



UNIVERSITY OF
HOHENHEIM



AMAIZE-P

Fourth Block Seminar
P Nutrition and Recovery
08-16 March 2020



Sino-German International Research Training Group AMAIZE-P

中德国际研究培训项目

Adaptation of maize-based food-feed-energy systems
to limited phosphate resources

粮食-饲料-能源玉米生产系统磷资源高效利用

Saturday, 07 March 2020:**Sunday, 08 March 2020:** Arrival of Chinese PIs and researchers, international invited speakers

Optional: Bilateral Research Subjects (RS) meetings

Monday, 09 March 2020: Fourth block seminar of IRTG AMAIZE-P (I)**Venue: University of Hohenheim, Euro-Forum Katharinasaal****Morning Session I: Scientific talks by two invited speakers**

Time	Content	Speakers	Title/organization
Chairperson: Prof. Dr. Markus Rodehutschord			
09:00-09:15	Welcome	Prof. Dr. Ralf Vögele Prof. Dr. Torsten Müller Prof. Dr. Huaiyu Yang	Dean, Faculty of Agricultural Sciences, University of Hohenheim Institute of Crop Science, University of Hohenheim College of Resources and Environment, Southwest University, Chongqing
Two Keynotes			
09:15-10:15	Function of Livestock to Convert Agricultural Biomass into Food: Current Trade Offs and Future Perspectives	Prof. Dr. Wilhelm Windisch	TUM School of Life Sciences Weihenstephan Campus
10:15-10:45: Group photo and Coffee/tea break at Euroforum			
10:45-11:45	Micronutrients and phytic acid in maize: Focus on bioavailability	Dr. Molly Muleya (née Gabaza)	School of Biosciences, University of Nottingham
11:45-12:00	General discussion (Day 1 morning)		
12:00-13:45: Lunch break at University "Mensa"			
Afternoon session I: Scientific talks by two invited speakers			
Time	Content	Speakers	Title/organization
Chairperson: Mr. Gero Becker			
Two Keynotes			
13:45-14:45	The fate of nutrients in biorefineries	Prof. Dr. Nicolaus Dahmen	Institute for Catalysis Research and Technology, Karlsruhe Institute of Technology (KIT)
14:45-15:30	Effects of anaerobic digestion and digestate post-treatment on nutrient composition and fertilizer value	Dr. Kurt Möller	LTZ Augustenberg, Karlsruhe
15:30-16:00: Coffee/tea break at Euroforum			
16:00-16:30	General discussion (Day 1)		
18:00-21:00	Dinner (Invited speakers and Chinese PIs) Restaurant Garbe, Filderhauptstraße 136, 70599 Stuttgart-Plieningen		
21:00: Chinese PIs and international invited speakers: Transfer by coach from bus stop "Universität Hohenheim" to Eningen unter Achalm (approx. 35 km S), accompanied by Dr. Marco Roelcke. Check into hotel "Eninger Hof".			

Tuesday, 10 March 2020: Fourth block seminar of IRTG AMAIZE-P (II)

07:45 h: German scientists, German and Chinese doctoral candidates: Transfer by coach from bus stop "Universität Hohenheim" to Eningen unter Achalm.

Morning visits: Venue: Lindenhöfe Station in Eningen unter Achalm

09:00-10:30	Visit of biorefinery technicum	Prof. Dr. Andrea Kruse, Mr. Gero Becker	RS 3.4
10:30-12:00	Visit of biogas plant and related installations	Dr. Hans Oechsner	RS 3.3
12:00-13:30	Lunch break at H3 Büro und Schulungszentrum, Arbachtalstraße 6, Eningen unter Achalm		

Afternoon session II:

Venue: H3 Büro und Schulungszentrum, Arbachtalstraße 6, Eningen unter Achalm

Presentations by doctoral researchers

Chairperson: Prof. Dr. Huaiyu Yang

14:00-14:20	RS 1.1	5 min. for each German and each Chinese PhD student + 10 min. discussion, same for all below
14:20-14:50	RS 1.2	
14:50-15:15	RS 1.3	
15:15-15:40	RS 3.1	
15:40-16:10	Coffee/tea break at H3 Büro und Schulungszentrum	

Chairperson: Dr. Willmar Leiser

16:10-16:30	RS 3.2	5 min. for each German and each Chinese PhD student + 10 min. discussion, same for all below
16:30-16:50	RS 3.3	
16:50-17:15	RS 3.4	
17:15-17:30	Joint discussion of doctoral researchers' presentations on Day 1	

17:30 h: Chinese PIs and international invited speakers: Walk from H3 Büro und Schulungszentrum to hotel "Eninger Hof" in Eningen.

