Chapter 5 Conclusions



In this book, introduction to enhanced heat transfer has been discussed in detail. Both passive and active techniques along with their commercial applications have been dealt with. Fundamentals of heat transfer and necessary correction for variation of fluid properties are to be understood clearly to appreciate the impact of heat transfer enhancement on the improved design of compact heat exchangers. This has been followed by complete treatment of fouling on enhanced surface. Fouling fundamentals, fouling of gases on finned surfaces, shell-side fouling of liquids, liquid fouling in internally finned tubes, rough tubes and plate-fin geometry and fouling in plate heat exchanger have been discussed at length. This book ends with the complete treatment of correlations and modelling of fouling in enhanced tubes.