

# ICDQM-2017 CALL FOR PAPERS

20<sup>TH</sup> DQM INTERNATIONAL CONFERENCE ON DEPENDABILITY AND QUALITY MANAGEMENT  
20-я DQM МЕЖДУНАРОДНАЯ КОНФЕРЕНЦИЯ ПО НАДЁЖНОСТИ И УПРАВЛЕНИЮ  
КАЧЕСТВОМ

AND  
8<sup>TH</sup> DQM INTERNATIONAL CONFERENCE ON LIFE CYCLE ENGINEERING AND MANAGEMENT  
8-я МЕЖДУНАРОДНАЯ КОНФЕРЕНЦИЯ ПО РАЗРАБОТКЕ ЖИЗНЕННОГО ЦИКЛА  
И УПРАВЛЕНИЮ

JUNE 29–30, 2017, PRIJEVOR, SERBIA

Organized by:  
THE DQM RESEARCH CENTER, PRIJEVOR, SERBIA

[www.dqmcenter.com](http://www.dqmcenter.com)



## ICDQM-2017, DQM INTERNATIONAL CONFERENCES

The DQM Research Center invite you to participate in both conferences **20<sup>th</sup> DQM International Conference on Dependability and Quality Management** and **8<sup>th</sup> DQM International Conference on Life Cycle Engineering and Management** (ICDQM-2017) on the conference topics: Quality Engineering, Reliability Engineering, Industrial Engineering, Systems Engineering, Military Engineering, Energy Efficiency and Lean Production. Papers in the above topics may relate to methods, techniques, methodologies and concepts. The conferences will be organized to plenary lectures, and conference topics sections. Authors are invited to submit english (or russian) language Microsoft word text of their papers by May 15<sup>th</sup>, 2017. Submitted papers will be considered for acceptance as a full paper (6 pages maximum, including paper title, authors name, authors organization, paper summary and paper manuscript), 11 point size Times New Roman font, single space, normal, margins: left 4 cm, right 4 cm, top 5 cm, bottom 5 cm, without header and footer, without paragraphs. Submissions of the papers on e-mail: [dqmcenter@mts.rs](mailto:dqmcenter@mts.rs). The papers will be considered by the Scientific Programme Committee and will be included into the conference proceedings in english (or russian) language. Selected papers will be considered and published in both the journal issues of "*Communications in Dependability and Quality Management, An International Journal*" (Serbia) or in "*International Journal of Engineering and Automation Problems*" (Russia). Best paper from both of research and industrial applications will be organized. Scientific Program Committee Chair: Professor Ljubisa Papic, director and founder of the DQM Research Center, Prijedor, Serbia. The ICDQM-2017 will consist of plenary lectures and parallel sessions with deliberate opportunities for relaxed professional interaction. The ICDQM-2017 Proceedings will be published in hard copy and CD by the DQM Research Center.

We look forward to meeting you in Prijedor in June 2017.

Professor Ljubisa Papic  
International Programme Committee Chair  
ICDQM-2017  
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## CONFERENCE TOPICS

The purpose of the ICDQM-2017 is to provide a forum for discussion of traditional and innovative approaches to improve the performance of reliability, maintainability, safety, supportability and quality of products, processes and systems. DQM Research Center invites new and original submissions addressing theoretical and practical topics and its' applications covers all aspects relating to (but not limited to these topics):

### **Topic 1: Plenary Lectures**

World renowned speakers are invited to address the plenary lectures at the beginning of the ICDQM-2017.

### **Topic 2: Quality Engineering**

Examples of subject areas of **Quality Engineering** including, but not limited, the following:

Total Quality Management, Design for Quality, Cost of Quality, Six Sigma Methodology, Quality Planning and Measurement, Taguchi Methods, Stakeholders, Brand Management, Standardization and Quality, Software Quality, Just-in-Time, Sampling Principles, Productivity Increasing, Statistical Methods and Techniques, Quality Education, Quality Culture, Testing Methods, Quality Awards, Sources of Variation, Information Systems in Quality, Quality of Services, Quality Management Systems, Environmental Management System, Brainstorming and Brainwriting, Benchmarking, Business Excellence, Quality Audit, FMEA/FMECA, Quality Assurance, Conformity Assessment, Computer Aided Quality, Statistical Quality Control, Balanced Scorecard, SWOT, System 5S, Quality and Competitiveness, Mapping Work Processes, Integrated Management System, Accreditation and Certification, Quality of Life, Lean Production, etc.

### **Topic 3: Reliability Engineering**

Examples of subject areas of **Reliability Engineering** including, but not limited, the following: Dependability Management, Reliability Analysis, Failure Analysis, Safety Engineering, Maintainability Engineering, Total Productive Maintenance, Reliability Centered Maintenance, Availability, Supportability, Durability, Maintenance Strategies, Data Collection and Analysis, Reliability Prediction, Reliability Testing, Systems Effectiveness, FMEA/FMECA, FTA, ETA, Cost of Maintenance, Design for Maintainability, Design for Reliability, Maintenance Technologies, Failure Diagnosis, Maintenance Systems, Software Maintenance, Logistics Engineering, Risk Analysis, Human Factors in Reliability, Reliability Allocation, Monitoring, Software Reliability, eMaintenance, etc.

