



MINISTRY  
OF AGRICULTURE  
AND RURAL DEVELOPMENT  
OF THE SLOVAK REPUBLIC

AND OF BIOTECHNOLOGY  
AND QUALITY  
AND RAW MATERIALS  
AND FOODSTUFFS

13<sup>th</sup>  
INTERNATIONAL  
SCIENTIFIC  
CONFERENCE



# PROGRAMME

17<sup>th</sup> - 19<sup>th</sup> September 2018  
Smolenice Castle  
Slovak Republic

Faculty of Biotechnology  
and Food Sciences  
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www.fbfs.eu

## PROGRAMME

Monday, 17<sup>th</sup> September, 2018

7:00	7:15	<b>Transport from Nitra (Dormitory of Anton Bernolák) to Smolenice (Smolenice Castle) by bus (travel time 1h)</b>	
8:00	16:00	<b>Registration</b>	Smolenice Castle
10:00	10:45	<b>OPENING CEREMONY</b>	<p><b>Ján Tomáš</b>, Dean of Faculty of Biotechnology and Food Sciences, Slovak University of Agriculture in Nitra, Slovak Republic</p> <p><b>Ján Salaj</b>, Director of the Institute of Plant Genetics and Biotechnology, Plant Science and Biodiversity Center, Slovak Academy of Sciences, Nitra, Slovak Republic</p> <p><b>Kludia Halászová</b>, Rector of Slovak University of Agriculture in Nitra, Slovak Republic</p> <p><b>Milan Lapšanský</b>, Director General of the Section of Food Industry and Trade, Ministry of Agriculture and Rural Development of the Slovak Republic, Bratislava, Slovak Republic</p>

### 10:45 – 11:45 PLENARY LECTURES

<b>Chairpersons:</b>		Ján Tomáš, Ján Salaj, Jozef Bulla	
10:45	11:15	<b>Michal Kunštek</b>	Ministry of Agriculture and Rural Development of the Slovak Republic, Bratislava, Slovak Republic
Slovak republic as a member of the administrative assistance and cooperation network and system			
11:15	11:45	<b>Hrönn O. Jörundsdóttir</b>	The European Association for Food Safety, SAFE Consortium, Brussels, Belgium
Keeping food safety on the food innovation agenda			

12:00 – 13:30 **Lunch**

### 13:30 – 17:00 Session: BIOTECHNOLOGY AND MOLECULAR BIOLOGY

**13:30 – 14:30 PLENARY LECTURES** (presentation 27 min + discussion 3 min)

**14:30 – 15:00 LECTURES** (presentation 12 min + discussion 3 min)

**15:30 – 17:00 POSTERS** (presentation 2 min + discussion 1 min)

<b>Chairpersons:</b>		Zdenka Gálová, Norbert Lukáč, Adhikar Achyuti	
13:30	14:00	<b>José Cuezva</b>	Center of Molecular Biology "Severo Ochoa" the Autonomous University of Madrid, Spain
Reverse phase protein arrays: a platform for biomarker discovery			
14:00	14:30	<b>András Dinnyés</b>	Szt. Istvan University, Gödöllo, Hungary
Novel methods in food safety: Human induced pluripotent stem cell derived in vitro toxicology assays			
14:30	14:45	<b>Jaromír Vašíček</b>	National Agricultural and Food Centre & Slovak University of Agriculture in Nitra, Nitra, Slovak Republic
The efficiency of immunomagnetic sorting of rabbit bone marrow cells for the establishment of mesenchymal stem cell culture			
14:45	15:00	<b>Sushmita Nath</b>	School of Pharmacy and Biomolecular Sciences, Liverpool John Moores University, United Kingdom
Effect of ricinus communis on porcine uterine muscle's contractility			

15:00 – 15:30 **Coffee break**

15:30 – 17:00 **ORAL POSTER SESSION**

<b>Chairpersons:</b>	Radoslav Židek, András Dinnyés, István Komlósi
Electronic posters "ePosters" will be presented during Oral Poster Session. This session will be moderated and 3 minutes will be allocated for each presentation. Presentation of poster is also a great opportunity to interact with other scientists in your field.	

