## Contents

**Foreword**  
**Preface**  

### General aspects of bond  
1. Bearing angle model for bond: factors influencing bond strength  
2. Bond issues at the dapped ends of indirectly-supported R/C beams and slabs  

### Anchorages and laps of bars and prestressing tendons  
3. Anchorage in high-strength concrete of bars terminated with 90-degree standard hooks  
4. Design of reinforcing bar anchorages for tension loading  
5. An appraisal of ACI 318 rules for design of tension splices  
6. Recommended provisions and commentary on development length for high-strength reinforcement in tension  
7. Experimental investigation on bond of large-diameter reinforcing bars  
8. Influence on lap strength of lap length, shear and staggering of laps  
9. Experimental results on the local bond behavior of bars in bundles  
10. Bond of prestressing tendons  

### Bond under severe conditions  
11. Effect of high temperature on bond behavior between reinforcement and concrete  
12. Recent developments in design of pre-cast and post-installed rebar connections under temperature  
13. Residual bond performance after exposure to different heating regimes – elevated temperature vs. fire  
14. Reinforcement to concrete bond in inelastic regions of RC frame members
Degradation of bond for corrosion
15. Testing of bond for corroded reinforced concrete specimens 229
16. Assessment of corroded reinforced concrete structures in natural environment 230

Bond in new types of concrete
17. Bond behavior of steel bars embedded in lightweight concrete 259
18. Bond behaviour between reinforcing steel bars and FRC under monotonic loading 260
19. Crack widths in RC and R/FRC elements under repeated actions 284
20. Crack widths in RC and R/FRC elements under repeated actions 299