**Izvještaj o radu Odjela bioprocesnog inženjerstva u 2016. godini**

Odjel bioprocesnog inženjerstva usvojio je na početku svojeg mandata plan i program rada za razdoblje od 2013. – 2017. godine. U proteklom razdoblju, Predsjedništvu Akademije tehničkih znanosti Hrvatske redovito je krajem godine dostavljeno izvješće o aktivnostima u tekućoj godini. Početkom svake naredne godine dostavljen je plan za buduće godišnje razdoblje.

Obzirom, da je tek početak mjeseca listopada u ovom izvješću su navedene neke do sada izvršene aktivnosti, a cjelovito izvješće biti će dostavljeno poslije naredne sjednice Odjela bioprocesnog inženjerstva, koja će biti održana krajem mjeseca studenoga ove godine.

Navodim najznačajnije aktivnosti i postignuća u kojima su sudjelovali članice i članovi Odjela:

1. Na 31. godišnjoj Skupštini HATZ održanoj 11. svibnja 2016. godine:

Predsjedništvo Akademije tehničkih znanosti Hrvatske je, na osnovi čl. 32 i 40 Statuta i čl. 4 Pravilnika o nagradama i priznanjima HATZ-a, prihvatilo prijedlog Uprave i Odbora za nagrade i donijelo odluku da se medalje Akademije dodijele zaslužnim članovima HATZ-a za poseban doprinos radu Akademije.

dodijeljeno i:

Prof. dr. sc. Jasna Kniewald, Emeritus Akademije, Odjel bioprocesnog inženjerstva

Na osnovi čl. 17 Statuta i čl. 3 Pravilnika o izboru u članstvo HATZ-a, članovi Akademije unaprijeđeni su u nove emerituse  Akademije i to:

Prof. dr. sc. Branko Tripalo - Odjel bioprocesnog inženjerstva

Prof. dr. sc. Žaneta Ugarčić - Odjel bioprocesnog inženjerstva

Na osnovi čl. 17 Statuta i čl. 3 i 7 Pravilnika o izboru u članstvo HATZ-a suradnici Akademije unaprijeđeni su u nove članove Akademije i to:

Prof. dr. sc. Vladimir Mrša - Odjel bioprocesnog inženjerstva

Predsjedništvo je, na osnovi čl. 32 i 40 Statuta i čl. 5, 6, 7 i 18 Pravilnika o nagradama i priznanjima, prihvatilo prijedlog Odbora za nagrade i donijelo odluku o dobitnicima nagrada Akademije za 2015. godinu i to:

Prof. emer. dr. sc. Zlatko Kniewald   Nagrada za životno djelo ˝Moć znanja˝ za 2015. Medalja i diploma

Prof. dr. sc. Damir Ježek                     Godišnja nagrada “Rikard Podhorsky” za 2015. Diploma

1. Kao gost urednik prof. emer. Zlatko Kniewald u suradnji s članovima Odjela bioprocesnog inženjerstva dr.sc. Milenom Mandić, prof. dr.sc. Dragom Šubarićem i prof. dr.sc. Vladimirom Mršom pripremili su, pronašli donatore i  objavili u tiskanom obliku, a mogu se preuzeti  na www.hatz.hr i u elektroničkom obliku:

[„Tehničke znanosti“ Vol. 20(1) 2016](http://www2.hatz.hr/wp-content/uploads/2016/09/Tehnicke_znanosti_2016_za_web.pdf)

[„Engineering power“  Vol. 11(2) 2016](http://www2.hatz.hr/wp-content/uploads/2016/09/Engineering_Power_2016_za_web.pdf)

To su najnovije publikacije Akademije tehničkih znanosti Hrvatske koje su posvećene obilježavanju 40. obljetnice smrti prvog hrvatskog dobitnika Nobelove nagrade prof. dr.sc. Lavoslava Ružičke. Promocija navedenih publikacija održana je tijekom otvaranja 16. Ružičkinih dana u Vukovaru 22. rujna 2016. godine. Svim sudionicima skupa i počasnim gostima podijeljeni su primjerci publikacija.

1. 21–23. rujna 2016. u Vukovaru su uz pokroviteljstvo HAZU i potporu HATZ održani XVI. Ružičkini dani. Dopredsjednik Znanstveno-organizacijskog odbora bio je prof. dr.sc. Drago Šubarić, a član prof. dr.sc. Jurislav Babić.
2. 18. ožujka 2016. godine održan je pod visokim pokroviteljstvom predsjednice Republike Hrvatske gospođe Kolinde Grabar-Kitarović, a u supokroviteljstvu HATZ i Ministarstva poljprivrede RH II. međunarodni i VI. hrvatski znanstveno-stručni skup VODA ZA SVE. Član Organizacijskog odbora bio je član Odjela prof. dr.sc. Drago Šubarić.
3. Za vrijeme održavanja AMBIENTE na Zagrebačkom velesajmu 13. – 16. listopada godine , održano je 14. listopada 2016. u suorganizaciji HATZ 27. Međunarodno savjetovanje – II dio tema “Primjena znanosti u drvoprerađivačkom sektoru” uz sudjelovanje članova Odjela iz Drvnotehnološkog odsjeka Šumarskog fakulteta Sveučilišta u Zagrebu. Dugogodišnju značajnu ulogu u tim aktivnostima u organizaciji ovog savjetovanja ima član Odjela prof. dr.sc. Ivica Grbac.
4. listopada 2016. godine u Osijeku je održan 9. međunarodni znanstveno-stručni skup  HRANOM DO ZDRAVLJA. Predsjedavajući skupa bio je prof. dr.sc. Drago Šubarić. Pozdravne riječi sudionicima Skupa u svojstvu članice Predsjedništva i izaslanice predsjednika HATZ-a je uputila prof.  dr. sc. Milena Mandić.
5. 10–11. lipnja 2016. godine u Zagrebu je održan 1. međunarodni kongres Hrvatskog društva nutricionista i dijetetičara. Članice i članovi Znanstvenog odbora iz Odjela bili su: prof. emer. dr.sc. Damir Karlović, prof. dr.sc. Milena Mandić i prof. dr.sc. Damir Ježek.
6. Objavljeni su broj 1. i broj 2. (vol. 54.) časopisa Food Technology and Biotechnology, čiji je urednik prof. dr.sc. Vladimir Mrša, član Nadzornog odbora prof. emer. dr.sc. Tomislav Lovrić, a u Uređivačkom odboru sudjeluju: prof. dr.sc. Predrag Horvat, prof. dr.sc. Damir Ježek, prof. dr.sc. Vesna Lelas, prof. dr.sc. Peter Raspor, prof. dr.sc. Božidar Šantek i prof. dr.sc. Jagoda Šušković.
7. Objavljen je vol. 8. Croatian Journal of Food Science and Technology, čiji je urednik prof. dr.sc. Jurislav Babić, a članovi Uređivačkog odbora su: prof. dr.sc. Zoran Hreceg, prof. dr.sc. Damir Ježek i prof. dr.sc. Drago Šubarić.
8. Šumarski list ove je godine obilježio 140 godina izlaženja. Član Uređivačkog savjeta je prof. dr.sc. Ivica Grbac.
9. Europsko debatno natjecanje mladih održano je u Vijećnici HGK, 29.4.2016. Na osnovu imenovanja Uprave HATZ, kao član žirija sudjelovao je prof. emer. dr.sc. Zlatko Kniewald.
10. dr. sc. Milena Mandić nastavila je tijekom 2016. godine aktivno raditi u Uredničkom vijeću Hrvatske tehničke enciklopedije.
11. Sa zadovoljstvom možemo utvrditi da svi članovi Odjela redovito i bez zaostataka podmiruju svoje članske obveze.
12. Prema usvojenom četverogodišnjem planu možemo sa zadovoljstvom utvditi da su članovi Odjela osigurali potrebna sredstva od donatora i za pripremu i tisak godišnjaka HATZ 2013. kao i za Tehničke znanosti vol 20(1) 2016 i Engineering Power vol 11(2) 2016.

