



Microbial Bioprocess Method for Sustainable Squalene Production to Replace Shark Liver Oil in Industrial Applications

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PT. Pertamina Research and Technology Innovation
Kedaireka Matching Fund 2023

Our Team: UAD – PT. Pertamina RTI - BRIN



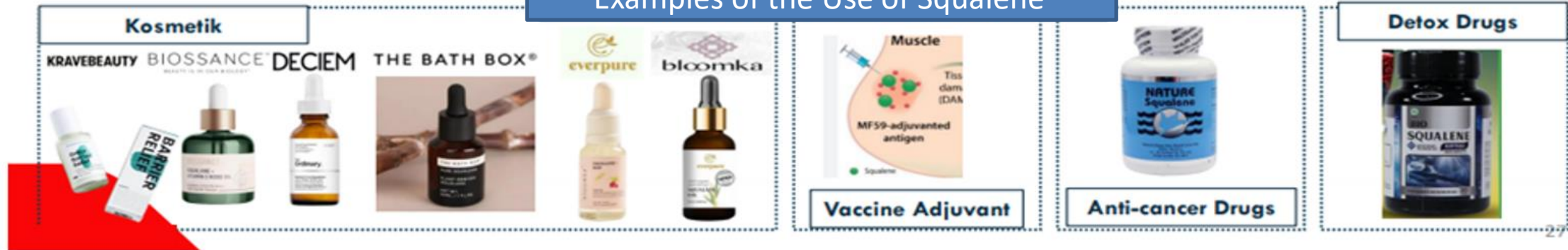
PT. PERTAMINA RESEARCH & TECHNOLOGY INNOVATION



NATIONAL RESEARCH AND INNOVATION AGENCY (BRIN), SERPONG

National Demand on Squalene

Examples of the Use of Squalene



Squalene is a natural compound that is often used as an active ingredient for moisturizing, anti-aging or antioxidant supplements.

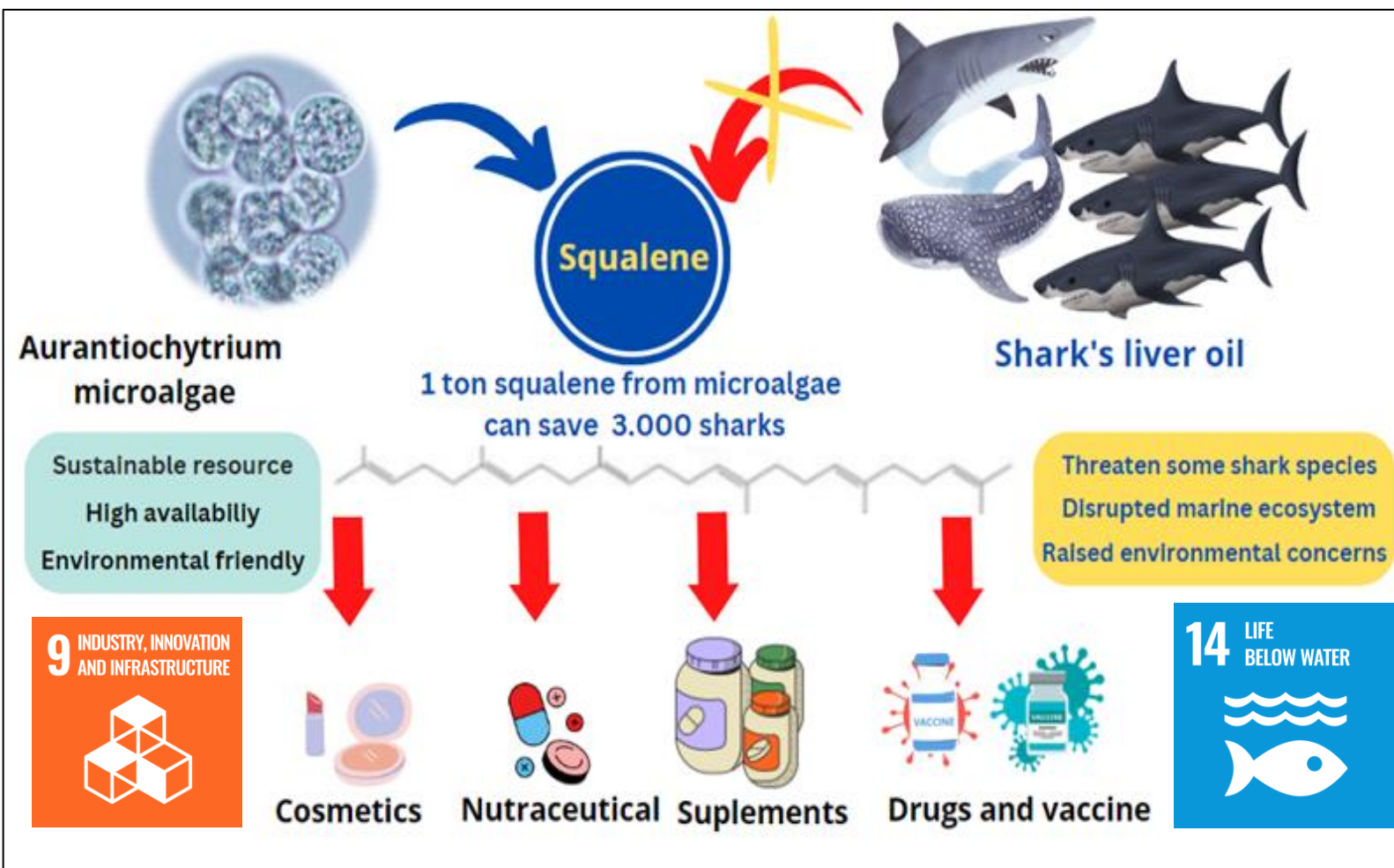
The benefits of squalene can also increase immunity and are used as an adjuvant vaccine covid-19.

