

Project proposal title (up to 200 characters): HEMOGLOBIN-BASED SPECTROSCOPY AND NONLINEAR IMAGING OF ERYTHROCYTES AND THEIR MEMBRANES AS EMERGING DIAGNOSTIC TOOL

Acronym (up to 20 characters): HEMMAGINERO

Name, father's/mother's name and family name: Mihajlo Dusan Radmilovic

Principal Investigator (PI) or Participant: Participant

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Name and address of the Scientific institution during the implementation of the Project and Scientific institution contact person: Institute of Physics Belgrade, University of Belgrade, Pregrevica 118, Belgrade, Serbia, contact: Aleksandar Krmpot, PhD, Associate research professor

BIOGRAPHY

- **Date and place of birth:** 06/08/1993, Belgrade, Serbia
- **Age:** 26
- **Citizenship:** Serbian
- **Research field and area/areas:** Biophotonics, Biophysics (Nonlinear optics, Image analysis, Biomedical optics, Time-resolved fluorescence spectroscopy, Computational biology)
- **Education:**
 - 01/10/2018-current Ph. D. in Biophotonics
 - 01/10/2012-07/09/2018 B.Sc and M. Sc. in Molecular biology and Physiology
University of Belgrade, Serbia, Faculty of Biology, M. Sc. Thesis title: "Analysis of ATP dependent current from *Phycomyces blakeesleanus* using Patch clamp method" (defended 7th September 2018), average grade 9.03 out of 10
- **Name, family name and title of the Ph.D. thesis supervisor**
- **Dates of appointments (researcher and scientific titles, i.e., equivalent titles in higher education)**
 - 16th April 2019 Young Researcher
- **Employment history (institutions and to/from dates up to the day of the proposal submission)**
 - 01/05/2019-current Young Researcher Institute of Physics, University of Belgrade, Serbia, Laboratory for Biophysics
- **List of selected publications (up to five most important publications in the research field of the Project)**
- **Citation number:**
- **Project history:**
- **Awards, prizes, etc.**
 - 2015-2016 Students' fellowship by the Ministry of Education of Republic of Serbia
- **Reviewing scientific journals and grants**
- **International scientific collaboration and mobility**
- **Skills and other facts relevant to the Project**
 - Developing and using image processing algorithms based on Kernel methods and DNN(deep neural networks) for cellular shape image classification
 - Mathematical and computational modeling of dynamical processes, such as cooperativity in binding oxygen to hemoglobin
- **Link to the Public RIS page (istrazivaci.gov.rs) and to another database of researchers if available**
 - https://www.researchgate.net/profile/Mihajlo_Radmilovic
- **Career breaks in research**