

# Train of Trainers Workshop Höxter

11<sup>th</sup> – 14<sup>th</sup> of September, 2018

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## Review Table

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## 1 Overview about Participants and Lecturers

In Table 1 the participants of all different Jordanian and Syrian Partner Universities are listed. Unfortunately, from the University of Aleppo, there was no lecturer sent since the chosen participants didn't receive their Visa to Germany.

**Table 1:** Participants from Jordanian and Syrian Partner Universities

University	Participant Name
Al Albayt University	Dr. Amjed Shatnawi
Al-Baath University	Prof. Adnan Ghata
Al-Zaytoonah University of Jordan	Dr. Malik Alamayneh
German Jordanian University	Dr. Nidal Alshwawreh
	Eng. Shorouq Shaweesh
MUTAH University	Prof. Dr. Bassam Almahasneh
Tishreen University	Prof. Moussa Al Samara
	Dr. Boushra Nema
	Eng. Eskandar Haddad
University of Jordan	Prof. Ahmad AbuYaghi
	Prof. Zayed Al-Hamamre
	Prof. Mohammad Al-Shannag

In Table 2 the agenda of the week including all lecturers from OWL UAS. The planned courses for which the respective training was provided are also included in the table.

**Table 2: Agenda of the week**

Date	Time	Content	Lecturer
Tue. 11/09/2018	9:00 - 9:30	welcome and presentation of the workshop program	Prof. Dr.-Ing. habil. Salman Ajib
	9.30 - 12.00	Presentation and discussion of the course "Water and Wastewater Treatment including Bio-Techniques for Waste Water Treatment"	Prof. Dr.-Ing. Martin Oldenburg
	13:00 - 15:30	Presentation and discussion of the course "Water Resources Engineering including non-conventional water recourses"	Prof. Dr.-Ing. Joachim Fettig
	15:30 - 16:00	Short presentation in the laboratory (Heat pump and refrigeration system)	Prof. Dr.-Ing. habil. Salman Ajib
	16:00 - 16:30	welcome and presentation of the HS OWL university of applied science	Prof. Dr. Jürgen Krahl (President of the University)
	16:30 - 17:00	Summary of the first day	Prof. Dr.-Ing. habil. Salman Ajib

Wed. 12/09/2018	9:00 – 12:00	Presentation and discussion of the courses "Power and refrigeration cycles (2 courses)"	Prof. Dr.-Ing. habil. Salman Ajib
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	13:00 - 17:00	Presentation and discussion of the course “modelling and simulation of power plant cycles (new); This needs a software program Epsilon”	Prof. Dr.-Ing. habil. Salman Ajib
Thu. 13/09/2018	9:00 – 12:00	Presentation and discussion of the course “Air Pollution and Air Quality Management”	Prof. Dr. rer. nat. Klaus Maßmeyer
	13:00 - 17:00	Presentation and discussion of the course “Environmental Monitoring Systems (New Course)”	Prof. Dr. rer. nat. Burkhard Wrenger
Fr. 14/09/2018	9:00 - 14:30	Excursion to PV plant in Herste and another place near Godelheim for presenting the Environmental Monitoring Systems experimentally	Prof. Dr. Burkhard Wrenger and Prof. Dr.-Ing. habil. Salman Ajib
	14:30 - 16:00	Closing session and final discussions	Prof. Dr.-Ing. habil. Salman Ajib

## 2 Summary of the Workshop Days

### 2.1 Tuesday, 11<sup>th</sup> of September, 2018

On Tuesday, 11<sup>th</sup> of September, 2018 the Train-of-Trainer Workshops started at the HS OWL (UAS) in Höxter. The Welcoming speech and Presentation of the program started punctually at 9:00 (Figure 1).



**Figure 1:** Welcoming Speech at HS OWL (UAS) in Höxter

After the Welcoming Speech by Prof. Ajib, he gave a presentation on contents related to the courses, which were given at the workshop in Höxter.

- “Water Resources Engineering including non-conventional water recourses”
- “Water and Wastewater Treatment including Bio-Techniques for Waste Water Treatment”
- “Power and refrigeration cycles (2 courses)”
- “modelling and simulation of power plant cycles (new)”
- “discussion of the courses Air Pollution and Air Quality Management”
- “Environmental Monitoring Systems (New Course)”



Figure 2: Lecturer Prof. Dr.-Ing. Martin Oldenburg during his course



Figure 3: Lecturer Prof. Dr.-Ing. Joachim Fettig during his course

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Figure 4: Tour through the laboratory



Figure 5: Tour through the laboratory “Renewable energies and decentralized energy supplying”, Prof. Ajib.



