

Innovation & Entrepreneurship Short Lecture Series:

Unravelling the Potential of Innovation and Entrepreneurship in RCP



ANDRE UHLMANN

Andre Uhlmann is head of the start-up network SAXEED at the TU Bergakademie Freiberg and is responsible for business model development and start-up financing. He coaches the start-up projects on their way from idea generation, business model development and business planning to the founding of a growth-oriented start-up. He uses several methods like design thinking, lean startup and business model generation and has access to a large network of business angels, VC investors (pre-seed, seed, series A), business promoters and technology-oriented startups. Andre Uhlmann has a degree in business administration, is a certified SCRUM Master and Design Thinking Coach and looks back on more than fifteen years of experience on corporate, consulting and start-up side.

How to develop and evaluate business ideas in the clean energy sector - Startup Trends at TUBAF

In the lecture you learn how you can create and evaluate meaningful business ideas. Therefore, we work out a common understanding of entrepreneurship and explain current trends especially lean startup approach. Then we focus on Design Thinking as an agile method of creating ideas. We derive the Design Thinking process and discuss the six steps of that process on startup examples in the clean energy sector. At the end we focus on startup trends in the clean energy sector and discuss their challenges.

Tuesday, October 8, 2024; 13:00 (CEST)



MARIANTHI LIAPI

Marianthi Liapi is an architect and a researcher specializing in the creative combination of design thinking, participatory learning and the contemporary maker culture. Since 2014, she has been the Research Program Director of the Transformable Intelligent Environments Laboratory (TUC TIE Lab) at the Technical University of Crete, running private, state-funded and institutional research programs. She developed an interdisciplinary methodology titled Educational Pla(y)ces (Εκπαιδóτοποι in Greek) influenced by her long-term collaboration with developmental psychologist Edith Ackermann. Her research projects are rooted in architecture and technology and branch out from there into learning places and maker spaces, transformable intelligent environments, extreme environments, cultural settings and projection mapping technologies, as well as in visual-spatial communication. Since 2002, she has received 16 awards for her projects in architecture, technology and education. Marianthi holds a Diploma in Architecture and Engineering from the Aristotle University of Thessaloniki and a MSc degree in Design and Computation from the Massachusetts Institute of Technology. Since 2021, she is a Fulbright Greece Outreach Ambassador.

Digital Crafting as a means to sustainable creativity and production

The course investigates the role of digital crafting in promoting sustainable creativity and production. Through a series of diverse good-practice examples, the course explores the principles of digital craftsmanship, creatively combined with design thinking. Along these lines, it also investigates the ways in which the maker culture tools, such as 3D printers and laser cutters, are key to the creation of innovative, environmentally-friendly products. By the end of the course, students will be able to:

- Understand the fundamentals of digital crafting technologies and their sustainable applications.
- Become familiar with the process of designing and building an object from scratch.
- Describe the advantages of creative solutions that incorporate sustainable practices in their design and production.

Wednesday, October 16, 2024; 13:00 (CEST)



SERGIO RUBIO MARTÍN

Engineer in Computer Engineering with an M.Sc. in Computer Engineering from the University of León. Currently, I am a PhD student in Production and Computer Engineering at the University of León. Furthermore, I am a member of the SALBIS research group, exploring a research line focused on implementing artificial intelligence models using Electronic Health Records as datasets. My work involves extracting relevant data from unstructured information and transforming it into structured data to help train models that predict psychiatric diagnoses. Additionally, I am a member of IABiomed, the Spanish Society of Artificial Intelligence in Biomedicine.

AI in Sustainable Healthcare: Data Management

This lecture will explore how Artificial Intelligence (AI) is revolutionizing the healthcare system and the great results that are being obtained. We will start with an introduction to how AI works and delve into the process of preprocessing data from any kind of Electronic Health Record (EHR) to prepare it for AI models. In addition, various utilities that AI has within the healthcare sector will be shown. Furthermore, the importance of EHRs will be highlighted, and it will be demonstrated how AI can diagnose patients with high accuracy and in a short time. Finally, we will discuss how the implementation of AI in data management not only enhances diagnostic accuracy and speed but also optimizes resources and reduces costs within the healthcare system.

