# Extract the Insulating Fiber from the Chicken Feathers

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Slaughtering of huge amounts of farmed chicken worldwide results in huge amounts of feathers. Unless they are properly dispensed and/or adequately utilized, accumulations of the chicken feathers can pose both health and environmental threats. The present investigation is a serious attempt to profitably implement chicken feathers in the manufacture of thermally insulating material. This was motivated by the fact that the feathers are there to maintain the bird's body temperature constant. Accordingly, the adequacy of chickens' feathers, whether in its native form or in a finely divided form, was assessed to serve as an efficient thermally insulating material. Thermal and spectroscopic studies were carried out on the test feathers and commercial synthetic fibers. Results obtained could prophesize a successful application of the test feathers in the manufacture of thermally insulating material for various industrial manifestations.

**Awards Won:**