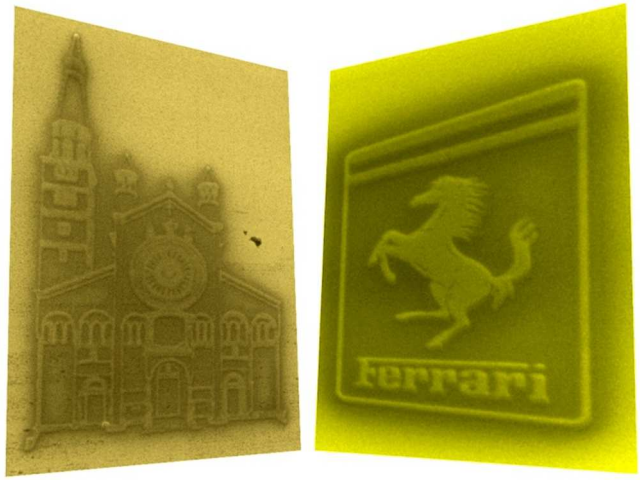
## Venue

San Geminiano complex, a restored XV century cloister in the heart of the city, home of the Law school of University of Modena and Reggio Emilia.

*(Address: Via San Geminiano 3, Modena)*

## Workshop Program

- **10 July**: Welcome reception
- **11 – 13 July**: Workshop scientific program
- **12 July**: Modena tour (UNESCO site & Ferrari museum) and conference dinner




## Local Organization

The workshop is organized by the Nanoscience Institute of National Research Council (CNR), Modena.


- Gian Carlo Gazzadi (*Chairman*)
  ✉ giancarlo.gazzadi@nano.cnr.it
- Stefano Frabboni (*co - organizer*)
- Luisa Neri, Maria Bartolacelli (*Secretariat*)
  ✉ febip2018-modena@nano.cnr.it


## Registration Fees

| | Early-bird (before May 15) | Late (until June 15) |
|---|---|---|
| Standard [1)] | 380 EUR | 450 EUR |
| Student [1)] | 280 EUR | 330 EUR |
| Accompanying [2)] | 150 EUR | 180 EUR |

1) It includes: welcome reception, 3 lunches and coffee breaks during workshop, Modena tour and conference dinner.
2) It includes: welcome reception, Modena tour and conference dinner.

**Register and submit your Abstract on:**

**http://web.nano.cnr.it/FEBIP2018-Modena/**

## Important Dates

- **27 April**: Deadline for Abstract submission.
- **8 May**: Abstract acceptance notification.
- **15 May**: Deadline for Early-bird Registration.
- **15 June**: Deadline for Late Registration; on-site registration not available.

# FEBIP 2018

**Modena (IT), 10 – 13 July**

**7th International Workshop on**

## Focused Electron Beam Induced Processing

**http://web.nano.cnr.it /FEBIP2018-Modena**


**Organized by Nanoscience Institute - CNR, Modena**

**febip2018-modena@nano.cnr.it**


CNRNANO MODENA

## Introduction

The 7th international workshop on Focused Electron Beam-Induced Processing (FEBIP) will be held in Modena (Italy) from 10th to 13th of July 2018, following the editions of 2006 in Delft (NL), 2008 in Thun (CH), 2010 in Albany (USA), 2012 in Saragoza (ES), 2014 in Frankfurt (DE) and 2016 in Vienna (AT).

The scope of the workshop is to bring together the scientific community working with focused electron beams as a tool for direct nanofabrication, through gas-assisted deposition and etching. The scientific program will be focused on the recent advances and applications of the technique, along with the fundamental aspects of electron-molecule interaction process and precursor design. Windows on focused ion beam sibling technique will be also opened.

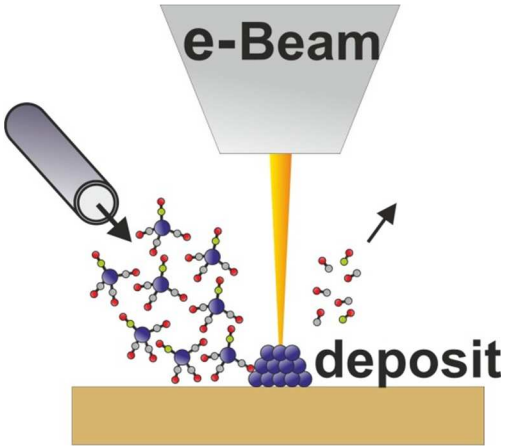
The city of Modena with its Romanesque architecture masterpiece, the renowned food excellence and the birthplace of Ferrari cars' myth, is looking forward to welcoming you!

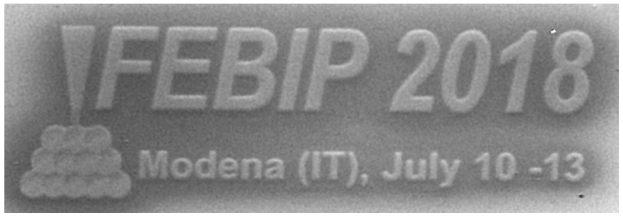
## Scientific Committee

- Cornelis W. Hagen (UT Delft, Netherlands)
- Klaus Edinger (SMT Carl Zeiss, Germany)
- Gian Carlo Gazzadi (CNR – NANO, Italy)
- Michael Huth (Uni. Frankfurt, Germany)
- Harald Plank (UT Graz, Austria)
- Philip Rack (Uni. Tennessee, USA)
- Masayuki Shimojo (IT Shibaura, Japan)
- José Maria de Teresa (ICMA Zaragoza, Spain)
- Milos Toth (UT Sidney, Australia)
- Ivo Utke (EMPA, Switzerland)
- Heinz Wanzenböck (UT Vienna, Austria)

## Topics

- e-/molecule interaction process
- New gas precursors' design
- Modeling of deposition&etching processes
- Deposition&etching fundamentals: new materials and methods, purification, characterization
- FEBIP applications in Magnetism, Photonics and Electronics
- 3D FEBID: fundamentals & applications
- Focused Ion beam (Ga, He) deposition




## Invited Speakers

- **Petra Swiderek** (University of Bremen, Germany): *Recent Progress in Electron-Molecule Interaction Study*
- **Michael Huth** (Goethe University, Frankfurt, Germany): *FEBID meets Materials Science*
- **Hans Mulders** (ThermoFisher Scientific, Netherlands): *Review on Deposit Purification Approaches*
- **Paolo Vavassori** (CIC NanoGune - San Sebastian, Spain): *Remote Magnetomechanical Nanoactuation by FEBID*
- **Robert Winkler** (FELMI ZFE – Graz, Austria): *Advanced 3D FEBID*
- **Shinji Matsui** (University of Hyogo, Japan): *Pioneer 3D Beam-Induced Deposition*
- **Rosa Córdoba** (ICMA – Zaragoza,Spain): *Ion-Beam deposition of Superconductive Nanostructures*
- **Jason Fowlkes** (CNMS – Oak Ridge National Lab., USA): *Nanomechanical Characterization of 3D FEBID Nanostructures*