October/December 2013

www.globalharmonization.net

# **GHI** Matters

The newsletter of the Global Harmonization Initiative

## Message from the President

#### Dear Readers,

It is a pleasure to write an introductory message for the first GHI Matters that I have not had responsibility for, freeing much time to devote to other - mostly also GHI - matters. I am very grateful to Siân, our Editor-in-Chief.

I write this just shortly after the news that one of the greatest fighters for justice in history, former President Mandela, had died. I congratulate our South African friends for a man such as he who united the peoples of a nation when nobody believed that it would be possible. And, of course, I offer my sympathy to the same people for the loss of their country's father because, even when expected, losing your beloved father is still a very painful event. He, however, will live forever in the memories of the entire world.

GHI has many active food scientists and it is becoming difficult to follow all that is happening. Some countries now have more than one ambassador, facilitating the organisation of local activities, which means the number of GHI Ambassadors is also growing and keeping track of all their activities is impossible. Nevertheless, this issue includes a short report from: the ambassador in Croatia, discussing harmonization of food regulations with the director of the Croatian Food Agency; one of the ambassadors in South Africa, hosting a workshop of the International Commission on Microbiological Specifications for Foods (ICMSF), and another on the 20<sup>th</sup> SAA-FoST Biennial International Congress; our ambassador in Sri Lanka about the dietary wisdom from our ancestors; and the ambassador in Bangladesh describing results for Bangladesh from the EU Rapid Alert System for Food and Feed in the period 2000–2012.

There is more, such as articles about harmonizing halal food law in the context of the history, and the fact there is more than enough food to feed 10 billion people in 2050, "but where?", which is adapted from an article by prize-winning journalist Alex Renton.

#### In This Issue

1. President's message	1
2. Harmonizing halal food law and certifi- cation in the historical context of Islamic law	2
3. 20 <sup>th</sup> SAAFoST Biennial International Congress	3
4. Workshop: Microbiological sampling and food safety objectives	3
5. Where's the food !	4
6. Bangladesh in the Rapid Alert System for Food and Feed	4
7. ISEKI teaching materials	5
8. Ensuring Global Food Safety; Exploring Global Harmonization	7
9. Wisdom from our ancestors: The efficacy of traditional diets	7
10. GHI Officers	9
11. GHI Ambassadors	10
1 million	





GHI meetings and workshops are where the consensus happens!

Achieving consensus on the science of food regulations and legislation to ensure the global availability of safe and wholesome food products for all consumers.



Congratulations to one of the founding members of the GHI Board, Dr Vishweshwaraiah Prakash, who was elected Vice President by the International Union of Nutritional Sciences (IUNS) for the period 2013-2017. Dr Prakash has been and still is extremely active and, therefore, received at almost the same time the IUFoST Lifetime Achievement Award 2013.

We are fast approaching the end of the year and around then, depending on where you live, there are great celebrations. I use this opportunity to wish everybody a happy and pleasant time and, in some areas of the world, also very much strength and courage to cope with the prevailing circumstances, hoping that with mutual effort, eventually, these circumstances will improve.

Take Care, Huub Lelieveld,

**GHI** President

### Harmonizing halal food law and certification in the historical context of Islamic law

**D**uring the last meeting of the GHI Working Group 'Food safety in relation to religious dietarv laws' (Istanbul TR, 7<sup>th</sup> May 2013), it became clear that harmonizing halal food law and certification in an international context presents major challenges. These difficulties include the understanding of halal food requirements amongst Islamic countries, regions and/or organisations. Halal criteria specify what foods and beverages may be consumed by Muslims and how these are prepared. Whilst some general rules apply, the precise criteria are different throughout the Islamic world. To further harmonise Islamic religious dietary law. the entire historical context of sharia law needs to be taken into account.

In general, Islamic or sharia law is derived from the Koran. Where the Koran is not specific, further explanation was sought and has resulted in different local practices or sunnas, based on what the Prophet Muhammad might have done in a given situation as well as wider understanding of the Koran. In parallel with these first level sources, there are also analogous extensions that have been established (qiyas) and 'what all Muslims agree on' (consensus, ijma). GHI has legal non-profit entity status and its charter and constitution are registered in Vienna, Austria as the GHI-Association (ZVR453446383).

