



Federal Ministry  
of Food  
and Agriculture



Fachagentur Nachhaltige Rohstoffe e.V.

# Poplars and Other Fast-Growing Trees

Renewable Resources for Future Green Economies

25<sup>th</sup> Session of the International Poplar Commission

13<sup>th</sup> to 16<sup>th</sup> September 2016, Berlin





## Foreword

Dear delegates, distinguished guests, ladies and gentlemen,  
it is my pleasure to welcome you in Berlin at the 25<sup>th</sup> Session of the International Poplar Commission!

The International Poplar Commission (IPC) is one of the oldest statutory bodies within the framework of the Food and Agriculture Organization of the United Nations (FAO); and it is the only statutory body of the FAO with a strong focus on forests and trees. Traditionally, in particular poplars and willows have been the main interest of the IPC. These trees are multi-purpose species and already today form an important component of forestry and agricultural production systems worldwide, often owned by small-scale farmers. In the future, poplars, willows and other fast-growing tree species could strongly contribute to the conversion of societies from fossil-based economies to more bio-based economies that make greater use of raw materials produced by plants. To achieve this, new scientific knowledge is needed on the functional and mechanistic relationships that are important for tree growth, wood quality establishment and their interactions with the biotic and abiotic environment. Poplars and willows are today accepted as efficient biological models for all commercial trees in elucidating e. g. the relevant molecular, physiological and ecological mechanisms for a transition into more sustainable and bio-based future economies, indicating the prominent role that poplars and willows will have in achieving this development.



In the four years since the IPC community last met in Dehradun, India in 2012, a wealth of information has been generated in various scientific disciplines including molecular genetics, breeding, plant physiology, pathology and ecology. This body of knowledge represents an indispensable resource from which new applications for the sustainable production and use of renewable biomass will surely emerge. The theme of the 25<sup>th</sup> session of the IPC, *Poplars and Other Fast-Growing Trees – Renewable Resources for Future Green Economies*, was chosen in view of the current challenges in moving towards green, bio-based economies and the opportunities offered by fast-growing trees to contribute to these developments. The theme of this session also reflects the current reform of the IPC convention, including a broadening of the focus from addressing poplars and willows towards stronger consideration of also other fast-growing trees sustaining people and the environment. The subjects to be discussed during this session will address the sustainable production of raw materials for future bio-based economies at various scales, but also the related issues of climate change adaptation and mitigation; resilience against disasters, threats and crises; biodiversity conservation; and sustainable agriculture and forestry. I wish you an enjoyable and productive time in Berlin, looking forward to working with you on issues related to the use of poplars, willows and other fast-growing trees in the transition of societies towards green and more bio-based economies.

A handwritten signature in black ink, appearing to read 'Martin Weih'.

Prof. Martin Weih  
Chairperson of the International Poplar Commission (IPC),  
Swedish University of Agricultural Sciences (SLU)





## Content

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## Conference venue



### 1 Convention Center Adlershof

Rudower Chaussee 17  
D-12489 Berlin

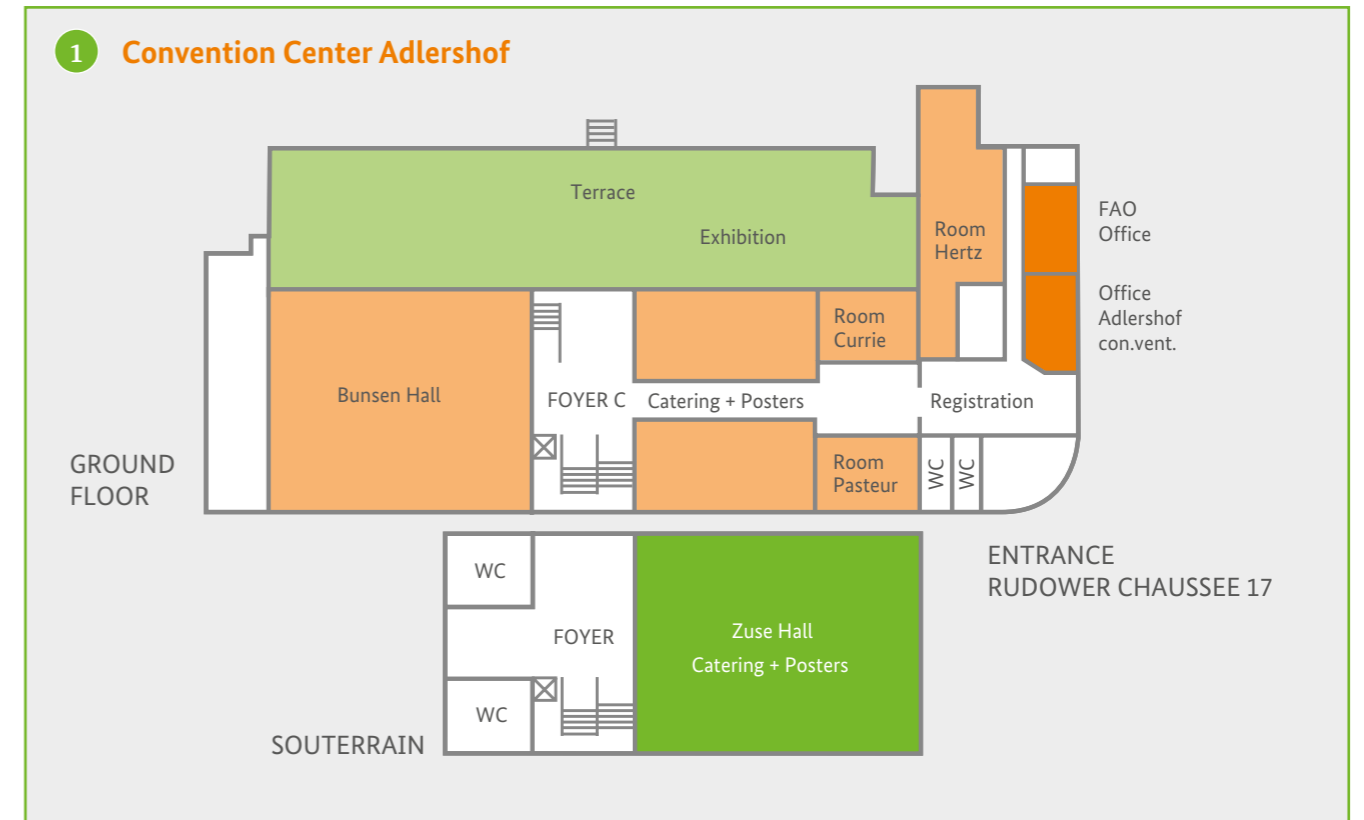
### 2 Forum Adlershof

Rudower Chaussee 24  
D-12489 Berlin

### 3 Former Airport Hangar (Banquet Dinner)

Ludwig-Boltzmann-Str. 1  
D-12489 Berlin

The conference venue is the modern science and technology park Adlershof (meaning “eagle’s yard”). Adlershof was the first airplane landing field in Germany that was put into operation in 1909. It is located about 15 km southeast of the city close to the airport Berlin-Schönefeld (SXF) and is well accessible by public transport from both Berlin airports and the city center. All conference facilities (food, catering, plenary hall, concurrent session halls, space for poster session, space for exhibition, host secretariat, FAO-Secretariat) are available at Adlershof and are located within walking distance from each other. Working lunches and snacks will be provided centrally at Adlershof on all session days (Tuesday to Friday).