**IZVJEŠĆE O AKTIVNOSTIMA U 2016. GODINI**

**POJEDINAČNI PRILOZI**

**ČLANICA I ČLANOVA ODJELA BIOPROCESNOG INŽENJERSTVA**

**Prof. emer. dr.sc. Zlatko Kniewald, Emeritus Akademije**

1. Tajnik Odjela bioprocesnog inženjerstva
2. Član Predsjedništva Akademije tehničkih znanosti Hrvatske
3. Dobitnik Nagrade za životno djelo „Moć znanja“, medalje i diplome Akademije tehničkih znanosti Hrvatske
4. Gost urednik Engineering Power Bulletin of the Croatian Academy of Engineering, vol. 11(2) 2016.
5. Gost urednik Tehničke znanosti Glasnika Akademije tehničkih znanosti Hrvatske, vol. 20(1) 2016.
6. Osigurao potrebna sredstva donatora za pokriće troškova pripreme i tiska Engineering Power vol. 11(2) 2016. i Tehničke znanosti vol. 20(1) 2016,
7. Izabran za člana „College of Expert Reviewers for a three-year period (from 20 October 2016 to 19 October 2019)“ međunarodne znanstvene institucije, (jedna recenzija u tijeku)
8. Izaslanik predsjednika HATZ na 16. Ružičkinim danima u Vukovaru – pozdravna riječ i prezentacija Engineering Power – Tehničke znanosti posvećene 40 godina od smrti nobelovca prof. Lavoslava Ružičke,
9. Izaslanik predsjednika HATZ na obilježavanju 20. godišnjice Biotehničke zaklade PBF-a u auli Rektorata u Zagrebu,
10. Sudjelovanje u emisiji „Društvena mreža – Znanstveni četvrtak“ prvi program HRT , tema 20 godina Biotehničke zaklade PBF-a,
11. Izaslanik predsjednika HATZ na 22. sastanku Poslovno-znanstvenog kluba u HGK, koji je održan 11.2016.,
12. Član žirija na Europskom debatnom natjecanju mladih u HGK, 29.4.2016.Imenovan od Uprave HATZ, U nastavku obavijest HGK:

“Europsko debatno natjecanje, informacija o rezultatima završnog natjecanja, dostavlja se: Poštovani članovi žirija, Kao članu stručnog žirija na Europskom debatnom natjecanju mladih održanom 29. travnja o.g. u Vijećnici HGK u Zagrebu, javljam da je završna debata održane od 2. - 4. listopada o.g. u Budimpešti. Pobjednici i hrvatski predstavnici u Budimpešti, svi troje, izabrani su među 10 najboljih govornika. Odradili ste dobar posao i tako pomogli da dostojno promoviramo Hrvatsku i na ovom natjecanju. Budući da su organizatori najavili nastavak ovog projekta, nadam se budućoj suradnji.“

1. Održao promociju Engineering Power – Tehničke znanosti kao gost urednik na tribini u Akademiji medicinskih znanosti Hrvatske 10. 2016.
2. Izaslanik predsjednika Akademije tehničkih znanosti Hrvatske, član Predsjedništva Akademije i tajnik Odjela bioprocesnog inženjerstva Akademije, na 22. sastanku Poslovno-znanstvenog kluba, koji je održan 15.11.2016. u HGK u Zagrebu.
3. Objavio rad u Annual 2015 Croatian Academy of Engineering, u skupini 3. Selection of Previously Published Papers by the Members of the Croatian Academy of Engineering, p.257-278. (ISSN 1332-3482, Zagreb 2016.). Znanstveni rad “Demasculinization and feminization of male gonads by atrazine: Consistent effects across vertebrate classes” objavljen je u The Journal of Steroid Biochemistry and Molecular Biology 127, 64-73 (2011). IF časopisa 4,05, a od objavljivanja do 1.prosinca 2016. citiran je 91 puta. Prema podacima baze ResearchGate radovi prof. emer. Zlatka Kniewald do 1. prosinca 2016. godine citirani su 788 puta.

**Prof. dr. sc. Milena Mandić**

1. Zamjenica tajnika Odjela bioprocesnog inženjerstva Akademije tehničkih znanosti Hrvatske Redoviti dolazak i aktivno sudjelovanje u radu OBI;
2. Recenzije godišnjih izvješća znanstvenih projekata za europsku znanstvenu ustanovu (3 recenzije);
3. Član Znanstvenog odbora 1. kongresa Hrvatskog društva nutricionista i dijetetičara, Zagreb 10.-11. lipnja 2016., hotel Westin
4. Izvještaj o kandidatu za nagradu HATZ-a za 2015.
5. Sudjelovanje na skupovima, sastancima i predavanjima od javnog interesa (u organizaciji HDKI-a, a uz obavijest HATZ-a):
6. dr. sc. Valerije Vrček: Lijekovi u okolišu (27/1/16)
7. dr. sc. Nikola Kezić: Pčele u detekciji zagađivala u okolišu (24/2/16)
8. Rad u publikaciji Akademije tehničkih znanosti Hrvatske koji je posvećene obilježavanju 40 obljetnice smrti prvog hrvatskog dobitnika Nobelove nagrade prof. dr.sc. Lavoslavu Ružički. Promocija navedenih publikacija održana je tijekom otvaranja 16. Ružičkinih dana u Vukovaru 22. rujna 2016. godine. Svim sudionicima skupa i počasnim gostima podijeljeni su primjerci publikacija, a s radom:
9. Milena L. Mandić, Srećko Tomas i Drago Šubarić: Od prvih Ružičkinih dana do šesnaestih Ružičkinih dana, Tehničke znanosti. 20(1) 2016.;
10. Milena L. Mandić, Srećko Tomas i Drago Šubarić: From the First Ružička Days to the Sixteenth Ružička Days. Engineering power. 11(2) 2016;
11. U ime HATZ-a kao suorganizatora pozdravila sudionike 9. međunarodnog znanstveno-stručnog skupa Hranom do zdravlja, 13. listopada 2016., Osijek;
12. Sudjelovanje na otkrivanju biste prof. dr. sc. Vatroslava Lopašića, 17. listopada 2016. Zagreb;
13. Tijekom 2016. godine nastavila aktivno raditi u Uredničkom vijeću Hrvatske tehničke enciklopedije.
14. prisustvovala godišnjoj skupštini HATZ-a.