However, what is law must still be based on the Koran and sunnas. Historically, limited agreements on the content of law were to be found throughout the early Islamic world. Instead of trying to achieve complete agreement across the empire, the most important legal scholars Abu Hanifa, Malik, Shafi'i and Ibn Hanbal, split into parallel legal traditions, 'schools of law' or madhhabs. The four agreed on basic guidelines, but also differ on many issues. Generally, these 'schools of law' are tolerant towards each other, and separated largely by geography rather than legal perception. Within these 'schools of law' there are scholars that defined Islamic law. Individual cases in (regional) law practice are judged by qadi. However, there are also jurists or scholars of law (mufti) who clarify the law in general terms or offer a legal opinion (fatwas) when asked to do so by the judge or a party in the case and fulfilling different societal aims: judicial, political and private. Although Islamic literature discusses how far into the field of theology a mufti may venture, they have a significant influence on the development of regional laws. The aim is not to unify or harmonize sharia law and, as such, explains many of the difficulties associated with harmonization religious dietary law globally. The temptation is to seek solutions outside Islam, but there are alternatives.

A broader meaning of halal is that which is lawful or permissible. The opposite of halal is haram, what is forbidden. Between and inside these concepts are a wide variety of actions and situations. In sharia law, rules that describe whether something is correct are grouped into five categories: (1) required (wajib), which are sin to omit; (2) recommended (mandub) that may be omitted without sin; (3) neutral (mubah); (4) disapproved or repulsive (makruh) but not a sin; and (5) forbidden (haram).

Halal definitely includes the first three levels. There is some dispute over whether makruh is also halal, but it is certainly something that Muslims avoid. However, only the first and last (haram) have any legal significance. The law specifies what is required and what is forbidden; other categories, ultimately, remain a matter between each believer and Allāh.

Although there are always difficulties associated with putting foods in a specific category, this might be an interesting approach to harmonize religious dietary laws. Considering all the Islamic laws concerning food into account, foods could be classified as halal or haram. However, in practice, there are many situations where it is not clear if foods are halal for entire Muslim population, which is where this wider approach becomes problematic. These foods are disputed by nature or manufacturing and may be classified as between halal and haram, falling into mandub, mubah or makruh. Such classification may take liability away from the manufacturer, make international trade clearer, and empowers individuals in the choice of the food consumed, precisely where it should be.

Knut S. Vikør, Between God and the Sultan. A History of Islamic Law, London 2005

Evertjan van Roekel LLM MA, The Netherlands Member GHI Working Group Food safety in relation to religious dietary laws 'Ensuring global food safety', global standards and legislation, symposia and workshops worldwide on food safety, cooperation of GHI with other scientific bodies, product safety and toxicity, zero tolerance and effect of date coding, and the destruction of food that is still safe and edible.

The main discussion point after the presentation was the question whether we need so many organizations involved in food safety. The speaker responded and emphasized that GHI was different and unique because it was ran by food scientists without involvement or interference of governments, industries or any other stakeholders.

SAAFoST's 20<sup>th</sup> Biennial International Congress and Exhibition was followed, on 10<sup>th</sup> October, by a workshop on 'Microbiological Sampling Plans and Food Safety Objectives' organised the International Commission on the Microbiological Specification for Food (ICMSF) (see below ).

> Dr Pieter van Twisk GHI Ambassador in South Africa (Lead)

## 20<sup>th</sup> SAAFoST Biennial International Congress

Attended by 537 delegates from 26 countries, including eight in Africa, the South African Association for Food Science and Technology (SAAFoST) held its 20<sup>th</sup> Biennial International Congress and Exhibition in Pretoria, South Africa (7-9<sup>th</sup> October 2013). Delegates included Pingfan Rao (IUFoST President), Judith Meech (IUFoST Secretary General), Walter Spiess (President of the International Academy of Food Science and Technology) and Janet Collins (IFT President). The programme included oral and poster presentations covering a wide variety of subjects; there were 18 posters on food safety alone and, during a plenary lecture, food safety was emphasised as one of the challenges facing food retail businesses.