**Figure 6:** Tour through the laboratory “renewable energy and decentralized energy supply”, Prof. Oldenburg



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**Figure 7:** Tour through the laboratory “renewable energy and decentralized energy supply”, Prof. Fettig



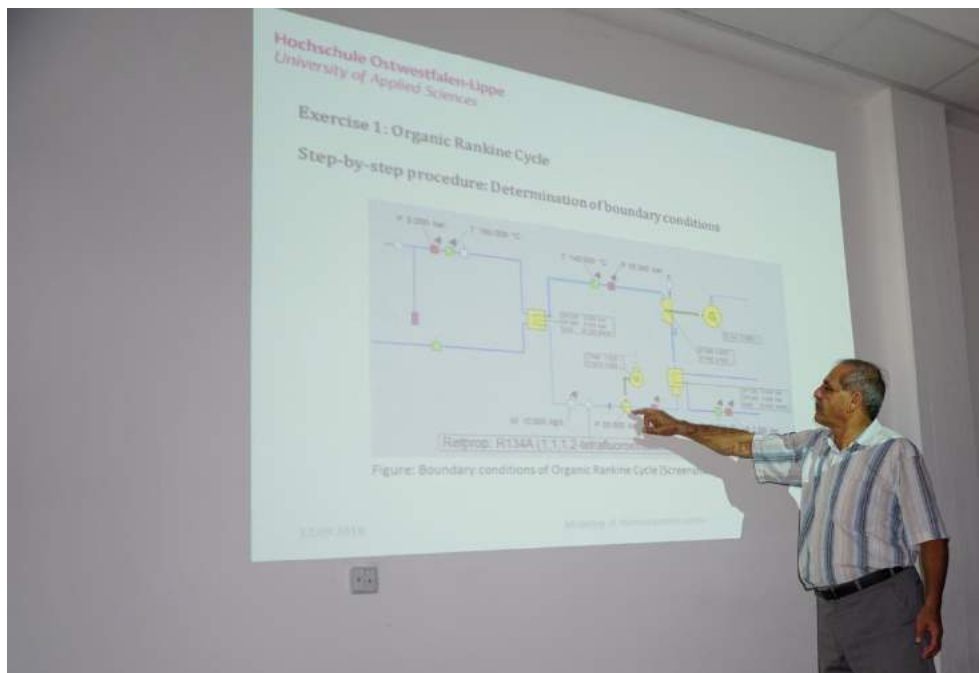
**Figure 8:** Welcome speech of Prof. Dr. Jürgen Krahl (President of the University)

## 2.2 Wednesday, 12<sup>th</sup> of September, 2018

On Wednesday, 12<sup>th</sup> of September there were two different workshops given by Prof. Ajib.

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**Figure 9:** Lecturer by Prof. Ajib during his course „modelling and simulation of power plant cycles”.



**Figure 10:** Exercise during the Workshop

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### 2.3 Thursday, 13<sup>th</sup> of September, 2018

On Thursday, 13<sup>th</sup> of September, 2018 there were different workshops given by Prof. Dr. rer. nat. Maßmeyer and Prof. Dr. rer. nat. Wrenger.



Figure 11 + 12: Prof. Dr. rer. nat. Maßmeyer and Prof. Dr. rer. nat. Wrenger during their courses

### 2.4 Friday, 14<sup>th</sup> of September, 2018

On Friday, 14<sup>th</sup> of September, 2018 there were two planned visit appointments during the excursion. The first visit appointment must be cancelled, because the weather conditions did not allowed taking off the drone, but the weather afternoon was better, therefore, the planed excursion has been done.



Figure 14 + 15: PV Power Plant of the energy supplier “Stadtwerke Bad Driburg”

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Figure 16: Discussion at the PV power plant



Figure 17: Group photo after finishing the Workshop.

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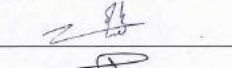

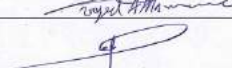

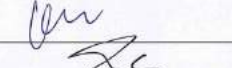
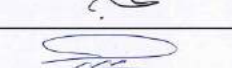

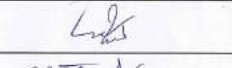



### 3 Training Material




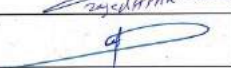

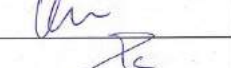



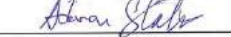


All presentations given at OWL UAS as well as further information from the companies that were visited during the week have been collected and are available via following link:

<https://www.dropbox.com/> (?)

