## **Institute of Composite Structures and Adaptive Systems**



DLR Institute of Composite Structures and Adaptive Systems Lilienthalplatz 7, 38108 Braunschweig

13.04.2011

## Certificate of employment

Mr. Celal Cakiroglu, born on 23.01.1985 in Istanbul worked from October 2010 to March 2011 as a student assistant in the department of Structural Mechanics at the Institute of Composite Structures and Adaptive Systems of German Aerospace Center (DLR) in Braunschweig.

The DLR is a non-university research institute with about 5000 employees at eight german sites. Research priorities are aeronautics, space, transport, energy as well as defence and security.

The main tasks of Mr. Cakiroglu were:

- Buckling and post buckling analysis of unstiffened CFRP plates in ABAQUS
- Programming of python scripts in order to control the ABAQUS analyses and their evaluation
- Programming of a C++ script to calculate buckling loads
- Working with Linux

Mr. Cakiroglu fulfilled his tasks actively engaged after a short familiarization phase to the complex stability topic. Thanks to his very good programming skills in Python and his determined way of working he achieved very good results. New experiences and knowledge were obtained because of his work. His scripts are very useful for further computations. The predefined work schedule was carried out to our full satisfaction.

We wish Mr. Cakiroglu all the success in any future position he takes up.

Head of Institute of Composite of Structures Supervisor:

and Adaptive Systems

Prof. M. Wiedemann

Dipl.-Ing. Tanja Führer

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