Indonesia is currently unable to produce in industrial scale of squalene and is still importing



Great potential to build its own with alternative from Indonesian natural resources

Our Innovation Concept

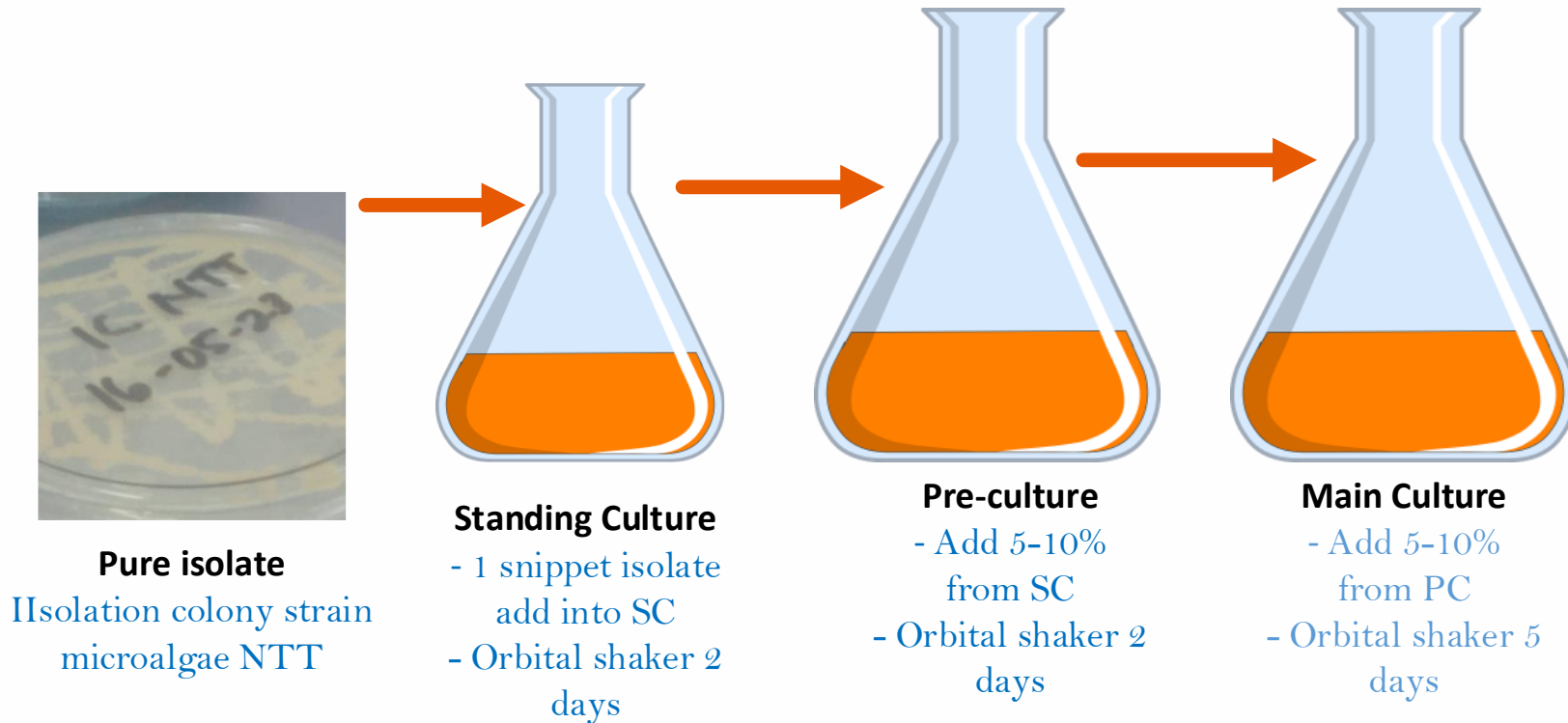


Replacing the source of squalene feedstock from shark oil and other fish using Aurantiochytrium microalgae.

1 ton of squalene requires 3,000 sharks. If to build a national squalene plant with an initial capacity of 10 tons / year, it saves 30,000 sharks per year.

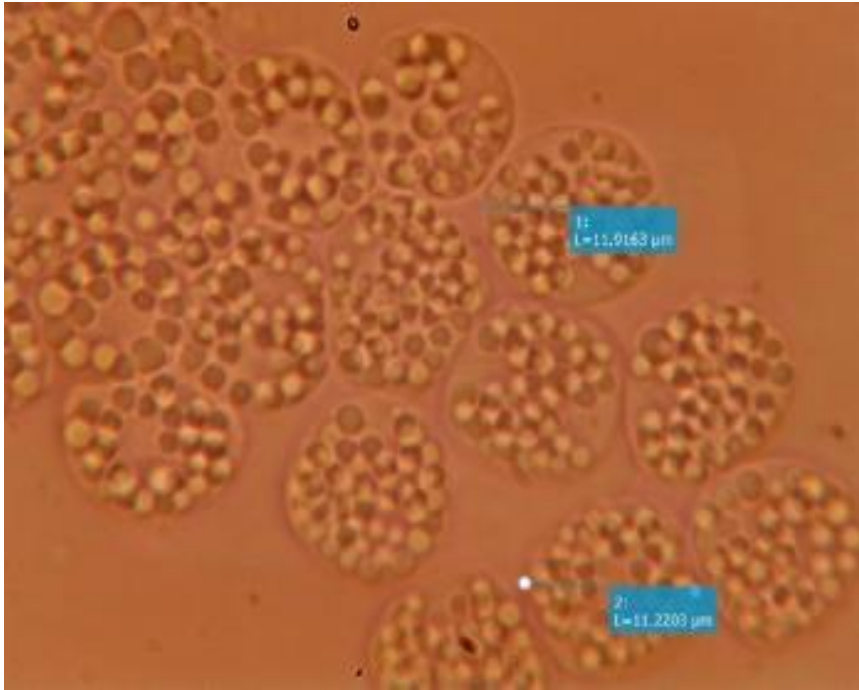
1 vial of vaccine contains 10 mg of squalene as a vaccine adjuvant. If to meet 250 million Indonesians the production of squalene from microalgae saves at least 7.5 million sharks.

