

# 出國報告（出國類別：會議及參訪）

2011 國際穀物科技學會暨第三屆 MoniQA 國際會議  
(2011 ICC and the 3rd MoniQA International Conference)

## 出國報告

服務機關：國立屏東科技大學

姓名職稱：古源光校長

派赴國家：瓦爾納 保加利亞

報告日期：100 年 10 月 15 日

出國期間：100 年 9 月 24 日 至 9 月 29 日

## 摘 要

- 一、 ICC(International Association of Cereal Science and Technology)為總部設立於奧地利維也納之國際穀物科技組織，台灣自 2006 年開始以 associate member 加入，2009 年則改為 corporate member(團體會員)，由中華穀類研究所盧所長、本人、台大食品科技研究所葉安義教授、靜宜大學張永和教授等為代表會員，依會議屬性輪流出席其所主辦之會議，2009 年 11 月國立屏東科技大學曾主辦由 ICC 委辦之「ICC International Conference on Food Safety and Wholesomeness of Cereal Products」，2011 年 12 月本校也將再次承辦「ICC International Conference on Mycotoxin of Cereal Products」。
- 二、 ICC 之秘書長 Dr. Roland Ernest Poms 對台灣相當友善，曾多次親自蒞台參加 ICC Serial Meetings 及台灣食品科技學會舉辦之年會，同時亦邀請 ICC 之歷任會長，如 Dr. John Taylor、Dr. Marina Carcea、及 Jan Willem van der Kamp 等來台灣參與各項食品科學學術活動，對台灣在國際學術組織極盡維護及支持。今年 12 月 Dr. Roland Ernest Poms 及部分 ICC 國際會員將再次蒞臨由 ICC 委辦國立屏東科技大學主辦之「ICC International Conference on Mycotoxin of Cereal Products」。
- 三、 2011 ICC Meeting and the 3<sup>rd</sup> MoniQA International Conference on Food Safety and Consumer Protection 在保加利亞 瓦爾那市 (Varna, Bulgaria)舉行，會期自 2011 年 9 月 25 日至 30 日，行程及會議議程包括 3 天之研討會，由各國之專家學者分別代表報告，並安排參訪行程，本人因國內尚有其他重要會議，僅參加 9 月 25 日至 28 日之議程，在會議中並與盧訓所長、張正昇博士共同與外國之專家學者交流，並邀請來台參加 12 月之研討會。

四、MoniQA (Monitoring and Quality Assurance in the Food Supply Chain)原來是 ICC 轄下之一個學術委員會(committee or consortium)，今年 7 月起正式成立為 MoniQA Association，目前已有 22 個原來之 MoniQA consortium members 及 2 個 associate members 加入成為正式會員，本人建議國立屏東科技大學及中華穀類研究所均以正式會員加入此一新的歐盟食品安全管制學術組織，邀請國內年輕之學者專家積極參與其學術活動，確保台灣在此組織之會員權益。

## 目 次

壹、目的-----	4
貳、出國行程及議程-----	5-9
參、心得與建議-----	10
肆、附錄	
一、研討會議程-----	11-13
二、活動照片-----	14-27

## 壹、目的

- 一、參加 MoniQA 第 3 屆之「食品安全暨消費者保障國際研討會」。
- 二、建立與歐盟(EU)體系所支持成立之「國際穀物科技學會」(ICC: International Association of Cereal Science and Technology, Vienna, Austria)及其各會員組織間之學術交流關係，並積極參與由 ICC 支持成立之 MoniQA Association 及其所主辦之各項學術活動，以盡會員之權利義務，並藉此發表台灣在此領域之研究成果與貢獻。

## 貳、出國行程及議程

9月24日：

下午搭乘高鐵前往桃園轉台北國際機場，搭乘長榮 BR061 班機經曼谷至維也納(9月25日當地時間上午 08:45 抵達)，並隨及轉搭奧地利航空 OS763 班機飛往保加利亞瓦爾納市(Varna, Bulgaria)，抵達時已是當地時間中午 12:45。隨即搭乘機場計程車前往會議所在之 Melia Grand Hermitage (Golden Sands Beach, Varna State)，並完成註冊報到。

