



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

**September, 12th-16th 2016,
Varna, Bulgaria**

International
Society of
Commodity Science
and Technology



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE IN A CHANGING WORLD**

PROGRAM

September, 12th - 16th 2016

Varna, Bulgaria

Organizers

University of Economics-Varna

Commodity Science Department

International Society of Commodity Science and Technology



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

BRIEF SUMMARY

Monday, 12th September 2016

**Location: University of Economics-Varna,
Aula, University of Economics-Varna**

14.00-16.00	Arrival and registration of participants
16.00-16.50	Opening Ceremony
16.50-17.00	Tribute to Professors Jacek Koziol and Anna Koziolowa
17.00-17.30	Greetings
17.30-18.30	Plenary Lectures
18.30	Welcome Cocktail
21.45	Transfer by bus from University of Economics-Varna to hotel Azalia

Tuesday, 13th September 2016

Location: University of Economics-Varna

8.30	Transfer by bus from hotel Azalia to University of Economics-Varna
9.00-9.15	Wreath-laying ceremony at the monument of the founder of the Scientific Commodity Science in Bulgaria Prof Tsani Kalyandzhiev - University of Economics-Varna
9.15-9.30	Group photo of the participants of the 20 th IGWT Symposium - University of Economics-Varna
9.30-10.30	Session 1 - Hall - 220/221
9.30-10.30	Poster session/Poster discussion 1 - Hall - 446
10.30-11.30	Coffee break
11.30-12.30	Session 2 - Hall - 220/221
11.30-12.30	Poster session/Poster discussion 2 - Hall - 446
12.30	Transfer by bus from University of Economics-Varna to hotel Azalia



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

13.00-14.30	Lunch at hotel Azalia
14.45	Transfer by bus from hotel Azalia to Varna (Roman Thermae)
15.00 –16.30	Visit of Roman Thermae
17.00	Transfer by bus to hotel Azalia
19.30	Bulgarian Traditional Dinner at hotel Azalia

Wednesday, 14th September 2016
Location: University of Economics-Varna

8.30	Transfer by bus from hotel Azalia to University of Economics-Varna
9.00-10.30	Session 3 - Hall - 220
9.00-10.30	Poster session/Poster discussion 3 - Hall - 446
10.30-11.30	Coffee break
11.30-12.30	Session 4 - Hall - 220
11.30-12.30	Poster session/Poster discussion 4 - Hall - 446
11.30-12.30	General Assembly of IGWT - Hall 128
12.45	Transfer by bus from University of Economics -Varna to hotel Azalia
13.00-14.30	Lunch at hotel Azalia
14.45	Transfer by bus from hotel Azalia to Varna
15.00 -18.15	Cultural tour (Varna Museum of Archaeology)
18.15	Transfer by bus from Varna to hotel Azalia
19.30	Dinner at hotel Azalia



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

Thursday, 15th September 2016

**Location: Excursion (St. Konstantin & Elena-Golden Sands-
Balchik)**

9.00-13.00	Free time
13.30	Departure by bus from hotel Azalia to Botanic Garden - Balchik
17.30	Departure by bus to hotel Azalia
18.30-20.00	Dinner at hotel Azalia
20.00	Departure by bus from hotel Azalia to Aladzha Monastery St. Trinity
20.00-21.30	Light show - Aladzha Monastery St. Trinity
21.45	Departure by bus from Aladzha Monastery St. Trinity to hotel Azalia

Friday, 16th September 2016

Location: University of Economics-Varna

8.30	Transfer by bus from hotel Azalia to University of Economics-Varna
9.00-10.00	Plenary Session "Commodity science - new trends, perspectives, development" - Hall - 446
10.00-11.00	Coffee break
11.00-12.00	Closing ceremony - Hall - 446
12.30	Transfer by bus from University of Economics-Varna to hotel Azalia
13.00-15.00	Lunch at hotel Azalia
15.00	Free time