Pieter van Twisk, GHI Ambassador to South Africa, was one of the congress speakers and gave a talk about GHI including: what GHI is, definitions of "food safety", member countries of GHI, duties of GHI ambassadors, *modus operandi* (working groups, consensus between food scientists), working groups, publications including the book

# Workshop: Microbiological sampling and food safety objectives

**A**n International Commission on Microbiological Specifications for Foods (ICMSF) workshop on 'microbiological sampling and food safety objectives' was hosted in South Africa on 10<sup>th</sup> October 2013. Held following the South African Association for Food Science and Technology Congress (7-9<sup>th</sup> October 2013) in Pretoria (ZA), 60 places were initially available but unprecedented demand saw this rise finally to 70 delegates.

ICMSF members Lucia Anelich (Anelich Consulting ZA, organiser), Jean Louis Cordier (Nestlé CH), Peter McClure (Unilever UK) and Tom Ross (University of Tasmania AU) presented and, amongst other things, delegates learned about microbiological criteria, components constituting microbiological criteria, how these are developed and more in the hope that companies will base/alter their testing regimens on scientifically-developed microbiological criteria. Five government officials were also invited to attend the workshop, due to generous sponsorship received, and three accepted. It is vital that government officials participate in such events, as accurate sampling of food for various regulatory purposes, including testing of imported food, is a critical part of food control. It is hoped this workshop can be hosted elsewhere in Africa, not only for training purposes but also to assist countries in developing science-based food safety regulations, with an ultimate goal of harmonizing food safety regulations across different regions in Africa. This will not only to facilitate regional trade, but also international trade and ensure protection of human health.

> Lucia Anelich, GHI Ambassador in South Africa

### Where's the food!

"The way food is produced it looks like we have enough food for about 4500 calories a day somewhere in the world. But, millions live with absolute hunger. It is not clear how this will handled in the future when in 2050 we are expected to have 10 billion people on the planet and the demand of food increases exponentially ..." Alex Renton, journalist

The global migration of food whether salmon travels 50 000 Km from Sweden or wheat grown in Brazil is eaten as bread in France, avocados in the salad come from Peru or the coriander from Spain, is a global phenomenon. But, whilst 1.2 billion people are obese and suffer with non-communicable diseases such as diabetes, nearly 900 million are living in absolute hunger and, of them, 300 million are children who will ultimately grow up stunted. We give little thought to the spider's web of deals, political and economic, which permit this astonishing feast to lie before us or to the resources used: water - 150 litres to irrigate wheat for couscous or fossil fuels that power every bit of production, from refrigerated ships from New Zealand and South America to fertilizers for South African and Californian vines. We are not going to run out of food. Looked at in terms of calories, the world is fabulously, happily, over-supplied. Currently, we produce enough to give everyone on the planet 4 500 kilocalories daily, more than double the energy most of us need. On that basis, we could feed not just the nine or 10 billion expected in 2050, when the human population peaks in the middle of the 21st century, but a few billion more . . .

For the whole article <u>http://bit.ly/1eZJeqU</u>

Alex Renton is a prize-winning journalist whose work has been honoured by the Guild of Food Writers, Amnesty International and the British Press Awards, among others. His new book on food security, Planet Carnivore, has recently been published.

## Bangladesh in the Rapid Alert System for Food and Feed notifications in the period 2000–2012: a review

Information provided in the Rapid Alert System for Food and Feed (RASFF) portal database of the European Commission on "crustaceans and products thereof" for Bangladesh during 2000-2012 was investigated to analyse the trends of occurrences. A total of 159 (10.56%) notifications (alert - 40; border rejection - 47; information - 72) were recorded for Bangladesh against a worldwide 1505 notifications. During the period 120 (20.27%) notifications were identified for residue of veterinary medicinal products against 592 notifications recorded in the portal. Forty-eight consignments were re-despatched to Bangladesh while 11 consignments were destroyed at the European border as a consequence of the notifications by the European countries.