EXPERIMENT

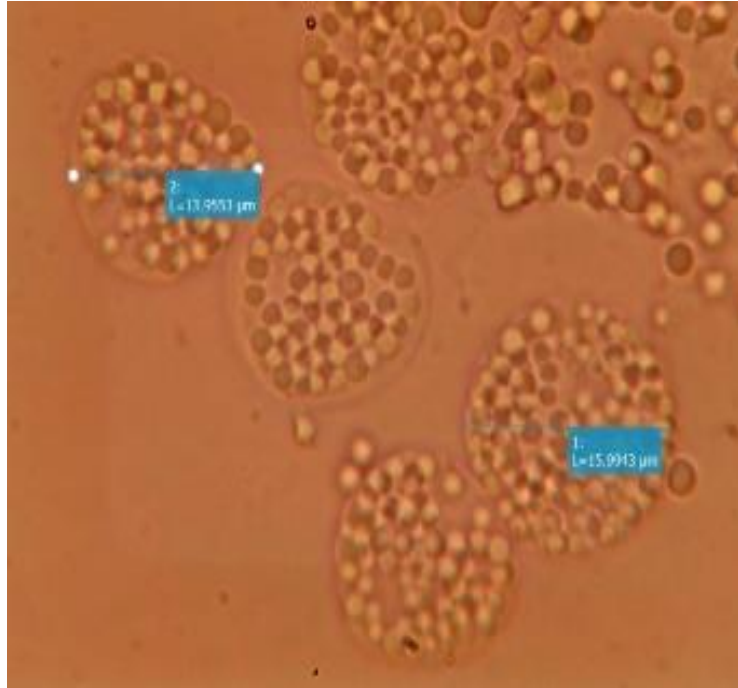


**The study used strains isolated from Lasiana Beach, Kupang,
Nusa Tenggara Timur (NTT) Province.**

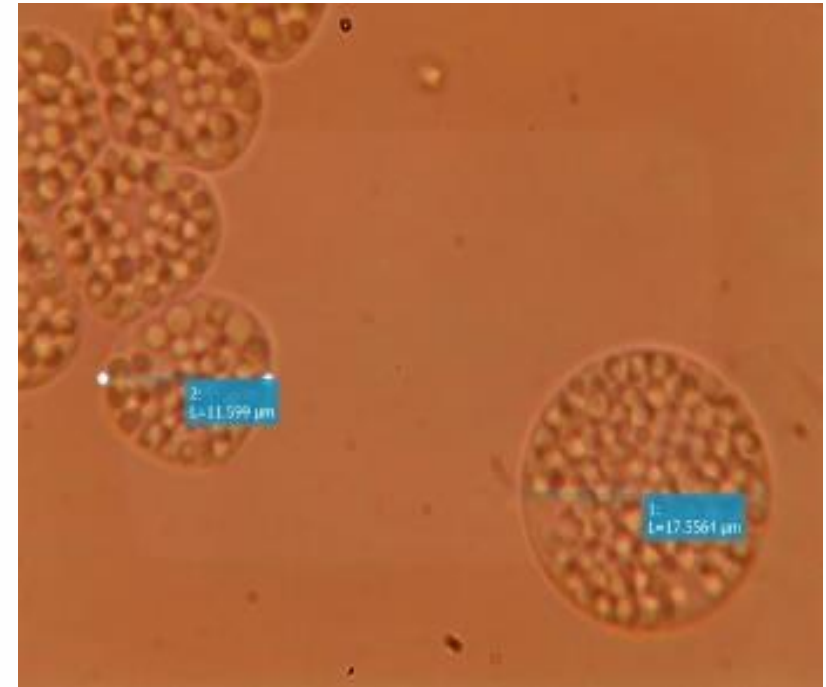
The Micrograph of Microalgae Strain



Standing culture



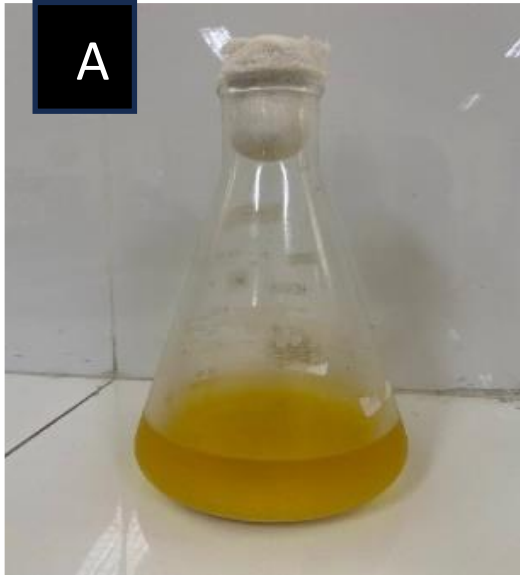
Pre culture



Main culture

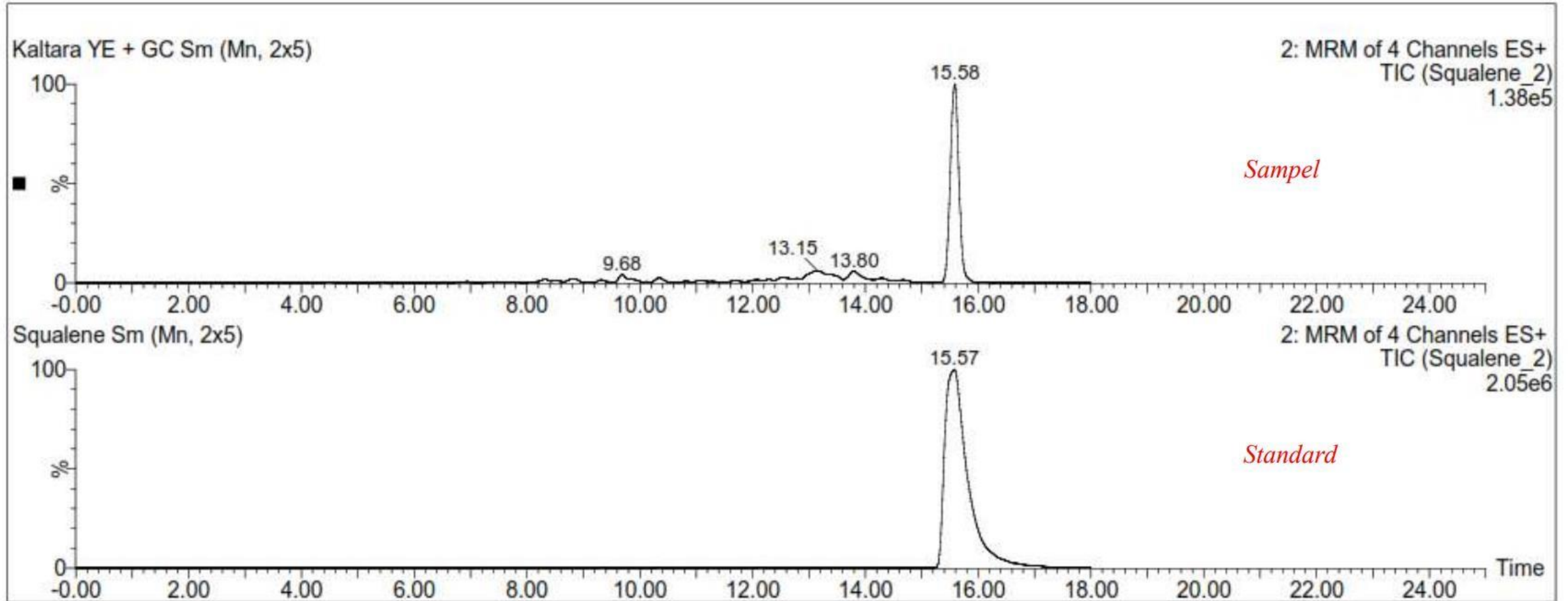
The pure isolate diameter is 8 μ . The diameter of the standing culture is 12 μ , the pre-culture is 16 μ , and the main culture is 18 μ .

RESULT



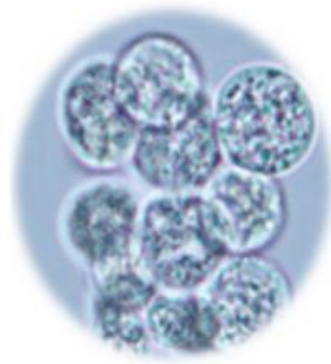
(A) SC Liquid, (B) Biomass liquid, (C) Wet biomass, (D) Dried Biomass

Squalene in Our Strain



Conclusions

Aurantiochytrium
microalgae



saves



Millions
endangered
species of shark

Squalene is high demanded in industrial applications for cosmetics, nutrition and pharmaceuticals products

Our experiment revealed that we can produce squalene from Aurantiochytrium microalgae

Further use of this microbial approach can replace conventional production of squalene from shark liver oil.

Our Activities



A



B



C



D



E



F



G



H

Our laboratory production consists of several steps, namely:

- A. Sampling from Mangrove Forests
- B. Isolating pure strain of microalgae
- C. Using laminar air flow
- D. Cultivation in lab-scale Erlenmeyer
- E. Centrifugation for biomass separation
- F. Drying
- G. Cultivation in laboratory fermenter at BRIN Serpong
- H. Producing biomass

The analysis of squalene was conducted at ITB Bandung

Thank you



TECHNICAL IMPLEMENTATION OF PARALLEL SESSION ICSE 2023

Dear participant, prior to the day of the conference, we would like to inform you that:

1. All time in the program schedule is in Western Indonesia Time / Waktu Indonesia Barat (WIB; GMT+7). Please pay attention and adjust it to your local time. Current time in WIB can be found on <http://time.bmkg.go.id/>.
2. For all accepted and registered papers are required to submit presentation materials in the PPT and PDF files form
3. In order to avoid the internet connection issue during your presentation, we suggest all presenters to submit a video recording of the paper presentation, with a maximum duration of 7 minutes, in a mp4 format
4. Video and presentation materials (ppt and pdf) are sent via <https://bit.ly/ICSEPresentation2023> no later than August 6, 2023 at 20.00 WIB.
5. The committee will announce the schedule of all participant sessions in each cluster on the WhatsApp Group (<https://chat.whatsapp.com/LnHZrIZX5sX5wkwjfTq0Nk>) and via email to each participant.
6. During ICSE the presenter is required to use a virtual background. Our team will take screenshots of the presenter during the presentation session.
7. The maximum duration of the presentation is 7 minutes and the Q&A is 5 minutes.
8. To facilitate coordination, presenters should join WhatsApp groups (<https://chat.whatsapp.com/LnHZrIZX5sX5wkwjfTq0Nk>) according to a predetermined cluster with a link sent via email.

We look forward to seeing you on August 7-8, 2023.

Regards,

ICSE 2023 parallel session committee



PARALLEL SESSION SCHEDULE ICSE 2023

Faculty of Science and Technology, UIN Sunan Kalijaga Yogyakarta
August 7 – 8, 2023

Day 1. August 7 2023

Room 1 (Online Presenter)

Cluster : Material Science (1)

Zoom : https://bit.ly/ROOM1_ICSE

Room : Room 402 GKT 4th Floor

Moderator : Ir. Trio Yonathan Teja Kusuma, S.T., M.T., IPM.

