

#### **PROGRAM OF THE CONFERENCE**

## Sunday 8<sup>th</sup> September

#### 16h30-19h - Registration 19h30 - Welcome Cocktail

### Monday 9<sup>th</sup> September

8h45	Welcome session - Jérémy Couturier and Nicolas Rouhier	
S-metabolism session 1 Chair: Stanislav Kopriva		
9h-9h30	<b>Jutta Papenbrock</b> - Sulfotransferases and their role in glucosinolate biosynthesis analyzed in various stress conditions	
9h30-10h	Jon Mueller - Sulfation of Steroids in Humans - Conferring Directionality	
10h-10h20	Patrick Lehr - Sulfur fertilization enhances drought stress response	
10h20-10h40	Anna Wawrzynska - LSU proteins enhance sulfate assimilatory pathway flux in Arabidopsis thaliana	
10h45	Coffee break	
11h10- 11h40	Silke Leimkühler - 2-Thiouridylases for tRNA in pro- and eukaryotes	
11h40-12h10	<b>Ann Cuypers</b> - How sulfur allocation impacts plant responses to cadmium stress: from signalling to acclimation	
12h10-12h30	Daniela Ristova - Interaction of S homeostasis with N signaling in Arabidopsis thaliana	
12h30-12h50	Takehiro Ito - Elucidation of glutathione degradation pathway in Arabidopsis thaliana	
13h-14h30	Lunch	
	S-metabolism session 2 Chair: Luis Romero	
Claus Jacob - Harnessing the power of sulfur: redox catalysis, nanotechnology and		
14h45-15h15	biomedical innovations	
15h15-15h45	Takaaki Akaike - Metabolism and redox signal regulation by supersulfides	
15h45-16h05	<b>Shingo Kasamatsu</b> - Development of mass spectrometry-based supersulfidomics and its potential: alternations in supersulfide production during the germination of broccoli sprouts	
16h05-16h25	<b>Suvajit Basu</b> - Exploring uncharted territories: new genes for sulfur starvation responses in plants	
16h30	Coffee break	
17h	Poster Session	
	Plenary Session	
18h	Chair: Stanislav Kopriva	
	Kazuki Saito - A 35-year journey in plant sulfur research: a personal perspective	
19h30	Dinner	



# Tuesday 10<sup>th</sup> September

Redox regulation session 1 Chair: Marcel Deponte	
9h-9h30	Stefanie Müller-Schüssele - Class I glutaredoxins in plastid oxidative stress: repair crew or regulators?
9h30-10h	<b>Günter Schwarz</b> - Molybdenum in health and disease: Thiol and sulfide signaling in metabolism and synapse function
10h-10h20	<b>Ayaka Kinno</b> - Analysis of pathological progression-dependent changes of supersulfides production in the brain tissues of mouse models of Alzheimer's disease
10h20-10h40	Natacha Donnay - The plant DCC1 are atypical thioredoxins with a holdase activity
10h45	Coffee break
11h10- 11h40	<b>Tobias Dick</b> - Site-specific activation of proton pump inhibitors by tetrathiolate zinc centers
11h40-12h10	<b>Jose Ugalde</b> - Decoding the function of Tau Glutathione S-transferases: GSTU24 and GSTU25 in Arabidopsis
12h10-12h30	<b>Ginevra Peppi</b> - Functional insights into the catalytic and redox-based regulatory properties of AKR4Cs from Arabidopsis thaliana
12h30-12h50	<b>Laura Morette</b> - Phylogenetical, biochemical and structural insights into the iota glutathione transferase from the cyanobacteriota Synechocystis sp. pcc 6803, an atypical glutathione transferase exhibiting an unexpected FMN-binding domain
13h-14h30	Lunch
H <sub>2</sub> S signalling session Chair: Cecilia Gotor	
14h45-15h15	Ruma Banerjee - Sulfide signaling and mitochondrial redox metabolism
15h15-15h45	Angeles Aroca - Hydrogen sulfide: a key ally in adapting to climate change
15h45-16h05	<b>Benjamin Selles</b> - The complex interaction network of human sulfurtransferases with H <sub>2</sub> S oxidation pathway proteins
16h05-16h25	<b>Tatjana Hildebrandt</b> - Compartmentalization of cysteine metabolism in plants affects stress signaling
16h30	Coffee break
17h	Poster Session
18h	Plenary Session Chair: Guenter Schwarz Milos Filipovic - Protein persulfidation enters a new phase
19h30	Dinner



# Wednesday 11<sup>th</sup> September

Redox regulation session 2 Chair: Nicolas Rouhier		
9h-9h30	Marcel Deponte - How do glutaredoxins reduce non-glutathione disulfides?	
9h30-10h	Mirko Zaffagnini - The intricate relationships between glutathione and proteins: interaction and redox modulation	
10h-10h20	<b>Sophie Hendrix</b> - Glutathione peroxidase-like 8 (GPXL8): a new player in $H_2O_2$ signaling in <i>Arabidopsis thaliana</i> ?	
10h20-10h40	<b>Zhichao Liu</b> - Biochemical characterization of thioredoxin-related protein Clot/TRP14 of <i>Populus trichocarpa</i>	
10h45	Coffee break	
Glucosinolates session		
Chair: Jutta Papenbrock		
11h10-11h40	<b>Masami Hirai</b> - Plant survival strategies responding to environmental stress by controlling sulfur allocation	
11h40-12h10	<b>Luke Bell</b> - The role of sulfur in salad rocket ( <i>Eruca vesicaria subsp. sativa</i> ) nutritional and sensory quality	
12h10-12h30	<b>Christian Zörb</b> - Glucosinolates in Kohlrabi after nitrogen fertilization increase as detected by a NIRS method	
12h30-12h50	<b>Georgios Stylianidis</b> - Sulfur-based biofortification of wheat with iron: cysteine-based biofortification schemes	
13h-14h30	Lunch	
	Emerging topics session	
	Chair: Jean-Pierre Jacquot	
14h45-15h15	<b>Andreas Meyer</b> - Lipoylation overkill: boosting lipoylation capacity causes the release of sulfide	
15h15-15h45	Stéphane Lemaire - Synthetic and systems biology of carbon fixation in Chlamydomonas	
15h45-16h05	<b>Uladzimir Barayeu</b> - NOS produces cyclic octasulfur that enables protection against lipid peroxidation in lipid droplets	
16h05-16h25	Eve-Lyn Hinckley - Sulfur: a major element undergoing global change	
	Closing session	
16h30	Jérémy Couturier and Nicolas Rouhier	
17h	Coffee break	
17h30	Guided tour of Abbey	
20h	Conference Dinner	