**Prof. dr. sc. Jagoda Šušković**

a) Kao voditeljica Biotehničkog centra HATZ pripremila je program rada i izvješće o radu Biotehničkog centra.

b) Podpredsjednica je Matičnog odbora za područje biotehničkih znanosti

c) Odobren odlazak na „sabbatical“, odnosno studijsku godinu 2016./2017. pa je u 2016. godini obnašala funkcije na Prehrambeno-biotehnološkom fakultetu Sveučilišta u Zagrebu do rujna 2016.:

* pročelnice Laboratorija za tehnologiju antibiotika, enzima, probiotika i starter kultura
* voditeljice poslijediplomskog doktorskog studija “Biotehnologija i Bioprocesno inženjerstvo, prehrambena tehnologija i nutricionizam”
* predsjednice Odbora za poslijediplomske studije

d) Voditeljica je projekta s tvrtkom Podravka d.d.: Razvoj probiotičkih proizvoda Podravke na bazi žitarica (2013.-2017.)

e) Autorica poglavlja u sveučilišnom priručniku „Praktikum za vježbe iz opće mikrobiologije“ (izdavač: Hrvatsko mikrobiološko društvo, 2016.)

f) Kao voditeljica doktorskog studija PBF-a, bila je odgovorna za postupak provođenja Reakreditacije doktorskog studija „Biotehnologija i bioprocesno inženjerstvo, prehrambena tehnologija i nutricionizam“ Prehrambeno-biotehnološkog fakulteta Sveučilišta u Zagrebu, pred Stručnim povjerenstvom (dana 06. lipnja 2016.) u sastavu: Professor Claes Niklasson, Chalmers University of Technology, Kraljevina Švedska; Professor Colette Fagan, University of Reading, Ujedinjena Kraljevina Velike Britanije i Sjeverne Irske; Professor Susanne Knøchel, Faculty of Science University of Copenhagen, Kraljevina Danska; M.Sc. Kathirvel Alagesan, doktorand, Max Planck Institute of Colloids and Interfaces, Savezna Republika Njemačka.

g) Održala je pozvano predavanje na javnoj tribini organiziranoj u okviru projekta "BioDinaMik: Praćenje biodinamike mješovitih kultura pomoću novorazvijene metode uzimanja otiska prsta" kojeg je nositelj Prehrambeno-biotehnološki fakultet Sveučilišta u Zagrebu, financiranog u okviru Europskog socijalnog fonda kojeg sufinancira Europska Unija. Naslov predavanja „Crijevna mikrobiota - probiotički i prebiotički koncept“ (Zagreb, Prehrambeno-biotehnološki fakultet, 12.srpnja 2016.)

h) Održala je pozvano predavanje na sastanku Sekcije za primijenjenu mikrobiologiju Hrvatskog mikrobiološkog društva povodom Europskog dana svjesnosti o antibioticima (18. studeni). Naslov predavanja „Važnost kontinuiranog istraživanja mikrobne proizvodnje antibiotika“ (Zagreb, Prehrambeno-biotehnološki fakultet, 18. studenog 2016.)

i) Sudjelovanja na znanstvenim skupovima u 2016.godini:

* Uroić, Ksenija; Marijanović, Martina; Durgo, Ksenija; Novak, Jasna; Leboš Pavunc, Andreja; Kos, Blaženka; Šušković, Jagoda „Adhesion properties of probiotic S-layer-expressing Lactobacillus strains“ The 3rd Microbiome R&D and Business Collaboration Forum London, Ujedinjeno Kraljevstvo, 10-11.04.2016.
* Uroić, Ksenija; Marijanović Martina; Durgo, Ksenija; Novak, Jasna; Leboš Pavunc, Andreja; Kos, Blaženka; Šušković, Jagoda ”S-layer proteins and bacteriocins of probiotic Lactobacillus strains” 6th Croatian Congress of Microbiology with International Participation, Sveti Martin na Muri, Hrvatska, 15.-18.6.2016.
* Martina Marijanović, Ksenija Uroić, Ksenija Durgo, Jasna Novak, Andreja Leboš Pavunc, Katarina Zorić, Jagoda Šušković, Blaženka Kos ”S-layer-expressing Lactobacillus strains in competitive exclusion of pathogens” Conference MiCRObiota Incognita Krk, Hrvatska, 26-28.9.2016.
* Ksenija Uroić, Polona Jamnik, Martina Marijanović, Jasna Novak, Andreja Leboš Pavunc, Saša Kazazić, Snježana Kazazić, Hrvoje Petković, Jagoda Šušković, Blaženka Kos ”Surface proteins of probiotic strain Lactobacillus paraplantarum SF9B: Effect of simulated conditions of the gastrointestinal tract” Power of Microbes in Industry and Environment 2016˝ Krk, Hrvatska 28.9 – 01. 10. 2016.
* Uroić, Ksenija; Kos, Blaženka; Novak, Jasna; Leboš Pavunc, Andreja; Marijanović, Martina; Šušković, Jagoda, Tema: Probiotičke bakterije – prijateljsko lice primjenjene mikrobiologije 14. Festival znanosti Zagreb i Varaždin, Hrvatska, 18-24.04.2016.
* Ksenija Uroić, Martina Marijanović, Jasna Novak, Andreja Leboš Pavunc, Ksenija Durgo, Bojana Bogovič Matijašić, Blaženka Kos, Jagoda Šušković. Probiotic potential of autochthonous microbiota in dried and smoked fresh cheeses. 42nd Croatian dairy experts symposium with international participation, Lovran, Croatia, 9.-12.11.2016. (Organizer: Croatian Dairy Union)

j) Popis znanstvenih radova objavljenih u 2016. godini:

* K. Uroić, J. Novak, U. Hynönen, T.E. Pietilä, A. Leboš Pavunc, R. Kant, B. Kos, A. Palva, J. Šušković (2016) The role of S-layer in adhesive and immunomodulating properties of probiotic starter culture Lactobacillus brevis D6 isolated from artisanal smoked fresh cheese. LWT - Food Science and Technology 69, 623-632.
* R. Kant, K. Uroić, U. Hynönen, B. Kos, J. Šušković, A. Palva (2016) Genome sequence of Lactobacillus brevis strain D6, isolated from smoked fresh cheese. Genome Announcement 4(2).
* H. Šuranská, P. Raspor, K. Uroić, N. Golić, B. Kos, S. Mihajlović, J. Begović, J. Šušković, Lj. Topisirović, N. Čadež (2016) Characterisation of the yeast and mould biota in traditional white pickled cheeses by culture-dependent and independent molecular techniques. Folia Microbiologica 61(6), 455–463.

