ISO, TQM, Medical Tourism & Patient Safety Best Practices
Proceedings of the
16th International Conference on ISO & TQM 16-ICIT
+ 8th Cooperation & Competition Conference 8-C&C
11-13 July 2012 at Linnaeus University Conference Centre, Vaxjo, Sweden
www.hk5sa.com/icit

Organisers:

Editorial Team:
Prof. Samuel K.M. HO
Programme Director, HK Buddhist College & Founder: AA, ISO, ICIT
Guest Speaker, Oxford U. & Ex-Research Fellow, Cambridge U., UK.
Prof. Mosad Zineldin
Faculty of Business, Economics and Design, Linnaeus U., Sweden
Int. Scientific Awards for Research Excellence & Founder: 500, C&C
Dr. Fawzy Soliman
PhD Supervisor, University of Technology, Sydney, Australia.
Dr. Martin Amsteus
Senior Lecturer, School of Business & Economics, Linnaeus U., Sweden

Sponsored by:
Top Emerald Portfolio of Academic Journals, UK
Listed on the Thomson citation index – ISI

Swedish Book Registration Office
Cataloguing in Publication Data.
© 2012 HKBC & Linnaeus University

16-ICIT and 8-C&C are supported by:

- GSE Research Ltd., UK
- International 5-S Organisation (I5SO), HKSAR
- International Council for Quality Function Deployment, Japan
- Kania School of Management, University of Scranton, USA
- MCB University Press (140 Academic Journals), UK
- Royal Society for the Promotion of Health, UK
- Spanish Association for Quality, Spain
- University of Baraimi, Oman
- University Institute Technology Mara, UiTM - Sarawak
- University Tenega National – UNITEN, Malaysia

16-ICIT + 8-C&C: Organising & Technical Committee

Co-Chairs:

Prof. Sam Ho (Programme Director, HK Buddhist College & Chair, APBEST Academy, HK)

Prof. Mosad Zineldin (Faculty of Business, Economics & Design, Linnaeus U., Sweden)

Members:

- Prof. Dato’ Ir. Dr. Mashkuri Yaacob (VC, Universiti Tenega Nasional, Malaysia)
- Prof. Hesham Magd (VC & College of Business Dean, U. of Baraimi, Oman)
- Prof. Jamil Hj. Hamali (Rector, UiTM, Sarawak Branch, Malaysia)
- Prof. Mike Donnelly (Dean, Faculty of Business & Enterprise, Swinburne University)
- Prof. Abdo Jurjus (Faculty of Medicine – American U. of Beirut, Lebanon)
- Prof. Stanislav Karapetrovic (Dept. of Mechanical Engg., U. of Alberta, Canada)
- Dr. Fawzy Soliman (PhD Supervisor, University of Technology, Sydney)
- Dr. John Peters (Director, GSE Research & Ex-CEO, Emerald Group, UK)
- Dr. Satya Chattopadhyay (Asso. Prof., Kania School of Mgt., U. of Scranton, USA)
- Dr. Ahmed Soliman (ICC Hospital and Student U. Hospital, Alexandria U., Egypt)
- Dr. Martin Amsteus (Senior Lecturer, School of Business & Economics, Linnaeus U.)
- Dr. Palmira López-Fresno (VP, Spanish Association for Quality)
16th International Conference on ISO & TQM 16-ICIT + 8th Cooperation & Competition Conference 8-C&C

11-13 July 2012 at Linnaeus University Conference Centre, Vaxjo, Sweden

PREFACE

Welcome to the 16th International Conference on ISO & TQM (16-ICIT) and 8th Cooperation & Competition Conference (8-C&C) organised by the Linnaeus University (LU), Swinburne University (SU), University of Technology, Sydney (UTS), University of Alberta in Edmonton (UAB), Hong Kong Buddhist College (HKBC), and APBEST Academy (AA). The history of the ICIT is summarized in the following table:

