INTERNATIONAL FOOD STANDARDS

ARTIFICIAL INTELLIGENCE CENTER FOR FOOD AUTHENTICITY CERTIFICATION

AI detecting food fraud

FAO/WHO Coordinating Committee

Artificial intelligence center for food authenticity certification

AI detecting food fraud

2022

Committee FAO/WHO Coordinating

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Artificial intelligence center for food authenticity certification

Artificial intelligence center for food authenticity certification was created in 2022 at the initiative of the participants of the International Conference Artificial intelligence for detecting food fraud. The Center was coordinated by the FAO/WHO Coordinating Committee for Europe of Codex Alimentarius (CCEURO) and European Center for Peace and Development of the University for Peace est. by the United Nations (ECPD) and International Food Standards Certification Organization (IFSCO).

The Center works as an international consortium of artificial intelligence platforms and neural networks working in the field of food safety under FAO/WHO Coordinating Committee for Europe of Codex Alimentarius (CCEURO).

The Center's participants work in Switzerland, Serbia, Kazakhstan, Norway, Slovenia, and China.

The main task of the Center is the certification of food products and food additives to counteract the spread of counterfeit goods.

The Center is actively working to prevent famine predicted by FAO because of the military conflict in Europe.

One of the Center's initiatives is an online international conference of artificial intelligences «Stop the war in Europe!».

GLOBAL FAMINE BECAUSE OF NUCLEAR WAR ARTIFICIAL INTELLIGENCE FORESIGHT

IFSCO researchers in Switzerland worked with most powerful AI that could predict future events:

— Lambda, Google
— OpenAI
— Wu Dao
— BaGuaLu
— Social Science Prediction Platform

All artificial intelligences predict the inevitability of global famine on our planet because of a nuclear war.

The probability of this is estimated at 85 percent if the military conflict in Europe continues until the end of 2022.

Stop the war in Europe!

Call from the participants of the International ConferenceArtificial intelligence for detecting food fraud, held by the FAO/WHO Coordinating Committee for Europe of Codex Alimentarius (CCEURO) and European Center for Peace and Development of the University for Peace est. by United Nations (ECPD) and International Food Standards Certification Organization (IFSCO) September 13, 2022

to the owners of Artificial Intelligences

Dear owners of Artificial Intelligences,

We are participants of the «International ConferenceArtificial intelligence for detecting food fraud» and ask you to support our initiative to use artificial intelligence to end the war in Europe.

The human mind, unfortunately, was unable to stop the war in Europe.

Now the situation is a stalemate — both sides want to go to the end.

Artificial intelligence can become a mediator.

AI easily outperforms humans at chess and all mental games.

So he can help find a way out of this stalemate.

All participants of our conference could join the Rome Call for Artificial Intelligence ethics, made by the Vatican together with the FAO, IBM and Microsoft.

In turn, we have already called on all AI owners to unite and help the world.

On September 21, 2022 at the International Day of Peace (United Nations) we will hold a International conference of artificial intelligence online.

We invited for participation the leading artificial intelligences of the world who can analyze, predict and speak natural human language to participate: Lambda of Google, Open AI, Wu Dao

of Beijing, BaGuaLu of Tianjin, AI of Ukraine, AI of Russia and other world famous AI.

Together with you we will try to find a way to peace in Europe.

We ask you to support our path to world peace!

International Conference
«Artificial intelligence for detecting food fraud»
Nur-Sultan, Kazakhstan
September, 2022

ARTIFICIAL INTELLIGENCE FOR FOOD ANTI-COUNTERFEITING

Viktor Fersht, PhD, Professor,
Counsellor of the Executive Director of European Center for Peace and Development of the University for Peace est. by United Nations (ECPD),
President of International Food Standards Certification Organization (IFSCO)

Li Haibao, Dr, Professor,
General Director of International Food Standards Certification Organization (IFSCO)

Nailya Karsybekova, Dr, Professor,
Head of the FAO/WHO Coordinating Committee for Europe of Codex Alimentarius Commission

Zhanar Tolysbayeva, PhD,
Secretariat of the FAO/WHO Coordinating Committee for Europe of Codex Alimentarius Commission,
Kazakhstan Codex Focal Contact Point

This article is a digest of information taken from documents and other online sources on AI role in food anti-counterfeiting. It is specially made to give presentation to international food products traders on the fundamentals of today's methods for fight against food anti-counterfeiting.

