

*PAGES meeting on*  
*High Latitude Paleoenvironments*  
*Moscow, May 16<sup>th</sup>-17<sup>th</sup>, 2002*

*Program, Abstracts*  
*And*  
*List of Participants*

*May 16<sup>th</sup>*

*9h40-10h00*

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**DENDROCLIMATIC STUDY IN THE URALS AND SIBERIA: NEW RESULTS AND OPPORTUNITIES**

There are several important aspects in studying Ural-Siberian climates, environmental and forest ecosystem changes using tree-rings: a) it is the biggest part of Eurasia with the widest range of climatic zones; b) the lack of long-term climatic information especially at high latitudes where most warming is expected; c) most of the natural forests are located upper 60° N which are the best archives of climate changes over hundreds of years or millennia; d) high abundance of well preserved dead and subfossil wood in permafrost and mountain regions as a material to develop super-long tree-ring chronologies (practically for a whole Holocene) and to reconstruct the spatio-temporal dynamics of forest ecosystems; e) tree-ring chronologies are characterized by high resolution in time and contain a strong climatic signal of interannual, decadal and centennial durations.

Five main research fields are presented: 1) spatio-temporal summer temperature changes in high latitudes using the network of tree-ring chronologies based on ring-width, density and tracheid anatomy data; 2) developing long-term tree-ring chronologies; 3) analysis of tree growth response to rapid climatic changes and catastrophic events (experimental and modeling approaches); 4) tree growth and spatio-temporal dynamics of the upper and polar treelines and forest-tundra ecosystems; 5) links of tree-ring analysis to carbon balance studies (local and regional scales).