

## **Kratek opis usposabljanja mladega raziskovalca** (*Short description of the Young Researcher's training*)

1. Raziskovalna organizacija (*Research organisation*):

Univerza v Ljubljani, Biotehniška fakulteta

2. Ime, priimek in elektronski naslov mentorja (*Mentor's name, surname and email*):

Matevž Mihelič, matevz.mihelic@bf.uni-lj.si

3. Šifra in naziv raziskovalnega področja (*Research field*):

4.01.01 Gozd – gozdarstvo (*4.01.01 Forest – forestry*)

4. Kratek opis usposabljanja mladega raziskovalca (*Short description of the Young Researcher's training*):

Navedite tudi morebitne druge zahteve, vezane na usposabljanje mladega raziskovalca (npr. znanje tujih jezikov, izkušnje z laboratorijskim delom, potrebne licence za usposabljanje...).

*slo:*

Mladi raziskovalec se bo pridružil katedri za gozdno tehniko in ekonomiko Oddelka za gozdarstvo in obnovljive gozdne vire, ki se prvenstveno ukvarja s proučevanjem vpliva pridobivanja lesa na gozd in človeka. V svetovnem merilu je katedra znana predvsem po raziskavah s področja gozdnega dela, vplivov mehanizacije na okolje in človeka ter raziskavami s področja gozdarske politike in ekonomike.

Vplivi pridobivanja lesa na okolje so večplastni in vplivajo na atmosfero, rastline v gozdu in na gozdna tla ter na človeka, ki z mehanizacijo upravlja. Pri vplivih na gozdna tla je med manj poznanimi vplivi odnos med strojem in tlemi, saj je povezava zelo kompleksna in zahteva podrobnejše proučevanje. Kandidat bo v svoji nalogi sprva nadgradil obstoječe metodološko znanje o interakcijah med strojem in tlemi. Proučil bo, kako izbrani parametri stroja vplivajo na poškodovanost tal ob spremembi tipa in lastnosti tal. Končni cilj je proučiti, vpliv pridobivanja lesa na različne tipe in spremembe lastnosti tal ter vpliv teh sprememb na poškodovanost gozdnih tal.

Kandidat bo tekom usposabljanja pridobil nova znanja s področja geografskih informacijskih sistemov, tehnik ugotavljanja nosilnosti gozdnih tal, osnovnih tehnik gravimetrijskih in TDR analiz ter osnovne tehnike in postopke pri študiju dela in časa. Kandidatu bo omogočeno vključevanje v delo tujih raziskovalnih skupin, dostop do najnovejših metod s področja ter možnost predstavljanja rezultatov na mednarodnih sestankih in konferencah.

Od kandidata pričakujemo aktivno znanje angleškega jezika, smisel za delo v skupini ter veselje in predanost do znanstvenega dela. Prednost bodo imeli kandidati s predhodnimi izkušnjami v raziskovalnem okolju.

*eng:*

Young researcher will join the chair of forest technology and economics at the Department of forestry and renewable resources which deals with the investigation of the effects of forest harvesting onto environment and worker. The chair is world renowned for its achievements in the field of works studies, forest operations, and their influence onto environment and worker and forest policy and economics.

The influences of forest harvesting are complex, and influence the atmosphere, forest plants and forest soils as well as forest workers. The effects of forest harvesting onto forest soils are among least investigated. The young researcher will first upgrade the methodological knowledge regarding the interactions between soils and forest machines, and continue with studies of the relationship between selected machine parameters and damages to the soil in relation to their properties. The modelling approaches to soil properties and their responses to driving with forest mechanization will also be studied. As a final aim, the candidate will investigate the influence of forest harvesting onto different types and changes in soil properties and the influence of these parameters onto soil damages.

The candidate will gain new knowledge regarding geographical information systems, techniques of determination of soil bearing capacity, basic techniques of gravimetry and TDR analysis, and basic techniques and procedures of time and motion studies. The candidate will be involved in the work of foreign research groups, he will have access to novel methods and ability to present their work at international meetings and conferences.

We expect that the candidate has good English communication skills, team-work spirit and dedication to scientific work. Candidates with previous experiences in research are appreciated.