Time	ID	Authors	Title
14.00-14.15		Opening Parallel Session	
14.15-14.30	5014	Siwi Qoirinisa, Endaruji Sedyadi, Dodi Irwanto, Karmanto	The Effect of Adding TiO ₂ Filler on The Physical and Mechanical Properties of Bioplastic Based Potato Starch (<i>Solanum tuberosum</i> L.) and Glycerol from Waste Cooking Oil
14.30-14.45	5003	Revvan Rifada Pradiza, Mochamad Asrofi, Hari Arbiantara Basuki, Salahuddin Junus, Melbi Mahardika, Putri Amanda, R. A. Ilyas, M. R. M. Asyraf	Biocomposite Material from Polyvinyl Alcohol (PVA)/Cassava Starch Reinforced by Lemon Peel Fiber: Tensile and Fracture Morphology Characteristic
14.45-15.00	3011	Aria Wira Yuda, Amir Arifin, Irsyadi Yani, Barlin Oemar	Titanium Nitriding: A Systematic Literature Review
15.00-15.15	4006	A.Aziz, Hikmatun Ni'mah, Tri Widjaja	Synthesis of Poly Lactic Acid from Lactic Acid Using Direct Polycondensation Method Using Al(DS) ₃ and AlCl ₃ Catalysts
15.15-15.30	5009	Hilmy Dzaki Arisandi, Mochamad Asrofi, Revvan Rifada Pradiza, Intan Hardiatama, Salahuddin Junus, Melbi Mahardika, Putri Amanda, R. A. Ilyas	Properties of Biocomposite Films Based PVA/Potato Starch Filled by Coffee Ground Waste
15.30-15.45	5010	Mutiara Eka Permata, Endaruji Sedyadi, Dodi Irwanto, Karmanto	The Effect of Adding Variations in Glycerol Concentration from Used Cooking Oil on the Physical Properties of Edible Film Made from Potato Starch
15.45-16.00		Closing Parallel Session	



Room 2 (Online Presenter)

Cluster : Material Science (2)

Zoom : https://bit.ly/ROOM2_ICSE

Room : Room 403 GKT 4th Floor

Moderator : Anti Damayanti, H S.Si., M.Mol.Bio.

Time	ID	Authors	Title
14.00-14.15	Opening Parallel Session		
14.15-14.30	4007	Alvina Lutviyani, Endaruji Sedyadi, Ihda Novia Indrajati	Biosynthesis and Characterization of Edible Films from Kepok Banana Peel Starch with a Combination of Glycerol-Sorbitol Plasticizer
14.30-14.45	5002	Kapil Gupta	A Research Study on Surface Roughness, Corrosion Rate, and Wire Erosion during WEDM of Wc-Co Composite
14.45-15.00	5013	Firman Kurniawansyah, OK Ahmad Ariq, Bunga Widianan N, Eka Maulana Idzati, Hikmatun Ni'mah, Himawan TBM Petrus, Mahfud Mahfud	Development of Geothermal Sludge Derived – Silica Catalyst for Sago Starch Hydrolysis
15.00-15.15	2006	Astri Arnamalia, Endaruji Sedyadi, Dodi Irwanto and Esti Wahyu Widowati	Physicomechanical Properties of Edible Film with the Addition of Red Ginger (Zingiber Officinale Var. Rubrum) and its Application to Tomato (Lycopersicum Esculentum)
15.15-15.30	4001	Muhammad Arief Rubani, Arli Aditya Parikesit	Molecular Simulation of Coffee Beans' Natural Products as Lead Compounds for Stroke Remedy
15.30-15.45	4004	Solomon Achimugu	Effect of Soaking Time on the Nutrients Composition and Sensory Properties of Soymilk
15.45-16.00	Closing Parallel Session		



Room 3 (Online Presenter)

Cluster : Sustainability (1)

Zoom : https://bit.ly/ROOM3_ICSE

Room : Room 404 GKT 4th Floor

Moderator : Dias Idha Pramesti, S.Si., M.Si.

Time	ID	Authors	Title
14.00-14.15	Opening Parallel Session		
14.15-14.30	1002	Hanindyo Adi, Sudaryatno, Sukirno, Suwarno Hadisusanto	Does the Red Palm Weevil <i>Rhynchophorus ferrugineus</i> Exist in Indonesia? a Review
14.30-14.45	1003	Suherman, Ilmi, Muhammad Sabri, A.S.Silitonga	Effect of Reaction Time on Production Biodiesel of <i>Schleichera Oleosa</i>
14.45-15.00	1005	Umi Latifah, E.L.Widiastuti, N.Nurcahyani, G.N Susanto	The Effect of Food Addition of Taurine and <i>Gracillaria</i> Sp on the Growth of Juvenile Gouramy (<i>Osphronemus gouramy</i> Lac .)
15.00-15.15	1010	Ria Amelia, Eko Agus Suyono	Biofuel Production by Utilizing Tofu Wastewater and Napthalene-Acetic Acid as an Alternative Medium for <i>Euglena</i> sp
15.15-15.30	4003	Khalimatus Sa'diyah, Christyfani Sindhuwati, Profiyanti Hermien Suharti, Fathur Rohman, Cucuk Evi Lusiani	Coconut Shell, Rice Husk, and Corn Cob Pyrolysis with Zeolite Catalyst to Produce Liquid Smoke
15.30-15.45	1004	Ejah Said Mansur, Mahmud Rizal Mustopa, Ricky Habibullah, Shofwatul Uyun	Identification of Disease in Tomato Plants Based on Image : Systematic Literature Review
15.45-16.00	Closing Parallel Session		



Room 4 (Offline Presenter)

Cluster : Sustainability (2)