9月25日：

上午 9:00 由 ICC 及 MoniQA 安排參訪行程，主要是參觀黑海(the Black Sea)沿岸瓦爾納州(Varna State)之歷史古蹟，如 Kaliakra Cliff Castle、the Palace at Balchik (the Romanian Queen' s Palace at Balchik)等，並參觀黑海沿岸之風力發電場，在此海濱地區到處聳立著白色風機，並以陣列式排列在空曠的平原上，甚是壯觀，可作為台灣發展風力發電之參考。

9月26日：

原請求 ICC 秘書處安排參訪 Medical University of Varna 及 Technical University of Varna，但因適逢保加利亞放長假(long weekend)及 ICC 秘書處聯繫不及，本日臨時改由與 ICC 秘書長 Dr. Roland Ernest Poms 及工作人員等研議，除原由中華穀類研究所代表參與 ICC 之 Corporate membership 外，另外因原屬 ICC 轄下之 MoniQA Consortium 也業於今年 7 月改成正式之學術組織 MoniQA Association，因此 Dr. Roland Ernest Poms 建議中華穀類研究所及國立屏東科技大學分別加入此組織成為正式之 MoniQA Partnership。此外，今年 12 月 6 日將在國立屏東科技大學舉行之 ICC 國際研討會(2011 ICC International Conference on Mycotoxin of Cereal Products)，也趁此機會與 ICC 秘書長及將隨行之工作人員商議相關細節，並邀請外國學者專家來台與會。

9月27日：

全日參加 2011 ICC and the 3<sup>rd</sup> MoniQA International Conference on Food Safety and Consumer Protection。早晨之開幕式中安排 3 場 keynote speeches，分別由比利時專家 Dr. Franz Ulberth 代表 Institute for Reference Materials and Measurements, Joint Research Center of European Commission 發表「The Impact of Food Safety Regulations and Global Implementation Standards」；Dr. Lyubina Donkova 代表 Bulgarian Food Safety Agency 發表「Food Safety: Official Control and Priorities in Bulgaria」；中國四川大學之裴曉芳教授(Xiaofang Pei)發表「Food Safety in Emerging Economics: Vietnam and China」。會議主持人為 Dr. Angel Angelov (University of Food Technology, Bulgaria)，Daniel Spichtinger (MoniQA Deputy Chair, RTD Services, Austria) 及 Constanza Conte (ICC Secretariat)。會中，經由 ICC 工作人員 DI Rainer Svancinka (RTD Services)之引介，與 Dr. Angel Angelov 有進一步之交談，雙方並約定未來可考慮建立學術合作之管道。

此 3 場專題報告均有其未來的重要性，且均建立於一個共同的主題「Food Safety」，可見歐盟一方面在其 27+盟國間建立共同之食品安全管制標準及法規，另一方面也逐漸要求開發中國家，特別如中國、越南、泰國、印尼、印度等農產品及加工食品輸出國在食品安全之管制機制及措施能符合歐盟之嚴格標準，且逐漸透過立法要求這些輸出國須同步建立與歐盟體系下相同水準之驗證參考實驗室(certified reference labs)，此點也是台灣食品工業主管機關經濟部工業局及農產品主管機關行政院農業委員會必須及早因應準備的。

中國代表裴曉芳的報告中越廚代庖的提及越南之食品安全議題，許多與會人士均大惑不解，更讓越南代表為之氣結，這恐怕是中國一貫之伎倆，經常利用國際會議的場合遂行其國際政治之意圖與野心，這也是台灣相關政府部門及學術單位所必須注意的問題。2013~14 年 ICC 會長將由中國河南工業大學之王豐政 (Dr. Fengcheng Wang) 教授擔任會長，台灣應更積極參與在此歐盟之非政府組織，並選派年輕及中生代的專家學者加入 ICC 及 MoniQA。

下午之會議主題共有：「Consumer Issue: Risk, Understanding and Choice」及「Young Scientists Present Their MoniQA Results」，總共有 9 組專題報告，分別由英國、比利時、保加利亞、義大利、匈牙利、土耳其、越南、中國等代表及年輕學者報告

