## Instructions for authors

The length for manuscript contributions is limited to **2 pages**. Please follow the guidelines in terms of page format and font by using the template available on the conference website.

Once the manuscript accepted, the author will be informed on whether the presentation will be oral or poster. For posters, a template is also available on the conference website, though there is no strict requirement to follow it. Hanging panels will be provided. The ensured dimensions for hanging is A0 format. For other dimensions, please plan a solution for hanging your poster.

## Venue, location, accomodation

#### Venue

The JNRSE 2018 will take place at the ENSMM engineering school, 26 rue de l'Epitaphe, 25000 Besançon FR.

#### Location

Besançon (<a href="http://www.besancon.fr/">http://www.besancon.fr/</a>) is the second city of the Bourgogne Franche-Comté region. It is near the Switzerland border and is served by the TGV high speed train. Here are some examples of distance between Besançon and other important cities:

- ~2h by TGV train from Charles-de-Gaulle airport Paris FR
- 160Km from Basel CH
- 170km from Geneva CH
- 250km from Zurich CH
- 250km from St Exupéry airport Lyon FR

There are two train stations in Besançon:

- the Besancon-Viotte train station which is downtown.
- and the TGV FC (Franche-Comté) train station which is 25km outside Besançon. A shuttle connects TGV FC with Besancon-Viotte.

## **Accommodation**

A number of hotels are available in or near the downtown Besançon, near the conference venue and near the Besançon-Viotte train station. A list of them will be recommended to ease either the walk to the conference venue or the public transportation accessibility. These recommended hotels are available on the conference website. The authors have to arrange their accommodation by themselves.

## Introductory School to Energy Harvesting Microsystems (May 16-18, Besançon FR)

The JNRSE (May 14-15) will be followed by 3-days Training School (May 16-17-18) organized by the Innovative Marie Skłodowska-Curie Training Network ENHANCE: Piezoelectric Energy Harvesters for Self-Powered Automotive Sensors: from Advanced Lead-Free Materials to Smart Systems. It is the first of a series of Workshops and Training Schools held by world experts and industry partners of our Consortium



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on topics revolving around molecular engineering, material science, MEMS and Energy Harvesting. The 3-days event is a broad-based multidisciplinary introductory School to energy harvesting microsystems hosted by the University of Franche-Comté and will be held at the ENSMM engineering school as well. The school is open to all PhD, Post Docs, Master students and researchers. The given lectures will cover topics such as fundamentals of energy harvesting, basics of power electronics, piezoelectricity & ferroelectricity, thin films, characterization methods, design and modeling.

Find more info on the ENHANCE project and the Training School at:

- www.itn-enhance.com
- https://enhance-ss2018.sciencesconf.org





#### Contacts

https://jnrse-2018.sciencesconf.org/

jnrse2018@femto-st.fr

(All photos by Jean-Charles Sexe, Eric Chatelain, Ville de Besançon)

# **JNRSE** 2018

Besançon, May 14-15, 2018

in conjunction with the  $1^{st}$  ENHANCE Training School on Energy Harvesting (May 16-17-18)



Manuscript deadline: March 15, 2018 Review reports: March 31, 2018 Conference days: May 14-15, 2018

and Storage)







https://jnrse-2018.sciencesconf.org/

## **About JNRSE 2018**

The « Journées Nationales sur la Récupération et le Stockage d'Energie » (INRSE - literally "National Days on Energy Harvesting and Storage") aims at gathering the French and international community from the fields of energy conversion, harvesting and storage, especially at small scale, as well as the design of complete "selfpowered" devices that are energetically autonomous.