### 2 Forum Adlershof

Room  
Melli Beese

„esswirtschaft“

Hans Grade Hall



#### WLAN

SSID/Netzwerk: IPC25  
password: berlin2016



# Program

## Monday, 12 September 2016

### IPC-Executive Committee Meeting

08:30 / Registration for Executive Committee Meeting

09:00 / IPC-Executive Committee Meeting

10:30 / Morning break

11:00 / IPC-Executive Committee Meeting

12:30 / Lunch break

14:00 / IPC-Executive Committee Meeting

15:30 / Afternoon break

16:00 / IPC-Executive Committee Meeting

18:00 / End of Executive Committee Meeting

## Tuesday, 13 September 2016

07:30 / Registration and distribution of material for IPC-Session

### Opening and Welcome [BUNSEN HALL]

Master of ceremony: Stefano Bisoffi (IPC Executive Committee, Italy)

#### 09:00 / Opening of the Session

Peter Bleser (Parliamentary State Secretary, Member of the German Parliament, Federal Ministry of Food and Agriculture)

#### 09:15 / Welcome remarks

Eva Müller (FAO, Director Forestry Policy and Resources Division)

#### 09:30 / Welcome remarks

Martin Weih (Chairman of the International Poplar Commission, Sweden)

#### 09:45 / Adoption of the agenda

Martin Weih (Chairman of the International Poplar Commission, Sweden)

#### 10:00 / Election of chairperson and two vice-chairpersons

Martin Weih (Chairman of the International Poplar Commission, Sweden)

#### 10:10 / The Czech Republic – a new IPC member

Jan Weger (Silva Tarouca Research Institute for Landscape and Ornamental Gardening, Průhonice, Czech Republic)

10:30 / Morning Break

### Plenary Session 1 [BUNSEN HALL]

Moderator: Sven de Vries (Alterra, Wageningen University, the Netherlands)

#### 11:00 / Poplars and other fast-growing trees – renewable resources for future green economies

Matthias Dieter (Johann Heinrich von Thünen Institute, Federal Research Institute for Rural Areas, Forestry and Fisheries, Germany)

#### 11:20 / The reform of the International Poplar Commission (IPC) in light of modern forest policy requirements

Walter Kollert (Secretary of the International Poplar Commission, FAO, Italy)

#### 11:40 / Plant remodeling in trees – breeding perspectives in poplar

Mathias Fladung (Thünen Institute of Forest Genetics, Germany)

#### 12:00 / Advances in a willow (*Salix* spp.) breeding program in Argentina for different wood applications

Teresa Cerrillo (Instituto Nacional de Tecnología Agropecuaria, Campana, Argentina)

12:30 / Lunch break

13:30 / Group photograph of all participants [TERRACE OF THE CONVENTION CENTER]

### Plenary Session 2 [BUNSEN HALL]

Moderator: Ron Zalesny (USDA Forest Service, Northern Research Station, USA)

#### 14:00 / Sweden's quest for renewable resources – an opportunity for growing poplars and willows?

Martin Weih (Dept. of Crop Production Ecology, Swedish University of Agricultural Sciences, Sweden)

#### 14:20 / Bio-energy from poplar biomass under short rotations: full greenhouse gas balance, energy balance and environmental life cycle analysis

Reinhart Ceulemans (University of Antwerp, Department of Biology, Belgium)

#### 14:40 / Short-rotation coppice (SRC) as a fuel hedge

Jan Grundmann (Energy Crops GmbH, Germany)

#### 15:00 / The role of the private sector in promoting the culturing of poplar and other fast growing tree species in India

Ramesh C. Dhiman (Wimco Seedlings unit of ITC PSPD, India)

15:30 / Afternoon break

### Plenary Session 3 [BUNSEN HALL]

Moderator: Jud Isebrands (Environmental Forestry Consultants LLC, USA)

#### 16:00 / Introduction of the European Poplar Association (ProPopulus)

Pedro Garnica and Bernard Mourlan (PrPopulus, France)

#### 16:20 / Importance of the plant microbiome for growth, health, and stress tolerance

Sharon L. Doty (School of Environmental and Forest Sciences, University of Washington, USA)

#### 16:40 / Pharmaceuticals and Personal Care Products: *Populus alba* phenotyping and uptake

Erika Pierattini (Institute of Life Sciences – Scuola Superiore Sant'Anna, Italy)

**17:00 / The poplar in the urban environment – experiences with its use and usability in The Netherlands**

Jitze Kopinga (Wageningen University and Research Centre, Netherlands)

**18:00 / Question and Answer Session on the proposed IPC reform**

IPC Executive Committee and IPC Secretary

**19:00–20:30 / Cocktail reception hosted by FAO [FOYER AND TERRACE]**

Welcome remarks by Eva Müller (FAO, Director Forestry Policy and Resources Division)

**Wednesday, 14 September 2016****09:00–10:30 / Concurrent Sessions A****Session 1A: Tree Improvement [BUNSEN HALL]****09:00 / Sources of variation in hybrid poplar biomass production throughout Michigan, USA**

R. Miller (Michigan State University, Forest Biomass Innovation Center, Escanaba, Michigan, United States)

**09:20 / Genetic improvement of poplar and prospects for poplar cultivation in Germany**

M. Hofmann (Nordwestdeutsche Forstliche Versuchsanstalt, Abt. Genressourcen, Hann. Münden, Germany)

**09:50 / Evaluation of growth and bioenergetic potential of fast-growing trees (*Populus* and *Salix*) for short rotation plantation**

N. Kutsokon (Institute of Cell Biology and Genetic Engineering, NASU, Ukraine)

**10:10 / Establishment of poplar plantations in Scandinavia and the Baltic Sea region**

A. Karacic (Swedish University of Agricultural Sciences, Sweden)

**Session 2A: Tree Improvement [ROOM PASTEUR]****09:00 / Protoplast fusion based breeding of sterile polyploids in various poplar species – (presented by P. Welters)**

N. Efremova (Phytowelt Green Technologies GmbH, Köln, Germany)

**09:20 / Case Study of Hybrid aspen, poplar and willow yields in five year rotation**

D. Lazdina (LSFRI 'Silava', Salaspils, Latvia)

**09:50 / Poplar breeding program in Argentina: 2013 comparative clonal trial network status**

S. Monteverde (Instituto Nacional de Tecnología Agropecuaria, Campana, Argentina)

**10:10 / Flowering time genes influence biomass production in poplars**

T. Brüggemann (Thuenen-Institute of Forest Genetics, Grosshansdorf, Germany)

**Session 3A: Climate impact/pathogens [ROOM CURIE]****09:00 / Early climatic benefits of Salicaceae plantations on abandoned arable land**