<table>
<thead>
<tr>
<th>ICIT</th>
<th>Year</th>
<th>Host (on Easter Mon.-Wed. every year since 1996)</th>
<th>Hosting Country</th>
<th>Theme</th>
<th>Papers</th>
<th>Delegates</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1996</td>
<td>Leicester Business School, De Montfort Uni.</td>
<td>England, UK</td>
<td>Inaugural</td>
<td>45</td>
<td>80</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>1997</td>
<td>Luton Business School, Luton University</td>
<td>England, UK</td>
<td>Business Excellence</td>
<td>75</td>
<td>100</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>1998</td>
<td>School of Business, HK Baptist University</td>
<td>HKSAR, China</td>
<td>ISO 9000 &amp; TQM</td>
<td>104</td>
<td>160</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>1999</td>
<td>School of Business, HK Baptist University</td>
<td>HKSAR, China</td>
<td>TQM &amp; Innovation</td>
<td>130</td>
<td>180</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>2000</td>
<td>Productivity Quality Research Centre, NUS</td>
<td>Singapore</td>
<td>Action 2000: Imperatives for Change</td>
<td>119</td>
<td>160</td>
<td>26</td>
</tr>
<tr>
<td>6</td>
<td>2001</td>
<td>Paisley Business School, Uni. of Paisley</td>
<td>Scotland, UK</td>
<td>Integrated Management</td>
<td>95</td>
<td>150</td>
<td>21</td>
</tr>
<tr>
<td>7</td>
<td>2002</td>
<td>Centre for Mangt. Quality Research, RMIT</td>
<td>Australia</td>
<td>Change Management</td>
<td>160</td>
<td>250</td>
<td>29</td>
</tr>
<tr>
<td>8</td>
<td>2003</td>
<td>National Quality Institute, Montreal</td>
<td>Canada</td>
<td>Business Excellence</td>
<td>84</td>
<td>150</td>
<td>24</td>
</tr>
<tr>
<td>9</td>
<td>2004</td>
<td>Foundation for TQM Promotion</td>
<td>Thailand</td>
<td>TQM Best Practices</td>
<td>80</td>
<td>280</td>
<td>20</td>
</tr>
<tr>
<td>10</td>
<td>2005</td>
<td>Shanghai Academy of Quality Management</td>
<td>Shanghai, China</td>
<td>TQM &amp; 6-sigma for Competitiveness</td>
<td>140</td>
<td>300</td>
<td>26</td>
</tr>
<tr>
<td>11</td>
<td>2006</td>
<td>AA &amp; Hang Seng School of Commerce</td>
<td>HKSAR</td>
<td>TQM &amp; Corporate Governance</td>
<td>85</td>
<td>150</td>
<td>22</td>
</tr>
<tr>
<td>12</td>
<td>2007</td>
<td>AA and NCUT &amp; CSQ in Taiwan</td>
<td>RoC</td>
<td>Going for Gold</td>
<td>68</td>
<td>120</td>
<td>17</td>
</tr>
<tr>
<td>13</td>
<td>2008</td>
<td>AA and SIRIM, MPC &amp; UiTM, Malaysia</td>
<td>Malaysia</td>
<td>Innovation for Competitiveness</td>
<td>77</td>
<td>220</td>
<td>25</td>
</tr>
<tr>
<td>14</td>
<td>2010</td>
<td>AA and University of Scranton, USA</td>
<td>USA</td>
<td>Lean Management</td>
<td>55</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>15</td>
<td>2011</td>
<td>AA and UNITEN, SIRIM, MPC, UiTM, CIOB(M) in Malaysia</td>
<td>Malaysia</td>
<td>Sustainable Development through Innovation</td>
<td>98</td>
<td>160</td>
<td>21</td>
</tr>
</tbody>
</table>

In the past, around 20% of the papers have been published in refereed journals as a result. Riding on this success, the 16-ICIT & 8-C&C use “ISO, TQM, Medical Tourism & Patient Quality/Safety Best Practices” as a theme for the further development of ISO and TQM into the service industry, in particular in the field of medical tourism and health quality.
International Standards Organisation (ISO) series sets out the methods that can be implemented in an organization to assure that the customers’ requirements are fully met. Moreover, the organization’s requirements will be met both internally and externally and at an optimum cost. This is the result of efficient organization of the resources available, including material, people and technology. The most important standard in the ISO Series is obviously ISO 9000. Over the past fourteen ICIT’s the focuses were on ISO 9000. However, with the advancement of mankind, there is a pressing need for other equally important standards for organizations to develop and compete. Such examples include, but not limited to:

- ISO 9000 - Quality Management Systems
- ISO 13485 - Medical Devices Quality Management Systems
- ISO 14000 - Environmental Management System
- ISO 14064 - Green House Gases
- ISO 14067 - Carbon Footprint for Products
- ISO 14155 - Clinical investigation of medical devices for human subjects - Good clinical practice
- ISO 15765 - Carbon Emission for Road Vehicles
- ISO 16949 - Quality Management Systems for the Car Industry
- ISO 22000 - Food Safety Management System
- ISO 50000 - Energy Management System

As a result, during the closing meeting of the 14-ICIT in April 2010 at the Scranton University, USA, the Organising Committee decided to rename the word ‘I’ to represent ‘ISO’, instead of ‘ISO 9000’.

