

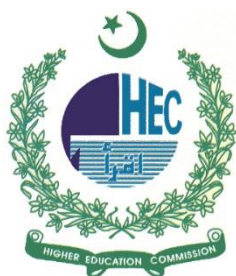


1<sup>ST</sup> INTERNATIONAL CONFERENCE ON

## SEPARATION PROCESSES (ICSP 2017)

NISHAT HOTEL, LAHORE

● APRIL 26-27, 2017



**ICSP-2017**

**Conference PROGRAM**

**CONFERENCE PATRONAGE**

Prof. Dr. Raheel Qamar (T.I)	Rector CIIT
Prof. Dr. Qaisar Abbas	Director, CIIT Lahore

**CONFERENCE SECRETARIAT**

Prof. Dr Asad U. Khan	Chair
Dr. Asim Laeeq Khan	Co-Chair
Dr. Muhammad Yasin	Co-Chair
Dr. Abrar Faisal	Member
Dr. Sikandar Rafiq	Member
Mr. Amjad Riaz	Member
Ms. Ayesha Ilyas	Secretary
Mr. Akmal Rana	Member
Mr. Zaman Tahir	Member
Mr. Muhammad Raees	Member
Mr. Zufishan Shumair Attari	Member
Mr. Mohsin Ali	Organizing Secretary

## CONFERENCE VENUE

**The Grand Ball Room – A  
Nishat Hotels & Properties Limited  
Trade and Finance Center Block, Near Expo Center  
Abdul Haq Road, Johar Town, Lahore**

Tel: +92(042)-111-001-007

Email: [ICSP@ciitlahore.edu.pk](mailto:ICSP@ciitlahore.edu.pk)

## LANGUAGE

The official conference language is English.

## REGISTRATION HOURS

Wednesday, April 26                      8:30 AM – 9:30 AM

## INTERNET ACCESS

Internet Service is available inside conference rooms.

## PROGRAM

The technical program includes invited plenary and keynote lectures, oral sessions and poster presentations.

## ORAL PRESENTATIONS

Oral presentations are scheduled for 12 minutes of presentation and 3 minutes of Q&A.

All presentations should be in PowerPoint or PDF formats. A laptop and LCD projector will be available in all sessions. Each presenter is requested to bring the presentation in a USB storage device and upload it to the laptop before the session begins. All presentations will be destroyed at the end of the session.