**Prof. dr. sc. Vladimir Jambreković**

1. Kao gostujući profesor održao predavanja za studente i jedno predavanje za zaposlenike na SS. Cyril i Methodius University in Skopje, Faculty of Design and Technologies Furniture and Interior (02. – 06. 05. 2016.).
2. Na 10. redovitoj Sjednici Senata Sveučilišta u Zagrebu, održanoj 19. 05. 2016. potvrđen za dekana Šumarskoga fakulteta za dvogodišnje mandatno razdoblje akad. god. 2016./2017. i 2017./2018.
3. Mentor tri diplomska rada na diplomskim studijima i četiri završna rada na preddiplomskim studijima.
4. Predsjednik Programskog odbora Dana kvalitete Šumarskog fakulteta (31. 03. 2016.).
5. Voditelj Potpore znanstvenim istraživanjima Sveučilišta u Zagrebu pod naslovom Povećanje industrijskog potencijala drva crne johe (Alnus glutinosa) i bijele vrbe (Salix alba) kroz karakterizaciju i selektivnu izolaciju kemijskih komponenti (12. 07. 2016.)
6. Sudionik Stručnog skupa povodom obilježavanja 20. godina dabra u Hrvatskoj i godine ŠUMA I VODA, 20. 04. 2016., Šumarski fakultet, održao predavanje pod naslovom Hrvatska komora inženjera šumarstva i drvne tehnologije (HKIŠDT) 2006. – 2016.
7. Član Programskog odbora i Organizacijskog odbora “ 27th International Conference on Wood Science and Technology (ICWST) (13. - 14. 10. 2016.).
8. Predsjednik Povjerenstva za izobrazbu i predsjednik Organizacijskog odbora šestog edukacijskog seminara prvog stupnja (osnovna izobrazba) pod nazivom Primjena međunarodnog standarda ISPM 15 u skladu s Pravilnikom o fitosanitarnim zahtjevima kojima mora udovoljavati drveni materijal za pakiranje u međunarodnom prometu (NN 89/14), održan 22. 03. 2016. na Šumarskom fakultetu.
9. Predsjednik Povjerenstva za izobrazbu, predsjednik Organizacijskog odbora i predavač pet tema šestog edukacijskog seminara drugog stupnja (napredna izobrazba) pod nazivom Primjena međunarodnog standarda ISPM 15 u skladu s Pravilnikom o fitosanitarnim zahtjevima kojima mora udovoljavati drveni materijal za pakiranje u međunarodnom prometu (NN 89/14), održan 30. 06. 2016. na Šumarskom fakultetu.
10. Član Organizacijskog odbora međunarodne znanstvene konferencije "Natural Resources, Green Technology and Sustainable Developement –GREEN/2", Zagreb 05. - 07. 10. 2016.
11. Član Nadzornog odbora trgovačkog društva PANONSKI DRVNI CENTAR KOMPETENCIJA d.o.o.,  Virovitica (07. 07. 2016.)

**Prof. dr. sc. Ivica Grbac**

1. Ambienta 2016. 27. Međunarodna znanstvena konferencija IMPLEMENTATION OF WOOD SCIENCE IN WOODWORKING SECTOR, Zagreb 13. – 14. 10. 2016.. HATZ suorganizator. Prof. dr. sc. Ivica Grbac bio je predsjednik Organizacijskog odbora i glavni urednik publiciranog Zbornika radova.
2. Zlatna medalja za inovaciju „Uređaj za ispitivanje pokretnih dijelova namještaja“, 14. Međunarodna izložba inovacija, 20.-22.listopada 2016. (prof. dr. sc. Ivica Grbac dobitnik)
3. Srebrna medalja za inovaciju „Uređaj za ispitivanje pokretnih dijelova namještaja“, 65. međunarodni sajam inovacija INNOVA 2016, 17.-19. studenoga 2016. u Bruxellesu, odličje i priznanje Nacionalne uprave za znanstvena istraživanja i inovacije rumunjskog Ministarstva obrazovanja i znanstvenih istraživanja te posebna nagrada za izum od Rumunjske udruge za nekonvencionalne tehnologije (prof. dr. sc. Ivica Grbac dobitnik).

**Prof. dr. sc. Vlatka Jirouš Rajković**

1. Miklečić, Josip; Jirouš-Rajković, Vlatka: Influence of Thermal Modification on Surface Properties and Chemical Composition of Beech Wood (Fagus sylvatica L.). // Drvna industrija : znanstveno-stručni časopis za pitanja drvne tehnologije. 67 (2016) , 1; 65-71 (članak, znanstveni.)
2. Miklečić, Josip; Jirouš-Rajković, Vlatka; Šaško, Marko: The impact of sanding and curing time on quality of coated wood surface // međunarodna konferencija Implementation of wood science in woodworking sector, zbornik radova / Grbac, Ivica (ur.), Zagreb : Šumarski fakultet Sveučilišta u Zagrebu, 2016. 153-158.
3. Tolar, F.; Petrič,, M; Jirouš- Rajković, V: Dimenzijska stabilnost in obstojnost premaznih sistemov za večnamensko pohištvo, prihvaćen za objavu u časopisu Ventil, stručni rad
4. Recenzirala 4 znanstvena rada za časopis Drvna industrija čija sam članica Uredničkog odbora
5. Recenzirala dva bilateralna projekta za potrebe Ministarstva znanosti, obrazovanja i sporta
6. Prijavila projekt Izgradnja drvnotehnološkog nazivlja (DRVNA) na natječaj Hrvatske zaklade za znanost raspisan u travnju 2016. Projektni prijedlog prihvaćen je za financiranje u trajanju od 1. 10. 2016. do 30. 9. 2017.

**Prof. dr.sc. Jasna Kniewald, Emeritus Akademije**

1. Sudjelovanje u radu Znanstvenog vijeća HATZ-a kao član i predstavnica Odjela za biokemijsko inženjerstvo.
2. Objavljen rad u Annual 2015 Croatian Academy of Engineering, u skupini 3. Selection of Previously Published Papers by the Members of the Croatian Academy of Engineering, p.257-278. Znanstveni rad “Demasculinization and feminization of male gonads by atrazine: Consistent effects across vertebrate classes” objavljen je u The Journal of Steroid Biochemistry and Molecular Biology 127, 64-73 (2011).  IF časopisa 4,05, a od objavljivanja do 1.prosinca 2016. citiran je 91 puta. Prema podacima baze ResearchGate radovi prof. Jasne Kniewald do 1. prosinca 2016. godine citirani su 607 puta.
3. Medalja Akademije dodijeljena za poseban doprinos radu Akademije: Prof. dr. sc. Jasna Kniewald, Emeritus Akademije, Odjel bioprocesnog inženjerstva
4. Znanstveni radovi objavljeni u 2016. godini:
* Teuta Murati, Branimir Šimić, Jelka Pleadin, Maja Vukmirović, Marina Miletić, Ksenija Durgo, Jasna Kniewald, Ivana Kmetič: Reduced cytotoxicity in PCB-exposed Chinese Hamster Ovary (CHO) cells pretreated with vitamin E. // Food and Chemical Toxicology (2016).  http://dx-doi.org/10.1016/j.fct.2016.11.014

**Prof. dr.sc.dr.h.c. Gordana Kralik, Emeritus Akademije**

Ministarstvo znanosti, obrazovanja i sporta je  6. studenoga 2015. ustrojilo Znanstveni centar izvrsnosti za personaliziranu brigu  zdravlju (ZCI), čija će se istraživanja provoditi od 2015.-2020. godine.  ZCI se sastoji od 2 istraživačke jedinice:

a) Istraživačka jedinica „Istraživanje u glikoznanosti“ (Farmaceutsko-biokemijski fakultet Sveučilišta u Zagrebu, Prirodoslovno-matematički fakultet Sveučilišta u Zagrebu, Dječja bolnica Srebrnjak, Specijalna bolnica Sveta Katarina, Genos.d.d., Medicinski fakultet Sveučilišta u Splitu.

b) Istraživačka jedinica „Istraživanje, proizvodnja i medicinsko ispitivanje funkcionalne hrane“ (Sveučilište Josipa Kurja Strossmayera u Osijeku: Poljoprivredni fakultet u Osijeku, Medicinski fakultet, Odjel za kemiju).

