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Strengthening Research Collaboration and Innovation toward World Class University for Establishing Smart Society

> **17**th_13th October. 2022

AAC, ICT USK & **Online Everywhere**

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www.aic.unsyiah.ac.id/2022/socialsciences



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BOOK OF PROGRAM

The 12th Annual International Conference 2022on Sciences and Engineering

Universitas Syiah Kuala

"Strengthening Research Collaboration and Innovation toward World Class University for Establishing Smart Society"

> AAC, ICT USK & Online Everywhere October 12-13, 2022

Welcome Speech from Rector of Universitas Syiah Kuala



Assalamu'alaikum warahmatullahi wabarakatuh.

The honorables: Vice Rectors of Universitas Syiah Kuala, professors, lecturers, researchers, colleagues, ladies and gentlemen. On behalf of Universitas Syiah Kuala, I would like to welcome you all to the 12th Annual International Conference (AIC) Universitas Syiah Kuala.

Praise and gratitude be onto Allah SWT . Because of His grace and blessings, we can be brought together to this scientific forum. Shalawat and greetings to the Prophet Muhammad SAW, who has brought us from darkness to the lightness and civilization.

Allow me to welcome and extend our appreciation to all the keynote speakers for our conference this year and welcome also to the invited speakers. Thank you for making time to share at Universitas Syiah Kuala's 2022 Annual International Conference.

It is my hope that the 12th AIC Universitas Syiah Kuala would be able to achieve its objective to make it an effective forum for academic communities, researchers, and practitioners to support and strengthen academic and industrial collaborations to enhance research and innovation. We believe that academics and industries must not work alone, we must collaborate, especially at this post-pandemic time. The collaboration will help in achieving goals in the most effective and efficient ways. And, we can lead the change to a better environment and standard of life.

Once again, I would like to acknowledge the generous contribution from our co-organizers and supporting institutions: Universiti Sains Malaysia, Hasanuddin University, Sumatera Utara Islamic University, Badan Kerjasama PTN Wilayah Barat, IMT-GT uninet, and Tourism Department of Aceh.

We believe knowledge, research and technology are for the people and must be inclusive; for minorities, people with disabilities, for everyone, for all. No matter how much we can accomplish for ourselves, whether it be research or development, it will never be sufficient. Therefore, the focal drive of this conference is to share and research findings, exchange perspectives and ideas, to be taken to the next stages, to the implementation to improve the quality of life and humanity. This conference covers a wide range of topics, divided into three tracks: Sciences and Engineering; Environmental and Life Sciences; and Social Sciences.

Ladies and gentlemen,

Last but not least, my greatest appreciation goes to the Advisory Board, Organizing Committee, International Scientific Committee, institutions, companies, and volunteers who have directly and indirectly supported and contributed to the success of this conference. The committee has organized a vibrant scientific program and is working hard to bring highly respected and internationally reputable speakers to lead the conference.

Finally, I wish you all a very productive conference, and lively discussions. We hope this conference will help anticipate the future by strengthening academic and industrial collaborations to enhance research and innovation.

May God bless us all with good health to make this event a successful and enjoyable one!

Wassalamualaikum warahmatullahi wabarakatuh.

Prof. Dr. Ir. Marwan

Rector Universitas Syiah Kuala

Welcome Speech from Chairperson AIC 2022 Universitas Syiah Kuala



Assalamualaikum Wa Rahmatullahi Wa Barakatuh,

Excellences, Distinguished Participants, Ladies, and Gentlemen. On behalf of the organizing committee, I am honored and delighted to welcome you to the 12th Annual International Conference (AIC) 2022 of Universitas Syiah Kuala. I wish to take this opportunity to welcome all the participants, the keynote, and our invited speakers for coming to our campus in person and virtually.

It is already two years since the pandemic shifted our workspaces to home, last year conference we had to make it online, but now we have a bit of relief since the condition is much better, the number of COVID cases is null and we could hold the meeting in hybrid mode. We believe that communication amongst scientists should remain connected and updated, whatever the situation is.

Thus in the spirit of "Recover Faster, Rise Stronger" the conference (The 12th AIC 2022) has a theme "Strengthening Research Collaboration and Innovation toward World Class University for Establishing Smart Society" and has welcomed the researchers, scientists, and students around the world with related topics to share their work, thoughts, ideas, together with learning something new.