18:00-19:00 h: German PIs and senior scientists, German and Chinese doctoral candidates: Transfer by coach to bus stop Fruwirthstraße, 70599 Stuttgart-Hohenheim

18:00-20:00 Dinner in Eningen (International invited speakers)

Wednesday, 11 March 2020: Fourth Block seminar of IRTG AMAIZE-P (III)

07:45 h: German scientists, German and Chinese doctoral candidates: Transfer by coach from bus stop "Universität Hohenheim" to Eningen unter Achalm

Morning session II:

Venue: H3 Büro und Schulungszentrum, Arbachtalstraße 6, Eningen unter Achalm

Time	Content	Speakers	Title/organization
Presentations by doctoral researchers (contd.)			
Chairperson: Dr. Jürgen Franzaring			
09:00-09:25	RS 2.1	5 min. for each German and each Chinese PhD student + 10 min. discussion, same for all below	
09:25-09:50	RS 2.2		
09:50-10:10	RS 2.3		
10:10-10:40: Coffee/tea break at H3 Büro und Schulungszentrum			
Chairperson: Dr. Marco Roelcke			
10:40-11:05	RS 2.4	5 min. for each German and each Chinese PhD student + 10 min. discussion, same for all below	
11:05-11:25	RS 4.1		
11:25-11:50	RS 4.2		
11:50-12:15	Joint discussion of doctoral researchers' presentations on Day 2		
12:15-13:45: Lunch break at H3 Büro und Schulungszentrum, Arbachtalstraße 6, Eningen unter Achalm			

Afternoon visit: Food processing company

14:00 h Departure from H3 Büro- und Schulungszentrum to visit "Alb-Gold" organic pasta company on the Swabian Alb, Im Grindel 1, 72818 Trochtelfingen

14:30-15:00	Company presentation via English language film		RS 3.1
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15:00-15:30: Coffee break at Alb-Gold Company

15:45 h Departure from "Alb-Gold" company and return to "Unterer Lindenhof"

Afternoon visit: Lindenhöfe Station in Eningen unter Achalm

16:30-17:30	Introduction to animal feeding experiments with broilers	Prof. Dr. Markus Rodhutschord	RS 3.2
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17:30 h: Chinese PIs and international invited speakers: Transfer by coach from Unterer Lindenhof to hotel "Eninger Hof".

18:00-19:00 h: German PIs and senior scientists, German and Chinese doctoral candidates: Transfer by coach to bus stop "Universität Hohenheim" in Stuttgart-Hohenheim

18:00-20:00: Dinner in Eningen (International invited speakers)

Thursday, 12 March 2020: Excursion to Lake Constance (博登湖)

07:30 h: German scientists, German and Chinese doctoral candidates: departure from bus stop “Universität Hohenheim” by coach

08:45 h: Chinese PIs and international invited speakers: Pick-up at hotel “Eninger Hof” in Eningen unter Achalm

08:45-09:15 h: Drive to Lichtenstein Castle by coach

09:30-10:30	Visit Lichtenstein Castle (guided tour) in 72805 Lichtenstein
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10:30-12:45 h: Proceed to Island of Reichenau in Lake Constance

12:45-14:00 h: Lunch at Restaurant Bützel, Am Vögelisberg 10, 78479 Reichenau

Afternoon:

Visit of Island of Reichenau (UNESCO World Heritage) in Lake Constance (博登湖):

14:15-15:30	Guided tour of ancient romanic cathedral Münster St. Maria und Markus with famous herb garden
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15:45-17:00	Visit of vegetable production in greenhouse
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17:15-17:30	Stopover at Laib & Seele bakery, Zelleweg 2, 78479 Reichenau
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17:30-19:30 h: Chinese PIs and international invited speakers: Return to Eningen unter Achalm by coach

19:30-20:15 h: German scientists, German and Chinese doctoral candidates: Return by coach to bus stop “Universität Hohenheim” in Stuttgart-Hohenheim

For excursion on 12 March 2020 see maps p. 10 and 11.