Prof. Kralik voditeljica je istraživačke skupine na zadacima „Obogaćivanje jaja funkcionalnim sastojcima“ i „Obogaćivanje pilećeg mesa funkcionalnim sastojcima“ u sklopu istraživačke jedinice „Istraživanje, proizvodnja i medicinsko ispitivanje funkcionalne hrane“, a rezultate svojih istraživanja prof. Kralik prezentirala je na nekoliko međunarodnih skupova i u međunarodnim časopisima.

Popis publiciranih radova u 2015. i 2016.:

1. Kralik Z., Kralik G., Mahmutović H. (2016): Pokazatelji tehnološke kvalitete mišićnog tkiva prsa brojlerskih pilića i pačića. Proceedings of XVII International Feed Technology Symposium (ed.: Klević Jovanka, Čolović Radmilo, Vukmirović Đuro, ISBN: 978-86-7994-051-3), 25-27 December 2016, Novi Sad, Serbia, p. 74-78.
2. Grčević M., Kralik Z., Kralik G., Galović D., Pavić M. (2016): The effect of lutein additives on biochemical parameters in blood of laying hens. Poljoprivreda, 22(1): 34-38.
3. Kralik G., Kralik Z., Grčević M. (2016): Funkcionalni proizvodi i zašto ih konzumirati. Zbornik sažetaka 23. međunarodnog savjetovanja „Krmiva 2016“, Opatija, 01.-03.06., str. 9-10.
4. Grčević M., Kralik Z., Kralik G., Radišić Ž., Pavić M. (2016): Production characteristics and some biochemical parameters in blood of laying hens fed mixtures with added lutein. Proceedings of 51st Croatian and 11th International Symposium on Agriculture (Ed.: Pospišil, Milan; Vnučec, Ivan, ISBN 978-953-7878-50-4, Opatija, Hrvatska, 15-18 Februar 2016, p. 329-333 (poster, međunarodna recenzija, objavljeni rad, znanstveni).
5. Kralik G., Sak-Bosnar M., Kralik Z., Galović O., Grčević M. (2015): Effect of dietary β-alanine and L-histidine on concentration of carnosine and oxidative stability of chicken meat. Poljoprivreda, 21(1, Suppl.): 190-194. CAB Direct Abstract, RN: 20153370040
6. Kralik G., Kralik Z., Grčević M., Kralik I., Hanžek D. (2015): The effect of feeding laying hen conventional and omega-3 enriched diet on fatty acid profiles in egg yolk lipids. Journal of Agricultural Science and Technology B, 5: 506-511.
7. Kralik G., Kralik Z., Đurkin I., Škrtić Z., Kralik, I. (2015): Effect of dietary histidine, hybrid line and gender on chicken meat quality and concentration of carnosine. Journal of Poultry Science, 52(4): 295-303. Web of Science Categories: Agriculture, Dairy & Animal Science, AN: WOS:000363353400008

Prof. Kralik je u akademskoj šk.godini 2015./2016. obavljala konzultacije i ispite.kao koordinator obveznog modula “Biometrika u zootehnici” i izbornih modula “Svinjogojstvo-odabrana poglavlja” te “Peradarstvo-odabrana poglavlja”, koji se slušaju na sveučilišnom poslijediplomskom doktorskom studiju “Poljoprivredne znanosti, smjer “Stočarstvo”

**Prof. dr. sc. Jurislav Babić**

1. Jozinović, Antun; Šubarić, Drago; Ačkar, Đurđica; Babić, Jurislav; Miličević, Borislav: Influence of spelt flour addition on properties of extruded products based on corn grits. Journal of food engineering. 172 (2016); 31-37
2. Jozinović, Antun; Šubarić, Drago; Ačkar, Đurđica; Miličević, Borislav; Babić, Jurislav; Jašić, Midhat; Valek Lendić, Kristina: Food industry by-products as raw materials in functional food production. Annual 2015 of the Croatian Academy of Engineering. 2016 (2016); 423-437
3. Miličević, Borislav; Babić, Jurislav; Miličević, Radoslav; Šubarić, Drago: The influence of different pot still type on quality of Williams pear distillates. Tehnički vjesnik, 23 (2016), 4; 945-949

ZNANSTVENI PROJEKTI

Voditelj znanstvenog projekta: Primjena plinske plazme i ultrazvuka u postupcima modifikacije škroba (2016-2017)

Suradnik na znanstvenom projektu: Primjena nusproizvoda prehrambene industrije u razvoju funkcionalnih i okolišno prihvatljivih ekstrudiranih proizvoda i aditiva (2014-2018).

Suradnik na međunarodnom projekt: Application of high pressure technologies in the extraction of plant material (2016-2017.)

Suradnik na stručnom projektu: Poljoprivredni poduzetnički inkubator Drenovci (2015-2016)

OSTALO

2016. Član znanstveno-organizacijskog odbora međunarodnog kongresa “Ruzicka days” Vukovar, Croatia.

Član znanstveno-organizacijskog odbora International Scientific and Professional Conference WITH FOOD TO HEALTH 2016, Osijek, Croatia.

Glavni urednik časopisa: Croatian Journal of Food Science and Technology

Član uređivačkog odbora međunarodnih časopisa:

* Journal of agricultural extension and rural development
* Journal of cereals and oilseed
* Journal of Global Agriculture and Ecology
* Asian Journal of Agricultural Extension, Economics & Sociology
* Food in Health and Disease
* International journal of Advances in Scientific research and Reviews

**Prof. Dr. Peter Raspor, Dr.h.c.mult., Uni. dipl. eng**

International member in "Akademija tehničkih znanosti Hrvatske" (HATZ),

Member of Academia Europea

Peter.raspor@guest.arnes.si

Short report on activities for the year 2016\*

The work conducted in 2016 can be allocated in few scientific and research clusters but also in pedagogic and organisational cluster. Peter Raspor was actively involved in teaching, lecturing in Ljubljana, Maribor, Vienna, mentoring PhD students and in researching in particularly within TRAFooN project and taking part in other ongoing stories he started or was involved deeply in along the years. All mentioned elements are important, but some of them had been more productive during the year and lets mention them referring to outcomes as relevant for this short overview. The outcomes are presented as publications, lectures, and other contributions to science and professional area, as well as PhD defence and organisation of international or national meetings or taking part in conferences shaping the future. Additional to many reviews to other journals Peter Raspor served as editor in the boards in following journals: Acta agriculturae Serbica, Arhiv za higijenu rada i toksikologiju, Chemical industry & chemical engineering quarterly. Critical reviews in biotechnology, FEMS letters,  Food and bioprocess technology, Food technology and biotechnology, G. U. Journal of science, Gida, Hrana i ishrana,  International journal of food science, technology & nutrition, Potravinárstvo, Slovak journal of food sciences, Tejgazdaság. The most prestige outcome of editorial work is the Book with Springer edited by NEDOVIĆ, Viktor, RASPOR, Peter, LEVIĆ, Jovanka, TUMBAS ŠAPONJAC, Vesna, BARBOSA-CÁNOVAS, Gustavo V. Emerging and traditional technologies for safe, healthy and quality food, (Food engineering series, 1571-0297). Cham [etc.]: Elsevier, 2016. XVIII, 478 str., ilustr. ISBN 978-3-319-24038-1. ISBN 978-3-319-24040-4. http://link.springer.com/book/10.1007/978-3-319-24040-4,

