


## PERSONAL INFORMATION

## Tamara Jakovljević

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## WORK EXPERIENCE

2010–Present **Senior Researcher in Division of Forest ecology (Scientific Area: Biotechnical Sciences Scientific Field: Forestry, Scientific branch ecology) and Head of Laboratory for Physical and chemical analyses of soil, plant material, atmospheric deposition and air particles**

Croatian Forest Research Institute, Jastrebarsko (Croatia)

Research activities: Assessment and Monitoring of Air Pollution Effects on forests, environmental monitoring, environmental chemistry and biotechnology, data elaboration and evaluation of monitoring data, quality control and assurance

Management activities: laboratory manager, Quality manager, organizing and conducting European Interlaboratory comparison within UN-ECE ICP Forests programme, organizing international scientific and expert conferences and meetings, project coordination

2003–2009 **Head of laboratory (Physical and chemical analyses of soil, plant material, atmospheric deposition and air particles) and Quality manager**

Croatian Forest Research Institute, Jastrebarsko (Croatia)

- organizing and conducting laboratory work
- developing, implementing and maintaining technical quality assurance systems and activities according to ISO 17025
- managing monitoring of atmospheric deposition in forests
- team member and coordinator of scientific and expert projects in the field of ecology

## EDUCATION AND TRAINING

2008–2010 **PhD in Biotechnology / Thesis title: Assessing the fluxes of ions from the atmosphere to the lowland forest ecosystem of Croatia following the UN-ECE ICP Forests methodologies**

University of Zagreb, Faculty of Food Technology and Biotechnology, Zagreb (Croatia)

- research on assessment and monitoring of air pollution effects on forests in Croatia
- comparison of air pollutant concentrations and critical levels in Croatia and other European countries done at the CNR ISE- Italian National Research Council- Institute for ecosystem study, Verbania Pallanza, Italy

2004–2008 **MSc in Biotechnology / Thesis title: Validation of analytical methods for determination of phosphorus and ammonium in water**

University of Zagreb, Faculty of Food Technology and Biotechnology, Zagreb (Croatia)

1994–2000 **BSc in Biochemical engineering**

University of Zagreb, Faculty of Food Technology and Biotechnology, Zagreb (Croatia)

**International professional training**

- 2019 ENEA, Rome, Italy, effects of ozone on terrestrial ecosystems, evaluation of monitoring data
- 2017 CNR ISE institute, Verbania Pallanza, Italy
  - effects of atmospheric deposition on forest ecosystems, evaluation of monitoring data
- 2015 INRA institute, Avignon, France
  - project "Integrated research on Forest Resilience and Management in the Mediterranean"
- 2011 ENEA institute, Rome, Italy
  - Short scientific mission " Deposition of nitrogen and its effects on forests ecosystem" Cost action FP0903: Climate change and forest mitigation and adaptation in a polluted environment
- 2009-2010 CNR ISE institute, Verbania Pallanza, Italija
  - Analyses and evaluation of monitoring data for assesment of atmospheric deposition to the forest

**PERSONAL SKILLS**

**Mother tongue(s)** Croatian

**Foreign language(s)**

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Italian	C2	C2	C1	C1	B2
French	B2	B2	A2	A2	B1
Spanish	B1	B1	A1	A1	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
Common European Framework of Reference for Languages - Self-assessment grid

**Communication skills**

- expressed ability to adapt to multicultural environment while working abroad (during doctoral study and training)
- good communication skills gained through experience as researcher, project leader and project team member on various international and national projects

**Organisational / managerial skills**

- leadership- laboratory manager and quality manager
- good organisation skills gained as Organization Conference Chair and Scientific Conference of international scientific-expert conference GREEN 2014, 2016,2018 Zagreb, Croatia; Crolab conference, 2014, Šibenik, Croatia and ICP Forests meeting of Heads of laboratory, 2013, Zadar, Croatia
- good team -leading skills as project leader
- good organisation skills gained as organizer of European Interlaboratory soil commparation for UNECE ICP Forests programme

**Job-related skills**

- good command of quality control processes gained as quality manager and expert for ISO 17025 standards for accreditation agency
- analitical instrument competences
- mentoring skills (responasabile for PhD student and the stage of young graduates in Bioprocess Engineering and molecular biotechnology)