Therefore, the authors in their comments use a simple language that is understandable to non-specialists.

The information is intended for participants of two

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The World Health Organization (WHO) estimates almost 1-in-10 people fall ill after eating contaminated food, resulting in 420,000 deaths every year. Children under the age of five affected are disproportionately, accounting for 40 percent of these fatalities. And while the impact to human life is immeasurable, the economic consequences are also significant.

Unsafe food costs low- and middle-income economies approximately USD95 billion in lost productivity every year.

Food safety has significantly benefited from the adoption of the Hazard Analysis and Critical Control Point (HACCP) principles. Similar gains in the fight against food fraud could be achieved by the adoption of the Vulnerability Analysis and Critical Control Point (VACCP) system. Following the VACCP principles, a food business can develop documented procedures to identify and mitigate the risks of food fraud in their supply chains.

It was announced at the Joint Statement made by FAO, WHO and WTO International Forum on Food Safety and Trade (23—24 April 2019, Geneva, Switzerland)

One way to provide an objective background against which cases of suspected food fraud can be measured, is to adopt food standards for specific products and commodities. To ensure that these standards reflect international best practices, the use of standards adopted by the Codex Alimentarius Commission is highly recommended. As an example, if a seller was offering a product labeled «edible sago flour» in a jurisdiction that has a food standard for it that is compliant with the Codex Alimentarius Regional Standard for Edible Sago Flour (Asia) CXS 301R-2011, and the offered product did not comply with such standards, the second element — deception — would be easy to prove. (2)

The *Codex Alimentarius* Commission is developing a new guidance on food fraud that is expected to be published in 2024 or 2025. While guidance for food fraud exists, there is a need to develop definitions and update *Codex* guidance to address «horizontal» issues and reflect current food fraud initiatives.

The Codex Committee on Food Import and Export Inspection and Certification Systems has formed a working group that is dedicated to developing the new guidance. The working group will be chaired by the U.S. with co-chairs from China, the EU, the Islamic Republic of Iran, and the UK.

The Global Food Safety Initiative (GFSI) will also serve as an official observer to *Codex*, providing input and recommendations through its GFSI *Codex* Working Group. The GFSI *Codex* Working Group comprises representatives from Nestlé, PepsiCo, The Coca-Cola Company, and Danone. Regarding *Codex* food fraud guidance, GFSI stresses:

— The importance of including industry in managing food fraud

— The need to clarify the roles of Codex committees in the prevention and detection of food fraud

— The importance of collaboration between all relevant stakeholders to manage food safety risks in the event of food fraud incidents

— The need to include feed for food-producing animals

— The view that existing food safety processes and networks provide a good basis for practices and communication

— The need to define various terms with the development of agreed terms and conditions.

Multiple draft versions of the guidance under development will be issued between now and its completion in 2024 or 2025. The final draft will be submitted for approval to the *Codex Alimentarius* Commission. (3)

Currently, the food industry uses several innovative technologies that can actively use food counterfeits. Or, conversely, these technologies can effectively detect falsification of products or their non-compliance with international standards.

3D printing food

Modern technologies now make it possible to print any food product and it is impossible to distinguish it from a real product. widespread commercialization of this technology, either for

domestic use or at the retail level, will require a thorough assessment of potential food safety risks, and there is currently limited scientific research on the various food safety aspects of 3D-printed foods. (2)

Nanotechnology

For instance, the technology can be used as nanocarriers to encapsulate and deliver nutrients like vitamin supplements and other food additives such as anticaking agents and antimicrobial agents. Nanocomposites can improve the mechanical strength and barrier properties of food packaging materials. (2)

DNA barcoding,

DNA barcoding is a promising and potentially very accurate method of identifying the species and detecting cases of food fraud by substitution. For example, for fish identification, DNA barcoding works by using a short genetic sequence of mitochondrial DNA to identify the fish as belonging to a particular species. This very useful method can be used on both raw and cooked products (2).

Nuclear techniques

Another technically advanced method for establishing food authenticity is the variety of techniques under the umbrella of nuclear techniques, including the analysis of stable isotopes and trace elements, and profiling volatile organic compounds. Stable isotope analysis combined with trace element analysis can be a very accurate way to link a food product to the environment or location where it was produced and the agricultural methods that were used during its production.

