University of Belgrade – Mechanical Engineering Faculty Laboratory for Production Metrology and TQM

FINAL REPORT FOR CIRP:

Fifth International Working Conference

"TOTAL QUALITY MANAGEMENT – ADVANCED AND INTELLIGENT APPROACHES"

WAS HELD 31st May - 4th June 2009, Belgrade, SERBIA

Report prepared by

Professor Dr. Vidosav D. MAJSTOROVIĆ

Conference Founder and Chairman

CIRP member support Prof. Dr. Laslo Monostori

Belgrade, July 2009.

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I. General data:

- 1. <u>Name of the Conference</u>: Fifth International Working Conference: "Total Quality Management Advanced and Intelligent Approaches".
- 2. <u>Date and place</u>: 31st May 4th June, 2009, Belgrade, Serbia.
- 3. <u>Number of participants</u>: 346 from 34 countries (Austria, Australia, Argentina, Brazil, Bulgaria, Canada, Croatia, Cyprus, Germany, Greece, Egypt, Hungary, Italia, Libya, France, England, Slovakia, Slovenia, Spain, Macedonia, Japan, Montenegro, Macedonia, The Netherlands, New Zeland, Portugal, Pakistan, Romania, Republic Srpska, South Africa, Turkey, Ukraine, USA, Serbia).

II. Paper sessions:

- 1. Number of papers received: 102
- 2. Number of papers accepted: 83
- 3. Number of papers presented: 69
- Number of sessions and names: 1 Opening Plenary Session, 2 Plenary Sessions,
 Special Conference, 11 Paper Sessions, 6 Workshops / Round Tables Discussion and 1 Industrial Visit TOTAL 23.

CONFERENCE PLAN

31st May, 2009 / Sunday

17:00 – 18:30 Registration on reception desk (first floor – hall CeNT) in **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade.

18:30 Welcome Cocktail - **Club CeNT** (first level), Mechanical Engineering Faculty, Belgrade.

19.00 Workshop 1 / Round Table Disscussion 1: The Importance of Process

Management in Achieving High-Performance Organization (Danijela Savić-Lukić,

ASQ (American Society for Quality) Certified Six Sigma Black Belt, DeltaM

Group, Beograd, Serbia) – Hall Delta Company – Milentija Popovica 75,

New Belgrade.

1st June, 2009 / Monday

08:00 – 16:30 Registration on reception desk (first floor – hall CeNT) in **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade.

09:00 – 10.30 Opening Ceremony and Plenary Presentation – Hall CeNT (first floor) - Mechanical Engineering Faculty, Belgrade.

10:30 – 11:30 Cocktail - **Club CeNT** (first level), Mechanical Engineering Faculty, Belgrade.

11:30 – 13:30 Opening Plenary Session: Business excellence models (applications and development trends) - Hall CeNT (first floor) - Mechanical Engineering Faculty, Belgrade.

13:30 - 15:00 Break

15:00 – 16:30 Parallel Sessions (**3,4,5**) - **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade / Hall CeNT (first floor), Hall 514 (**5**th floor), Hall 518 (**5**th floor).

IWC TQM 2009 / Session 3 - Hall CeNT (first floor) / Young PhD researchers IWC TQM 2009 / Session 4 - Hall 514 (5th floor) / QM/TQM New Approaches IWC TQM 2009 / Session 5 - Hall 518 (5th floor) / TQM Assessment

16:30 - 17:00 Coffee break - Club CeNT (first level).

17:00 – 18:30 Parallel Sessions (**6,7,8**) - **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade / Hall CeNT (first floor), Hall 514 (5th floor), Hall 518 (5th floor).

IWC TQM 2009 / Session 6 - Hall CeNT (first floor) / Workshop 2 / Round Table Disscussion 2 : Organisational Excellence or/and Management Quality (Moderators: Dr Isaac Sheps, MSc Milan Ivanovic, Prof. Dr. Vidosav Majstorovic) IWC TQM 2009 / Session 7 - Hall 514 (5th floor) / World Class Performances IWC TQM 2009 / Session 8 - Hall 518 (5th floor) / Business Process Improvement

2nd June, 2009 / Tuesday

08:00 – 16:30 Registration on reception desk (first floor – hall CeNT) in **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade.

09:00 – 10.30 Parallel Sessions (**9,10,11**) - **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade / Hall CeNT (first floor), Hall 514 (5th floor), Hall 518 (5th floor).

IWC TQM 2009 / Session 9 - Hall CeNT (first floor) / 3rd Balkan Conference on Quality / 4th Balkan Quality Forum - <u>THE BALKAN AS A REGION OF QUALITY</u>
IWC TQM 2009 / Session 10 - Hall 514 (5th floor) / Integrated Management Systems
IWC TQM 2009 / Session 11- Hall 518 (5th floor) / TQM Tools and Techniques

10:30 - 11:00 Coffee break - Club CeNT (first level).

11:00 – 13:00 Parallel Sessions (12,13,14) - Mechanical Engineering Faculty, str. Kraljice Marije 16, Belgrade / Hall CeNT (first floor), Hall 514 (5th floor), Hall 518 (5th floor).

IWC TQM 2009 / Session 12 - Hall CeNT (first floor) / Special Conference "Manufuture in Serbia 2009"

IWC TQM 2009 / Session 13 – Hall 514 (5th floor) / Six sigma Applications IWC TQM 2009 / Session 14– Hall 518 (5th floor) / QM in Higher Education

13:00 – 15:00 Break

15:00 – 16:30 Parallel Sessions (**15,16,17**) - **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade / Hall CeNT (**first floor**), Hall 514 (**5**th **floor**), Hall 518 (**5**th **floor**).

IWC TQM 2009 / Session 15 - Hall CeNT (first floor) / - Workshops 3 / Round Table Disscussion 3:

- Manufuture Results and Future Trends (Dr. Augusta Maria Paci, Italy; Dr. Liviu Jalba, Romania, Prof. Dr. Vidosav Majstorovic, Serbia, MSc Tatjana Sibalija, Serbia).
- Rapid Technology Development State of the art (Dipl.-Ing. Reiner Gotzen, Germany).

IWC TQM 2009 / Session 16 - Hall 514 (5th floor) / TQM Application IWC TQM 2009 / Session 17 - Hall 518 (5th floor) / Knowledge Engineering and TQM

16:30 - 17:00 Coffee break - Club CeNT (first level).

17:00 – 18:30 Parallel Sessions (18,19,20) - Mechanical Engineering Faculty, str. Kraljice Marije 16, Belgrade / Hall CeNT (first floor), Hall 514 (5th floor), Hall 518 (5th floor).

IWC TQM 2009 / Session 18 - Hall CeNT (first floor) / - Workshops 4 / Round Table Disscussion 4: Trends in CMM Developments - CZ Expiriences (Michel Bujara, Mario Vizcaino-Hoppe, Roland Roth, Carl Zeiss, Oberkochen, Germany).

IWC TQM 2009 / Session 19 - Hall 514 (5th floor) / Robust Engineering

20:00 IWC TQM 2009 / Conference Dinner (informal).

3rd June , 2009 / Wednesday

Industrial visit (Factory visit and excursion tour) – Carlsberg Srbija doo, Čelarevo (Free of charge for participants of TQM Conference). For detailes please contact: maintendecenters and milena.matijevic@carlsberg.rs., as soon as possible, because number of participants are limited.

Final report for CIRP, July 2009 - Prof. Dr. V. Majstorovic

- Session **20** - Workshops 5 / Round Table Disscussion 5: **EFQM BE Model – Challenges and Opportunities (Andreas I. Ioannides)**. This workshop will be held in Carlsberg Srbija doo, Čelarevo.

4th June, 2009 / Thersday

- **09:12.30** ICQ 2009 – Different sessions.

12:30 – 14:00 - Hall CeNT (first floor)

Session 21 - Workshops 6 / Round Table Disscussion 6: Excellence – Where we going ? (Prof. Dr. Ton van der Wiele, Steve Unwin)
 Closing Plenary Session and accept of IWC TQM / Convention Facts and Conclusions.

14:00 – Farewell Cocktails in Club CeNT (first level).

- <u>Time reserved for each paper</u>: 30 minutes for Keynote papers and 20 minutes for other papers
- 6. <u>Time reserved for discussion</u>: 10 minutes for Keynote paper and 5 minutes for other papers
- 7. Attendance to sessions: Average 200 participants per session
- 8. Members of Scientific Committee

International Program Committee:

Honorary Chairs: Prof. Dr. L. Alting (Dk), Prof. Dr. G. Arndt (Au), M. Debenham (UK), Prof. Dr. S. Karapetrovic (Ca), Prof. Dr. F. Jovane (I), Prof. Dr. L. Monostori (H), Prof. Dr. H. Osanna (At), Prof. Dr. T. Pfeifer (G), Prof. Dr. G. Sohlenius (S), Prof. Dr. J. Stanic (Ser), Prof. Dr. N. Suh (USA), Prof. Dr. H. VanBrussel (B), Prof. Dr. A. Weckenmann (G), Prof. Dr. A. van der Wiele (NI).

Conference Chair: Prof. Dr. V. Majstorovic (S).

Members: Prof. Dr. I. Angeli (Cy), Prof. Dr. B. Ačko (SI), Prof. Dr. D. Axinte (UK), Prof. Dr. U. Bititci (UK), Prof. Dr. H. Bley (G), Prof. Dr. M. Bobrek (BiH), Prof. Dr. P. Bojanić (Ser), Prof. Dr. C. Bouzakis (Gr), Prof. D. Brissaud (F), Dr. R. Bueno (Sp), Prof. Dr. P. Castka (NZ), (Miss) Dr. Eng. L. Catellani (I), Prof. Dr. E. Chlebus (PI), Prof. Dr. K. Cho (K), Prof. Dr. G. Chryssolours (Gr), Prof. Dr. P. Cunha (Po), Prof. Dr. L. DeChiffre (Dk), B. Dimitrijević (Ca), Prof. Dr. N. Dragulanescu (Ro), Prof. Dr. J. Duflou (Be), Prof. Dr. F. Fang (Ch), (Mrs) Prof. Dr. A. Fisher (Is), Prof. Dr. M. Frota (Br), Prof. Dr. I. Inasaki (J), Dr. R. Isaksson (S), M.Sc. M. Ivanović (Ser), Dr. L. Jalba (Ro), Prof. Dr. J. Jedrzejewski (PI), Prof. Dr. Z. Katz (SA), Prof. Dr. F. Kimura (J), (Mrs) Prof. Dr. A. Kjellberg (S), Prof. Dr. L. Krause (G), Prof. Dr. J. P. Kruth (Be), Prof. Dr. A. Kusiak (USA), Prof. Dr. P. Kuhlang (At), Prof. Dr. S. Lu (USA), (Mrs) Ass. Prof. Dr. V. Marinkovic (Ser), (Mrs) Prof. Dr. N. Majkić-Singh (Ser), Prof. Dr. G. Maropoulos (UK),

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Prof. Dr. V. Milačić (Ser), Prof. Dr. A. Molina (Mx), Prof. Dr. P. Molnar (H), Prof. Dr. G. Morel (F), Prof. S. Naruo (J), Prof. Dr. S. Nof (USA), (Mrs) L. Nitu (Ro), Prof. Dr. H. Panetto (Fr), Dr. G. Pegs (UK), (Mrs) Prof. Dr. S. Pejčić-Tarle (Ser), MSc. Z. Pendić (Ser), Prof. Dr. C. Periera (Br), (Mrs) Prof. Dr. L. Petrova-Galabova (Bu), Dr. S. Rosu (Ro), Prof. Dr. R. Roy (UK), Dr. I. Sheps (Is), (Miss) MSc. T. Sibalija (Ser), Prof. Dr. M. Sphitalini, Prof. Dr. M. Soković (SI), Prof. Dr. D. Stanivuković (Ser), Prof. Dr. V. Stojiljkovic (Ser), Prof. Dr. S. Takata (J), Prof. Dr. T. Sorin (Ro), Prof. Dr. M. Taisch (I), Prof. Dr. R. Teti (I), Prof. Dr. M. Trajanovic (Ser), Prof. Dr. K. Ueda (J), Prof. Dr. G. Zhang (Ch), M.Sc. S. Živković (Ser), (Mrs) Prof. Dr. G. Ušćebrka (Ser), Prof. Dr. F. Vernadat (Fr), Prof. Dr. E. Westkaemper (G).