Saturday, 17th September 2016

Departure of participants



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

DETAILED CONTENT

Monday, 12th September 2016	
Location: Aula, University of Economics-Varna	
14.00 – 16.00	Arrival and registration of participants
16.00 – 16.50	Opening Ceremony
	<i>Welcoming words</i>
	➤ Prof. Plamen Iliev, PhD – Rector of University of Economics-Varna
	➤ Prof. Dancho Danchev, PhD - Dean of the Faculty of Economics of University of Economics-Varna
	➤ Prof. Andrzej Chochół, PhD - President of IGWT, Poland
	➤ Prof. Gerhard Vogel, PhD - Vice-President of IGWT, Austria
	➤ Mr Ivan Tabacov - Chairman of the Bulgarian Chamber of Commerce and Industry
16.50 – 17.00	Tribute to Professors Jacek Koziol and Anna Koziolowa
17.00 - 17.30	Greetings
17.30 – 18.30	<i>Plenary Lectures</i>
	➤ Temenuga Stoykova , University of Economics -Varna, Bulgaria <i>Commodity Science in Bulgaria – Development and Topicality</i>
	➤ Zenon Foltynowicz , Poznan University of Economics and Business, Poland <i>The Sustainable Commodity and Products for Circular Economy</i>
18.30	Welcome Cocktail, University of Economics - Varna
21.45	Transfer by bus from University of Economics-Varna to hotel Azalia



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

<u>Tuesday, 13th September 2016</u> Location: University of Economics – Varna	
8.30	Transfer by bus from hotel Azalia to University of Economics-Varna
09.00- 9.15	Wreath-laying ceremony at the monument of the founder of the Scientific Commodity Science in Bulgaria Prof Tsani Kalyandzhiev - University of Economics - Varna
9.15-9.30	Group photo of the participants of the 20 th IGWT Symposium - University of Economics-Varna
9.30 – 10.30	<u>Session 1</u> Hall – 220 Moderators – Assoc. Prof. Daniela Ivanova, PhD Prof. Zenon Foltynowicz, PhD Secretary – Assist. Prof. Radoslav Radev <i>I. “COMMODITY SCIENCE: ACHIEVEMENTS, TRENDS AND CHALLENGES”</i> Anatolii Mazaraki, Nataliia Prytulska, <i>Ukraine</i> Commodity Science in Ukraine: Present and Future Carlo Russo, Giulio Mario Cappelletti, Giuseppe Martino Nicoletti, <i>Italy</i> Innovative Approaches of Water Scarcity Management in the Apulia Region Riccardo Beltramo, Paolo Cantore, Licia Gallo, <i>Italy</i> Information & Communication Technologies (ICT) for the engagement of the Commodity Science in Environmental Education: the Scatol8® System Svitlana Belinska, Nataliia Kamienieva, Stanislava Levytska, <i>Ukraine</i> Formation of Competitiveness of Products of Processing Fruits and Vegetables Ukrainian Production



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

Session 1

Hall – 221

Moderators – Prof. Maria Lucchetti, PhD

Prof. Eva Waginger, PhD

Secretary – Chief Assist. Stilian Stefanov, PhD

***III. “ECONOMIC, COMMERCE AND MARKETING
ASPECTS OF COMMODITY SCIENCE”***

**Gabriela Cecilia Stanculescu, Gál Tünde, Casiana
Radut, Romania**

Research Models, Education and Dissemination of the
Best Practices Applied in the Activity of Domestic and
International Tour Operators

