

Proceedings of the 2nd Italian Conference on  
Sensors and Microsystems

**ARTIFICIAL**  
**AND**  
**NATURAL**  
**PERCEPTION**

BIBLIOTHEQUE DU CERIST

Editors

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C. Di Natale

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F. Davide

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## FOREWORD

This book collects a selection of the papers that were presented at the Second Italian Conference on Sensors and Microsystems. The Conference was held on the 3 - 5 February 1997, at the Aula Convegni of the National Research Council (CNR) in Rome.

In this Conference a link between sensors fields and perception theory was attempted. Indeed the development of sensors and microsystems, currently done by academic and industrial researchers, shows many links with the latest achievements in the field of artificial and natural perception. For this reason a basic session, dedicated to this topic, has been organized, in order to provide arguments for a new definition of the sensors and microsystems science and to the role of this discipline in the whole human frame.

The content of this book also shows the pre-competitive applied research and some new aspects in the sensors field. The Conference also pointed out the benefits coming from interdisciplinary actions among researchers. This fact represents a guide line for the future planning research and developments in the sensors and microsystems discipline.

The Conference was organized by the Italian Association of Sensors and Microsystems (AISEM). At the present the AISEM gathers together more than 150 researchers representing research laboratories of universities and public research centers (75%) and industrial laboratories (25%).

Deep thanks are due to Prof. Enrico Garaci, Chairman of the CNR, for the support given to the Conference. Appreciations are also due to the members of the Scientific and Organizing Committees for their help and to Mrs. Claudia Spotorno for her cooperation to the organization of the Conference.

It is a pleasure to acknowledge the support of Telecom Italia SpA especially for promoting the session on Artificial and Natural Perception.

Corrado Di Natale  
Arnaldo D'Amico  
Fabrizio A.M. Davide

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**DURING THE CONFERENCE THE FOLLOWING PAPERS WERE AWARDED:**

*A. Curulli, I. Carelli, G. Palleschi*

Enzyme electrode probes obtained by electropolymerization of monomers with PMS and selected dehydrogenase enzymes

*C. Di Natale, E. Proietti, R. Diamanti, A. D'Amico*

Modelling and control in semiconductor manufacturing with a multisensor system and a modular neural network

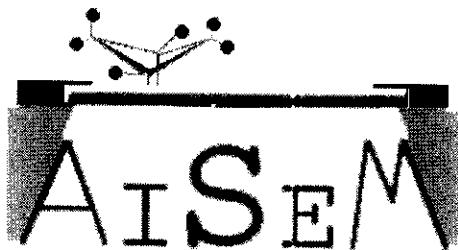
*G. Amato, L. Boarino, N. Brunetto, V. laquaniti, S. Maggi, E. Monticone, R. Steni, G. Benedetto, R. Spagnolo*

Realisation of a superconducting bolometer on "silicon aerogels": an innovative process for thermal insulation of sensors

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AISEM has been founded in the 1995. Its main scope is to contribute to improve the quality of the research in the fields of Sensors and Microsystems and to strength the links between academic and public research institutions and the small and medium companies.

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