Room : Room 407 GKT 4th Floor

Moderator : Dr. Ika Nugraheni Ari Martiwi, S.Si., M.Si

Time	ID	Authors	Title
14.00-14.15	Opening Parallel Session		
14.15-14.30	1006	Ismed Ismed, Rina Yenrina, Hasbullah Hasbullah, Yusniwati Yusniwati, Daimon Syukri, Tuty Anggraini, Annisa Rizki Mardiah	The Effect of Crude Ficin Enzyme Concentration on the Characteristics of Peptones from Yellowfin Tuna (Thunnus Albacares) Dark Meat
14.30-14.45	1009	Suhendra, Martono Setyawan, Karima Anggita Wijayanti, Selva Mazareta, Irika Devi, Anggraini, Septhian Marno, Andri Hutari	Microbial Bioprocess Method for Sustainable Squalene Production to Replace Shark Liver Oil in Industrial Applications
14.45-15.00	1001	Zulfa Ahmad Nurkholiq, Sudarlin Sudarlin	The Effect of Position of Cyano-3-Acetic Acid Electron Withdrawing Group on γ -Mangostin as a Sensitizer on Dye-Sensitized Solar Cells (DSSC): Theoretical Study
15.00-15.15	5004	Sekar Tri Wulan Amelia, Shafira Nur Adiningsih, Tantular Nurtono, Heru Setyawan, and W. Widiyastuti	Citric Acid-Mediated Crosslinking and its Impact on Cellulose-Gelatin Film from Extracted Avocado Seed Waste
15.15-15.30	1008	ARIFAH Khusnuryani, EKA Sulistiyowati	Perception of Household Water Supply in Yogyakarta (Indonesia) and Hanoi (Vietnam)
15.30-15.45	4002	Mochammad Purwanto, M. Anuari Ramdani, Wildan Wahyu Firdhaus, Rachmad Yogaswara	Bioelectricity Production Through Dual-Chamber Microbial Fuel Cell Using Tofu Liquid Waste: Effect of differences in electrolyte solutions
15.45-16.00	Closing Parallel Session		



Room 5 (Offline Presenter)

Cluster : Material Science and Industrial Chemistry

Room : Room 408 GKT 4th Floor

Moderator : Dian Aruni Kumalawati, M.Sc.

Time	ID	Authors	Title
14.00-14.10	Opening Parallel Session		
14.10-14.25	5005	Shafira Nur Adiningsih, Sekar Tri Wulan Amelia, W. Widyastuti, Heru Setyawan, and Tantular Nurtono	Effect of Cellulose Sonication Pre-Treatment in Avocado Seed-Based Cellulose/Gelatine Composite Hydrogel's Mechanical Properties
14.25-14.40	5006	Timo Rautioa, Matias Jaskarib, Mikko Hietalac, Aappo Mustakangasd, Antti Järvenpäae	Fatigue Performance and Impact Toughness of PBF-LB Manufactured AlSi10Mg
14.40-14.55	5008	Ahmad Marzuki, Hery Purwanto, Artono Dwijo Sutomo, Harjana, Ari Handono Ramelan, Devara Ega Fausta, Retno Willy Astuti, Anisa Nandita Rahmawati, Frisca Aulia Avyanti, Rivina Oktafiani	Physical Properties Study of Sodium Doped Boro-Tellurite (Na ₂ O: TeO ₂ -B ₂ O ₃ - ZnO) Glasses
14.55-15.10	5011	Ahmad Marzuki, Artono Dwijo Sutomo, Hery Purwanto, Riyatun, Devara Ega Fausta, Laila Amalia Putri, Retno Willy Astuti	Thermal Stability of ZnO/Tm ₂ O ₃ Substitution on Tellurite-Zinc-Bismuth-Sodium (TZBN) Glasses
15.10-15.25	5012	Mohammad Ahsan Taqwim, Susy Yunita Prabawati	Adsorption Study of Activated Carbon from Coffee Grounds with H ₃ PO ₄ Activator as Silver (Ag) Adsorbent
15.25-15.40	4005	Dewi Fardhyanti, Haniif Prasetiawan, Hanif Ardhiansyah, Desy Siami, Randi Aswar	Influence of the Nitrogen Flowrates on the Bio Oil Production and Characterization from Pyrolysis of Oil Palm Empty Fruit Bunch
15.40-15.55	2002	Dika Priyanto, Indro Prakoso , Hasyim Asyari , Ayu Anggraeni Sibarani , Nike Meidita Shandi	Improvement of Bottlenecks in Printed Brown Sugar Production Using Line Balancing and Simulation
15.55-16.00	Closing Parallel Session		



Day 2. August 8 2023

Room 1 (Online Presenter)

Cluster : Technology: General Issues
Zoom : https://bit.ly/ROOM1_ICSE
Room : Room 402 GKT 4th Floor
Moderator : Muhammad Galih Wonoseto, M.T.

Time	ID	Authors	Title
14.00-14.15	Opening Parallel Session		
14.15-14.30	2007	Maria Krisnawati, Fadhila Rifda Azka Syailendri and Ayu Anggraeni Sibarani	Ready Mix Concrete Production Scheduling and Truck Mixer Allocation Using Genetic Algorithm: A Case Study
14.30-14.45	2010	Muhammad Raffiudin, Rattasit Sukhahuta	Exploring Sacred Texts: Leveraging Computer Science for Dataset Similarity Analysis in Religious Studies
14.45-15.00	2012	Koh Ee Xinne, Dr. Sabariah Binti Saharan	Time Series Analysis on Covid-19 Cases in Malaysia and Thailand
15.00-15.15	2015	Yessi Yunitasari, Latjuba Sofyana STT, and Maria Ulfah Siregar	Ciber Crime Identifying Using Using Machine Learning Techniques - Based Sentiment Analysis
15.15-15.30	1007	Eca Indah Anggraini, Syahrul Fadholi Gumelar	Geospatial Pattern of Terrorism Activity in Java Island Based on Machine Learning Model for Sustainable Nation Security
15.30-15.45	2011	Silvi Istiqomah, Perdana Suteja Putra	Innovative Design of Electric Vehicle Battery Replacement Stations Search in Indonesia Using Design Thinking Approach
15.45-16.00	Closing Parallel Session		



Room 2 (Online Presenter)

Cluster : Engineering: General
Zoom : https://bit.ly/ROOM2_ICSE
Room : Room 403 GKT 4th Floor
Moderator : Atika Yahdiyani Ikhsani, M.Sc.

