

EDMS NO.
1723638REV.
0.1VALIDITY
VALID**REFERENCE : NOT REQUIRED**

HL-LHC Resources request

Date: 2016-09-27**Project/Activity:**
WP03/MQW-MBW**Title Position/Task:** Material and Mechanical engineer for the redesign of rad-hard conventional magnets**Description Project:**

To extend its discovery potential, the LHC will need a major upgrade to increase its luminosity (rate of collisions) by a factor of 10 beyond its design value. The HL-LHC is the project that will develop the new technologies and be in charge of the design, production, installation and commissioning of the equipment required to reach this objective

Task:

You will join the WP3 team to develop radiation hard conventional magnets (MQW and MBW)

You will be in charge of development/characterization program for new rad hard insulation (300 MGy) with external international institute as partners. You will have a leading role in the program definition, sample fabrication, irradiation campaign follow up, mechanical electrical tests, NDT analysis. You will participate in the follow up of the contract for the Wolframium Heavy Alloy shielding production and contribute to the finalization of their installation procedure. In addition for the new MQW you will take part in the conjoint effort between CERN and external partners supporting the collaboration via computations and engineering activities. You will be part of the team leading the MBW redesign and procurement solutions identification. You shall also Keep up to date the MQW and MBW life expectation taking into account LHC operational scenario and new material data that could be come available.

Know how of materials engineering (polymers) is an asset as well as experience or training in NDT testing

Profile: Material or mechanical engineer**Experience:**

Strong background in material

Candidates will be expected to possess a good working knowledge of either English or French.

Specific details: Ideally starting in December 2016**Requester:** I. Bejar Alonso**Approved by:****Budget code:****Visa Budget Officer:** B. Delille**APT Wu:****Date Visa:****Distribution List:** UPM, IST**Proposal:**

To be filled by the University with reference to list of candidates or team work proposal