The AIC participants come from Indonesia, Malaysia, Vietnam, Thailand, Canada, Australia, Japan, and Brunei Darussalam representing the students, lecturers, and researchers. The committee received 237 abstract titles contributed by more than 500 authors, and after review, we have 130 articles that match the qualification. The accepted papers will be published by AIP proceedings (Scopus indexed) and international journals (Scopus and Sinta 2 indexed).

Our technical program is rich and varied with six keynote speeches, three invited talks, and four parallel sessions. On this occasion, I also wish to welcome our keynote speaker Prof. Dr. Rashid Sumaila (Professor of Oceans and Fisheries Economics, the University of British Columbia), Assoc. Prof. Davin H. E. Setiamarga, Ph.D. (National Institute of Technology, Wakayama College, Japan), Dr. Handito Joewono (IPB University, Indonesia), Dr. Abul Kalam Azad (University Brunei Darussalam, Brunei Darussalam), Dr. Martin Wilkes (University of Essex, United Kingdom) and Prof. Dr. Mathias Ulbricht (Universitat Duisburg-Essen, Germany).

We were also honored to host our invited speakers Rezzy Eko Caraka (BRIN, Indonesia), Dimas B. E. Dharmowijoyo, Ph.D. (University Teknologi PETRONAS, Malaysia), Dr. Eng. Sapto Andriyono, S.Pi., MT (Airlangga University, Indonesia).

Additional to the interesting presentation from the keynotes and invited speakers, onsite, at the front hall AAC, we have the exhibition of innovative products from the research centers and professors of USK. Thus, for the onsite participant, we encourage them to visit the booth to discuss and get informed on the latest innovative products that are being exhibited.

Finally, as the chairman of the 12th AIC 2022, I am in debt of sincere thanks to the people who have worked, planned, organized, and support this event, especially the Organizing Committee members who have worked all out, extremely difficult to mention their effort one by one so that the conference and its programs could run smoothly.

I also would like to sincerely thank the Rector of Syiah Kuala University Prof. Dr. Ir. Marwan, Vice-Rector, Chairman of the Institute for Research and Community Services Prof. Dr. Taufik Fuadi Abidin, S.Si., M.Tech, the IMT-GT Uninet, and BKS PTN Barat.

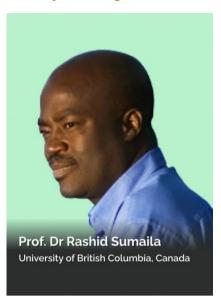
I sincerely hope you will enjoy the conference and I highly expect that this meeting will catalyze and strengthen cooperation among us in the future.

Haekal Azief Haridhi, Ph.D

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Keynote Speaker 1



Dr. Ussif Rashid Sumaila is Professor and Director of the Fisheries Economics Research Unit at UBC's Institute for the Oceans and Fisheries. He specializes in bioeconomics, marine ecosystem valuation and the analysis of global issues such as fisheries subsidies, IUU (illegal, unreported and unregulated) fishing and the economics of high and deep seas fisheries. Sumaila has experience working in fisheries and natural resource projects in Norway, Canada and the North Atlantic region, Namibia and the Southern African region, Ghana and the West African region and Hong Kong and the South China Sea. He has published articles in several journals including, Journal of Environmental Economics and Management, Journal of Bioeconomics, Land Economics, ICES Journal of Marine Science, Environmental and Resource Economics and Ecological Economics. Sumaila's work has generated a great deal of interest, and has been cited by, among others, the Economist, the Boston Globe, the International Herald Tribune, and the Vancouver Sun.

Keynote Speaker 2



Dr. Handito Joewono is currently the head of Sekolah Ekspor, CEO Arrbey Consulting and the secretary of Response Acceleration Task Force for Developing Export Oriented Small and Medium Enterprises (SMEs) Ministry of Cooperatives and SMEs of Republik Indonesia. His practical experience in economic related organization including Chamber of commerce, National Start Up Centre, Green Purchasing Network, Association for Technology Start Up Indonesia. Dr Joewono finished his doctorate program at IPB University in 2008 and expertise in Corporate Planning, Business Strategy, as well as Branding and Expert Management.