R. Rytter (Rytter Science, Röstänga, Sweden)

**09:20 / Impact of climate on Nepal economy and way forward**

K. K. Ghimire (Nepal)

**09:50 / New genetic resources of poplars in Romania, in the context of climate change**

G. Mihai (Department of Forest Genetics and Tree Breeding, "Marin Dracea" National Institute for Research and Development in Forestry, Bucharest, Romania)

**Session 4A: Physiology [ROOM HERTZ]****09:00 / Growth and physiology of *Salix* clones in response to drought and rewatering – (presented by S. Cortizo)**

A. B. Guarnaschelli (Department of Vegetal Production, Faculty of Agronomy, University of Buenos Aires, Argentina)

**09:20 / Evaluation of poplar genotypes under Mediterranean conditions: growth and water use efficiency in the first vegetative period**

H. Sixto (Centro de Investigación Forestal INIA-CIFOR, Madrid, Spain)

**09:50 / Transpiration and water relations of four poplar genotypes under SRC – (presented by S. Vanbeveren)**

A. Navarro (University of Antwerp, Belgium)

**10:10 / Valuation of some growth and functional responses of *Salix* clones in response to flooding – (presented by S. Cortizo)**

F. D. Caccia (Department of Vegetal Production, Faculty of Agronomy, University of Buenos Aires, Argentina)

**Session 5A: Production/Livelihoods [HANS GRADE HALL]****09:00 / Mixed strategies for defense in willow; resistance and tolerance to herbivory under varying nutrient regimes**

C. Glynn (Department of Crop Production Ecology, Swedish University of Agricultural Sciences, Uppsala, Sweden)

**09:20 / Process based modeling to select optimal regional phenotypes for SRC willow to maximize resource use efficiency**

B. Richard (Rothamsted Research, Harpenden, United Kingdom)

**09:50 / A *Salix* spp. short rotation coppice system in Buenos Aires, Argentina: Effects of clonal composition, planting density and drip irrigation on biomass production**

F. Achinelli (Comisión de Investigaciones Científicas de Buenos Aires (CIC), Argentina)

**10:10 / Grey alder (*Alnus incana* (L.) MOENCH.) – a complement to other fast-growing tree species in northern Europe**

L. Rytter (Forestry Research Institute of Sweden, Svalöv, Sweden)

**Session 6A: Productions [ROOM MELLI BEESE]****09:00 / Poplar and willow wood as a multi-use, local, raw material for a broad spectrum of green construction products within the European forestry wood chain**

L. de Boever (WOOD.BE, Brussels, Belgium)

**09:20 / Acid-catalyzed organosolv processing of short rotation coppice “poplar with bark” – a parametric study on yield and structure of sulfur-free lignin**

V. Rohde (Fraunhofer Institute for Chemical Technology, Germany)



**09:50 / Growth patterns of several poplar clones for plywood production in Spain**

P. Garnica (Bosques y Ríos SLU, Garnica Plywood, Spain)

**10:10 / Properties and utilization of selected fast growing tree plantation species for wood-based industries in the Philippines**

R. Aggangan (Forest Products Research and Development Institute (FPRDI), Department of Science and Technology (DOST), Laguna, Philippines)

**10:30–11:00 / Morning break****11:00–12:20 / Concurrent Sessions B****Session 1B: Tree Improvement [BUNSEN HALL]****11:00 / Survival and growth analysis of aspen hybrid families in the Central Chernozem area of Russia**

R. Tsareva (All-Russian Scientific Research Institute of Forest Genetics, Tree Breeding and Biotechnology, Voronezh, Russia)

**11:20 / Next generation tree biotechnology for biofuels and biomaterials – (presented by Georg von Wühlisch)**

M. R. Ahuja (Zobel Forest Associates, New Paltz, NY, USA)

**11:40 / Two Salix genotypes differ in their productivity when grown in monoculture and mixture**

S. Hoerber (Swedish University of Agricultural Sciences, Sweden)

**12:00 / Improvement on poplars of the section Populus in Germany**

M. Liesebach (Thuenen-Institute of Forest Genetics, Grosshansdorf, Germany)

**Session 2B: Tree Improvement [ROOM PASTEUR]****11:00 / Towards a high and sustainable biomass production: the Salix Molecular Breeding Activities program (SAMBA)**

A. C. Rönnberg-Wastljung (Swedish University of Agricultural Sciences, Uppsala, Sweden)

**11:20 / Production of diploid pollen in Populus by heat-induced depolymerisation of meiotic microtubule cytoskeletons**

J. Wang (Forestry University, Beijing, China)

**11:40 / Triploid poplars as a potential for breeding fast growing trees**

H. Liesebach (Thuenen-Institute of Forest Genetics, Grosshansdorf, Germany)

**12:00 / Wood and tree-ring anatomical traits for phenotyping poplar cultivars**

M. Meyer (Technische Universität Dresden, Germany)

**Session 3B: Pathogens [ROOM CURRIE]****11:00 / A histological and biochemical comparison of resistant and susceptible Populus genotypes inoculated with Sphaerulina musiva**

N. Abraham (North Dakota State University, Plant pathology NDSU, Fargo, ND, United States)

**11:20 / Testing pathogenicity of Sclerotium rolfsii causing leaf spot of poplar**

S. Rawat (Forest Pathology Division, Forest Research Institute, Dehradun, India)

**11:40 / Could pathogenicity be used as a determining factor to study isolate variation?**

K. Naharia (Genetics and Tree Propagation Division, Forest Research Institute, Dehradun, India)

**Session 4B: Physiology/Agroforestry [ROOM HERTZ]****11:00 / Introducing trees into cultivated fields to reduce the French shortage of poplar wood: Agroforestry and wood quality**

R. Marchal (CIRAD, RU BioWooEB, Montpellier, France)

**11:20 / Poplar and black locust yields from short rotation coppice hedgerows in an alley cropping system**

J. Mirck (Department of Soil Protection and Recultivation, Brandenburg University of Technology, Cottbus, Germany)

**11:40 / Biomass production in an improved sustainable mixed short-rotation woody cropping of Populus-hybrids and Robinia pseudoacacia**

J. Rebola-Lichtenberg (Georg-August-Universität Göttingen, Germany)

**12:00 / Proposed management for willow agrosilvopastoral systems in the delta of the Paraná River (Argentina)**

E. Casaubon (INTA Delta de Paraná, Argentina)

**Session 5B: Livelihoods/Economics [HANS GRADE HALL]****11:00 / Poplar in the Kyrgyz Republic**

N. Chyngozhoev (Forest Research Institute of the National Academy of Science, Kyrgyzstan)

**11:20 / How poplar (Populus deltoides) based agroforestry transformed weak rural economy to prosperous green economy in north India?**

M. S. Haque (National Bank for Agriculture and Rural Development, India)

**11:40 / Production potential and impact of wood market fluctuations on plantation trend of exotic poplar (Populus deltoides) in India**

K. B. Bangarwa (Department of Forestry, CCS Haryana Agricultural University, Hisar (Haryana), India)

**12:00 / The journey of poplar cultivation under agro-forestry in India – responding to drivers of change**

Gulshan Kumar (Indian Forest Service, Haryana State, India)