Because of the significance of the ISO Series of standards, and its close relationship to TQM, the first objective of this Conference is to consider the impact of ISO implementation on TQM.

TQM provides the overall concept that fosters continuous improvement in an organization. The TQM philosophy stresses a systematic, integrated, consistent, organization-wide perspective involving everyone and everything. It focuses primarily on total satisfaction for both the internal and external customers within a management environment that seeks continuous improvement of all systems and processes. TQM has been considered by many organizations as the way to survive and succeed. The second objective of this Conference is therefore to provide a forum for the identification of the contemporary development in the theories and practices of TQM.

In view of the importance of Cooperation & Competition as developed by Prof. Mosad Zineldin, the third objective of this Conference is to research on the Cooperation & Competition approach to healthcare quality/safety and patient satisfaction as well as medical tourism.

The Conference gives us the opportunity to benefit at first hand from the expertise and experience of eminent speakers who are senior executives of many leading edge organizations and distinguished academics contributing to the research and development of ISO and TQM. The 16-ICIT is represented by delegates from 15 countries. The statistics of the number of papers presented is shown in the following table.

<table>
<thead>
<tr>
<th>Country</th>
<th>Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>6</td>
</tr>
<tr>
<td>China – HKSAR</td>
<td>4</td>
</tr>
<tr>
<td>Greece</td>
<td>4</td>
</tr>
<tr>
<td>Sweden</td>
<td>4</td>
</tr>
<tr>
<td>Lebanon</td>
<td>4</td>
</tr>
<tr>
<td>Iran</td>
<td>3</td>
</tr>
<tr>
<td>Australia</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romania</td>
<td>2</td>
</tr>
<tr>
<td>Spain</td>
<td>2</td>
</tr>
<tr>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>Canada</td>
<td>1</td>
</tr>
<tr>
<td>China – Mainland</td>
<td>1</td>
</tr>
<tr>
<td>Finland</td>
<td>1</td>
</tr>
<tr>
<td>Oman</td>
<td>1</td>
</tr>
<tr>
<td>UK</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td>44</td>
</tr>
</tbody>
</table>

from 17 territories
The 44 papers of the 16-ICIT/8-C&C have been organized according to different areas of activities in the development of ISO, TQM, Health Quality/Safety, Patient Safety & Medical Tourism. They are:

<table>
<thead>
<tr>
<th>Sub-theme #</th>
<th>Topic</th>
<th>No. of Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ISO &amp; TQM Best Practices</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>ISO 9000 / 14001 / 50001, OH18001, etc.</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>5-S, 6-σ, BPR, QFD &amp; other Quality Tools</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Lean 5-S, Lean 6-σ and other TQM Tools</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>OSH &amp; Patient Safety in Healthcare</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Best Practices in Healthcare and Medical Tourism</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>Best Practices in Education, Services &amp; Public</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>44</strong></td>
</tr>
</tbody>
</table>

We are privileged to have the following 11 prominent keynote speakers presenting their expertise opinions on specific issues of ISO and TQM:

- **Australia**
  - Dr. Fawzy Soliman (PhD Supervisor, University of Technology, Sydney)

- **Canada**
  - Prof. Stanislav Karapetrovic (Professor, Dept. of Mechanical Engg., University of Alberta in Edmonton)

- **HKSAR**
  - Prof. Sam Ho (Programme Director, HKBC; Founder Chair, APBEST Academy, ICIT, ISO & HKSSA)

- **Lebanon**
  - Prof. Abdo Jurjus (Department of Anatomy, Faculty of Medicine, American University of Beirut)

- **Malaysia**
  - Prof. Dato’ Dr. Mashkuri Yaacob (VC, Universiti Tenega Nasional – UNITEN)
  - Prof. Jamil Hj. Hamali (Rector, UiTM, Sarawak Branch)

- **Oman**
  - Prof. Hesham A.E., Magd (VC & Dean of College of Business, U. of Baraimi)

- **Spain**
  - Dr. Palmira Lopez-Fresno (VP, Spanish Quality Association & Spanish Quality Award Chief Examiner)

- **Sweden**
  - Prof. Mosad Zineldin (Professor at School of Business & Economics, Linnaeus University)
  - Ms. Valentina Vasicheva (Lecturer, School of Business & Economics, Linnaeus University)

- **USA**
  - Prof. Satya Chattopadhyay (Prof. of Marketing, Kania School of Management, University of Scranton)

We would also like to thank the Technical Committee members who have helped us so readily to review the abstracts and/or edit some of the papers. We are indebted to the editors of the supporting journals who come to this conference because they trust there are good quality papers for their journal publications. Last but not the least, we would also like to thank all our presenters and delegates contributing to the successful experience of the 16-ICIT/8-C&C. A sincere welcome to you all and we wish you an enjoyable and fruitful sharing experience at the University of Linnaeus Convention Centre in the beautiful country of Sweden during summer!