Note: Bolded name are CIRP member.

National Honorary Committee:

Prof. Dr. N. Hajdin, Prof. Dr. M. Nedeljković, Prof. Dr. A. Sedmak, Prof. Dr. M. Milovančević, Prof. Dr. V. Lučanin, Prof. Dr. Lj. Tanović, Prof. Dr. P. Petrović.

National Sponsors Honorary Committee:

A. Radosavljević, S. Vuletić, M. Jakovljević, S. Srećković, J. Pantelić-Babić, P. Jakovljević, Z. Spasić, Dr. P. Popović.

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- Carlsberg Srbija doo.

NATIONAL / INTERNATIONAL SPONSORS:

- Ministry for Science and Technology, Serbia, Belgrade.
- Jugoinspekt, Belgrade.
- Informatika, Belgrade.
- National Institute for Metrology, Belgrade.
- Metalac Holding, Gornji Milanovac.
- Fresenius Medical Care, Belgrade,
- Institut za nuklearne nauke "Vinča" Biro za sertifikacju, Belgrade.
- Microelectronica S.A., Bucharest, Romania.

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Japanese Union of Scientist and Engineers (**JUSE**); Tokyo; Japan. European Organization for Quality (**EOQ**); Brussels; Belgium. European Foundation for Quality Management (**EFQM**); Brussels; Belgium.

American Society for Quality (ASQ); Milwaukee; USA

International Federation for Information Processing (IFIP); Laxenburg; Austria.

WG 5.7 Integration and Production Management

International Measurement Confederation (IMEKO); Budapest; Hungary.

TC 14 Measurement of Geometrical Quantities

International Federation of Automatic Control (IFAC); Laxenburg; Austria.

TC 5. 1 Manufacturing Plant Control

TC 5.2 Manufacturing Modelling for Management and Control

TC 5.3 Enterprise Integration and Networking

Organized by

Mechanical Engineering Faculty, Laboratory for Production Metrology and TQM, Belgrade, Serbia.

Co – organized by

United Association of Serbia for Quality (YUSQ), Belgrade, Serbia.

- Members of the Organizing Committee: Prof. Dr. V. Majstorovic, T. Stojiljkovic, G. Dojcinovic
- 10. Short description of the paper reviewing procedure: This procedure was based on CIRP evolution form.

Appendix I: Lists of titles and authors and sessions chairmen:

5th IWC TQM 2009 - DETAILED PROGRAM

31st May, 2009 / Sunday

17:00 – 18:30 Registration on reception desk (first floor – hall CeNT) in **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade.

18:30 Welcome Cocktail - **Club CeNT** (first level), Mechanical Engineering Faculty, Belgrade.

19.00 Workshop 1 / Round Table Disscussion 1: The Importance of Process

Management in Achieving High-Performance Organization (Danijela Savić-Lukić,

ASQ (American Society for Quality) Certified Six Sigma Black Belt, DeltaM

Group, Beograd, Serbia) – Hall Delta Company – Milentija Popovica 75,

New Belgrade.

1st June, 2009 / Monday

08:00 – 16:30 Registration on reception desk (first floor – hall CeNT) in **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade.

09:00 – 10.30 Opening Ceremony and Plenary Presentation – Hall CeNT (first floor) - Mechanical Engineering Faculty, Belgrade.

- Opening addresses
- Awards
- Opening Plenary Presentation EVALUATION OF SERVICES THROUGH USER GENERATED CONTENT, <u>Ton van der Wiele, Professor</u>¹, Jos van Iwaarden, PhD, Assistant Professor², ¹Quality Management and Organizational Performance, Rotterdam School of Management, Erasmus University, Rotterdam, The Netherlands, ² Rotterdam School of Management, Erasmus University, Rotterdam, The Netherlands.

10:30 – 11:30 Cocktail - **Club CeNT** (first level), Mechanical Engineering Faculty, Belgrade.

11:30 – 13:30 Opening Plenary Session: Business excellence models (applications and development trends) - Hall CeNT (first floor) - Mechanical Engineering Faculty, Belgrade.

Chairmen:

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Prof. Dr. Ton van der Wiele, Erasmus University Rotterdam, Rotterdam, The Netherlands.

Prof. Dr. Herbert Osanna, Vienna University of Technology, Vienna, Austria.

Prof. Dr. Luca Cagnazzo, Department of Industrial Engineering, University of Perugia, Perugia, Italy.

Dr.-Ing. Peter-Frederik Brenner, Chair Quality Management and Manufacturing Metrology (QFM), Erlangen Friedrich-Alexander-University Erlangen-Nuremberg, Germany.

Dr. Isacc Sheps, Chief Executive Officer, Carlsberg – UK, London, UK.

Visiting Prof. Shinji NARUO, The Univ. of Bucharest, Business and Administration Faculty, Romania.

Steve Unwin, Access to Excellence Co Ltd / Photonbooks.com, UK.

Prof. Dr. Vojislav Stojiljković, Faculty of Mechanical Engineering, Niš, Serbia.

Prof. Dr. Vidosav D. Majstorović, Faculty of Mechanical Engineering, Belgrade University, Belgrade, Serbia.

Keynote Speakers:

- 1. QUALITY MANAGEMENT INITIATIVES IN ORGANIZATIONS FOR INTERNATIONAL COOPERATION, Keynote paper, Ton van der Wiele, Professor¹, Constantijn Heemskerk, Master of Science in Management Consultancy², Jos van Iwaarden, PhD, Assistant Professor³, ¹Quality Management and Organizational Performance, Rotterdam School of Management, Erasmus University, Rotterdam, The Netherlands, ²the Dutch Ministry of Finance, The Hague, ³ Rotterdam School of Management, Erasmus University, Rotterdam, The Netherlands.
- 2. INDUSTRIAL METROLOGY OF THE VIEWPOINT OF NANOTECHNOLOGY AND NANOMETROLOGY, Keynote paper, P. Herbert Osanna, M. Numan Durakbasa, Lukas Kräuter Vienna University of Technology TU-Wien, Vienna, Austria.
- 3. A NEW REDUCTION-DEFECTS MODEL FOR SME'S BASED ON SIX SIGMA METHODOLOGY: A CASE STUDY, Keynote paper, Luca Cagnazzo¹, Emanuele Luna², Cristiano Brugnoni³, Paolo Taticchi⁴, Paolo Carbone⁵, ¹Department of Industrial Engineering, University of Perugia, Perugia, Italy, ²Angelantoni Industrie SPA, ³Angelantoni Industrie SPA, ⁴Department of Industrial Engineering, University of Perugia, Perugia, Italy, ⁵Department of Electronic Engineering, University of Perugia, Perugia, Italy.
- 4. SPECIFICATION OF INFORMATION SYSTEMS FOR DESIGN OF EXPERIMENTS ACCORDING TO A REFERENCE MODEL, Keynote paper, *Dr.-Ing. Peter-Frederik Brenner, Chair Quality Management and Manufacturing Metrology (QFM), Erlangen Friedrich-Alexander-University Erlangen-Nuremberg, Germany.*
- 5. From Product Quality to Organization Quality, Keynote paper, Sheps Isaac, PhD, Chief Executive Officer, Carlsberg UK, London, UK.

- 6. IN-HOUSE VOCATIONAL EDUCATION SYSTEM OF THE MANUFACTURING COMPANY TOYOTA AND HITACHI, Keynote paper, *Prof. Shinji Naruo*, *The Bucharest University*, *Bucharest*, *Romania*.
- 7. EXCELLENCE IN UNCERTAINTY, Keynote paper, Steve Unwin, Access to Excellence Co Ltd / Photonbooks.com, UK.
- 8. THE EFQM EXCELLENCE MODEL IMPLEMENTATION IN WEST BALKANS, Keynote paper, Prof. Dr. Vojislav Stojiljković, Predrag Stoiljković, Bratislav Stoiljković, CIM College d.o.o Niš, Serbia.
- 9. RESEARCHES OF THE IMPACT QUALITY MANAGEMENT PRINCIPLES ON QUALITY MANAGEMENT PRACTICES IN SERBIA, Keynote paper, Prof. Dr. Vidosav Majstorovic, Mechanical Engineering Faculty, Belgrade, Serbia.

13:00 - 15:00 Break

15:00 – 16:30 Parallel Sessions (**3,4,5**) - **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade / Hall CeNT (first floor), Hall 514 (5th floor), Hall 518 (5th floor).

IWC TQM 2009 / Session 3 - Hall CeNT (first floor) / Young PhD researchers

Chairmen:

Michael Giebel, University of Kassel, Germany.

Milan Zdravković, Research Assistant, Faculty of Mechanical Engineering, University of Niš, Serbia.

Miloš Stojković, Faculty of Mechanical Engineering, University of Niš, Laboratory for Intelligent Manufacturing Systems, Serbia.

Dragan Ćoćkalo PhD, assistant professor, Technical faculty "Mihajlo Pupin", Zrenjanin, Serbia.

Abulgasem- Errabou, Coventry University, UK.

- 1. VALUE ADDED BY QUALITY MANAGEMENT DEVELOPING A MODEL DESCRIBING THE MECHANISMS AND A PROCESS APPROACH FOR INTRODUCTION, Introduction paper, Michael Giebel, University of Kassel, Germany.
- **2. CONCEPT OF SEMANTIC INFORMATION POOL FOR MANUFACTURING SUPPLY NETWORKS, MSc. Milan Zdravković**¹, Prof. dr Hervé Panetto², Prof. dr Miroslav Trajanović¹, ¹Faculty of Mechanical Engineering, University of Niš, Innovation Center for Information Technologies, ²Research Centre for Automatic Control (CRAN UMR 7039), Nancy-Université, CNRS, France.
- **3. SEMANTIC INTERPRETATION OF GEOMETRICAL FEATURES, Miloš Stojković**¹, Miodrag Manić¹, Milan Trifunović¹, Dragan Mišić¹, ¹Faculty of Mechanical Engineering, University of Niš, Laboratory for Intelligent Manufacturing Systems, Serbia.
- 4. THE MODEL FOR ASSURING SATISFACTION OF CUSTOMER REQUIREMENTS, Dragan Ćoćkalo PhD, assistant professor, Dejan Đorđević PhD, professor, Technical faculty "Mihailo Pupin". Zrenjanin. Serbia.
- 5. QUALITY GAP OF SERVICES IN HIGHER EDUCATION FROM THE POINT VIEW OF STUDENTS, *Abulgasem- Errabou*, Coventry University, UK.

IWC TQM 2009 / Session 4 - Hall 514 (5th floor) / QM/TQM New Approaches

Chairmen:

Prof. Dr. Ing. Nicolae Dragulanescu, "Polytechnica" University of Bucharest, Romania. **MSc. Milan Ivanović,** Lloyd's Register d.o.o. Belgrade, Serbia.

Ola Busari, Development Bank of Southern Africa, Midrand, South Africa.

Rajit Vidyarthi, ABV-Indian Institute of Information Technology & Management, Gwalior, India.

Azemina Klobodanović, B.Sc., University of Zenica, Institute of Metallurgy "Kemal Kapetanović", Zenica, B&H.

