

Program Schedule
8th Southeast Asia Conference on THERMOELECTRICS
Prime Plaza Hotel Sanur, Bali
November 20-21st, 2024

Day and Date	Time (WITA)	Activity	Place
Wednesday, November 20 th 2024	16.00-18.00	Registration and Field Trip Confirmation	4 th Floor, Auditorium Room (Singaraja and Mangupura Room)
	19.00 - 19.10	Opening Welcome Dinner	Kintamani 2 nd Floor
		Opening Speech: - SACT General Chairman	
19.10 - 20.30	Dinner & Music		
Thursday, November 21 st 2024	07.30 - 08.15	Preparation	4 th Floor Auditorium Room (Singaraja and Mangupura Room)
	08.15 - 08.30	Opening by MC Entertainment: - Indonesia National Anthem	
	08.30 - 08.45	Opening Speech: - SACT General Chairman - Rector of ITS Surabaya	
	08.45 - 09.00	Souvenir & Photo Session	
	09.00 - 09.05	Opening Plenary Session I by Moderator -Prof. Dr. Tosawat Seetawan Sakon Nakhon Rajabhat University, Thailand	
	09.05 - 09.50	Keynote Speaker I -Prof. G. Jeffrey Snyder - Northwestern Engineering, USA	
	09.50 - 10.35	Keynote Speaker II - Prof. Supree Pinitsoontorn, Ph.D. Khon Kaen University, Thailand	
10.35 - 10.40	Opening Plenary Session II by Moderator		

The 8th Southeast Asia Conference on Thermoelectrics
November 20-22, 2024, Prime Plaza Hotel, Sanur-Bali, Indonesia.



Day and Date	Time (WITA)	Activity	Place
		- Dr.Lila Yuwana, M.Si. Institut Teknologi Sepuluh Nopember, Indonesia	
	10.40 - 11.25	<i>Keynote speaker III</i> - Prof. Jeon Geon Han - Sungkyunkwan University, Republic of Korea	
	11.25-12.00	<i>Keynote speaker IV</i> - Dr. rer. nat. Ruri Agung Wahyuono, S.T., M.T. Institut Teknologi Sepuluh Nopember, Indonesia	
	12.00 - 13.00	Lunch Break	Restaurant L Floor
	13.00 - 15.00	Parallel session	Total 3 Room: <ul style="list-style-type: none"> • Room 1: Singaraja Room • Room 2: Mangupura Room • Room 3: Badung Room
	15.00 - 15.15	<i>Coffee Break</i>	
	15.15 - 16.00	Parallel session	
	16.00-16.30	Closing Ceremony	Singaraja Room

Schedule of Parallel Speakers Session SACT 2024

Thursday, November 21st, 2024

Time (WITA)	Room 1 (Singaraja Room)	Room 2 (Mangapura Room)	Room 3 (Badung Room)
13.00 - 13.20	Invited Speaker 1 -Prof. Fumiyuki Ishii Kanazawa University, Japan	Invited Speaker 4 -Prof. Dr. Jakrapong Kaewkhao Nakhon Pathom Rajabhat University, Thailand	Invited Speaker 6 -Prof. Dr.-Ing. Drs. Ir. Mitra DjamaI, IPU. Institut Teknologi Bandung, Indonesia
13.20-13.40	Invited Speaker 2 -Prof. Dr. Tosawat Seetawan Sakon Nakhon Rajabhat University, Thailand	Invited Speaker 5 - Dr. Atsuko Kosuga Osaka Prefecture University (Nakamozu Campus), Japan	Invited Speaker 7 - Dr. Sasfan Arman Wella National Research and Innovation Agency (BRIN), Indonesia
13.40 - 14.00	Invited Speaker 3 Prof. Chaohai ZhangNanjing University of Aeronautics and Astronautics, China	ID-2	ID-6
14.00 - 14.15	ID-8	ID-5	ID-19
14.15 - 14.30	ID-45	ID-50	ID-48
14.30-14.45	ID-24	ID-13	ID-36
14.45-15.00	ID-16	ID-30	ID-47
15.00-15.15	Coffee Break		
15.15-15.30	ID-34	ID-21	ID-17
15.30-15.45	ID-35	ID-22	ID-43
15.45-16.00	ID-51	ID-23	ID-10