### 4 Participant List

All participants had to fill a participants list in order to prove their attendance. The signed list is shown below.

attendance list		
Name	Institut	11.09.
Dr. Nidal Alshwawreh	GJU	
Eng. Shorouq Shaweesh	GJU	
Prof. Ahmad AbuYaghi	UJ	
Prof. Zayed Al-Hamamre	UJ	
Prof. Mohammad Al-Shannag	UJ	
Prof. Dr. Bassam Almahasneh	MUTAH	
Dr. Amjed Shatnawi	AABU	
Dr. Malik Alamayneh	ZUJ	
Prof. Al-Samara	TU	
Eng. Eskandar Haddad	TU	
Boushra Nema	TU	
Prof. Adnan Ghata	ABU	

attendance list		
Name	Institut	12.09.
Dr. Nidal Alshwawreh	GJU	
Eng. Shorouq Shaweesh	GJU	
Prof. Ahmad AbuYaghi	UJ	
Prof. Zayed Al-Hamamre	UJ	
Prof. Mohammad Al-Shannag	UJ	
Prof. Dr. Bassam Almahasneh	MUTAH	
Dr. Amjed Shatnawi	AABU	
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Boushra Nema	TU	
Prof. Adnan Ghata	ABU	


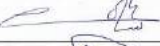

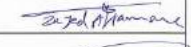

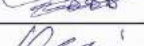



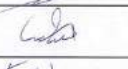


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attendance list

Name	Institut	13.09.
Dr. Nidal Alshwawreh	GJU	
Eng. Shorouq Shaweesh	GJU	
Prof. Ahmad AbuYaghi	UJ	
Prof. Zayed Al-Hamamre	UJ	
Prof. Mohammad Al-Shannag	UJ	
Prof. Dr. Bassam Almahasneh	MUTAH	
Dr. Amjed Shatnawi	AABU	
Dr. Malik Alamayneh	ZUJ	
Prof. Moussa Al-Samara	TU	
Eng. Eskandar Haddad	TU	
Boushra Nema	TU	
Prof. Adnan Ghata	ABU	

