




Personal information

MOMCHIL PANAYOTOV PANAYOTOV



 University of Forestry, Dendrology Department
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Gender: Male | Birth Date: 16/03/1976 | Nationality: Bulgarian

PROFESSIONAL EXPERIENCE

Since 2016 r. - associate professor
 2008 – 2016 – teaching assistant

University of Forestry, Sofia
 Teaching – lectures and practical training in Dendrology
 Research in the field of natural dynamics and disturbance regimes of Subalpine forests,
 climate responses of coniferous trees and climate reconstructions based on
 dendrochronology

EDUCATION

- 2008-2011, PostDoc
 WSL Institute for Snow and Avalanche Research SLF
 Project: “Natürliche Dynamik von subalpinen Lawinenschutzwäldern”
 Project Leader: Dr. Peter Bebi
- 2003-2007, PhD (Forestry and Dendrology)
 University of Forestry, Sofia, Bulgaria
 PhD thesis: “Influence of some ecological factors on the growth of the tree species from Pinaceae family at the Bulgarian treeline”
 Advisor: Dr. S. Yurukov
- 1995-2000, MSc in Forestry
 University of Forestry, Sofia, Bulgaria
 Master thesis: “Research of the Avalanche Activity on the North-Western Slope of Todorka Peak, Pirin Mountains”
 Advisor: Dr. D. Zakov
- 1990-1995, Secondary Education
 First English Language School, Sofia, Bulgaria

Personal skills

Mother language Bulgarian

Other languages

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Participation in conversation	Personal expression	

English	C2	C2	C2	C2	C2
Russian	B1	B1	A1	A1	A1

Communication skills I can work in teams

Organizational and leader skills

- Leader of scientific project funded by the Ministry of Education and Science of Bulgaria (DMU 02/22/2009); participation in a number of projects funded by the National Science Fund of Bulgaria, Velux Stiftung (Switzerland) and the Swiss National Science Foundation (SNSF)
- Director of international Freeride competition organized by the Bulgarian Extreme and Freeski Association, Bansko, Bulgaria, 2003, <http://befsa.com>
- Leader of numerous Avalanche safety trainings organized by the Bulgarian Extreme and Freeski Association

Computer skills

- Good skills in Microsoft Office™, PhotoShop™, CorelDraw™, ArcGIS and other specialized software packages in the field of dendrochronological analysis

Other skills

- Member of the Mountain Rescue Service of Bulgaria

Driving license

- Clean driving license, category “B”

Other information

PhD Thesis:

- “Study of the influence of some ecological factors on the species from Pinaceae family at the treeline zone”

Projects

- “Subalpine forest development in Bulgaria under climate change” – Project funded by the Swiss National Science Foundation. Project leader: Dr. Peter Bebi (SLF); Role of Dr. M. Panayotov – investigator; Responsible for data collection and analysis from Bulgarian sites
- “Natürliche Dynamik von Lawinenschutzwäldern” – Project funded by the Velux Foundation; 2007-2011; Project leader: Dr. Peter Bebi (SLF); Role of Dr. M. Panayotov – investigator; Responsible for data collection and analysis from Bulgarian sites;
- „Natural disturbances and dynamics in pristine Norway spruce (Picea abies Karst) forests” - project funded by the National Science Fund of Bulgaria. 2010-2013. Project leader and principal investigator
- “Dendrochronological, Climatic and Historical Reconstruction of the Bulgarian Past, ca. 1500-2000” - project funded by the National Science Fund of Bulgaria. 2010-2013. Principal investigator, responsible for construction and analysis of tree-ring chronologies
- “Climatic sensitivity of European beech (Fagus sylvatica L.) and Norway spruce (Picea abies (L.) Karst.) at their Southeastern distribution limit under global changes” – Bilateral project between Bulgaria and Romania. 2007-2010. Role of Dr. M. Panayotov – investigator
- “Influence of ecological conditions on morphological and anatomical features of leaves