之。值得注意的是越南及中國的年輕學者之報告，不論內容及英語之口頭報告、應答能力等均比前 2 屆有極明顯之進步，且其內容切合 ICC 及 MoniQA 關注之主題，此點也是我們應引以為注意的。

晚上參加 ICC 及 MoniQA 共同主辦之歡迎晚宴(reception dinner)，與會人員均聚集在戶外的陽台上，一方面享受著保加利亞的傳統佳餚，一方面也享受著來自黑海的徐拂晚風，一方面更藉機認識更多的國際友人。因此，認識來自新加坡、日本、越南、中國、紐西蘭、美國、奧地利、及保加利亞的專家學者。其中，越南河內百科大學(Hanoi University of Science and Technology)之 Dr. To Kim Anh 及其同事、保加利亞 University of Food Technology, Plovdiv 之 Dr. Angel Angelov 均表達合作之意願，並邀請前往其學校參訪。餐會中也遇見來自奧地利農業大學 BOKU (本校姊妹校)之教授，也談到未來在食品 traceability 及 authenticity 進一步合作之可行性。餐會至晚上 10 時左右結束。

9 月 28 日：

上午參加本日會議之專題報告：「Food safety, Food Security and Climate Change」，共有來自於保加利亞、英國、比利時、紐西蘭、中國及烏克蘭等 5 位專家之報告。主題除與食品安全相關外，更由氣候變遷談到糧食生產與供應之種種問題，其中更有講演者將 MoniQA 與因環境極端變遷所造成農產品污染等問題連結起來，顯示 MoniQA 未來在全球糧食供應將扮演之角色不可等閒視之，行政院農業委員會應積極透由國際合作處及駐奧地利代表處掌握最新之資訊及動態。

下午則趕搭自瓦爾納往維也納之奧地利航空 OS764 班機，當晚 07:35 轉搭長榮 BR062 自維也納返國。

9 月 29 日：

下午 5:00 返抵桃園國際機場，轉搭高鐵返抵高雄，回屏東時已將近晚上 9:30。

## 參、心得與建議

一、 ICC 之秘書長 Dr. Roland Ernest Poms 對台灣相當友善，曾多次親自蒞台參加 ICC Serial Meetings 及台灣食品科技學會舉辦之年會，同時亦邀請 ICC



之歷任會長，如 Dr. John Taylor(南非)、Dr. Marina Carcea(義大利)、及 Jan Willem van der Kamp(荷蘭)等來台灣參與各項食品科學學術活動，對台灣在國際學術組織極盡維護及支持。今年12月 Dr. Roland Ernest Poms 及部分 ICC 國際會員將再次蒞臨由 ICC 委辦國立屏東科技大學主辦之「ICC International Conference on Mycotoxin of Cereal Products」。

二、MoniQA (Monitoring and Quality Assurance in the Food Supply Chain)原來是 ICC 轄下之一個學術委員會(committee or consortium)，今年7月起正式成立成為 MoniQA Association，目前已有 22 個原來之 MoniQA consortium members 及 2 個 associate members 加入成為正式會員，建議國立屏東科技大學及中華穀類研究所均以正式會員加入此一新的歐盟食品安全管制學術組織，並邀請國內年輕之學者專家積極參與其學術活動，確保台灣在此組織之會員權益。

三、歐盟一方面在其 27+盟國間建立共同之食品安全管制標準及法規，另一方面也逐漸要求開發中國家，特別如中國、越南、泰國、印尼、印度等農產品及加工食品輸出國在食品安全之管制機制及措施能符合歐盟之嚴格標準，且逐漸透過立法要求這些輸出國須同步建立與歐盟體系下相同水準之驗證參考實驗室(certified reference labs)，此點也是台灣食品工業主管機關經濟部工業局及農產品主管機關行政院農業委員會必須及早因應準備的。

四、中國參加國際會議的代表經常利用國際會議的場合遂行其國際政治之意圖與野心，並嘗試排擠台灣代表以台灣為國名參與國際學術組織，這是台灣相關政府部門及學術單位所必須注意的問題。2013~14年 ICC 會長將由中國河南工業大學之王豐政 (Dr. Fengcheng Wang) 教授擔任會長，台灣應更積極參與在此歐盟之非政府組織，並選派年輕及中生代的專家學者加入 ICC 及 MoniQA。