Friday, 13 March 2020: Fourth Block seminar of IRTG AMAIZE-P (IV)

07:00 h: Chinese PIs and international invited speakers: Pick-up at hotel “Eninger Hof” in Eningen unter Achalm and return to by coach to bus stop “University of Hohenheim”

Venue: University of Hohenheim, Euro-Forum Katharinasaal

Morning Session III: Scientific talks by four invited speakers and advisory board members

Time	Content	Speakers	Title/organization
Chairperson: PD Dr. Hans Oechsner			
08:30-08:35	Short introduction, announcements	Dr. Marco Roelcke	Institute of Crop Science, University of Hohenheim
08:35-09:20	Phosphorus recycles – their role and function in the circular phosphorus economy	Prof. Dr. Susanne Schmidt	University of Queensland, Australia
09:20-10:05	Struvite Precipitation from Waste Water and Digestate in Germany and its Potential in China	PD Dr. Joachim Clemens	SF-SoepenberGmbH, Cleve, Germany; BMBF PIRAT-systems project

10:05-10:30: Coffee/tea break at Euroforum

Venue: University of Hohenheim, Euro-Forum Katharinasaal

Chairperson: Dr. Peteh Mehdi Nkebiwe

10:30-11:15	From Waste via Green Energy to Plant Nutrients: New solution for high N substrates	Dr. Thomas Mannheim	Ductor GmbH, Düsseldorf, Germany
11:15-12:00	Roots as the key players in P-forest ecosystem nutrition	Prof. Dr. Friederike Lang	Chair of Soil Ecology, University of Freiburg
12:00-12:10	Closing remarks	Prof. Dr. Torsten Müller Prof. Dr. Huaiyu Yang	Institute of Crop Science, University of Hohenheim College of Resources and Environment, Southwest University, Chongqing

12:10-13:30 Lunch break at University “Mensa”

13:30-14:00: After-lunch coffee/tea break at Euroforum

Parallel afternoon session I: Educational programme for doctoral researchers

Venue: University of Hohenheim, Euro-Forum Katharinasaal

13:30-15:30	Workshop with PhD students: Pulling together the current knowledge of the IRTG and identifying gaps	Prof. Dr. Susanne Schmidt	University of Queensland, Australia
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Parallel afternoon session II: General meeting of German and Chinese PIs, incl. Advisory Board

Venue: University of Hohenheim, Lecture Hall 24, Fruwirthstraße 20

Chairs: Prof. Torsten Müller, Dr. Marco Roelcke, Prof. Dr. Wenxin Liu, Prof. Dr. Huaiyu Yang

14:00-17:00 Discussion of general and specific issues, agenda t.b.d.:

18:30-20:30 Dinner (self-organized)

Saturday, 14 March 2020: Departure of Chinese PIs and international invited speakers

Educational contents for German and Chinese doctoral candidates:

Group 1, approx. 10 participants

Venue: Lecture hall HS 35, Fruwirthstr. 48 (Kavaliershaus 4)

09:00-12:00	1 st Workshop on “Diversity in an intercultural context” Morning session	Ms. Brigitte Ott-Goebel	Ott-Goebel Consulting, Ostfildern, Germany
12:00-13:30	Lunch. Catering provided at venue		
13:30-17:00	1 st Workshop on “Diversity in an intercultural context” afternoon session	Ms. Brigitte Ott-Goebel	Ott-Goebel Consulting, Ostfildern, Germany

Sunday, 15 March 2020:

Monday, 16 March 2020: Educational contents for German and Chinese doctoral candidates:

Group 2, approx. 10 participants

Venue: Lecture hall HS 35, Fruwirthstr. 48 (Kavaliershaus 4)

