochschule, Germany, Prof. Dr. Thomas Heupel - FOM Hochschule, Mercedes Camona - Universidad Catholica Antonio Murcia (UCAM), Spain (thomas.heupel@fom.de)

- **09.40 – 10.00**

**Experimental Setup for Testing /and Evaluation/ of Kalman Filter Configurations**

Prof. Dr. Stefan Hensel - University of Applied Sciences Offenburg, Germany, Prof. Dr. Marin B. Marinov - Technical University of Sofia, Bulgaria, Mr. Christopher Kupitz - University of Applied Sciences Offenburg, Germany, Mr. Dimitre Trendafilov - Technical University of Sofia, Bulgaria (mbm@tu-sofia.bg)

- **10.00 – 10.20**

**Principle behind droplet formation in microfluidic devices based on force balance**Mr. Emil Grigorov, Technical University of Sofia, Bulgaria ([emil.rumenov.grigorov@abv.bg](mailto:emil.rumenov.grigorov@abv.bg))

- **10.20 – 10.40**

**Usability Evaluation Plan within an UX Design Process (UsabPlanInUXD)**Assist. Prof. Dr. Svetla Ivanova-Vassileva, Technical University of Sofia, Bulgaria ([vassileva@fdiba.tu-sofia.bg](mailto:vassileva@fdiba.tu-sofia.bg))

- **10.40 – 11.00**

**Evaluation of Kalman Filter Configurations for Robot Localization Using Sensor Data Fusion**

Prof. Dr. Stefan Hensel - University of Applied Sciences Offenburg, Germany, Prof. Dr. Marin B. Marinov - Technical University of Sofia, Bulgaria, Mr. Christopher Kupitz - University of Applied Sciences Offenburg, Germany, Dimitre Trendafilov - Technical University of Sofia, Bulgaria (mbm@tu-sofia.bg)

**11. 00 – 11. 30 Coffee break****Session Chair: Assoc. Prof. Dr. Zvetelina Gankova – Ivanova**

- **11.30 – 11.50**

**Verbesserung der Eigenmotivation von den Teammitgliedern an dem Arbeitsplatz**

Mr. Atanas Bonchev Dr. Vesselin Kanchev, Technical University of Sofia, Bulgaria  
([atanas.bontschev@gmail.com](mailto:atanas.bontschev@gmail.com))

- **11.50 – 12.10**

**Der Einfluss der Corona-Pandemie auf die Entwicklung des Homeoffice – Eine Analyse der Motivation und Arbeitszufriedenheit im Generationenvergleich**

Ms. Djellëza Sadrija, Prof. Dr. Thomas Heupel - FOM Hochschule Essen, Germany  
([thomas.heupel@fom.de](mailto:thomas.heupel@fom.de))

- **12.10 – 12.30**

**Entwicklung eines mobilen Arbeitsmaschine-Simulators für die Validierung kooperativer Regelungskonzepte**

Mr. Balint Varga, Selina Meier, Prof. Dr.-Ing. Sören Hohmann - Karlsruhe Institute of Technology, Germany ([balint.varga2@kit.edu](mailto:balint.varga2@kit.edu))

- **12.30 – 12.50**

**Analysis of Methods for IT Service Management Processes Implementation in Higher Education Institutions**

Mr. Yordan Yordanov, Technical University – Sofia, Bulgaria ([yordan.yordanov@fdiba.tu-sofia.bg](mailto:yordan.yordanov@fdiba.tu-sofia.bg))

- **12.50 – 13.10**

**Kreativität im Matheunterricht durch digitale Medien**

Ms. Viktoria Simidova, Technical University – Sofia, Bulgaria ([viktoria.simidova@fdiba.tu-sofia.bg](mailto:viktoria.simidova@fdiba.tu-sofia.bg))

- **13.10 – 13.30**

**Novelty Framework Design for Student Feedback Analyses Using SaaS and AI**

Assoc. Prof. Dr. Milena Krumova, Technical university – Sofia, Bulgaria ([mkrumova@tu-sofia.bg](mailto:mkrumova@tu-sofia.bg))

**13.30 – 14.00 Closing**

**Assoc. Prof. Dr. Vasil Galabov – Technical university - Sofia**

**Prof. Dr. Stefan Stefanov – Technical university - Sofia**

**Assist. Prof. Dr. Mladen Mladenov – Technical university – Sofia**

**Announcement of the next FDIBA Conference 2023 – Motto and Dates****14:00 – 15:30 Lunch**

**VIDEO CALL LINK for 2022 FDIBA Conference "Engineering 4.0 and the Internet of Everything" November 24 – 25, 2022:**

<https://meet.google.com/ocz-oijr-amj>