- 1. FROM VICIOUS CYCLES TO VIRTUOUS CYCLES IN QUALITY MANAGEMENT, Introduction paper, *Prof. Dr. Ing. Nicolae Dragulanescu*, "Polytechnica" University of Bucharest, Romania.
- **2. MANAGEMENT QUALITY, MSc. Milan Ivanović¹,** Prof. Dr. Vidosav D. Majstorović², ¹Lloyd's Register d.o.o. Belgrade, ²Mechanical Engineering Faculty, Belgrade, Serbia.
- 3. ENTRENCHING A QUALITY CULTURE: A MULTI-STAKEHOLDER POLICY FRAMEWORK FOR MANAGING QUALITY, Ola Busari, Development Bank of Southern Africa, Midrand, South Africa.
- 4. STRATEGIC FRAMEWORK FOR IMPLEMENTING TQS IN SERVICE ORGANIZATIONS, *Rajit Vidyarthi*, Chandra Sekhar Dronavajjala, Dr. Deepali Singh, ABV-Indian Institute of Information Technology & Management, Gwalior, India.
- 5. EFQM-MODEL FOR EXCELLENCE AND BUSINESS EXCELLENCE AWARDS, Azemina Klobodanović, B.Sc., University of Zenica, Institute of Metallurgy "Kemal Kapetanović", Zenica, B&H.

IWC TQM 2009 / Session 5 – Hall 518 (5th floor) / QM/TQM Assessment

Chairmen:

Raimondas Paskevicius, Vilnius Business College, Lithuania.

Prof. Dr. Hayat, Dean Faculty of La, commerce & Business Bahauddin Zakariya University, Multan, Pakistan.

Vesna Spasojević Brkić, PhD., Assistent Professor, Faculty of Mechanical Enginnering, University of Belgrade, Belgrade, Serbia.

Prof.Dr Živan Živković, University of Belgrade, Technical Faculty in Bor, Bor, Serbia.

Dr. Marko D. Mirkovich, Bauxite mines,s.c. Quality and Information Centre, Niksic, Montenegro.

- 1. ASSESSMENT OF COMPANY MANAGEMENT FROM THE INNOVATIVE APPROACH, Introduction paper, Raimondas Paskevicius, Vilnius Business College, Lithuania.
- 2. CRITICAL TOTAL QUALITY MANAGEMENT FACTORS AND FINANCIAL PERFORMANCE OF THE FIRM, *Prof. Dr. Hayat, M. Awan*¹, *Dr. Ishaq Bhatti*², *Dr. M.*

Azeem Qureshi³, Khuram Shahzad Bukhari⁴, ¹Dean Faculty of La, commerce & Business Bahauddin Zakariya University, Multan, Pakistan, ²Department of Economics and Finance La Trobe University, Melbourne Australia, ³Institute of Management Sciences Bahauddin Zakariya University, Multan, Pakistan, ⁴Institute of Management Sciences Bahauddin Zakariya University, Multan, Pakistan.

- 3. CONFIRMATORY FACTOR ANALYSIS OF QUALITY MANAGEMENT EVIDENCE FROM SERBIAN INDUSTRIAL COMPANIES, Vesna Spasojević Brkić, PhD., Assistent Professor, Milivoj Klarin, PhD., Full Professor, Vojkan Lučanin, PhD., Full Professor, Faculty of Mechanical Enginnering, University of Belgrade, Belgrade, Serbia.
- **4. THE INFLUENCE OF TQM PRACTICE TO EMPLOYEES' SATISFACTION AND LOYALTY,** *Prof.Dr Živan Živković, Dr Ivan Mihajlović, Isidora Djutić, University of Belgrade, Technical Faculty in Bor, Bor, Serbia.*
- **5. LOGICAL AGGREGATION AS CONSISTENT TOOL THE QUALITY EVALUATION, Dr. Marko D. Mirkovich¹,** Dr. Dragan G.Radojevich², Dr. Vidosav D. Majstorovich³, Dr. Janko J. Hodolic⁴, ¹⁾Bauxite mines,s.c. Quality and Information Centre, Niksic ²⁾, Montenegro, Institute "Mihajlo Pupin" Belgrade ³⁾Mechanical Engineering Faculty, Belgrade ⁴⁾FTS, Production Mechanical Engineering Institute, Novi Sad. Serbia.

16:30 - 17:00 Coffee break - Club CeNT (first level).

17:00 – 18:30 Parallel Sessions (**6,7,8**) - **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade / Hall CeNT (first floor), Hall 514 (5th floor), Hall 518 (5th floor).

IWC TQM 2009 / Session 6 - Hall CeNT (first floor) / Workshop 2 / Round Table
Discussion 2 : Organizational Excellence or/and Management Quality (Moderators:
Dr Isaac Sheps, MSc Milan Ivanovic, Prof. Dr. Vidosav Majstorovic)

IWC TQM 2009 / Session 7 - Hall 514 (5th floor) / World Class Performances

Chairmen:

Alessandro Brun, Department of Management, Economics and Industrial Engineering – Politecnico di Milano, Milan, Italy.

Andreas I. Ioannides, V. President, Cyprus Association for Quality, Nicosia, Cyprus. **Dipl. Ing. Simone Smolinska**, Quality system & Continuous Improvement manager, Le Belier East Europe, Hungary.

Zoran Pendić, EUROSYSTEMS, Belgrade, Serbia.

Dr Igor Svetel, Inovation Center, Mechanical Engineering Faculty, Belgrade, Serbia.

Final report for CIRP, July 2009 - Prof. Dr. V. Majstorovic

- 1. ALIGNMENT BETWEEN A FIRM'S QUALITY MANAGEMENT SYSTEM AND ITS STRATEGIC OBJECTIVES, Introduction paer, Alessandro Brun¹, Matteo Savino², ¹ Department of Management, Economics and Industrial Engineering Politecnico di Milano, Milan, Italy, ²Department Engineering Università degli Studi del Sannio, Benevento, Italy.
- 2. POLICY AND STRATEGY WITHIN BUSINESS EXCELLENCE MODELS TODAY'S CHALLENGES AND OPPORTUNITIES, Andreas I. loannides, V. President, Cyprus Association for Quality, Nicosia, Cyprus.
- 3. "WHEN SOUL AND POSSIBILITY MEET EACH OTHER'S" (EXAMPLES OF BREAKTHROUGH MANAGEMENT IN A FOUNDRY), Dipl. Ing. Simone Smolinska, Quality system & Continuous Improvement manager, Le Belier East Europe, Hungary.
- **4. A METRICS FOR EVALUATION OF ECO-PRODUCT DEVELOPMENT PROCESS, Zoran Pendić¹,** Prof. Dr. Vidosav Majstorović², ¹EUROSYSTEMS, Belgrade, ²Mechanical Engineering Faculty, Belgrade University, Serbia.
- 5. OPEN STANDARDS BASED BUILDING INFORMATION MODELING: TOWARDS QUALITY ASSURANCE IN ARCHITECTURE, ENGINEERING AND CONSTRUCTION, Dr Igor Svetel¹, Mr Milica Pejanović², ¹Inovation Center, Mechanical Engineering Faculty, ² Faculty of Architecture, Belgrade, Serbia.

IWC TQM 2009 / Session 8 – Hall 518 (5th floor) / Business Process Improvement

Chairmen:

J. Rauchenberger, Department for Production Quality and Metrology Fraunhofer Institute for Production Technology IPT, Aachen, Germany.

Prof. Dr. Lidia Galabova, Technical University of Sofia, Faculty of Management, Bulgaria.

Prof. Dr. Mirko Sokovic, University of Ljubljana, Faculty of Mechanical Engineering, Slovenia.

M.Sc Tatjana V. ŠIBALIJA, Faculty of Mechanical Engineering, University of Belgrade, Serbia.

Aleksandra Stefanović, Dipl. Eng. El., YUSQ, Belgrade, Serbia.

- **1. APPLICATION OF A MATURITY MODEL AS FRAMEWORK FOR PROCESS IMPROVEMENT, Introduction paper,** *J. Rauchenberger*¹, *B. Spiegelberger*², *R. Stetter*³, *R. Schmitt*¹, ¹Department for Production Quality and Metrology Fraunhofer Institute for Production Technology IPT, Aachen, Germany, ²Institute of information technology in mechanical engineering, Dept. of Mechanical Engineering, Technical University Munich, Munich, Germany, ³ITQ GmbH, Munich, Germany.
- **2. RESEARCH OF THE PROCESSES STATES**, *Dr. Lidia Galabova*¹, *Prof. DSc. Geoprgy Tasev*², ¹Technical University of Sofia, Faculty of Management, Bulgaria, ²Chairmen of Union of Quality Experts in Bulgaria, Bulgaria.
- **3. SEVEN QUALITY TOOLS IN CONTINUOUS IMPROVEMENT PROCESS,** *Mirko Sokovic* ¹, *Dusko Pavletic* ², ¹*University of Ljubljana, Faculty of Mechanical Engineering, Slovenia,* ²*University of Rijeka, Faculty of Engineering, Croatia.*

- **4. SPC AND PROCESS CAPABILITY ANALYSIS CASE STUDY,** M.Sc Tatjana V. ŠIBALIJA, Prof.PhD Vidosav D. MAJSTOROVIĆ, Faculty of Mechanical Engineering, University of Belgrade, Serbia.
- 5. STANDARDS IN SOFTWARE PRODUCTION AREA TREND OR REAL REQUIREMENT, Aleksandra Stefanović, Dipl. Eng. El., YUSQ, Belgrade, Serbia.

2nd June. 2009 / Tuesday

08:00 – 16:30 Registration on reception desk (first floor – hall CeNT) in **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade.

09:00 – 10.30 Parallel Sessions (**9,10,11**) - **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade / Hall CeNT (first floor), Hall 514 (5th floor), Hall 518 (5th floor).

IWC TQM 2009 / Session 9 - Hall CeNT (first floor) / 3rd Balkan Conference on Quality / 4th Balkan Quality Forum - THE BALKAN AS A REGION OF QUALITY

<u>Conference chairs:</u> Liliana Nitu, Vidosav Majstorovic, Lidia Galabova, Angeli Ioannis.

Chairmen:

Math. Ec. Liliana Nitu, Romanian Association for Quality - ARC, Bucharest, Romania. *Prof. Dr. Lidia Galabova,* Technical University of Sofia, Bulgaria.

Frota, Mauricio Nogueira, PhD, Postgraduate Metrology Program Metrology for Quality and Innovation Catholic University of Rio de Janeiro, Brazil.

Dr. Angeli loannis, Cyprus University of Technology, Nicosia, Cyprus.

Prof. Dr. Snežana Pejčić-Tarle, Faculty of Transport and Traffic Engineering, Belgrade, Serbia.

Ege İZGİ ÇAKI, Turkish Standrs Instituion, Human Resources Director, Ankara, Turkey.

- **1. COMBINED AUDIT A PRACTICAL APPROACH, Introduction paper, Math. Ec. Liliana Nitu,** Eng. Lucian Daniel Nitu, Prof. PhD. Eng. Gheorghe Solomon, Romanian Association for Quality -ARC, Romanian Society for Certification ROCERT, Politehnica University Bucharest, Romania.
- 2. APPLICATION OF SIPOC DIAGRAM IN SIX SIGMA QUALITY IMPROVEMENT APPROACH, MSc. Boyka Nenkova, Dr. Lidia Galabova, Risk Engineering Ltd., Bulgaria, Technical University of Sofia, Bulgaria.
- 3. AN OVERVIEW OF THE QUALITY INFRASTRUCTURE IN SERBIA, Frota, Mauricio Nogueira, PhD¹, Racine, Jean-Louis, PhD², Majstorović, D. Vidosav, PhD³, ¹Postgraduate Metrology Program Metrology for Quality and Innovation Catholic University of Rio de Janeiro, Brazil, ²Private and Financial Sector Development Europe and Central Asia Region, The World Bank, ³Production Engineering Department, University of Belgrade, Serbia.

- 4. "QUALITY, ENVIRONMENTAL AND FOOD SAFETY MANAGEMENT SYSTEMS; SIMILARITIES AND DEFICIENCIES. A CASE STUDY OF THREE NATIONAL SURVEYS IN CYPRUS", *Dr. Angeli Ioannis*¹, Nasia Apostolou², Maria Pouvali³, Andria Olympiou⁴, ¹Cyprus University of Technology, ²University of Edinburgh, ³University of Glamorgan, ⁴Agriculture University of Athens, Greece.
- **5. QI in HE Case study form Serbia**, *Prof. Dr. Snežana Pejčić-Tarle*, Faculty of Transport and Traffic Engineering, Belgrade, Serbia.
- 6. LEGAL APPLICATIONS THAT ARE SUPPORTING AND IMPROVING QUALITY SYSTEMS OF HEALTH CARE SERVICE IN TURKEY, Ege IZGI ÇAKI, Turkish Standrs Instituion, Human Resources Director, Ankara, Turkey.

