**71st Tobacco Science Research Conference**

**INSTRUCTIONS FOR THE PREPARATION OF ABSTRACTS**

**CHOOSE ONE:**  
- [x] Oral  
- [ ] Workshop  
- [ ] Poster

**PRESENTING AUTHOR:** FAMILY NAME should be in all caps.  
- **Name:** Jane H. DOE  
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**ADDITIONAL AUTHORS:** Please type the name, institutional affiliation and location (city, state, country) for each additional author in the cell below.  
- John Doe, Acme Tobacco Company; Anywhere, WA, USA  
- Bob Smith, First Filters; Inc. Bigtown, WA USA

**NOTE:** List the affiliation of each author. If multiple authors have the same affiliation, list that affiliation only once. Use the following format:  
- John M. Smith, Jane E. Doe; Acme Tobacco Company, Anywhere, WA, USA and Jack Q. Public; General Testing Company, Mytown, WA, USA

**ORAL PRESENTATION SESSION TOPIC:** Please select your 1st and 2nd choices for the session topic. Final assignment will be made by the Editorial Committee.  

**First choice:**  
- Agronomy  
- Toxicology and *in vitro* Studies  
- Regulation and Quality  
- Method Development/Smoke Chemistry  
- Materials/Manufacturing/Finished Product  
- eCigarettes/Alternative Cigarettes  
- Smokeless Tobacco Products  
- Human Smoking/Clinical Studies/Biomarkers  
- [x] Other: Cigarette Design

**Second choice:**  
- Agronomy  
- Toxicology and *in vitro* Studies  
- Regulation and Quality  
- Method Development/Smoke Chemistry  
- Materials/Manufacturing/Finished Product  
- eCigarettes/Alternative Cigarettes  
- Smokeless Tobacco Products  
- Human Smoking/Clinical Studies/Biomarkers

**SPECIAL NNN SESSION:** This year’s conference will hold an oral presentation session dedicated to FDA’s proposed rule, “Tobacco Product Standard for N-nitrosonornicotine Level in Finished Smokeless Tobacco Products.” If you are interested in presenting in this session, please select your topic of interest below. Please check the appropriate box(es). Final assignments will be made by the Editorial Committee.  

- Agronomy  
- Toxicology and *in vitro* Studies  
- Regulation and Quality  
- Method Development/Product Chemistry  
- Materials/Manufacturing/Finished Product  
- Human Smoking/Clinical Studies/Biomarkers
Title: Cut and paste your title in the cell below.

INFLUENCE OF TIPPING PERFORATION TYPE ON CIGARETTE PERFORMANCE.

Please type, or cut/paste, your abstract in the section below. The abstract must include a brief description of the objectives, the methods used, the results and their implications. The editorial committee reviews and accepts papers based on the abstract. Very short or vague abstracts will not be accepted.

1. Use 12-point fonts, Arial or Courier if possible.
2. The abstract should be no longer than 275 words in length.
3. Abstracts must be submitted electronically via e-mail to editorial@TSRCinfo.com.
4. Type or paste in the information, save it to your computer and then attach the completed template to your e-mail submission.
5. Abstracts must be received no later than May 26, 2017. Confirmation of receipt of the abstract will be provided to the principal author via e-mail. If you do not receive confirmation of receipt by June 1st, assume the abstract was not received and contact Ian Fearon, editorial@TSRCinfo.com.
6. Only PowerPoint presentations may be used at the conference. If you require other provisions, please contact the Editorial Committee no later than August 1, 2017.
7. 16:9 will be the standard PowerPoint format, though 4:3 format can be projected.
8. Company logo is permitted ONLY on title slide.
9. The maximum presentation time is 20 minutes including questions and answers.

Abstract: Cut and paste your abstract (Workshops must also include a detailed outline) in the cell below.

Cigarettes were made with tipping perforated via mechanical, electrostatic, and microlaser processes and with nonporous tippings perforated post-production with the on-line laser to investigate causes for smoke yield differences which have been previously shown to arise from different vent designs. Filter efficiency differences owing to vent designs have been proposed as the cause for these yield differences. In the present work, smoke yields of the on-line laser perforated products were higher than those observed with cigarettes with pre-perforated vent designs at comparable nominal dilution levels over a range of 0 to 60%. Filter efficiency measurements of upstream and downstream filter segments did not show differences owing to vent designs. Air dilution measured during smoking showed that the dilution of the laser-perforated products was lower than that found for the pre-perforated products. The differences found in dilution during smoking accounted for the smoke yield differences noted, and were attributed to a difference in the flow dependence of ventilation between the two tipping types. That is, ventilation decreases more rapidly as flow increases for laser-perforated cigarettes than for those made with pre-perforated tipping. When dilution is integrated over a puff with a sinusoidal flow profile, the net effect is a reduction in ventilation for laser-perforated cigarettes.

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Electronic Signature:  

Jane H. Doe

Date of Submission:  

21 March 2017