Julia Uzunova, Bulgaria

The Global Challenges and Illegal Goods in New
Marketing Era

Julian Vasilev, Miglena Stoyanova, Bulgaria

Company Product Range Formation Using MS Excel and
SPSS

**Olena Sydorenko, Nadia Bolila, Marina Apach,
Ukraine**

Market Fish Products: Problems and Prospects

Rastislav Strhan, Slovakia

Perception of Quality and Marketing Consequences

Yuliya Syaglova, Russia

Systemic Analysis of Marketing Paradigms



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

9.30 – 10.30

Poster session/Poster discussion 1

Hall – 446

Moderator – Prof. Riccardo Beltrano, PhD

Secretary - Assist. Prof. Velichka Marinova

***I. “COMMODITY SCIENCE: ACHIEVEMENTS,
TRENDS AND CHALLENGES”***

**Mykola Bednarchuk, Bohdan Semak, Ihor Polovnikov,
Nina Domantsevyh, Natalia Popovych, *Ukraine***

Commodity Sciences of Shoes: Problems and Decisions

**Stanislaw Popek, Michal Halagarda, Grzegorz Suwala,
*Poland***

**Influence of Genetically Modified Raw Materials on
Determinants of Product Quality**

Tomasz Lech, *Poland*

**Assessing the Microbiological Risk to Historical
Parchment Documents**

**Vladimir Kiselev, Tatyana Kiseleva, Vladimir
Terentyev, Kerimova Ragima, *Russia***

**Consumer Demands’ Descriptors for Emerging Russian
Sparkling Wine Market**

***III. “ECONOMIC, COMMERCE AND MARKETING
ASPECTS OF COMMODITY SCIENCE”***

**Angela Carelli, Alessandra Nardone, Patrizia Papetti,
*Italy***

Marketing Product Lever in the Luxury Goods Sector

Dmitry Fedyunin, Sergey Lochan, *Russia*

Marketing Activities Management of Trading Companies



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

Haekyung Yu, Chaerin Kim, Mei Na Nan, Kyeongshin Yang, Haena Park, South Korea

Images of Korean Beauty Perceived by Vietnamese and Chinese Women

Ilhyun Bae, Korea

An Exploratory Study on Marketing Strategy of Korean Car Companies in Eastern Europe

Kim Won Kyum, Fan Qing Ji, Korea, China

The Relationship Among SNS Quality Factor, Satisfaction, Flow, and Usage Intention

Koji Yoshimoto, Korea

The Feature of Strategies for Japanese Corporate Activities in the East Europe Region

Kyung-jin Kim, Korea

The Effects of Message Type on Consumer Attitudes for Coffee Shops

Mariana Dragusin, Raluca Mariana Grosu, Andreea Simona Saseanu, Romania

Is There an Ethnic Market Niche for Immigrant Entrepreneurs, Active in the Bakery Industry? Focus on Turkish Immigrants in Romania

Marko Kores, Matjaž Denac, Slovenia

Analysis of the Attractiveness of Investments in Solar Heating Systems in Slovenia

Olga Gorjunjva, Elena Morosova, Svetlana Zolotova, Russia

Customers' Preferences in Perfumed Shower Gels





**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

	<p>Pawel Turek, Jędrzej Knot, Poland The Effect of Color on Perceived Taste of Aqueous Solutions</p> <p>Stefano Pastore, Marcello Ruberti, Stefania Massari, Italy Hydroponics: New Perspectives for the Global Food Supply</p> <p>Svetlana Zolotova, Nikolai Kalmin, Russia Reasons for Designing the Layout of a Jewellery Store According to the Concept of a Functional and Decorative Zoning</p> <p>Vladimir Kiselev, Pljushcheva, Vladimir Terentyev, Russia Modification of Customers' Behavior at Points of Sales Using Multisensory Marketing Communications</p> <p>Vladimir Kiselev, Tatyana Kiseleva, Vladimir Terentyev, Russia Consumer Emotional Evaluation of Russian Red Merlot Wine Market</p> <p>Wacław Adameczyk, Poland The Current Problems of Sustainable Production and Consumption</p>
10.30 – 11.30	Coffee break



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

11.30 – 12.30

Session 2

Hall – 220

Moderators – Prof. Roberto Rana, PhD

Prof. Natalia Prytulska, PhD

Secretary – Chief Assist. Eng. Vanya Zivkova, PhD

***VII. “TECHNOLOGY AND INNOVATION: PRODUCTS
AND PROCESSES”***

Annalisa Romani, Manuela Ciani Scarnicci, Arianna Scardigli, Annarita Paiano, *Italy*

Circular Economy as a New Model for the Exploitation of the Agroindustrial Biomass

Ewa Biazik, Anna Pudło, Dorota Chorążyk, Teresa Skiba, Wiesław Kopeć, *Poland*

Heme Iron Content in Chicken Muscle Homogenates Depending on Imidazole Dipeptide Levels

Małgorzata Miśniakiewicz, *Poland*

Food Additives versus Clean Label – Consumers Preferences and Expectations from European Perspective

Ornella Malandrino, Daniela Sica, Stefania Supino, *Italy*

Energy Efficiency: A Critical Analysis of the Role of Public Administration in Italy

Peter Kuprienko, Natalia Dyuzhilova, Natalia Kuprienko, *Ukraine*

Modern Building Materials Based on the Recycling Technology

Roberto Rana, Carlo Ingrao, *Italy*

The Rule of By-Products to Make Profitable Bioenergy from Microalgae: A Comprehensive Review