- 1. ASSOCIATIVE TO *TRITICUM AESTIVUM* L. BACTERIA AS A SOURCE OF STRAINS FOR BIOTECHNOLOGY OF THE RHIZOSPHERE**  
Suleiman Abdurashytov
- 2. MOLECULAR ANALYSIS OF BUCKWHEAT USING GENE SPECIFIC MARKERS**  
Želmíra Balážová, Zdenka Gálová, Martin Vivodík, Milan Chňapek, Radomíra Hornyák Gregáňová
- 3. THE PROMISING IMPACT OF POMEGRANATE BYPRODUCTS ON HUMAN OVARIAN CELLS IN VITRO**  
Simona Baldovská, Katarína Michalcová, Michal Miškeje, Július Árvay, Marek Bandík, Adriana Kolesárová
- 4. IMPLICATION OF METALS AND METALLOIDS IN ANIMAL AND HUMAN HEALTH: REVIEW**  
Jana Bilčíková, Veronika Fialková, Eva Kováčiková, Michal Miškeje, Oksana Ryabchenko, Tatiana Bojňanská, Norbert Lukáč, Zuzana Kňazická
- 5. CONSTRUCTION OF PLANT TRANSFORMATION VECTOR CONTAINING EXPRESSION CASSETTE OF ARABIDOPSIS GENE *At1g54410***  
Eva Boszorádová, Mária Zimová, Zuzana Gregorová, Monika Bardáčová, Ildikó Matušiková, Jana Moravčíková
- 6. EFFECT OF RISK FACTORS OF ENVIRONMENT ON HAEMATOLOGICAL PARAMETERS OF ANIMAL BLOOD**  
Marcela Capcarová, Anna Kalafová, Renáta Mamráková
- 7. THE IN VITRO EFFECT OF THE *ORIGANUM VULGARE* EXTRACT ON SEMEN**  
Michal Ďuračka, Lucia Gavalovičová, Marek Slávik, Július Árvay, Eva Tvrďá
- 8. LUNASIN AND ITS VERSATILE HEALTH-PROMOTING ACTIONS**  
Hana Ďuranová, Veronika Fialková, Jana Bilčíková, Oksana Ryabchenko, Norbert Lukáč, Zuzana Kňazická