**Session 6B: Reclamation/Phytoremediation [ROOM MELLI BEESE]****11:00 / Poplar for environmental restoration: Physiological and molecular approaches for heavy metal and organic molecules**

L. Sebastiani (Institute of Life Sciences – Scuola Superiore Sant'Anna, Pisa, Italy)

**11:20 / Using native balsam poplar (Poplar balsamifera) for reclamation in the oil sands region of north-eastern Alberta, Canada**

B. Thomas (University of Alberta, Department of Renewable Resources, Alberta, Canada)

**11:40 / Establishment of hybrid poplar for surface mine reclamation in the southern coalfield of West Virginia, USA**

R. Zalesny (USDA Forest Service, Northern Research Station, Rhinelander, WI, United States)

**12:00 / Willow afforestation for quarry rehabilitation in Rio Negro Valley, Argentina**

E. R. Thomas (Instituto Nacional de Tecnología Agropecuaria, Río Negro, Argentina)

**12:30–14:00 / Lunch Break**



**14:00–15:20 / Concurrent Sessions C****Session 1C: Tree Improvement [BUNSEN HALL]****14:00 / Widening of genetic base of *Populus deltoides* in India through hybrid clone development**

A. Kumar (Indian Council of Forestry Research and Education, Dehradun, India)

**14:20 / Reproduction of *Populus intersectional* hybrid by means of ovule microcultures**

A. Ghamari Zare (Research Institute of Forests and Rangelands, Tehran, Iran)

**14:40 / Wood quality assessment of clones of *Populus deltoides* developed by Forest Research Institute, India through closed and open pollination**

S. Gupta (Forest Research Institute, Dehradun, India)

**Session 2C: Genomics [ROOM PASTEUR]****14:00 / The SWEET gene family in *Populus*: evolution, expression patterns, and contribution to secondary growth**

Meng-Zhu Lu (Research Institute of Forestry, Chinese Academy of Forestry, China)

**14:20 / The analysis of gene expression profile in *Salix* under salt stress**

J. Zhou (Department of Tree Genetics and Breeding, Jiangsu Academy of Forestry, China)

**14:40 / ISAP (Inter-Sine Amplified Polymorphism) – a retrotransposon-based marker system for identification of varieties, clones and accessions of poplar**

A. Kögler (Technische Universität Dresden, Faculty of Science, Institute of Botany, Germany)

**15:00 / Intra-specific variation in poplar drought responses**

A. Polle (Georg-August Universität Göttingen, Germany)

**Session 3C: Pathogens/Insects [ROOM CURRIE]****14:00 / Poplar clones in Latvia: Juvenile growth and fall frost damages**

S. Senhofa (LSFRI 'Silava', Salaspils, Latvia)

**14:20 / Plant decline etiology in poplar short-rotation coppices**

N. Anselmi (DIBAF University of Tuscia, Viterbo, Italy)

**14:40 / Poplar clones differ in their resistance against insect feeding**

H. Schröder (Thünen Institute of Forest Genetics, Germany)

**15:00 / Importance and management of the red poplar leaf beetle (*Chrysomela populi* L.) in short-rotation coppices (SRC): an overview**

R. Georgi (TU Dresden, Faculty of Environmental Sciences, Germany)

**Session 4C: Agroforestry [ROOM HERTZ]****14:00 / Poplar in southern European agroforestry**

M. R. Mosquera Losada (Univesidad de Santiago de Compostela, Lugo, Spain)

**14:20 / Fast-growing tree culture outside forest: experiences from India**

Dinesh Kumar (Silviculture Division, Forest Research Institute, Dehradun, India)

**14:40 / Biomass estimation models and allometry changes in a short rotation coppice poplar plantation in the North of Spain – (presented by N. O. Rodriguez)**

J. Valbuena-Castro (Sustainable Forest Management Research Institute, Madrid, Spain)

**15:00 / A pilot study of poplar plantations optimal rotation period and its growth dynamics under different planting densities**

B. Hjelm (Dept. of Crop production Ecology, Swedish Univ. of Agriculture Science, Uppsala, Sweden)

**Session 5C: Economics [HANS GRADE HALL]****14:00 / Contribution of poplars and willows for rural livelihoods and sustainable development in Argentina**

E. Borodowski (Ministerio de Economía y Producción, Secretaría de Agricultura, Ganadería, Pesca y Alimentos, Argentina)

**14:20 / Poplar plantation – a boon to rural livelihoods and ecological restoration in north India**

S. K. Sharma (Geography and Environmental Science Department, India)

**14:40 / *Populus deltoides* financial maturity (case study: Kurdistan province, western Iran)**

K. Adeli (Forestry Department, Faculty of Agriculture, University of Lorestan, Iran)

**15:00 / Economic analysis tool for SRWC-based feedstock production in the Southeastern U.S.A. – (presented by D. Hazel)**

S. Ghezehei (Department of Forestry and Environmental Resources at North Carolina State University, USA)

**Session 6C: Reclamation/Phytoremediation [ROOM MELLI BEESE]****14:00 / The effectiveness of poplar and willow trees in reducing erosion on pastoral slopes in New Zealand**

I. McIvor (Plant &amp; Food Research, New Zealand)

**14:20 / Study on growth parameters of poplar trees irrigated with municipal wastewater in south of Tehran-Iran**

A. Salehi (Research Institute of Forests and Rangelands, Agricultural Research, Education and Extension Organization, Iran)

**14:40 / Treated wastewater use in forest plantations in north Patagonia, Argentina – (presented by E. R. Thomas)**

C. Tucat (Medanito S. A., Argentina)

**15:00 / Selection and use of native willow clones for reclamation in forest ecosystems impacted by elevated salt levels**

R. Krygier (Natural Resources Canada, Canadian Forest Service, Alberta, Canada)

**15:30–16:00 / Afternoon break**

**16:00–17:40 / Concurrent Sessions D****Session 1D: Tree Improvement [BUNSEN HALL]****16:00 / Geo-climatic gradient shapes functional trait variations in *Salix eriocephala***

R. Soolanayakanahally (Saskatoon Research and Development Centre, Saskatoon, Canada)

**16:20 / Evaluation of improved willow in north Patagonia, Argentina**

E. R. Thomas (Instituto Nacional de Tecnología Agropecuaria, Río Negro, Argentina)

**16:40 / Testing of native willows for SRC on agricultural land**

J. Weger (Silva Tarouca Research Institute for Landscape and Ornamental Gardening, Průhonice, Czech Republic)

**17:00 / Production of new clones of cricket bat willow (*Salix alba*) for fast growth and quality timber**

S.A. Gangoo (SK University of Agricultural Sciences and Technology of Kashmere, India)

**Session 2D: Genomics [ROOM PASTEUR]****16:00 / Transcriptome analysis of poplar clones to understand differences in their genetic performance in mono and mixed stand with black locust**