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

Ryeo-Won Lee, Jong-Ho Lee, Korea

A Study of Synergy Effects of Innovation on Firm Performance

Silva Sagradyan, Narine Hovhannisyan, Aram Nazaryan, Armenia

The Effect of Medicinal-Technical Raw Materials on the Physico-chemical Characteristics of Wheat Dough and Semi-Finished Products Cooked with Sponge and without Sponge Methods

Svitlana Stretovych, Ludmila Andriievska, Tetiana Glushkova, Leonid Koptiukh, Ukraine

Modern Additives at Process of Paper Production

Vera Amicarelli, Giovanni Lagioia, Teodoro Gallucci, Lorena Carla Giannossa, Italy

Status and Trends in Graphene Research

Session 2

Hall – 221

Moderators – Prof. Gerhard Vogel, PhD

Prof. Renata Salerno-Kochan, PhD

Secretary – PhD Candidate Georgi Dimitrov

II. “PROTECTION AND SATISFACTION OF CONSUMERS”

Agnieszka Kawecka, Poland

Consumers with Sight Disabilities as a Packaging Industry Point of Interest



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

	<p>VI. “SUPPLY CHAIN MANAGEMENT: PACKAGING AND LOGISTICS OF PRODUCTS”</p> <p>Daeki Kim, Joohyun Kim, Korea Evolution of Logistics Service Product to Maximize Customer Service</p> <p>Malgorzata Lisińska-Kuśnierz, Krzysztof Bar, Poland Tools for Integrating the Supply Chain</p> <p>Tomasz Lesiow, Ewa Biazik, Poland Attitude of the Poultry Meat Industry in Poland to the Implementation of Active and Intelligent Packaging Systems</p>
<p>11.30 – 12.30</p>	<p><u>Poster session/Poster discussion 2</u> Hall – 446 Moderator – Assoc. Prof. Taras Karavayev, PhD Secretary – PhD Candidate Dana Stefanova</p> <p>VII. “TECHNOLOGY AND INNOVATION: PRODUCTS AND PROCESSES”</p> <p>Anita Bocho-Janiszewska, Marta Ogorzalek, Tomasz Wasilewski, Poland Utility and Safety Assessment of Handwashing Liquid Detergents Containing Blackberry Seed Extract Obtained by Supercritical Carbon Dioxide Extraction</p> <p>Caterina Tricase, Mariarosaria Lombardi, Italy The Use of Industrial Hemp (<i>Cannabis sativa</i> L.) in the Building Sector: An Overview</p> <p>Denka Zlateva, Dana Stefanova, Bulgaria Enhancing the Nutritional Value of Bread Through Fortification with Zinc and Selenium</p>





**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology

IGWT

**September, 12th-16th 2016,
Varna, Bulgaria**

**Radoslav Radev, Georgi Dimitrov, Sabka Pashova,
Ivan Panchev, Bulgaria**

Legal Regulations about Use of Edible Coatings in Food Technologies

Ľubica Knošková, Slovakia
Opening Product Innovation

**Nataliia Prytulska, Iuliia Motuzka, Serhii Aslanian,
Ukraine**

The Quality of Products for Enteral Nutrition

**Przemysław Szopa, Jacek Czerniak, Andrzej
Gajewski, Poland**

Application of Absorption and Fluorometric Methods to Measuring Air Pollution through Quantitative Analysis of Chlorophyll Content in Evergreen Plants of *Thuja Occidentalis* Species

**Rodica Pamfilie, Bogdan Onete, Olaru Marieta,
Bumbac Robert, Romania**

Digitalization – a Must in the International Trade for Economic Growth

Tomasz Wasilewski, Artur Seweryn, Poland

Effect of the Type of Hebal Extract Obtained under Supercritical CO₂ Condition on the Functionality of Hand Dishwashing Liquids

**Tomasz Wasilewski, Dominik Czerwonka, Artur
Seweryn, Urszula Piotrowska, Jerzy Żuchowski,
Poland**

Application of Sage (*Salvia L. Officinalis*) Supercritical CO₂ Extract to Manufacture of All Purpose Cleaners



