As a continuation from the first and second Maritime Sciences and Advanced Technology (MSAT) conference on August 3-5, 2017, in Denpasar, Bali, and on August 7-8, 2019 in Makassar, we heartfully worked on the 3rd MSAT Conference “Toward Ocean Sustainability for a Better Future Through Sciences and Technology” initially taken place at Pangandaran Integrated Aquarium and Marine Research Institute (PIAMARI), Pangandaran, West Java, 5-6th August 2021 (https://msat.fitb.itb.ac.id/). This conference is one of our Memorandum of Agreement the implementations between the Faculty of Earth Science and Technology - ITB, Geospatial Information Agency of Indonesia, and the PIAMARI, Maritime Affairs and Fisheries.

Topic, as mentioned above, is chosen to support Sustainable Development Goals (SDGs) promoted by the United Nations. The Maritime science, and technology targets at least the SDGs no 13 and 14; Climate Action and Life below water. While several others like no. 1 (No Poverty) and 2 (Zero Hunger) and no. 7 (Affordable and clean energy) are also strongly workable from the Maritime section, especially our country as we are the second-largest coastline in the world. This makes 60% of our citizens live in the coastal area. Moreover, our earth system is highly likely sensitive to climate change and might continuously affect the future climate. The global surface temperature will continue to increase until at least the mid-century under all emissions scenarios considered. Global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in CO₂ and other greenhouse gas emissions occur in the coming decades.

Our first Conference proceeding (Volume 62) was published at IOP on 06 July 2018 (https://iopscience.iop.org/issue/1755-1315/162/1), and our second conference proceeding (Volume 618) was published at IOP on 21 December 2020 (https://iopscience.iop.org/issue/1755-1315/618/1). The proceeding covers the important impact of the geographical position of the Indonesian Seas. We have welcomed various research findings from the aspects of Ocean-Atmosphere Dynamics, Marine Hazard and Coastal Degradation, Marine Resources, Conservation and ICZM, and Marine Geodesy and Satellite Oceanography – as have become the sessions. Therefore, in this Conference Proceeding, readers might discover the recent issue and results of research in the broad topics of maritime science and advanced technology.

Unfortunately, the 3rd MSAT must be held online using the Zoom platform due to Covid-19. On June-September 2021, Indonesia was experiencing the high-risk status of Covid-19, which was under activity restrictions. We chose to keep the dates fixed on August 5-6, 2021, although we have to hold the conference virtually instead of postponing it on other dates. The reason is to keep all the speakers on schedule, and administration supports are in place. Additionally, world oceans day, commemorated on June 8, was framed for celebration. By the advantages, participants from many remote areas in Indonesia joined this virtual conference.

The organizers were in 3 different cities of Bandung (ITB), Jakarta (BIG), and Pangandaran (PIAMARI). In Bandung, the MSAT committee was assigned to the faculty within several different rooms to comply with the health protocol during the pandemic. The participants who attended online on the first and second day were about 250 participants from various institutions and universities in Indonesia and teachers in Pangandaran, 3 keynote speakers and 9 invited speakers, and 53
The invited speakers were well-known scientists around the world (USA, China, Japan, Korea, Australia, and New Zealand), hence attracted some participant from abroad. The opening was opened by the Dean of the Faculty of Earth Science and Technology, Dr. Irwan Meilano, S.T., M.Sc., and ITB Chancellor, Prof. Reini Wirahadikusumah. After that, it was continued with the Keynote Speaker of the Minister of Maritime Affairs and Fisheries of Indonesia, Mr. Ir. Sakti Wahyu Trenggono, M.M., and continued with a mini session which was opened with a breakout room system (Room A, B, C, D, and E) on Zoom. Keynote Speakers were given 30 minutes to present the talk, and Invited speakers were allocated for 20 minutes talk and 10 minutes Q&A session guided by the assigned moderator. Meanwhile, every participant presents their works maximum of 15 minutes, followed by 5 minutes of Q&A session guided by the moderator for each morning and afternoon session. The event starts on time from 08.00 to 17.00. The MSAT event can also be watched through the Oceanography Study Program Youtube: Oceanography ITB (https://www.youtube.com/channel/UCtLdITrN051L6wpa5KtwG7A)

Minor obstacles due to technical issues such as low internet connection from presenters, failure on audio, and lack of coordination during breakout-room sessions did appear. However, it was manageable and solved within a bit of time. Hence, the 3rd MSAT went well.

Last but not least, we would like to sincerely appreciate all of the parties for the successful of the 3rd MSAT. We express special acknowledgement to the Ministry of Research and Technology – Higher Education of Indonesia, Faculty of Earth Sciences and Technology - Institut Teknologi Bandung, and Geospatial Information Agency Republic of Indonesia (BIG) for the financial support. We deeply express our gratitude for organizing committee, keynote and invited speakers, reviewers, editors, and editing staffs for fully dedication, tireless efforts, and continuing hard work along the conference events and the process of this proceeding publication. We also deeply appreciate all of participants and authors for the excellent participating and taking the best opportunity for disseminating, discussing, and publishing the papers. Finally, we hope this proceeding provides the readers up to date and prominent information in maritime science and advanced technology from various points of view.

The organizing committee is listed as follows.

- Steering Committee:
  - Dr. Irwan Meilano, S.T., M.Sc.
  - Dr. rer.nat. Mutiara Rachmat Putri, S.Si., M.Si.
  - Agus Mochamad Ramdhan, S.T., M.T., Ph.D.

- Organizing Committee
  - Chair: Ivonne M. Radjawane, M.Si., Ph.D.
  - Members:
    1. Dr. Ayi Tarya
2. Dr. Eng. Aditya R. Kartadikaria
3. Dr. rer. nat. Rima Rachmayani
4. Faizal Ade R. Abdullah, M.Si.
5. Hanif Diastomo, M.Sc.
6. Iwan P. Anwar, M.Si.
7. Ardian Mahiru Rizal, S.Si.
8. Erlin Beliyan, S.Si., M.Si.
9. Avrionest, S.Si., M.Si.
10. Elgodwistra Kartikoputro, S.Si
11. Suseno Wangsit Wijaya, S.Pi.,M.Eng
12. Nursugi, ST
13. Gin Gin Gustiar, S.Si
14. Sri EKA WATI, S.Si., M.Sc
15. Muhammad Taufik, S.I.K
16. Fachmi Zain
17. Dr. Agus Setiawan
18. Rikha Bramawanto
19. Yuni Ari Wibowo

• Editorial Committee
  Chief Editor: Dr. R. Dwi Susanto
  Member:
    o Dr. rer. nat. Rima Rachmayani
    o Iwan Pramesti Anwar, M.Si
    o Erlin Beliana, M.Si
    o I Made Dharma Raharja
    o A.R. Khairun Nisa’, M.Si
    o Siti Tamalia Zuyayda
    o Kholillah Yudicia Isnaeni
    o Edwin Aprianta Winardi
    o Adelina Lumbangaol
    o Adinda Maharani

Photo documentation:
The 3rd International Conference on Maritime Sciences and Advanced Technology

IOP Publishing

IOP Conf. Series: Earth and Environmental Science 925 (2021) 011001
doi:10.1088/1755-1315/925/1/011001
