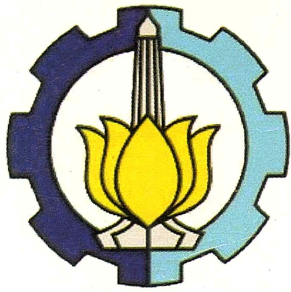


Lamp "A"

ISSN : 2086-1931

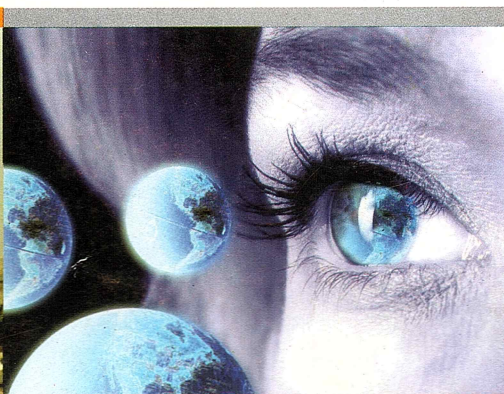
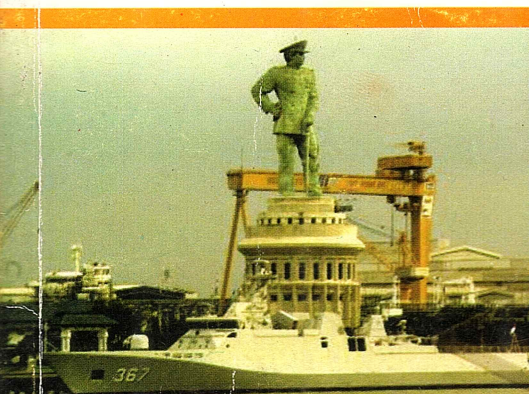


ITS
Institut
Teknologi
Sepuluh Nopember



THE PROCEEDING

Grha ITS, December 6, 2011

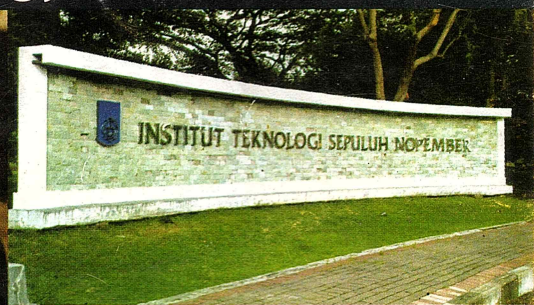


3rd

APTECS

2011

International Seminar on Applied Technology, Science, and Arts



"Resources Optimization Based on Science and Technology for Nations' Self-Reliance"

IPTEK

The Journal for Technology and Science



The UNIVERSITY
of NEWCASTLE
AUSTRALIA



UNIVERSITI
TEKNOLOGI
PETRONAS



LPPM - ITS



PROCEEDING

**3rd INTERNATIONAL SEMINAR
ON APPLIED TECHNOLOGY, SCIENCE AND ARTS -
APTECS 2011**

THEME

**RESOURCES OPTIMIZATION BASED ON
SCIENCE AND TECHNOLOGY FOR NATIONS'
SELF-RELIANCE**

GRHA SEPULUH NOPEMBER, 6 December 2011

Organized by :

Institute of Research and Public Services (LPPM)

INSTITUT TEKNOLOGI SEPULUH NOPEMBER

2011