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

Poster session/Poster discussion 2

***II. "PROTECTION AND SATISFACTION OF
CONSUMERS"***

Romani, M. Ciani Scarnicci, C. Vita, P. Pinelli, F. Maggino, *Italy*

Nutrition and Quality of Life for the Safety and Human Health

Andra Vasilcovschi, *Romania*

Directions Towards Ensuring the Protection and Satisfaction of Consumers of Innovative IT Products: Case Study Social Online Gaming

Jaroslav Świda, Ewa Jaracz, *Poland*

Tendencies of Mineral Water Packaging Changes Preferred by the Elderly Consumers in Poland

Lelia Voinea, Dorin Vicențiu Popescu, Mihai Teodor Negrea, *Romania*

Edible Insects – A New Challenge for the Diet of European Consumer

Minsang Lee, *Korea*

Case Study of FREITAG Brand

Piotr Przybek, *Poland*

Valuation Of Quality Changes

Poster session/Poster discussion 2

***VI. "SUPPLY CHAIN MANAGEMENT: PACKAGING
AND LOGISTICS OF PRODUCTS"***

Velichka Marinova, Temenuga Stoykova, *Bulgaria*

Normative Requirements for Packages from Recycled Fiber Materials





**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

	Vladimir Kiselev, Tatyana Kiseleva, Konstantin Kiselev, Vladimir Terentyev, <i>Russia</i> Consumer Taste Evaluation at Russian Wine Market
12.30	Transfer by bus from University of Economics-Varna to hotel Azalia
13.00 – 14.30	Lunch at hotel Azalia
14.45	Transfer by bus from hotel Azalia to Varna (Roman Thermae)
15.00 – 16.30	Visit of Roman Thermae
17.00	Transfer by bus to hotel Azalia
19.30	Bulgarian Traditional Dinner at hotel Azalia

Wednesday, 14th September 2016
Location: University of Economics – Varna

8.30	Transfer by bus from hotel Azalia to University of Economics-Varna
9.00 – 10.30	<u>Session 3</u> Hall – 220 Moderators – Prof. Rodica Pamfilie, PhD Assoc. Prof. Ulian Vassilev, PhD Secretary – Chief Assist. Stilian Stefanov, PhD VIII. “QUALITY, SAFETY AND AUTHENTICITY OF PRODUCTS” Alessandro Bonadonna, Erica Varese, Giovanni Peira, Umberto Rosati, <i>Italy</i> The Safeguarding of Agricultural Food Production in Harsh Environments and the Optional Quality Term „Mountain Product”. The Piedmontese Mountain (North-West Italy) Cheese Makers’ Opinions



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

Alina Tkachenko, Inna Pakhomova, *Ukraine*

Prospects for the Use of Natural Antioxidants in the Production of Pastry

Andrzej Chochól, *Poland*

The Issues of Management of Safety of Industrial Commodities – the Case of Cosmetics

Antonella Calabretti, Paolo Bogoni, Massimo Calabrese, *Italy*

Quality and Safety in Commercial Baby Foods

Leonardo Borsacchi, Mario Biggeri, Andrea Ferrannini, *Italy*

Application and Review of an Integrated Check-List to Promote Legal Compliance and Socially Responsible Behaviors among Ethnic Enterprises

Ludmila Eliseeva, Ekaterina Grishina, *Russia*

Development of a Methodology for Identifying Juice Products from Pomegranate

Małgorzata Lisińska-Kuśnierz, Agnieszka Cholewa-Wójcik, *Poland*

Conditions and Evaluation of Safety Hazards Packed Chemical Substances and Preparations

Mario Andrea Franco, Gavino Morittu, Gavina Manca, *Italy*

Application of Multielement Stable Isotope Ratio Analysis for Traceability of Cheese Produced in Sardinia (Italy)