attendance list

Name	Institut	14.09.
Dr. Nidal Alshwawreh	GJU	
Eng. Shorouq Shaweesh	GJU	
Prof. Ahmad AbuYaghi	UJ	
Prof. Zayed Al-Hamamre	UJ	
Prof. Mohammad Al-Shannag	UJ	
Prof. Dr. Bassam Almahasneh	MUTAH	
Dr. Amjed Shatnawi	AABU	
Dr. Malik Alamayneh	ZUJ	
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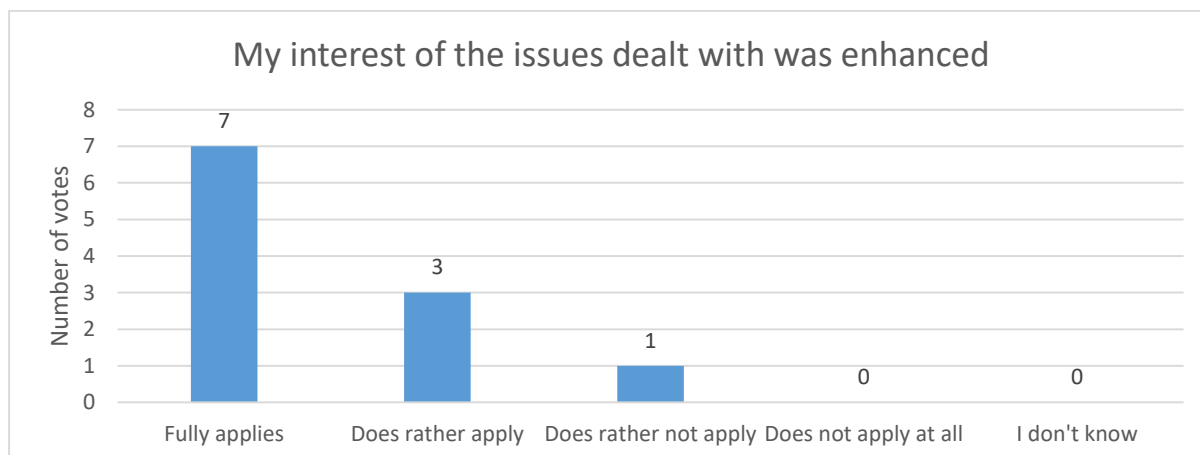