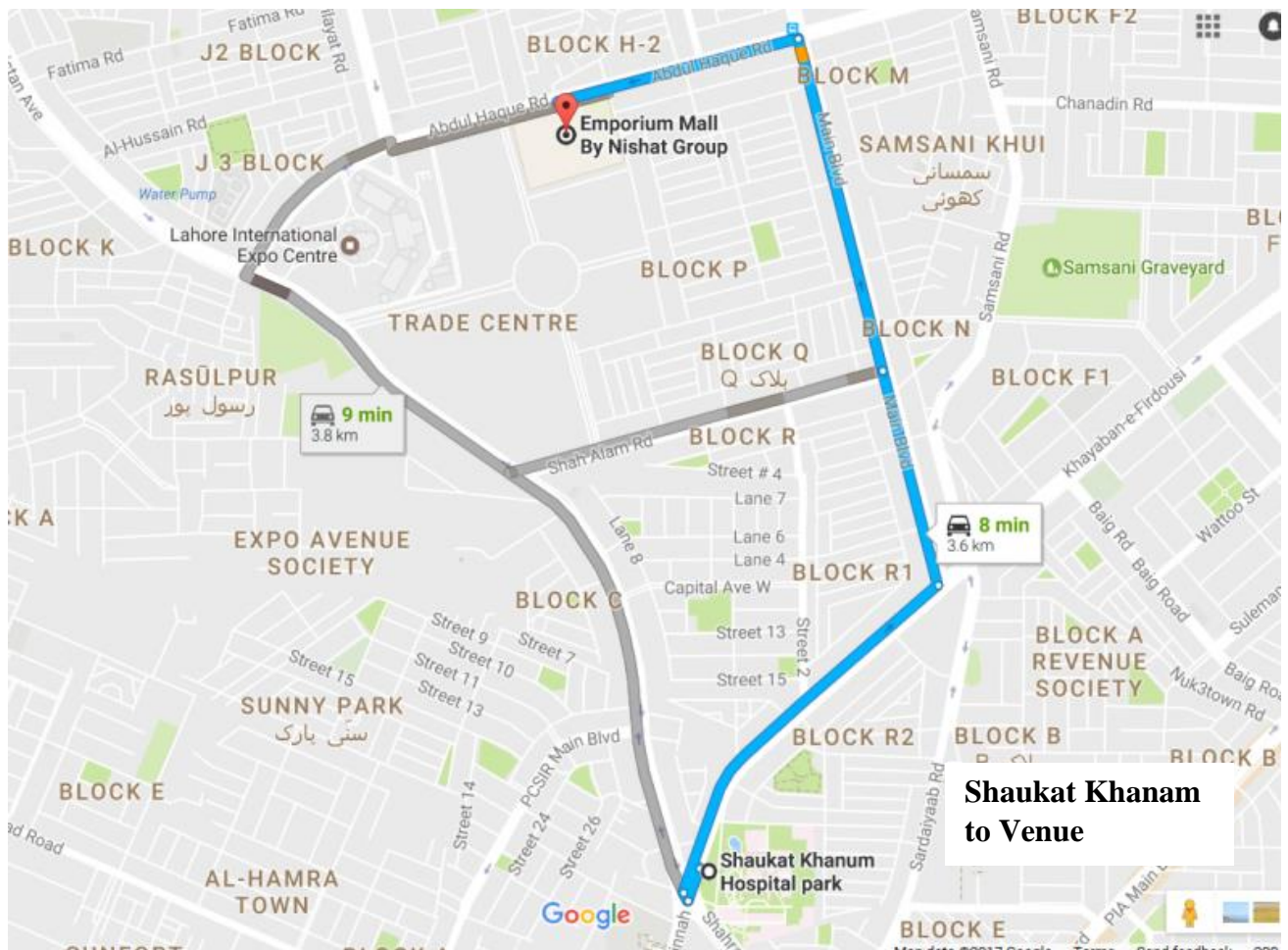
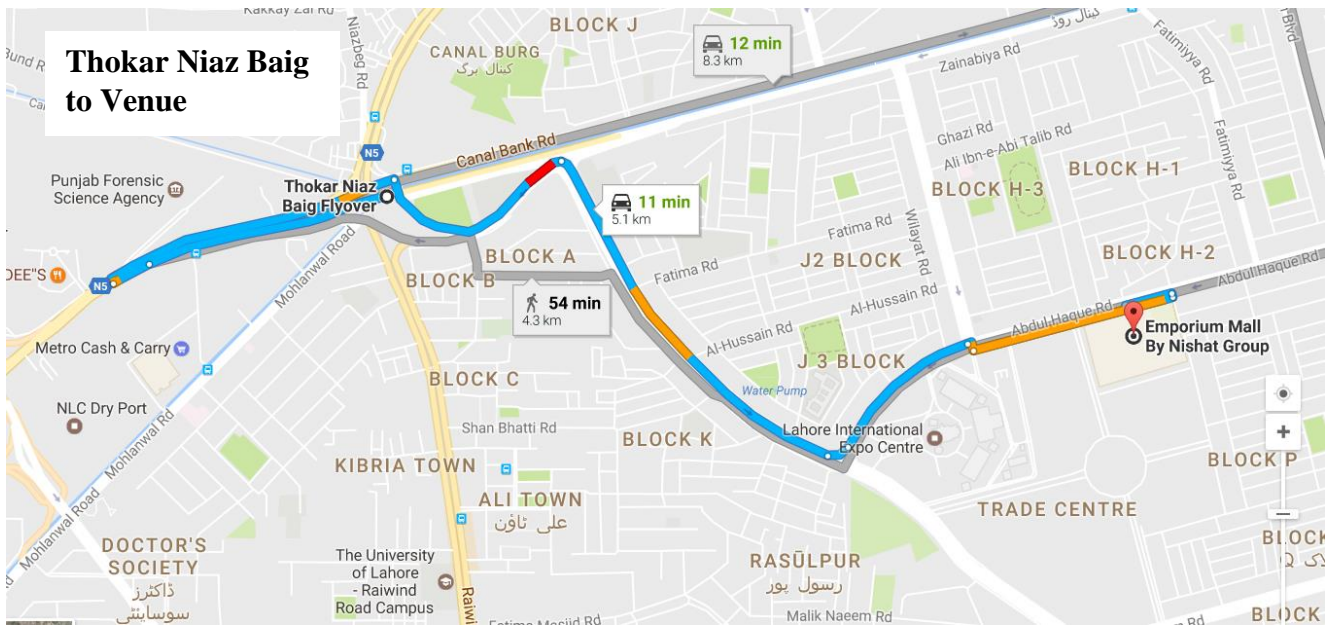
We urge all presenters to use the provided laptop for presentation so as to minimize changeover times.