Romuald I. Zalewski, Eulalia Skawińska, *Poland*

Impact of Economy and Commodity Science on Sustainable Food System





**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

	<p>S.I. Sahradyan, A.V. Ghazaryan, N.G. Hovhannisyian, Armenia Study of Gamma Irradiation Influence on the Quality of Stabilization and Safety of Some Food Product</p>
<p>9.00 – 10.30</p>	<p><u>Poster session/Poster discussion 3</u> Hall – 446 Moderator – Assoc. Prof. Taras Karavayev, PhD Secretary – PhD Candidate Dana Stefanova</p> <p>VIII. “QUALITY, SAFETY AND AUTHENTICITY OF PRODUCTS”</p> <p>Alica Lacková, Marta Karkalíková, Štefan Žák, Slovakia Food Quality and Safety in the Context of Increasing their Competitiveness</p> <p>Artur Wolak, Poland Condition Monitoring of In-Service Lubricants - the Analysis of Color</p> <p>Bohdan Holub, Ukraine New Challenges in Synbiotic Dairy Food</p> <p>Elżbieta Kondratowicz-Pietruszka, Poland A Comparative Analysis of Certain Cold Pressed Nut and Seed Oils</p> <p>Ewa Marcinkowska, Gabriela Zielińska, Poland The Measurement of Leather Shrinkage Temperature with Automatic Recording</p>





**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

Galyna Mykhailova, Valentyna Osiiivska, Svitlana Bulenok, *Ukraine*

Thermalphysic Characteristics of Bedding Products are a Source of a Person's Sound Sleep

Gavino Balata, Giovanni M. Pes, Alessio Tola, *Italy*
Traditional Products and Longevity in Sardinia. A Preliminary Study for a Certification Strategy

Irina Goncharova, Olena Sydorenko, Yuliya Yakobchuk, *Ukraine*

Methods of Analysis Quality and Safety of the Packaged Drinking Water

Joanna Michalak, Elżbieta Gujska, Marta Czarnowska, *Poland*

Surface Colour and Acrylamide Content of Market-Purchased Food

Joanna Ptasńska-Marcinkiewicz, Mateusz Ogonek, *Poland*

The Effect of Different Sugars on the Alcohol Content

Kim, Yong Ju, *Korea*

Product Safety Rules for the Elderly Shoes and Product Analysis in S. Korea and in Other Major Countries

Lidia Ostasz, *Poland*

The Influence of Microwave Heating on Oxidative Change in Olive Oil

Lyudmila Eliseeva, Peter Gorozhanin, Olga Yurina, *Russia*

The Study of Oxidation of Walnuts Fat during Storage





**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

**Michał Halagarda, Grzegorz Suwała, Stanisław Popek,
*Poland***

The Quality of Snacks Available on the Polish Market on
the Example of Salted Potato Chips

**Michał Halagarda, Władysław Kędzior, Ewa
Pyrzyńska, *Poland***

The Quality of Traditional and Conventional Sausages
from Poland

**Monika Modzelewska-Kapituła, Renata Pietrzak-
Fiećko, Zdzisław Zakeś, *Poland***

The Content of Selected Macroelements in Wild and
Farmed Pike Fillets

**Monika Modzelewska-Kapituła, Ryszard Żywica,
*Poland***

Sensorial Quality of Omega-3 Enriched Eggs and
Sausages from the Polish Market

Renata Salerno-Kochan, *Poland*

The Assessment of the Risks Caused by Heavy Metals
Contained in Consumer Products by the Use of
Bioindicative Measuring Method

**Roxana Procopie, Magdalena Bobe, Maria Alexandra
Toma, *Romania***

Focusing on the Dynamic Romanian Market of the Food
Supplements

**Ryszard Żywica, Monika Modzelewska-Kapituła,
*Poland***

The Influence of Apple Juice Dilution Degree on Its Basic
Quality Attributes and Electric Conductivity



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

	<p>Spognardi S., Bravo I., Papetti P., <i>Italy</i> Characterization of Italian Extra-Virgin Olive Oils and Detection of Adulteration by GC-MS</p> <p>Sabka Pashova, Maya Trichkova - Ablee, <i>Bulgaria</i> A Comparative Study on Quality of Vinegar and Acid Products Available Commercially</p> <p>Vittorio Vaccari, Cristina Cordoni, Immacolata Manco, Antonella Valvassori, <i>Italy</i> Risk Management and Safety System for Health Services</p> <p>Władysław Kędzior, Joana Ptasieńska-Marcinkiewicz, Małgorzata Pycek, <i>Poland</i> Quality of Fruit Yoghurts</p>
10.30 – 11.30	Coffee break
11.30 – 12.30	<p><u>Session 4</u></p> <p>Hall – 220</p> <p>Moderators – Prof. Roberto Merli, PhD Assoc. Prof. Denka Zlateva, PhD</p> <p>Secretary – Assist. Prof. Radoslav Radev</p> <p>IV. “ENVIRONMENTAL ASPECTS OF COMMODITY SCIENCE”</p> <p>Bruno Notarnicola, Maria Claudia Lucchetti, Giuseppe Tassielli, Pietro Alexander Renzulli, Gabriella Arcese, Rosa Di Capua, <i>Italy</i> Waste Recovery in Steelmaking Sector: An EU Overview</p> <p>Daniela Ivanova, Anelia Haradinova, <i>Bulgaria</i> Public Environmental Instruments and Their Impact on the Environmental Policy of Bulgarian Companies</p>