09:00-12:00	2 nd Workshop on “Diversity in an intercultural context” Morning session	Ms. Brigitte Ott-Goebel	Ott-Goebel Consulting, Ostfildern, Germany
12:00-13:30	Lunch break at University “Mensa”		
13:30-17:00	2 nd Workshop on “Diversity in an intercultural context” afternoon session	Ms. Brigitte Ott-Goebel	Ott-Goebel Consulting, Ostfildern, Germany

Friday, 20 March 2020: Educational contents for German and Chinese doctoral candidates:

Special lecture on P

Venue: Lecture hall “Seminarraum EG”, Institute of Agricultural Engineering (440), Garbenstraße 9

13:00-16:00	Special lecture about phosphorus and phosphates, followed by discussion	Prof. Dr. Andrea Kruse	Institute of Agricultural Engineering, University of Hohenheim
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Participants List

Invited speakers and Advisory Board members

1. Prof. Dr. Susanne Schmidt, University of Queensland, Brisbane, Australia
2. Prof. Dr. Friederike Lang, Chair of Soil Ecology, University of Freiburg, Freiburg, Germany
3. Dr. Molly Muleya (née Gabaza), School of Biosciences, University of Nottingham, Nottingham, UK
4. Prof. Dr. Wilhelm Windisch, TUM School of Life Sciences, Weihenstephan Campus, Freising, Germany
5. Prof. Dr. Nicolaus Dahmen, Institute for Catalysis Research and Technology, Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany
6. Dr. Kurt Möller, LTZ Augustenberg, Karlsruhe, Germany
7. PD Dr. Joachim Clemens, SF-SoepenberGmbH, Cleve, Germany
8. Dr. Thomas Mannheim, Ductor GmbH, Düsseldorf, Germany
9. Ms. Brigitte Ott-Goebel, Ott-Goebel Consulting, Ostfildern, Germany

German Side

10. Prof. Dr. Ralf Vögele, Dean, Faculty of Agricultural Sciences, University of Hohenheim
11. Prof. Dr. Torsten Müller, IRTG Spokesperson (German side), Institute of Crop Science, University of Hohenheim
12. Prof. Dr. Reiner Doluschitz, IRTG Deputy Spokesperson (German side), Institute of Farm Economics, University of Hohenheim
13. Dr. Marco Roelcke, IRTG Coordinator (German side), University of Hohenheim
14. Prof. Dr. Tobias Würschum, State Plant Breeding Institute, University of Hohenheim
15. Prof. Dr. Uwe Ludewig, Institute of Crop Science, University of Hohenheim
16. Prof. Dr. Waltraud Schulze, Department of Plant Systems Biology, University of Hohenheim
17. Prof. Dr. Andreas Fangmeier, Institute of Landscape and Plant Ecology, University of Hohenheim
18. Prof. Dr. Simone Graeff-Hönninger, Institute of Crop Science, University of Hohenheim
19. Prof. Dr. Joachim Müller, Institute of Agricultural Engineering, University of Hohenheim
20. Prof. Dr. Jan Frank, Institute of Biological Chemistry and Nutrition, University of Hohenheim
21. Prof. Dr. Markus Rodehutscord, Institute of Animal Science, University of Hohenheim
22. Prof. Andrea Kruse, Institute of Agricultural Engineering, University of Hohenheim
23. Dr. Hans Oechsner, State Institute for Agricultural Engineering and Bioenergy, University of Hohenheim
24. Dr. Willmar Leiser, Head of Biotechnology Group, State Plant Breeding Institute, University of Hohenheim
25. Dr. Tobias Hartmann, Post-doctoral researcher, Research Subject (RS) 4.2, University of Hohenheim
26. Dr. Sebastian Munz, Post-doctoral researcher, Institute of Crop Science, University of Hohenheim
27. Dr. Peteh Mehdi Nkebiwe, Post-doctoral researcher, Institute of Crop Science, University of Hohenheim

28. Dr. Jürgen Franzaring, Post-doctoral researcher, Institute of Landscape and Plant Ecology, University of Hohenheim
29. M.Sc. Gero Becker, Institute of Agricultural Engineering, University of Hohenheim