Time	ID	Authors	Title
14.00-14.15	Openering Parallel Session		
14.15-14.30	3005	Taufik Alfuaad, Khusna Dwijayanti	Flowshop Production Scheduling Using the Campbell, Dudek, Smith (CDS), Palmer, and Dannenbring Method to Minimize the Total Production Time (Study Case : Pt. Naturindo Fresh Kulon Progo)
14.30-14.45	3007	Dede Haerohmansyah, Endarti Puspitasari, Dwi Agustina Kurniawati	Optimizing Alfian's Cassava Stick Production to Maximize Business Profits Imron Rosidi
14.45-15.00	3009	Yusuf Saputro	Analysis of the Influence of Promotion, Price, Ease of Use, and Flexibility on Shopping Behavior of E-Commerce Users in Jabodetabek
15.00-15.15	5001	RM Magabe, Kapil Gupta	A Mini Review on Machining of Aluminium
15.15-15.30	3002	Andika Yuli Heryanto	Bakpia Quality Control Analysis Using the Statistical Quality Control (SQC) Method (Case Study: SMEs Bakpia Latief, Kediri)
15.30-15.45	2008	Syamsul Anwar	Value Stream Mapping in Crude Palm Oil Industry: A Brief Review
15.45-16.00	Closing Parallel Session		



Room 3 (Online Presenter)

Cluster : Technology and Engineering
Zoom : https://bit.ly/ROOM1_ICSE
Room : Room 404 GKT 4th Floor
Moderator : Gunawan Budi Susilo, M.Eng.

Time	ID	Authors	Title
14.00-14.15	Closing Parallel Session		
14.15-14.30	5007	Retno Dwi Astuti, Anis Yuniati	Neural Network Synchronization of the Morris-Lecar Neuron Model Coupled with Short-Term Plasticity (STP)
14.30-14.45	2014	Fuad Achmadi, Fathur Rachman Nufaily, Afdi Fauzul Bahar, and Shofwatul 'Uyun	Application of Optical Character Recognizer Prototype and Convulsion Neural Network for Vehicle License Plate Detection
14.45-15.00	3004	Dwi Heru Siswantoro, and Budi Santoso	Dimensional Analysis for Customized Rotary Evaporator
15.00-15.15	3001	Trio Yonathan Teja Kusuma, Susy Susmartini, Bambang Suhardi, Lobes Herdiman	Analysis of Tourist Fatigue in Natural Tourism Destinations
15.15-15.30	3010	Chong Qi, Sabariah Binti Saharan	Analysis on Students' Academic Performance in Relation to the Results of Pre-University Examination
15.30-15.45		Frida Agung Rakhmadi, Widayanti, Rochan Rifai	A Design of The Third Generation of UIN Sunan Kalijaga's UV Fluorescence Spectro-Imaging System
15.30-15.45	Closing Parallel Session		



Room 4 (Offline Presenter)

Cluster : Technology: General Issues

Room : Room 407 GKT 4th Floor

Moderator : Dr. Ir. Sumarsono, S.T., M.Kom.

Time	ID	Authors	Title
14.00-14.10	Opening Parallel Session		
14.10-14.25	2004	Mandahadi Kusuma, Dedy Hariyadi, and Indah Daila Sari	Applying Visualization and Analysis Data to Investigate Cyber Crimes (Case: Web Defacement)
14.25-14.40	2016	Aura Pradhya, Marshal Bhakti, Gagat Riano, Ismoyo	Selection of Squadron Main Base Air Force Fighters Using the Analytical Hierarchy Process Method
14.40-14.55	2005	Bad'ul Hilmi Arromdoni, Mandahadi Kusuma, and Bambang Sugiantoro	Web Application Vulnerability Analysis Using the OWASP Method (Case Study: OJS CSFD UIN Sunan Kalijaga Yogyakarta)
14.55-15.10	2009	Dina Millatina, Hikmah Nursidik, Maulana Yusuf Ahmadi, Muhammad Galih Wonoseto	Development Web-Based Economic Data Application of Nu DIY Using Extreme Programming
15.10-15.25	2013	Nur Faridah, Shofwatul Uyun, Nida Muhliya Barkah, Irma Eryanti Putri	A Systematic Literature Review on the Accuracy of Breast Cancer Classification
15.25-15.40	5015	Mumung Ridhuan Munggara, Nita Handayani, Fajar Arianto	Calculation of Absorbed Dose of ¹⁰³ Pd and ¹³¹ Cs Sources in Prostate Cancer Brachytherapy Simulation Using Monte Carlo N-Particle 6 (MCNP-6) Software
15.40-15.55	2003	Hakim Ar Rifki R, Salma El Achzaabi, Sherly Aprilia, Gagat Riano, Ismoyo	Placement Optimization of Air Force Fighter in the National Air Defense System
15.55-16.00	Closing Parallel Session		



Room 5 (Offline Presenter)

Cluster : Engineering: General
Room : Room 408 GKT 4th Floor
Moderator : Dr. Widayanti, S.Si. M.Si.

Time	ID	Authors	Title
14.00-14.10	Opening Parallel Session		
14.10-14.25	3003	Indro Prakoso , Anriady Miftahul Putra, Maria Krisnawati , Sugeng Waluyo	Design for Manufacturing and Assembly for Holzweig-Based Dining Chairs and Table
14.25-14.40	3006	Nurlaila Praditasari Goesman, Anisa Nurjannah, and Indro Prakoso	OHS Performance Assessment on Production Floor at PT. XYZ
14.40-14.55	3008	Stevan Deby Anbiya Muhamad Sunarno, Keneth Bautista Sedilla, Takayuki Nishimura, Takafumi Maeda	Overview of Sleep and Fatigue at Indonesian Coal Mining Workers Working with Shift Work
14.55-15.10	6001	Muhammad Raihan Hilmy, Indro Pranoto, Muhammad Aulia Rahman, Khasani	Experimental Study of the Liquid Cold Plate Cooling System for Lithium-Ion Battery in Electric Vehicle
15.10-15.25	6002	Mizana Hanafillah, Yuniaristanto, and Wahyudi Sutopo	Exploring the Adoption of Electric Motorcycles Based on Habits, Knowledge, Costs, and Infrastructure in Indonesia
15.25-15.40	2001	Chadziqatun Najilatil Mazda, Ira Setyaningsih	Implementation of Taguchi Methods to Assessment Workspace Design Towards the Employee Performance
15.40-15.55	2017	Fini Bestiara, Kushendarsyah Saptaji, Tiara Kusuma Dewi, Farid Triawan, Anwar Ilmar Ramadhan, Azmir Azhari	Development of the Extrusion Based Food 3D Printer Machine by Modifying Fused Deposition Modelling (FDM) 3D Printer
15.55-16.00	Closing Parallel Session		