- and wood of *Pinus heldreichii*” project funded by the Science and Research Division of the University of Forestry, Sofia, 2007-2010. Project leader and principal investigator
- “Studies of growth of experimental afforestations from Pine genus trees in the treeline zone” - project funded by the Science and Research Division of the University of Forestry, Sofia; 2005; Role: Principal investigator
 - “Study of the distribution of fruit-giving tree species on the South slopes of Vitosha Mountain and mapping it with the use of GPS and GIS”- project funded by the Administration of Nature Park Vitosha; 2004; Role: Project leader and principal investigator
 - “Dendrochronological analysis of the influence of abiotic factors on the growth and development of the tree species from Pinaceae family at the Bulgarian treeline” - project funded by the Science and Research Division of the University of Forestry, Sofia; 2004; Principal investigator
 - “Mapping the treeline position and its tree species composition on the North slopes of Vitosha mountain with the use of GIS” – project funded by the Science and Research Division of the University of Forestry, Sofia; 2003; Principal investigator

Main Publications

- Edward R. Cook, Richard Seager, Yochanan Kushnir, Keith R. Briffa, Ulf Büntgen, David Frank, Paul J. Krusic, Willy Tegel, Gerard van der Schrier, Laia Andreu-Hayles, Mike Baillie, Claudia Baittinger, Niels Bleicher, Niels Bonde, David Brown, Marco Carrer, Richard Cooper, Katarina Čufar, Christoph Dittmar, Jan Esper, Carol Griggs, Björn Gunnarson, Björn Günther, Emilia Gutierrez, Kristof Haneca, Samuli Helama, Franz Herzig, Karl-Uwe Heussner, Jutta Hofmann, Pavel Janda, Raymond Kontic, Nesibe Köse, Tomáš Kyncl, Tom Levanič, Hans Linderholm, Sturt Manning, Thomas M. Melvin, Daniel Miles, Burkhard Neuwirth, Kurt Nicolussi, Paola Nola, Momchil Panayotov, Ionel Popa, Andreas Rothe, Kristina Seftigen, Andrea Seim, Helene Svarva, Miroslav Svoboda, Terje Thun, Mauri Timonen, Ramzi Touchan, Volodymyr Trotsiuk, Valerie Trouet, Felix Walder, Tomasz Ważny, Rob Wilson and Christian Zang (2015) Old World megadroughts and pluvials during the Common Era. *Science Advances*, doi: 10.1126/sciadv.1500561
- Panayotov, M., Bebi, P. Tsvetanov, N., Alexandrov, N. Laranjeiro, L. and Kulakowski, D. (2015) The disturbance regime of Norway spruce forests in Bulgaria. *Canadian Journal of Forest Research*, 45: 1143–1153, dx.doi.org/10.1139/cjfr-2014-0505
- Seim, A., Treydte, K., Trouet, V., Frank, D., Fonti, P., Tegel, W., Panayotov, M., Fernández, Donado, L., Krusic, P. and Büntgen, U. (2014) Climate sensitivity of Mediterranean pine growth reveals distinct east–west dipole. *International Journal of Climatology (Impact Factor: 3.4)*. 09/2014; DOI: 10.1002/joc.4137
- Filchev, L., Feilong, L. and Panayotov, M. (2014) An assessment of land-use/land-cover change of Bistrishko branishte biosphere reserve using Landsat data. *IOP Conf. Ser.: Earth Environ. Sci.* 17 012060 doi:10.1088/1755-1315/17/1/012060
- Ivanova, A., Todorova, Y., Rangelova, P. and Panayotov, M. (2013) Xylogenesis of *Pinus heldreichii* and *Pinus peuce* in Pirin Mts. *Bulgarian Journal of Agricultural Science*, 19 (2) 2013, 229–232
- Panayotov, M., Zafirov, N. and Cherubini, P. (2013) Fingerprints of extreme climate events in *Pinus sylvestris* tree rings from Bulgaria. *Trees-Structure and Function*. 27(1):211-227, doi: 10.1007/s00468-012-0789-1
- Rangelova, P. and Panayotov, M. (2013) Structure of old-growth *Pinus heldreichii* forests in Pirin Mountains. *Bulg. J. Agric. Sci., Supplement 2*, 19: 273–276, PDF file
- Panayotov M. and V. Shishkova, (2013) *Pinus nigra* Arn. tree ring chronology from Slavyanka Mts. in Bulgaria is strongly related to regional drought events. *Forestry Ideas*, 2013, vol. 19, No 1 (45): 79–90, PDF file
- Shishkova, V. and M. Panayotov (2013) Climate-growth relationship of *Pinus nigra* tree-ring width chronology from the Rhodope Mountains, Bulgaria. *Bulg. J. Agric. Sci., Supplement 2*, 19: 225–228, PDF file
- Babst, F., Poulter, B., Trouet, V., Tan, K., Neuwirth, B., Wilson, R., Carrer, M., Grabner, M., Tegel, W., Levanič, T., Panayotov, M., Urbinati, C., Bouriaud, O., Ciais, P., Frank, D. (2012) Site- and species-specific responses of forest growth to climate across the