### **Topic 4: Industrial Engineering**

Examples of subject areas of **Industrial Engineering** including, but not limited, the following: Concurrent Engineering, Design of Experiment, Value Engineering, Business Process Reengineering, Project Management, Software Engineering, Data Base and Knowledge Base, Design Methodologies and Processes, Life Cycle Engineering, PERT, Fuzzy Systems, GPS, Knowledge Management, FMEA/FMECA, Technological Development Management, Multicriterion Analysis, Design Processes and Methodologies, Simulation and Modeling, International Marketing, Marketing Information System, Soft Computing, Expert Systems, Intelligent (Human) Robots, Life Cycle Cost, Industrial Health, Personnel Management, Intellectual Property, Organizational Culture, etc.

### **Topic 5: Systems Engineering**

Examples of subject areas of **Systems Engineering** including, but not limited, the following: Computer Aided Systems, Systems Modeling, On-line Control, Computer Aided Engineering Application, Supervisory, Control and Data Acquisition (SCADA), Active Systems, Mining and Geology, Distance Learning, Information Technologies, Medical Engineering, Internet Technologies, Measurement Systems, Electrical Industry, Power Efficiency, Stochastic Systems, Telecommunications, Control of Industrial Processes, Telemedicine, Mechatronics, Transport and Traffic, Data Bases and Knowledge Bases, Waterpower Engineering, Agricultural Engineering, Automatization, etc.

### **Topic 6: Military Engineering**

Examples of subject areas of **Military Engineering** including, but not limited, the following: Defense System, Military Industry Competitiveness, Military Systems, Advanced Technologies and Defense System Functioning, Army Supplying, Military Logistics, Quality Management in Food Providing in Army, Quality of Scientific Work in Defence System, Security Measures, Military Applications of Multicriterion Analysis, Military Project Management, Military Operations, Risk Assessment in Military Organizations, Operational Planning in Army, Making Military Decision Process, Distance Learning in Defence System, Military-Technical Systems Effectiveness, Reliability and Availability of Military-Technical Systems, Maintainability of Military Equipment, Team Work in Military Systems, Human Resources in Defense Systems, Education in Defense Systems, etc.

### **Topic 7: Energy Efficiency**

Examples of subject areas of **Energy Efficiency** including, but not limited, the following: Energy Efficiency as Sustainable Development Base, Consumption of Energetic Resources Problem, Energy from the Customer Point of View, Consumption Energy Services, Energy Saving Technologies, Unrestored Energy Sources, Restored Energy Sources, Cogeneration, Ecological Problems of Energetics, Standardization in Saving Energy Area,

Energetic Certification of Buildings (houses), Continuous Education for Energy Efficiency, Energy Efficiency Increasing Projects, Legislation in Energy Consumption and Saving, Energy Efficiency of Communal Systems, Energy Efficient Materials, Intelligent Buildings, Energy Efficient Maintenance Equipment and Buildings, Risk Management in Power Systems, Architectural Parameters of Energy Efficiency, Systems of Heating, Conditioning, Ventilating and Cooling, etc.

**Topic 8: Lean Production**

Examples of subject areas of **Lean Production** including, but not limited, the following: Continuous Improvement Process, Lean Enterprise, Mass Production Systems, Muda-Mura-Muri, Visual Workplace (System 5S), Quality Function Deployment, Just-in-Time, Value Engineering, Lean-Six Sigma, Overall Equipment Effectiveness, Productivity, Quality Circles, Single Minute Exchange of Dies (SMED), Kanban, Poka-Yoke, 5 Whys, Kaizen, Deming PDCA Cycle of Improvement, Autonomation (Jidoka), Lean Maintenance, Spaghetti Diagram, Supermarkets, Hoshin Kanri, Gemba, 7 Wastes, Flexible Production Systems, Planning Under Uncertainty, Theory of Constraints, Value Stream Mapping, Visual Management (Andon Board), Spaghetti Chart, Enterprise Resource Planning, Heijunka, Ishikawa Diagram, Pull Production, Push Production, Total Productive Maintenance, Standardized Work.

**SCIENTIFIC PROGRAMME COMMITTEE CHAIR**

Professor Ljubisa Papic, The DQM Research Center, Prijedor, Serbia

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#### **DQM CONFERENCES LANGUAGES**

The official languages of the ICDQM-2017 are serbian, russian or english. This languages will be used for all printed matter, presentations and discussion.

