



## Upskilling and Next-Generation Activated Carbon Fiber Technology

Non-Confidential

### BACKGROUND

P&G competes across many consumer-packed goods categories where malodor is a top consumer concern. We believe that incorporating volatile organic compound (VOC) adsorption technologies into products could serve our consumers' needs for odor control. We have evaluated numerous adsorbent technologies and activated carbon fiber (ACF) is of particular interest.

### NEED DESCRIPTION

We are seeking to consult and potentially partner with an expert in activated carbon fiber to understand the impact of precursors, processing conditions, and methods of incorporating ACF into textiles and/or nonwovens on volatile organic compound adsorption performance, durability, and large-scale manufacturability. As a first step, we are interested in the identified SME giving a seminar on the basics of ACF to educate the organization. Longer-term, we are interested in co-developing and testing various ACFs in our *in vitro* and *in vivo* methods to link the various parameters of ACFs to their odor control performance. Below are more specific descriptions of the expertise and capabilities we are seeking.

### WHAT WE ARE LOOKING FOR

#### Seminar on Activated Carbon Fibers in Textiles

- Research focus on ACF for VOC adsorption
- Methods of incorporating activated carbon fibers into textiles and/or nonwovens
- Understanding of large-scale and, preferably, industrialized processes

#### Lab- Scale Capabilities

- Ability to vary precursor, carbonization, and activation conditions to produce ACF
- Ability to vary method of incorporating ACF into textiles and/or nonwovens

### WHAT WE ARE NOT LOOKING FOR

- At this time, alternative adsorbent materials (e.g.: zeolites, metal-organic frameworks, etc.)
- Companies/mills producing ACF (i.e.: not suppliers)

Please note that only **non-confidential** information describing the expertise and capabilities can be accepted for review.