Room 1: Singaraja Room

Time (WITA)	Abstract Id	Title
13.00 - 13.20	Invited Speaker 1 -Prof. Fumiyuki Ishii Kanazawa University, Japan	Computational design of high-performance thermoelectrics in low-dimensional and topological materials
13.20-13.40"	Invited Speaker 2 -Prof. Dr. Tosawat Seetawan Sakon Nakhon Rajabhat University, Thailand	Synthesis, Measurement and Fabrication of Thermoelectric Materials, Properties, Modules and Applications
13.40 - 14.00	Invited Speaker 3 Prof. Chaohai Zhang Nanjing University of Aeronautics and Astronautics, China	Innovative Applications of Low-Temperature Plasma Technology in Greenhouse Gas Treatment and Medical Fields
14.00 - 14.15	ID-8	Thin film Thermoelectric Module based on FeTiSb p- and n-type Junction
14.15 - 14.30	ID-45	Generate Electricity from Your Arm-Air with Thermoelectric
14.30-14.45	ID-24	Impact of Cu Doping on the Thermoelectric Properties of the Magnéli Phase $W_{18}O_{49}$
14.45-15.00	ID-16	Thermoelectric Properties of Molybdenum Disulfide (MoS ₂) Thin Film as Prepared by RF Magnetron Sputtering and Rapid Thermal Annealing Process
15.00-15.15	Coffee Break	
15.15-15.30	ID-34	Thermoelectricity in higher Chern number system
15.30-15.45	ID-35	Transverse Thermoelectric Effect in Chern Insulator NiCl ₃ Monolayer
15.45-16.00	ID-51	Enhancement of thermoelectric power factor in CaGe ₂ semimetal films through interlayer atomic modulation

Room 2: Mangapura Room

Time (WITA)	Abstract Id	Title
13.00 - 13.20	Invited Speaker 4 -Prof. Dr. Jakrapong Kaewkhao Nakhon Pathom Rajabhat University, Thailand	Development of Glass Scintillator for X-rays Imaging Application
13.20-13.40	Invited Speaker 5 - Dr. Atsuko Kosuga Osaka Prefecture University (Nakamozu Campus), Japan	Crystal Structure and Thermoelectric Properties of Room Temperature GeTe-based Bulk Materials
13.40 - 14.00	ID-2	Chemically Manipulating the Electrical Conductivity and Thermopower of Nb/Ni-doped SrTiO ₃ by Selectively Reducing Ni ions
14.00 - 14.15	ID-5	Enhanced thermoelectric properties of Ag ₂ Se by manipulation in carrier concentration via acetylene carbon black nanocomposites
14.15 - 14.30	ID-50	Optimized Ultrasonic-assisted Liquid-Phase Exfoliation of Bi ₂ Te ₃ Nanosheet
14.30-14.45	ID-13	Controlling the p- and n-type thermoelectric properties of Heusler-type Ru ₂ TiSi compounds by electronic structure engineering
14.45-15.00	ID-30	Role of off-stoichiometric effect on thermoelectric properties of Heusler-type Ru ₂ TiSi compounds
15.00-15.15	Coffee Break	
15.15-15.30	ID-21	Development of a Planetary Cryo-Milling Ball Milling apparatus and the Amorphization of Si-Ge Powder
15.30-15.45	ID-22	First-Principles Study on Layered Thermoelectrics CaSi ₂
15.45-16.00	ID-23	Large Transverse Thermoelectric Effect in Transition Metal Trihalides Monolayer

