1. Record Nr.   UNINA9910366634803321

   Autore   Li Li

   Titolo   Modeling the Fate of Chemicals in Products / / by Li Li

   Pubbl/distr/stampa Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020

   ISBN   981-15-0579-9

   Edizione   [1st ed. 2020.]

   Descrizione fisica 1 online resource (119 pages)

   Collana   Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053

   Disciplina   363.705

   Soggetti   Environmental management
                      Urban ecology (Biology)
                      Environmental chemistry
                      Environmental sciences
                      Environmental Management
                      Urban Ecology
                      Environmental Chemistry
                      Math. Appl. in Environmental Science

   Lingua di pubblicazione Inglese

   Formato   Materiale a stampa

   Livello bibliografico Monografia

   Nota di contenuto Introduction: Modeling the fate of chemicals in products in the total environment -- Modeling the fate of chemicals in products in the anthroposphere and environment -- Global long-term fate and dispersal of polychlorinated biphenyls -- The degradation of fluorotelomer-based polymers contributes to the global occurrence of fluorotelomer alcohol and perfluoroalkyl carboxylates -- Elucidating the variability in the hexabromocyclododecane diastereomer profile in the global environment -- Effective management of demolition waste containing hexabromocyclododecane in China.

   Sommario/riassunto This thesis provides a novel methodological basis for mechanistically understanding the dynamics of chemicals in products (CiPs) in the anthroposphere and physical environment and establishes a modeling continuum from production of a chemical to its concentrations in various environmental compartments. Using this framework, the thesis investigates how CiPs are transported and transformed and how they accumulate in the global environment. Furthermore, it identifies the

measures needed to minimize their adverse effects on the environment and human society. It serves as an invaluable, interdisciplinary reference resource for industrial ecologists, environmental chemists and decision-makers involved in environmentally sound management of CiPs and associated waste.