

## Fabric Property Development and Characterization Agenda

The Nonwovens Institute (NWI), NC State University  
1020 Main Campus Drive  
Raleigh, NC 27606

### Tuesday

|          |   |                         |
|----------|---|-------------------------|
| 12:00 pm | <b>Registration and Lunch</b>                               |                         |
| 1:00 pm  | Introductions and Course Overview                           | Dave Nelson, NWI        |
| 1:45 pm  | Introduction to Testing & Quality Management System (QMS)   | Behnam Pourdeyhimi, NWI |
| 2:15 pm  | <b>Break</b>  |                         |
| 2:30 pm  | Structural Attributes of Nonwovens & Their Characterization | Behnam Pourdeyhimi, NWI |
| 3:15 pm  | <b>Break</b>  |                         |
| 3:30 pm  | Structural Uniformity                                       | Behnam Pourdeyhimi, NWI |
| 4:10 pm  | Effect of Structure on Behavior                             | Behnam Pourdeyhimi, NWI |
| 4:30 pm  | Mechanical Properties: Tensile, Compression & Recovery      | Benoit Maze, NWI        |
| 6:00 pm  | <b>Group Dinner – TBD</b>                                   |                         |

### Wednesday

|          |   |                            |
|----------|---|----------------------------|
| 8:30 am  | <b>Breakfast</b>  |                            |
| 9:00 am  | Tear & Bursting   | Benoit Maze, NWI           |
| 9:45 am  | Fuzz & Linting  | Behnam Pourdeyhimi, NWI    |
| 10:30 am | <b>Break</b>  |                            |
| 10:45 am | Haptics – Measurement of “Hand” & Demo  | Peter Botticelli, SynTouch |
| 12:00 pm | <b>Lunch</b>  |                            |
| 1:00 pm  | Flammability and Thermal Evaluation   | Benoit Maze, NWI           |
| 1:30 pm  | Pore Size and Pore Volume Distribution  | Benoit Maze, NWI           |
| 2:00 pm  | Blood Borne Pathogen  | Behnam Pourdeyhimi, NWI    |
| 3:00 pm  | <b>Break</b>  |                            |
| 3:15 pm  | Mechanical Properties & Characterization Laboratory Tour and Practical Demonstrations | Amy Minton, NWI            |
| 5:00 pm  | <b>Adjourn for the Day</b>  |                            |



**Thursday**

|          |  |                               |
|----------|--|-------------------------------|
| 8:30 am  | <b>Breakfast</b>   |                               |
| 9:00 am  | Microscopic Analysis – Overview                                      | TBD                           |
| 10:15 am | <b>Break</b>   |                               |
| 10:30 am | NWI Pilot Facility Tour  | Dave Nelson, NWI              |
| 11:15 am | Scanning Electron Microscope (SEM) and Its Applications in Nonwovens | Jining Xie, Nanoscience, Inc. |
| 12:00 pm | <b>Lunch</b>   |                               |
| 1:00 pm  | SEM Nonwoven Applications and Lab                                    | Jining Xie, Nanoscience, Inc. |
| 2:00 pm  | Electrospun Nonwovens – Application and Characterization             | TBD                           |
| 3:00 pm  | <b>Break</b>   |                               |
| 3:15 pm  | Air & Aerosol Filtration   | Behnam Pourdeyhimi, NWI       |
| 4:15 pm  | Liquid Filtration  | Behnam Pourdeyhimi, NWI       |
| 5:00 pm  | <b>Adjourn for the Day</b>   |                               |

**Friday**

|          |   |                         |
|----------|---|-------------------------|
| 8:30 am  | <b>Breakfast</b>                        |                         |
| 9:00 am  | Absorbency                              | Behnam Pourdeyhimi, NWI |
| 10:00 am | <b>Break</b>                            |                         |
| 10:15 am | Moisture Vapor Transmission Rate (MVTR) | Behnam Pourdeyhimi, NWI |
| 11:00 am | Wiping Efficiency – DWE Methods         | Pierre Grondin, NWI     |
| 12:00 pm | <b>Lunch and Course Adjourns</b>        |                         |