**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

Emiliya Kulinska, Elka Vasileva, *Bulgaria*

The Policies and Measures to Improve Energy Efficiency
in Bulgarian Household Sector

Emiliya Kulinska, *Bulgaria*

Energy Efficiency and Energy Poverty in Bulgarian
Households

Eva Waginger, *Austria*

What Remains from Integrated Product Policy?

Gregor Radonjič, *Slovenia*

Greenwashing of Products: A Serious Challenge for
Commodity Science

Małgorzata Koszewska, *Poland*

Sustainable Consumption and Production Models a Challenge
for Commodity Science - Comparative Analysis in Visegrad
Region

**Maria Claudia Lucchetti, Bruno Notarnicola,
Gabiella Arcese, Giuseppe Tassielli, Pietro Alexander
Renzulli, Rosa Di Capua, *Italy***

Environmental Impacts: Damage and Economic Risk
Assessment. State of Art and Literature Review

Matevž Obrecht, Matjaž Denac, *Slovenia*

Public Opinion on Sustainable Energy Policy
Development: Case of Slovenia

**Miriam Spalatro, Giulio Mario Cappelletti, Giuseppe
Martino Nicoletti, Carlo Russo, *Italy***

Environmental Impacts of the “Fourth Range Lettuce”





**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

**Stefano Duglio, Stanislav Ivanov, Francesca Magliano,
Maya Ivanova, Italy, Bulgaria**

Motivations, Costs and Benefits in the Adoption of the European Ecolabel in the Tourist Sector. A Survey on the Italian Accommodation

Zbigniew Klos, Poland

Proposal of Environmental Aspects Assessment of Products

**V. "QUALITY MANAGEMENT SYSTEMS,
STANDARDIZATION AND CERTIFICATION OF
PRODUCTS"**

**Alfredo Ernesto Di Noia, Giuseppe Martino Nicoletti,
Italy**

"Certifications" and Sustainable Tourism in Italian Protected Natural Areas

Bistra Vassileva, Bulgaria

Agile Quality Management Systems: Challenges and Implications for Creative Industries

Kim, Jong Soon, Soo Hwan Kwak, Ungbae Lee, Korea

An Exploratory Study on Improving Physical Strength and Fitness Using the Control Chart

**Taras Karavayev, Nina Merezhko, Valentyn
Sviderskyi, Ukraine**

Technical Regulations of Paints and Coatings According to Association Agreement Between Ukraine and the EU





**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

11.30 – 12.30

Poster session/Poster discussion 4

Hall – 446

Moderator – Assoc. Prof. Bistra Vassileva, PhD

Secretary – PhD Candidate Georgi Dimitrov

***IV. “ENVIRONMENTAL ASPECTS OF COMMODITY
SCIENCE”***

Andrea Rocchi, Olimpia Martucci, *Italy*

Emas and BEMP: new Applications

Dessislava Kotcheva, *Bulgaria*

Stakeholders’ Analysis Aimed at Identification of
Municipal Actions for Decreasing Landfill Waste
Quantities

Federica De Leo, Pier Paolo Miglietta, *Italy*

The Water Footprint of Agricultural Products from Woody
Crops in Salento and Impact Assessment on Local Water
Resources

Magdalena Wojnarowska, *Poland*

The Role of Environmental Labeling for Sustainable
Production and Sustainable Consumption

Matjaž Denac, Janez Pohleven, *Slovenia*

Environmental Analysis of Constructions of Prefabricated
Passive Houses in Slovenia

**Michele Preziosi, Roberto Merli, Maria Claudia
Lucchetti, *Italy***

Tourism Towards Sustainability: Challenges and
Opportunities for the Accommodation Sector



