



Tempus

530577-TEMPUS-1-2012-1-RS-TEMPUS-JPCR

IMPROVEMENT OF PRODUCT DEVELOPMENT STUDIES IN SERBIA AND BOSNIA AND HERZEGOVINA

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# IPROD

## Training at STU

WP 2.1 Transfer of knowledge and expertise of EU partners to PC university teachers in the field of Management of Product Development, Innovations management, Eco-product development and Industrial Product Development



# OVERVIEW

- Training agenda
- Acquaintance with participants
- Training on Generative design
- Individual assignments
- Training in the company EKOM
- Training in STU laboratories
- Training in the Volkswagen Slovakia
- Conclusion

# Training agenda

## *Training of Partner country University teachers for modernization of pedagogical methodology by STU Bratislava*

*5<sup>th</sup>-18<sup>th</sup> October 2014*

### Training agenda:

Sunday 5 <sup>th</sup> October	Arrival in Bratislava, accommodation
Monday 6 <sup>th</sup> October	Welcome note, introductory presentation about the Institute of Transport Technology and Engineering Design at STU, introduction of both host and visiting colleagues
Tuesday 7 <sup>th</sup> October	Presentation of research activities at the Institute, assignments definition and discussion on activities, at 5 p.m. tour of Bratislava with wine tasting and special diner
Wednesday 8 <sup>th</sup> October	At 9 a.m. leaving Bratislava from the Hotel Akademik on purpose of training visit to the EKOM s.r.o. in Piešťany, afternoon lunch on the hill Červená Veža, tour of Piešťany spa and other activities, at 8 p.m. arrival to Bratislava
Friday 9 <sup>th</sup> - Thursday 16 <sup>th</sup> October	Independent work on purpose of assignment solution
Monday 13 <sup>th</sup> October	Visit to laboratories at STU
Thursday 16 <sup>th</sup> October	Assignments completion
Thursday 16 <sup>th</sup> October	At 2 p.m. leaving Bratislava from the main building of FME STU on purpose of training visit to the Volkswagen Bratislava
Friday 17 <sup>th</sup> October	At 9 a.m. final presentations, evaluation of training
Friday 17 <sup>th</sup> October	Departure

If it is not specified, training starts daily at 9 a.m. in the Laboratory of Generative Design (room 352 in the building of Faculty of Mechanical Engineering STU in Bratislava)



# Acquaintance with participants

- Ivan Knežević
- University of Novi Sad
- Gordan Lješić
- University of Mostar





# Training on Generative design

- Generative design laboratory similar to the one of BMW or any other professional automotive design research centres
- Training on higher CAD software CATIA V5, CATIA V6
- Training on 3D printing software Insight 9.1
- Training on 3D scanning device with software ATOS Professional
- Teaching methodologies with the aid of new technologies