Abstract Keynote Speaker 2 Pentahelix Innovation

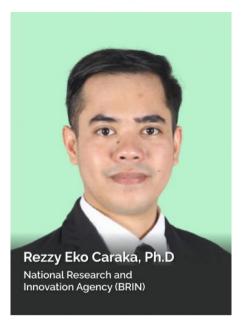
Handito Joewono

Head of Sekolah ekspor

Abstract

Globalization speed the world convergences and lead to world economic integration. Innovation become the motor to survive the rapid changes in the world. All countries race to create products and support the needs of the people around the world. Agents of economy collaborate and innovate to create sustainability of development which include government, academic, business, research and international collaboration. To activate the collaboration and cooperation to produce innovation, one of the mediation is Sekolah Ekspor that has been promote through Indonesia to spread the knowledge of exporting and encourage youngsters to involve in international trade.

Invited Speaker



Rezzy Eko Caraka, Ph.D is s a researcher and practitioner in data science and statistics. He has worked on all SDG topics to produce precise modeling, forecasting, data mining, and text mining analysis for policy and decision making. Currently serve at Seoul National University is a 7-year term, non-tenure-track faculty position as well as a researcher (Superintendent) with the research expertise of Data Science on abroad research units (Diaspora). BRIN became the sole national research agency Republic of Indonesia. Caraka's academic works focus on data science, statistics, machine learning, and spatial analysis and already produce 10 books, 37 articles in high impact journals with 7 more upcoming publications. His works was not limited to publication but also software building and received about 57 awards from various activities.

Abstract Invited Speaker

Making Sense of the Metaverse and Its Prospects Through Data Science

Rezzy Eko Caraka^{1,2}

¹Research Center for Data and Information Sciences, Research Organization for Electronics and Informatics, National Research and Innovation Agency, Bandung, West Java, 40135, Indonesia ²Department of Mathematical Sciences, Ulsan National Institute of Science and Technology, Ulsan 44919, Republic of Korea

email: rezzy.eko.caraka@brin.go.id or rezzyekocaraka@unist.ac.kr

Abstract

A metaverse is a series of virtual spaces and second lives in which a person can create and surf with other Internet users who are not in the same physical spaces. The virtual world concept allows any user to connect, communicate, work, play and conduct various transactions just like in the real world. The Metaverse concept combines several technological innovations, e.g., virtual reality (VR) and augmented reality (AR). This keynote speech discusses how to maximize the prospect of metaverse through data science and examine trending themes and current issues about the digital economy, Islamic finance, tourism, education and pedagogy, e-sport, and Information Communications Technology (ICT).

keywords: Metaverse; Data Science; virtual reality; sustainable development goals.

The 12th Annual International Conference (AIC) 2022 Technical Program Schedule

12-13 October 2022, Banda Aceh, Indonesia

Day 1 (Wednesday, 12 October 2022)

Onsite : AAC Dayan Dawood

Link Zoom : https://zoom.us/j/94650028287?pwd=c3NqMWRJYVhLVDRqWFVod2NPeGhJZz09

Meeting ID: 946 5002 8287

Passcode: 933061

Time (Western Indonesia Time)	Schedule	PIC		
08.00 - 08.30	Registration	Committee		
08.30 - 08.40	Opening Ceremony	Miftahul Janah		
08.40 - 09.00	Reciting of Holy Quran and Shalawat badar	M Fuad Arifin		
09.00 - 09.05	Singing the National Anthem of Indonesia (Indonesia Raya)	Nelva Miranda Fadhlia Putri, S.H		
09.05 - 09.10	Profile of Universitas Syiah Kuala	Committee		
09.10 - 09.15	Welcoming Remark by the Confrence Director	Haekal Azief Haridhi, Ph.D		
09.15 - 09.20	Welcoming Remark by the Rector of Universitas Syiah Kuala	Prof. Dr. Ir. Marwan., IPU		
09.20 - 09.25	Do'a	M Fuad Arifin		
09.25 - 09.30	Awarding token of appreciation to keynote and invited speakers represented by Dr. Abul Kalam Azad (attanding keynote onsite) and Dr. Eng. Sapto Andriyono, S.Pi., MT (attanding invited onsite)	Prof. Dr. Ir. Agussabti, M. Si., IPU and Pro Dr. Taufik Fuadi Abidin, S.Si., M.Tech		
09.30 - 10.00	Photo session and break	Committee		
	Keynote Speakers (session 1)			
10.00 - 10.45	Prof. Dr. Rashid Sumaila - University of British Columbia, Canada	Moderator : Dr. Iskandar AS, S.Pd, M.A		
10.45 - 11.30	Assoc. Prof. Davin H. E. Setiamarga, Ph.D - Technocenter fo Regional Research Collaboration National Institute of Technology, Wakayama College, Japan			
11.30 - 12.00	Discussion	1		
12.00 - 14.00	Break	Committee		
	Keynote Speakers (session 2)			
14.00 - 14.45	Dr. Handito Joewono - Director of Export School, Indonesia			
14.45 - 15.30	Dr. Abul Kalam Azad - Universiti Brunei Darussalam (UBD), Brunei Darussalam	- Noticiator - Kalilar Dara Lurika, 5.1., M		
15.30 - 16.00	Discussion			
16.00 - 16.15	Break			
	Keynote Speakers (session 3)			
16.15 - 17.00	Dr. Martin Wilkes - University of Essex, United Kingdom	1		
17.00 - 17.45	17.00 - 17.45 Prof. Dr. Mathias Ulbrich - Lehrstuhl für Technische Chemie II Moderator : Dr. Nur Fadli, M.S. Universität Duisburg-Essen			
17.45 - 18.15	Discussion			
18:15	The end of 1st day			
19.30 - 21.30	Gala Dinner	Committee and Participants		