- European continent. *Global Ecology and Biogeography*. doi: 10.1111/geb.12023
- Panayotov, M. and Georgiev, D. (2012) Dynamics in the *Ips typographus* outbreak following the 2001 windthrow in Bistrishko braniste reserve, Bulgaria, *Silva Balcanica*. 38-48
 - Panayotov, M., Kulakowski, D., Laranjeiro, D.S. and Bebi, P. (2011) Wind disturbances shape old Norway spruce-dominated forest in Bulgaria. *Forest Ecology and Management*, 262: 470-481, doi:10.1016/j.foreco.2011.04.013
 - Trouet, V., Panayotov, M., Ivanova, A., and Frank, D., (2011) A Pan-European summer teleconnection mode revealed by a new temperature reconstruction from the northeastern Mediterranean (1768-2008). *The Holocene*, in review
 - Panayotov, M. (2011) Avalanches on the NW slope of Todorka peak and their influence on forests. *Phytologia Balcanica*, 17(2), 237-246
 - Panayotov, M., Dimitrov, D. and Yurukov, S. (2011) Extreme climate conditions in Bulgaria - evidence from *Picea abies* tree-rings. *Silva Balcanica*.12: 37-46
 - Panayotov M., Kulakowski D., Spiecker H., Krumm F., Laranjeiro L. and Bebi P. (2010). Natural disturbance history of the pristine *Picea abies* forest Parangalitsa. *Forestry Ideas*, special issue from the conference "Forestry – Bridge to the future", Sofia, May 2010; in press
 - Panayotov, M., Tsavkov, E., Zhelev, P., Yurukov, S., Ivanova, A., Russeva, M., Todorova, Y. and Trouet, V. (2011) Tree ring and anatomical studies in *Pinus heldreichii* forests in Pirin Mountains. *Forestry Ideas*, special issue from the conference "Forestry – Bridge to the future", Sofia, May 2010; in press
 - Panayotov, M., Bebi, P., Trouet, V., and Yurukov, S. (2010) Climate signal in tree-ring chronologies of *Pinus peuce* and *Pinus heldreichii* from the Pirin Mountains in Bulgaria. *Trees - Structure and Function*. 24: 479-490
 - Panayotov, M., Dimitrov, D., Popa, I., Tsavkov, E. and Yurukov, S., (2010). Pointer years in *Picea abies* (L.) Karst and *Fagus sylvatica* L. tree-ring chronologies from Bulgaria and Romania. In: Levanic, T. et al. (2010) *Proceedings of the "Tree Rings in Archaeology, Climatology and Ecology (TRACE 2010) in Otocec, Slovenia, April 16th-19th 2009*; Vol. 8: 110-116
 - Panayotov, M., Tsavkov, E., Zhelev, P. and Yurukov, S., (2010). Anatomical and morphological changes in *Pinus heldreichii* Christ along an altitudinal gradient in Pirin mountains. *Oltenia. Oltenia. Studii si comunicari. Stiintele Naturii*. Tom. 26, No. 1: 45-57
 - Tsvetanov, N., Nikolova, N., Panayotov, M. (2010) Tree ring reactions after windthrow in the pristine *Picea abies* forest Parangalitsa. *Proceedings of the International conference "Tree Rings in Archaeology, Climatology and Ecology TRACE 2010"*, 22-25.04.2010, Freiburg, Germany
 - Panayotov, M., Bebi, P., Krumm, F. and Yurukov, S., (2009). *Pinus peuce* and *Pinus heldreichii* tree rings as key to past mountain climate in Southeastern Europe. *Proceedings of the the "Tree Rings in Archaeology, Climatology and Ecology TRACE 2008" Conference, April 27th-30th, 2008, Zakopane, Poland*: 71-77
 - Panayotov, M., Yurukov, S., (2007). Tree ring chronology from *Pinus peuce* in Pirin Mountains and the possibilities to use it for climate analysis. *Phytologia Balcanica*, 13(3): 313-320
 - Panayotov, M.P. (2007) Determination of avalanche events by analysis of tree rings of *Pinus peuce*. *Econological Engineering and Environmental Protection*, No.1: 75-82; in Bulgarian, English abstract;
 - Panayotov, M.P. (2005) Dendroecological analysis of the influence of extreme climate events. *Forestry Ideas*, 2: 31:39. in Bulgarian, English abstract

