

Call for Abstracts
8th International Conference
EEMODS 2013
Energy Efficiency in Motor Driven Systems
Rio de Janeiro, RJ (Brazil)
October 28-30, 2013

Introduction

Following the success of the EEMODS Conferences in Lisbon (1996), London (1999), Treviso (2002), Heidelberg (2005), Beijing (2007), Nantes (2009), and Washington D.C (2011), Eletrobras and the Electric Power Research Center (Cepel), with the scientific and technical support of the European Commission Joint Research Centre, Institute for Energy and Transport, are organizing the **8th International Conference on Energy Efficiency in Motor Driven Systems (EEMODS)**.

The Conference will be held in **Rio de Janeiro, RJ (Brazil) on October 28 - 30, 2013**.

Previous EEMODS events have been very successful in attracting distinguished and international presenters and attendees. The wide variety of stakeholders has included professionals involved in manufacturing, marketing, and promotion of energy efficient motors and motor driven systems, policy making and research. Segments represented come from manufacturing, academia, research, and public policy.

EEMODS'13 will provide a forum to discuss and debate the latest developments in the impacts of electrical motor systems on energy and the environment, the energy efficiency policies, standards (ISO 50.001) and programs adopted and planned, and the technical and commercial advances made in the dissemination and penetration of energy-efficient motor systems.

The three-day conference will include plenary sessions where key representatives of governments and international organizations, manufacturers, program managers and experts will present their views and programs to advance energy efficiency in motor systems, for example, through international co-operation on efficiency requirements. Parallel sessions on specific themes and topics will allow in-depth discussions among participants.

The conference is very international by nature, and aims to attract high quality and innovative papers and participants from every corner of the world.

To contribute to the success of the conference and to facilitate the development of new policies and strategies to increase energy efficiency, we **invite you** to participate in the conference and the debates and **to submit abstracts** on the below topics.

All papers shall address new and original developments, in particular on the session on technologies only papers focusing on new advanced solutions will be considered, in addition papers shall not be of commercial nature.

Call for Abstract Topics

Technologies

1. Electric Motors

Life cycle costing, test methods and measurements, induction motors with emphasis on higher efficiency (technology and design), permanent magnet motors, DC brushless motors, motors with frequency inverters, motor repair, maintenance and operation, evaluation tools, etc.

2. Emerging Motor Technologies

Switched reluctance, permanent magnet, electronically commutated and others. line-start permanent magnet motors, Super-Premium Motor Technologies (e.g. synchronous reluctance, amorphous metals).

3. Power Electronics and Drives

New solutions in drives in relation to energy efficiency, measurement of drive efficiency, successful application of drives, advanced integrated motor and drives, application-oriented optimization of drives (motion control tasks), power quality issues.

4. Pumping Systems

Life cycle costing, energy efficiency improvements in pumps, pumps classification, maintenance and operation of pumps and pumping systems, on-site assessment of pump efficiency, efficiency test methods, energy-saving tools, market assessments, system design and optimization, pumps energy-saving programs, efficient methods to control the flow and pumps working as turbines. This topic 4 covers industrial, water supply and treatment and irrigation pumps, and water pumps in buildings.

5. Compressed Air Systems

Maintenance and operation of compressed air systems and compressors, advanced compressor design to optimize efficiency, energy efficiency improvements in air compressors and controls, life cycle costing, compressor energy-saving programs, energy-saving tools, market assessments, system design and optimization, air compressor/compressor system efficiency test methods, efficient methods to control flow/pressure, methods to detect leak, efficiency assessment regarding temperature, pressures, leaks, compressor types, coupling etc..

6. Fan / Exhauster Systems

Life cycle costing, energy efficiency improvements, maintenance operation, efficiency test standards, energy-saving tools, market assessments, efficient methods to control flow, system design and optimization, drive belts, energy saving programs, classification and labeling schemes. This topic covers industrial and buildings ventilation or exhaustion systems.

7. Refrigeration Systems

Maintenance and operation, life cycle costing, new refrigerants, system optimization, load management, VSD, efficiency testing, energy-saving potentials, industrial applications, compressor design, heat recovery, cycle optimization, software tools. This topic covers display cabinets and cold storage rooms

8. Mechanical Power Transmission

Coupling between electrical motors and mechanical machines (pumps, compressors, fans, exhaust fans etc); efficiency of different couplings; flat belts, V belts, timing belts, gearboxes/gearings, pulleys; conveyor belts.