The 12th Annual International Conference (AIC) 2022 Technical Program Schedule

12-13 October 2022, Banda Aceh, Indonesia Day 2 (Thursday, 13 October 2022)

Onsite: ICT Building 3rd floor

Link Zoom: https://zoom.us/j/94650028287?pwd=c3NqMWRJYVhLVDRqWFVod2NPeGhJZz09

Meeting ID: 946 5002 8287

Passcode: 933061

No	Schedule	PIC	Room onsite	Room online
08.00 - 08.30	Registration	Committee		
	Invited Speakers	Social Science (SS)		1 breakout room
08.30 - 09.15	Rezzy Eko Caraka, Ph.D - National Research and Innovation Agency (BRIN), Indonesia	SS Moderator : Dr. Putri Bintusy Syathi, SE, MA	ICT Building 2nd Floor Serbaguna Room	
09.15 - 09.45	Awarding token of appreciation to invited speaker	Committee		
09.45 - 10.00	Photo Session and Break	Committee		
10.00 - 12.35	Parallel Session 1	Moderator : Fitriyani, SE., M.Sc	ICT Building 3rd Floor Multiguna Room	1 breakout room
12.35 - 14.00	Break and Lunch	Committee	•	
14.00 - 15.40	Parallel Session 2	Moderator : Mahfud, SH., LL.M	ICT Building 3rd Floor Multiguna Room	1 breakout room
15.40 - 15.55	Break	Committee		
15.55 - 17.35	Parallel Session 3	Moderator : Masrizal, S.Pd.I., M.Ed	ICT Building 3rd Floor Multiguna Room	1 breakout room
17.35 - 17.40	Announcement of best papers and best presentation	Miftahul Janah	ICT Building 2nd	Main hall room
17.40 - 18.00	Closing remark by the head of Institute for Research and Community Services	Prof. Dr. Ir. Agussabti, M. Si., IPU	Floor Serbaguna Room	