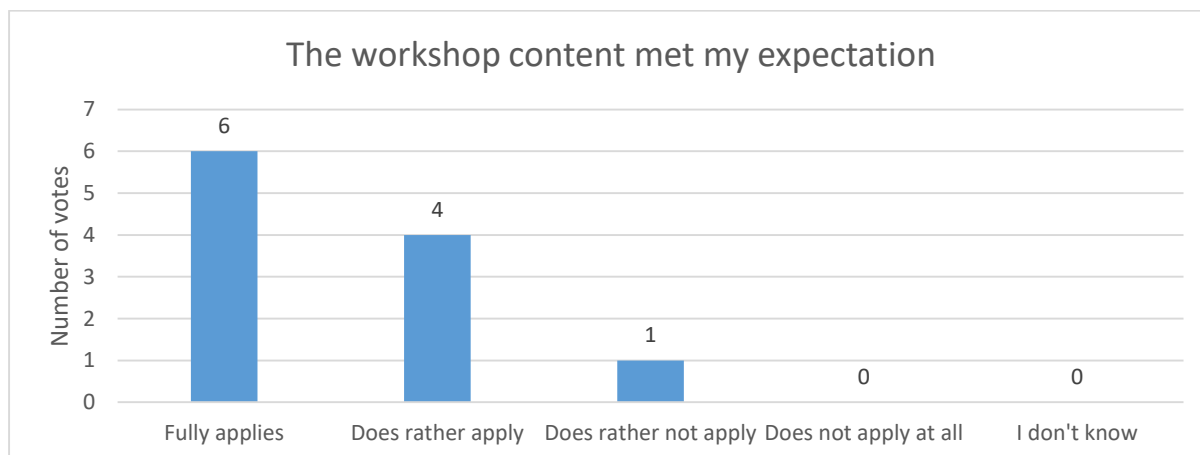
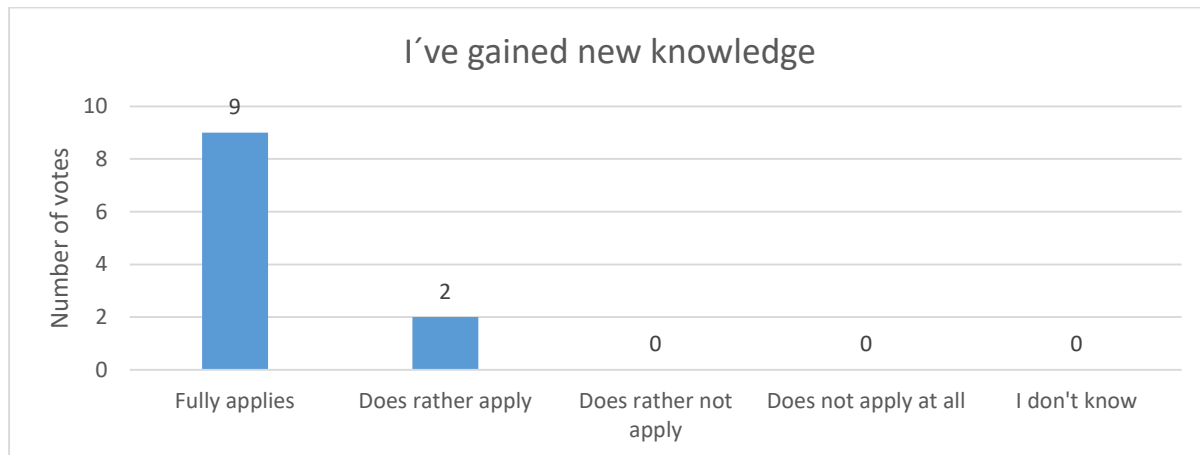
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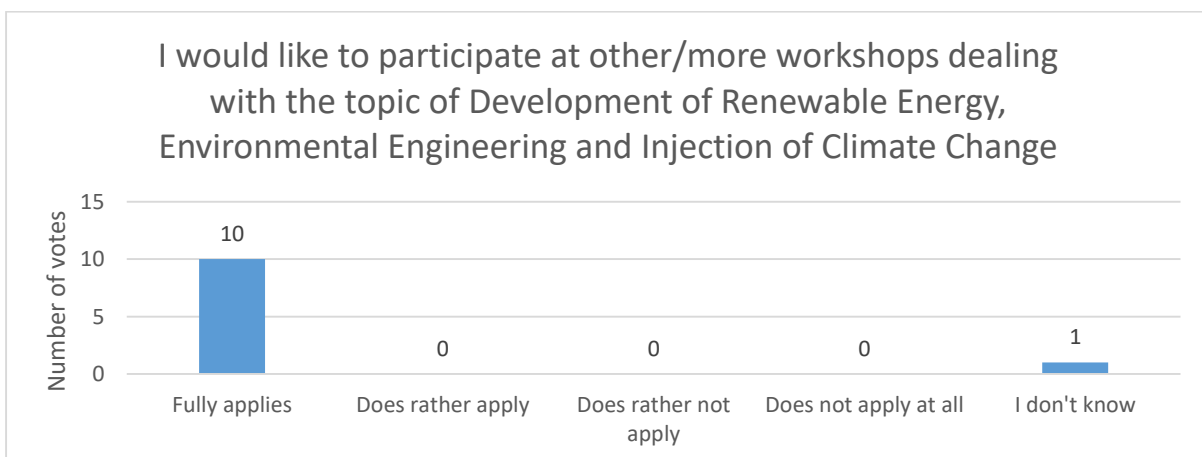
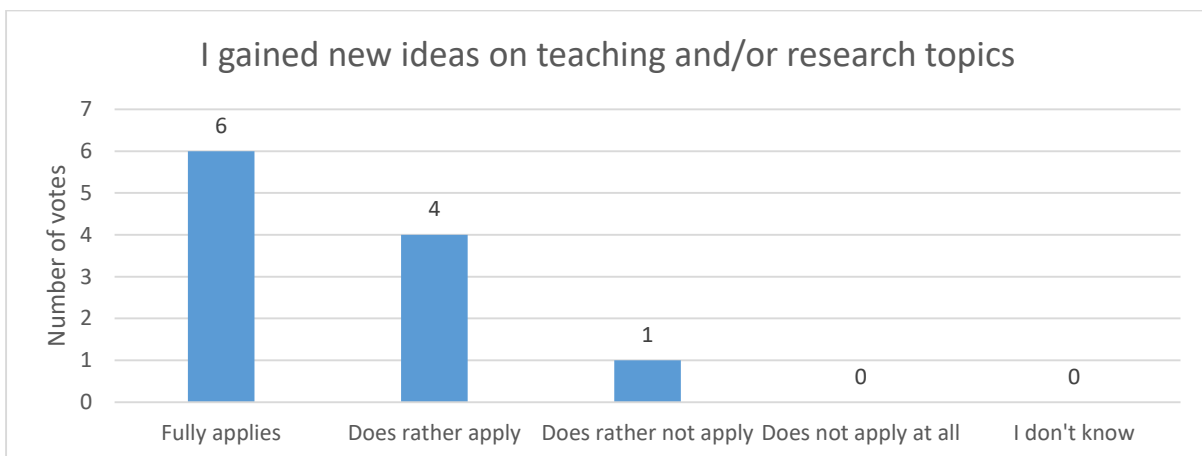
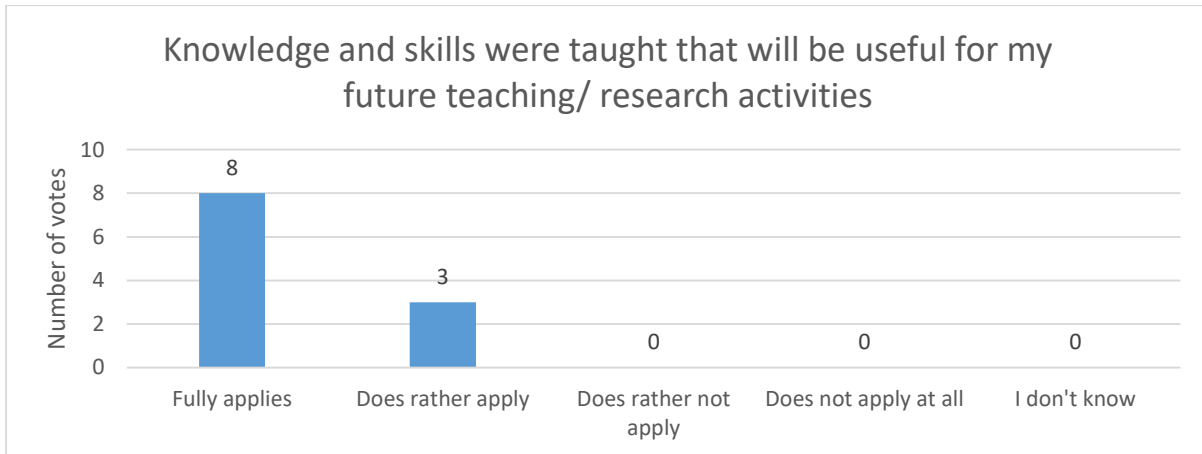
## 5 Evaluation Results