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Independent user	Independent user	Basic user

Digital skills - Self-assessment grid

Good knowledge of Microsoft Office tools, such as Word, Excel, PowerPoint

Driving licence B

ADDITIONAL INFORMATION

Memberships

- member of state body for implementation of National Emission Ceilings Directive (2016/2284/EU)
- Review Editor on the Editorial Board of Forests and the Atmosphere (specialty section of Frontiers in Forests and Global Change)
- Deputy Coordinator IUFRO 8.04.03 – Atmospheric deposition, soils and nutrient cycles
- member of ICP Forests expert group on air quality
- member of ICP Forests expert group on atmospheric deposition,
- member of ICP Forests working group on QA/QC in laboratory
- member of Croatian forestry society and Croatian Biotechnology Society
- member of Croatian accreditation agency assessors
- steering committee member in Society of Croatian Laboratories and the president of Section for the environment
- Executive Board member of Croatian Society of Biotechnology

Projects

- 2017- 2020 Assessment of Atmospheric **D**eposition and **O**zone levels in **M**editerranean **F**orest ecosystems (DepOMedFor)/ Croatian science foundation/project coordinator
- 2018-2019 Assesment of heavy metals in soil of protected areas/ Public Institution of Kamenjak/project coordinator
- 2015-2016 Determination of biochemical parametars reponsabile for oxidative stress/Croatian academy for science and art/project coordinator
- 2007-ongoing National programme of monitoring of damage to forest ecosystems in the Republic of Croatia/ Ministry of agriculture /National expert / responasabile for field measurement and elaboration of data for atmospheric deposition and air pollution
- 2015-2018 INTEgrated research on FOrest Resilience and Management in the mEDiterranean(INFORMED) /FP 7 Foresterra collaborative project /Croatian Forest Reserach Institute
- Team leader/ the project aims to produce global change scenarios specifically dedicated to the Mediterranean forests
- 2015-2018 MedWildFireLab - Global Change Impacts on Wildland Fire Behaviour and Uses in Mediterranean Forest Ecosystems, towards a « wall less » Mediterranean Wildland Fire Laboratory /FP7 Foresterra networking project /Croatian Team leader/
- 2014-2018 COST ActionFP1306 Valorisation of lignocellulosic biomass side streams for sustainable production of chemicals, materials & fuels using low environmental impact technologies/member of working group LCA and Techno-economic analysis/national management committee member
- 2013-2017 COST Action ES1308 Climate Change Manipulation Experiments in Terrestrial Ecosystems - Networking and Outreach (ClimMani) Management Committee member substitute/aim: synthesise of our knowledge across drivers and ecosystem processes
- 2011- 2013 Atmospferic deposition measurement / Croatian Forest Ltd. / Principal investigator/
- 2010-2013 COST Action FP0903: 2010-2013 COST Action FP0903: Climate change and forest mitigation and adaptation in a polluted environment / Management Committee member substitute/ research collaboration and networking, contribution to reporting, participating in short term scientific mission (1 month) "Deposition of nitrogen and its effects on forests ecosystem" in ENEA, Rome, Italy
- 2011-2013 The influence of various mineral fertilizers, substrates and container types on the vitality of forest tree seedlings/ Croatian Forests Ltd./Team member

