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Sommario/riassunto	<p>This book explains how researchers design, prepare, develop, test and fly their science experiments on microgravity platforms before sending them to space. All preparation phases are explained and presented, including aircraft parabolic flights as part of spaceflight preparation. Twenty international authors, all experts in their own microgravity research field, contribute to chapters describing their experience to prepare experiments before space flights. Fields covered are Physical Sciences and Life Sciences. Physical Sciences covers fluid physics (vibration effects on diffusion; red blood cell dynamics; cavitation in microgravity; capillary driven flows) and material sciences (electromagnetic levitator onboard International Space Station). Life Sciences includes human physiology (sampling earlobe blood; human cardiovascular experiments; tumours in space) and neurophysiology (dexterous manipulation of objects in weightlessness).</p>