

# Contents

<i>I</i>	<i>General introduction</i>	11
1	Historical remarks and airframer perspectives	13
2	A challenging problem of fluid mechanics	19
3	Selected physical properties of ice	27
<i>II</i>	<i>Fluid mechanics of icing at small scales</i>	33
4	From nucleation to the solidification of impacting droplets	37
5	Methods to study drop impact at ambient conditions	43
6	Drop impact on dry surfaces	51
7	Drop impact on liquid films	59
<i>III</i>	<i>Fluid mechanics of icing at large scales</i>	67
8	Icing wind tunnel	71
9	Simulation of ice accretion	85
10	Understanding glaze ice accretion	101
	Bibliography	119
	Nomenclature	133