30. Ms. Thea Mi Weiß, Doctoral candidate on German side, Research Subject (RS) 1.1
31. Ms. Melissa Mang Doctoral candidate on German side, RS 1.2
32. Ms. Xuelian Li, Doctoral candidate external on German side, RS 1.2
33. Ms. Mingjie He, Doctoral candidate on German side, RS 1.3
34. Mr. Filippo Abele, Doctoral candidate on German side, RS 2.1
35. Ms. Fangfang Ning, Doctoral candidate external on German side, RS 2.1
36. Mr. Daniel Wanke, Doctoral candidate on German side, RS 2.2
37. Ms. Yawen You, Doctoral candidate external on German side, RS 2.2
38. Ms. Alice Reineke, Doctoral candidate on German side, RS 2.3
39. Ms. Andrea Giovanna Niño Savala, Doctoral candidate on German side, RS 2.4
40. Mr. Peter Erwin Lux, Doctoral candidate on German side, RS 3.1
41. Mr. Moritz Novotny, Doctoral candidate on German side, RS 3.2
42. Mr. Konstantin Dinkler, Doctoral candidate on German side, RS 3.3
43. Mr. Jens Pfersich, Doctoral candidate on German side, RS 3.4
44. Ms. Qing Xue, Doctoral candidate external on German side, RS 3.4
45. Ms. Xiaomin Yu, Doctoral candidate on German side, RS 4.1

46. Mr. Xiu hao Quan, Doctoral candidate, University of Hohenheim, Pattern Management (PMC) BMBF-project

Chinese Side

47. Prof. Dr. Huaiyu Yang, College of Resources and Environment, Southwest University (SWU), Chongqing

48. Ms. Yuan Wang, Doctoral candidate on Chinese side, RS 2.2
49. Ms. Lan Li, Doctoral candidate on Chinese side, RS 3.2
50. Ms. Bowen Li, Doctoral candidate on Chinese side, RS 3.3
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Front cover

“Diorama” model of installations at “Unterer Lindenhof” station, by D. Wüst, M. Bernhard, S. Wenzler, Institute of Agricultural Engineering, University of Hohenheim. Photo: © Konstantin Dinkler and Peter Lux, 20 February 2020.

Project website:

<https://amaize-p.uni-hohenheim.de/>

**Contact Information:**

Prof. Dr. Torsten Müller: mobile [redacted]
Dr. Marco Roelcke: mobile: [redacted] marco.roelcke@uni-hohenheim.de
Dr. Tobias Hartmann: mobile: [redacted]
Mr. Peter Erwin Lux: mobile: [redacted]
Mr. Moritz Novotny: mobile: [redacted]
Mr. Konstantin Dinkler: mobile: [redacted]
Mr. Jens Pfersich: mobile: [redacted]
Ms. Xiaomin Yu: mobile: [redacted]

Restaurant in Hohenheim:

Wirtshaus Garbe, Filderhauptstraße 136, 70599 Stuttgart-Plieningen
Tel.: (+49) 0711-3421180
info@wirtshausgarbe.de www.wirtshausgarbe.de

Hotel accomodation in Hohenheim:

Christkönigshaus
Paracelsusstraße 89 •70599 Stuttgart-Plieningen
Tel.: (+49) 0711-458282-3
christkoenigshaus@tagungshaus.net www.christkoenigshaus.de

Catholic Academy Hohenheim
Paracelsusstraße 91, 70599 Stuttgart-Plieningen
Tel. (+49) 0711-451034600
hohenheim@akademie-rs.de www.akademie-rs.de