Tuesday, October 22, 2024; 11:00 (CEST)



MAURICIO CAMARGO PARDO

Mauricio Camargo is full professor on Management of Technology and Innovation at the Ecole Nationale en Génie des Systèmes Industriels of Nancy (The Industrial Engineering School of the University of Lorraine -France). Director and researcher at the ERPI Laboratory (Research team on Innovative processes). His main research interests are: New Product Development, decision making in innovation processes and technology strategy. Its most recent project concerns interdisciplinary studies for circular economy in different industries such as distributed plastic recycling and bio-economy. BSc On Chemical Engineering at the Universidad Nacional de Colombia. PhD on Automatics of Industrial and Human systems from the Université de Valenciennes et de Hainaut Cambresis in France.

Toward a circular economy for plastics: current and emerging trends and perspectives

Although plastic materials have remarkable properties that allow them to be used in a number of applications, from food packaging to building or agriculture, the issue of plastic waste is well recognized as a threat to the future of the planet's ecosystems. Solutions for reuse, repair, and recycling are far from being purely technology-based. Strategies to seek circularity and a more rational use of these materials will be tackled in this lecture.

Tuesday, October 29, 2024; 13:00 (CEST)



KATARZYNA POSTRZEDNIK-LOTKO

Katarzyna Postrzednik-Lotko, PhD, assistant professor, Silesian University of Technology, Faculty of Organization and Management, Department of Applied Social Sciences, ul. Roosevelta 26 41-800 Zabrze, e-mail: Katarzyna.Postrzednik-Lotko@polsl.pl, member of the PTOT association, studied German at the University of Opole and at the Universities of Heidelberg and Berlin. She is a certified translator of German. From 2001, as a doctoral student, she held classes at the Department of Applied Social Sciences at the Faculty of Organization and Management at the Silesian University of Technology. A many time grant holder of DAAD: in 1999 in Heidelberg, in 2004 and 2005 in Dresden, and 2004/2005 in Berlin (Freie Universität). She defended her doctoral dissertation regarding Polish-German relations of the interwar period in Silesia in 2007 at the University of Opole, obtaining the PhD's degree of humanities. 2007–2014 she has been Dean of the Opole Department of the Bogdan Jański Higher Education School. 2015-2017 she worked at the Gliwice Higher Education School of Entrepreneurship. In 2015-2019 she was Subject Matter Expert at Teleperformance Germany Sp. z o.o. in Katowice, responsible for Quality Assurance of processes on Amazon project. Her scientific interests focus mainly on the topics connected with social communication, especially communication flow in modern global enterprises, technology and process assessment, as well as sustainable development and quality of life.

Supporting Sustainability: Innovation and Entrepreneurship Amid Today's Challenges

The lecture will present the most important aspects of sustainable development policy and identify contemporary innovative instruments influencing it, including entrepreneurial development. In addition, particular emphasis will be placed on the fact that issues related to sustainable development (including in the context of spatial planning and investment) and environmental protection are also highlighted as key topics in discourses on quality of life in Europe. In addition, key contemporary challenges for the future development of Europe will be identified. These include promoting sustainable development, strengthening sustainable business, optimising infrastructure, ensuring social stability in areas such as health, education and social policy, and the prudent use of natural resources, including promoting biodiversity and supporting material cycle optimisation. The aim is to guarantee the greatest possible availability of natural resources for future generations. This will entail the continuation of an advanced energy policy, with a reduction in CO2 emissions in line with targets. At the same time, education should also be strengthened, with further consolidation of the education system. The security of the population should also be ensured, and the regions should be effectively positioned through cooperation on key projects and greater consideration of common interests at national level.

Thursday, November 7, 2024; 11:00 (CEST)