Along this side they are also many activities in different organising committees for international meetings. This takes substantial time but it will not be discussed in detail, maybe just to illustrated with very special contribution to diversification of knowledge transfer in food microbiology was at 2nd WPAEFM symposium “Food microbiology education in practice” at 25th ICFMH Conference “FoodMicro” 2016 Dublin 19th July. Among17 invited lectures were also few from organizers introducing the issue to public like RASPOR, Peter. Education and training in food microbiology : challenges and constraints for educators and employers. SMOLE MOŽINA, Sonja, et al. Integration of students into project work via (inter)national networks, studies and exchange/research programs. OVCA, Andrej, et al. Food microbiology challenges in the education of primary school children. V: One health meets food microbiology: abstracts book, Food Micro 2016, 19-22 July, 2016, Dublin, Ireland.

During the event food microbiology education regarding knowledge and skills needed in industrial practice, further education, official labs showed that has to have educational impact or in the education itself ( ie novel methods,) or connected to Good Educational Practice and the symposia contributions and discussions showed just that as crucial for advancement of university education.

On the other hand the most complex knowledge transfer was conducted within the TRAFooN project although Peter Raspor was not officially any longer WP leader since January 2016, due to unexpected retirement, he did his best that all the duties would be conducted as planned. In this package a lot of work  was done in different countries From Nederland to Poland and from Czech to Serbia and Switzerland to Slovenia. Our part was food safety and we contributed the most to wheat and buckwheat cluster and to sweet fruit cluster in particularly plums and partially to fish. We delivered many lectures and publications in real practice, to students but also at scientific meetings. The most prestige lectures in this activity ware conducted in Vodňany addressing fish professionals, SMOLE MOŽINA, Sonja et al. An overview of safety concerns : from the fish feed to the fish on plate : lecture at the expert seminar within Trafoon project : Improving fish feed and feeding techniques, fish processing, labelling and marketing with fish products, 1st - 2nd February 2016, Vodňany, Czech republic, and in Warszawa 29. 06. 2016 addressing top R&D professionals from cereal sector: RASPOR, Peter.  Buckwheat between tradition to innovation. From tradition to innovation - in buckwheat, oats and gluten-free-strategies for SMEs in production, processing and marketing, Olsztyn: Institute of Animal Reproduction and Food Research of the Polish Academy of Sciences, 2016, str. 10-11. and finally in Novi Sad, Serbia during celebration of 10th anniversary of the Institute of Food Technology by RASPOR, Peter. Bread and bread like foods in the changing world. V: ĐURAGIĆ, Olivera (ur.). Celebrating food : abstract book, FoodTech Congress, 25-27. 10. 2016, what corresponds well to the official end of the project. Many activities were performed along the same lines at specialised courses for practitioners like at 15th International Cereal and Bread Congress April 18-21, 2016, by AVBELJ, Martina, et al. Carob enriched buckwheat bread - a new alternative in the gluten-free diet.  And SMOLE MOŽINA, Sonja at al. Carob flour as multifunctional supplement exhibits also antimicrobial activity in bread. V: KÖKSEL, Hamit (ur.). Book of abstracts, ICBC 2016, Istanbul, Turkey  in Warszawa by ŠPORIN, Monika, et al. Carob enriched buckwheat bread - a new alternative in the gluten-free diet. V: From tradition to innovation - in buckwheat, oats and gluten-free-strategies for SMEs in production, processing and marketing, Warszawa, 29. 06. 2016  and in Olsztyn at Institute of Animal Reproduction and Food Research of the Polish Academy of Sciences by RASPOR, Peter, et al. Neglected traditional foods as trigger for new generation of food products.; LUSKAR, Lucija, et al. Carob flour as multifunctional supplement exhibits also antimicrobial activity in bread. V: Bonding tradition with innovation : [successful strategies in food chain value], TRAFOON International Conference, 12-13. 9. 2016, Olsztyn not to ignore global meetings like 14th International Congress on Yeasts in Japan where research connected to new substrates like carob were presented to professional audience  AVBELJ, Martina, et al. Quality and safety challenges for novel fermented product bread like product. V: Program & abstracts : ICY 2016, 14th International Congress on Yeasts, September 11-15, 2016, Awaji Yumebutai, Hyogo, Japan. Nara: Nara Institute of Science and Technology (NAIST), 2016, or regional in Novi Sad with posters LUSKAR, Lucija, et al. Carob flour addition improves microbiological stability of bread. V: ĐURAGIĆ, Olivera (ur.). Celebrating food : abstract book, FoodTech Congress, 25-27. 10. 2016, Novi Sad, Serbia. Novi Sad: Institute of Food Technology, 2016, and round tables promoting EU research on the experience of TRAFooN project RASPOR, Peter,et al. The message from the EU 7FP project "TRAFOON" tradition to or for innovation : is this achievable?. V: ĐURAGIĆ, Olivera (ur.). Celebrating food : abstract book, FoodTech Congress, 25-27. 10. 2016, Novi Sad, Serbia. Novi Sad: Institute of Food Technology, 2016 as well as very focused lectures to practitioners in country side like in Serbia in plum areas RASPOR, Peter, SMOLE MOŽINA, Sonja. Bezbednosti i kvalitet šljive i proizvoda od šljive. V: BRAUN, Susanne (ur.). Inovacije u proizvodnji i preradi šljive : trening materijal za radionicu, Trening radionica, program Trafoon, Čačak, 26. februar 2016. [Čačak: Inštitut za voćarstvo, 2016], str. 63-86.  On top of it also some professional articles were published in national languages to make transfer of knowledge  easier like in the case of fermented foods LUSKAR, Lucija, et al. Dodatek ali surovina, tradicija ali inovacija : rožič v pekarstvu. Mlinarstvo in pekarstvo, ISSN 1408-581X, 2016, letn. 17, št. 102, str. 6-10 and RASPOR, Peter. Priprava fermentirane hrane iz žit : fermentirana kruhom podobna živila iz žit v azijsko-pacifiškem območju. Mlinarstvo in pekarstvo, ISSN 1408-581X, 2016, letn. 17, št. 102, str. 22-24. Maybe at the end of this demanding project transferring knowledge and skills we have to mention interesting publication just coming out from all TRAFoon partners in which we add our views on buckwheat  as professional  chapter in a nicely lustrated monograph by RASPOR, Peter. Slovenia : buckwheat. V: HILSCHER, Manuel (ur.). Traditional food : a culinary trip through Europe. Stuttgart: University of Hohenheim, Forschungszentrum für Bioöokonomie, cop. 2016, str. 96-103, interesting possibility to address students and teachers in Belgrade Faculty of Agriculture, Institute of Food Technology and Biochemistry, RASPOR, Peter. Bread throughout different global cultures : invited lecture on FP 7 project GA 613912 "Traditional Trafoon - Traditional Food Network to improve the transfer of knowledge for innovation" - Trafoon, 24th March, 2016, Belgrade, Serbia and to open research dimension and teaching platform on different way.