IWC TQM 2009 / Session 10 – Hall 514 (5th floor) / Integrated Management Systems

Chairmen:

Ass. Prof. Dr. Valentina Marinkovic, Quality Department, "ZDRAVLJE- Actavis", Leskovac, Serbia.

Mrs. Iveta Mezinska, Lecturer, Institute of Quality Engineering, Riga Technical University, Latvia.

Dr. Ayman H. Al-Momani, Civil Engineering Department, Mu'tah University, Jordan. **Assist. Prof. Anastasiya Marcheva, PhD,** D. Tsenov Academy of Economics, Svishtov, Bulgaria.

Andrea Suchankova, MSc., Slovak Institute of Metrology, Bratislava, Slovakia.

- 1. INTEGRATED MANAGEMENT SYSTEMS IN THE PHARMACEUTICAL COMPANY "ZDRAVLJE ACTAVIS", Introduction paper, Ass. Prof. Dr. Valentina Marinkovic, Quality Department, 'ZDRAVLJE- Actavis", Leskovac, Serbia.
- 2. DESIGNING OF INTEGRATED QUALITY MANAGEMENT SYSTEM IN BUILDING MATERIALS PRODUCTION COMPANIES, Mrs. Iveta Mezinska, Lecturer ¹, Mr. Gundars Mezinskis, Prof., Dr.hab.sc.ing.², ¹Institute of Quality Engineering, Riga Technical University, Latvia, ²Institute of Silicate Materials, Riga Technical University, Latvia.
- 3. Quality Cost requirements and their economic impact, Dr. Ayman H. Al-Momani, Civil Engineering Department, Mu'tah University, Jordan.
- **4. TOTAL QUALITY & PEOPLE CAPABILITY MANAGEMENT,** *P. P. Sukumaran* ¹, **Assist. Prof. Anastasiya Marcheva, PhD** ², ¹Executive Director- Business Operations, Best & Crompton Engg. Limited, Chennai, India, ²D. Tsenov Academy of Economics, Svishtov, Bulgaria.
- **5. MID DIRECTIVE AND THEIR APPLICATION IN SLOVAKIA THE BEST PRACTICE,** *Andrea Suchankova, MSc., Project Manager*¹, *Dr. Ivan Mikulecky, Senior Metrologist*¹, *Prof. Dr. Vidosav Majstorovic*², ¹Slovak Institute of Metrology, Bratislava, Slovakia, ²Mechanical Engineering Faculty, Belgrade, Serbia.
- 6. APPLICATIONS OF MDD DIRECTIVE IN SLOVAKIA SOME EXPERIENCES, Andrea Suchankova, MSc., Project Manager¹, Dr. Ivan Mikulecky, Senior

Metrologist¹, Prof. Dr. Vidosav Majstorovic², ¹Slovak Institute of Metrology, Bratislava, Slovakia, ²Mechanical Engineering Faculty, Belgrade, Serbia.

IWC TQM 2009 / Session 11 – Hall 518 (5th floor) / TQM Tools and Techniques

Chairmen:

- **C.** Hammers, Laboratory for Machine Tools and Production Engineering WZL, RWTH Aachen University, Germany.
- **P. Beaujean,** Laboratory for Machine Tools and Production Engineering WZL, RWTH Aachen University, Germany.

Prof. Dr. João C. O. Matias, University of Beira Interior, Department of Electromechanical Engineering, Portugal.

Prof. Dr. Sorin-George Toma, Faculty of Administration and Business, University of Bucharest, Romania.

Marko JOVANOVIĆ, Dipl. Mech. Eng., YUSQ, Belgrade, Serbia.

- 1. IMPROVING THE PRODUCT DEVELOPMENT PROCESS WITH INFORMATION FLOW ORIENTED QUALITY GATES, Introduction paper, C. Hammers, Prof. R. Schmitt, Laboratory for Machine Tools and Production Engineering WZL, RWTH Aachen University, Germany.
- 2. SELF-OPTIMIZING PRODUCTION IMPLICATIONS FOR QUALITY MANAGEMENT, P. Beaujean, D. Kristes, Prof. R. Schmitt, Laboratory for Machine Tools and Production Engineering WZL, RWTH Aachen University, Germany.
- 3. THE CONTRIBUTION OF THE MAINTENANCE FUNCTION FOR THE TOTAL QUALITY SUCCESS, Prof. Dr. João C. O. Matias, Prof. Dr. Carlos M. P. Cabrita, University of Beira Interior, Department of Electromechanical Engineering, Portugal.
- **4. LEARNING, A KEY DRIVER OF TOYOTA MOTOR CORPORATION,** *Prof. Dr. Sorin-George Toma, Faculty of Administration and Business, University of Bucharest, Romania.*
- 5. USING SIX SIGMA MEASURMENT AND ANALYSIS TOOLS IN CMMI, Marko JOVANOVIĆ, Dipl. Mech. Eng., YUSQ, Belgrade, Serbia.

10:30 - 11:00 Coffee break - Club CeNT (first level).

11:00 – 12:30 Parallel Sessions (12,13,14) - Mechanical Engineering Faculty, str. Kraljice Marije 16, Belgrade / Hall CeNT (first floor), Hall 514 (5th floor), Hall 518 (5th floor).

IWC TQM 2009 / Session 12 - Hall CeNT (first floor) / Special Conference
"Manufuture in Serbia 2009"

<u>Conference chairs:</u> Prof. Dr. Vidosav Mjastorovic, Dr. Augusta Maria Paci, Dr. Liviu Jalba.

Chairmen:

Final report for CIRP, July 2009 - Prof. Dr. V. Majstorovic

Dr. Augusta Maria Paci, Consiglio Nazionale delle Ricerche, Roma, Italy.

Dipl.-Ing. Reiner Götzen, microTEC Gesellschaft für Mikrotechnologie mbH, Germany. *Dr. Liviu Jalba,* Microelectronica, Bucurest, Romania.

M.Sc. Tatjana V. ŠIBALIJA, Faculty of Mechanical Engineering, University of Belgrade, Serbia.

Srđan Živković, M.Sc, Military Technical Institute, Belgrade, Serbia.

- 1. STRATEGIC STUDIES TOWARDS INDUSTRIAL TRANSFORMATION, Introduction paper, Dr. Augusta Maria Paci, Consiglio Nazionale delle Ricerche, Roma, Italy.
- **2. POLYMER BASED MCROSYSTEMS IN PARALLEL BATCH PRODUCTION, Dipl.-** *Ing. Reiner Götzen, M.Sc. Jan Götzen, microTEC Gesellschaft für Mikrotechnologie mbH, Germany.*
- 3. West Balkan Manufuture Initiative Some practical results, *Dr. Liviu Jalba*, *Microelectronica*, *Bucurest*, *Romania*.
- 4. ADVANCED QUALITY INPROVEMENT INITIATIVES: THE BEST PRACTICE FROM SERBIA, M.Sc Tatjana V. ŠIBALIJA, Prof. Dr. Vidosav D. MAJSTOROVIĆ, Faculty of Mechanical Engineering, University of Belgrade, Serbia.
- 5. MEASURING OF WING'S ANGULAR POSITION, Srđan Živković, M.Sc, Military Technical Institute, Belgrade, Serbia.

IWC TQM 2009 / Session 13 - Hall 514 (5th floor) / Six sigma - Applications

Chairmen:

Jose-Alberto Eguren, Engineering school of Mondragon Unibertsitatea, Mechanical and Manufacturing Department, Mondragón, Spain

Prof. Dr. Mirko Sokovic, University of Ljubljana, Faculty of Mechanical Engineering, Slovenia.

M.Sc Abel Ribeiro de Jesus, Federal University at Bahia State, Brazil.

Danijela Savić-Lukić, ASQ (American Society for Quality) Certified Six Sigma Black Belt, DeltaM Group, Beograd, Serbia.

Alessandro Brun, Department of Management, Economics and Industrial Engineering - Politecnico di Milano, Milan, Italy.

- **1. DEVELOPMENT OF A 6 SIGMA BASED CONTINUOUS IMPROVEMENT MODEL FOR MATURE SECTORS, Introduction paper,** Jose-Alberto Eguren¹, Aitor Goti¹, Victoria Rodríguez¹ Lourdes Pozueta⁴, ^{1,2,3}Engineering school of Mondragon Unibertsitatea, Mechanical and Manufacturing Department, Mondragon Unibertsitatea, Mondragón, Spain, ⁴Avancex, Zarautz, Spain.
- **2. IDENTIFYING AND SELECTING SIX SIGMA PROJECTS,** Matej Hohnjec ¹, Mirko Sokovic ², Dusko Pavletic ³, ¹ Six Sigma Akademija Matej Hohnjec s.p., Slovenia, ² University of Ljubljana, Faculty of Mechanical Engineering, Slovenia, ³ University of Rijeka, Faculty of Engineering, Croatia.

- 3. TEN YEARS OF TQM AND FIVE YEARS OF SIX SIGMA PROGRAM IN A METALLURGICAL COPPER PLANT, M.Sc Abel Ribeiro de Jesus, Dr. Herman Lepikson, Federal University at Bahia State, Brazil.
- 4. Design of Experiment Case Study: Use of Response Surface Methodology in Optimization of Attachment Process in Laser Assembly, Danijela Savić-Lukić, ASQ (American Society for Quality) Certified Six Sigma Black Belt, DeltaM Group, Beograd, Serbia.
- 5. IS YOUR NON-PROFIT ORGANIZATION READY TO IMPLEMENT SIX SIGMA?, Alessandro Brun, Xixi Fan, Department of Management, Economics and Industrial Engineering Politecnico di Milano, Milan, Italy.

IWC TQM 2009 / Session 14 – Hall 518 (5th floor) / QM in Higher Education

Chairmen:

Prof.Dr.Ing. Nicolae Dragulanescu, "Polytechnica" University of Bucharest, Romania. **Dr. Laura Catellani,** University Quality Service (SQuA), Politecnico di Milano, Italy. **Prof. Dr. Sherif El-Araby**, Egypt.

Prof. Dr. D. Jovanoski, University of Ss. Cyril and Methodius, Faculty of Mechanical Engineering, Skopje, R. Macedonia.

Professor SCD. (Econ), Helena Vladimirovna Martyakova, Institute of Industrial Economics of the National Academy of Sciences of Ukraine, Donetsk National Technical University, Donetsk, Ukraine.

- 1. QUALITY ASSURANCE IN EDUCATION SLOGANS, MYTHS AND GOOD PRACTICES, Introduction paper, *Prof.Dr.Ing. Nicolae Dragulanescu*, "Polytechnica" University of Bucharest, Romania.
- 2. Using a Dissimilarity Index for Analysing Student Ratings of University Courses, Dr. Laura Catellani, University Quality Service (SQuA), Politecnico di Milano, Italy.
- 3. TOWARDS A FRAMEWORK FOR THE IMPLEMENTATION OF TQM IN INSTITUTIONS OF HIGHER EDUCATION A CASE STUDY IN A UNIVERSITY IN EGYPT, Nada M. Ragab, Riham A. Hassan, and Sherif El-Araby, Egypt.
- **4.** QUALITY MANAGEMENT IN THE UNIVERSITIES AN EXAMPLE FROM MACEDONIA, Dr. R. Minovski, Dr. D. Jovanoski, Dr. B. Jovanoski, University of Ss. Cyril and Methodius, Faculty of Mechanical Engineering, Skopje, R. Macedonia.
- 5. INTERACTION OF LABOUR MARKETS AND EDUCATION IN THE SYSTEM OF MANAGEMENT OF ITS QUALITY, *Professor SCD. (Econ), Helena Vladimirovna Martyakova, Institute of Industrial Economics of the National Academy of Sciences of Ukraine, Donetsk National Technical University, Donetsk, Ukraine.*

13:30 – 15:00 Break

15:00 – 16:30 Parallel Sessions (**15,16,17**) - **Mechanical Engineering Faculty**, str. Kraljice Marije 16, Belgrade / Hall CeNT (first floor), Hall 514 (5th floor), Hall 518 (5th floor).