For more information visit <u>http://vri.cz/docs/</u> vetmed/58-8-399.pdf

Veterinarni Medicina (2013) 58(8): 399-404

S.M. Nazmul Alam, GHI Ambassador in Bangladesh

A globally harmonised brochure describing GHI and its activities has been published and can be downloaded from <u>http://bit.ly/1jSiyw4</u>

## Food Safety Magazine

The October/November 2013 issue of Food Safety Magazine is now available online. Features include: Economically motivated adulteration: Another dimension of the "expanding umbrella of food defence"; Authentication of seafood; Thermal processing with food safety in mind; Communication: It's not all about the science; Best practices in facility design; US and EU requirements for recycled food contact materials; Don't forget about your chemical hazards!; Is it time for retail HACCP?; What defines a laboratory quality system; and Food safety insider: rapid micro solutions.

Click here to begin reading http://bit.ly/199FtPm

## Journal of Hygienic Engineering and Design

**J**HED (www.jhed.mk) is a platform for bringing together industry, experts and the scientific community as well as consumers.

It is a unique journal with more than 25,000 registered readers worldwide. Authors of papers published in JHED will have priority as Invited Speakers for the 7<sup>th</sup> Central European Congress on Food, which will take place in Ohrid (MK, 21<sup>st</sup>-24<sup>th</sup> May 2014).

7<sup>th</sup> CEFood Congress program will also include roundtable discussions and networking event on: Horizon 2020, FP7, COST and EUREKA Programmes.

For more information visit http://keyevent.org/ Invitation

Topics for JHED include:

- 1. Food and feed value chains management and integration
- 2. Ingredients and additives, nutrition and health
- 3. Food and feed primary production and processing technologies
- 4. Hygienic engineering and design
- 5. Food biotechnology, biomass and bioproducts
- 6. Food and feed analysis, quality, safety and traceability
- 7. Food safety legislation
- 8. Consumers and sensory science
- 9. Traditional food production and protection
- 10. Education, innovation and knowledge transfer

If you would like to publish in JHED, please register at - http://www.jhed.mk/categories/ naslovna/ and click on JHED AUTHORS REGISTRATION

To submit an abstract for consideration, please consult the JHED abstract submission rules (http://www.jhed.mk/categories/view/411) and, once registered as an author, send your abstract to contact@key.com.mk.

There are fees for publication (http://www.jhed.mk/categories/view/406).

# The 20<sup>th</sup> International Congress of Nutrition

Was held in Granada (ES, 15-20<sup>th</sup> September 2013, <u>http://icn2013.com</u>) where the General body elected Dr Vishweshwaraiah Prakash (founding member of the GHI Board) as IUNS Vice President for 2013-2017, unanimously.

This makes a lot of difference for India from the nutrition point of view, globally, particularly with adoption of the Food and Nutrition Security Bill earlier this year. It also means Prakash will be still busier, ensuring some of the successes in India, such as mid-day meals, Anganwadis, the milk in school and banana a day programmes as well as how severely malnourished children should be handled following discharge from hospital, can be established elsewhere based on the successful Indian model.

#### **ISEKI** teaching materials

The ISEKI FOOD Association Education platform is a dynamic and concerted effort to bring together a wealth of up-to-date information. This elocation is a one-stop site containing a significant amount of information and resources for students, teachers and practitioners in the food and beverage respectfully like listings of web sources including webinars and e-learning courses as well as databases on laboratory and pilot plant equipment and curricula. The site is maintained and regularly updated with material to ensure that it remains both timely and significant to all those who access it. For more inforvisit https://www.iseki-food.net/ mation teaching materials/info

### Meetings with GHI involvement



#### Safety, Quality and Functionality of food in the Food Industry and Food Service Towards a Culture of Quality in the Food Consumption

The 6<sup>th</sup> International Meeting CUCCAL will take place in Cancún (MX, 4-8<sup>th</sup> November 2013) and is organised by SOMEICCA (Sociedad Mexicana de Inocuidad y Calidad para Consumidores de Alimentos), which is chaired by Prof. Marco A. León Félix (GHI Ambassador in Mexico). There will be GHI meetings during this conference, details will follow later. Further information will be made available via the GHI Newsletter and website (www.globalharmonization.net) and the event website (http://bit.ly/16A67N3).