Beside mentioned project the research work was still focused on yeast, bacteria and bioprocessing on one side, but also on negative processes and how to handle them within food supply chain(s). Each part is presented separately with the selection of main references illustrating outcomes.

Positive and negative role of Yeast in food and nutrition

The long lasting tradition researching yeast from different aspects also contributed this year to set of publications based on previous work. Still they are coming some publications on yeast ecology and physiology on yeast, like from cheese ŠURANSKÁ, Hana et al. Characterisation of the yeast and mould biota in traditional white pickled cheeses by culture-dependent and independent molecular techniques. Folia microbiologica, ISSN 0015-5632. [Print ed.], 2016, vol. 61, str. 455-463, from fermented beverages like beer and wine KRANJC, Luka,. Physiological profiles relevant for novel alcoholic beverage design among Dekkera bruxellensis strains from different provenances. Journal of the Institute of Brewing, ISSN 0046-9750. [Print ed.], 2016, vol. 122, iss. 3, str. 536-542. Our added value in yeast research was awarded by invitation to review impact regarding potential quorum-sensing in yeast AVBELJ, Martina, ZUPAN, Jure, RASPOR, Peter. Quorum-sensing in yeast and its potential in wine making. Applied microbiology and biotechnology, ISSN 0175-7598, 2016, vol. 100, iss. 18, str. 7841-7852. They are still some publications coming out from the past work like SIMS, Jason, et al. High reactive oxygen species levels are detected at the end of the chronological life span of translocant yeast cells. Molecular genetics and genomics, ISSN 1617-4615, Febr. 2016, vol. 291, iss. 1, str. 423-435, but they are also some recent just opening new dimension of yeasts in intriguing area of probiotic yeasts like Zorica Tomičić et al. Probiotic yeast Saccharomyces boulardii (nom. nud.) modulates adhesive properties of Candida glabrata Med Mycol (2016)  doi: 10.1093/mmy/myw026.

This gave possibility to accept different invitations to present research outcomes as selected lectures at the top international meetings on yeasts in Japan,  ČADEŽ, Neža, et al. Genetic changes in brewing yeast Saccharomyces pastorianus during industrial and laboratory scale serial re-pitching;  TOMIČIĆ, Zorica at al,. Probiotic yeast Saccharomyces boulardii (nom. nud.) modulates adhesive properties of Candida glabrata. V: Program & abstracts : ICY 2016, 14th International Congress on Yeasts, September 11-15, 2016, Awaji Yumebutai, Hyogo, Japan. Nara: Nara Institute of Science and Technology (NAIST), 2016, and consequently we were offered to deliver lecture also at home in Krk at Power of Microbes in Industry and Environment 2016 among sometimes even more critical audience Probiotic yeast Saccharomyces boulardii (nom. Nud.) modulates adhesive properties of Candida glabrata  also at“Power of Microbes in Industry and Environment 2016”, which was held in Krk, Croatia from September 28th to October 1st 2016. Poster communication is also very welcomed for critical thinkers because it opens new dimension to our research and we still cultivate this approach when possible like TOMIČIĆ, Ružica, et al. Adhesion of Candida spp. and Pichia spp. to abiotic surfaces. TOMIČIĆ, Zorica, et al. The effect of probiotic yeast Saccharomyces boulardii (nom. nud.) on the adhesion of Candida glabrata. V: ĐURAGIĆ, Olivera (ur.). Celebrating food : abstract book, FoodTech Congress, 25-27. 10. 2016, Novi Sad, Serbia. Novi Sad: Institute of Food Technology, 2016, and KRANJC, Luka et al., Physiological characteristic of Brettanomyces bruxellensis strains isolated from different beer and wine related environments. V: One health meets food microbiology : abstracts book, 25th International ICFMH Conference [also] Food Micro 2016, 19-22 July, 2016, Dublin, Ireland. Dublin: University College Dublin, 2016, and KOČAR, Nataša, et al. Monitoring of phenotypic changes in brewer's yeast during serial repitching. V: Program & abstracts : ICY 2016, 14th International Congress on Yeasts, September 11-15, 2016, Awaji Yumebutai, Hyogo, Japan. Nara: Nara Institute of Science and Technology (NAIST), 2016.

Can all this be considered as result of good research? Maybe not if we evaluate it just year per year, but if we connect this outcomes also to other happenings like privilege to lecture at Ph. D. programme, 6th of April 2016, University of Pécs, RASPOR, Peter. Quantification of yeast adherence and invasion: can we handle this challenge : invited lecture in the frame of special occasion of "Investigation of oxidative stress regulatory mechanisms on unicellular fungi" and an honour to be the chair of PhD examination commission as was the case MILNE, Nicholas. Engineering nitrogen uptake and branched-chain amino acid metabolism in Saccharomyces cerivisiae : proefschrift ter verkrijging van de graad van doctor aan de Technische Universiteit Delft, op gezag van de Rector Magnificus, voorzitter van het College voor Promoties, in het openbaar te verdedigen op 26th April 2016 om 10:00 uur. [Delft: Technische Universiteit Delft, 2016]. 150 str., ilustr. ISBN 978-94-028-0142-2.  And finally inauguration lecturer at opening 1st Polish Brewing school by Peter RASPOR, The yeast: Challenge for technologist and microbiologist in beer production? Academia Europaea, 15 October 2016, Wrocław, Poland, than we can see it as good development of science, but also pedagogical advancement in the area of life sciences and technology.

Biofilms, adhesion and antimicrobial potential of some natural compounds to pathogens and contaminates has been well addressed in last years. In this area we published selection of original scientific articles dealing with bacteria and effect of various extracts from plants and food wastes  indicating capacity to reduce adhesion and inhibiting growth of selected  bacteria  responsible for food borne illnesses in food supply chain like BEZEK, Katja, et al.. Attenuation of adhesion, biofilm formation and quorum sensing of Campylobacter jejuni by Euodia ruticarpa. Phytotherapy research, ISSN 0951-418X, Sep. 2016, vol. 30, iss. 9, str. 1527-1532;BOHINC, Klemen, et al. Metal surface characteristics dictate bacterial adhesion capacity. International journal of adhesion and adhesives, ISSN 0143-7496. [Print ed.], July 2016, vol. 68, str. 39-46; KURINČIČ, et al. Effects of natural antimicrobials on bacterial cell hydrophobicity, adhesion, and zeta potential  Arhiv za higijenu rada i toksikologiju, ISSN 0004-1254, 2016, vol. 67, str. 39-45, TROŠT, Kajetan, et al. Polyphenol, antioxidant and antimicrobial potential of six different white and red wine grape processing leftovers. Journal of the science of food and agriculture, ISSN 1097-0010, 2016, vol. 96, iss. 14, str. 4809-4820,