IWC TQM 2009 / Session 15 - Hall CeNT (first floor) / - Workshops 3 / Round Table Discussion 3:

- Manufuture Results and Future Trends (Dr. Augusta Maria Paci, Italy; Dr. Liviu Jalba, Romania, Prof. Dr. Vidosav Majstorovic, Serbia, MSc Tatjana Sibalija, Serbia).
- Rapid Technology Development State of the art (Dipl.-Ing. Reiner Gotzen, Germany).

IWC TQM 2009 / Session 16 - Hall 514 (5th floor) / TQM Application

Chairmen:

Prof. Dr. Peter Kuhlang, Institute for Management Science, Vienna University of Technology, Vienna, Austria.

Prof. Dr. Dragana Grubišić, Ekonomski fakultet Split, Croatia.

Prof. Dr. Lidia Galabova, Technical University of Sofia, Faculty of Management, Bulgaria.

Prof. Ing. Edita Hekelová, PhD., Slovak University of Technology, Bratislava, Slovakia. **Ing. Monika Fedorčáková,** Department of Management and Economics, Faculty of Engineering, Technical University of Košice, Košice, Slovakia.

- 1. IMPORTANCE OF TQM-METHODS IN THE AREA OF INDUSTRIAL SERVICES AN EMPIRICAL SURVEY IN THE AUSTRIAN MACHINERY AND PLANT ENGINEERING INDUSTRY, Introduction paper, Armin Rosteck, Peter Kuhlang, Wilfried Sihn, Institute for Management Science, Vienna University of Technology, Vienna, Austria.
- 2. COMPANY COMPETENCE FOR TQM IMPLEMENTATION THE EXAMPLE OF COMPANIES IN CROATIAN ELECTRICAL ENERGY SECTOR, Marija Šiško Kuliš, Ph. D.¹, Dragana Grubišić, Ph. D.², Ante Rozga, Ph. D.², HEP-Proizvodnja d.o.o., ²Ekonomski fakultet Split, Croatia.
- **3. QUALITY MANAGEMENT SUCCESS APPROACHES,** *Prof. DSc. Geoprgy Tasev*¹, **Dr. Lidia Galabova**², ¹Chairmen of Union of Quality Experts in Bulgaria, Bulgaria, ²Technical University of Sofia, Faculty of Management, Bulgaria.
- 4. IMPORTANCE OF HUMAN FACTOR IN TQM, *Prof. Ing. Edita Hekelová, PhD.,* Slovak University of Technology, Bratislava, Slovakia.
- **5. METHODS USED TO IMPLEMENT OF CUSTOMERS NEEDS INTO BUDINSESS ACTIVITIES, Ing. Monika Fedorčáková,** Ing. Peter Poór, Department of Management and Economics, Faculty of Engineering, Technical University of Košice, Košice, Slovakia.

IWC TQM 2009 / Session 17 – Hall 518 (5th floor) / Knowledge Engineering and TQM

Chairmen:

Dr. Sebastian Marius ROSU, Special Telecommunications Service, Information Technology Department, Bucharest, University "Politehnica" of Bucharest, Romania. **Steve Unwin.** Access to Excellence Co Ltd / Photonbooks.com, UK.

Mario Vizcaino-Hoppe, Oberkochen, Germany.

Luminita ROSU, University "Politehnica" of Bucharest, PREMINV Research Center, Information Technology Department, Bucharest, Romania.

Prof.dr.sc. Marko Bešker, EOQ manager and auditor, Zagreb, Croatia.

- 1. KNOWLEDGE TRANSFER & CAPITALIZATION TO SUPPORT KAPPS DEVELOPMENT FOR AN EFFECTIVE KNOWLEDGE MANAGEMENT IN SMEs, Introduction paper, Sebastian Marius ROSU^(1&2), George DRAGOI⁽²⁾, Marius GURAN⁽²⁾, Luminita ROSU⁽²⁾, ⁽¹⁾Special Telecommunications Service, Information Technology Department, Bucharest, ⁽²⁾University "Politehnica" of Bucharest, PREMINV Research Center, Romania.
- **2. EXCELLENCE IN UK APPLICATIONS TRENDS,** Steve Unwin, Access to Excellence Co Ltd / Photonbooks.com, UK.
- **3. METROLOGY AND VISUALISATION FOR MICROMANUFACTURING,** Mario Vizcaino-Hoppe, Roland Roth, Oberkochen, Germany.
- **4. A BUSINESS PROCESS MANAGEMENT APPROACH IN VIRTUAL ENTERPRISE,** George DRAGOI⁽¹⁾, Sebastian Marius ROSU^(1&2), Costel Emil COTET⁽¹⁾, Constantin Radu PARPALA⁽¹⁾, Luminita ROSU⁽¹⁾, ⁽¹⁾University "Politehnica" of Bucharest, PREMINV Research Center, ⁽²⁾Special Telecommunications Service, Information Technology Department, Bucharest, Romania.
- 5. RISKS IN DIAGNOSTICS AND TREATMENT OF INTERNAL MEDICINE DISEASES, Dr.sc. Josip Čiček, M.D, EOQ manager and auditor, Prof.dr.sc. Marko Bešker, EOQ manager and auditor, Zagreb, Croatia.

16:30 - 17:00 Coffee break - Club CeNT (first level).

17:00 – 18:30 Parallel Sessions (18,19,20) - Mechanical Engineering Faculty, str. Kraljice Marije 16, Belgrade / Hall CeNT (first floor), Hall 514 (5th floor), Hall 518 (5th floor).

IWC TQM 2009 / Session 18 - Hall CeNT (first floor) / - Workshops 4 / Round Table
Discussion 4: Trends in CMM Developments – CZ Expiriences (Michel Bujara, Mario
Vizcaino-Hoppe, Roland Roth, Carl Zeiss, Oberkochen, Germany).

IWC TQM 2009 / Session 19 - Hall 514 (5th floor) / Robust Engineering

Chairmen:

Dr Danijela Tadić, The Faculty of Mechanical Engineering, University of Kragujevac. **Svetlana Stevovic, PhD.C.E.,** Faculty of construction management, University Union, Belgrade. Serbia.

Dr. Predrag Popović, Institute of Nuclear Sciences VINČA, Belgrade, Serbia.

Zhuchenko Oleksiy, National Technical University of Ukraine «Kyiv Polytechnic Institute», Kyiv, Ukraine.

- **1. IMPROVEMENT OF QUALITY TOOLS AND METHODS BY APPLYING FUZZY SETS THEORY, Ivitation paper,** *Dr Danijela Tadić* ¹, *Dr Svetlana Stevović* ², *Dr Dragan Milanović* ³, ¹The Faculty of Mechanical Engineering, University of Kragujevac, ²The Faculty of Construction Management, University Union, Belgrade, ³The Faculty of Mechanical Engineering, University of Belgrade, Serbia.
- **2. METHODOLOGICAL APPROACH TO TECNICAL AND ENVIRONMENTAL QUALITY MANAGEMENT, Ivitation paper,** Svetlana Stevovic, PhD.C.E.¹, Predrag Popovic, PhD.M.E.², ¹Faculty of construction management, University Union, Belgrade, Serbia, ²Institute of Nuclear Sciences "VINCA" Belgrade, Serbia.
- 3. RISK ASSESSMENT IN THE SAFETY IMPROVEMENT PROCESS IN AREAS WITH POTENTIALLY EXPLOSIVE ATMOSPHERES, Ivitation paper, Predrag Popović, Ljubiša Kovačević, Miroslav Tufegdžić, Institute of Nuclear Sciences VINČA, Belgrade, Serbia.
- 4. The Convergence / Divergence of Quality, Dr. Pat Townsend, MIT, USA.
- 5. SYNTHESIS AND INVESTIGATION OF THE ROBUST CONTROL SYSTEM WITH H_{∞} CONTROLLER IN ORDER TO SUPPORT THE PRESCRIBED TEMPERATURE CONDITIONS OF A GLASS-FURNACE, Tsapar Vitaly, Zhuchenko Oleksiy, National Technical University of Ukraine «Kyiv Polytechnic Institute», Kyiv, Ukraine.

20:00 IWC TQM 2009 / Conference Dinner (informal).

3rd June, 2009 / Wednesday

Industrial visit (Factory visit and excursion tour) – Carlsberg Srbija doo, Čelarevo (Free of charge for participants of TQM Conference). For details please contact: maintendecenters and milena.matijevic@carlsberg.rs., as soon as possible, because number of participants are limited.

Session 20 - Workshops 5 / Round Table Discussion 5: EFQM BE Model –
 Challenges and Opportunities (Andreas I. loannides). This workshop will be held in Carlsberg Srbija doo, Čelarevo.

4th June , 2009 / Thursday

- **09:12.30** ICQ 2009 – Different sessions.

12:30 - 14:00 - Hall CeNT (first floor)

Session 21 - Workshops 6 / Round Table Discussion 6: Excellence – Where we going ? (Prof. Dr. Ton van der Wiele, Steve Unwin)

- Closing Plenary Session and accept of IWC TQM / Convention Declaration

14:00 - Farewell Cocktails in Club CeNT (first level).

IV. Concluding notes

General considerations on the quality of the papers and presentation Very good papers with advanced approaches from main Conference topics.

General consideration on the success of the Conference Conference is full success and 6th IWC TQM & AIA will be held 2011. (*Please see appendix III*).

Difficulty

More applicable information for participants from industry.

V. WORKSHOPS / ROUND TABLES WAS HELD ON 5th IWC TQM 2009

Fifth International Working Conference TOTAL QUALITY MANAGEMENT – ADVANCED AND INTELLIGENT APPROACHES, Belgrade, Serbia.

E-mails: Danijela.Savic.Lukic@deltamgrupa.rs, majnem@EUnet.rs.

NOTE: Please, register on e-mails address immediately! Number participants are limited! $WORKSHOP\ 1/ROUND\ TABLE\ DISCUSSION\ 1-HOST\ IS$

DELTA HOLDING, Beograd, Serbia.

Meeting with cocktail to be held on 2009 - 05 - 31

7 p.m. – 9 p.m.

You are kindly invited to participate on the W 1 / RTD 1 to be held in Presentation Hall Delta Holding, str. Milentija Popovića 7b, 11070 New Belgrade AGENDA

- 1. Opening. Welcome from Delta Holding, Belgrade.
- 2. Introduction of present and guests.
- 3. Discussion / Topic: The Importance of Process Management in Achieving High-Performance Organization (Panelists: Danijela Savić-Lukić, Dr. Sheps Isaac, Prof. Dr. Ton Wiele)
- 4. Cocktail

On W1/RTD1 are attending:

- A. Professors and QM experts form abroad, participants on 5th IWC TQM, 3rd Balkan Conference on Quality, International Convention on Quality Belgrade 2009.
- B. Employees and guest from Delta Holding B. National experts for OM.

<u>NOTE</u>: Discussion and conclusion will be including in final Materials/Proceedings from IWC TQM, Belgrade 2009. Number of participants are limited. Please register as soon as possible by e-mail on top e-mail address. Not possible to be attending if you not register.

In Belgrade, 1st June 2009.

Prof. Dr. Vidosav Majstorović / Danijela Savic-Lukic

Attending 92 participants for 12 countries. RTD was finished in 9.30 p.m.

5th International Working Conference TOTAL QUALITY MANAGEMENT – ADVANCED AND INTELLIGENT APPROACHES, 31st May – 4th June, 2009. Belgrade, Serbia.

