



**CROATIA-SERBIA COOPERATION IN SCIENCE AND TECHNOLOGY
2016-2017**

**Project: Molecular and Phytochemical Characterization by RAMAN Spectroscopy
of Economically Important Indigenous Medicinal Plants**

**Advanced Course
"Molecular Diversity Analysis and Phylogenetics "**

Aims

The course is designed to offer participants a fundamental understanding of the of the basic methods used in molecular diversity analysis and phylogenetics.

Date

Oct. 31st to Nov. 2nd, 2016
10 AM - 2 PM

Location

University of Belgrade, Faculty of Agriculture
Lecture room: 14, 5th Floor, New Building

Course outline

- Day 1: Descriptive statistics
- informativeness of a genetic marker, within-population diversity
- Genetic distance measures
- genetic distance at individual and population level
- Day 2: Multivariate statistics
- clustering, neighbour-joining method, bootstrap
- Genetic structure
- Wright's F-statistics, AMOVA, Bayesian model-based clustering methods
- Day 3: Molecular phylogeny
- distance-based methods, maximum parsimony
 - maximum likelihood, Bayesian inference

Lecturer

Professor Zlatko Šatović
University of Zagreb, Faculty of Agriculture, Zagreb, Croatia

Organizer

Professor Zora Dajić-Stevanović
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