The context, motivations and challenges behind this conference series lie in the increasing demands in terms of energetically autonomous devices, both at public and industrial scales, covering domains like domotics or widespread sensors and sensor networks for control and security. Scientific and industrial progresses in terms of autonomous, wireless devices begin however still limited by out-of-board energy demands which currently cannot be fully addressed by primary batteries, it becomes mandatory to find and use other energy sources. Hence, using the energy that is directly available from the surrounding environment of the device (in the form of heat, vibrations, electromagnetic wave and so on), leading to the concept of energy harvesting, is an attractive alternative. Nevertheless, capabilities in terms of energy conversion, extraction and storage must sustain the energy demand of the targeted system. Similarly, the optimal design of a complete self-powered device, ranging from the material to the electrical aspects, through the mechanical, thermal or radiofrequency domains, require considering the global energy transfer chain.

After the previous editions in various places in France, the INRSE of 2018 is organized by the FEMTO-ST research institute in Besancon, France, and will take place at the ENSMM engineering school, 26 rue de l'Epitaphe on the 14th and the 15<sup>th</sup> of May, 2018.

## **Conference topics**

- Materials and systems for electromechanical energy conversion
- Materials and systems for electrothermal energy
- Materials and systems for radiofrequency and magnetoelectric energy conversion
- Fabrication and integration
- Innovative concepts for ambient energy conversion/harvesting
- Electrical interfaces for energy extraction and management
- Microgenerators and nanogenerators
- Materials and devices for electrical energy storage
- Microbatteries and supercapacitors

- Energy transmission
- Global self-powered wireless devices
- Test and measurement techniques

## **Plenary talks**

Eight plenary talks from internationally renown researchers and from industries will take place during the two days in alternation with the technical sessions.

## **Technical session**

Technical sessions are composed of oral sessions and poster sessions. Students (Phd, post-doc) are strongly encouraged to submit and to participate to these technical sessions.

#### **Prizes**

In order to praise Ph.D. students and post-doctoral fellows' work, two prizes will be decerned:

- a prize for the best oral presentation,
- and a prize for the best poster presentation.

The winners will be selected by a committee composed of the conference organizers and of the invited speakers, who will evaluate both the presentations and the related manuscripts.

## **Organizers & Committees Program committee**

- Adrien BADEL, SYMME, Annecy
- Philippe BASSET, ESIEE, Paris
- Skandar BASROUR, TIMA, Grenoble
- Noureddine BOUHADI, FEMTO-ST, Besançon
- Hélène DEBEDA. IMS. Bordeaux
- Iean-Marie DILHAC, LAAS, Toulouse
- Mickaël LALLART, LGEF INSA-Lyon
- Elie LEFEUVRE, IEF, Paris

### Local committee

- Noureddine BOUHADDI. FEMTO-ST. chair
- Ausryne BARTASYTE, FEMTO-ST, co-chair
- Magali BARTHES, FEMTO-ST, co-chair
- Sandrine CHATRENET, FEMTO-ST, co-chair
- Najib KACEM, FEMTO-ST, co-chair
- Christine FROIDEVAUX, FEMTO-ST, co-chair
- François LANZETTA. FEMTO-ST. co-chair
- Claudia LAOU-HUEN, FEMTO-ST, co-chair
- Francis MILLER, FEMTO-ST, co-chair
- Sandrine QUARROZ, FEMTO-ST, co-chair
- Micky RAKOTONDRABE, FEMTO-ST, co-chair

## **Important dates**

The important dates and deadlines are:

Manuscript deadline	March 15, 2018
Review reports	March 31, 2018
Early registration	Before April 15, 2018
Late registration	April 16 → May 03, 2018

## Registration

The registration fees are:

Phd and post-doc presenting a paper (early)	Free
Phd and post-doc presenting a paper (late)	Free
Attendee (early)	100€
Attendee (late)	120€
Industrial booth (early)	+150€
Industrial booth (late)	+200€

#### Remarks:

- The industrial booth fee is in addition to the attendance
- For organization reason, PhD students and post-doc presenting a paper should do their registration as well, even if it is free.
- The online registration is mandatory for every attendant. On-site registration will not be possible, except for exceptional case.