ICSE 2023 RUNDOWN

Faculty of Science and Technology, UIN Sunan Kalijaga Yogyakarta
August 7 – 8, 2023

Time	Agenda	Venue
1st day (Monday Aug 7th 2023)		
07.00 - 08.00	Registration	Theatrical room, Gedung Kuliah Terpadu (GKT) 4 th Floor
08.00 - 08.20	Opening Ceremony	
	The Singing of National Anthem "Indonesia Raya"	
	Hymne of UIN Sunan Kalijaga	
	Reciting Al Quran	
Welcoming Remarks		
08.20 - 08.25	1. Chairman of ICSE 2023, Dr. Dwi Agustina Kurniawati, PhD., IPM., ASEAN Eng	
08.25 - 08.30	2. Dean Science and Technology Faculty: Dr. Khurul Wardati	
08.30 - 08.40	3. Rector UIN Sunan Kalijaga, Prof. Dr. Phil. Al Makin (officially open ICSE)	
08.40 - 08.45	Playing video Profile of UIN Sunan Kalijaga and Science and Technology Faculty	
08.45 - 09.00	Coffee Break	
	Plenary Session	
	Moderator: Dr. Eka Sulistyowati, M.A., M.IWM	Theatrical room, Gedung Kuliah Terpadu (GKT) 4 th Floor
09.00 - 09.45	Speaker#1 Prof. Kenji Mishima (Fukuoka University, Japan)	
09.45 - 10.00	Q n A	
10.00 - 10.05	Giving certificate of appreciation	
10.05 - 10.55	Speaker#2 ChM Dr Faridah Abu Bakar (UTHM, Universiti Tun Hussein Onn Malaysia)	
10.55 - 11.10	Q n A	
11.10 - 11.15	Giving certificate of appreciation	
11.15 - 13.00	Lunch Break	
13.00 - 13.45	Speaker#3 Assoc. Prof. Dr. Kitichate Sridith (PSU, Prince of Songkla University Thailand)	Theatrical room, Gedung Kuliah Terpadu (GKT) 4 th Floor
13.45 - 14.00	Q n A	
	Giving certificate of appreciation	
14.00 - 16.00	Parallel Session	
2nd day (Tuesday Aug 8th 2023)		
07.00-08.00	Registration	
	Plenary Session	
	Moderator: Ir. Titi Sari, S.T., M.Sc., IPM.	Theatrical room, Gedung Kuliah Terpadu (GKT) 4 th Floor
08.00 - 08.45	Speaker#4 Assoc. Prof. Ahad Ali, Ph.D (Lawrence Technological University, USA)	
08.45 - 09.00	Q n A	
09.00 - 09.05	Giving certificate of appreciation	
09.05 - 09.30	Coffee Break	



Time	Agenda	Venue
09.30 - 10.15	Speaker#5 Assoc. Prof. Rajesh Piplani (NTU, Nanyang Technological University Singapore)	Theatrical room, Gedung Kuliah Terpadu (GKT) 4 th Floor
10.15 - 11.00	Speaker#6 Prof. Ir. Muhammad Nizam, S.T., M.T., Ph.D., IPM (UNS, Universitas Sebelas Maret Surakarta)	
11.00 - 11.30	Q n A	
11.30 - 11.35	Giving certificate of appreciation	
11.35 - 13.00	Lunch Break	
13.00 - 14.00	Presentation Session from Invited Speakers	
	Cluster: Science	Room 402 GKT 4 th Floor
	Moderator: M. Zaki Riyanto, M.Sc	
13.00 - 13.30	Martianus Frederic Ezerman, Ph.D (NTU, Nanyang Technological University Singapore)	
13.30 - 13.45	Noor Saif Muhammad Mussafi, PhD (UIN Sunan Kalijaga Yogyakarta, Indonesia)	
13.45 - 14.00	Dr. Thaqibul Fikri Niyartama (UIN Sunan Kalijaga Yogyakarta, Indonesia)	
14.00 - 14.15	Q n A	Room 403 GKT 4 th Floor
	Cluster: Engineering#1	
	Moderator: Taufiq Nuruzzaman, PhD	
13.00 - 13.30	Assoc. Prof. Dr. Bernardi Pranggono, PhD, FHEA, SMIEEE (ARU, Anglia Ruskin University, UK)	
13.30 - 13.45	Dr. Agung Fatwanto, M.Kom. (UIN Sunan Kalijaga Yogyakarta, Indonesia)	
13.45 - 14.00	Q n A	Room 404 GKT 4 th Floor
	Cluster: Engineering#2	
	Moderator: Kartiansmara Lilih Purnaumbara, M.Sc	
13.00 - 13.30	Dr. Shahrul Azwan (UTeM, Universiti Teknikal Malaysia Melaka)	
13.30 - 13.45	Ir. Khusna Dwijayanti, ST., M.Eng., Ph.D, IPM (UIN Sunan Kalijaga Yogyakarta, Indonesia)	
13.45 - 14.00	Q n A	
14.00 - 16.00	Parallel Session	
3rd day (Wednesday Aug 9th 2023)		
08.00 - 15.00	City Tour	