2010- 2013 Forest monitoring / Croatian Forest Ltd. / Team member

### Publications

- Jakovljević, T.**, Marchetto, A., Lovreškov, L., Potočić, N., Seletković, I., Indir, K., Jelić, G., et al., 2019. Assessment of Atmospheric Deposition and Vitality Indicators in Mediterranean Forest Ecosystems. Sustainability, 6805, 1-12
- Velić N, Stjepanović M, Begović I, Habuda-Stanić M, Velić D, **Jakovljević T**, 2018: Valorisation of Waste Wood Biomass as Biosorbent for the Removal of Synthetic Dye Methylene Blue from Aqueous Solutions BY: South-east Eur Volume: 9 Issue: 2 Pages: 115-122
- Redovniković, IR, De Marco, A, Proietti, C, Hanousek, K, Sedak, M, Bilandžić, N, **Jakovljević, T**, 2017 : Poplar response to cadmium and lead soil contamination, Ecotoxicology and Environmental Safety, Vol. 144; 482-489
- Konig, N., Kowalska, A., Brunialti, G., Ferretti, M., Clarke, N., Cools, N., Derome, J., Derome, K., De Vos, B., Fuerst, A., **Jakovljević, T.**, Marchetto, A., Mosello, R., O'Dea, P., Tartari, G. A., Ulrich, E., 2016: Manual on Quality Assurance and Control in Laboratories, Part XVI, UN EC ICP Forests
- Jakovljević, T**, Cvjetko Bubalo, Marina, Orlović, Sanja, Sedak, Marija, Bilandžić, Nina, Brozinčević, Iva, Radojčić Redovniković, Ivana 2014: Adaptive response of Poplar (*Populus nigra* var. *italica*) after longterm Cd exposure. Environmental science and pollution research international, vol. 21, no. 5: 3792-3802
- Bubalo, MC ; Hanousek K ; Radošević, K, Srček VG; Jakovljević, T, Redovnikovic, IR, 2014: Imidiazolium based ionic liquids: effects of different anions and alkyl chains lengths on the barley seedlings, Ecotoxicology and Environmental Safety 101: 116-123**
- Jakovljevic, T., Cvjetko M, Sedak M, Maja Đokic, Bilandzic, N., Vorkapic-Furac J., Radojic Redovnikovic, I., 2013: Balance of glucosinolates content under Cd stress in two Brassica species, Plant Physiology and Biochemistry 63, 99-106 (2): 231-238**
- Jakovljević, T**, Radojčić Redovniković, I, Cvjetko, M, Bukovac, I, Sedak, M, Dokić, M, Bilandžić, N, 2015: The potential of poplar (*Populus nigra* var. *italica*) in the phytoremediation of cadmium. Šumarski list, vol. 139, no. 5-6
- Jakovljević, T, Marchetto, A, Berkovic, K, Rosa, J ; Potocki, A, 2013: Atmospheric deposition measurement in the lowland forest ecosystem of Pokupsko basin in Croatia. Periodicum Biologorum 115 (3): 363-370**
- Kucinic, M, Koren, T, Mihoci, I, Vukovic, M, , **Jakovljevic, T**, Jencic, S, 2013: Can spreading of the Geranium Bronze *Cacyreus marshalli* (Butler, 1898) (Insecta, Lepidoptera, Lycaenidae) in Croatia be assigned to climate change? Per. Bil. 115(3):429-433
- Jakovljevic, T**, Halambek, J, Radošević, K, Hanousek, K, Gradečki-Poštenjak, M, Gaurina Srček, V, Radojčić Redovniković, I, De Marco, A, (2015) The Potential Use of Indigobush (*Amorpha fruticosa* L.) as Natural Resource of Biologically Active Compounds. SEEFOR, vol. 6, br. 2, p. 171-178
- Jakovljević, T., Gradečki-Poštenjak, M., Radojčić Redovniković, I. (2011) Fiziološka, kemijska i antioksidativna svojstva svježeg i uskladištenog sjemena pinije (*Pinus pinea* L.), Šumar. list, 135 (7-8): 343-352**
- Jakovljević, T., Pánczél, G., Manninger, M., Potočić, N., Seletković, I., Dubravac, T., Gradečki-Poštenjak, M. (2010) Lišće obične bukve (*Fagus sylvatica* L.), referentni uzorak ICP foresta za međulaboratorijske usporedbe i njegova primjenjivost za određivanje ukupnog dušika i ugljika u lišću, Šumar. list, 134 (7-8): 361-370**
- Vrbek, B., Pilaš, I., Pemar, N., Dubravac, T., Bakšić, d., Medak J., **Jakovljević, T.** (2009) Heavy metals in lysimetric solution of pseudogley soils in the Kupa and Cerna river areas, Period. Biol, 111 (4): 419- 426
- Dubravac, T., Dekanić, S., Vrbek, B., Matošević, D., Roth, V., **Jakovljević, T.**, Zlatanov, T. (2009) Crown volume in forest stands of pedunculate oak and common hornbeam, Period. Biol, 111 (4): 479-485
- Jakovljević, T.**, Berković, K., Tartari, G., Vrbek, B., Vorkapić-Furac, J. (2009) Atmosferska taloženja u šumskim ekosustavima Europe i istraživanje novih metoda određivanja fosfora i amonijakalnog dušika u okviru ICP Forests programa, Šumar. list, 133(5-6): 267-278
- Seletković, I., Potočić, N., Jazbec, A., Čosić, T., **Jakovljević, T.**, 2009 Utjecaj različitih sjetvenih supstrata i vrsta sporotopivih gnojiva na rast i fiziološke parametre sadnica obične bukve (*Fagus sylvatica* L.) u rasadniku i nakon presadnje, Šumar. list 133 (9-10): 469-481

