

Aggregation Behavior of Keratin Proteins Determined by Dynamic Light Scattering

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in partial fulfillment of the requirements for the degree of

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In
Materials Science and Engineering

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Figures	Fig. 2 At the left, a compound alpha-helix with pitch about 67 A. The diameter, shown as about 10 A., includes volume occupied by side chains as well as the main chains of the protein. Centre, a seven-strand alpha-cable, with lead of about 400 A. In the proposed structures of proteins of the alpha-keratin type these cables are packed together, with compound helixes as shown at the left in the interstices. At the right, a three-strand rope, with lead of about 200 A., and with sense opposite to that of the seven-strand cable. In the suggested structure for feather rachis keratin, these ropes are packed together with seven-strand alpha-cables, in the ratio of two ropes to one alpha-cable.
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Mark

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