J. I. Ropertz (Georg August University Goettingen, Germany)

**16:20 / SSR based DNA fingerprinting and genetic diversity analysis of 92 poplar cultivars in China**

J. Hu (Research Institute of Forestry, Chinese Academy of Forestry, China)

**16:40 / Metabolomic responses of down-regulated p-coumaroyl quinate/shikimate 3'-hydrolase (C3'H) and cinnamate 4-hydrolase (C4H) genes in the lignin biosynthetic pathway of *Eucalyptus urophylla* x *E. grandis* with reduced recalcitrance**

T. Tschaplinski (Oak Ridge National Laboratory, United States)

**Session 3D: Insects [ROOM CURRIE]****16:00 / The power of poplar odor – how we can help poplars to fight back – (presented by St. Schütz)**

M. Kazic (Georg-August-Universität Göttingen, Forstzoologie und Waldschutz, Germany)

**16:20 / Olfactory navigation of sawflies (*Nematus spec.*) as a device for hazard analysis of different practically relevant poplar varieties in short rotation coppice**

K. Manthe (University of Applied Sciences Erfurt, Faculty of Landscape Architecture, Horticulture and Forestry, Germany)

**16:40 / Management of poplar defoliator: *Clostera cupreata* through herbal approach – (presented by A. Tomar)**

R. Sehrawat (Forest Research Institute, Indian Council of Forestry Research and Education, India)

**17:00 / Relations between insect resistance and tree age of transgenic triploid *Populus tomentosa* plants**

M. Yang (Forestry College, Agricultural University of Hebei, China)

**Session 4D: Production [ROOM HERTZ]****16:00 / Results from six years of the joint research project PROLOC – clone-site interaction and yield dynamics after two rotation cycles**

C. Stiehm (Northwest German Forest Research Institute, Germany)

**16:20 / Development of poplar clones for SRC in an EU-wide trial**

D. Glas (Bavarian Institute for forest seeding and planting (ASP), Germany)

**16:40 / Influence of two contrasting planting systems and weeding regimes on willow performance under field conditions**

M. Welc (Swedish University of Agricultural Sciences, Sweden)

**17:00 / Success factors for short rotation plantation projects – framework conditions, business models and case studies in Europe**

M. Weitz (Lignovis GmbH, Hamburg, Germany)

**Session 5D: Energy [HANS GRADE HALL]****16:00 / Woodfuels as alternative source of energy in rural and urban areas in the Philippines**

R. Aggangan (Forest Products Research and Development Institute, Philippines)

**16:20 / Bio-ethanol from hemicellulose wastes of ligno-cellulosic biomass – a sustainable future bio-refinery prospect – (presented by D. Kumar)**

P. K. Gupta (Forest Research Institute Dehra Dun, India)

**16:40 / How to run a biomass group-heating on SRC basis**

H.-G. von Engelbrechten (Agraligna GmbH, Germany)

**17:00 / Subsurface drip irrigation in poplar bioenergy systems: biomass production and economic evaluation in Mediterranean climate**

P. Paris (CNR-Istituto di Biologia Agroambientale e Forestale (IBAF), Italy)

**Session 6D: Phytoremediation [ROOM MELLI BEESE]****16:00 / Response of flooded weeping willow seedlings to zinc heavy metal**

M. Tabari (Tarbiat Modares University, Iran)

**16:20 / Phytoremediation of river sediments with the use of poplars and willows**

A. Pilipovic (University of Novi Sad – Institute of Lowland Forestry and Environment, Russia)

**16:40 / Effects of heavy metals and mycorrhizal fungi on growth and nutrient status of *Populus alba* x *glandulosa***

N. Aggangan (University of the Philippines Los Baños, Philippines)

**19:00–21:00 / Banquet Dinner hosted by the German Federal Ministry of Food and Agriculture (BMEL) [FORMER AIRPORT HANGAR]**

Welcome remarks by Dorothea Steinhauser, Head of Division Sustainable Forest Management and Timber Markets, German Federal Ministry of Food and Agriculture, Berlin



## Thursday, 15 September 2016

### 09:00–10:30 / Concurrent Sessions E and Poster Presentation

#### Session 1E: Tree Improvement [BUNSEN HALL]

09:00 / **Breeding of fast-growing tree species for changing environments in Saxony, Germany**

H. Wolf (Staatsbetrieb Sachsenforst, Pirna, Germany)

09:20 / **Poplar genetic transformation for sustainable growth in short rotation plantation**

N. Rasydov (Institute of Cell Biology and Genetic Engineering, Kiev, Ukraine)

09:50 / **Fast breeding of poplars and other tree species: future prospects and biosafety concerns**

H. Hönicka (Thuenen-Institute of Forest Genetics, Grosshansdorf, Germany)

10:10 / **Breeding of multipurpose willows on the basis of *Salix daphnoides*, *S. purpurea* and *S. pentandra***

B. Bubner (Thuenen-Institute of Forest Genetics, Waldsiedersdorf, Germany)

#### Session 2E: Genomics [ROOM PASTEUR]

09:00 / **Integrated SNP correlation, co-expression and genome-wide association networks for *Populus trichocarpa*. pleiotropic and epistatic network-based discovery**

D. Weighill (BioEnergy Science Center, Oak Ridge National Laboratory, United States)

09:20 / **Improvement of the inducible activation tagging AC/DS transposon system by employing the positive selection marker TMS2**

M. Fladung (Thünen Institute of Forest Genetics, Germany)

09:50 / **Complete genome sequences of *Populus tremula* chloroplast and mitochondrion as new resources for holistic poplar breeding**

B. Kersten (Thünen Institute of Forest Genetics, Germany)

10:10 / **Chloroplast and mitochondrial SNP-markers support holistic poplar breeding**

H. Schröder (Thünen Institute of Forest Genetics, Germany)

#### Session 3E: Ecology [ROOM CURIE]

09:00 / **Methods for diagnosis of aspen sustainability**

O. Chernyshenko (State Forest University, Moscow, Russia)

09:20 / **Full LCA of poplar SRC considering environmental impacts on a marginal SITE in Southwest Germany – (presented by J.-P. Schnitzler)**

J. Schweier (Albert-Ludwigs-University Freiburg, Germany)

09:50 / **Quantifying environmental impacts of poplar short-rotation-coppice on marginal land – summary results from the PROBIOPA experiment**

R. Grote (Karlsruhe Institute of Technology, Germany)

10:10 / **Natural regeneration of black, hybrid and balsam poplars in the landscape**

H. Liesebach (Thünen-Institute of Forest Genetics, Germany)

#### Session 4E: Production [ROOM HERTZ]

09:00 / **Resource potential of aspen in Russia**

A. Tsarev (Petrozavodsk State University, Russia)

09:20 / **Growth potential of first generation hybrid aspen plantations in southern Finland**

E. Beuker (Natural Resources Institute Finland, Finland)

09:50 / **Biomass productivity and mutual relations between tree growth and soil nutrient status in short-rotation hybrid aspen plantations in hemiboreal Estonia**

R. Lutter (Institute of Forestry and Rural Engineering, Estonian University of Life Sciences, Estonia)

10:10 / **New clones will let farmers to increase variability and sustainability of poplar plantation in Argentina**

