

FIRST CALL

3rd international scientific conference

QUO VADITIS

Agriculture, Forestry and Landscape?

 **15TH–17ST SEPTEMBER 2025**

On behalf of the Organizing Committee let us invite you to the international conference titled

Quo Vaditis, Agriculture, Forestry and Landscape? 40 Years of Climate Change Research in the Czech Republic

organized by the Global Change Research Institute CAS – CzechGlobe.

The venue location will be the Horal Hotel (Valachy Resort, www.valachy.cz) in Velke Karlovice in the Beskydy Mountains (Czech Republic).

On the occasion of the 40th anniversary of the establishment of the Bílý Kříž Experimental Ecological Station in the Beskydy Mountains, the Czech Republic, we are pleased to invite you to join us for a multidisciplinary conference addressing the impacts of climate change, along with strategies for adaptation and mitigation across various scales, from molecular processes to landscape, and disciplines, from ecophysiology to socio-economics. The conference will bring together researchers to share cutting-edge findings, innovative technologies, and strategies addressing adaptation and mitigation of climate change. The focus will span key ecosystems, socio-economic resilience, and sustainable transformation of agriculture, forestry and land use.

Since the establishment of the Bílý Kříž station, its professional direction has been guided by the current director of the Global Change Research Institute CAS – CzechGlobe, Prof. Michal V. Marek, who celebrated a significant milestone, his 70th birthday, in 2024. It is no exaggeration to say that his entire scientific career has been devoted to the station.



Conference Sessions:

FROM LAB TO LAND

Explore the complex responses of ecosystems to climate change, from the molecular to the landscape scale, including an assessment of the role and potential for integration of adaptation and mitigation measures. The session will address key topics such as carbon dynamics, greenhouse gas fluxes, adaptation strategies and tools enhancing the mitigation functions of managed ecosystems, including agriculture, forestry and water resources. Discussions will include ecosystem responses to elevated CO₂, climate warming and water scarcity, uniting researchers who work with diverse climatic and hydrological conditions across scales and using innovative technologies, such as remote sensing. The session aims to foster dialogue among scientists engaged in experimental and observational studies at various spatial scales, contributing to a deeper understanding of the resilience of ecosystems to climate stressors. The session should also focus on understanding adaptation mechanisms across hierarchical levels ranging from genetic and molecular changes to growth and landscape-wide adaptations, including increase ecosystem resilience to water scarcity and high temperatures while maintaining key ecosystem functions. Additionally, this session will offer a broader perspective on how to enhance the mitigation role of ecosystems, including an understanding of the underlying mechanisms through their practical implementation.

FROM LAND TO LIFE

The session will explore current climate change impacts from the regional to global scales, including estimates using projected climate scenarios. The emphasis will be on the adaptive capacities of ecosystems, including transformative change for sustainability. This session will also explore systemic changes through innovative policy frameworks, such as ecosystem accounting and nature-based solutions. Emphasis will be placed on the socio-economic impacts of these changes, examining how ecosystems can not only adapt but also drive sustainability through integrated strategies for climate action. Participants will discuss approaches that combine science with policy, aiming to promote transformative solutions for sustainable landscapes and livelihoods.

Among the invited keynote speakers are:

Prof. Nina Buchmann (ETH Zürich, Switzerland)

Prof. Ulf Büntgen (University of Cambridge, UK)

Prof. Pierre Ibisch (Eberswalde University for Sustainable Development, Germany)

Dr. Giorgio Matteucci (CNR, Institute of Bioeconomy, Italy)