Books and chapters in books:

- Panayotov, M. and Menteshv, B. (2013) *Avalanche safety – a handbook for skiers and snowboarders*. Second revised edition. BEFSA, 80 pp
- Nagel, T., Svoboda, M. and Panayotov, M. (2013) Natural disturbances and forest dynamics. In Kraus, D. and Krumm, F. (eds.) *Integrative approaches as an opportunity for the conservation of forest biodiversity*. European Forest Institute. 284 pp.; 116-124
- Panayotov, M., Jordanov, B., Botev, B., Boyadzhiev, N. and Zagorov, M. (2010) Ten most

popular routes for ski and snowshoes tourism in Vitosha. Vitosha NP and Secret Trails. 67 pp.

- Popyordanov, L., Damyanov, M., Demirev, K., Georgiev, K., Bilyarski, S., Stoyanov, Y., Kovacheva, V., Todorov, V., Gospodinova, L. and Panayotov, M., (2008) Close to the mountains a guidebook of the mountain guide and the good mountaineer. Odysseia-In, 2-d edition; 296 pp
- Panayotov, M. (2005) Avalanche safety – a handbook for skiers and snowboarders. BEFSA, 64 pp
- Popyordanov, L., Damyanov, M., Stoyanov, Y., Todorov, V., Georgiev, K., Shipkova, K., Panayotov, M., Todorov, T. and Gospodinova, L., (2005) Close to the mountains a guidebook of the mountain guide and the good mountaineer. Odysseia-In, 248 pp

Other publications (popular magazines):

- Panayotov, M., Gogushev, G., Tsavkov, E., Alexandrov, N. and Lazarov, S. (2012). Natural disturbances and their importance for the management of the mountain forests in Bulgaria. Gora, 3:16-22; (in Bulgarian)
- Panayotov, M. (2011) Avalanches – a challenge for the forester. Gora, 4: 16-17; (in Bulgarian)
- Panayotov, M., Tsvetanov, N. and Nikolova, N. (2010) The giants of Parangalitsa. Gora, 5: 17-19; (in Bulgarian)
- Panayotov, M. (2010) Why did you fall avalanches? Whiteroom, No. 12, 128-131; (in Bulgarian)
- Panayotov, M. (2008) Avalanches in the spring. Whiteroom, No. 10: 127-128; (in Bulgarian)
- Panayotov, M., Alexandrov, N., (2008). Natural disturbances in mountain forests – challenges and opportunities for silviculture. Gora, No. 5; (in Bulgarian)

Reviewing:

- Forest Ecology and Management, Agricultural and Forest Meteorology, Annals of Forest Science, Trees – Structure and function, Earth Surface Processes and Landforms, Dendrochronologia

Conference presentations and posters:

- EURODENDRO2015, Antalya, Oct. 2015; "Mountain Forest Management in a Changing World", Slovakia, High Tatra Mountains, July 2015; "Forestry-Bridge to the Future", Sofia, May 2015; "Forest landscape mosaics: disturbance, restoration and management at times of global change" (FORDISMAN 2014), Tartu, Estonia, August 2014; Climtree2013, Zurich, Sept. 2013; 7-th National Botanical Conference, Sofia, Sept. 2011; EURODENDRO 2011, Engelberg, Switzerland, Sept. 2011; WORLDDEDNRO 2010, Rovaniemi, Finland, June 2010; EURODENDRO 2009, Palma de Majorca, Oct., 2009 ; Museum and Scientific Research, Craiova, Romania, Sept. 2010; Forestry – Bridge to the future, Sofia, May 2010; TRACE 2009, Otocec, Slovenia, April 2009; TRACE 2008, Zakopane, Poland, April 2008; Natural Hazards and Natural Disturbances in Mountain Forests: Challenges and Opportunities for Silviculture, Trento, Italy, Sept. 2007; Sustainable Forestry, Problems and Challenges, Ohrid, Macedonia, Oct. 2007; TRACE 2005, Fribourg, Switzerland, 2005;