Room 4 - Social Sciences

Zoom link: https://zoom.us/j/94650028287?pwd=c3NqMWRJYVhLVDRqWFVod2NPeGhJZz09

Zoom ID: 946 5002 8287

Zoom Passcode: 933061

Zoom Breakout Room: ROOM 4

Onsite Location: ICT Building 3rd Floor Multiguna Room

No	Time	Paper ID	Authors	Title	Attandance type		
	Parallel Session 1						
Mod	erator: Fitriyani	, S.E., M.S	Sc				
1	10.00-10.10	4834	Syafruddin Chan* and Kurnia Asni	The Encouragement of Live Streaming Shopping Attribute and Low-Price Appeal on Purchase Intention in Tiktok Live Streaming and the Moderation Role of the Guarantee Return Policy Title	ZOOM		
2	10.10 -10.20	4952	Tengku Putri Lindung Bulan*, and Rahmi Meutia	The Role of Product Innovation in Mediating Entrepreneurial Orientation on Marketing Performance	ZOOM		
3	10.20 - 10.30	4970	T. Zulham,Yayuk Eko Wahyuningsih*, Rollis Juliansyah, Tasdik Ilhamudin, and Teuku Bahran Basyiran	The Income Changes of Micro and Small Enterprises Before and During the Covid-19 Pandemic in the Southwest Region of Aceh Province	ZOOM		
4	10.30 -10.40	4978	Cut Afrianandra*, Endang Surasetyo Ningsih, and Bustamam	Accounting Performance in Local Government of Aceh Province	ONSITE		
5	10.40 -10.50	4993	Lilis Maryasih, Evi Mutia* and Nurma Sari	The Perspective of Market Analysis on Cryptocurrency Value Post Fatwa Indonesian Ulema Council (MUI)	ZOOM		
6	10.50 - 11.00	5111	Srinita Srinita, B.S. Nazamuddin*, Nur Aidar, Asri Diana, and Mega Utami	The effects of Covid-19 Pandemic on Working Hours And Mental Health of SME Workers	ZOOM		
7	11.10 - 11.20	5274	Fitriyani*, Rezky Hermawan, and Nadia Safitri	Relationship between Electronic Money and Growth in Indonesia	ONSITE		
8	11.20 - 11.30	5129	ZefriansyahZefriansyah *, Abdul Rahman Lubis,	Determinant Factors of Consumer Behavior on Online Purchase Intention	ZOOM		

			Syafruddin Chan, and Sorayanti Utami		
9	11.30 -11.40	5266	Ernawati, Miksalmina*, Indra, Raihan Dara Lufika, Fadhlul Reza, Nawar Ashfia	Patchouli Oil Marketing Efficiency: A Case Study of the South Aceh Patchouli Industry Cooperative	ZOOM
10	11.40- 11.50	4835	Permana Honeyta Lubis, Syafruddin Chan*, and Sorayanti Utami	Mediating Role of Travel Anxiety and Risk Attitude on the Effect of Fear of Covid-19 and Use of General News Source about Covid-19 on Intention to Book Future Travel	ZOOM
11	11.50 - 12.00	5175	Dajwi*, Abdurahman Lubis, Aliamin and Indayani	The Effect of Organizational Mechanization on Budgetary Slack in Local Tax Collection Offices in Indonesia	ZOOM
12	12.00 - 14.00	BREAK			
			Parallel Sessior	1 2	
Mode	erator: Mahfud,	SH., LL.M	1		
13	14.00 - 14.10	5268	Uswatun Hasanah, Putri Bintusy Syathi*, and Fikriah	Ratification Sustainable Development Goals: Indonesia NO POVERTY	ONSITE
14	14.10 - 14.20	4814	Dzakiyy Hadiyan Achyar, Zata Hasyyati, Hazhiyah Yumni and Fathir Wafda	Pythonic Accounting- Assisted Sentiment Analysis Moderation Effect on Bank Aceh Protection for Indonesia's Aceh Economy	ZOOM
15	14.20 - 14.30	4796	Nur Alim Rachim*, M. Said Karim , Syamsuddin Muchtar, and Haeranah	Drugs as Confiscated Objects In The Evidence Of The Crime Of Money Laundering	ZOOM
16	14.30 - 14.40	4903	Zahratul Idami, Ruslan, Satria Gunawan*, and Alfi Rahman	Comparative Study of Epistemology of Werstern and Islamic Public Policy	ONSITE
17	14.40 - 14.50	5017	Mirza Fuady, Nasrullah Ridwan,*, R Munadi, and M Andrian Kevin	Covid-19 Global Pandemic and City Resilience	ZOOM
18	14.50 - 15.00	5018	Mirza Fuady, Buraida*, and M Rafi Farrel	Inclusive and Sustainable Development of Kampung Kota in Indonesia	ZOOM
19	15.00 - 15.10	5099	Kadriah*, Susiana, Eka Kurniasari, and Rismawati	Partiality of Consumer Financing Standard Agreement on Consumer from Law of Consumer Protection View	ONSITE