<u>Milena.Matijevic@carlsberg.rs</u> – Milena Matijevic <u>majnem@EUnet.rs</u> - V. Majstorović

FACTORY VISIT (Brewery Carlsberg, Celarevo) AND EXCURSION TOUR (Museum Carlsberg Srbiia)

Date and time: 3rd June 2009, <u>07:00 am - 05:30 pm.</u>

Starting / end point: Mechanical Engineering Faculty, str. Kraljice Marije 16, Belgrade /

07:00 am / 05:30 pm.

Transportation: By bus (45 sets).

Tour: Belgrade – Čelarevo – Belgrade.

Detailed Plan:

07:00 am – Meeting Point at Mechanical Engineering Faculty, Kraljice Marije 16. Transportation to Brewery Carlsberg, Celarevo.

09:00 am – Arrival in Brewery Carlsberg Srbija, Celarevo (www.carlsberg.rs).

09:00 - 09:30 am - Coffee break

09:30 – 12:30 pm Visiting Brewery, Meeting with Management Board, Discussion.

- Presentation of QMS/IMS System, Information System (S. Vuletić)
- Workshops 5 / Round Table Disscussion 5: EFQM BE Model Challenges and Opportunities (Andreas I. Ioannides).

12:30 – 01:30 pm Visiting Museum Carlsberg Srbija

01:30 - 03:30 pm Lunch.

03:30 pm – Departure for Belgrade.

05:30 pm – Arrival in Belgrade on MEF, Kraljice Marije 16.

Price: <u>Free of charge for participants of 5th IWC TQM 2009</u>. Number of participants are limited (45). Please register as soon as possible by e-mail on top e-mail address.

Welcome in Serbia and Carlsberg Srbija doo, Čelarevo!

Sincerely Yours,

Aleksandra Ranković, Manager of Communication, Carlsberg Srbija doo Prof. Dr. Vidosav Majstorovic

In Belgrade / Čelarevo, 5th June 2009.

Attending 36 participants for 14 countries.

<u>Appendix II.</u> Special edition International Journal "TOTAL QUALITY MANAGEMENT & EXCELLENCE", Vol. 37, No. 3, 2009, Belgrade, Serbia.

United Association of Serbia for Quality (YUSQ), Belgrade, Serbia.

INTERNATIONAL JOURNAL

TOTAL QUALITY MANAGEMENT & EXCELLENCE

"Special issue"

Papers second reviewed and presented at the Fifh International Working Conference "Total Quality Management – Advanced and Intelligent Approaches", held from 31st May to 4th June, 2009, at Belgrade, Serbia.

UDK 658.5 YU ISSN 1452-0680 No. 3, Vol. 37, 2009

INTERNATIONAL JOURNAL "TOTAL QUALITY MANAGEMENT & EXCELLENCE" Vol. XXXVII, No.3, 2009.

FOUNDER AND PUBLISHER:

YUSQ - United Association of Serbia for Quality, Belgrade, SERBIA.

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FTS. Novi Sad

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Science University of Tokyo, Tokyo, Japan

Milovan Luković

Company "Milan Blagojević", Lučani

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Copies: 1000 examples

Note: This Journal is publication science character. Ministry for Science and Technology of the Republic of Serbia has financially supported this Number.

Belgrade, September 2009.

Preface from Journal editor in chief

Dear reader,

Welcome on special issue of International Journal "Total Quality Management & Excellence", Vol. 37, No. 3, 2009, which consist papers second reviewed and presented at the Fifth International Working Conference "Total Quality Management — Advanced and Intelligent Approaches", was held from $31^{\rm st}$ May to $4^{\rm th}$ June, 2009, at Belgrade, Serbia. During five days the Conference attended 346 participants from 34th countries.

Selected papers presented at this Conference are now offered to you in the special edition of the TQM&E International Journal. The International Special Edition Editorial Board (*members from CIRP, IFIP, IFAC, IMEKO*) reviewed the papers and after corresponding additions and corrections they are included in this edition. The papers reflect the world level in theory and practice of different QM/TQM/BE aspects today and as such may be used for education of experts for quality.

In time of economic crises quality issues become particularly important. They acquire new dimensions and often present milestone for survival of an organization on the market. Today, engineering-technical dimensions of quality are implied, while business-managing aspects are developing, improving and increasingly applying. In parallel to this, sustainable development issues (ISO 9004:2009), limited resources (energy and row materials), climate changes and global financial crisis are superadded to quality topic.

The Fifth IWC TQM Conference, Belgrade 2009, is arranged and held in such circumstances. Its basic objective is to offers the answers, from scientific-research point of view, on challenging issues regarding the progress of quality management. From the other side, equally important aspect of this Conference is the application of a new QM models and experiences related to this.

The especially important aspect of the Conference is contribution to European integrations in scientific-research domain, but also in business-industrial activities. It has become the world-known scientific-business forum for the exchange of knowledge and ideas and discussion about directions of future quality management concepts, through open-discussions, on biannually basis.

From the Fourth IWC TQM Conference, Belgrade 2007, two novelties have been introduces: (i) *The award for an individual for significant personal contribution to the Conference development.* The first winner, at 2007, was Prof. Dr. Herbert Osanna, TU Vienna, Austria, the honorary president of the Conference. He is the one of the Conference founders; at each conference he presented the introduction paper accepted from the audience with the utmost attention. (ii) *The award for young researcher, for*

his/her doctoral thesis research. From this reason, the Special Session — Young researches, has been introduced at 2007, where PhD students present their researches. The Award winner for 2007 was Laura Catellani, Dipartimento di Meccanica — Politecnico di Milano, Milano, Italy, for the paper "Detecting out-of-control samples in customers' satisfaction surveys analysis: the effect of coding the categories of the ordinal scale".

With the greatest please, I would like to introduce the laureates for 2009:

- (i) <u>Prof. Dr. Ton van der Wiele, Rotterdam School of Management, Erasmus University, Rotterdam, The Netherlands.</u> Prof. Wiele was one of the honorary presidents of the Conference, with regular participation since 2003. He is world well-known scientific in QM domain, who has presented introduction papers at each conference from its foundation, showing the way toward QM theory progress.
- (ii) this year, the award for the best young researcher belongs to <u>Michael Giebel</u>, <u>PhD student from University of Kassel</u>, <u>Germany</u>, for the paper "Value Added by Quality Management Developing a Model Describing the Mechanisms and a Process Approach for Introduction".

The Conference 2009 includes various scientific-expert contents that add a specific dimension, which could not be found in other conferences from the technical fields held in Serbia.

The greatest worth of the Conference refers to the authors from five continents and 33th countries. Their high competence and high-quality level of papers have given the crucial contribution to the Conference.

The special thankfulness refers to the Honorary Presidents of the Conference, the members of International Program Committee and the Presidents of the Sections, for their personal contribution to the success of the Conference.

Large number of organizations, institutions and individuals contributed to preparation of the Conference, at which I am especially grateful. Some of them have been supported us continuously, so they deserve special acknowledgement: Serbian Academy of Science and Arts, and its President Prof. Dr. Nikola Hajdin, JUSE (Japanese Union of Scientist and Engineers), Tokyo, Japan and Mr. Slobodan Srećković, General Director of Informatika, Belgrade.

The special remark deserves the main sponsor — Carlsberg Serbia, who, by its contribution, enables a high level of arrangement and organization of the Conference. Carlsberg Serbia is also proven as an exceptional host of technical visit prepared for foreign participants of the Conference, which added a new dimension to the whole concept. Our gratitude deserves the other sponsors, because without their help this Conference could not be successfully organized.

The Ministry of Science and Technological Development of Republic of Serbia has supported the Conference are I would like to express our sincere gratefulness.

The main messages stated during plenary sessions, papers sessions at the workshops/round tables and industrial visit (totally 23) are: (i) the support for biannual holding of this Conference in Serbia, as very imporant event in this part of Europe, (ii) presented papers, particularly those from abroad, are a good basis for work on implementation in our country, (iii) the papers from Serbia (the majority) should be in future more oriented towards the results of the implementation, and (iv) the support for national plan of activities for quality improvement in 2009 /'10.

The 6th International TQM Conference with the same global topic and new topics will be held from 29th May to 2nd June 2011 at Belgrade.

Welcome in Belgrade, SERBIA 2011.

Belgrade, September 25th 2009.

Professor Dr. Vidosav D. MAJSTOROVIĆ, The President and Founder of TQM Conference

Welcome address at the opening of Fifth TQM 2009, Belgrade – 1st June.

1st June, 2009 / Monday

09:00 – 10.30 Opening Ceremony and Plenary Presentation – Hall CeNT (first floor) - Mechanical Engineering Faculty, Belgrade.

- Opening addresses
- Awards
- Opening Plenary Presentation EVALUATION OF SERVICES THROUGH USER GENERATED CONTENT, <u>Ton van der Wiele, Professor</u>¹, Jos van Iwaarden, PhD, Assistant Professor², ¹Quality Management and Organizational Performance, Rotterdam School of Management, Erasmus University, Rotterdam, The Netherlands, ² Rotterdam School of Management, Erasmus University, Rotterdam, The Netherlands.

10:30 – 11:30 Cocktail - **Club CeNT** (first level), Mechanical Engineering Faculty, Belgrade.

- Session Chairs:
 - Prof. Dr. V. Majstorovic, Conference chair and founder.
 - Dr. Branislav Lolic, YUSQ Honorary President.
 - Prof. Dr. Dragutin Stanivukovic, YUSQ President.
 - Dr. Liviu Jalba, Manufuture HLG Vice-president.

Distinguished participants, dear guests, ladies and gentlemen

I wish you good morning. This is the 5th IWC TQM 2009, Belgrade. In order to begin with the work I would request the chairs of this Session, esteemed professors and colleagues, Mr. Jalba, Mr. Lolic, Mr. Stanivukovic and Mr. Majstorovic to take their seats in the working chairmanship.

We wish to welcome the guests, authors of papers and all participants of this Conference that has become the most significant, traditional international meeting on new approaches to the quality management in this part of Europe.

Special welcome we wish official representatives, invited guest and journalist. There is a saying in our country: Welcome and feel at home! and this is what I want to say to you.

The special thankfulness refers to the Honorary Presidents of the Conference, the members of International Program Committee and the Presidents of the Session, for their personal contribution to the success of the Conference. They are prominent and in the world recognized scientists in the fields to be considered at this Conference.

The Conference is supported by the most important world and international scientific and professional institutions and organizations, such as CIRP - Paris, EOQ and EFQM - Brussels, ASQ - USA, JUSE - Japan, IFIP, IFAC, IMEKO, the Serbian Academy of Sciences and Arts, the Ministry of Sciences and Technology, and a large number of national organizations and persons. We thank them all.

The special remark deserves the main patron – Carlsberg Serbia, who, by its contribution, enables a high level of arrangement and organisation of the Conference. Carlsberg Serbia is also proven as an exceptional host of technical visit prepared for participants of the Conference, which added a new dimension to the whole concept.

Our gratitude deserves the other sponsors, because without their help this Conference could not be successfully organised.

This Session has three parts: opening addresses, awards and opening plenary presentation. Let us start in turn.

I have already said, a larger number of international and national representatives are attending this Conference. Some of them will address the participants.



1. The Ministry the Government of Serbia for Sciences and Technology has continuously supported this Conference since 2001, and we owe it our special thanks. Today with us is Professor Milos Nedeljkovic, State Secretary for Science and Technology Development and now I invited them to address Conference participants.

Thank you Professor Nedeljkovic for your kind words and wishes.

2. Manufuture program is European Union strategic research agenda for advanced engineering. Serbia is full member of this initiative until 2007. On this TQM Conference we have Special Conference – Manufuture in Serbia 2009. Dr Liviu Jalba, vice – chairmen HLMG is now with us, and I wish to ask him to take the floor and address the participants this Conference.

I wish to thank Dr. Jalba, on yours warm words and good wishes. We will be honored to cooperate with you and Manufuture program in future.

<u>3.</u> The University of Belgrade is the most important national high educational institution, that has continuously supported this Conference as well. We are grateful to them for this. With us today is the vice-rector, Professor Aleksandar Sedmak, and I am asking him to take the floor.

Thank you Professor Sedmak for your nice words and good wishes.