S. Cortizo (Instituto Nacional de Tecnología Agropecuaria, Campana, Argentina)

#### Session 5E: Energy [HANS GRADE HALL]

09:00 / **Efficient harvest and storage of wood chips from poplar in practice**

R. Pecenka (Leibniz Institute for Agricultural Engineering Potsdam-Bornim (ATB), Germany)

09:20 / **Post-harvesting emissions of CO<sub>2</sub> and biogenic hydrocarbons from woodchips produced by a poplar short-rotation coppice**

A. Ghirardo (Helmholtz Zentrum München, Research Unit Environmental Simulation, Institute of Biochemical Plant Pathology, Germany)

09:50 / **Poplar short rotation coppice grown in marginal environments of southern Italy**

G. Facciotto (Consiglio per la ricerca in Agricoltura e l'analisi dell'economia agraria (CREA), Casale Monferrato (AL), Italy)

10:10 / **New poplar genotypes for short rotation biomass plantations in the Mediterranean environment: productivity and quality of biomass for biorefinery – (presented by P. Paris)**

M. Sabatti (CNR-Istituto di Biologia Agroambientale e Forestale (IBAF), Italy)

#### Session 6E: Special Applications [ROOM MELLI BEESE]

09:00 / **Lead Tolerance of *Populus alba* and *Populus nigra* Clones Inoculated with Arbuscular Mycorrhizal Fungi in Relation to Physiological Parameters**

A. Salehi (Poplar & Fast Growing Trees Research Group, Research Institute of Forests and Rangelands Tehran, Iran)

09:20 / **Study of transporters of HMA and NRAMP family in wild type and transgenic line (35S::aqua1) of *Populus alba* stressed with cadmium**

A. Neri (Institute of Life Sciences – Scuola Superiore Sant'Anna, Italy)

09:50 / **The responses of different sources of low-molecular-weight organic carbon (LMWOC) on soil nitrogen (N) transformation in three plantations**

X. Yening (Nanjing Forestry University, China)

10:10 / **Ovicidal and larvicidal in vitro activity of eight *Salix* clone extracts against a pure strain of *Heamonchus contortus***

J. Schapiro (Instituto Nacional de Tecnología Agropecuaria, Campana, Argentina)

10:30–11:00 / Morning Break

**11:00–12:30 / Poster presentation [ZUSE HALL]**

**12:30–14:00 / Lunch break**

**14:00–15:30 / Business meetings of working parties**

- Session 1F: Domestication and conservation of genetic resources [BUNSEN HALL]
- Session 2F: Climate change, plant health and resilience to threats and crisis [ROOM MELLI BEESE]
- Session 3F: Sustainable livelihoods, landuse, products & bioenergy [HANS GRADE HALL]
- Session 4F: Environmental and ecosystem services [ROOM HERTZ]
- Session 5F: Taxonomy, nomenclature and registration [TERRACE OR BASEMENT]
- Session 6F: Policy, communication and outreach [ROOM CURRIE]

**15:00–18:00 / General Assembly of the European Poplar Association (ProPopulus) [ROOM PASTEUR]**

**15:30–16:00 / Afternoon break**

**16:00–17:30 / Business meetings of working parties (continued)**

- Session 1F: Domestication and conservation of genetic resources [BUNSEN HALL]
- Session 2F: Climate change, plant health and resilience to threats and crisis [ROOM MELLI BEESE]
- Session 3F: Sustainable livelihoods, landuse, products & bioenergy [HANS GRADE HALL]
- Session 4F: Environmental and ecosystem services [ROOM HERTZ]
- Session 5F: Taxonomy, nomenclature and registration [TERRACE OR BASEMENT]
- Session 6F: Policy, communication and outreach [ROOM CURRIE]

## Friday, 16 September 2016

**Plenary Session 4 [BUNSEN HALL]**

Moderator: Bernard Mourlan (European Poplar Association (ProPopulus), France)

**09:00 / Engineered wood products based on poplar and willow wood**

Joris van Acker (Ghent University, Belgium)

**09:20 / Trends and perspectives in poplar and willow cultivation – a global synthesis of national progress reports**

Jim Carle (JB Carle & Associates consulting firm, New Zealand)

**09:50 / Global and regional market trends for poplar products – (presented by Walter Kollert)**

Arvydas Lebedys (Forestry Officer (Statistics), FAO-HQ, FAO)

**10:10 / Poplars and willows: a photo library**

Jim Richardson (Poplar and Willow Council of Canada, Canada and Jud Isebrands, Environmental Forestry Consultants LLC, USA)

**10:30 / Morning break**

**Working party reports**

**11:00 / Taxonomy, Nomenclature and Registration**

WP1

**11:15 / Domestication and Conservation of Genetic Resources**

WP2

**11:30 / Climate Change, Plant Health and Resilience to Threats and Crises**

WP3

**11:45 / Sustainable Livelihoods, Land-use, Products and Bioenergy**

WP4

**12:00 / Environmental and Ecosystem Services**

WP5

**12:15 / Policy, Communication and Outreach**

WP6

**12:30 / Lunch break**

**Closing ceremony**



Moderator: Joris van Acker (Ghent University, Belgium)

**14:00 / Best Posters Award**

Sven de Vries (Alterra, Wageningen University, the Netherlands)

**14:30 / Election results**

**1. Vote on the proposed IPC-reform**

**2. Composition of the new Executive Committee**

Martin Weih (Chairman of the International Poplar Commission, Sweden)

**15:00 / Closing remarks**

Georg von Wühlisch (Thünen-Institute of Forest Genetics, Germany)

**15:15 / Closing speech**

Walter Kollert (Secretary of the International Poplar Commission, FAO, Italy)

**15:30 / Afternoon break**

**16:00 / Informal meeting of the new Executive Committee [HANS GRADE HALL]**

**17:00 / Departure for post-conference tours**

## Exhibitor

### Tailor made solutions for fast growing tree plantations

Lignovis offers the full range of services for high yielding SRF/SRC projects in Europe – from consultancy to turnkey project implementation:

- Concept and strategy for cost optimized and environmentally beneficial poplar and willow plantations.
- Supply of certified and high yielding planting material from own nurseries.
- Establishment and management of fast growing plantations with own machinery (incl. site preparation and weed-control).
- Turnkey implementation of optimized plantation projects for farmers, energy wood users & investors.
- Design and implementation of long-term sourcing strategies for bioenergy projects and the wood-consuming industry.



Until 2016 Lignovis has planted more than 18 million poplars and willows for clients in several EU countries and on own plantations. The produced wood is utilized as renewable energy source for heat & power as well as raw material in the wood processing industry.

