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"This book will cover the reliability of photovoltaic modules. Since PV modules are required to produce electricity for a long time (typically 20 to 30 years) their reliability and durability are key to their commercial success. As PV has now grown into a large industry the reliability is even more critical. Failure of the modules in even one large system could lead to the loss of hundreds of millions of dollars. To understand why PV modules are usually considered a very reliable product, this book will review the history of the reliability efforts showing how field failures were used to develop accelerated stress tests that were then used to provide quick feedback on changes to the products that improved their reliability. Once the reader understands how the industry arrived at its present state, the book will turn to the future, looking at what will be necessary in order to develop a methodology for providing a service life prediction. PV is now a fairly well known technology with many systems deployed on residential rooftops, commercial buildings and utility scale fields. This of course was not the case as recently as the mid-1990s. Module reliability has been one of the critical requirements in the growth of PV. Over this time frame the cost of PV modules has gone from more than \$10/per peak watt to less than \$0.5 per peak watt. During that same time period module warranties have increased to 25 years or more with the necessary reliability and durability. Going forward we expect to see module prices continue to decline as PV reaches grid parity for most if not all applications. It is imperative that the module reliability be maintained in this transition to lower cost. It is also critical that better Quality Assurance methods and improved accelerated stress tests be developed in order to provide service life predictions for deployment in any terrestrial environment. Investors want better tools for predicting the long term performance than what is available today"--