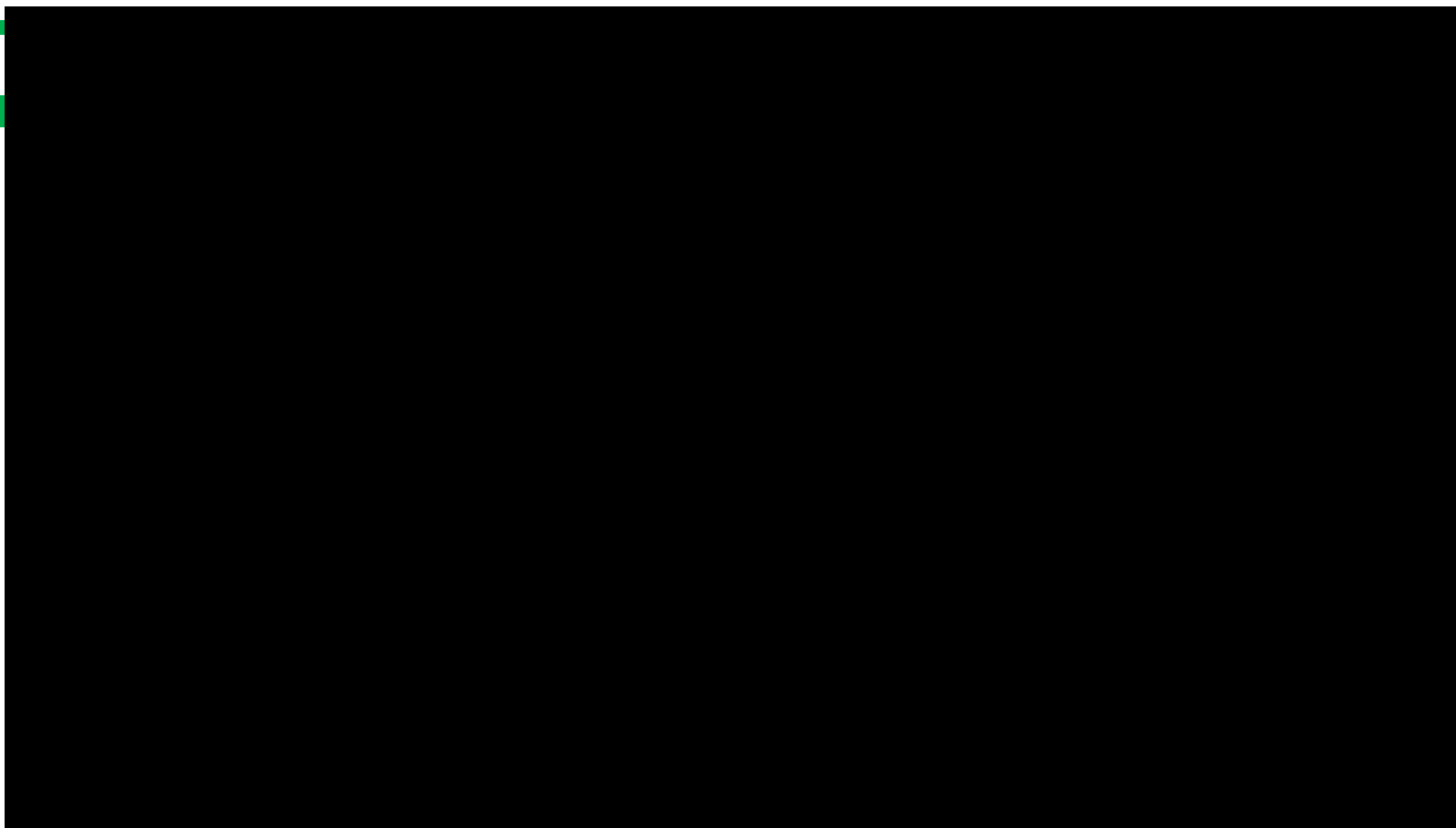
# Individual assignments

- Design of a planetary gearbox created by 3D printer in one operation without assembling





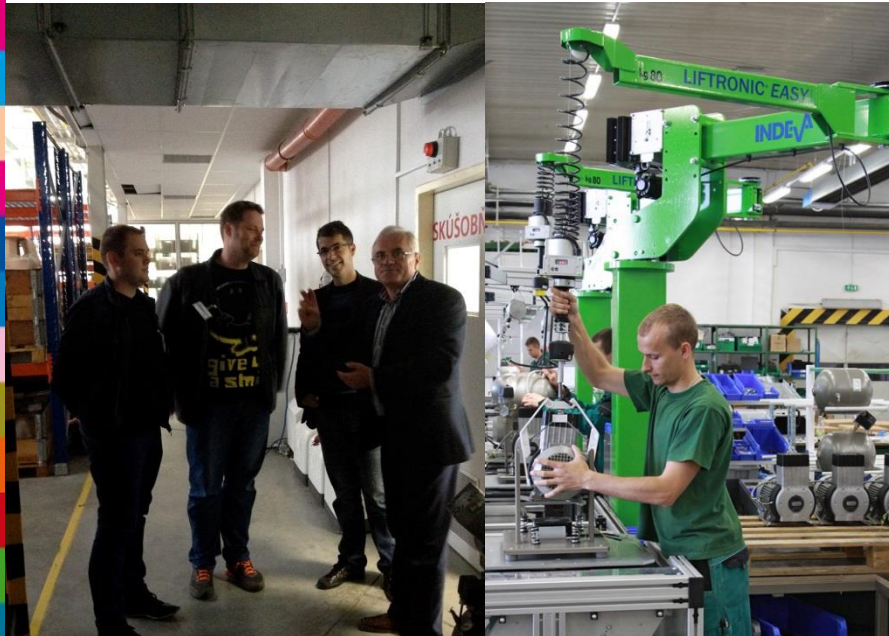
# Individual assignments





# Training in the company EKOM

- World leader in production of oil-free compressors
- Slovak company with own research, design and manufacturing of the entire product
- An example of middle company with the main idea to underline the national knowledge and labour power







# Training in STU laboratories



- Implementation of theoretical knowledge
- ICE lab, lab of mobile working machines, lab for testing planetary gears, student racing car lab, aerodynamic tunnel lab, automatic control lab, hydraulic machines lab



# Training in the Volkswagen Slovakia

- Visit to the manufacture hall with the biggest pressing machine in Europe
- Visit to the assembling line of UP car
- Visit to the assembling line of gearboxes
- Off-road parcours
- Electric car test fleet





## Conclusion

- Training on modern design methodology and ways of teaching modern design methodology
- Implementation of softwares for proving theoretical knowledge
- Interrelation between laboratory and companies
- How does Product development look like in the middle national company compared with the worldwide enterprise



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## Thank you for your attention!