

**12-14**  
**December**

**GENERAL INFORMATION:**

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**AMatStIC - ADVANCED  
MATERIALS STUDIES  
TOWARDS INVERTED  
CLASSROOMS**

**Venue**  
University Koblenz-Landau  
Campus Koblenz  
Building M  
Room M323

**FINANCED BY:**

**DAAD**



Project ID: 57448234

## GENERAL INFORMATION:

The AMatStIC project between the University Mohammed VI Polytechnic (UM6P) in Morocco and the University Koblenz-Landau (UKL) in Germany mainly aims at enhancing the internationalization of the curricular and at improving student and staff mobility for both involved universities.

A special focus of this short-term project is the intention in both the master and PhD programs and implement bilaterally the concept of **inverted** or **flipped classrooms**, which is a cutting edge pedagogic approach already in use at the most prominent academic institutions and universities all around the world.

The conference especially aims at materials science and natural sciences, including mathematics, computer science and related disciplines in close connection to pedagogical and didactic study courses.

## WORKSHOP PROGRAM:

### DAY 1 MORNING: M323

CHAIR: DR. CHRISTIAN FISCHER (UKL)

(Organization)

9:00-9:30	<b>REGISTRATION</b>
9:30-9:45	Prof. Dr. Stefan Wehner (UKL) Opening of the Workshop and Introduction of Faculty 3
9:45-10:00	Prof. Dr. Jones Alami (UM6P) Introduction University Mohammed VI Polytechnic and MSN Department
10:00-10:15	Prof. Dr. Dr. h.c. May-Britt Kallenrode (UKL) Greetings of the President of University Koblenz-Landau
10:15-10:30	Prof. Dr. Rachid Hakkou (UM6P) Valorization of by-products from phosphate mines
10:30-10:45	Prof. Dr. Yassine Taha (UM6P) Towards the transformation of phosphate wastes into low carbon cement
10:45-11:00	PD. Dr. Carola Winkelmann (UKL) Phosphate in the aquatic environment: nutrient or contaminant?
11:00-11:30	<b>REFRESHMENT BREAK</b>
11:30-11:45	Prof. Dr. Thomas Götz (UKL) Optimal Control - Applications in Material Science
11:45-12:00	Dr. Youssef Tamraoui (UM6P) On the Structural Phase Transitions and Optical Properties of $Sr_3TeO_6$ - $Sr_2CaTeO_6$ System
12:00-12:15	Prof. Dr. Mounir El Achaby (UM6P) Structured materials from cellulose derivatives and biopolymers for functional applications
12:15-12:30	Prof. Dr. Hicham Benyoucef (UM6P) Functional Polymers & Composites for Advanced Applications
12:30-14:00	<b>LUNCH BREAK</b>

## DOCTORANDS AND STUDENTS SESSION:

(Organization)

### DAY 1 AFTERNOON: M323

CHAIR: DR. VERA TRABADELO (UM6P)

14:00-14:15	Ms. Samira Moukannaa (UM6P) Valorization of phosphate mining wastes for construction materials manufacturing using geopolymerization technology
14:15-14:30	Mr. Kevin Rohe (UKL) Approaching the competing surface reaction $H_2+O_2+CO$ : Model and Experiment planning
14:30-14:45	Ms. Zineb Kassab (UM6P) Development of Structured Bio-Composite Films for Food Packaging Application
14:45-15:00	Mr. Lucas Beucher (UKL) Biopolymer foils as supporting material for the production of parylene layers coated with thin a-C:H films
15:00-15:15	Mr. El Mehdi Toufik (UM6P) Functional Biocomposites for Biomedical Applications
15:15-15:30	Mr. Refat Soliman (UKL) Inverted Classroom for Post-Graduate Material Science Program (M.Sc.) "Connecting a Rotary Vane Pump to a Vacuum Chamber" Performance and results
15:30-15:45	Dr. Karunia Putra Wijaya, Mr. Nityananda Roy (UKL) Transport of microplastics in a tile-cavity system: A two-dimensional modelling approach
15:45-16:00	Ms. Loubna Hdidou (UM6P) Green Synthesis of Nano-structured Metal Oxides $Co_3O_4$ as Anode Material for Lithium-ion Batteries
16:00-17:00	<b>COFFEE BREAK and POSTER SESSION</b>
17:00	<b>Optional: Christmas Party on Campus and Concert</b>

### DAY 2

10:00-11:40	M323	Campus tour and visit of Faculty 3 laboratories
11:40-12:00	M323	Ms. Ines Tobis (UKL) Welcome Center Campus Koblenz
12:00-13:45		<b>LUNCH BREAK</b>
14:00-16:00	mLab C005	Dr. Peter Ferdinand (UKL) Flipped Classroom - Concept, didactics and research Dr. Robert Rockenfeller (UKL) Two examples of video-based lectures in mathematics: preparation, implementation and evaluation
16:00-17:00	M323	Discussion: Implementation of IC-concept and legal statements
17:00	M323	Get together and departure for <b>WORKSHOP DINNER</b> in Koblenz at 19:00 (Restaurant By Mangal), optional "Christmas Market"

### DAY 3

9:30-11:00	M323	Assessment of the event Closing words and farewell
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