### 5.1 Benefit and knowledge gain



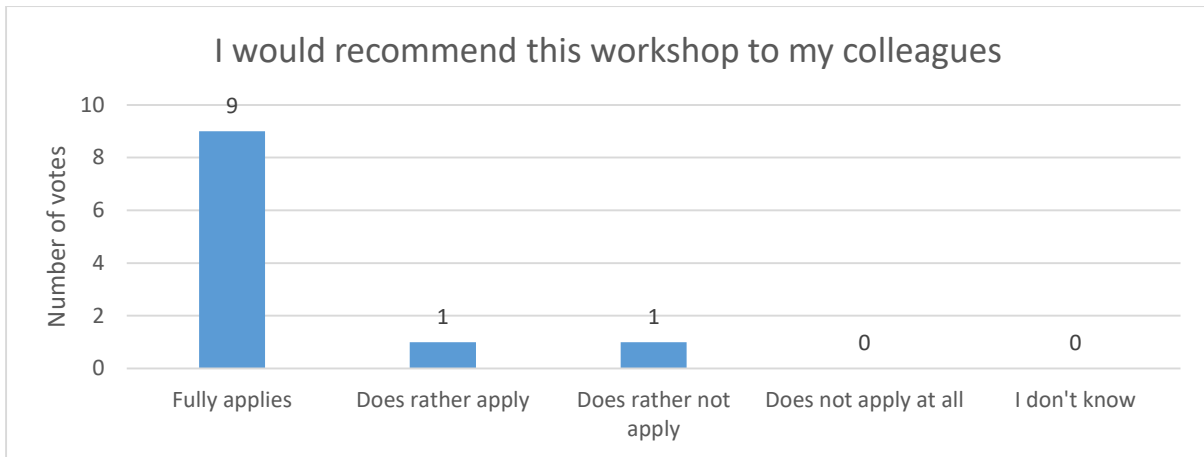
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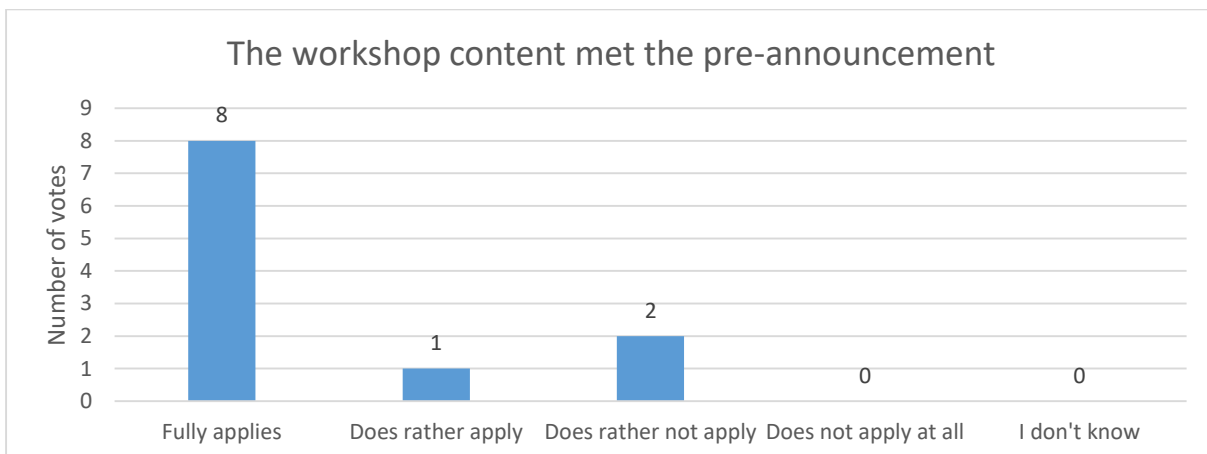
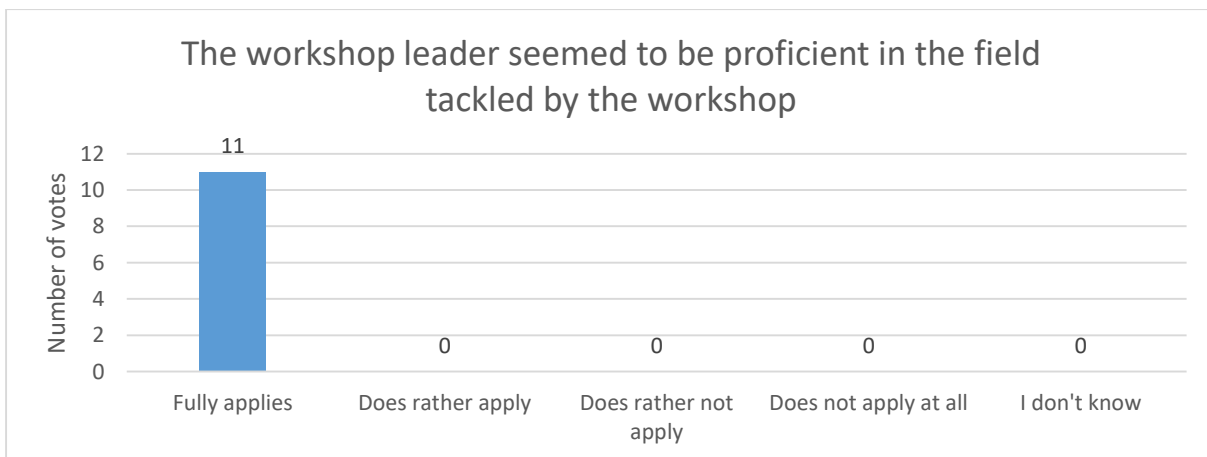
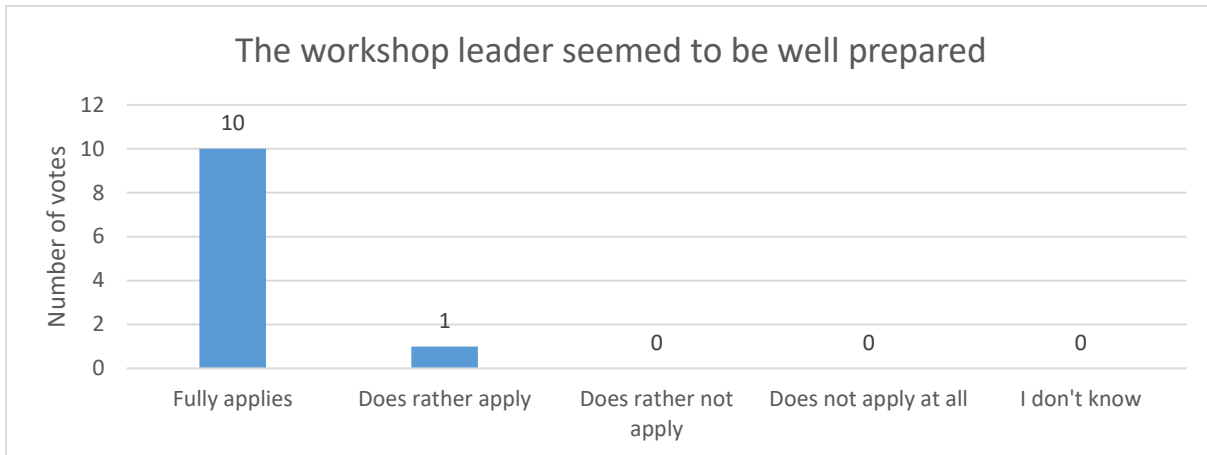