# 肆、附錄

## 一、議程 Programme

### Tuesday 27<sup>th</sup> September 2011

09:30-10:00 Registration and Welcome Coffee

#### 10.00-12.30 Opening Session: Food Safety and the Consumer Perspective

Chair: Angel Angelov (University of Food Technology, Bulgaria), Daniel Spichtinger (RTD Services, Austria) and Costanza Conte (ICC)

In the opening session invited experts will set out the state of the art as concerns “eating out in a global village” (old and new safety challenges), the global implementation of standards, the situation in Bulgaria and the surrounding region, the EU and in the emerging economies of Asia (challenges and implications from recent scares) as well as providing insights from a consumer perspective.

- *Welcome* by Dr. Kamen Nikolov, Director of the Quality Management Directorate, Bulgarian Food Safety Authority
- ***"The Impact of Food safety Regulations and global implementation standards" Keynote by Franz Ulberth – European Commission***
- *Food safety - Official Control and Priorities in Bulgaria*, Lyubina Donkova, Bulgarian Food Safety Authority, Head of Department of Laboratory Activities
- *Food Safety in Emerging Economies – Vietnam and China*, Xiaofang Pei, Professor, West China School of Public Health, Sichuan University
- *Overview of the MoniQA Network of Excellence and its Activities*, Roland Poms, Coordinator of MoniQA and ICC Secretary General

12.30-14.00 Lunch - Poster presentations and table-tops (in parallel – exhibition area), demonstration and hands-on activities at exhibition booths

#### 14.00-15.45 Session 2: Consumer Issues: risk, understanding and choice

Chair: Clare Mills (Institute of Food Research, UK) and Marina Carcea (INRAN, IT)

Engaging in a meaningful dialogue with the consumer

- **Overcoming the challenges of risk assessment for allergenic foods. Keynote by Rene Crevel (Science Leader - Allergy & Immunology, Unilever)**
- *Food Safety - Safe for whom? Engaging with Diverse Communities* Jayam Dalal (Consumer Member with the UK Advisory Committee for Novel Foods & Processes)
- *Independent comparative product testing: role and impact on quality of foods in Bulgaria*, Bogomil Nikolov Bulgarian National Association Active Consumers
- *European consumers on the quest for “authentic” foods*, M. Carcea and F. Melini (INRAN, IT)

#### 16.30-18.00 Session 3: Young scientists present their MoniQA results

Chair: Anton Alldrick (Campden BRI, UK) and Xiaofang Pei (West China School of Public Health, Sichuan University)

- *Food Allergens – the way towards method validation*, K.Török (BME, HU)
- *Fate of Fusarium Toxins During Processing of Some Traditional Turkish Maize-Based Foods: Bread, Halva and Kuymak*, E. Numanoglu (HCTU, TK)
- *Functional foods in developing countries: A Vietnamese consumer study*, V. P. Tu, HUT, VT)
- *A novel Magnetic Capture–Multiplex PCR Assay for the Simultaneous Detection of Three Foodborne Pathogens*, H.J. Zuo (SCU, PRC)

**18.30-20.30 QAS Editorial Meeting (with dinner) – on invitation only**

20.30 Welcome reception

## Wednesday 28th September 2011

### 08.30-10.30 Session 4: Food Safety, Food Security and Climate Change

Chair: Martin Rose (FERA, UK) and Barbara Thomson (ESR, NZ)

Approximately 9% of climate emissions are derived from agriculture and IPCC models predict significant changes in food production due to climate change, resulting in challenges in food security in some regions. The interaction between climate change and food security will form the overarching framework for discussions in the second plenary session.