Since we have a very tight and fully packed program, we request all the delegates to be punctual and respect the allocated timeslots.

In case of absence of some presenter, next presenter shall be called for presentation.

## POSTER SESSION

The dimensions of the poster board will be 594 mm (Width) x 841 mm (Height) (or equivalently 23.3 in (W) x 35 in (H)). This corresponds to A1 Size in portrait layout. Posters are to be put up according to the assigned Paper IDs.





**Prof. Dr. Ivo F. J. Vankelecom**  
*KU Leuven, Belgium*



**Prof. Dr. Roil Bilad**  
University Technology Petronas, Malaysia



**Prof. Dr. Paul F. Luckham**  
Imperial College, London, United Kingdom



**Prof. Dr. Xianfeng Li**  
*Chinese Academy of Science, Dalian, China*

### Wednesday, April 26

08:30 – 09:30	Registration
09:30 – 10:00	<p>Inauguration/ Opening Ceremony</p> <p>09:30 Recitation of Holy Quran</p> <p>09:35 Welcome Address by Conference Chair</p> <p>09: 40 Address of Chief Guest</p> <p>09:55 Vote of Thanks by Director, CIIT Lahore</p>
<b>Plenary Session-I</b>	
10:00 – 10:40	<p><i>High-throughput membrane technology at KU Leuven</i></p> <p style="text-align: right;">Prof. Dr. Ivo F. J. Vankelecom KU Leuven, Belgium</p>
10:40 – 11:10	<b>Coffee/Tea Break (Networking + Poster Presentations)</b>
<b>Plenary Session-II</b>	
11:10 – 11:50	<p><i>Utilizing the layer by layer technique for the large scale manufacture of nanocapsules for controlled release and Cadmium extraction</i></p> <p style="text-align: right;">Prof. Dr. Paul F. Luckham Imperial College, London, UK</p>
11:50 – 12:30	<p><i>Porous membrane in secondary battery application</i></p> <p style="text-align: right;">Prof. Dr. Xianfeng Li Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China</p>

# ICSP 2017

12:30 – 13:10	<i>Fouling factor in membrane module design</i>	
	Prof. Dr. Roil Bilad University Technology Petronas, Malaysia	
13:10 – 14:15	<b>Lunch Break</b>	
	<b>Technical Session I: Membrane Technology</b> <b>Venue: TBD</b> <b>Session Chair:</b> Prof. Dr. Nasir M. Ahmad <b>Co-Chair:</b> Prof. Dr. Murid Hussain	<b>Technical Session II: Absorption &amp; Adsorption processes</b> <b>Venue: TBD</b> <b>Session Chair:</b> Prof. Dr. Mahmood Saleem <b>Co-Chair:</b> Prof. Dr. Robina Farooq
14:15 – 14:30	<i>Advanced membranes based on intrinsically conducting polymers: Pervaporation and Ion-exchange applications</i> Prof. Dr. Asif Ali Qaiser UET Lahore	<i>Adsorption-A low cost separation process for the removal of environmental pollutants</i> Prof. Dr. Haq Nawaz Bhatti Agriculture University, Faisalabad
14:30 – 14:45	<i>Techno-economic analysis of membrane based post-combustion CO<sub>2</sub> capture process</i> Prof. Dr. Arshad Hussain NUST, Islamabad	<i>Title to be decided</i> Prof. Dr. Basit Yameen LUMS, Lahore
14:45 – 15:00	<i>Developing Solvent Resistant Nanofiltration (SRNF) Membranes for Treatment of Dye Solutions</i> Prof. Dr. Fozia Tabassum Minhas Woman University, Multan	<i>Cu-oxide Coatings as Promising Electrode Materials for Microbial Fuel Cell</i> Prof. Dr. Nehar Ullah UET Peshawar



