**INTERNSHIP POSITION**

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| **Topic**  | **Surface modification of materials** |
| **Specification/****Programme**(min. 100 words) | The aim is to acquaint students with methods and procedures used in the surface modification of materials. Emphasis will be placed on plasma surface treatment technologies (physical vapor deposition, magnetron sputtering), other methods of creating surface treatments (sol-gel methods, laser nano-micro-texturing, galvanic coating), and methodology for evaluating modified surfaces (layer roughness, thickness, chemical composition, hardness, tribology, abrasion resistance, microscopy confocal and digital, assessment of antibacterial activity, etc.). Finally, students will meet appropriate methods (e.g., image processing or signal analysis) for evaluating the obtained data; and become acquainted with data processing using statistical methods in suitable software in order to obtain reliable results. |
| **Time period** |  |
| **Length of the traineeship - number of months** | 2 x 1 month |
| **Supervisor´s name and contact**  | Ing. Totka Bakalova, Ph.D.Ing. Lucie Svobodová, Ph.D.Technical University of LiberecFaculty of Mechanical EngineeringDepartment of Material ScienceStudentská 1402/246117 Liberectotka.bakalova@tul.czlucie.svobodova@tul.cz |
| **Administrative Contact** | Marcela Valkova, marcela.valkova@tul.cz  |
| **Documents required** | CV, Letter of motivation, Transcript of Records |