**Project reviewer**

2019 evaluation of project proposals call 2019, H2020-Bio-Based Industries Joint Undertaking, European Commission, Bruxelles, Belgium

2018 evaluation of submitted project periodic reports, Bio-Based Industries Joint Undertaking, European Commission, Bruxelles, Belgium

2016 evaluation of project proposals call 2016, Bio-Based Industries Joint Undertaking Call 2016, European Commission, Bruxelles, Belgium

2016 evaluation of project proposals ERA NET, Sumforest, Unit 315 European Research Affairs, Federal Office for Agriculture and Food, Bonn, Germany

2015 evaluation of project proposal, Non-profit organization Fondazione Cassa di Risparmio di Padova, Rovigo, Italy

2015 evaluation of project proposal submitted to Cost action "Life sciences"

2014 evaluation of project proposals for Ministry of Education, Youth and Sports, Check Republic, Proposals under the Czech-Norwegian Research Programme (CZ09), Norway grants

**Organization of scientific and expert meetings**

2020, 2018, 2016, 2014 Natural resources, green technology and sustainable development- GREEN2018, 2016, 2014“, supported by international organizations IUFRO, EFI, EBTA), International scientific and expert conferences, Chair of scientific committee and Co-chair of organization committee, Zagreb, Croatia

2019 14th CROLAB CONFERENCE, THE LABORATORY COMPETENCE, Co-chair of organization committee, Dubrovnik, Croatia

2018 14th CROLAB CONFERENCE, THE LABORATORY COMPETENCE, Co-chair of organization committee, Trakošćan, Croatia

2017 Joint Expert Panels meeting on Crown Condition, Soil & Soil Solution, Foliage and Litterfall, Deposition and QA/QC in Laboratories, member of organization committee, Zagreb, Croatia

2017 13th CROLAB CONFERENCE, THE LABORATORY COMPETENCE, Co-chair of organization committee, Poreč, Croatia

2016 FP1306 COST Action “Valorization of lignocellulosic biomass side streams for sustainable production of chemicals, materials & fuels using low environmental impact technologies, member of Scientific committee, Dubrovnik, Croatia

2016 12th CROLAB CONFERENCE, THE LABORATORY COMPETENCE, Co-chair of organization committee, Vinkovci, Croatia

2015 12th CROLAB CONFERENCE, THE LABORATORY COMPETENCE, Co-chair of organization committee, Zadar, Croatia

2013 4th ICP Forests Meeting of the Heads of the Laboratories, Chair of organization committee, Zadar, Croatia

**Guest lectures at international conferences and expert meetings**

2019 ICP Forests Joint Expert Panels Meeting on Crown Condition, Soil & Soil Solution, Foliage and Litterfall, Deposition and QA/QC in Labs, Brussels, Belgium- invited lecture

2018 European Biotechnology Congress 2018, Athens, Greece - invited lecture

2017 ICP Forests Joint Expert Panels Meeting on Crown Condition, Soil & Soil Solution, Foliage and Litterfall, Deposition and QA/QC in Labs, Zagreb, Croatia- invited lecture

2015 11th International conference Laboratory competence, Zadar, Croatia- invited lecture

2015 5th ICP Forests Meeting of the Heads of the Laboratories, Vienne, Austria-invited lecture