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

Nicola Casolani, Claudio Pattara, Lolita Liberatore, Italy
Mapping Water Footprint of *Durum Wheat* Production in Italy

Paolo Bogoni, Barbara Campisi, Marta Cosmina, Gianluigi Gallenti, Francesco Marangon, Stefania Troiano, Italy
Carbon Footprint in Wine Production: a Review

Vanya Zhivkova, Bulgaria
Fruit and Vegetable Wastes as a Source for Production of Biofuels

**V. “QUALITY MANAGEMENT SYSTEMS,
STANDARDIZATION AND CERTIFICATION OF
PRODUCTS”**

Federica Murmura, Laura Bravi, Italy
Exploring Customers’ Perceptions about Quality Management Systems: An Empirical Study

Federica Murmura, Nicola Casolani, Laura Bravi, Italy
Linking “*Student satisfaction*” with *Quality Function Deployment* (QFD) to Manage Higher Education in Italy

Jadwiga Adameczyk, Poland
Quality in the Reporting of Sustainable Development of Enterprises

Lolita Liberatore, Nicola Casolani, Federica Murmura, Italy
Perception of Extra-Virgin Olive Oil Certifications: A Commodity Market Perspective





**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

Marcello Ruberti, *Italy*

Problems and Perplexities about EMAS Performance Indicators: A Preliminary Analysis of the Italian Thermoelectric Power Stations Case Study

Marieta Stefanova, Antoaneta Stoyanova, *Bulgaria*

Process-Based Approach in the Quality Management Systems Implementation

Marieta Stefanova, Denka Zlateva, Temenuga Stoykova, *Bulgaria*

Impact of Quality Management Systems on the Minimum Durability of Biscuit Products

Marieta Stefanova, *Bulgaria*

The Compatibility and Differences Between the Requirements Of the Standard for Quality Management ISO 9001:2015 and the Standards ISO 22000:2005, BRC Food V.7 and IFS Food V.6

Marta Karkalíková, Alica Lacková, *Slovakia*

Applicability of Environmental Management in Organizations

Patrizia Pinelli, Leonardo Borsacchi, *Italy*

From Documented Procedure to Documented Information: The New Approach of ISO 9001:2015





**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

11.30 – 12.30	General Assembly of IGWT Hall 128
12.45	Transfer by bus from University of Economics-Varna to hotel Azalia
13.00 – 14.30	Lunch at hotel Azalia
14.45	Transfer by bus from hotel Azalia to Varna
15.00 – 18.15	Cultural tour (Varna Museum of Archaeology)
18.15	Transfer by bus from Varna to hotel Azalia
19.30	Dinner at hotel Azalia
<u>Thursday, 15th September 2016</u> Location: Excursion (St. Konstantin & Elena – Golden Sands – Balchik)	
9.00 – 13.00	Free time
13.30	Departure by bus from hotel Azalia to Botanic Garden – Balchik
17.30	Departure by bus to hotel Azalia
18.30 – 20.00	Dinner at hotel Azalia
20.00	Departure by bus from hotel Azalia to Aladzha Monastery St. Trinity
20.00 – 21.30	Light show - Aladzha Monastery St. Trinity
21.45	Departure from Aladzha Monastery St. Trinity to hotel Azalia



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**



**20th IGWT SYMPOSIUM
COMMODITY SCIENCE
IN A CHANGING WORLD**

International
Society of
Commodity Science
and Technology



**September, 12th-16th 2016,
Varna, Bulgaria**

Friday, 16th September 2016
Location: University of Economics - Varna

8.30	Transfer by bus from hotel Azalia to University of Economics-Varna
9.00 – 10.00	Plenary Session “Commodity science - new trends, perspectives, development” Hall – 446 Moderators – Assoc. Prof. Daniela Ivanova, PhD Assoc. Prof. Sabka Pashova, PhD Secretary – PhD Candidate Georgi Dimitrov
10.00 – 11.00	Coffee break
11.00 – 12.00	Closing ceremony Hall – 446
12.30	Transfer by bus from University of Economics-Varna to hotel Azalia
13.00 – 15.00	Lunch at hotel Azalia
15.00	Free time

Saturday, 17th September 2016
Departure of participants



**UNIVERSITY OF ECONOMICS-VARNA, BULGARIA,
COMMODITY SCIENCE DEPARTMENT**