- 9. THE EXPRESSION OF B-1,3-GLUCANASE FROM *DROSERA BINATA* IN THE *E. COLI* EXPRESSION SYSTEM**  
Monika Frátriková, Miroslav Rajninec, Juraj Kleman, Martin Jopčík, Jana Libantová
- 10. CYTOPROTECTIVE EFFECTS OF RESVERATROL AGAINST HYDROGEN PEROXIDE-INDUCED OXIDATIVE STRESS IN TM3 LEYDIG CELLS**  
Hana Greifová, Tomáš Jambor, Katarína Zbyňovská, Norbert Lukáč
- 11. THE INFLUENCE OF MICROBIAL PREPARATION ON THE MIGRATION OF WATER SOLUBLE FORMS OF COPPER IN SOIL-PLANT SYSTEM AND GRAIN QUALITY OF WINTER WHEAT**  
Lyudmila Chaikovska
- 12. OPTIMALISATION OF SOYBEAN LUNASIN PEPTIDE EXTRACTION**  
Milan Chňapek, Zdenka Gálová, Želmíra Balážová, Dana Miháliková
- 13. MODULATIVE EFFECTS OF 4-OCTYLPHENOL IN RELATION TO THE STEROIDOGENESIS IN MICE LEYDIG CELLS**  
Tomáš Jambor, Hana Greifová, Anton Kováčik, Zsolt Forgács, Norbert Lukáč
- 14. PRODUCTION OF INTERLEUKIN 1BETA AND INTERFERON GAMMA BY BOVINE MAMMARY GLAND LEUKOCYTES STIMULATED BY LIPOPOLYSACCHARIDE**  
Eliska Kabourkova, Matej Mika, Ales Pavlik, Petr Slama
- 15. PROTEOMICS INFORMED BY TRANSCRIPTOMICS APPROACH TO PARASITIC WEEDS OF THE OROBANCHACEAE FAMILY**  
Juraj Kleman, Katarína Klubicová, Maksym Danchenko, Monika Frátriková, Miroslav Rajninec, Ludovit Skultety, Radoslava Matusova
- 16. THE EFFECT OF GRAPE EXTRACT AND BIOSUBSTANCES ON HUMAN OVARIAN CELLS *IN VITRO***  
Adriana Kolesárová, Simona Baldovská, Katarína Michalcová, Branislav Gálik, Jaromír Vašíček, Eduard Kolesár, Martin Marák, Ľuboslav Sanislo, Vladimír Křen
- 17. THE USE OF INDUCTIVELY COUPLED PLASMA OPTICAL EMISSION SPECTROMETRY (ICP-OES) FOR THE DETERMINATION OF SELECTED ELEMENTS IN DIFFERENT TYPES OF MATHERIAL**  
Michal Miškeje, Július Árvay, Jana Bilčíková, Zuzana Kňazická, Tomáš Slanina, Marián Tomka, Anton Kováčik
- 18. CHITINASE ACTIVITIES IN VEGETATIVE AND SPOROGENOUS TISSUE EXPOSED TO ANDROGENESIS-INDUCIBLE STRESS CONDITIONS IN WINTER RYE (*SECALE CEREALE* L.)**  
Jana Moravčíková, Ewa Dubas, Kamil Zielinski, Zuzana Gregorová, Eva Boszorádová, Iwona Żur, Anna Nowicka, Monika Krzewska, Mária Zimová, Ildikó Matušíková
- 19. GROWING *SPATHIPHYLLUM* BUD CLUSTER CULTURES *IN VITRO* USING LIQUID MEDIUM**  
István Dániel Mosonyi
- 20. EFFECT OF FEEDING ON GROWTH AND BLOOD BIOCHEMISTRY OF MALE FALLOW DEER**  
Ales Pavlik, Petr Slama, Daniel Bures, Radim Kotrba
- 21. ROUND-LEAF SUNDEW (*DROSERA ROTUNDIFOLIA* L.) CHITINASE EXPRESSION AND CHARACTERISATION IN BACTERIAL EXPRESSION SYSTEM**  
Miroslav Rajninec, Jana Libantová, Martin Jopčík, Monika Frátriková, Juraj Kleman
- 22. NON-WOOD FOREST RESOURCES OF FOREST BIOCHEMISTRY. MODERN TECHNOLOGIES, TARGET MARKETS, WORLD EXPERIENCE**  
Victor Roshchin
- 23. FATTY ACID PROFILE OF RABBIT MEAT AFTER ZEOLITE ADMINISTRATION**  
Tomáš Slanina, Ondřej Bučko, Filip Tirpák, Peter Herc, Francesco Vizzarri, Peter Massányi
- 24. EFFECT OF DIFFERENT CULTURE MEDIUM ON CULTIVATION OF ADIPOSE TISSUE DERIVED STEM CELLS FROM TWO BIOLOGICAL SOURCES**  
Mária Tomková, Barbora Kulíková, Jaromír Vašíček, Andrej Baláži, Alexander Makarevič, Peter Chrenek
- 25. *LEVISTICUM OFFICINALE* AND ITS EFFECTS ON BOVINE SPERMATOOZA ACTIVITY**  
Eva Tvrdá, Anikó Varga, Marek Slávik, Július Árvay
- 26. PRODUCTION OF INTERLEUKINS AFTER AMYGDALIN TREATMENT IN HUMAN ENDOTHELIAL CELLS**  
Katarína Zbyňovská, Marek Halenár, Hana Greifová, Tomáš Jambor, Adriana Kolesárová, Norbert Lukáč
- 27. RESTRICTION POLYMORPHISM OF MAL D 1 ALLERGEN PROMOTOR IN APPLE VARIETES**  
Jana Žiarovská, Jana Bilíková, Veronika Fialková, Lucia Zeleňáková, Lucia Zamiešková
- 28. MARKER PROFILING OF WHEAT WITH DIFFERENT DROUGHT TOLERANCE BY CDDP**  
Matúš Kysel, Jana Žiarovská, Veronika Štefúnová, Katarína Ražná, Miroslav Švec

17:00 – 18:00 Meeting of Scientific Committee and Invited Guests

18:00 Dinner

**Tuesday, 18<sup>th</sup> September, 2018**

08:00 **Breakfast**  
 09:00 – 10:30 **Sessions: FOOD DESIGN AND INNOVATION;  
 PERSONALIZED NUTRITION AND HEALTH**

