

Call IRISJR3\_2015 Opening date: 4<sup>th</sup> May 2015 Closing date: 25<sup>th</sup> May 2015

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The IRIS - "Integrated Radiation and Image Sensors" Research Unit of the Bruno Kessler Foundation - FBK, Centre for Material and Microsystems, is looking for a researcher with strong background in the field of silicon radiation detectors.

### Workplace description

IRIS Research Unit carries out R&D activities on advanced radiation and image sensors fabricated within both full custom and standard CMOS technologies. The main research activities of the group are on the design and characterization of silicon radiation detectors, single-photon sensors and advanced image sensors.

More information about IRIS is available at http://iris.fbk.eu

### Job description:

The successful candidate will work primarily on the development of various types of silicon radiation detectors (pixel-, 3D-, strip- and drift-detectors).

The candidate is expected to follow the entire development flow, starting from TCAD simulations, to the design of the device layout and finally taking care of the electrical and functional characterization up to the module level. This activity will be carried out in the framework of research collaborations with Istituto Nazionale di Fisica Nucleare (INFN) and European Organization for Nuclear Research (CERN) as well as industrial projects with key international players in the field of analytical instrumentation.

The activity will be carried out in collaboration with other researchers involved in the relevant projects and with the technology engineers of FBK Micro and Nano Fabrication Facility. Finally, the candidate is requested to actively contribute to the scientific dissemination of the group.

### Job requirements

The ideal candidate should have:

- Master degree in Electronics or Physics with a strong background on device physics;
- Good skills in device (TCAD) simulation and design;
- Good scientific background and ability to write scientific papers;
- Good experience in silicon device testing and characterization;
- Excellent knowledge of English (oral and written);
- Strong teamwork attitude;
- Enthusiastic attitude to research activity.

# Additional requirements:

- PhD in Electronics, Physics or related fields or equivalent 3-years research experience;
- Experience on functional test of silicon radiation detectors;
- Good skills on LabView and/or Matlab;
- Scientific publications relevant to the field of silicon radiation detectors;
- Visiting scholarship or experience at international level.

# Employment:

Type of contract: fixed term contract (full time)

Number of positions: 1

<u>Gross salary:</u> from  $\in$  33.300, based on the candidate's profile and expertise (including meal vouchers or work canteen and welcome office support for visa formalities, accommodation, social security, etc.)

Start date: June 2015

Duration: 2/3 years (depending on the candidate background)

# Application:

Candidate are requested to submit their application by completing the online form at the following link https://hr.fbk.eu/en/jobs. Please make sure that your application contains the following attached (pdf.format):

- detailed CV and list of relevant scientific publications
- letter of motivation

Application deadline: 25<sup>th</sup> May 2015

For further information, please contact the Human Resources Service at jobs@fbk.eu