Siberian Federal University, Krasnoyarsk, Russia V.N.Sukachev Institute of Forest SB RAS, Krasnoyarsk, Russia Swiss Federal Research Institute WSL, Birmensdorf, Switzerland

# **Program**

Russian-Swiss Workshop

# "Current Status and the Potential of Tree-Ring Research in Russia"

Krasnoyarsk, Russia January 20-21, 2014

Under support of
Russian Science Foundation (Project 14-14-00295)
Ministry of Science and Education of RF (Project 5.784.2014/K)

### Program Committee:

Vaganov Eugene A. Siberian Federal University, Krasnoyarsk, Russia

Büntgen Ulf Swiss Federal Institute for Forest, Snow and

Landscape Research WSL, Birmensdorf, Switzerland

Kirdyanov Alexander V. V.N.Sukachev Institute of Forest SB RAS,

Krasnoyarsk, Russia

### Organizing Committee:

Kirdyanov Alexander V. V.N.Sukachev Institute of Forest SB RAS,

Krasnoyarsk, Russia

Sviderskaya Irina V. Siberian Federal University, Krasnoyarsk

# Tuesday, 20 January

## Siberian Federal University, office P8-06

09.00 – 09.10	Opening Session Eugene A. Vaganov, Rector of Siberian Federal University, Russia
	Lectures Moderator: Irina V. Sviderskaya
09.10 – 10.30	Ulf Büntgen Swiss Federal Institute for Forest, Snow and Landscape Research WSL Frontiers of tree-ring research
10.30 - 11.00	Coffee-break
11.00 – 11.45	Fritz Schweingruber Swiss Federal Institute for Forest, Snow and Landscape Research WSL Aging, none escapes
11.45 – 12.30	Eugene A. Vaganov  Siberian Federal University, Krasnoyarsk  Searching for the bridge between dendrochronology, physiology and gene expression: a problem of long-distance signalling
12.30 – 13.30	Lunch
	Presentations Moderator: Vladimir V. Shishov
13.30 – 13.45	K.V. Krutovsky, N.V. Oreshkova, E.A. Babushkina, Liliana V. Belokopytova, T.V. Kostyakova, A.M. Grachev, E.A. Vaganov, Khakasia Technical Institute-Branch of the Siberian Federal University, Abakan Preliminary results on using methods of dendrochronology and genome wide genotyping for studying the genetic mechanisms of homeostasis, heterosis and genetic resistance towards the environmental factors in Siberian larch
13.45 – 14.00	Dmitry Ovchinnikov, L. Lixin, Zh. Qi-Bin, A. Kirdyanov V.N. Sukachev Institute of Forest SB RAS, Krasnoyarsk  A long-term tree-ring variability along the northern Siberia-Tibetan plateau transect based on the Hilbert-Huang transform method

14.00 – 14.15	Alexey I. Fertikov, A.V. Kirdyanov, A.S. Shishikin, E.A. Vaganov Siberian Federal University, Krasnoyarsk  Dynamics of heavy metal (Ni, Co, Mn, Cu, Fe) and sulfur (S) content in tree-ring of larch affected by industrial pollution from the Norilsk smelters
14.15 – 14.35	V. Matskovsky, Olga Solomina Institute of Geography RAS, Moscow 831-years long conifer tree-ring chronology in Solovki Islands and its climatic interpretation
14.35 – 14.55	Viktor Voronin, V. Oskolkov, V. Bujantuev, S.Shvetsov, R.Moritz Siberian Institute of Plant Physiology and Biochemistry SB RAS, Irkutsk Construction of a millennia-long chronology for the north Baikal region, Russian from the Holocene deposits of Muya-river valley
14.55 – 15.30	Coffee-break
15.30 – 15.50	Ekaterina Dolgova Institute of Geography RAS, Moscow June-September temperature reconstruction in the Northern Caucasus based on blue intensity data
15.50 – 16.10	Rashit M. Hantemirov, L.A. Gorlanova, Y.A. Ekba, R.S. Dbar, A.Y. Surkov, V.V. Kukarskih  Institute of Plant and Animal Ecology UrB RAS, Ekaterinburg  Assessing the climatic sensitivity of Pinus brutia on the eastern coast of the Black Sea
16.10 – 16.25	Anna V. Taynik, V.S. Myglan Siberian Federal University, Krasnoyarsk Tree-ring growth of Siberian larch at the upper treeline in the Altay- Sayan region over the last 250 years
16.25 – 16.40	Valentin V. Barinov, V.S. Myglan Siberian Federal University, Krasnoyarsk Extreme climatic events in Altay-Sayan region over the last 250 years inferred from dendrochronological data
16.40 – 17.00	Anatoly Nikolaev  East-North Federal University, Yakutsk  The effect of cryogenic processes on radial growth of larch in Central Yakutia, Russia
17.00 – 17.20	Leonid I. Agafonov  Institute of Plant and Animal Ecology UrB RAS, Ekaterinburg  Deciduous tree species as indicators of river hydrology

#### Wednesday, 21 January

#### Siberian Federal University, office P8-06

**Presentations** 

Moderator: Alexander V. Kirdyanov

- 9.30 9.45 L.V. Belokopytova, **T.V. Kostyakova**, E.A. Babushkina, A.M. Grachev Khakasia Technical Institute-Branch of the Siberian Federal University, Abakan Dendroclimatological analysis of the radial growth of Scots pine and Siberian larch on the territory of the museum-natural reserve "Kazanovka" (Khakasia)
- 09.45 10.05 O. Solomina, **V. Matskovsky** *Institute of Geography RAS, Moscow*

Drought frequency in the last 300 years in the Moscow region (Russia) from pine and oak ring width chronologies

- 10.05 10.20 Vladimir V. Kukarskih, L.I. Agafonov

  Institute of Plant and Animal Ecology UrB RAS, Ekaterinburg

  Dendrochronological studies in the southern Trans-Urals and
  Kazakhstan
- 10.20 10.40 Irina V. Sviderskaya, M.V. Bryukhanova, A.V. Kirdyanov
  Siberian Federal University, Krasnoyarsk
  New Instrument for Dendrochronology Model Estimation of
  Hydraulic Characteristics of Pinaceae Tree Rings by Their Cellular
  Structure
- 10.40 11.10 **Coffee-break**
- 11.10 11.30 **Vladimir V. Shishov**, I.I. Tychkov, M.I. Popkova, V.A. Ilin

  Siberian Federal University, Krasnoyarsk

  Tree-ring growth simulation in Eurasia: from a single tree to landscape
- 11.30 11.45 **Ivan I. Tychkov**, M.I. Popkova, V.V. Shishov *Siberian Federal University, Krasnoyarsk*

VS-oscilloscope - software developing of the tree-ring growth process-based model

- 11.45 12.00 Margarita I. Popkova, I.I. Tychkov, V.V. Shishov, E.A. Vaganov Siberian Federal University, Krasnoyarsk

  Cell growth simulation of tree rings: new approach
- 12.00 13.00 **Lunch**
- 13.00 15.00 **General discussion** (outcome of the Workshop, joint publications, Special Issue of tree-ring related journal, possible joint projects, etc.) **Moderator: Ulf Büntgen**