#### **SUBMISSION OF PAPERS**

Submissions are invited on original and previously unpublished research. Authors are invited to submit their full papers electronically to the ICDQM-2017 Organising Secretariat:

DQM Research Center  
P.O. Box 132, 32102 Cacak, Serbia  
Phone: + 381 32 883610; Fax: + 381 32 883611  
E-mail: [dqmcenter@mts.rs](mailto:dqmcenter@mts.rs); Website: [www.dqmcenter.com](http://www.dqmcenter.com)

Full papers are accepted for review on the condition that the manuscript is original, has not been published before, has not been presented at a conference, and has not been submitted for presentation at another conference. The full papers will be reviewed and accepted papers will be included in the ICDQM-2017 Proceedings which will be published in hard copy book and in electronic version (CD issue) and issued to delegates at the ICDQM-2017. The paper should include the following information: Name(s) of author(s), The corresponding author, Position or job title, Organisation(s), Full postal address(es) Phone, fax numbers and E-mail, Paper title, Summary, Key words (maximum three), Introduction, Paper manuscript, References.

#### **BEST PAPER AWARDS**

The DQM Research Center will nominate the best papers presented at the ICDQM-2017 for the Best Paper Awards in both academic and industrial aspects.

#### **REGISTRATION FEE**

The ICDQM-2017 registration fee for one paper is 100,00 EUR for all delegates (presenting authors and attendants). Payment of fees must be made in advance for the full refereed paper to be printed in the ICDQM-2017 Proceedings. Payment for authors of accepted papers and for attendants is required by 17 May, 2017. Fees includes the ICDQM-2017 materials and attendance to all official programme. Payment of registration fees should be made with help of Instruction for Customer Transfer in EUR (DQM Research Center Bank Details).

#### **CONFERENCE LOCATION AND TRAVEL**

The ICDQM-2017 will take place in village Prijedor (Cacak), Serbia. Prijedor village is located near Cacak city, on the boundary central part (Sumadija) and West Serbia, about 140 km on south from Belgrade. It is one of most beautiful places in the region, at a two rivers: West Morava and Kamenica. Prijedor has excellent opportunities for spending time in nature and orchards. Weather in June in Prijedor is normally sunny with temperatures around 30 °C. From Belgrade to Prijedor it is possible to come by car or by bus.

#### **REGISTRATION PROCESS**

Please complete the ICDQM-2017 registration form including payment information and fax or post it to address the ICDQM-2017 Organising Secretariat. Registrations are also possible to make by E-mail. Upon receipt of the completed registration form, a confirmation will be sent by E-mail: [dqmcenter@mts.rs](mailto:dqmcenter@mts.rs) or fax: + 381 32 883611. Registration desk of the ICDQM-2017 will be open on Thursday, 29th June, 2017, from 8.00–9.00 a.m., DQM Research Center in Prijedor.

IMPORTANT DATES

- Deadline for submission of paper manuscript on E-mail [dqmcenter@mts.rs](mailto:dqmcenter@mts.rs) May 15, 2017
- Notification of papers acceptance: May 16, 2017
- Registration fee payment: May 17, 2017
- The ICDQM-2017 final programme on the [www.dqmcenter.com](http://www.dqmcenter.com) no later: June 15, 2017
- The ICDQM-2017 dates: Thursday-Friday, June 29–30, 2017

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## МОДЕРНИЗАЦИЯ ДВИГАТЕЛЕЙ ВНУТРЕННЕГО СГОРАНИЯ: ЦИЛИНДРОПОРШНЕВАЯ ГРУППА НОВОГО ПОКОЛЕНИЯ



*Издательство "Инфра-Инженерия" представляет новую книгу Анатолия Дружинина "Модернизация двигателей внутреннего сгорания: цилиндропоршневая группа нового поколения".*

В книге приведены исследования и анализ ошибок и недостатков в конструкции цилиндропоршневых групп двигателей внутреннего сгорания, а также способы их устранения. Рассмотрены процессы влияния газодинамики на работу уплотнительных поршневых устройств, гидродинамики – на работу маслосъемных поршневых устройств и термодинамики – на тепловые изменения формы и размеров цилиндра и поршня. Обоснован способ применения воды в рабочих процессах ДВС. Представлены конструкции элементов ЦПГ, реализация которых позволит увеличить мощность и ресурс двигателя, уменьшить расход топлива и моторного масла, улучшить его экологию.

Книга будет полезна инженерно-техническим работникам моторостроительных предприятий, ученым и специалистам проектно-технологических институтов, студентам высших и средних учебных заведений, а также слушателям факультетов и институтов повышения квалификации.

Дружинин Анатолий Матвеевич, кандидат технических наук, доцент Казанского научно-исследовательского университета имени А.Н. Туполева. Профессиональный технолог по авиационным, ракетным двигателям и двигателями внутреннего сгорания. Проблему повышения эффективности ДВС исследует более 30-ти лет. Награжден дипломом «За лучшую инновационную идею «Новые поршневые уплотнения для двигателей внутреннего сгорания» республиканского конкурса «50 лучших инновационных идей Республики Татарстан», 2006 г.

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