- Introduction and poster promotions
- *Climate Change , Agriculture and Food Sustainability: Challenge for the 21st Century?* Atanas Atanassov (Joint Genomic Centre, Sofia, BG)
- *Featured MoniQA Output: Environmental contaminants in foods and feeds in the light of climate change*, Barbara Thomson (ESR, NZ) and Martin Rose (FERA, UK)
- *Food safety of fresh produce: how to govern a supply chain of uncompromised food sovereignty*, Mieke Uyttendaele (University of Ghent, Veg-i-Trade Project)
- *The evolution and prospects of food safety risk assessment in China*, Zhang Li-shi and Chen Jin-yao (West China School of Public health, Sichuan University)
- *Short poster presentation: Analysis of food risks as basis for perfection of the safety system estimation and control in plant food products*, Pylypenko, Legorova (Odessa national Academy of Food Technologies, Ukraine)
- Closing remarks

10.30-11.00 Break

### 11.00-12.30 Session 5: Food allergens

Chair: Bert Popping (Eurofins, DE)

Allergens in general and food allergens specifically are on the rise and will form the focus of this session.

- **Keynote: Allergen Developments through MoniQA: Validation, Reference Materials, and Stakeholder involvement**, Bert Popping (Eurofins, DE)
- *"Allergen-Management: Challenge and Chance for the Industry"*, Sylvia Pfaff (Food Information Service Europe, DE)

- *Detection of hazelnut proteins by antibodies and by liquid chromatography-tandem mass spectrometry*, Sabine Baumgartner (BOKU, AT)

12.30-14.00 Lunch - Poster presentations and table-tops (in parallel – exhibition area)- demonstration and hands-on activities at exhibition booths

#### **14.00-16.00 Session 6: Food Safety: regulations and the law: socio economic impact, better future regulations**

Chair: Mario Mazzocchi (UNIBO, IT) and Line Friis Lindner (ICF)

This session showcases socio-economic case studies with specific focus on the WTO, developing countries and the EU, consumers in Europe and emerging markets as well as cross-referencing the debate with the issues discussed in the climate change session.

- *Current EC framework –Line Friis Lindner (ICF)*
- *Featured MoniQA Output: Looking into the future: an interactive decision support system for impact assessment of regulatory initiatives in a dynamic food sector environment*, G. Schiefer, E. Novelli (University of Bonn, DE)
- *How a generic evaluation framework can be supported by fuzzy multi-criteria analysis: the case of regulatory needs after the melamine milk scandal in China* M. Ragona (University of Bologna, IT)
- *Food safety and the internet – strategies for consumer protection*, D. Raschke, (Federal Office of Consumer Protection and Food Safety, Germany)
- *Standardisation and validation of PCR methods in the context of EHEC and recent outbreak* Charlotta Engdahl Axelsson (Eurofins Food & Agro Sweden AB)

16.00-16.30 Break

#### **16.30-18.00 Session 7: (Re-)Emerging issues (nanotechnology, microbiology, authenticity)**

Chair: Hanna-Leena Alakomi (VTT,FI) and Martin Rose (FERA, UK)

New technologies can have a significant impact on consumer behaviour and change and it is therefore important to communicate and inform end users and consumers early. This scientific session will provide lessons learned from the GMO debate as well as an overview of risk-benefit analysis with special emphasis on nanotech and modern technologies employed in food manufacturing and control.

- **Keynote: Towards improved food safety: targeted food processes and emerging technologies**, Dietrich Knorr (TU Berlin, Germany)
- *Authentication of traditional game meat products by the use of species specific PCR*, J.S. Amaral (University of Porto, PT)
- *Featured MoniQA Output: Applying expert judgment to build and assess a multi criteria decision making model on safety of nanotechnology-enabled food products*, Villie Flari (FERA, UK)
- ***Detection of Geographical origin of paddy rice from Taiwan based on near infrared spectroscopy, multiple elements and isotope analyses, J. S. Chang (China Grain Products R&D Institute, Taiwan)***

- *Introducing Nanomaterials into the Food Sector: Repeating the Mistakes of GM Foods?* Ralf Greiner (Department of Food Technology and Bioprocess Engineering, Federal Research Institute of Nutrition and Food, DE)

### 19.00 Panoramic Tour

### 20.30 Conference Dinner

## Thursday 29th September 2011

### 08.30-10.30 Session 8: Chemical contaminants and mycotoxins

Chair: Michele Solfrizzo (CNR, IT) and Hans van Egmond (RIKILT, NL)

The session will focus on the costs and impact of incidences and loosing trust with the consumer as well as showcasing new tools for analysis and MoniQA case studies in the field.