**Sam Ho & Mosad Zineldin**

Co-Chairs, 16-ICIT/8-C&C (on behalf of the Organising Committee)

samho@hkbc.edu.hk & Mosad.zineldin@lnu.se
## CONTENTS

### SUPPORTING ORGANISATIONS & EDITORS

#### PREFACE

(Chair, 16-ICIT/8-C&C)

K = Keynote Paper

**Programme Rundown**

Underlined No. *(Blue colour)* are Hyperlink Items

<table>
<thead>
<tr>
<th>No.</th>
<th>Title &amp; Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part 1:</strong></td>
<td><strong>ISO &amp; TQM Best Practices</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Ppt  | 1.1K Engineering Organizational Excellence Best Practices through capturing Tacit Knowledge -- Evidence from Saudi Arabia  
*Hesham A.E. Magd* | 1 |
| Ppt  | 1.2 Customer Loyalty -- Choice of the delight or failure in e-services  
*Luc Honore Petjji Yaya, Frederic Marimon & Marti Casadesus Fa* | 10 |
| Ppt  | 1.3 Relevant Criteria for National Quality Award in UAE  
*Vijayan Namibiari & Subhashis Nandy* | 18 |
| Ppt  | 1.4 Business Excellence towards Sustainable Development in the Energy Sector -- A case study for Malaysia  
*Endang Jati Mat Sahid, Tan Ching Sin & Leong Yow Peng* | 27 |
| Ppt  | 1.5 Outsourcing and its Impact on Operational Performance  
*Ali Nazeri, Reza Gholami & Sadra Rashidi* | 35 |
| Ppt  | 1.6 Does Loyalty Exist within the Swedish FMCG Sector?  
*Mosad Zineldin, Emmie Thurn & David Gustafsson* | 44 |
| **Part 2:** | **ISO 9000 / 14001 / 50001, OH18001, etc.**                                                                 |
| Ppt  | 2.1K Global Certification of Halal and Customer Preference  
*Jamil Hamali, Firdaus Abdullah & Abg Zainoren Abg Abdurahman* | 61 |
| Ppt  | 2.2K Options for Management Systems Standards -- Does the Integration Level matter?  
*Stanislav Karapetrovic, Alexandra Simon & Marti Casadesus* | 73 |
| Ppt  | 2.3 Survey of ISO 9001 Implementation in Greek Software Companies  
*Theodore Amygdalas, Foits Youzas & Dimosthenis Mpointakidis* | 81 |
| Ppt  | 2.4 BQM: A Model for Recreation of Change Management  
*Mohammad Kargar Shouraki & Ali Asghar Naserheil* | 89 |
| Ppt  | 2.5 Upgrade of Hong Kong SMEs to Comply with the Global Aviation Quality Management Standard AS 9100:2009 for Entering into the Aviation Parts Manufacturing Industry  
| Ppt  | 2.6 The Impact of a Global Strategy and International Accreditation on the Development of Lebanese Medical Tourism  
*Patrick Accaoui* | 110 |
| **Part 3:** | **5-S, 6-σ, BPR, QFD & other Quality Tools**                                                                 |
| Ppt  | 3.1K Strategic Alliances, Total Relationship Management (TRM) and 5 Qs -- Why do both Marriages and Strategic Alliances have over 50% failure rate?  
*Mosad Zineldin & Valentina Vasicheva* | 119 |
| Ppt  | 3.2 Six Sigma's Critical Success Factors and Toolbox  
*Moschidis Odysseas & Ismyrlis Vasileios* | 128 |
| Ppt  | 3.3 Using IT to advance Competitive Thoughts according to the "Blue Ocean Strategy"  
*Majid Zamani* | 136 |
| Ppt  | 3.4 Achieve Hospital Excellence through 5-S in an Emergency Department in Hong Kong  
*Vincent F. K. Tsoi, C. C. Chan, Y. W. Lau & Heyman Tang* | 142 |
| Ppt | 3.5 | Quality Control and Monitoring for Peace and Sustainable Development -- A case study of EU project in a developing country  
Valentina Vasicheva |
|---|---|---|
| Ppt | 3.6 | Large Scale Construction Project Management through 5-S  
Rahim bin Ahmad, Abdullah bin Che Mat, Abdullah Chik & Ab. Ghani Mohd Hashim |