Room 3: Badung Room

Time (WITA)	Abstract Id	Title
13.00 - 13.20	Invited Speaker 6 -Prof. Dr.-Ing. Drs. Ir. Mitra Djamal, IPU. Institut Teknologi Bandung, Indonesia	Crystallinity and Chemical Properties of Timor Sea Stony Coral
13.20 - 13.40	Invited Speaker 7 - Dr. Sasfan Arman Wella National Research and Innovation Agency (BRIN), Indonesia	Lattice Thermal Conductivity Calculations with Machine-Learned Force Fields
13.40 - 14.00	ID-6	Direct Evidence for the Mechanism of Early-Stage Geopolymerization Process
14.00 - 14.15	ID-19	Enhanced Magnetic Properties and Densification of SrFe ₁₂ O ₁₉ /Fe ₃ O ₄ Hard/Soft Composites via Cold Sintering Process
14.15 - 14.30	ID-48	Heat Exchanger Sizing of Organic Rankine Cycle Waste to Energy Power Plants with Various Working Fluid
14.30 - 14.45	ID-36	Enhancing thermoelectric power factor of PEDOT-PSS: SnSe ₂ nanocomposite Sheets by rapid thermal annealing
14.45 - 15.00	ID-47	Manipulating energy barrier for getting high stability and thermoelectric performance in Cu _{1.93} Ag _x S _{1-y} Se _y system
15.00 - 15.15	Coffee Break	
15.15 - 15.30	ID-17	Investigation Flexible Thin Film Thermoelectrics of SnSe Prepare by RF Sputtering
15.30 - 15.45	ID-43	The thermal conductivity of Zirconium Metal-Organic Framework in various gas ambiances: vacuum, air, Ar, and He
15.45 - 16.00	ID-10	Incorporating RGO into β -Ag ₂ Se matrix to Enhance its Thermoelectric Performance for Harvesting Thermal Energy Near Room Temperature

Online Room

Time	Abstract Id	Title
13.00 - 13.20	ID-38	Thermoelectric Properties of ZnO Wurtzite Structure by Density Functional Theory
13.20-13.40"	ID-46	The high Sensitivity and Selectivity of the Ammonia Sensors
13.40 - 14.00	ID-37	Analysis of the Electronic and Thermoelectric Properties of 2-D HfSe ₂ using Density Functional Theory
14.00 - 14.15	ID-39	Increasing Solar PV Output with Hybrid System PV-Teg Based on Finite Element Modeling

Poster

Abstract Id	Title
ID-1	Fabrication and Performance Testing of Thermoelectric Cooler with Bismuth Telluride (Bi ₂ Te ₃) Material for N-Type Semiconductor and Antimony Telluride (Sb ₂ Te ₃) for P-Type Semiconductor
ID-42	Structural Optimization and Enhanced Thermoelectric Performance in Hexagonal MoXY (X = S, Se, Te, O; Y = S, Se, Te, O) Monolayers: Insights from First-Principles Calculations
ID-26	Study of Antibacterial Performance of DLC Coatings on SS 316L Material Deposited Using Plasma Nitrocarburizing
ID-20	Advancement of an Energy-Efficient LPG Gas Stove Capable of Generating Electricity Through a Reflector Sheath System Utilizing a Thermoelectric Generator
ID-15	Thermoelectric Properties Enhancement Using Liquid-Exfoliated SnSe ₂ Multisheets Coated on Glass Substrate
ID-28	Improvement ohmic contact of Thermoelectric Module by annealing
ID-3	Enhanced Thermoelectric Properties of p-type Bi _{0.5} Sb _{1.5} Te ₃ Bulk Alloys Synthesized by Control Time and Spark Plasma Sintering Method
ID-27	Perovskite solar cells efficiency: verification of NIP device architecture
ID-31	Effect Of ZGO Hole Transport Layer for Perovskite Solar Cell Using by Sputtering Method