# ICSP 2017

15:00 – 15:15	<i>Performance Evaluation of a Full-Scale Membrane Bioreactor (MBR) Plant from Unsteady to Steady State Condition</i>  Prof. Dr. Sher Jamal NUST, Islamabad	<i>Combustion of Low Rank Coal with Municipal Solid Waste (MSW) and Impact on NO<sub>x</sub></i>  Prof. Dr. Suleman Tahir University of Gujrat, Gujrat
15:15 – 15:30	<i>Membranes for Science &amp; Engineering Applications</i>  Prof. Dr. Tahir Jamil University of Punjab, Lahore	<i>Separation of Hydrogen Sulfide from Natural Gas Using Low Cost Adsorbent</i>  Prof. Dr. Zaheer Aslam UET Lahore
15:30 – 15:45	<i>Multifunctional weak polyelectrolyte multilayers for membrane applications</i>  Dr. Shazia Ilyas KU Leuven, Belgium The Urban Unit Lahore	<i>Bi-metallic decorated carbon nanotubes for polluted water treatment</i>  Sadiya mushtaq UET Lahore
15:45 – 16:00	<i>High CO<sub>2</sub> selective 3-(trimethoxysilyl)propan-1-aminium acetate based supported ionic liquid membrane</i>  Ayesha Ilyas COMSATS, Lahore	<i>Aspen Hysys Simulation of Heat Integrated Cryogenic Plate and Packed Distillation Columns for Air Separation</i>  Abdul Qadir NFC Faisalabad
16:00 – 16:20	<b>Tea/Coffee Break (Networking + Poster Presentation)</b>	

# ICSP 2017

	<b>Technical Session III: Membrane Processes</b> <b>Venue: TBD</b> <b>Session Chair:</b> Prof. Dr. Tahir Jamil <b>Co-Chair:</b> Prof. Dr. Asim Laeeq Khan	<b>Technical Session IV: Novel Separation Techniques</b> <b>Venue: TBD</b> <b>Session Chair:</b> Prof. Dr. Haq Nawaz Bhatti <b>Co-Chair:</b> Prof. Dr. Moeen-ud-Din Ghauri
16:20 – 16:35	<i>Functional Polymer Membranes for Water Purification: Design, Development, and Applications</i> Prof. Dr. Nasir M. Ahmad NUST, Islamabad	<i>Advances in particle separation from flue gases</i> Prof. Dr. Mehmood Saleem University of Punjab, Lahore
16:35 – 16:50	<i>A review of the characterization of the synthetic polymeric membranes and fouled membrane: from the microscopic to macroscopic scale</i> Prof. Dr. Rahma Tamime Lahore School of Economics, Lahore	<i>Design, Mathematical Modelling, and Parametric Analysis of a Solar Desalination System with Humidification and Dehumidification</i> Rasikh Tariq HITEC University, Taxila
16:50 – 17:05	<i>Solid Electrolyte Membrane Reactors for Efficient Synthetic Fuel Production</i> Prof. Dr. Asif Mahmood PIEAS, Islamabad	<i>Pore scale numerical simulation of microfiltration of slotted pore filters via COMSOL Multiphysics - deformation behaviour of oil droplet</i> Nabeel Ahmed UET Peshawar
17:05 – 17:20	<i>Preparation of Polysulfone Membranes Modified with Polyethylene Glycol Functionalized Carbon Nanotubes for Antifouling Applications</i> Arsalan Khalid King Fahd University, Saudi Arabia	<i>Synthesis, characterization and application of iron nanoparticles based cellulose adsorbent for heavy metals removal from wastewater</i> Attarad Ali Quaid-e-Azam University, Islamabad

# ICSP 2017

17:20 – 17:35	<i>Development of PEBAx 2533/ZIF-7 Mixed Matrix Membranes for Gas Separation</i> Wajahat ur Rehman UET Peshawar	<i>Geopolymerization: A Green &amp; Sustainable Approach for Inorganic Membrane Synthesis</i> Amir Naveed UET Peshawar
17:35 – 17:45		<i>Risk Management and Analysis of Silica Dust Hazards in Local Stone Crushing Industry</i> Wajid Ali UET Peshawar
17:45 – 18:00	<i>Working Sessions Closing remarks &amp; Prize Distribution</i>	
<b>20:00</b>	<b>Conference Gala Dinner</b>	