**Part 4: Lean 5-S, Green & Innovation Management**

| Ppt | 4.1K | Performance Measurement -- An integrative perspective of stakeholder’s view  
Palmira López-Fresno & Fernando Fernández-González |
|---|---|---|
| Ppt | 4.2K | Appraisal of Innovation Knowledge  
Fawzy Soliman |
| Ppt | 4.3 | Competing through Lean -- Towards resource oriented implementation framework  
Anna Rymaszewska |
| Ppt | 4.4 | Green Management by Simulating Environmental Performance Index using System Dynamic Model  
Margaret Kit-Yok Chan & Bee-Wah Yap |
| Ppt | 4.5 | Enhancing Lean Sigma Capability -- An Industrial-Academic collaboration  
Barbara M Savage & Paul |
| Ppt | 4.6 | The Road towards Lean Six Sigma -- Key success factors of Lean Six Sigma application  
Alexandros Psychogios, Loukas Tsironis & Fotis Vouzas |

**Part 5: OSH & Patient Safety in Healthcare**

| Ppt | 5.1K | Patient Safety Best Practice through the 5-S Practice  
Samuel K. M. Ho & Olivia W. Y. Ho |
|---|---|---|
| Ppt | 5.2 | Is the Heavy Metal Generation Rational?  
Alan Baldwin |
| Ppt | 5.3 | Pre and Post Analytical Errors in a Clinical Laboratory at a Specialized Hospital in Egypt  
Rasha Mosallam & Salwa Hassan |
| Ppt | 5.4 | Notes on a pair of Scissors in the Egyptian Museum - Cairo - JE 69308  
Mona M. Taha Hussein |
| Ppt | 5.5 | Quality Control and Monitoring of In-Home Care Services  
Walid Hassan, Hassan Bazzi, Denise Kerbaj & Hassan M. Khache |
| Ppt | 5.6 | Herbs in Ancient Egypt  
Mohammed El Shimy |

**Part 6: Best Practices in Healthcare and Medical Tourism**

| Ppt | 6.1K | Health Tourism Quality in Lebanon -- The First World health service at a Third World cost  
Abdo Jurjus, Inaya Hajj Hussein & Assad Eid |
|---|---|---|
| Ppt | 6.2 | Branding Kuching City as a Health Tourism Destination in Sarawak, Malaysia  
Nuraini Binti Puti, Siti Mardinah Abdul Hamid & Margaret Kit-Yok Chan |
| Ppt | 6.3 | Medical Tourism in Romania, Mures County Case Study  
Brăduț-Vasile Boloș |
| Ppt | 6.4 | Intellectual Property as a Drive for Medical Tourism -- The ANA Aslan case  
Dr. Mihaela Daciana Bolos |
| Ppt | 6.5 | A Comparative Study for the Role of Travel Agents in positioning the Wellness Tourism  
Adel Hammam & Azza Saad |
| Ppt | 6.6 | The Quality of Post-operative Care as a Vital Tool for Medical Tourism in Egypt  
Soha Bahgat Farag |
| Ppt | 6.7 | Impact of Medical Tourism on the Quality of Medical Services -- The case of Lebanon  
Hassan M. Khachfe, Eng. Walid Hassan, Hassan Bazzi & Denise Kerbaj |

**Part 7: Best Practices in Education, Services & Public**

| Ppt | 7.1K | Outcome Assessment in Graduate Business Education and Continuous Improvement  
Satya P. Chattopadhyay & Mary Elizabeth Moylan |
|---|---|---|
| Ppt | 7.2K | Quality, You Know It, But Do You Have It?  
Mashkuri bin Yaacob & Mohamad Ishak Bin Mohamad Ibrahim |
| Ppt | 7.3 | Customer Satisfaction driving Financial Performance for Swedish Insurance Companies  
*Johan Adolphson, Jan Eklöf & Johan Parmler* | 328 |
| Ppt | 7.4 | Learning Outcomes from SERVQUAL for Improving Library Performance  
*Shirley Mo-ching Yeung, Michelle Mun-Shan Ho & Flower On-Yee Yan* | 336 |
| Ppt | 7.5 | Research on the Driving Effects of Service Quality on Customer Asset in the Library -- Empirical Study Based on Perspective of Customer Behaviours  
*Liu Songbai, Yu Li, Teng Limei & Zhu Yiyi* | 347 |
| Ppt | 7.6 | Therapeutic Massage and Reflexology in Ancient Egypt (Alternative Treatment)  
*Rasha M. Omran* | 356 |
| Ppt | 7.7 | Hyperbaric Medicine Facilities - A Tourism Destination Advantage and a Diver's Guarantee  
*Soad Omran Mansour* | 366 |