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Introduction

SPIE has been sponsoring conferences on fiber optic sensor technology for over 30 years, and the Fiber Optic Sensors and Applications VI conference continues this tradition. Three fiber optic sensor conferences have been combined in an effort to provide a more comprehensive overview of the technology and its applications than could have been provided by a single conference. It is hoped that in the future this conference will offer a yearly venue for useful discussions between researchers and developers of this technology, as well as those who are striving to apply it to the real world.

Over the past 30 years, some of the technology has reached considerable maturity with the widespread deployment of fiber optic gyro technology, the usage of fiber optic acoustic sensors for undersea applications, fiber optic current sensors used to support electrical grids, and widespread deployment of fiber optic sensors on civil structures worldwide. This maturity has lead to an increase in the number of companies offering fiber optic sensor products and the overall size of the market. At the same time, there are many application areas that have yet to be explored which has resulted in a number of new fiber optic sensor designs that offer promise of new markets in the future. It is also apparent that each new application brings new sets of challenges as well as opportunities.

The result has been a continuing revitalization of the fiber optic sensor field that is apparent in the papers that are contained in these proceedings.

Eric Udd
Anbo Wang
Henry Du