4. The Mechanical Engineering Faculty in Belgrade is the founder and the organizer of this Conference. With us today is the dean Professor Milorad Milovancevic, and I am asking him to take the floor.

Thank you Professor Milovancevic for your nice words and good wishes. We will do together everything necessary to fulfill them.

5. Carlsberg Srbija is one of the best Company in our country. We have great pleasure that is Carlsberg Srbija main patron this Conference. I have the honor now to invite Mr. Aleksandar Radosavljevic, CEO, Carlsberg, Srbija to take the floor and address the participants this Conference.

Thank you Mr. Radosavljevic for yours support, kind words and wishes.

6. Ladies and gentlemen, the most significant scientific institution in our country, the Serbian Academy of Sciences and Arts has supported our Conference from its establishment. With us today is Professor Mariincic, Director of SASA Technical Museum. He has give you special address and officially open this Conference.

Professor Marincic, please.

Thank you Professor Marincic for your nice words and good wishes. We will do everything necessary to fulfill them.

<u>B.</u>

1. Dear ladies and gentlemen we have come to the festive moment – the handing over of the *SPECIAL CHARTER* of the Mechanical Engineering Faculty, the organizer of this Conference, to all those who have to a significant extent contributed to its development. A specially founded jury for the preparation and award of these recognitions was faced with a very difficult task. It was necessary to select only one out of the group of several candidates - and this time this is our respected professor Wiele, from Erasmus University, Rotterdam, The Netherlands.

Let us congratulate him with an applause.

Here is a short explanation. Professor Wiele is a honorary chairman of this Conference and its promoter in the world wide. He has participated in its work with his

very valuable papers since its foundation. These papers are professional messages to the young colleagues in this country and abroad in the field of QM and are attentively followed and studied.

I am inviting Professor Wiele to come and receive this recognition and a modest present. The Special Charter for Professor Wiele will be delivery by Professor Majstorovic, Conference chair and founder.

I congratulate Professor Wiele once more both on your and my behalf.

2. Ladies and gentlemen, this Conference, particularly supporting the participation of young researchers (on each Conference we have Session with this topic). They will represent its future backbone. This is why we have decided, in order to promote professional attendance at the Conference, to select and award the best research work achieved by young researchers in their PhD dissertations. In future there will be a special Session with young authors at this Conference.

Ladies and gentlemen I have the pleasure to declare that the recipient of this year's award for the best paper of a young author is Mr. Michael Giebel, University of Kassel, Germany.

Let us congratulate him with an applause.

I am asking Mr. Giebel to receive this recognition with a modest present. The Special Charter for Mr. Giebel will be delivery by Professor Majstorovic, also.

Once more, I congratulate Miss Catellani both in your and my name.

Dear ladies and gentlemen we have come to the second parent this festive moment – the handing over of the *GRAND GOLD CHARTER* of the National Organization for Quality – JUSK (United Association for Quality of Serbia). JUSK Committee for award this year awarding two persons and one company:

1. Prof. Dr. Marko KONTIC, Belgrade University.

 National Award for Quality Improvement for special personal contribution to the development of the quality mission in Serbia and the promotion of the national movement for quality in medical Fifth International Working Conference "Total Quality Management – Advanced and Intelligent Approaches", 31st May – 4th June, 2009, Belgrade, Serbia.

Final report for CIRP, July 2009 - Prof. Dr. V. Majstorovic

health-care.

Congratulations, please applause!

I am inviting Professor Kontic to come and receive this recognition and a modest present. The Award for Professor Kontic and other awarded will be delivery by Professor Stanivukovic, JUSK President.

2. Next awarded is Mrs. Slavka BACKOVIC-JEREMIC, Zastava Arms Factory, Kragujevac.

 National Award for Quality Improvement for special personal contribution to the development of the quality mission in Serbia and the promotion of the national movement for quality in industry.

Also, congratulations, please applause!

I am inviting Mrs. Backovic-Jeremic to come and receive this recognition and a modest present.

3. And the last, not lest awarded is Company Zdravlje-Actavis, Leskovac.

National Award for Quality Improvement Company Zdravlje-Actavis, Leskovac for special contribution to the development of the quality mission in Serbia. This Company have fifth Management Systems certificated in application and integrated as IMS.

Congratulations, please applause!

I am inviting Mrs. Professor Valentina Marinkovic to come and receive this recognition and a modest present.

In name of warded address will be given by Mrs. Valentina Marinkovic.

Thank you Mrs. Marinkovic and I congratulate all awarded once more both on your and my behalf.



Ladies and gentlemen we have come to the third part of this Session. Now is the time for the introductory plenary lecture and our respected guest – Professor Wiele, whom I am calling to present his paper under the title - **EVALUATION OF SERVICES THROUGH USER GENERATED CONTENT.**

Thank you Professor Wiele for your inspirational presentation. By closing this Session I am inviting you to the cocktails party. The first plenary session will begin at 11.30. Thank you.

Professor Dr. Vidosav MAJSTOROVIC 1st June 2009., Beograd

Opening address of Professor Dr. Aleksandar Marincic, Member of Serbian Academy of Sciences and Arts – Fifth International Working Conference "Total Quality Management – Advanced and Intelligent Approaches", 1st June 2009, Belgrade, MEF.

Today, Total Quality Management (TQM), as business excellence (BE) achievement model, is generally accepted approach for benchmarking of organizations at the global market. Faster diffusion of this concept here depends on the scientific support of its professional implementation, this being the principal vision of this Conference as well.

The mission of this Conference is the building of a competent scientificprofessional international forum which will consider each two years, since 2001, the development and trends of this propulsive scientific field, with special emphasis on its possible implementation in our country.

The principal goal of this Conference is to review the state of the art in worldwide approaches to the development of business excellence concept, particularly from the aspect of the use of new artificial intelligence tools in their supporting role of new generations of manufacturing systems. In view of our country this meeting should show our level of understanding of implementation possibilities of business excellence in our economy, especially because of faster harmonization with the EU, as a national strategic goal for the this decade.

The Conference will work in three plenary sessions, twelve paper sesions and six Workshops/Round Tables Dissusions – totally 23 sesions, devoted to the following topics:

- Business excellence models (applications and development trends)
- Young PhD researchers
- QM/TQM New Approaches
- TQM Assessment
- Integrated Management Systems

- TQM Tools and Techniques
- Six sigma Applications
- QM in Higher Education
- TQM Application
- Knowledege Engineering and TQM
- Robust Engineering
- Advanced Metrology, etc.

The Serbian Academy of Sciences and Arts in existence for more than 150 years strongly supports the development of scientific thought, and this Conference at which 82 papers will be presented from 34 countries coming from Australia, Asia, Europe, Africa, Northern and South America demonstrates this.

Specific contribution of this Conference is that it is supported by the best known international institution in the field of production engineering in the world thus showing that our experts in this field are accepted by the most developed countries as equal partners.

I wish to emphasize this because this proves that this country possesses respective scientific potentials.

My congratulations to the organizers, the Mechanical Engineering Faculty and Professor Majstorovic, as Conference founder and chair, too for preparation of such a distinguished gathering, and welcome all participants on behalf of the Serbian Academy of Sciences and Arts and my own.

Thank you.

Professor Aleksandar MARINCIC

In Belgrade, 1st June 2009.

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- 44 IMPORTANCE OF TOM-METHODS IN THE AREA OF INDUSTRIAL SERVICES AN EMPIRICAL SURVEY IN THE AUSTRIAN MACHINERY AND PLANT ENGINEERING INDUSTRY, Introduction

paper, Armin Rosteck, Peter Kuhlang, Wilfried Sihn, Institute for Management Science, Vienna University of Technology, Vienna, Austria.

- 45 COMPANY COMPETENCE FOR TQM IMPLEMENTATION THE EXAMPLE OF COMPANIES IN CROATIAN ELECTRICAL ENERGY SECTOR, Marija Šiško Kuliš, Ph. D.¹, Dragana Grubišić, Ph. D.², Ante Rozga, Ph. D.², ¹HEP-Proizvodnja d.o.o., ²Ekonomski fakultet Split, Croatia.
- 46 KNOWLEDGE TRANSFER & CAPITALIZATION TO SUPPORT KAPPS DEVELOPMENT FOR AN EFFECTIVE KNOWLEDGE MANAGEMENT IN SMEs, Introduction paper, Sebastian Marius ROSU^(1&2), George DRAGOI⁽²⁾, Marius GURAN⁽²⁾, Luminita ROSU⁽²⁾, ⁽¹⁾Special Telecommunications Service, Information Technology Department, Bucharest, ⁽²⁾University "Politehnica" of Bucharest, PREMINV Research Center, Romania.
- 47 METROLOGY AND VISUALISATION FOR MICROMANUFACTURING, Mario Vizcaino-Hoppe, Roland Roth, Oberkochen, Germany.
- 48 A BUSINESS PROCESS MANAGEMENT APPROACH IN VIRTUAL ENTERPRISE, George DRAGOI⁽¹⁾, Sebastian Marius ROSU^(1&2), Costel Emil COTET⁽¹⁾, Constantin Radu PARPALA⁽¹⁾, Luminita ROSU⁽¹⁾, ⁽¹⁾University "Politehnica" of Bucharest, PREMINV Research Center, ⁽²⁾Special Telecommunications Service, Information Technology Department, Bucharest, Romania.
- 49 IMPROVEMENT OF QUALITY TOOLS AND METHODS BY APPLYING FUZZY SETS THEORY, Invitation paper, Dr Danijela Tadić¹, Dr Svetlana Stevović², Dr Dragan Milanović³, ¹The Faculty of Mechanical Engineering, University of Kragujevac, ²The Faculty of Construction Management, University Union, Belgrade, ³The Faculty of Mechanical Engineering, University of Belgrade, Serbia.
- 50 METHODOLOGICAL APPROACH TO TECNICAL AND ENVIRONMENTAL QUALITY MANAGEMENT, Invitation paper, Svetlana Stevovic, PhD.C.E.¹, Predrag Popovic, PhD.M.E.², ¹Faculty of construction management, University Union, Belgrade, Serbia, ²Institute of Nuclear Sciences "VINCA" Belgrade, Serbia.
- 51 RISK ASSESSMENT IN THE SAFETY IMPROVEMENT PROCESS IN AREAS WITH POTENTIALLY EXPLOSIVE ATMOSPHERES, Invitation paper, Predrag Popović, Ljubiša Kovačević, Miroslav Tufegdžić, Institute of Nuclear Sciences VINČA, Belgrade, Serbia.
- 52 ENTRENCHING A QUALITY CULTURE: A MULTI-STAKEHOLDER POLICY FRAMEWORK FOR MANAGING QUALITY, Ola Busari, Development Bank of Southern Africa, Midrand, South Africa.
- 53 CRITICAL TOTAL QUALITY MANAGEMENT FACTORS AND FINANCIAL PERFORMANCE OF THE FIRM, Prof. Dr. Hayat, M. Awan¹, Dr. Ishaq Bhatti², Dr. M. Azeem Qureshi³, Khuram Shahzad Bukhari⁴, ¹Dean Faculty of La, commerce & Business Bahauddin Zakariya University, Multan, Pakistan, ²Department of Economics and Finance La Trobe University, Melbourne Australia, ³Institute of Management Sciences Bahauddin Zakariya University, Multan, Pakistan, ⁴Institute of Management Sciences Bahauddin Zakariya University, Multan, Pakistan.

- Fifth International Working Conference "Total Quality Management Advanced and Intelligent Approaches", 31st May 4th June, 2009, Belgrade, Serbia.