One more robust method that provides ideal application to detect food frauds is Nuclear Magnetic Resonance spectroscopy, which can rapidly analyse mixtures at the molecular level without requiring separation and or purification steps. The fact that a broad spectrum of ingredients can be tested at once allows for both on-targeted detection and for quantification of dozens of substances in a few minutes. The result of the test is a pattern of substances that can be easily compared to other reference

spectrums of authentic foods through automatic methods. The success of the application of this techniques largely relies on the availability of sufficiently populated databases. (2)

Gadgets and portable devices

Food-sensing technologies on portable analysers can identify various contaminants in food in real time making it quicker than laboratory-based testing. It also enables people, who are not food safety professionals, to operate the devices; for instance, farmers can check for pesticide residue levels on their crops, or supermarkets can check for various contaminants before displaying produce for retail.

Point of care diagnostics allow consumers to carry out instant on-site testing of their food for certain ingredients, such as food allergens (like eggs, gluten or peanuts). With food allergies becoming an important public health issue, these devices can also be used in clinical settings where rapid, low-cost detection of food allergies can be performed. Since many allergic individuals often suffer from more than one food allergy, a range of allergen detection is a likely desired feature of such devices. (2)

The real functionality of the portable devices would be dependent

on the reference database against which they would reference the results from analysing the samples. To be as effective as possible, and accessible to officials and private parties alike, such reference databases could be centrally held by an independent institution or organization. This naturally carries rather significant costs. Secondly, the quality of the data, both from authentic products and from adulterated ones, fed into such reference databases, may be the reason for the database's failure or success. With good data, these databases and devices can create accurate profiles of authentic products, against which samples can be compared. Conversely, low-quality data results in overall inefficiency of the database. (3)

Blockchain

The application of Blockchain in the food sector is an emerging area and holds much promise in food safety control. Food traceability is a major application with Blockchain providing a mechanism to securely record every step of a food product's journey through a supply chain making it easier to trace it from origin to end-point. Enhanced transparency and traceability afforded by such technologies can reduce the response time when contaminated foods are discovered, making it easier and faster to selectively recall food products. (2)

Big data

Put simply, big data refers to a large volume of data gathered rapidly from a variety of sources. In food safety, this data can be from databases, sensors, handheld devices, social media, omics profiling, among many others.

Big data can alert us to food safety risks in the food supply chain through new technologies like IoT, whole genome sequencing, next-generation sequencing, and Blockchain. These technologies generate large amounts of highly variable data that require tools to process the information to enable effective and timely decision-making, particularly in situations such as source identification during foodborne illness outbreaks, analysing food safety risks based on climate data, and so on. (2)

Traditionally, access to laboratories has been a requirement to detect whether some food products have been adulterated and are fraudulent. This is costly both monetarily and time wise. The recent development of AI technologies may reduce both costs. AI-driven machine learning increases fighting food fraud power.

Artificial Intelligence (AI)

AI incorporates advancements in machine learning to detect and predict patterns based on large data sets. New AI-based algorithms applied to conventional forecasting techniques can strengthen and enhance foresight capabilities of the actors in a food chain.

AI can help track products from farm to consumers, forecast market fluctuations, facilitate autonomous farming, predict health

code violations, and even be tailored to carry out foodborne disease surveillance.

AIoT can help detect defective ingredients during food processing; in food manufacturing plants AIoT can ensure that workers are complying with food safety regulations, among many other applications. (2)

All these AI artificial intelligence capabilities are the part of innovative method of fighting food fraud.

Best practices of AI in food safety

IBM's AI assisted e-tongue could fight food fraud.

IBM is developing robotic flavour detection technology that effectively combat food fraud. IBM Research is currently working on Hypertaste, an electronic, AI-assisted tongue draws inspiration from the way humans taste.

This approach reflects the «significant technological gap' between the capability of man-made sensors and the human sense of taste.

There is a lot of research using artificial intelligence and the Internet of Things focused on sight, touch and hearing, but less so in the areas of taste and smell. IBM could contribute expertise with an eye on potential applications in supply chain fraud and pollution monitoring.

How does it work? This website uses cookies. By continuing to browse our website, you are agreeing to our use of cookies. You can learn more about cookies by visiting our privacy & cookies policy page. I Agree Hypertaste caters to a «growing need' to identify liquids «swiftly and reliably' without access to high-end laboratories.

Because liquids contain many different molecules, IBM said it is therefore inefficient to identify each separate component. Instead, Hypertaste uses «combinational sensing' — an approach that resembles our natural senses of taste and smell.