9. Motors in Household Appliances and HVAC

Improved and innovative motors, optimized designs, motor control, system optimization, energy labeling, databases, energy consumption, reliability. This topic covers residential and commercial equipment).

10. Motors for Transportation and other Motor Systems

Electric and hybrid cars and scooters, mixers, lifts, escalators, elevators, trains, light rail, and other systems using electric motors and drives

11. Optimization of Industrial On-Site Energy Production, Distribution and Transformation

This topic includes generator design for wind generators, CHP equipment, as well as optimization of the distribution network, including high efficiency transformers.

Policies and Programs

12. Industrial Management Policies

Energy management, role of energy manager, energy management standards (ISO 50001), contract energy management, winning company approval for energy efficiency projects, staff, training and qualification, M&V, ESCOs.

13. Motor System Audit and Programs

Motor challenge programs, utilities programs for motor and motor systems, audit schemes, advances in energy measurement techniques, software tools for auditors, monitoring and verification, audit case studies, national audit programs.

14. Policies, Programs and International Issues

Analysis of motor system energy use & greenhouse gas emissions and estimates or scenarios of reduction potentials; life-cycle costing; equipment-related harmonization (testing procedures, efficiency classes, marking schemes, labels); comprehensive market transformation strategies & programs; minimum energy performance standards; voluntary agreements; procurement programs; promotion of efficient systems via ESCOs, incentive programs, financing facilities, carbon markets (JI and CDM), white tags, and other mechanisms; information and training; motor promotion campaigns, motor databases, motor rebate programs, motors and VSD promotion campaigns and rebates, motor and VSD promotion policies.

15. Global Test Standards

Harmonization of global test standards for motor efficiency requirements and motor system components and system level. Effective comparison of existing standards.

16. System Efficiency

Methods for system efficiency (such as pumps, compressors, fans, blowers and mining equipment, lift equipment). Comparison among the different systems and methods. Special focus on measurement methods accuracy and reproducibility.

17. Utility Incentive Programs

Utilities DSM programs including incentives and rebates. Program design and evaluation. Market transformation programs.

Instructions for Authors

Authors interested in submitting papers for oral presentation at the conference are kindly requested to send a one-page abstract **in English** which should not exceed 400 words, with name, mailing address, e-mail and the relevant topic number (1-17 in the list of topics).

The papers presented are to be technical and scientific in nature. Both the written and oral presentations are to be free of commercialism. The author(s) may identify their company association as part of the author's data. Company name or logo or vendors name and logo shall only appear in the cover page of the presentation.

Manuscripts should be as short as the nature of the subject will permit without detracting from interest or omitting vital information. Papers will have a maximum length of 12 pages.

Each paper should start with an abstract. It should be one paragraph, no more than 300 words so that it can be printed in the conference records or used for advance publicity. An abstract should be a concise clear presentation of the paper. It should convey to a reader the purpose of the paper and the results obtained without a great deal of intermediate detail.

The abstract should summarize the contents of the paper, indicating its objective, starting point and original contribution. Abstracts will be selected by the International Program Committee. Selected authors should submit their paper in Word for Windows™ format. The papers will be peer reviewed, and comments will be sent back to authors.

Final papers will be accepted only when the peer reviewers' comments have been satisfactorily addressed. The final paper in electronic form will be included in the conference proceedings.

Abstracts should be submitted electronically as an MS Word file to the following address: gueorgui.trenev@ec.europa.eu

Confirmation of abstract reception will be mailed back.

Abstracts will be selected by the scientific committee based on the following criteria:

- Relevance to the focus of the conference
- Clarity of thought and presentation
- Presentation of new material
- Likelihood of stimulating a debate and paradigm shift.

Conference Calendar:

December 17, 2012: Abstracts are due to be sent to gueorgui.trenev@ec.europa.eu

January 31, 2013: Authors will be notified as to whether their abstracts have been accepted or rejected. Instructions for the preparation of final papers will be sent with the notice of acceptance.

April 08, 2013: Authors have to submit draft papers

June 03, 2013: Authors will receive comments to draft papers

July 27, 2013: Final papers have to be ready and mailed to the conference organizer for inclusion in the conference proceedings.

October 28-30, 2013: EEMODS'S 13 takes place in Rio

Contacts:

Website: www.eemods2013.org (to be used for registration and other logistic information)

Abstract and paper should be sent to:

Paolo Bertoldi

European Commission DG JRC

Tel. +39 0332 78 9299

Fax. +39 0332 78 9992

gueorgui.trenev@ec.europa.eu