Summer School

*Land Use and Ecosystem Change*

20-27 August 2019, Garmisch-Partenkirchen, Germany
The Karlsruhe Institute of Technology (KIT) will run an international Summer School on the topic of land use and ecosystem change during August 2019 at the KIT-Campus Alpin, IMK-IFU (Garmisch-Partenkirchen). Master and doctoral students are invited to learn about and discuss a wide range of issues related to ecosystem functioning, socio-ecological systems and land use change, in particular:

1. Both the biophysical and human processes and concepts needed to understand the broader issues of socio-ecological systems. This includes ecosystem functioning, biodiversity, ecosystem services, resilience, vulnerability, risk management, tipping-points, sustainability and related concepts in the field. We will also explore current understanding of how physical and human environmental changes affect socio-ecological systems, including content on international assessment processes such as the IPCC and IPBES.

2. Different aspects of land use change processes across geographic scales and for the past, present and future drivers of change. This will include, for example, land abandonment, extensification vs. intensification, deforestation, the role of social networks and knowledge diffusion, the role of pollinators and land management. There will be a focus on land use change assessment methods, including the role of observational data (e.g. from remote sensing and other sources) and land use modelling approaches using interactive exercises and case studies.

Format: The summer school will include a mix of lectures, practical exercises with student presentations and a field excursion. Participation is limited to a max. of 35 students. The cost for travel and accommodation is the student’s own responsibility; KIT will cover lunches, materials and the field excursion.

Lecturers (KIT): Prof. Dr. Almut Arneth, Prof. Dr. Mark Rounsevell, Dr. Richard Fuchs, Dr. Sam Rabin, Dr. Heera Lee, Dr. David Martin Belda, Dr. Calum Brown, Dr. Verena Seufert, Dr. Penelope Whitehorn, Dr. Anita Bayer, Dr. Bumsuk Seo. External keynote speakers not yet confirmed.

Applications: Application deadline is 14 April 2019. Please send a CV and a letter of motivation (limited to one page), signed by your supervisor, to: sylvia.kratz@kit.edu. Successful applicants will be notified in April 2019.
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<tr>
<th>Day</th>
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<th>Session</th>
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| Day 1| 20.08. | Introduction  
Past & present land use change  
Practical on drivers & processes of land use change  
Practical on global ecosystem functioning |
| Day 2| 21.08. | Observational data of land use change  
Practical on observational land use change data  
Practical continued incl. report & discussion |
| Day 3| 22.08. | Land use change modelling  
Practical on land use change modelling services  
Practical continued incl. report & discussion |
| Day 4| 23.08. | a) Ecosystems & land use change  
b) Ecosystem functioning & ecosystem services  
Practical continued incl. report & discussion |
| Day 5| 24.08. | Field trip to local farms |
| Day 6| 25.08. | Free time |
| Day 7| 26.08. | Species & biodiversity  
Practical on landscape scale analyses of species and biodiversity  
Practical continued incl. report & discussion |
| Day 8| 27.08. | Socio-ecological systems  
Practical on people, biodiversity & ecosystem  
Practical continued incl. report & discussion  
Wrap-up and close |

**Contact**

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