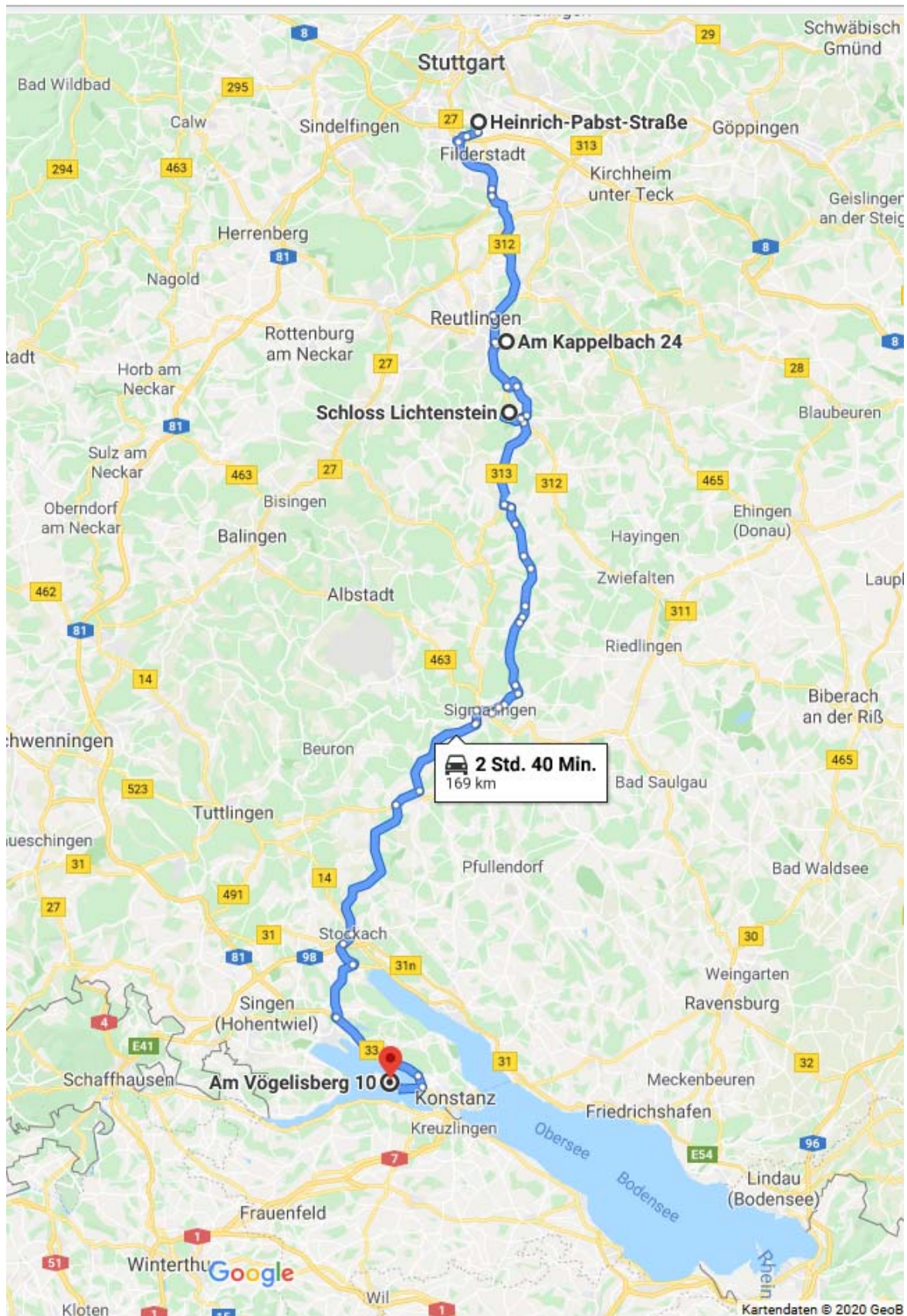
Hotel accomodation in Eningen unter Achalm:

Hotel Eninger Hof
Am Kappelbach 24, 72800 Eningen unter Achalm
Tel.: (+49) 07121-988550
info@eninger-hof.de www.eninger-hof.de

Please note:

During the events, the International Research Training Group AMAIZE-P will take videos for educational purposes.

(see maps on next two pages)



Route of excursion from Hohenheim via Eningen unter Achalm (Am Kappelbach 24) to Lichtenstein Castle, and further proceeding to the Island of Reichenau (Am Vögelisberg 10).



Locations of Restaurant Bütetzettel (A), Cathedral St. Maria and Markus (B), and greenhouse vegetable production farm (C) on the Island of Reichenau in Lake Constance.