- **Keynote: *Mycotoxin food issues in Bulgaria*, Terry Vrabcheva (Head of laboratory "Chemical Contaminants and Food Additives" National Center for Public Health Protection, Sofia, BG)**
- *Featured MoniQA Output: Assessing impacts of chemical contaminants in foods and feedstuffs*, B. Thomson (ESR, NZ)
- *Use of volatile compound metabolic signatures in poultry tissues to back-trace dietary exposure to xenobiotics*, E.Engel (INRA, FR)
- *The impact of tried acrylamide mitigation tools on the burden of highly exposed consumers*. Z. Ciesarova (Food Research Institute, Bratislava, Slovak Republic)
- *The production of citrinin-free red pigments of Monascus*, Philippe J. Blanc (Laboratoire d'Ingénierie des Systèmes Biologiques et des Procédés, INSA, FR)
- *Featured MoniQA Output: Proficiency test for simultaneous determination of up to eleven mycotoxins in maize by using LC-MS(MS) methodology*. M. Solfrizzo (CNR, IT)

10.30-11.00 Break

### 11.00-12.30 Session 9: Food Safety Education at an Academic level - Examples from a Global Perspective

Chair: Wolfgang Kneifel and Sian Astley

This session will present food safety curricula from institutions around the globe and will also provide an opportunity for stakeholders to comment on their needs in this regard.

- *International MSc Study Programme "Safety in the Food Chain" (SIDC) at BOKU Vienna*, Silvia Apprich (BOKU, AT)
- *Food Safety education at Wageningen University*, Ralf Hartemik (WUR, NL)
- *Graduate Training in Food Safety and Toxicology at the University of Hong Kong* Han Elnezami (HKU, PRC)
- *The food safety professional diploma- a benchmark at Ain Shams University, Cairo* Ali Abdelaziz Ali and Mohamed Elnawawy (ASU, Egypt)

12.30-14.00 Lunch

### 14.00-16.00 Session 10: Launch event of the MoniQA Association: A Global Food Safety

## **Network providing expertise and services for effective food safety management**

Chair: Roland Poms (ICC, AT/INT), Paul Finglas (IFR, UK)

This session introduces the MoniQA Association, which is an international group of organisations dedicated to collaborative research aimed at promoting a more secure and safer food supply set up as a successor to the Network of Excellence after the EC Grant for Integration ceases. Speakers will present the tools and services the association offers for effective food safety assurance.

- *"MoniQA: Achievements & Potential"* – Anton Alldrick (Campden BRI, UK)
  - *Key MoniQA Output: Scryer*, M.Ragona and/or M. Mazzocchi (University of Bologna, Italy)
  - *MoniQA Continuous Professional Development* Andreas Höhl, Gerhard Schleining and Wolfgang Kneifel (BOKU, AT)
  - *MoniQA Validation Studies short flashlight presentations*
    - Saskia van Ruth (RIKILT, NL) Eggs-ercize: MoniQA validation of methodology for verification of organic eggs
    - Alexandra Malachova (IFA-Tulln, AT) Evaluation of the variability of matrix effects observed in LC-MS for food analysis
  - *Networking activities and future proposals*, Paul Finglas (IFR)
- 16.00-16.30 *Poster award session* (first, second and third place, 7 minutes presentation of candidates). Awards sponsored by Wiley-Blackwell.

