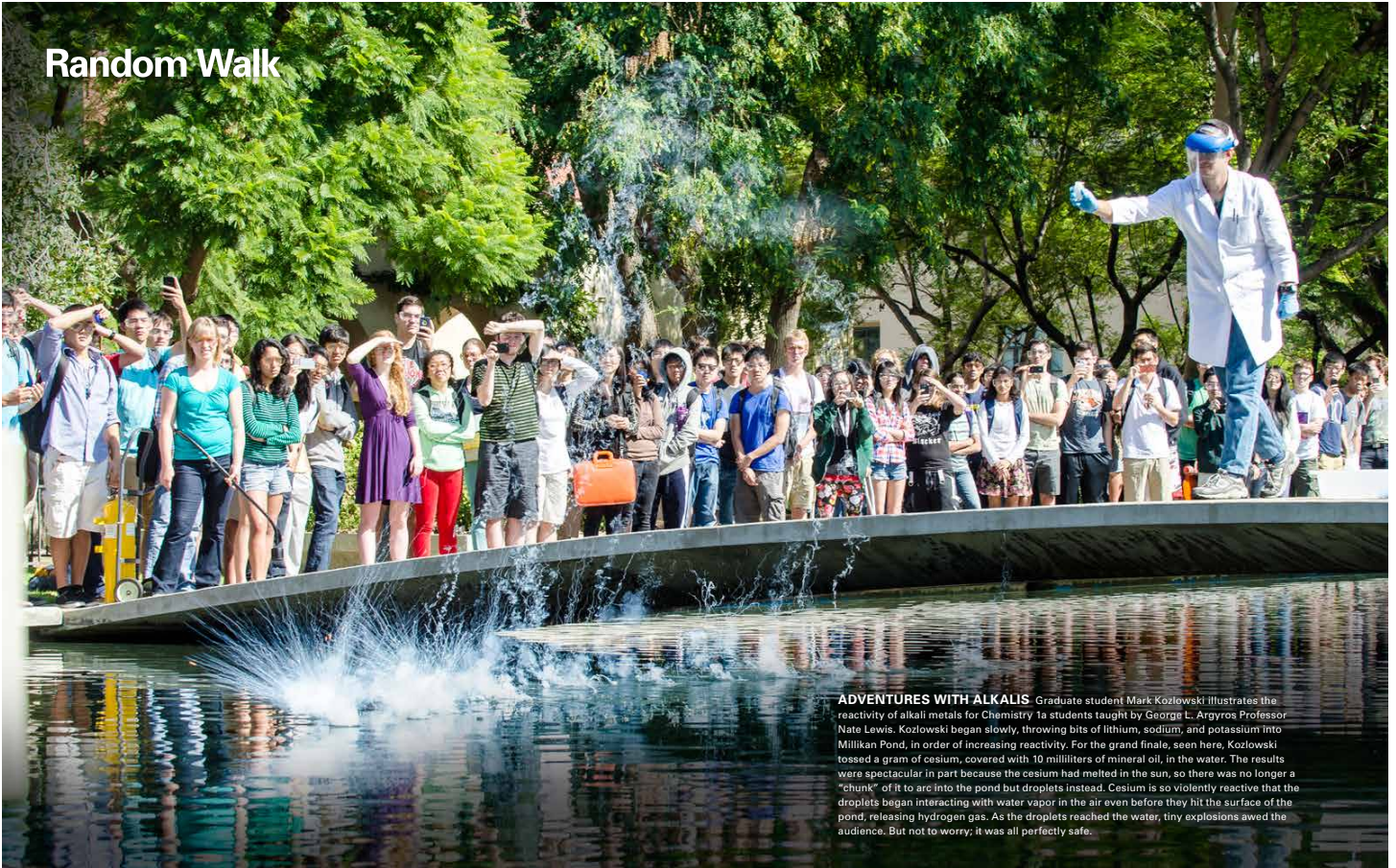


Random Walk



ADVENTURES WITH ALKALIS Graduate student Mark Kozlowski illustrates the reactivity of alkali metals for Chemistry 1a students taught by George L. Argyros Professor Nate Lewis. Kozlowski began slowly, throwing bits of lithium, sodium, and potassium into Millikan Pond, in order of increasing reactivity. For the grand finale, seen here, Kozlowski tossed a gram of cesium, covered with 10 milliliters of mineral oil, in the water. The results were spectacular in part because the cesium had melted in the sun, so there was no longer a “chunk” of it to arc into the pond but droplets instead. Cesium is so violently reactive that the droplets began interacting with water vapor in the air even before they hit the surface of the pond, releasing hydrogen gas. As the droplets reached the water, tiny explosions awed the audience. But not to worry: it was all perfectly safe.