



Contribution ID: 100

Type: **Talk**

[238] Biomimetic Passive Cooling

Wednesday, September 1, 2021 6:45 PM (15 minutes)

With the increasing average global temperature more and more households need a way to cool down. This study explores biomimetic passive cooling utilizing structured surfaces. The focus is put on structures that lower a body's average temperature without using electricity or replenishable resources. Biomimetics helps to find non-polluting ways to achieve such cooling structures.

At first, the physical principles will be explained, accompanied with current studies about their implementation. Biomimetics and its importance for this thesis will be discussed. Some examples found in nature will be explained. Possible attempts to use those will be expatiated. Finally, a summary will be given with an outlook about the future of passive cooling.

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Session Classification: Surfaces, Interfaces and Thin Films

Track Classification: Surfaces, Interfaces and Thin Films