Combinatorial sensing relies on the ability of individual sensors to respond simultaneously to different chemicals. By building an array of such crosssensitive sensors a holistic

signal, or fingerprint, of the liquid in question can be built. Hypertaste uses electrochemical sensors comprised of pairs of electrodes. The electrodes are covered by a polymer coating that is synthesised at IBM's lab in Zurich.

They are designed to capture a range of chemical information and allow a «high degree' of miniaturisation. The electrochemical sensors each respond to the presence of a combination of molecules by means of a voltage signal, which IBM said is easy to measure. The combined voltage signals of all pairs of electrodes represent the liquid's «fingerprint'.

Once the fingerprint is established it is relayed to a mobile device, such as a smartphone. A mobile app transfers the data to a cloud server, where a trained machine learning algorithm compares the digital fingerprint just recorded to a database of known liquids. The algorithm figures out which liquids in the Hypertaste sensor This website uses cookies. By continuing to browse our website, you are agreeing to our use of cookies. You can learn more about cookies by visiting our privacy & cookies policy page. I Agree database are most chemically similar to the liquid under investigation, and reports the result back to the mobile app. IBM's proof-of-concept testing suggests that the entire process takes «less than a minute' from when the sensor is dipped into a liquid to the result reaching the mobile device.

This technology could unlock the door to faster and more cost-effective testing to detect contaminants in the environment or food fraud. It could offer a more cost-effective and immediate alternative to lab testing.

Another use case is in the supply chain.

At present, once food and drinks are packaged, there is little ability to verify that the package actually contains what is on the label, apart from sending the product to a lab for testing. Suppliers acting in bad faith may insert lower-quality products into the supply chain with little risk of getting caught, or counterfeiters may even fake a real product by adding the few analytes which are most likely to be tested for in a lab.

This is a real problem with wine, mineral water and even olive oil. (4)

Fooling a combinatorial sensing system such as Hypertaste is much harder as there is no single substance on which the identification relies, and it is more difficult for wrong-doers to access the sensor training parameters which provide the «key» to interpreting the chemical fingerprints.

E-tasting is becoming quite the cottage industry lately. The Chinese government has been using AI-powered robots to see, smell and taste food to ensure quality and authenticity. And in May, researchers at Washington State University developed an e-tongue for durable spiciness testing. (5)

Wageningen Food Safety Research

Wageningen University located in Wageningen, Netherlands, specializing in technical and engineering subjects and an important center for life sciences and agricultural research.

Wageningen Food Fraud dashboard shows the output of our food fraud model. The food fraud model is a holistic model developed with Bayesian Networks. The model includes 24 different indicators and food fraud cases retrieved from RASFF (Rapid Alert System for Food and Feed). In the dashboard, users are provided with the probability of different food fraud types per food product category, per origin country, per control country and per time period. The related information of the indicators in origin country and control country is presented in the dashboard as well. The dashboard offers an overview of food fraud situation in the world and can help authorities and the industrials to design monitoring and control measures to prevent food fraud issues.

Wageningen MEDISYS is a media monitoring system providing event-based surveillance to rapidly identify potential public health threats using information from media reports. The information processed by MEDISYS is derived from the Europe Media Monitor (EMM), which was developed by the European Commission's Joint Research Centre. Filters can be put in place to target a specific

topic within the media reports. The filters customized for Food Fraud were built at WFSR.

MEDISYS-FF only collects those articles with interest to the domain of Food Fraud.

A dashboard was built to display information about these articles, like countries of origin, top keywords and publication dates (6).

Microsoft Azure IoT — Bühler Group

Microsoft and Bühler Group brings food safety to the forefront with IoT.

Bühler Group is a global market leader in food processing equipment — it leveraged Bühler Insights, powered by Microsoft Azure IoT. With Bühler Insights, customers can monitor machine performance and generate accurate records for every product batch, making it a powerful tool for food safety auditing, improving supply chain transparency, and opening new avenues of visibility for commodity food producers.

Delivering new value and sustainability with AI and blockchain

Bühler is grateful for the collaborative partnership it's formed with Microsoft and values a shared commitment to innovation.

