

2022 IEEE Ocean Engineering Technology and Innovation Conference: Management and Conservation for Sustainable and Resilient Marine and Coastal Resources (OETIC 2022)

**Surabaya, Indonesia
19-20 December 2022**



**IEEE Catalog Number: CFP22BE6-POD
ISBN: 979-8-3503-9708-6**

**Copyright © 2022 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP22BE6-POD
ISBN (Print-On-Demand):	979-8-3503-9708-6
ISBN (Online):	979-8-3503-9707-9

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENT

	Page
Opening remarks by Conference Chair: Dr. Endang Widjiati	iii
Welcome Speech Chair of IEEE OETEMS Joint Chapter Dr. Marina Frederik	iv
TPC / Reviewers	v
Author Index	vi
Schedule Conference Agenda	vii
1 Optimal Convex Relaxation-Based Wavelet Covariance Transform for More Robust AOD-PM Characterization and Tracer Tracking of Biomass Burning over Land/Sea Boundary Regions	1
2 Indonesia National Oceanographic Data Center (InaNODC): Design, Function, Deployment and Maintenance	11
3 Data Analysis and Visualization of INA-CBT Labuan Bajo System	17
4 Development of Real-Time Tsunami Early Warning System Dashboard Based on Tunami-F1 and Machine Learning in Sunda Arc, Indonesia	23
5 An FFT-Based Method for Wave Decomposition from Wave and Tide Monitoring Using A01NYUB Sensor	30
6 Performance of SCHAT Sequences in Multicarrier Underwater Acoustic Communications System	38
7 Effects of Different Hydrophone Sensitivities on Underwater Signal Measurement in the Test Tank	43
8 Underwater Acoustic Noise Characterization in Sunda Straits Waters	49
9 Efficient Image Transmission in UWA Channel	55
10 Underwater Acoustic Location Estimation of Flight Recorder Using Onboard Ad Hoc Wireless Sensor Network	62
11 Preliminary Investigation of the Mooring Line Tension of the Quad-Spar Tidal Current Power Plant Prior to Operation	70
12 Application of Multibeam Data for the Identification of a Possible Free Span on a Subsea Pipeline	74
13 Two-Phase Modelling of Pipeline Scouring in OpenFOAM	78
14 Precise Vessels Positioning in a Coastal Zone	83
15 Designing AIS Link Based on Software Defined Radio for LEO Satellites	88
16 Finite Element Analysis for Structural Strength of High-Density Polyethylene Material on Midship Boat Structure	93
Organizing Committee	99