#### EFFoST 2013 Annual Conference Bio-Based Technologies in the context of European Food Innovation Systems

This year's conference takes place in Bologna (IT) on 12-15<sup>th</sup> November 2013. For detailed information visit <u>http://www.effost.org/home/annual-meeting/</u>

GHI was an initiative of EFFoST and the International Division of IFT. Financial support from EFFoST has facilitated registration of the GHI Association in Austria. Since its foundation, there have been GHI meetings in association with the EFFoST Annual Conferences, and this will be the case again this year. Details will be published in the next issue of GHI Matters. In addition, in September, all GHI members will receive, by email, an invitation with details for the GHI meetings during the EFFoST Annual Conference. You may wish to keep the dates free!



## 3<sup>rd</sup> International ISEKI Food Conference: ISEKI Food 2014

Bridging training and research for industry and the wider community Athens GR, 21<sup>st</sup>-23<sup>rd</sup> May 2014 Food science and technological excellence for a sustainable bioeconomy For further information visit: http://www.isekiconferences.com/athens2014

## Ensuring Global Food Safety; Exploring Global Harmonization

Christine E. Boisrobert, Aleksandra Stjepanovic, Sangsuk Oh and Huub L.M. Lelieveld (eds.) Elsevier 2010 (0123748453) Vlasta Piližota (GHI Ambassador in Croatia)

Since food is important for all humans it is of great significance to deliver wholesome, safe and high quality food to consumers. There are many books dealing with safety and quality issues but none with such broad and important topics supported by specific objectives as 'Ensuring Global Food Safety; Exploring Global Harmonization'. From the first to the last, chapter, the expertise and knowledge in the field of food safety are well presented by a respectable number of world-known scientists and professionals, which in itself is an achievement. No other book integrates so many issues as methods, procedures, and food regulations (national and international), food analysis (analytical and microbiological), harmonization, food processing and packaging as well as issues covering specific chemicals or/ and microorganisms. The book is definitely one that should be introduced as a literature to students in food science and technology at universities or staff in government institutions dealing with legislation in the food sector or indeed those engaged at any level in the food chain.



This review was original published in Croatian Journal of Food Science and Technology (2010) 2(2): 48 (http://hrcak.srce.hr/index.php show=clanak&id\_clanak\_jezik=97984)

Vlasta Pilizota (GHI Ambassador in Croatia) visited Croatian Food Agency on 16<sup>th</sup> September 2013 and discussed GHI goals with with director, Ms Andrea Gross-Bosković.

**Croatian Food Agency (HAH)** is a governmentappointed authority within the portfolio of the Ministry of Agriculture, established by the Food Act and open on 3<sup>rd</sup> January 2005 in Osijek (HR). It is a legal entity with rights and obligations stipulated in the Food Act and the HAH Statute, and the Director of HAH is responsible for its effective and lawful operation. Activities are funded from the state budget of the Republic of Croatia.

## Wisdom from our ancestors: The efficacy of traditional diets

Our fast-paced lifestyle means there is hardly time to sit down properly at a dining table let alone enjoy a meal, and has resulted in the introduction of many convenience 'fast food' products that cater to the need to eat on the go. With all due respect for such creations, these products, however, have slowly but surely taken traditional dietary practices out of the limelight, not necessarily for the good of consumers. Traditional diets have been 'clinically tested' for generations, and proven generally to be effective in achieving health and well being, which seem to be absent and unachieved from presentday food items.

Traditional diets – regardless of their origin – typically involve the consumption of wild greens, whole grains and a multitude of herbs and spices. Scientific evidence continues to accumulate about the efficacy of these food ingredients in reducing the risk of non-communicable disease such as diabetes, cardiovascular disease and cancer. They may even be able to improve longevity based on data from recent clinical studies.

In promoting the adoption of traditional diets for disease reduction and improved health, traditional methods of preparation also need to be considered. Despite the technological advancements for processing, and the preservation of food even in household kitchens, ancient food preparation methods involved simply exposure of the raw food products to heat at moderate temperatures for a minimum of time. In turn, this was able to secure the continued bioactivity of most compounds that offer putative health benefits whilst reducing the microbiological risk.

