

Special Issue on “Non-Destructive Testing in Aerospace”

The root of non-destructive testing (NDT) can date back to 750 BC when ancient Romans used flour and oil to find cracks in marble slabs, and for centuries, blacksmiths had utilized sonic NDT to listen to the ring of different metals as these metals were shaped by hammering. It is recorded that the first use of NDT was in England in 1868 when Saxby used the magnetic characteristics of a compass to detect cracks in gun barrels. Today, the aerospace industry is leading the way in the application of NDT techniques. The variety of NDT techniques can be broadly classified into two sub-categories: surface techniques, which are used to detect surface defects such as cracks and surface porosity, and sub-surface techniques, such as ultrasonic testing or radiography, used to identify flaws that beneath the surface.

To consolidate the latest findings of research regarding NDT and promote understanding and cooperation in the aerospace industry, Transactions of Nanjing University of Aeronautics & Astronautics (TNUAA) intends to present a “Special Issue on NDT in aerospace”. The special issue is honored to be supported by the 9th International Symposium on NDT in aerospace, which was successfully held in 7th—10th Nov. 2017, Xiamen, China.

TNUAA is devoted to the dissemination of original archival research papers on theoretical developments, novel applications and case studies regarding pressing issues in aeronautics, astronautics, and civil aviation. As a peer-reviewed journal published bimonthly, TNUAA has been indexed by the predominant databases such as Ei Compendex (USA), Scopus (Holland), Chinese Science Citation Database (CSCD), Mathematical Review (USA), Cambridge Scientific Abstracts (CSA), SA (England), Zbl (Germany), etc.

Topics

The topics of TNUAA “Special Issue on NDT in aerospace” include, but are not limited to, the following:

- Sensors and actuators
- System design and integration
- Single processing and methods
- Prognostics and health management
- Integrity and safety assurance
- Modeling and simulations
- Mobile/autonomous NDT and monitoring
- Implementation, validation and certification
- Damage tolerance and aircraft aging

Important Dates

Full paper due for review: February 1th, 2018

Notification of results of first review cycle: February 28th, 2018

Revised paper submission due for Editor Board Meeting: March 15th, 2018

Final notification of results of Editor Board Meeting: March 20th, 2018

Publication in print due: April 30th, 2018

Submission Instructions

We welcome paper submissions between 6 and 10 pages, written in English. Paper submissions must not have been previously published. A paper is considered to have been previously published if it has appeared in a peer-reviewed journal, magazine, book, or meeting proceedings that is reliably and permanently available afterward in print or electronic form to non-attendees, regardless of the language of that publication. Complete papers should be submitted electronically through the online Chinese submission system (<https://tnuaa.nuaa.edu.cn>) or by E-mail (tnuaa@nuaa.edu.cn).

Authors are reminded to make sure to select Special Issue “Special Issue on NDT in aerospace” during submission. Both Research Articles and Reviews are welcome. For the instructions on preparing a manuscript and the required style and format, see the author guidelines on the TNUAA website http://tnuaa.nuaa.edu.cn/ch/reader/view_news.aspx?id=20101207124045001. TNUAA pursues a double-blind peer review policy, meaning both the authors and the reviewers remain anonymous to each other. Submissions (including citations) should not contain information that unnecessarily identifies the authors and their affiliations. For questions, please contact Guest Editor Prof. Lei Qiu, Prof. Zhiwei Zeng and Executive Editor Ms. Bei Zhang. Please notify Prof. Qiu, Prof. Zeng, and Ms. Zhang, when submitting the manuscript. For anyone who already has a paper under review and wishes to have it considered for this special issue, please send the request to Guest Editors Prof. Qiu, Prof. Zeng and copy the request to Executive Editor Ms. Zhang.

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Editorial Office of TNUAA

12th Nov., 2017