



Coordinate Metrology Society

## CMSC 2016 Murfreesboro, TN





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Optimization of 3D Target Measurement Accuracy for the Leica ScanStation P20 by Davide Bianculli, Cristopher D. Hernikl, and David E. Humphries, Lawrence Berkeley National Laboratory (LBNL)

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## **Coordinate Metrology Society Conference**

#### Introduction

The Executive Committee of the Coordinate Metrology Society (CMS) puts a premium on the content of technical presentations given at the Coordinate Metrology Society Conference. We are strongly committed to providing presentations and technical papers that explore technology, theory, and practices that advance 3D coordinate metrology.

#### Benefits of Presenting at the Coordinate Metrology Society Conference (CMSC)

The benefits of presenting at the annual Coordinate Metrology System Conference are three-fold:

- 1) Presenting at the CMSC provides a tremendous opportunity to showcase your knowledge and gain exposure and recognition by your peers in the field of 3D coordinate metrology.
- 2) The Executive Committee waives the conference registration and membership fees for individuals presenting at the annual conference. (NOTE: In the case of presentations with multiple authors or contributors, the Executive Committee is only able to waive one conference registration and membership fee.)
- 3) The Coordinate Metrology Society will publish both technical papers and presentations on the CMSC website. Additionally, peer-selected technical papers will be published in *The Journal of the CMSC*, which is mailed to a large circulation, and distributed at trade shows or conferences that influence participation at the annual CMSC.

#### **Important Deadlines for Submission and Publication**

Abstract Submission Deadline	March 11, 2016
Notification of Acceptance	April 8, 2016
Technical Papers Due	June 17, 2016
Presentations Due	July 8, 2016
Final Paper/Presentation Revisions Deadline	July 15, 2016
CMSC Conference Dates	July 25 - 29, 2016

Notification of acceptance will be emailed to authors and posted on the website on the date above.

#### **2016 Technical Presentation Coordinators**

If you have inquiries about presentations and technical papers, please email the 2016 CMSC Technical Presentation Coordinators Scott Sandwith (top photo) or Daniel Sawyer (bottom photo) at presentations@cmsc.org.

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**Coordinate Metrology Society Conference** 

#### **Abstract Guidelines**

1) Presentations and technical papers must be of original content, not previously published, or under consideration by other conferences or journals.

2) The abstract should state the purpose, hypothesis, tools used in research or investigation, data collected, and a summary or interpretation of the data.

3) Abstracts should be submitted in a Microsoft Word format and limited to 500 words. Each author must include their name (no initials please) and include the following "introduction template" at the top of the page.

- 1) Title of Abstract:
- 2) Author(s) Name(s)/Company(s)/Title(s):
- (Example: John Doe, ABC Manufacturing Company, Quality Manager)
- 3) Contact information for primary Author including full address, phone number and email address

#### Abstract Selection Process

Abstracts will undergo a peer review for selection or rejection by the conference committee. Accepted presentations/ technical papers will then be allocated to conference sessions. Abstracts will be published before the CMSC event.

Please note that abstracts for presentations have been accepted in the past for review without a supporting technical paper. However, these presentations are <u>not</u> candidates for publication in *The Journal of the CMSC*. Abstract submissions including technical papers carry more weight in the selection process. In the abstract, please indicate if a technical paper will be submitted.

Questions regarding abstract guidelines should be submitted to the 2016 Technical Presentation Coordinators listed on page 1.



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#### **Technical Paper Content Guidelines**

The Coordinate Metrology Society has instituted technical paper guidelines to be used by all parties submitting technical papers for presentation at the annual Coordinate Metrology Society Conference (CMSC). This standardization will improve readability and the review process of our best-in-class technical papers, and expedite the publication of chosen papers for *The Journal of the CMSC*.

Technical papers should be submitted in the English language and limited to no more than 10 pages of an ISO A4 paper size including graphics and captions. The paper should include a first paragraph abstract, nomenclature definitions (if required), context of the presentation, conclusion(s) and acknowledgments.

An FTP site will be available for submission and upload of technical papers and graphics. Instructions to utilize the FTP site will be provided in the acceptance notification. Questions regarding guidelines for technical papers should be submitted to the Technical Presentation Coordinators listed on page 1.

<u>Non-Commercialism, Clearances, and Copyrights:</u> Technical papers and presentations may not be commercial in nature. Specific hardware, software, peripherals and companies, if presented, must be secondary to the innovation, discovery and uniqueness of the project or experiment. Abstracts, technical papers and technical presentations that are deemed commercial in nature by the Technical Presentation Coordinators/Committee will be rejected for consideration. By submitting your presentation to the Coordinate Metrology Society, you are granting the organization permission to publish it, in whole or edited form, in its printed and/or online publications.