Regardless of whether adopted dietary practices are traditional or contemporary, portion control is an important aspect that does not get as much attention as required. Over-consumption of even the healthiest food item(s) still has consequences. Thus, in addition to a balanced and healthy diet, moderation is the key to maintaining good physical health. After all, food is medicine and, as with any medicine, food also has a consumption limit beyond which harmful antagonistic effects may occur ...

> Dr Viduranga Waisundara (GHI Ambassador for Sri Lanka)

## Meeting data template

We are keen to announce relevant meetings in the GHI Newsletter and on the GHI website. To be able to do so in a useful way, appropriate information is needed. To make it easy, the following template may be copied and pasted in an email to Dr. Aleksandra Martinovic (aleksandram74@gmail.com), GHI Meetings Coordinator and GHI Ambassador for Montenegro.

Full name of the event: Details of location: Name venue: Street and number: Town: Province or state: Country: Web page: Start and time: End date and time: Website of the event Titles of GHI actvity\*: Start date and time of GHI activity End date and time of GHI activity GHI officers or members involved: Names: Email addresses: Phone numbers:

\*e.g. presentations, posters, working group meeting

**GHI** is an initiative of the European Federation of Food Science and Technology (**EFFoST**), which is the European part of the International Union of Food Science and Technology (**IUFoST**) and the International Division of the Institute of Food Technologists (**IFT**). GHI is supported by many other scientific organizations and receives support from the European Hygienic Engineering and Design Group (**EHEDG**).



#### **GHI EXECUTIVE COMMITTEE**

Mr. Huub Lelieveld, The Netherlands Mr. Larry Keener, USA Dr. Sangsuk Oh, Korea Dr. Gerhard Schleining, Austria Dr. Vishweshwaraiah Prakash, India Mrs. Christine Boisrobert, USA Dr. Lilia Ahrné, Sweden

#### **GHI HONORARY OFFICERS**

Communications Director	Julie Larson Bricher, USA,
Director Ambassador Programme	Dr. Alina-Ioana Gostin, Romania
Working Groups Coordinator	Dr. Susanne Braun, Germany
Course Director	Richard F. Stier, USA
Regulatory Advisor	Nicole Coutrelis, France
Legal Advisor – Food	Dr. Bernd van der Meulen, The Netherlands
Newsletter Editor-in-Chief	Dr. Siân Astley, UK
Newsletter Publisher	Grigor Badalyan MSc, Armenia
Membership Director	Dr. Vishweshwaraiah Prakash, India
Assistant General Secretary	Irena Šoljić MSc, Croatia
Webmaster	Gunter Greil, Vienna, Austria

#### **SUPERVISORY BOARD**

- Dr. Roland Ernest Poms, ICC, Vienna, Austria (Chair)
- Dr. Hans Steinhart, EuCheMS Food Chemistry Division, Hamburg, Germany
- Dr. Pablo Juliano, CSIRO, Werribee, Australia
- Dr. V. Balasubramaniam, The Ohio State University, Columbus, USA
- Dr. Pingfan Rao, Fuzhou University and Chinese Institute of Food Science and Technology, Fujian, China
- Dr. Jaap Hanekamp, Roosevelt Academy, Tilburg, The Netherlands
- Dr. Siân Astley, EuroFIR, Brussels, Belgium
- Dr. Maria Tapia, Universidad Central de Venezuela, Venezuela

#### AUDITORS

Dr. Vladimir Kakurinov, Macedonia Dr. Pablo Juliano, Australia

#### **WORKING GROUP LEADERS**

Chemical food safety Food contact materials Genetic toxicology High-pressure processing Listeria in RTE food Mycotoxins Nanotechnology Nutrition Regulatory aspects of reducing post harvest losses Food safety in relation to religious dietary laws Dr. Jaap Hanekamp, The Netherlands Mr. Eric Partington, UK Dr. Firouz Darroudi, The Netherlands Dr. Hosahalli S. Ramaswamy, Canada Dr. Cynthia Stewart, USA Dr. Naresh Magan, UK and Dr. Mark Shamtsyan, Russia Dr. Frans Kampers, Netherlands and Dr. An-I Yeh, Taiwan Dr. Vishweshwaraiah Prakash, India and Iuliana Vintila, Romania Dr. Kenneth Marsh, USA

