



Sächsische Akademie
der Wissenschaften
zu Leipzig



Czech Academy
of Sciences

**Second Czech-German
Scientific Symposium**

Organised by
the SAXON ACADEMY OF SCIENCES AND HUMANITIES IN LEIPZIG

and

the CZECH ACADEMY OF SCIENCES

on

**RESILIENT SOCIETY,
APPLICATION OF AI,
CLIMATE CHANGE/ENERGY**

Programme

22th —23th SEPTEMBER 2025, LEIPZIG

PROGRAMME

September 22

Registration			
13:00	13:10	Opening remarks	Hans-Joachim KNÖLKER, Ondřej SANTOLÍK
Session 1		Chair: Miroslav CHOMÁT	
13:10	13:40	Ladislav KAVAN	Post Li-ion batteries
13:40	14:10	Martin BERTAU	The future of raw material production – why we have to leave trodden paths in raw material processing
14:10	14:40	Jan GELETIČ	AI potential in urban environmental modelling
14:40	15:10	Manfred WENDISCH	Global warming and geoengineering: methods and problems
15:10	15:40	Coffee break	
Session 2		Chair: Matthias SCHWARZ	
15:40	16:10	Ingo SIEGERT	Biased by design? Rethinking fairness in AI through conceptual and generative perspectives
16:10	16:40	Petr KADERKA	Audio description: making the visual world accessible to the blind and partially sighted
16:40	17:10	Christian WIRTH	Which trees and why?
17:10	17:40	Barbara ZITOVÁ	AI and cultural heritage

September 23

Session 3		Chair: Harald KRAUTSCHEID	
09:00	09:30	Florian STEGER	Equal access to the healthcare system as a prerequisite for participation
09:30	10:00	Martin VÍTA	Mapping the landscape of AI and ML applications in science: a survey from the CAS
10:00	10:30	Antonín FEJFAR	Advances in photovoltaics for utilising solar energy
10:30	10:50	Coffee break	
Session 4		Chair: Martin NITSCHKE	
10:50	11:20	Christian SCHMIDT	Resilience or transformation? Dependency and the need for radical change
11:20	11:50	Julia WESTERMAYR	Artificial intelligence in the molecular sciences: from the rules of chemical reactions to the learning and design of senses
11:50	12:20	Vít GVOŽDIAK	Philosophy and the Czech public: a quantitative approach
12:20	12:30	Closing remarks	

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