

## Internship Program at Osnabrück University of Applied Sciences

### Description of lab or research project

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|                                      | <h3>Materials Design and Structural Integrity Laboratory</h3>  |
| <p><b>Head of the laboratory</b></p> | <p>Dr. Javad Mola<br/>         Faculty of Engineering and Computer Science<br/>         Albrechtstr. 30, D-49076 Osnabrück<br/>         E-Mail: <a href="mailto:j.mola@hs-osnabrueck.de">j.mola@hs-osnabrueck.de</a><br/>         Phone.: +49 (0)541 969-2188</p>  |
| <p><b>Title of Project</b></p>       | <p>You will play a supporting role in the running projects. The project to which you will contribute will depend on your period of stay and the progress of the running projects.</p>  |
| <p><b>Abstract</b></p>               | <p>The projects running in this laboratory commonly involve the investigation of microstructure-property relationships in metallic materials, most commonly steels. The insights from the projects will be used for the development of new materials or for the enhancement of conventional materials by modification of their processing route. A summary of the projects running in the lab may be found (in German) under:</p> <p><a href="https://www.hs-osna-brueck.de/de/forschung/recherche/laboreinrichtungen-und-versuchsbetriebe/labor-fuer-materialdesign-und-werkstoffzuverlaessigkeit/wissenschaftstransfer/">https://www.hs-osna-brueck.de/de/forschung/recherche/laboreinrichtungen-und-versuchsbetriebe/labor-fuer-materialdesign-und-werkstoffzuverlaessigkeit/wissenschaftstransfer/</a></p> |
| <p><b>Tasks</b></p>                  | <p>Experimental work in metallography, light microscopy, electron microscopy, mechanical testing, welding, thermodynamic and</p>   |

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|                                 | kinetic calculations  |
| <b>Requirements</b>             | Basic knowledge of materials science and engineering and materials testing methods  |
| <b>Language Skills</b>          | English: fluent<br>German: though not essential, a basic knowledge of German would be useful.   |
| <b>Duration and time period</b> | 3 – 6 months in either summer semester (March – August) or the winter semester (September – February). Specific dates and duration of internship are to be agreed upon.   |
| <b>Further information</b>      | <a href="https://www.hs-osna-brueck.de/de/forschung/recherche/laboreinrichtungen-und-versuchsbetriebe/labor-fuer-materialdesign-und-werkstoffzuerlaessigkeit/">https://www.hs-osna-brueck.de/de/forschung/recherche/laboreinrichtungen-und-versuchsbetriebe/labor-fuer-materialdesign-und-werkstoffzuerlaessigkeit/</a> |