Isabella van Rijn, MSc, Netherlands and Dr. Ismail Odetokun, Nigeria

## **GHI AMBASSADORS**



#### **GHI Ambassadors**

#### www.globalharmonization.net

ARGENTINA AUSTRALIA BANGLADESH **CHINA** COSTA RICA CROATIA CZECH REPUBLIC EGYPT **GERMANY** GHANA HUNGARY INDIA IRAN ITALY JAPAN **KENYA** KOREA **LEBANON LITHUANIA** MACEDONIA MEXICO MONTENEGRO PAKISTAN ROMANIA RUSSIA **SENEGAL** SOUTH AFRICA **SPAIN** 

SRI LANKA TANZANIA THAILAND TURKEY

UGANDA UKRAINE URUGUAY U.S.A.

VENEZUELA

Prof. Alejandro Ariosti Dr. Dilip Ghosh Dr. S. M. Nazmul Alam Prof. Dr. Xian-Ming Shi M. Sc. Gisela Kopper Prof. Dr. Vlasta Piližota Dr. Milan Houška Eng. Morad Sayed Ahmed Dr. Oliver Schlüter M. Sc. Hanson Arthur Prof. Dr. Livia Simon-Sarkadi Prof. Dr. Jamuna Prakash Prof. Dr. Hamid Ezzatpanah Prof. Dr. Paola Pittia Dr. Quamrul Hasan Hon. Prof. Dr. Ruth K. Oniang'o Prof. Dr. Kwang-Won Lee B. Sc. Atef Idriss Prof. Dr. Rimantas Venskutonis Prof. Dr. Vladimir Kakurinov Prof. Marco A. León Félix Dr. Aleksandra Martinovic Dr. Shinawar Waseem Ali Assist. Prof. Dr. Mihaela Geicu-Cristea Prof. Dr. Mark Shamtsyan Dr. Ibrahima Cissé Dr. Pieter van Twisk (Lead Ambassador), Dr. Gunnar Sigge and Prof. Dr. Lucia Anelich Prof. Dr. Olga Martín-Belloso Dr. Viduranga Waisundara Dr. Godwin D. Ndossi Dr. Peter Alastair Hicks Prof. Dr. Hamit Koksel (Lead Ambassador) and Prof. Dr. Hasan Yetim B. Sci. Denis Twinamatsiko Prof. Dr. Yaroslav Zasyadko Dr. Pablo Juliano and M. Sc. Rosa Márquez Romero Dr. Aurora A. Saulo, Prof. Yao-Wen Huang and M. Sc. Harshit Agrawal Prof. Dr. Maria Soledad Tapia

For contact details, send an email to ambassadors@globalharmonization.net

Registered in Vienna - ZVR-Zahl / Registration Number: 453446383

GHI Association - c/o Department of Food Science & Technology, Universität für Bodenkultur Muthgasse 18,1190 Wien, Austria

## Become a GHI Member

If you are interested in becoming a member of GHI, we invite you

to take these simple steps:

- 1. Please visit www.globalharmonization.net and complete the Individual Membership Enrollment form. You will be asked to provide full contact information, current professional affiliations and areas of scientific expertise. There is no fee to join GHI.
- 2. Once your application has been accepted, you will receive notification via email, along with information from GHI regarding upcoming meetings, working groups workshops, and more.
- 3. For further questions on GHI membership, please send your inquiry to the attention of the Honorary Membership Director via email at membershipdirector@globalharmonization.net.



Gain an influential voice in consensus with other experts that will have a real impact on reducing world hunger, improving food safety and nutrition, and supporting new technology applications.



#### **CONTACT US**

#### Postal address:

GHI Association, c/o Dr. Gerhard Schleining Department of Food Science and Technology Universität für Bodenkultur Muthgasse 18 1190 Wien AUSTRIA

Email: info@globalharmonization.net

Web: www.globalharmonization.net