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David Damanik (damanik@its.caltech.edu), Department of Mathematics, California Institute of Technology, Pasadena, CA 91125, **Robert Sims*** (sims@math.uab.edu), Department of Mathematics, University of Alabama at Birmingham, 1300 University Blvd., Birmingham, AL 35294-1170, and **Gunter Stolz** (stolz@math.uab.edu), Department of Mathematics, University of Alabama at Birmingham, 1300 University Blvd., Birmingham, AL 35294-1170. *Localization for One Dimensional, Continuum, Bernoulli-Anderson Models.*

We use scattering theoretic methods to prove strong dynamical and exponential localization for one dimensional Anderson-type models with singular distributions; in particular the case of a Bernoulli distribution is covered. The operators we consider model alloys composed of at least two distinct types of randomly dispersed atoms. Our main tools are the reflection and transmission coefficients for compactly supported single site perturbations of a periodic background which we use to verify the necessary hypotheses of multi-scale analysis. We show that non-reflectionless single sites lead to a discrete set of exceptional energies away from which localization occurs. (Received October 02, 2000)