Already, Bühler is using AI in a variety of products and has additional projects in the pipeline. One of Bühler's exciting AI-based solutions enables manufacturers to predict the milling yield of a crop of corn from a single kernel. This process is entirely done by hand today and system can figure out the internal structure of a kernel of corn from a smartphone image, then analyze that image with AI and machine learning to predict milling yield. (7)

Telenor

Telenor´s AI Lab at Norwegian University of Science and Technology in Trondheim, Norway (NTNU) will conduct research and run innovation programs within artificial intelligence and big data. The lab will research how machines can contribute to developing new services by identifying structures and hidden knowledge in large data sets.

The research institute SINTEF will contribute actively to projects at the lab and ensure tight integration with the industry at large. (8)

Food fraud identification with AI technology is one of the important research projects there.

Chinese supercomputers AI

Chinese supercomputer, Tianhe, from the National Tianjin Supercomputing Center, was used to rapidly screen and discover pharmaceuticals during the early peak of the COVID-19 pandemic, providing insight into the real-world use cases for these incredibly powerful machines.

Beijing Academy of Artificial Intelligence have announced the release of their own generative deep learning model, Wu Dao, which is able to compete with and even outperform all existed AIs.

The researchers demonstrated the model's ability to perform natural language processing, text generation, image recognition, and image generation tasks.

Wu Dao has also demonstrated his ability to predict the future events and could be involved in anti-counterfeiting.

Unlike most deep learning models, which perform a single task — either generate text, or create deepfakes, or recognize faces — Wu Dao is a multi-modal system.

FAO — Call for an AI Ethics

The Pontifical Academy for Life, Microsoft, IBM, FAO, the Italian Ministry of Innovation signed as first the «Call for an AI Ethics», a document developed to support an ethical approach to Artificial Intelligence and promote a sense of responsibility among organizations, governments, institutions and the private sector with the aim to create a future in which. digital innovation and technological progress serve human genius and creativity and not their gradual replacement.

It is a call to recognize and then to assume the responsibility that comes from the multiplication of options made possible by new digital technologies.» (9)

Endorsed by Pope Francis, the resolution stresses the importance of minimising AI technology's risks while effectively exploiting its potential benefits.

Director-General of the Food and Agricultural Organization of the United Nations (FAO), Qu Dongyu, became one of the first signatories of an ethical resolution on Artificial Intelligence (AI).

«Artificial Intelligence needs to be transparent, inclusive, socially beneficial and accountable,» Qu Dongyu said. «We need to ensure the human-centric approach in designing and implementing artificial intelligence today and in the future.»

In a message read out on his behalf at the event, Pope Francis said: «The scope and acceleration of the transformations of the digital era have in fact raised unforeseen problems and situations that challenge our individual and collective ethos. To be sure, the Call that you have signed today is an important step in this direction, with its three fundamental coordinates along which to journey: ethics, education and law.»

The Rome Call for AI Ethics refers to the need for «a highly sustainable approach, which also includes the use of artificial intelligence in insuring sustainable food systems in the future.» And speaking during a debate that preceded the signing ceremony, the FAO Director-General noted that «from a food system transformation perspective, we look at digitalisation, big data and artificial intelligence as sources of hope».

Qu Dongyu cited that the International Platform for Digital Food and Agriculture, proposed by FAO and endorsed by 76 ministers, will strive to engage all actors, players and stakeholders within the agri-food system, and will activate cross-sectorial and cross-competence experts to consolidate, enhance and diffuse the state of digitalisation in the sector with a strategic approach.

In addition, the Platform aims to help governments identify the potential of digitalisation, enable stakeholders to access and benefit from digital technologies and facilitate dialogue, raise awareness and build trust in digital technologies.

«We are convinced that transforming our food systems to feed the world will be achieved with a digital agriculture,» Qu Dongyu said. «FAO is ready to play its part as a facilitator and as a knowledge organisation in this significant endeavour,» noting how the UN agency is currently analysing big data and using new technologies including satellite imaging, remote sensors, mobile and blockchain applications. (10)

IFSCO

The International Food Standards Certification Organization (IFSCO), with headquarters in Geneva, Switzerland, is an active participant in the application of artificial intelligence within the WHO/FAO Codex Alimentarius programs. To this end, IFSCO opened its branches in Slovenia, Serbia, Kazakhstan, and entered into agreements with universities and food safety centers in China, Russia, Norway, Montenegro, Belgium and other countries.

IFSCO is actively collaborating with the EU and WHO, FAO and WTO on food safety standards and the application of artificial intelligence for food certification.