## Thursday, April 27

<b>Session I</b>	
09:30 – 10:30	Annual Meeting of Pakistan Membrane Society Prof. Dr. Asad U. Khan
10:30 – 11:00	<b>Coffee/Tea Break</b>
11:00 – 12:00	Graduate Seminar Prof. Dr. Paul Luckham, Prof. Dr. Ivo F. J. Vankelecom, Prof. Dr. Xianfeng Li, Prof. Dr. Roil Bilad
12:00 – 13:00	Round Table Panel Discussion
13:00 – 13:30	Closing Remarks
13:30 – 14:30	<b>Lunch Break</b>

## Poster Presentations

Sr. #	Paper ID	Presenter	Affiliation	Abstract Title
1	Paper_05	Ahmad Mukhtar	NFC Faisalabad	Textile Industry Wastewater Treatment using DAP, Urea, and Polymer AQUATREAT @AR 06
2	Paper_06	Umar Shafiq	PU Lahore	Coagulation Flocculation Based Biological Treatment of Tannery Industry Wastewater using Potash Alum and Drewfloc
3	Paper_07	Atia Mubeen	NFC Faisalabad	Removal of Residual Carcinogenic Dyes from Industrial Wastewater using Flocculation Technique
4	Paper_09	Zaheer Asghar	University of Agriculture, Faisalabad	Modified sewage sludge for sustainable development
5	Paper_10	Naveed Ahmad	University of agriculture Faisalabad	Leather industry effluent treatment using Phycoremediation and Green Micro-algae
6	Paper_12	Muhammd Sadiq	UET Lahore	Preparation and Characterization of Mixed Matrix Membrane (MMM) of Polyvinyl Chloride (PVC) and Titanium-dioxide (TiO <sub>2</sub> ) for Water Desalination
7	Paper_13	Engr. Usman Ghani	UET Peshawar	Investigation of the Effect of Microwaves on Minerals Liberation and Grindability
8	Paper_16	Muhammad Sajid	UOG Gujrat	Removal of methylene blue from the aqueous solution of cannabis (HEMP) through adsorption
9	Paper_18	Muhammad Zeeshan	UET Taxila	Fouling reduction techniques in membrane bioreactor: A review
10	Paper_19	Saqib Iqbal Ch.	PU Lahore	Treatment of Ground Water using Sterilization, Softeners, Reverse Osmosis, and Filtration
11	Paper_20	Sikandar Rafiq	CIIT Lahore	Hydrophilic nanocomposite membrane for carrier-mediated transport for post-combustion CO <sub>2</sub> capture
12	Paper_21	Hassan Anwar Saleemi	Sharif College of Engineering & Technology	Desulfurization and Parametric Study of Bituminous Coal Via Froth Flotation Technique

# ICSP 2017

13	Paper_22	Asma Javeed	PU Lahore	Synthesis and Application of Polyether & Polyester based Polyurethanes as Redox Catalyst
14	Paper_23	Micaiah Cyril Das	UET Peshawar	Plant Design for Bio-Ethanol fermentation from potato peels waste Simultaneous Saccharification and Fermentation of Starch by Very High Gravity process
15	Paper_25	Iqra Yasmeen	CIIT Lahore	ZIF-67 Ionic liquid based mixed matrix membranes for gas separation
16	Paper_27	Sidra Saqib	CIIT Lahore	Synthesis and characterization of CNT mixed matrix membrane
17	Paper_28	Usama Shakil	PIEAS Islamabad	Simulation of Pre-Combustion CO2 Capture for IGCC Power Plants
18	Paper_29	Saba khan	Lahore School of Economics	ZIF-7/PSF mixed matrix membranes: synthesis and performance for removal of chromium from water
19	Paper_31	Sidratel Muntaha	UET Peshawar	Comparative Study of J-T Valve, Mechanical Refrigeration and Turbo Expander for Cryogenic Process
20	Paper_32	Uzair Tariq	UET Peshawar	Desulphurization of Indigenous coal by Oil Agglomeration
21	Paper_33	Mian Yahya Gul	UET Peshawar	Desulphurization of coal from Cherat by froth flotation
22	Paper_35	Tanzila Anjum	Lahore School of Economics	Preparation and Characterization of antifouling Mixed Matrix Ultrafiltration Membrane tailored by UiO-66 and Zeolite4A for the Removal of Humic Acid
23	Paper_36	Sudeeha Ishaq	Lahore School of Economics	Mixed Matrix Membranes comprising of BioMOF-1 in Polysulfone matrix for CO2 Separation
24	Paper_37	Waleed Yaseen	University of Agriculture Faisalabad	Photocatalytic activity of Magnetite TiO2-rGO nanocomposite as photocatalyst for the degradation study of aquatic pollutants
25	Paper_38	Muhammad Sher Khan	UET Peshawar	Sensitivity analysis of key parameters of a Amine Sweetening Unit
26	Paper_39	Muhammad Imran Ahmad	UET Peshawar	Statistical design of experiments for co-pyrolysis of used diapers and waste plastics
27	Paper_40	Kiran Mustafa	The Women University Multan	Optimization of Kinetic Variables for the Permeation of Dye across Bulk liquid Membrane