**16.30 End of 3rd MoniQA International Conference**

**17.30-18.30 First Annual General Assembly of the MoniQA Association – for members only**

## **Friday 30th September 2011**

**11.00 -17.30 Site visit to local winery and local sightseeing to**

## 二、活動照片



MoniQA 會議所在(Varna, Bulgaria)



與盧訓所長、張正昇博士合影於 Kaliakla Cliff Castle 前



在附近 Balchik, Varna State 之風力發電裝置



由 The University of Sofia 管理之 Balchik Palace 及其植物園

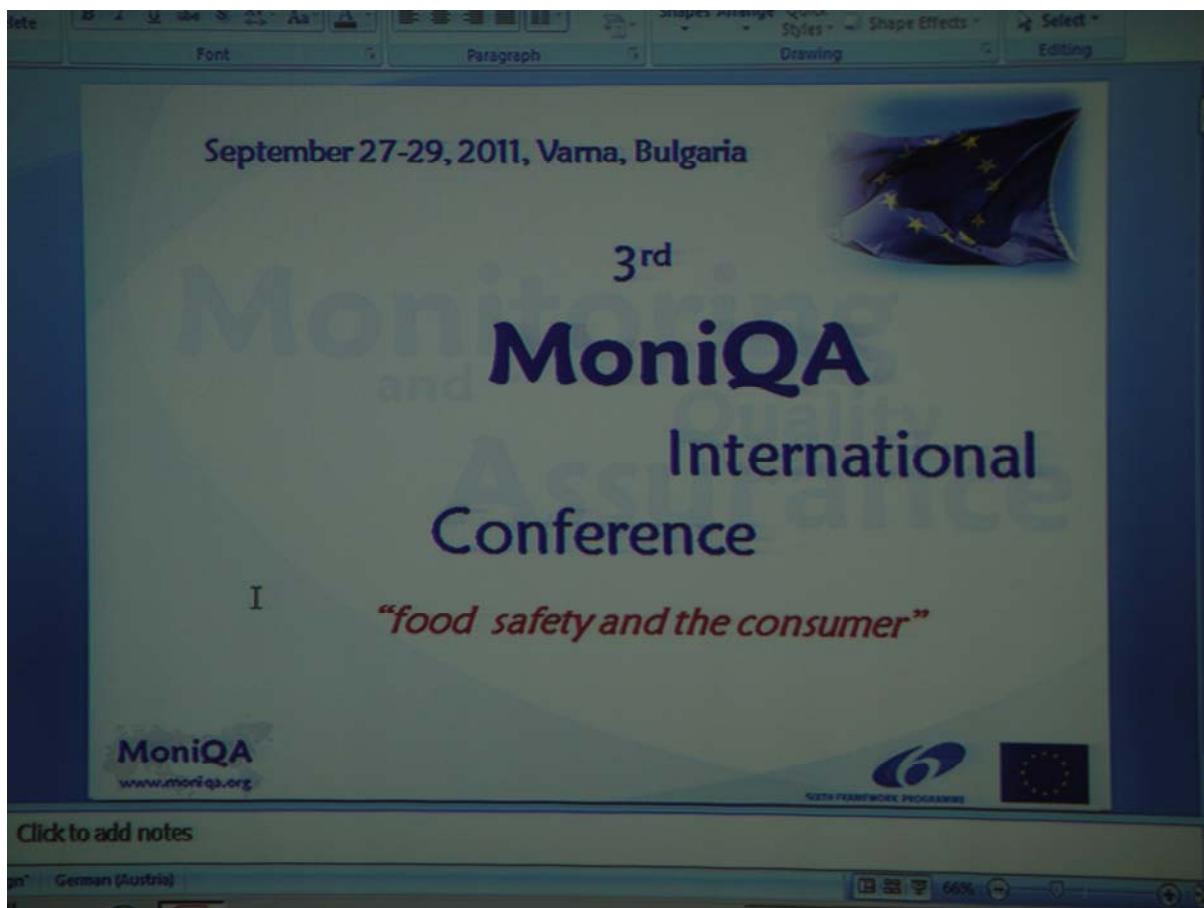




Balchik Palace, Varna State 內之植物園



與盧訓所長於 the Queen's Palace 合影



第 3 屆 MoniQA 研討會簡報首頁



秘書長 Dr. Roland E. Poms 之簡報



致贈本校簡介及紀念品予 University of Food Technology 主任 Dr. Angel Angelov



與盧訓所長攝於壁報展示區



吳部長見證本校與 UCA 之合作協議簽署



與 DI Rainer Svacinka (ICC Secretariat)於會場合影



會場之一隅



會場之一隅