## Pre-conference Study tours

Saturday, 10 September 2016

### Tour 1: Eberswalde, Germany

#### Applied Research on Short Rotation Coppices Eberswalde

08:00 / Start at Technologiepark Adlershof, Rudower Chaussee 17, 12489 Berlin

10:00 / Visit of short rotation coppice field trials of the University of Applied Sciences Eberswalde: site criteria (water supply), management regimes, harvesting and utilization, cultivars tested (hybrid poplar of different public and private breeders, e. g. AF clones, hybrid willow, black locust), coppices as wind break strips, poultry husbandry under poplar plantation

13:00 / Lunch at restaurant

14:00 / Cultural programme: Visit of 12<sup>th</sup> century Monastery at Chorin near Eberswalde (guided tour)

15:30 / Visit of beech forest of Grumsin of UNESCO World heritage Biosphere reserve Schorfheide-Chorin (guided-tour)

18:30 / Return to Technologiepark Adlershof

Sunday, 11 September 2016

### Tour 2: Waldsiedersdorf, Germany

#### Tree Improvement at Thünen Institute of Forest Genetics Waldsiedersdorf

08:00 / Start at Technologiepark Adlershof, Rudower Chaussee 17, 12489 Berlin

09:30 / Visit of Thünen Institute of Forest Genetics, Waldsiedersdorf: demonstration of ongoing tree improvement projects on poplar, willow, black locust, Douglas fir, Scots pine, hybrid larch, etc., selection for water use efficiency, legal questions of reproductive material moving in trade

11:30 / Operational poplar of Energy Crops (Vattenfall) at Müncheberg with included cultivar testing of Alasia Franco (AF-clones), University of Minnesota clones, among others

13:00 / Lunch at restaurant

14:00 / Cultural programme: Highlights & history tour of central Berlin incl. Reichstag, Brandenburger Tor, Holocaust Memorial, Führerbunker, Potsdamer Platz, Berlin Wall, and more (2 hours)

18:30 / Return to Technologiepark Adlershof

Monday, 12 September 2016

### Tour 3: Potsdam, Germany

#### Bioenergy and Carbon Sequestration, Leibniz Institute for Agricultural Engineering Potsdam-Bornim

08:00 / Start at Technologiepark Adlershof, Rudower Chaussee 17, 12489 Berlin

On the way: Famous Glienicke Bridge with *Populus x berolinensis* on the shore of Havel River

09:30 / Visit of Leibniz Institute for Agricultural Engineering Potsdam-Bornim: demonstration of ongoing projects short rotation coppice (poplar, willow, black locust): cultivation, harvesting and storage technology; nutrient and substance cycles, emission of climate relevant gases; biomethane & biochar, hybrid processes for energy production and carbon sequestration; use of residues for producing biochar as soil improver

13:00 / Lunch at restaurant

14:30 / Cultural programme: Guided sightseer through Potsdam including: Neuer Garten, Sanssouci Palace, Markets, Nikolaikirche, City Hall, Holländisches Viertel, Russian Colony Alexandrowka and more (2.5 hours)

18:00 / Return to Technologiepark Adlershof



## Post-conference Study tours

16 to 20 September 2016

### Tour 4: Central Germany

#### Bioenergy and UNESCO World Heritage Sites in Central Germany 2016

Friday, 16 September 2016

17:00–19:00 / Bus trip to Stendal

19:00–22:00 / Arranged dinner (included in participation fee) and hotel check in

Day 1: Saturday, 17 September 2016

08:00–12:00 / Bus trip to Hansestadt Werben: Salix-Populus-societies and Conservation of Black Poplar trees at the Elbe river

12:00–13:00 / Lunch

13:00–16:00 / Bus trip to Beuchte: visit of the bioenergy village

16:00–19:00 / Bus trip to Goslar: visit of the 1.000 year old Imperial Palace “Kaiserpfalz” UNESCO world heritage. Hotel check in. Dinner arranged by participants!

Day 2: Sunday, 18 September 2016

08:00–12:00 / Bus trip to Hann-Muenden: SRC-trials on three different sites with the 40 year old SRC-clone test “Haferfeld”

12:00–13:00 / Lunch

13:00–16:30 / Bus trip to Kassel: visit of the Wilhelmshoehe mountain park “Bergpark Wilhelmshoehe” UNESCO world heritage.

17:00 / Hotel check in. Dinner arranged by participants!

Day 3: Monday, 19 September 2016

08:00–10:00 / Bus trip to Altenlotheim/Eder: visit of the national park information center “Kellerwald” UNESCO world natural heritage: Ancient German Beech Forests

10:00–12:00 / Bus trip to Allendorf/Eder: visit of the heating system factory Viessmann

12:00–13:00 / Lunch

13:00–14:00 / Short rotation coppices managed by the Viessman factory

14:00–18:00 / Bus trip to monastery Eberbach: visit of the monastery with wine tasting in the state vineyard Eberbach; UNESCO world heritage “Mittleres Rheintal”

18:00–20:00 / Dinner (included in the participation fee)

20:30 / Arrival in Schlangenbad and hotel check in

Day 4: Tuesday, 20 September 2016

08:00–11:00 / Bus trip to Stockstadt: visit of the Kühkopf natural preservation center and natural regeneration of Black Poplar at the Rhine river

11:00–12:00 / Bus trip to Frankfurt-Airport: Farewell to those who depart from Frankfurt

12:00–16:30 / Bus trip to Eisenach with a packed lunch: visit to the Wartburg UNESCO world heritage

16:30–20:30 / Bus trip to Berlin and Farewell

## 16 to 20 September 2016

### Tour 5: Sweden

#### Trees, people and bioenergy in Sweden

Friday, 16 September 2016

18:00–21:00 / Flight Berlin – Kastrup, Copenhagen, Denmark (included in participation fee).

21:00–22:00 / Direct train from the airport to Malmö central station. Walking distance to the hotel in Malmö, Sweden. We arrange with each participant to meet you either at Kastrup or Malmö station.

Day 1: Saturday, 17 September 2016 (Ekebo and Växtrop)

08:15 / Departure from the hotel

09:30–11:30 / STOP 1. Skogforsk, Ekebo. The Swedish Forest Research Institute, Skogforsk presents current research on Populus species in Sweden.

11:30–12:15 / Lunch

13:00–14:30 / STOP 2. Salixenergi Europa AB and Lantmännen SW Seeds. Swedish willow breeding, development of willow business in Sweden and Europe, field visit to willow breeding trials.

15:30–17:00 / STOP 3. Växtorp, Swetree Technologies AB. GMO field trials with European aspen and poplar establishment trials.

20:00 / Arrival at the hotel in Gränna and dinner (included in participation fee).

Day 2: Sunday, 18 September 2016 (Gränna and Visingsö)

07:55–08:30 / Ferry from Gränna to Visingsö.

08:30–11:30 / STOP 4. Visingsö is an island on the lake Vättern famous for its reach history and 360 ha large oak plantations established during the first half of the 19<sup>th</sup> century.

11:30–12:30 / Lunch at Visingsö (included in participation fee)

12:30–13:00 / Ferry from Visingsö to Gränna

13:00 / Buss transport to Virsbo near Västerås

17:00–19:00 / STOP 5. Visit to forest area recovering from fire in 2014.

20:00 / Arrival in Västerås. Free time in Västerås. Dinner arranged by participants.

Day 3: Monday, 19 September 2016 (Tillberga and Enköping)

08:15 / Departure from the hotel

09:00–10:30 / STOP 6. Tillinge-Lundby farm. Willow plantations on agricultural land in central Sweden. Farmer experiences, use of septic tank waste water as fertilizer in SRC. Land use, landscape issues, etc.