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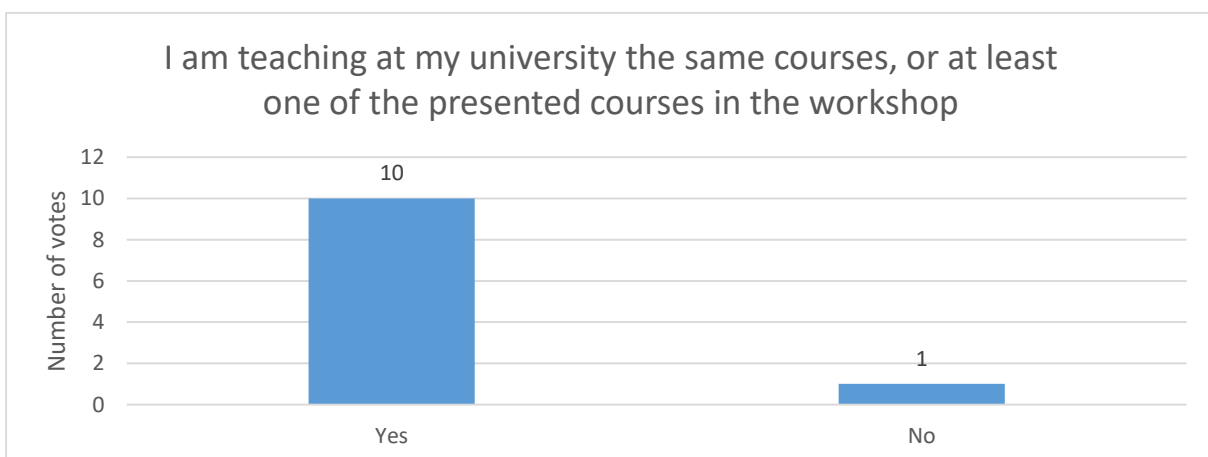
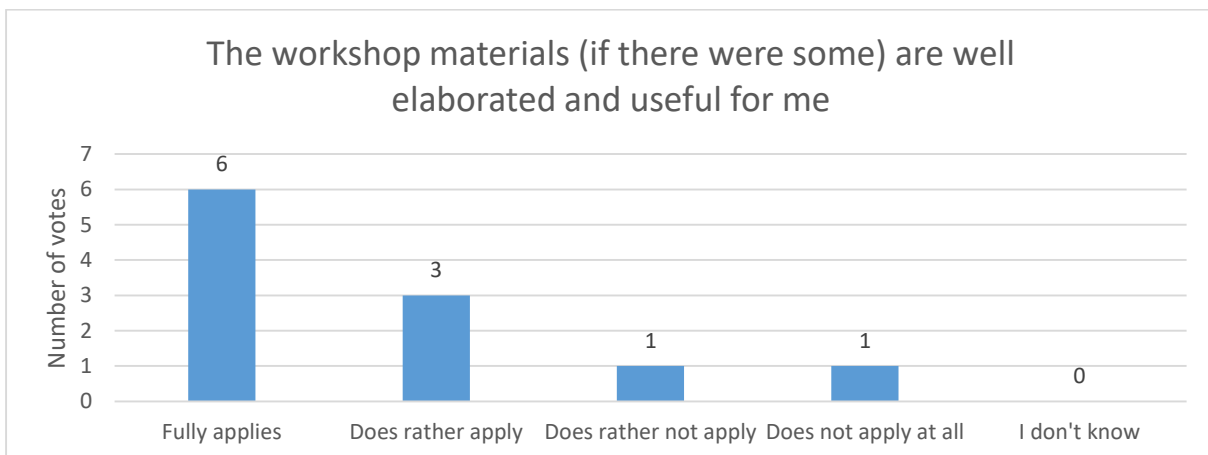
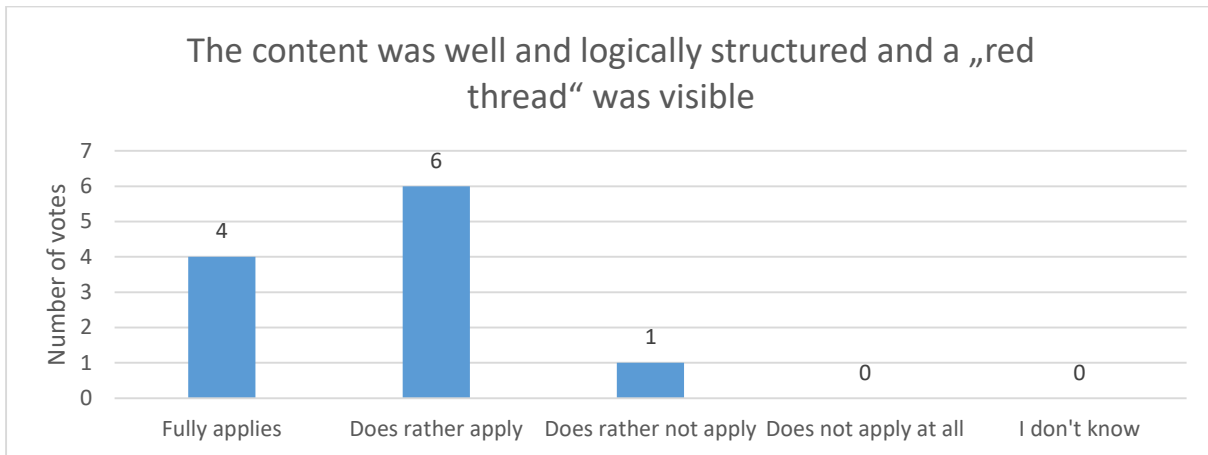