20	15.10 - 15.20	5132	Zulfadli A. Aziz* and Cut Dewi	Toponymies: Place-naming on Acehnese Villages and Migration Possibility Roots	ONSITE
21	15.20 - 15.30	5177	Ambo Asse Ajis	Mitigation Strategy for Tide Disaster Management at Fort Indrapatra, Aceh Besar	ONSITE
22	15.40 - 15.55	BREAK	I		
			Parallel Sessior	1 3	
Mod	erator: Masrizal	, S.Pd.I.,	M.Ed		
23	15.55 - 16.05	5267	St. Raudloh*, Lalu Erwan Husnan, Muhammad Shubhi, and Syaiful Bahri	Ngayu-Ayu Ritual Practice of Sasak Ethnic Ethnolinguistic Perspective	ZOOM
24	16.05 - 16.15	5163	Burhansyah*, Iskandar Abdul Samad, and Masrizal	The Application of Consciousness Raising Activities in Senior High School English Textbooks	ONSITE
25	16.15 - 16.25	4825	Iskandar Abdul Samad and Siti Sarah Fitriani*	Successive Visualization and Summarization Activities to Enhance Literacy Skills	ZOOM
26	16.25 - 16.35	5047	Signorina Kasvia, Mirza Desfandi, and Rina Suryani Oktari*	Analysis of Disaster Risk Reduction (DRR) Learning Modules in School Curriculum in Indonesia	ONSITE
27	16.35 - 16.45	5054	Cut Meutia Karolina* & Irwa Rochimah Zarkasi	The Transformation of Language Courses in the Pandemic and Digital Era (Study about Instagram Account @kampunginggrislc)	ONSITE
28	16.45 - 16.55	5106	F Fadhilah*, Yuri Gagarin, A Abdullah, Yuli Heirina Hamid and Laili Suhairi	Education of Food Additional Materials on the Selection Types of Snacks Students Family Welfare Education University of Syiah Kuala	ONSITE
29	16.55 - 17.05	5201	Sulastri*, Muhammad Nazar, Ichwana, Syahrial, and Ismi Zatya	Implementation of Merdeka Belajar Kampus Merdeka (MBKM) mixed internship program to foster the entrepreneurial spirit of prospective chemistry teacher students at Teacher Training and Education Faculty, Syiah Kuala University	ONSITE

30	17.05 - 17.15	5203	Nur Azmi, Hizir Sofyan, Rini Oktavia, and Salmawaty Arif*	Ethnomathematics: Culture Exploration and the Improvement of Mathematical Teaching Process	ZOOM
31	17.15 - 17.25	4822	Rahmawaty*, Darwanis, and Jhon Andra Asmara	Earning Management in Local Government of Aceh Province	ZOOM
32	17.25 - 17.35	4850	Evayani*, Mirna Indriani, and Cut Afrianandra	Intention to use of Financial Report Applications in Aceh SMEs : Using the Technology Acceptance Model	ZOOM
33	17.35 - 17.40	-	Miftahul Janah	Announcement of best papers and best presentation	Zoom: Main hall ONSITE: Gedung ICT
34	17.40 - 18.00	-	Prof. Dr. Ir. Agussabti, M.Si., IPU.	Closing Remark by Vice Rector of Academic Affairs USK (TBC)	Lt 2. Serbaguna Room

12th October 2022

Opening Ceremony, Keynote Speakers Sessions, Gala Dinner

Location : Academic Activity Center Dayan Dawood, Universitas Syiah Kuala (AAC USK)

- Time : Opening Ceremony and Keynote Speakers Sessions: 08.00-18.15 WIB Gala Dinner: 20.00 WIB
- Address : Teuku Nyak Arief Road, AAC Dayan Dawood, Kopelma Darussalam, Syiah Kuala Subdistrict, Banda Aceh

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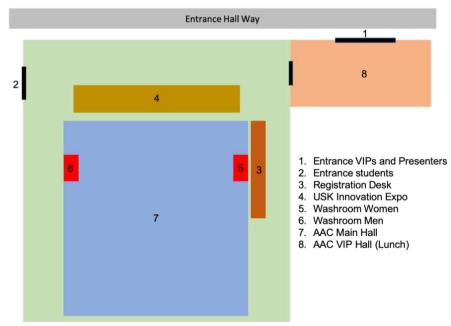
Google Maps

Google Maps



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Sketch of the Building:



13th October 2022 Parallel Session

Location : ICT Building 2nd and 3rd floor

Address : Tgk. Syech Abdul Rauf Road, ICT Building, Kopelma Darussalam, Syiah Kuala Subdistrict, Banda Aceh

10/10/22, 2:27 PM

Google Maps



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