09:00 – 09:30 **PLENARY LECTURE** (presentation 27 min + discussion 3 min)  
 09:30 – 10:30 **LECTURES** (presentation 12 min + discussion 3 min)  
 11:00 – 12:00 **POSTERS** (presentation 2 min + discussion 1 min)

<b>Chairpersons:</b>		Alena Vollmannová, Dana Tančinová, Ivan Kreft	
09:00	09:30	<b>Ángel Carbonell-Barrachina</b>	Miquel Hernandez University of Elche, Orihuela, Alicante, Spain
Role of sensory evaluation and marketing in the innovation of food industry			
09:30	09:45	<b>Adhikar Achyuti</b>	LSU AgCenter, Baton Rouge, Louisiana, USA
Novel approaches to mitigate food safety risks and utilize pecan shell bioactives as antimicrobial agents			
09:45	10:00	<b>Radoslav Židek</b>	Slovak University of Agriculture in Nitra, Slovak Republic
Nutrigenomic risk assessment of vitamin intake composition in sporty gifted children based on gene chip data			
10:00	10:15	<b>Marvin Moncada</b>	LSU Food Incubator, Baton Rouge, Louisiana, USA
Louisiana State University Agricultural Center Food Incubator: a successful model for small business economic development			
10:15	10:30	<b>Mateja Germ</b>	University of Ljubljana, Slovenia
Selenium, an element with dual effect on organisms			

10:30 – 11:00 **Coffee break**

11:00 – 12:00 **ORAL POSTER SESSION**

<b>Chairpersons:</b>	Miroslava Kačániová, Hrönn O. Jörundsdóttir, Ángel Carbonell-Barrachina
<p>Posters from all sections will be presented during Oral Poster Session. This session will be moderated and 3 minutes will be allocated for each presentation. Presentation of poster is also a great opportunity to interact with other scientists in your field.</p>	