## 5.2 Workshop Quality



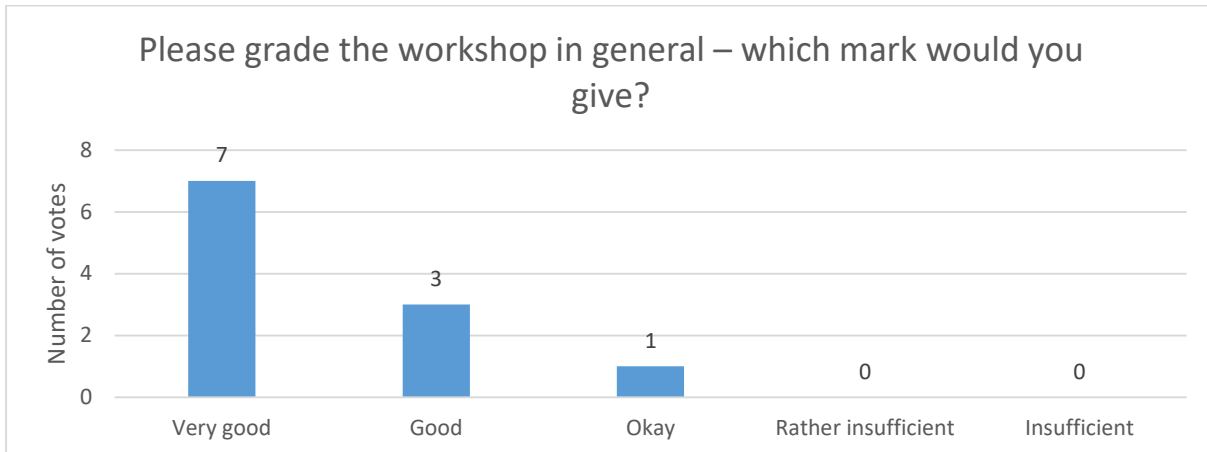
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### What did you like about the workshop?

- I liked the cooperative atmosphere and participants came from different backgrounds
- Good prepares good materials for teaching. Laboratory tour was very interesting
- Methodology, Field visits, Laboratories visit
- I like the organizing of the event, the discussed materials and the presentations made by the professionals
- The laboratory visits and the team discussion of course materials were fruitful
- The workshop helps the lecturer to organize the courses by showing examples and tutorials. Furthermore, the presentations were prepared very well. I visited a solar power plant, and we did practical experiments. The practical examples about simulation of the power plant were useful and very interest for me.
- Meeting interested academics; Lab and field visits
- Good prepares a good materials for teaching

### What didn't you like? What can be improved?

- I think it can be shortened to 2-days workshop
- Things in the work shop were very well
- The daily hours of the workshop are long. I suggest to have for example 5 hours from 9:00-14:00
- Many topics from different fields combined in one course, for example the course includes water management and power plants (that isn't true!).
- Some presentations have nothing to do with training and the content is rather little
- The training was concentrate.

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