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- 55 A NEW REDUCTION-DEFECTS MODEL FOR SMES BASED ON SIX SIGMA METHODOLOGY: A CASE STUDY, Luca Cagnazzo, Paolo Carbone, Paolo Taticchi, Department of Industrial Engineering, University of Perugia, Perugia, Italy.
- 56 LEGAL APPLICATIONS THAT ARE SUPPORTING AND IMPROVING QUALITY SYSTEMS OF HEALTH CARE SERVICE IN TURKEY, Ege İZGİ ÇAKIR Metallurgical and Material Science Engineer with Ms Degree, Buğra ÇAKIR Geology and Hydrogeology Engineer with Ms Degree, TÜRKİYE.
- 57 "WHEN SOUL AND POSSIBILITY MEET EACH OTHER'S" (EXAMPLES OF BREAKTHROUGH MANAGEMENT IN A FOUNDRY), Dipl. Ing. Simone Smolinska, Quality system & Continuous Improvement manager, Le Belier East Europe, Hungary.
- 58 THE EFQM EXCELLENCE MODEL IMPLEMENTATION IN WEST BALKANS, Keynote paper, Prof. Dr. Vojislav Stojiljković, Predrag Stojljković, Bratislav Stojljković, CIM College d.o.o Niš, Serbia.
- 59 EXCELLENCE IN UNCERTAINTY, Keynote paper, Steve Unwin, Access to Excellence Co Ltd / Photonbooks.com, UK.
- 60 QUALITY MANAGEMENT SUCCESS APPROACHES, Prof. DSc. Geoprgy Tasev¹, Dr. Lidia Galabova², ¹Chairmen of Union of Quality Experts in Bulgaria, Bulgaria, ²Technical University of Sofia, Faculty of Management, Bulgaria.
- 61 THE MODEL FOR ASSURING SATISFACTION OF CUSTOMER REQUIREMENTS, Dragan Ćoćkalo PhD, assistant professor, Dejan Đorđević PhD, professor, Technical faculty "Mihajlo Pupin", Zrenjanin, Serbia.
- 62 LOGICAL AGGREGATION AS CONSISTENT TOOL THE QUALITY EVALUATION, Dr. Marko D. Mirkovich¹, Dr. Dragan G.Radojevich², Dr. Vidosav D. Majstorovich³, Dr. Janko J. Hodolic⁴, ¹)Bauxite mines,s.c. Quality and Information Centre, Niksic, Montenegro, ²)Institute "Mihajlo Pupin" Belgrade, ³)Mechanical Engineering Faculty, Belgrade, ⁴)FTS, Production Mechanical Engineering Institute, Novi Sad, Serbia.

Appendix III:

6th International Working Conference

FIRST ANNOUNCEMENT, CALL FOR PAPERS, PRESENTATIONS AND PARTICIPATION

TOTAL QUALITY MANAGEMENT - ADVANCED AND INTELLIGENT APPROACHES With Second Special Conference "Manufuture in Serbia 2011".

29th May - 2nd June, 2011, Belgrade, SERBIA.





МАШИНСКИ ФАКУЛТЕТ УНИВЕРЗИТЕТА У БЕОГРАДУ MAŠINSKI FAKULTET UNIVERZITETA U BEOGRADU FACULTY OF MECHANICAL ENGINEERING UNIVERSITY OF BELGRADE

Paris, France.

International Program Committee (invited):

Honorary Chairs: Prof. Dr. L. Alting (Dk), M. Debenham (UK), Prof. Dr. F. Jovane (I), Prof. Dr. L. Monostori (H), Prof. Dr. H. Osanna (At), Prof. Dr. T. Pfeifer (G), Prof. Dr. G. Sohlenius (S), Prof. Dr. J Stanic (Ser), Prof. Dr. H. VanBrussel (B), Prof. Dr. A. Weckenmann (G), Prof. Dr. A. van der Wiele (NI).

Conference Chair and Founder: Prof. Dr. V. Majstorovic (Ser).

Members: Prof. Dr. I. Angeli (Cy), Prof. Dr. B. Ačko (SI), Prof. Dr. D. Axinte (UK), Prof. Dr. H. Bley (G), Prof. Dr. M. Bobrek (BiH), Prof. Dr. P. Bojanić (Ser), Prof. Dr. C. Bouzakis (Gr), Prof. D. Brissaud (F), Dr. F. Brenner (G), Prof. Dr. A. Brun (I), L. Cagnazzo (I), Prof. Dr. P. Castka (NZ), (Miss) Dr. Eng. L. Catellani (I), Prof. Dr. E. Chlebus (PI), Prof. Dr. K. Cho (K), Prof. Dr. G. Chryssolours (Gr), Prof. Dr. P. Cunha (Po), Prof. Dr. L. DeChiffre (Dk), B. Dimitrijević (Ca), Prof. Dr. N. Dragulanescu (Ro), Prof. Dr. J. Duflou (Be), Prof. Dr. F. Fang (Ch), (Mrs) Prof. Dr. A. Fischer (Is), Prof. Dr. M. Frota (Br), A. Gentili (I), Prof. Dr. I. Inasaki (J), Dr. R. Isaksson (S), M.Sc. M. Ivanović (Ser), Dr. L. Jalba (Ro), M.Sc A. Jesus (Br), Prof. Dr. J. Jedrzejewski (PI), Prof. Dr. Z. Katz (SA), Prof. Dr. F. Kimura (J), (Mrs) Prof. Dr. A. Kjellberg (S), Prof. Dr. P. Kopacek (At), Prof. Dr. J. P. Kruth (Be), Prof. Dr. A. Kusiak (USA), Prof. Dr. P. Kuhlang (At), Prof. Dr. S. Lu (USA), (Mrs) Prof. Dr. V. Marinkovic (Ser), Prof. Dr. G. Maropoulos (UK), (Mrs) Prof. Dr. A. Marcheva (Bu), (Mrs) I. Mezinska (Lt), Prof. Dr. V. Milačić (Ser), Prof. Dr. A. Molina (Mx), Prof. Dr. P. Molnar (H), Prof. Dr. G. Morel (F), Prof. S. Naruo (J), (Mrs) L. Nitu (Ro), (Mrs) Dr A. Paci (I), Prof. Dr. H. Panetto (Fr), Dr. R. Paskevicius (Lt), Dr. G. Pegs (UK), (Mrs) Prof. Dr. S. Pejčić-Tarle (Ser), MSc. Z. Pendić (Ser), Prof. Dr. C. Periera (Br), (Mrs) Prof. Dr. L. Petrova-Galabova (Bu), S. Rosu (Ro), Prof. Dr. R. Roy (UK), Dr. I. Sheps (Is), (Miss) MSc. T. Sibalija (Ser), Prof. Dr. M. Sphitalini, Prof. Dr. M. Soković (SI), Prof. Dr. D. Stanivuković (Ser), Prof. Dr. V. Stojiljkovic (Ser), Prof. Dr. S. Takata (J), Prof. Dr. T. Sorin (Ro), Prof. Dr. M. Taisch (I), Prof. Dr. R. Teti (I), Prof. Dr. R. Tuokko (Fi), Prof. Dr. M. Trajanovic (Ser), Prof. Dr. K. Ueda (J), Prof. Dr. G. Zhang (Ch), M.Sc. S. Živković (Ser), Prof. Dr. S. Yamada (J), (Mrs) Prof. Dr. G. Ušćebrka (Ser), Prof. Dr. F. Vernadat (Fr), Prof. Dr. E. Westkaemper (G).

Sponsored by (invited)

The International Academy for Production Engineering (CIRP), Paris, France.

Co - sponsored by (invited):

Japanese Union of Scientist and Engineers (JUSE); Tokyo; Japan.

European Organization for Quality (EOQ); Brussels; Belgium.

European Foundation for Quality Management (EFQM); Brussels; Belgium.

American Society for Quality (ASQ); Milwaukee; USA

International Federation for Information Processing (IFIP); Laxenburg; Austria.

WG 5.7 Integration and Production Management

Fifth International Working Conference "Total Quality Management – Advanced and Intelligent Approaches", 31st May – 4th June, 2009, Belgrade, Serbia.

Final report for CIRP, July 2009 - Prof. Dr. V. Majstorovic

International Measurement Confederation (IMEKO); Budapest; Hungary.

TC 14 Measurement of Geometrical Quantities

International Federation of Automatic Control (IFAC); Laxenburg; Austria.

TC 5. 1 Manufacturing Plant Control

TC 5.2 Manufacturing Modelling for Management a

and Control

TC 5.3 Enterprise Integration and Networking

MAIN PATRON

Carlsberg Srbija doo, Belgrade, Serbia.

Organized by *Mechanical Engineering Faculty*, Centre for Advanced Technology, **Laboratory for Production Metrology and TQM**, Belgrade, Serbia.

TOM Conference Schedule:

Sessions based on accepted papers on the topics of interest. Special sessions/Conferences organized and chaired by internationally recognized leaders of research in advanced topics. RTDs/WSs on special topics.

TOM Conference Venue

The TQM Conference will be held at the capital city of Belgrade, Serbia.

Official Language

The official language of the TQM Conference is English.

Scope of the TQM Conference

The main objective of the 6th TQM Conference is to provide an *international forum around the world for the exchange of knowledge, experience, research results and information* about various aspects of the state-of-the-art and the future development of total quality management.

The scope of the Conference covers philosophical, scientific and practical concepts concerning research, development and application of TQM-based advanced approaches.

Topics of interest

Topics (of interest include, but are <i>not limited</i> to:
	Business excellence models (applications and development trends);
	TQM & manufacturing management;
	World class performance;
	Attractive quality;
	Robust engineering;
	Six sigma model;
	Intelligent quality tools and methods;
	Virtual factory and virtual quality;
	Intelligent metrology in manufacturing;
	Intelligent and virtual CMM;
	Business process improvement;
	Breakthrough management;
	Organizational Excellence;
	Intelligent design for quality;
	Intelligent Business;
	Quality in Higher Education;
	Quality of the Public Services / health care;
	Advanced Quality approaches;
	Digital engineering/manufacturing;
	Manufuture initiative and Micro-nano manufacturing / Metrology

Special Session dedicated to Ph. D. thesis

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A special session will be dedicated to discussion of Ph. D. Thesis. An international committee will assign an award to the best paper from Ph. D. Thesis.

Papers and Proceedings

Prospective authors are invited to send their contributions on relevant topics. Papers may be submitted by e-mail in a Word file. The length of the paper should be 6A4 pages; 1.0 space typing; use Arial 10 point font. For the anonymity of review; please identify the following information separately: the title; author's full name; affiliation; address; e-mail address; telephone and fax numbers. Authors of accepted papers will be expected to sign a copyright release allowing publication in the proceedings. Pre - proceedings will be available before the Conference.

After the Conference; the Proceedings with selected papers which will under a second review; RTD; panel discussion and conclusion will be published in the International Journal "Total Quality Management & Excellence".

Registration

The registration fee for the TQM Conference is Euro 150; if paid before 15th May 2011. After that date; the fee is Euro 200. For the registration fee please contact the Conference Secretariat.

Lodging

For details regarding hotel reservations please contact the Conference Secretariat.

Important dates:

January 15; 2011 - Proposal for special sessions and RTDs/WSs due.

February 25; 2011 - Full paper due; 6 pages; electronic submission.

March 15: 2011 - Final paper acceptance.

March 25; 2011 - Registration announcement.

April 15; 2011 - Final program announcement.

May 15; 2011 - Early registration deadline.

May 29th – June 2nd – International Working Conference.

Conference Program Agenda - Draft:

First Day - 30th May 2011. / Industrial tour / Evening - Welcome reception and ROUND TABLE DISSCUSION.

Second Day - 31st May 2011. / 10:00a.m. - Noon Opening and Key Note Speakers. Cocktail / noon - 2:00p.m. Parallel Sessions (1) / 4:00 - 6:00p.m. Panel Discussion - Research Directions / Evening - Informal Conference Dinner.

Third/Fourth Day -1st/2nd June 2011. / 10:00a.m. - Noon Parallel Sessions (2) / 12.30p.m. - 2:00p.m. Parallel Sessions (3) / 4:00p.m. - 6:00p.m. Parallel Sessions (4).

Fifth Day - 3rd June 2011. / 10:00a.m. - Noon Closing Plenary Session.

Correspondence - Conference Secretariat:

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Report prepared by

Prof. Dr. Vidosav D. MAJSTOROVIC, Dipl. Mech. Eng.

IWC TQM Conference Chairman and Founder

In Belgrade, 15th July, 2009.