

**The 2nd International Symposium
“VERA JOHANIDES” -
BIOTECHNOLOGY IN CROATIA BY 2020**



Zagreb, May 10-11, 2013

The Great Hall of the University of Zagreb, Zagreb, Trg maršala Tita 14

FRIDAY, May 10, 2013

8.00 – 9.00 Registration

Co-Chairpersons: Zlatko Kniewald, Peter Raspor, Srđan Novak

9.00 – 9.15 Opening Address

Welcome Remarks

Aleksa Bjeliš, Rector of the University of Zagreb

9.15 – 9.50 Plenary Lecture

Srđan Novak (CRO) and Ivo Friganović (CRO)

How to initiate a new phase of biotechnology
development in Croatia?

9.50 – 10.25 Plenary Lecture

- Peter Raspor (SLO) and Vito Turk (SLO)

Biotechnology at the door of Horizon 2020

10.25 – 10.40 Coffee Break

Green Biotechnology

Co-Chairpersons: Jagoda Šušković, Milena Mandić

10.40 – 11.05 Thematic Lecture

- Slaven Zjalić (CRO)

Aflatoxins fifty years after: A still unsolved challenge

11.05 – 11.20 Domagoj Šimić (CRO)

Green biotechnology in agriculture – food, biofuel and
recombinant gene technologies

11.20 – 11.35 Neža Čadež (SLO)

Culture collections for future: case yeasts from genetic to
metabolic diversity

11.35 – 11.50 Boris Kovač (SLO)

Amylolytic activity inhibition of low falling number flours

11.50 – 12.05 Matjaž Deželak (SLO)

Processing of a gluten-free fermented beverages based on
malted pseudocereals

12.05 – 12.20 Boris Šćulac (CRO)

Modernisation of production plant and production proceses
implemented in Zagrebačka pivovara in period from 1995
till 2013

Red Biotechnology

Co-Chairpersons: Dragan Primorac, Višnja Bačun-Družina, Hrvoje Petković

- 12.25 – 13.00 Plenary lecture:
Dragan Primorac (CRO)
Molecular genetics: The present and the future
- 13.00 – 13.25 Thematic Lecture
Hrvoje Petković (SLO)
New approaches in the development of antibiotics – The return of tetracyclines
- 13.25 – 13.40 Goran Gajski (CRO)
Safety assessment and antioxidant activity of sodium copper chlorophyllin
- 13.40 – 13.55 Aleš Podgornik (SLO)
Production of bacteriophages for human applications
- 13.55 – 14.30 Coffee and Lunch Break

Blue Biotechnology

Co-Chairpersons: Jasna Franekić, Dušica Vujaklija.

- 14.30 – 14.55 Thematic Lecture
Dušica Vujaklija (CRO)
Molecular study of dominant soil bacteria : Streptomyces in nature and application to biotechnology
- 14.55 – 15.10 Bruno Zelić (CRO)
Intensification of agro and food industry waste biodegradation process
- 15.10 – 15.25 Maja Borić (SLO)
Rheology of liquid media influences bacterial physiology
- 15.25 – 15.40 Jure Šumi (SLO)
Green roofs – The future of urban life

White Biotechnology

Co-Chairpersons: Božidar Šantek, Gerhart Braunegg (R AUS)

- 15.45 – 16.10 Thematic Lecture
Gerhart Braunegg (AUS)
Sustainable production of polyhydroxyalkanoates
- 16.10 – 16.25 Božidar Šantek (CRO)
Development of integrated bioprocess for ethanol production from sugar beet
- 16.25 – 16.40 Želimir Kurtanjek (CRO)
Systems biology and biotechnology
- 16.40 – 16.55 Anita Slavica (CRO)
Advances in biotechnological processes for lactic acid production
- 16.55 – 17.10 Višnja Gaurina Srček (CRO)
Aquaculture and fish cell technology
- 17.10 – 17.30 Presentation of the new book „Bioprocess Engineering“ by Peter Raspor (SLO), reviewer
- 17.30 – 18.00 Round Table – Co-Chairpersons' Reports and Discussion
- 18.00 – 19.30 Get Together Party**

SATURDAY, May 11, 2013

Co-Chairpersons: Vladimir Mrša, Blaženka Kos

- 9.00 – 9.45 Plenary Lecture
Vladimir Mrša (CRO)
Higher education for the requirements of industrial production – The European experience and Croatian challenges
- 9.50 – 10.00 Martina Tijardović (CRO)
Overview of the past and the look on the future of forest reproductive material production in Croatia
- 10.00 – 10.10 Ivana Bošnjak (CRO)
Toxicity of bisphenol A (BPA) on urchin embryo gene expression and morphology
- 10.10 – 10.20 Lucija Nuskern (CRO)
Removal of heavy metals and phosphates from wastewater by bioparticles
- 10.20 – 10.30 Rok Gaber (SLO)
DNA guided assembly line
- 10.30 – 10.40 Teuta Murati (CRO)
Endocrine disruptors and animal-free toxicology
- 10.40 – 10.50 Ana Bielen (CRO)
Scanning for genes and encoding GDS(L) hydrolases in actinobacteria from wide diversity of ecological niches
- 10.50 – 11.00 Mario Franić (CRO)
Phytoextraction of cadmium using recombinant DNA technology in maize
- 11.00 – 11.20 Coffee Break

Co-Chairpersons: Damir Ježek, Jasna Beganović

- 11.20 – 11.30 Jasna Beganović (CRO)
Role of S-layer proteins in probiotic activity of *Lactobacillus* strains
- 11.30 – 11.40 Ana Marija Štafa (CRO)
Genetic side effects during gene replacement in yeast *Sacharomyces cerevisiae*
- 11.40 – 11.50 Etjen Bizaj (SLO)
Development and application of *Saccharomyces* interspecies hybrids in wine industry
- 11.50 – 12.00 Dušan Goranovič (SLO)
Regulation of biosynthesis of immunosuppressant FK506 (tacrolimus) by *Streptomyces tsukubaensis*
- 12.00 – 12.10 Mojca Brložnik (SLO)
Identification of genetic variants responsible for biotechnologically important traits and the design of new generation industrial yeast strains
- 12.10 – 12.20 Luka Ausec (SLO)
Mining bacterial genomes for laccases
- 12.20 – 12.30 Bojan Žunar (CRO)
Genetic transformation of yeast *Dekkera/Brettanomyces bruxellensis*.
- 12.30 – 12.40 Antonio Starčević (CRO)
Mass spectrometry-based clinical proteomics
- 12.40 – 12.50 Ana Butorac (CRO)
Evolution of bacterial populations: The metabolic engineering of *Lactobacillus brevis*
- 12.50 – 13.00 Q.D. Nguyen (Hungary)

Enhancement of efficiency of ethanol production from
Jerusalem artichoke

13.00 – 13.30 Closing Remarks and Announcement for the 3rd
3rd International Symposium „Vera Johanides“ in 2015 –
Biotechnology and Forestry Complex in Croatia