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Darmstadt, June 9, 2011

Subject: IDD-Method of Prof. Stefanov

Dear Professor Trichkov.

I have been informed by Professor Stefan Stefanov that a procedure for defense of his thesis had been opened in your Faculty. After a preliminary "internal" defense on June 21, if successful, he should present documents to you in several items. One of the items is "Certificates or documents for practical application of the results of the thesis, for scientific awards".

I think this letter of mine could play a role of a document confirming that Stefanov's IDD (Integration of Damage Differentials) method and software has been applied into LBF activities. LBF issues publications also in form of scientific reports. In 2009, the report, FB-236, 70 pages, was titled "Application of IDD (Integration of Damage Differentials) for Fatigue Life Assessment". It was edited by S. Stefanov, H. Hanselka (the Director of LBF) and C. M. Sonsino. You could certainly consider the act of issuing this report as a proof that the IDD method is internationally applied.

In addition I can state that our Phd. student Jens Wiebesiek is considering the method IDD in his thesis. He has been intensively consulted by Professor Stefanov and instructed in using the IDD software. Thanks to it, our LBF laboratory test processes, causing continuous multiaxial random loadings, have been visualized and analyzed in the IDD coordinate space. IDD has also been applied to LBF experimental results obtained in the past by Neugebauer, Simbürger, Sonsino, etc. Besides, our researchers K. Störzel and Dr. T. Bruder also collaborated for IDD application to LBF experimental studies on laserbeam welded steel tube-tube joints. The application results were reported on the 9th International Conference on Multiaxial Fatigue & Fracture (ICMFF9), Parma, Italy, 7 – 9 June 2010.

During his stay at LBF 2009 Professor Stefanov gave two lectures on IDD that evoked and still evoke interest and discussions with us. We follow what he places on the IDD site http://www.freewebs.com/fatigue-life-integral/. His IDD software is also there as freeware and this enables international practical application of IDD, not only in LBF.

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Darmstadt, June 9, 2011

As I have also been informed by Professor Stefanov, your new regulations of theses' defence procedure do not envisage taking "external" opinions that could influence the evaluation of the scientific jury. At least, I take the liberty to confirm that your Faculty can be proud of the fact that the interesting and internationally known IDD concept and method has been developed by one of your scientists.

Sincerely yours,

Prof. Dr.-Ing. C. M. Sonsino

(Deputy Head of Institute, Head of Business Area Industry and Associations