## ICSP 2017

28	Paper_41	Saima Noreen	University of Agriculture Faisalabad	Continuous study for removal of Actacid Orange-RL dye using the agro-polymer composite
29	Paper_42	Maria Tabasum	The Women University Multan	Remediation of Dye from Textile Wastewater using Polymer Inclusion Membrane
30	Paper_44	Muhammad Imran Ahmad	UET Peshawar	Process design for production of fuel by co-pyrolysis of used diapers and waste plastics
31	Paper_45	Muhammad Raees	CIIT Lahore	MOF-5 based mixed matrix membranes for solvent resistant nanofiltration
32	Paper_46	Zaman Tahir	CIIT Lahore	Tuning the Gas Separation Performance of Fluorinated and Sulfonated PEEK membranes by incorporation of Zeolite 4A
33	Paper_47	Shafiq Ur Rehman	CIIT Lahore	Synthesis, characterization and application of MOF based solid acid catalyst: an esterification of oleic acid
34	Paper_48	Zunaira Habib	NUST Islamabad	Surface modification and characterization of polyamide nanofiltration membrane for better performance and anti-biofouling properties
35	Paper_49	Farah Munawar	CIIT Lahore	Zeolitic Imidazolate Framework-71 (ZIF-71) based Mixed Matrix Membrane for Reverse Osmosis
36	Paper_52	Dr. Muhammad Imran Ahmad	UET Peshawar	Extraction of Sweetener from Stevia Leaves
37	Paper_54	Rabia Farooq	University of Karachi	Biotransformation of steroids as key step towards the production of new drugs at industrial level
38	Paper_55	Dr. Waseem	Hazara University Mansehra Pakistan	Adsorption efficiency of anatase TiO <sub>2</sub> nanoparticles against cadmium ions
39	Paper_58	YASMIN NERGIS	Bahria University, Karachi	Reed Bed Technology and Recharging on Groundwater: How Can We Mitigate the Climate Effect of Coastal Areas?
40	Paper_59	<u>Saad Ullah Khan</u>	UET Peshawar	Prediction of Size Distribution of Crude Oil Drops Through a Non-Converging Slotted Pore Membrane
41	Paper_60	<u>Mohsin Najam</u>	CIIT Lahore	Investigation of meso-porous silica (KIT-6 and SBA-15-S) effect on property balance of Styrene Butadiene Rubber(SBR) nanocomposites

## ICSP 2017

42	Paper_61	Umar Wahid	UET Peshawar	Computational Analysis of Membrane Oscillation and its Influence on Fouling
43	Paper_62	Qazi Sohaib	UET Peshawar	Desalination of water: Design, Fabrication and Performance Evaluation of Active Solar Still Coupled with Solar Collector
44	Paper_63	Usama Shakeel	CIIT Lahore	Synthesis and characterization of high surface area mesoporous HPW/KIT-6 Catalysts for the esterification of oleic acid
45	Paper_65	Fazli Saeed	UET Peshawar	Synthesis of Geopolymeric Membrane Using locally available Rice Husk Ash as a Source Material

# ICSP 2017

## Sponsors



Sentron Asia International