11:00–12:00 / STOP 7. Enköping. Treatment and utilization of municipal wastewater in large-scale willow plantations. Visit to a willow plantation in connection with wastewater collection ponds, discussion with farmer.

12:15–13:30 / Lunch (included in participation fee)

13:30–15:00 / STOP 8. Enköping, Ena Energi. Biomass based combined heat and power plant. Short presentation of Ena Energi and a guided tour in the CHP plant.

16:00 / Arrival at Uppsala. Free time in Uppsala.

17:00 / Optional – Guided tour of historic Uppsala (at no cost) followed by dinner for those who wish to join us at a local restaurant (at own cost).

Day 4: Tuesday, 20 September 2016 (Uppsala)

08:00 / Pick-up in minibuses at the hotel

09:00–10:00 / STOP 9. Krusenberg. Climate adapted poplars for northern latitudes. The clone trial in Krusenberg is a result of poplar breeding at the SLU in Uppsala conducted during the 1990's.

10:15–11:00 / Visit to willow clonal trial (Anki Rönnberg-Wästljung)

11:15–12:00 / Visit to ECOLINK-Salix field trial (Stefanie Hoeber)

12:15–13:00 / Visit to field trial concerning planting systems and weeding regimes in willow (Monika Welc)

13:00–14:00 / Lunch at the department (included in participation fee). Sum up of field trip, presentation of the department (Martin Weih)

End of program after lunch. Uppsala is situated about 40 km from the Stockholm Arlanda airport and there are frequent direct public connections (bus & train) from Uppsala Central Station to Stockholm Arlanda airport. Transport of participants from SLU campus to Uppsala Central Station can be arranged.

## Spouse-program

- Start and end point for all tours: Berlin Adlershof Convention Center
- Meeting for all tours: **08:50 hrs** in the Foyer of the Convention Center
- Please sign up for the tours at the registration office of the conference
- The participation fee is 10 € per person and tour

### Tuesday, 13 September 2016

#### 09:00–13:00 / Berlin bus tour and boat cruise

##### Description: Berlin-Essentials

Experience the highlights of Berlin during a 2-hour trip through the centre of Berlin! The government district, Potsdamer Platz, Checkpoint Charlie and Unter den Linden are just a few highlights of this informative, diversified and entertaining tour.

The tour includes a photo stop and a small walkabout – for example, at the Brandenburg Gate. Ideal for those who want to get a quick overview of Berlin.

Among other things, we will show you the following attractions:

- Alexanderplatz and the TV Tower – the tallest building in Germany
- Berlin City Hall and the Nikolai neighbourhood – the nucleus of medieval Berlin
- Berlin Cathedral and Museum Island – UNESCO World Heritage Site
- Schlossplatz and the Prussian Boulevard Unter den Linden
- Friedrichstreet and the Gendarmenmarkt with its two magnificent cathedrals
- Remains of the Berlin Wall and Checkpoint Charlie – symbol of the Cold War
- Brandenburg Gate – a symbol of division and reunification
- Government quarter with the Reichstag and Chancellery
- East Side Gallery, the longest preserved stretch of the Berlin Wall
- the trendy district of Kreuzberg
- Potsdamer Platz with the Daimler City and Sony Center

During the city tour at least 1 walkabout will be offered – either at the Brandenburg Gate, through the Sony Center at Potsdamer Platz, the Checkpoint Charlie or the Hackescher Markt.

##### Description: Boat Cruise

Experience Berlin in a relaxed mood from the numerous waterways! This 1-hour cruise takes you through the historical and new centre of Berlin passing by Museum Island, the Reichstag building, the Federal Chancellery, the House of World Cultures and the cradle of Berlin – Nikolai neighbourhood.

See, among others:

- Nikolai neighbourhood – the cradle of Berlin
- Museum Island – UNESCO World Heritage Site
- Berlin Central Station – an impressive glass and steel structure
- Reichstag building – the seat of the German Parliament
- The Federal Chancellery – overlooking the offices and the park on the opposite side
- The House of World Cultures – a cultural site with a distinctive visual appearance

### Wednesday, 14 September 2016

#### 09:00–13:00 / Potsdam Tour

##### Description:

Visit Potsdam with its magnificent palaces and parks! The 4-hour city tour begins and ends in Berlin and includes a walk through the famous park of Sanssouci Palace. Another photo stop is at Cecilienhof Palace. The tour also takes you to the Dutch Quarter in Potsdam's historic centre and many other Prussian buildings such as the Orangery Palace or the New Palace.

See, among others:

- Sanssouci Palace – a rococo jewel of Frederick the Great on the vineyard terraces
- Cecilienhof Palace – the last palace of the Hohenzollern dynasty and scenery of world history
- Orangery Palace – the realization of the dreams of a romantic king
- New Palace – „fanfaronade“ and largest palace for guests of Frederick II.
- Dragon House – original home of the wine grower
- Belvedere – a little castle with a beautiful view on the Klausberg
- House of steam-engines in the form of a small mosque
- Historical city centre with baroque buildings
- Dutch Quarter – a Dutch jewel in Prussia
- Reconstructed Residence Castle and Nikolai Church
- Nauener suburb, site of posh villas and former forbidden town of the Russian secret service (KGB)
- The Russian colony Alexandrowka from 1826
- Babelsberg Palace
- Glienicke Palace
- Glienicke Bridge, known from the exchange of secret agents during the Cold War

During our tour, we take a walk to Sanssouci Palace overlooking the vineyard terraces and visit the grave of the legendary Prussian monarch Frederick the Great. A further walk leads us through the New Garden to Cecilienhof Palace, where the victorious powers negotiated after the Second World War the fate of Germany and Central Europe.



## Thursday, 15 September 2016

### 09:00–12:00 / Tour through Berlin's typical neighbourhoods

#### Description:

The tour for curious people and explorers! On this tour we guide you, among others, through the districts of Kreuzberg, Prenzlauer Berg and Neukölln and you will experience many interesting and often little-known corners of Berlin. We will show you a piece of everyday life in Berlin off the beaten tourist tracks and impart the special flair of Berlin. You will get to know Berlin's most popular nightlife districts and curry-sausage stalls. Be open for some surprises and learn more about daily life in Berlin.

See, among others:

- Kreuzberg: a low mountain with a waterfall in the city centre
- Kreuzberg Promenade Bergmannstraße
- The picturesque Wilhelminian district around Chamissoplatz
- The multicultural bustle, mosques and the trendy districts of Kreuzberg and Neukölln
- The “alternative” party mile Oranienstreet with its quaint shops and pubs
- The unique industry ensemble Kulturbrauerei in the district Prenzlauer Berg
- The former Tempelhof Airport, site of the historic airlift in the divided Berlin
- The flamboyant style of the Kollwitz neighborhood with its cafes, designer shops and organic supermarkets ... and much more.

During our tour we are planning at least 1 walkabout, for example, a tour of the Kulturbrauerei or a climb of the real Kreuzberg with views of Berlin. Alternatively, we offer a stop at one of the famous curry-sausage stalls or a short walk through Kreuzberg.

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