- 29. DETERMINATION OF ELEMENTS IN WILD EDIBLE MUSHROOMS: LEVELS AND RISK ASSESSMENT**  
Július Árvay, Martin Hauptvogel, Marek Šnirc, Miriama Gažová, Lenka Demková, Lenka Bobuľská, Miroslava Hrstková, Daniel Bajčan, Ľuboš Harangozo, Jana Bilčíková, Michal Miškeje, Jana Štefániková, Vladimír Kunca
- 30. PHENOLIC COMPOUNDS AND ANTIRADICAL**  
Daniel Bajčan, Alena Vollmannová, Július Árvay, Marek Šnirc, Ján Mezey, Vladimír Šimanský, Pavol Trebichalský, Radovan Stanovič, Mária Timoracká
- 31. THE ANALYSIS OF THE MEAT PRODUCTS COMPOSITION BY DNA MICROARRAY**  
Ľubomír Belej, Zuzana Drdlová, Jozef Golian
- 32. CONTENT OF ANTIOXIDANTS IN TEA (*CAMELLIA SINENSIS* (L.) KUNTZE) GROWN IN THE SUBTROPICS OF RUSSIA**  
Oksana Belous, Nataliia Platonova
- 33. QUALITY OF RAW-COOKED MEAT PRODUCT AFTER APPLICATION GRAPE SEED EXTRACT**  
Marek Bobko, Miroslav Kročko, Peter Haščík, Andrea Mendelová, Alica Bobková, Juraj Čuboň, Jana Tkáčová, Ľuboš Hranagozo
- 34. A CHEMICAL METHOD COMBINED WITH HEAT TREATMENT FOR THE REDUCTION OF THE ANTINUTRITIVE MATERIALS OF SOYBEAN**  
János Csapó, Dóra Kiss, Csilla Albert
- 35. PRODUCTION OF ANTIOXIDANT WITH NATURAL ORIGIN BY FEATHER HYDROLYSIS**  
János Csapó, Dóra Kiss, Csilla Albert
- 36. THE EFFECT OF ARTIFICIAL LIGHT ON THE GROWTH OF SPINACH SPROUTS**  
Grzegorz Fiutak, Magdalena Michalczyk, Magda Filipczak-Fiutak, Krzysztof Surówka
- 37. DUAL QUALITY OF FOOD IN EU**  
Balász Grman
- 38. HEAVY METALLS IN SELECTED SPICES**  
Ľuboš Harangozo, Marek Šnirc, Július Árvay, Daniel Bajčan, Judita Bystrická, Pavol Trebichalský, Ján Kovarovič, Ivona Jančo
- 39. THE TESTING OF POTENTIAL PLANT RESOURCES FOR PRODUCTION OF ISOTHIOCYANATES IN VITRO**  
Martin Jopčík, Miroslav Rajnec, Martin Šimkovič, Ján Salaj
- 40. MALDI-TOF MASS SPECTROMETRY FOR THE IDENTIFICATION OF BACTERIA ISOLATED FROM A TRADITIONAL SLOVAK CHEESE: PARENICA**  
Miroslava Kačániová, Simona Kunová, Margarita Terentjeva, Ľudmila Nagyová, Elena Horská, Peter Haščík
- 41. POLLEN CAN - TESTING OF BEE POLLEN FERMENTATION IN MODEL CONDITIONS**  
Vladimíra Kňazovická, Zuzana Mašková, Eva Vlčková, Roman Švejstl, Hana Salmonová, Eva Ivanišová, Martina Gažarová, Iveta Gamráthová, Monika Repková, Marián Tokár, Viera Ducková, Miroslav Kročko, Margita Čanigová, Miroslava Kačániová
- 42. EVALUATION OF THE GLUTEN-FREE BAKERY PRODUCTS CONSUMPTION IN RELATION TO HYPERTENSION AS RISK FACTOR FOR CARDIOVASCULAR DISEASE**  
Anna Kolesárová, Martina Gažarová, Jana Kopčeková, Jana Mrázová, Lucia Zelenáková
- 43. PRODUCTION OF POLLEN CANS BY FERMENTATION OF BEE POLLEN IN MODEL CONDITIONS WITH REGARD TO FILAMENTOUS MICROMYCETES OCCURRENCE**  
Zuzana Mašková, Vladimíra Kňazovická, Dana Tančinová
- 44. INTEGRATED PRODUCTION OF FRUIT AND VEGETABLES AND CONSUMER AWARENESS**  
Iwona Mentel, Ewa Cieślík, Martyna Jarema
- 45. CONTROL OF QUALITY OF TRADITIONAL AND REGIONAL IN POLAND**  
Iwona Mentel, Ewa Cieślík, Klaudia Rączkowska
- 46. PACKAGING AS A VISUAL INDICATOR OF QUALITY, TRADITION AND CULTURE OF TRADITIONAL PRODUCTS FROM SHEEP MILK**  
Ľudmila Nagyová, Ľudmila Nagyova, Jana Rybanská, Ingrida Košičiarová, Elena Horská, Miroslava Kačániová
- 47. CONTENT OF SELECTED RISK ELEMENTS IN WELL WATER**  
Radovan Stanovič, Július Árvay, Daniel Bajčan, Tomáš Tóth, Ľuboš Harangozo
- 48. EFFECT OF ESSENTIAL OILS OF *LAMIACEAE* PLANTS ON THE *PENICILLIUM COMMUNE***  
Dana Tančinová, Juraj Medo, Zuzana Mašková, Denisa Foltinová, Július Árvay
- 49. THE CHICKPEA (*CICER ARIETINUM*) AS A SOURCE OF MICROELEMENTS IN RATIONAL NUTRITION**  
Ivana Tirdilíová, Alena Vollmannová
- 50. SENSORY EVALUATION OF FISHERY PRODUCT - COD IN MAYONNAISE**  
Jana Tkáčová, Adriana Pavelková, Alena Sajdová, Mária Angelovičová

**51. EFFECT OF GRAPE POMACE ADDITION ON FARINOGRAPHIC AND EXTENSOGRAPHIC PROPERTIES OF WHEAT DOUGH**

Marián Tokár, Iva Burešová, Helena Frančáková, Attila Kantor, Štefan Dráb, Eva Ivanišová

**52. THE EFFECT OF INCREASING DOSES OF FOLIAR APPLIED REGULATORS OF POLYAMINE BIOSYNTHESIS IN MIXTURE WITH TRIAZINE HERBICIDE ON FORMATION OF SPRING BARLEY BIOMASS**

