

## Properties of Bacterial Nanocellulose for Scenic Arts

**Authors :** Beatriz Suárez López, Gabriela Forman

**Abstract :** Kombucha (a symbiotic culture of bacteria and yeast) produces material capable of acquiring multiple shapes and textures that change significantly under different environment or temperature variations (e.g., when it is exposed to wet conditions), properties that may be explored in the scenic industry. This paper presents an analysis of its specific characteristics, exploring them as a non-conventional material for arts and performance. Costume Design uses surfaces as a powerful way of expression to represent concepts and stories; it may apply the unique features of nano bacterial cellulose (NBC) as assets in this artistic context. A mix of qualitative and quantitative (interventionist) methodology approaches were used -review of relevant literature to deepen knowledge on the research topic (crossing bibliography from different fields of studies: Biology, Art, Costume Design, etc.); as well as descriptive methods: laboratorial experiments, document quantities, observation to identify material properties and possibilities used to express a multiple narrative ideas, concepts and feelings. The results confirmed that NBC is an interactive and versatile material viable to be used in an alternative scenic context; its unique aesthetic and performative qualities, which change in contact to moisture, is a resource that can be used to show a visual and poetic impact on stage.

**Keywords :** biotechnological materials, contemporary dance, costume design, nano bacterial cellulose, performing arts

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