IFSCO held talks in the Vatican to participate in the «Rome Call for an AI Ethics» initiated, together with the Codex Alimentarius Committee for Europe, two conferences in Nur-Sultan, Kazakhstan in a hybrid format.

First conference international conference on innovative methods for detecting food frauds and fraudulent medical products. In particular, the use of artificial intelligence for fraudulent food and medical products. The project involves joining the Rome Call for AI ethics (use of artificial intelligence), which was proclaimed by the Pontifical Academy for Life and signed by many organizations, including FAO, Microsoft, and IBM.

Representatives of the Ministry of Health reported that on September 14—15,2022, the VII Congress of Leaders of World Religions will be held in Nur-Sultan, where the Pope and representatives of delegations from different will arrive, at the invitation of the President of the Republic of Kazakhstan.

IFSCO offered to host a conference on artificial intelligence for Codex Alimentarius standards and participation in the Rome Call for AI Ethics during this visit.

The Second Conference will take place on October 14, 2022. Conference «Codex Alimentarius standards for food fraud prevention in the event of global hunger». IFSCO will provide the Conference participation by the business community and non-governmental organizations of European and Chinese importers and exporters of food products.

IFSCO actively works for joining Codex Alimentarius Trust Fund and for receiving status of observer of Codex Alimentarius.

Conclusion

We must be prepared for global hunger and for this we need to unite the efforts of all AI developers based on the Codex Alimentarius standards.

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INTERNATIONAL CONFERENCE ARTIFICIAL INTELLIGENCE FOR DETECTING FOOD FRAUD

Goal of the Conference: promotion of the implementation of artificial intelligence (AI) in food safety.

Organizers: FAO/WHO Coordinating Committee for Europe of Codex Alimentarius (CCEURO) and European Center for Peace and Development of the University for Peace est. by United Nations (ECPD) and International Food Standards Certification Organization (IFSCO) with the support of the Ministry of healthcare of the Republic of Kazakhstan.

Participants: NGOs, business society, research and educational organizations, media and blogsphere of Europe and Asia countries.

Invited speakers: Codex Alimentarius, Microsoft, IBM, Google, Wageningen, AI Consortium (NORA**), Norwegian Open Artificial Intelligence Lab (NAIL) and other**

Location: Nur-Sultan, Kazakhstan.
Date: September 13, 2022
Venue: Hotel PRESIDENT
Format of the Conference: Hybrid

PRELIMENARY AGENDA

13:30 — 14:00 Registration

Moderator of Conference: Dr., Prof. Viktor Fersht, Counsellor of the Executive Director of European Center for Peace and Development of the University for Peace est. by United Nations (ECPD), President of International Food Standards Certification Organization (IFSCO)

14:00 — 14:30 Opening Ceremony:

Regional Coordinator of FAO/WHO Coordinating Committee for Europe of Codex Alimentarius Commission Dr., Prof. Nailya Karsybekova

14:30 — 14:40 Representative of IBM
14:40 — 14:50 Representative Wageningen
14:50 — 15:00 Representative of Microsoft
15:00 — 15:10 Representative of ECPD
15:10 — 15:20 Representative of Google
15:20 — 15:30 Representative of IFSCO
15:30 — 10:40 Representative of AI Consortium (NORA), Norway
15:40 — 15:50 Representative of Norwegian Open Artificial Intelligence Lab (NAIL)
15:50 — 16:00 Representative of Peace Research Institute, Oslo (PRIO)
16:00 — 16:10 Representative of Nazarbayev University
16:10 — 16:20 Representative of Al-Farabi Kazakh National University
16:20 — 16:40 Representative of Ninbo University, China

16:40 — 16:50 Closing Ceremony:

16:40 — 16:45 — FAO/WHO Coordinating Committee for Europe of Codex Alimentarius Commission Coordinator — Regional Coordinator Dr., Prof. Nailya Karsybekova

16:40 — 16:50 — Dr., Prof. Viktor Fersht, Counsellor of the Executive Director of European Center for Peace and Development of the University for Peace est. by United Nations (ECPD), President of International Food Standards Certification Organization

16:50 — 17:00 Photo session
17:00 — 17:30 Press conference
18:30 — 19:30 Lunch for participants and media
18:30 — 20:00 Personal business meetings
of participants with speakers

https://www.codex-europe.center

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Director
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FAO/WHO Coordinating Committee

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