Pavol Trebichalský, Daniel Bajčan, Ľuboš Harangozo, Tomáš Tóth, Radovan Stanovič

**53. IDENTIFICATION OF COW MILK ALLERGEN IN THE PRODUCTS OF GRAPE PROCESSING**

Lucia Zeleňáková, Fikselová Martina, Žiarovská Jana, Kolesárová Anna, Jurčaga Lukáš

12:00 – 13:30 **Lunch**

13:30 – 15:00 **Session: INOVATION TRENDS IN FOOD INDUSTRY** (in Slovak language)

<b>Chairpersons:</b>		Marián Tokár, Alica Bobková, Ľubomír Belej	
13:30	13:45	<b>Katarína Blicklingová</b>	Bioeconomy Cluster
13:45	14:00	<b>Beáta Minarovičová</b>	MLYN TRENČAN, spol. s r.o.
14:00	14:15	<b>Vladimír Komínek</b>	ARDANAS SLOVAKIA, s.r.o.
14:15	14:30	<b>Ján Durec</b>	McCarter a.s.
14:30	14:45	<b>Jaroslav Žiak</b>	Nestlé Slovensko s.r.o.
14:45	15:00	Discussion	

13:30 – 15:00 A tour of the Smolenice Castle (for foreigners participants)

15:00 – 15:30 **Coffee break**

15:30 - 19:00 **Free time**

19:00 - 22:00 **Gala Dinner**

08:00 **Breakfast**

09:30 – 11:00 **THE YOUNG SCIENTIST AWARD SESSION**  
(posters presentations 7 min + discussion 3 min)

<b>Chairpersons:</b>		Adriana Kolesárová, Jaromír Vašíček, Sushmita Nath	
9:30	9:40	<b>Katarzyna Kisielewska</b>	University of Warmia and Mazury in Olsztyn, Poland
Effect of chemerin on LH and FSH secretion by porcine pituitary gland during the oestrous cycle			
9:40	9:50	<b>Damian Tański</b>	University of Warmia and Mazury in Olsztyn, Poland
Influence of pituitary gonadotropins, prolactin and growth hormone on expression of AQP1 in the porcine ovarian follicular cells			
9:50	10:00	<b>Marlena Gudelska</b>	University of Warmia and Mazury in Olsztyn, Olsztyn, Poland
The influence of Orexin B on expression of ADIPOQ, AKR1C1, IL1B and CYP3A29 genes in the porcine endometrium on days 15 to 16 of pregnancy			
10:00	10:10	<b>Wiktoria Kozłowska</b>	University of Warmia and Mazury in Olsztyn, Olsztyn, Poland
The effect of electromagnetic field exposure on the synthesis and secretion of oestrone in porcine myometrium			
10:10	10:20	<b>Ewa Waszkiewicz</b>	University of Warmia and Mazury in Olsztyn, Olsztyn, Poland
The effect of electromagnetic field exposure on the synthesis and secretion of androstenedione in the myometrium in the presence of progesterone			
10:20	10:30	<b>Edyta Rytelewska</b>	University of Warmia and Mazury in Olsztyn, Olsztyn, Poland
Gene expression of chemerin and its receptors in the ovary of pigs during the oestrous cycle and early pregnancy			
10:30	10:40	<b>Marko Halo, Jr.</b>	Slovak University of Agriculture in Nitra, Nitra, Slovak Republic
Zinc affects rabbit spermatozoa in vitro: effects on motility and viability			



10:40	10:50	<b>Filip Tirpák</b>	Slovak University of Agriculture in Nitra, Nitra, Slovak Republic
Effect of taurine supplementation to conventional bovine insemination doses			

10:50	11:15	<b>AWARD OF YOUNG SCIENTISTS &amp; CLOSING CEREMONY</b>	<b>Ján Tomáš</b> , Dean of Faculty of Biotechnology and Food Sciences, Slovak University of Agriculture in Nitra, Slovak Republic <b>Adriana Kolesárová</b> , Vice-dean for Science and Research, Faculty of Biotechnology and Food Sciences, Slovak University of Agriculture in Nitra, Slovak Republic
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11:15 – 12:15 **Lunch**

12:15	12:30	<b>Transport from Smolenice (Smolenice Castle) to Nitra (Dormitory of Anton Bernolák) by bus (travel time 1h)</b>
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