Some of Our research was noticed and on that basis we delivered  few lectures on international meetings illustrating outcomes on Campylobacter abut also on contact surfaces came out like SMOLE MOŽINA, Sonja et al. Are they at risk and do they know? : food safety knowledge of poultry meat consumers in Slovenia. V: PULKRABOVÁ, Jana (ur.). Assuring the integrity of the food chain: fighting food fraud : program & book of abstracts, Food integrity 2016, April 6-7, 2016, Prague, Czech Republic. Prague: University of Chemistry and Technology, 2015, str. 89, P7.  not ignoring posters BEZEK, Katja, et al. Euodia ruticarpa fruit extract acts as anti-invasive of Campylobacter jejuni to HT29-MTX-E1212 cell line. V: One health meets food microbiology : abstracts book, 25th International ICFMH Conference [also] Food Micro 2016, 19-22 July, 2016, Dublin, Ireland. Dublin: University College Dublin, 2016. But being particularly happy to that part of this research was selected to be published as independent chapter in a monograph addressing surface characteristics in relation to microbial adhesion ability BOHINC, Klemen, JEVŠNIK, Mojca, FINK, Rok, DRAŽIĆ, Goran, RASPOR, Peter. Surface characteristics dictate microbial adhesion ability. V: PROKOPOVICH, Polina (ur.). Biological and pharmaceutical applications of nanomaterials. Boca Raton: CRC Press: Taylor & Francis, 2016, str. 193-213,

However, all this knowledge was further extended and conveyed to food safety area with brother perspective to address food safety and also consumers. In this area not only bacteria and yeast but also viruses have a role which we tried to elucidate, but with very clear intention to raise knowledge with teachers, students and eventually with consumers. This part can be illustrated with publications in journals like OVCA, Andrej, et al. Effect of educational intervention on young people, targeting microbiological hazards in domestic kitchens. Food Policy, ISSN 0306-9192. 2016, vol. 61, str. 156-162. AMBROŽIČ, Mateja, et al. Food safety expertise among professional food handlers and consumers related to foodborne viruses: Case Slovenia. Sanitarno inženirstvo, ISSN 1854-0678, 2016, [1-17 str.],  AMBROŽIČ, Mateja, et al.. Viral contamination in mussel production chain on the Slovenian coastline. Slovenian veterinary research, ISSN 1580-4003. [English print ed.], 2016,  [1-14 str.], and in global book publisher where we coined new concept of treating food supply nets RASPOR, Peter, JEVŠNIK, Mojca. Food supply chains vs. food supply nets. V: NEDOVIĆ, Viktor (ur.), et al. Emerging and traditional technologies for safe, healthy and quality food, (Food engineering series, 1571-0297). Cham [etc.]: Elsevier, 2016, str. 9-32,

These hot topics provoked also scientific and professional meeting organisers and invited lectures followed on regional level to address participants on plenary level about risk communication when food borne illness happens, like RASPOR, Peter. Risk communication in cases of contamination: an industrial perspective. V: OBRADOVIĆ, Dragojlo (ur.), RANIN, Lazar (ur.). Simpozijum Dani mikrobiologa Srbije 2016, Beograd, 12-13. maj 2016. and the wave of this thinking flushed also European level at EU presidency conference in Bratislava in Slovakia RASPOR, Peter. Risk communication when contamination takes place: food business operator view : lecture at the 5th Annual Scientific Congress on zoonoses, foodborne and waterborne diseases - Protection of public and animal health, 18th October 2016, Bratislava. Bratislava: Ministry of Agriculture and Rural Development of the SR

Understanding that this topic has many faces it is no wonder that professional circles asked to transmit this type of messages also on much specialised workshops, seminars and trainings. Consequently the this challenge lecturing was realised in Brussels within BTSF - European Commission Consumers, Health, Agriculture and Food Executive Agency for non European top governmental participants addressing Food Testing - Training course on Microbiology; with set of very focussed lectures RASPOR, Peter. Sampling, Sample management components and Sample preparation.  BTSF - Food Testing - Training course on Microbiology;  European Commission Consumers, Health, Agriculture and Food Executive Agency, DRB A3/042, L-2920 Luxembourg Contract 2014 96 03, Zoning Wavre-Nord - Centre d'Affaires Les Collines de Wavre Avenue Pasteur, 21 Brussels 18,-19 February 2016 and in Plovdiv in Bulgaria addressing Food chain safety management systems from different perspectives RASPOR, Peter. Food chain safety management systems : the impact of good practices and (Alternative) metods in microbiological examination of foods. V: Obuchitelen seminar "Savremenni analitichni podhodi za osiguryavane na kachestvoto i bezopasnostta na hrani, napitki i furazhi", Plovdiv, UHT, 21-24.06.216. Plovdiv: UHT - [Univerzitet po hranitelni tehnologii], 2016, not to stress to much invited lecture to mark World Food Day 2016, for which it was traditionally organised event in Slovenia, but somehow this is not any longer possible so invitation by Academia Europea Wroclaw Hub gave Peter Raspor opportunity to address this intriguing issue, Environmental and demographic changes as challenge for lifelong learning in current society: Case food safety and security Lecture for marking world food day 2016 Friday, 14.10.2016 http://acadeuro.wroclaw.pl/event/lecture-by-peter-raspor-for-marking-world-food-day-2016/  or invited commentary  from main daily newspaper in Slovenia RASPOR, Peter. Hrana - do kdaj kakovostna in varna?. Delo, ISSN 0350-7521, 17. okt. 2016, leto 58, št. 242, str. 5, which all raise awareness of not just local food and nutrition patterns.

For the real teachers mentoring is the crown of the activity and in the year 2016 two PhD defence took place, one on food borne Viruses, the last one with classical PhD system AMBROŽIČ, Mateja. Systemic evaluation and prevention of viral foodborne infection in food supply chain: doctoral dissertation. Ljubljana: 2016. and one as the first microbiologist of Bologna study programme, BEZEK, Katja. Control of biofilm forming ability of Campylobacter jejuni on abiotic surfaces and adhesion and invasiveness in cell lines model: doctoral dissertation. Ljubljana, 2016.  and the very last diploma student at food science and technology passing the classical diploma study KRIŽMAN, Luka. The influence of the addition of corob flour on microbiological, chemical, and sensory properties of gluten-free buckwheat bread : graduation thesis, university studies, (Biotehniška fakulteta, Oddelek za živilstvo, Ljubljana, Diplomske naloge, 1548)., 2016.

Final message for 2016

Although Peter Raspor had been retired in January 2016 and has no teaching obligation at Biotechnical faculty, where he contributed to establishment of study program of microbiology and he erected study program in biotechnology, he accepted to continue teaching on graduate levels in Austria and Slovenia as follows:

* Guest professor of Food Safety at The University of Natural Resources and Life Sciences, Vienna, 2006-
* Guest professor of Modern Bio-Technology in Food Production at University Vienna, 2008-
* Guest professor of Food Quality and Safety at Faculty of Biosistemic Sciences at University of Maribor, 2009-
* Guest professor of Food Safety at Faculty of Health Sciences at University of Ljubljana, 2011-
* Retired professor of Microbiology and Food safety from University of Primorska, 2014-2016
* Retired professor of Industrial Microbiology and Biotechnology from University of Ljubljana, 1986-2013
* Retired professor of Food Biotechnology from Budapest Corvinus University, 1994-2006

Prof. emer. dr. sc. Zlatko Kniewald, tajnik Odjela