- *Clearances:* If your work must be cleared or approved by your institution, company, or government agency before publication, please ensure the proper written approval documentation is granted allowing you to present by the listed dates above. Please provide copies to the Technical Presentation Coordinators to protect the CMSC from legal infringement.
- *Copyrights:* If your technical paper and final presentation detailed to the Coordinate Metrology Society infringe on the copyrights of whom you are representing, and prohibit the publication of your material outside the forum of the conference, please provide this documented information to the Technical Presentation Coordinators to protect the CMSC from legal infringement.



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#### **Technical Paper Formatting Guidelines**

Authors must use the following paper format guidelines:

<u>Document Type and Font</u>: All technical papers should be submitted in a Microsoft Word document in a one-column format and "Times New Roman" font no less that 10pt and no greater than 12pt. If the author(s) has a newer version of Microsoft Word, they should save the document using the older version.

<u>Introduction Template:</u> Each author must include their name (<u>no initials please</u>) and include the following "introduction template" at the top of the first page of the technical paper.

Title of the CMSC Technical Paper: Author(s) Name(s)/Company(s): Contact information for submitting Author: Name, Company Address, Town, Zip Phone Number: Email: Word Count (number of words in paper): Number of Images Submitted:

<u>References in Running Text:</u> All references should have superscript notations embedded within the running text. These superscript notations should be numbered in the order in which they appear in the running text, NOT alphabetized by author.

<u>Reference Endnotes:</u> The standard format for references in the endnotes is:

Last name, first name, article title, book title, conference title, publisher (if necessary), page or pages referenced (if necessary), and the date (format: day, month, year).

#### **Photography/Imagery Guidelines**

High resolution photography, charts, and other graphics play a vital role in illustrating your technical narrative. It is important to include "people using technology" photographs to tell your story. These visual elements play a significant role in paper selection too. All technical papers presented at the CMSC are considered for publication in *The Journal of the CMSC*. Having your technical paper published in this industry-recognized journal is prestigious; being featured as the cover story is even more so. To increase the chance of your paper appearing in this prominent position, the editors of *The Journal of the CMSC* request that you include a portrait-oriented, high-resolution (300 dpi) image that resolves at pixel dimensions of at least 2,048 x 1,536. Ideally, this graphic should be a compelling photo of your project with the featured measurement technology or technologies "SEEN IN ACTION." Authors must adhere to the following graphic guidelines:

1) Photo Submission: All images and captions must be submitted in individual files along with your technical paper.

2) <u>File Formats:</u> The preferable file formats for images (photographs, graphs, charts, schematics, CAD screen shots, etc.) are .GIF or .JPG.

3) <u>Filenames:</u> All images should have filenames according to their figure number preceded by the primary author's last name. For example, SmithFig1.jpg, SmithFig2.gif, etc.

4) Image Resolution: All images must have a high, print-ready resolution — a minimum of 300 dpi (dots per inch).

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#### **Presentation Guidelines**

Presentations at the CMSC conference are firmly restricted to 25 minutes; this includes your biographical introduction read by the Emcee. All presentations are restricted to a Microsoft PowerPoint format and will be given from a single CMSC provided notebook computer. All hyper-linked or imbedded content are restricted to the capacity of the supplied notebook computer, and must be submitted with the presentation.

Multimedia presentations with video or other content are welcomed and encouraged by the CMS. Video can be used to demonstrate the use of technology, document an experiment, or explain how metrology applications work. Video can give the audience a valuable insight into a process, design, or a fresh approach to measurement or inspection. The CMS would seek approval to leverage the video content presented at the conference for educational and promotional purposes for the CMSC.

If accepted, your presentation should be a reflection of your technical paper, if not, you will be informed of a revision request or rejection by the dates listed above. Accepted authors will be asked to submit their speaker biographies along with their presentation. An FTP site is available for submission of Technical Presentations and will be included in the acceptance notification. Further questions regarding Technical Presentation Guidelines should be submitted to the 2016 Technical Presentation Coordinators listed on page 1.

At the 31st annual CMSC in 2015, there were nineteen authoritative white papers and application presentations given by CMS members, special industry guests, and master users of portable measurement technology. Conference speakers represented leading scientific laboratories and global companies such as BMW Manufacturing Company, Newport News Shipbuilding, Northrop Grumman Aerospace, The Boeing Company, Naval Surface Warfare Center, FFT Produktionssysteme GmbH& Co. (Germany), Argonne National Laboratory, National Institute for Standards and Technology (NIST), National Physical Laboratory (NPL- UK), UNC Charlotte, University of Ontario Institute of Technology (Canada), Leibniz University at Hannover (Germany) and other leaders in the field.

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