

INTERNATIONAL GEAR CONFERENCE

26th • 28th August 2014
Lyon Villeurbanne
FRANCE



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Call for papers

Mechanical transmission components such as gears, rolling element bearings, CVTs, belts, chains, etc. are present in every industrial sector and range from nano-gears to multi-MW size gearboxes. Over recent years, increasing competitive pressure and environmental concerns have provided an impetus for cleaner, more efficient and quieter units. Moreover, the emergence of relatively new applications such as wind turbines, hybrid transmissions, jet engines, etc., has led to even more severe constraints. The main objective of this conference is to provide a forum for the most recent advances, addressing the challenges in modern mechanical transmissions.

To this end, we invite authors to submit original research and review articles, which stimulate the continuing efforts to understand and improve the behaviour of Mechanical Transmissions. Papers are solicited on all aspects of gear and power transmission technology and range of applications (aerospace, automotive, wind turbine, and others). We are particularly, though not exclusively, interested in topical issues such as power losses and efficiency, gear vibrations and noise, lubrication, contact failures, tribo-dynamics, nano transmissions, etc.

Potential topics include, but are not limited to:

- Gear noise and vibration, experiments and simulations.
- New gear design.
- New manufacturing techniques.
- Design and simulation methods for gear transmissions.
- Gear materials, heat treatments, coatings.
- Power losses and efficiency in gearboxes, low-loss gears, minimum lubrication.
- All relevant failure modes in gears and rolling-element bearings such as pitting, micro-pitting, scuffing, bending fatigue, etc.
- New lubricants, additives and lubrication methods.
- Interactions between tribological and dynamic behaviour; modelling of damping.

- Efficiency in belts, chains, bearings.
- Friction and leakage in seals.
- Testing - Development of specific test rigs and/or new test procedures.

Prospective authors planning to submit a paper to the International Gear Conference are invited to submit a 400 word abstract by 1st September 2013 using the conference website at <http://int-gear-conf14.sciencesconf.org>.

All submissions must be either Microsoft word documents (DOC, DOCX) or Portable Document Files (PDF). The abstracts will be reviewed by the Organising Committee and notifications will be sent to the authors by 31st December 2013. Final manuscripts should be written using the templates available at <http://int-gear-conf14.sciencesconf.org> and uploaded on the conference website by 30th April 2014. The accepted papers will be published in the Conference Proceedings provided to all attendees. Those contributions which are judged as being of particular scientific note may be submitted for publication in Mechanics and Industry (Cambridge University Press), subject to the authors' agreement.

English is the official language of the conference

Organising committee

National committee

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Location

With 1.2 million inhabitants, Lyon is the capital city of the Rhone Alps region and the second largest city in France after Paris. In 1998, Lyon received the UNESCO World Heritage Award on the strength of the continuity of its urban settlement over more than two millennia, from Roman times to the present day. The city still retains its distinctive Renaissance feel.

Lyon today is one of the most attractive cities in Europe, home to renowned international companies and major decision centres. It is also a gateway to the rest of the world with its international airport (St Exupery) and the high-speed (2-hour) TGV train connection to the centre of Paris and Charles-de-Gaulle airport.

For many years, Lyon has also been recognised as the gastronomic capital of France and the world with some internationally famous restaurants as well as more modest but excellent 'bou-chons', traditional family-run eateries serving delicious home-made fare.

Lyon is also the French centre of academic research on gearing with INSA Lyon, ECAM Lyon and ECL, Engineering Universities ("Grandes Ecoles"), CETIM-INSA joint laboratory for mechanical transmissions, I@L CARNOT Institute, etc. which are sponsoring this International Gear Conference in cooperation with a number of industrial partners including Hispano-Suiza (SAFRAN), CETIM and Eurocopter (EADS).

Conference dates

From 26th to 28th August, 2014.

Conference venue

The conference will be held at the conference centre « **Espace Tête d'Or** » which is located 103 Boulevard Stalingrad, Lyon-Villeurbanne, near the Parc de la Tête d'Or and only 1 km from INSA Lyon.



Conference fees

Early registration (before 1st May 2014)	600 €
Registration after 1st May 2014	700 €
Reduced rate for Doctoral Students	450 €

The conference fees include the proceedings, 3 buffet lunches plus refreshments at the conference venue and the Gala Dinner at the world-famous restaurant Bocusse on the evening of Wednesday 27th.

Those accompanying attendees may register for the Gala Dinner only at a cost of 120 € before 15th July 2014.



Conference website

Further information concerning travel arrangements, accommodation, paper submission etc, may be found on the conference website at:

<http://int-gear-conf14.sciencesconf.org>

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