

(16) Photovoltaics

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DETAILED PROGRAMME**Thursday : 15-12-2016****Session I : 10.15-11.45**

10.15-10.40 Invited Talk (1)	<u>Evan L Williams</u>	ABS-310-ICYRAM Investigation of Diketopyrrolopyrrole (DPP) based Organic Photovoltaics
10.40-11.05 Invited Talk (2)	<u>Goutam Kumar Dalapati</u>	ABS-Email-ICYRAM Earth abundant materials for solar energy conversion and saving applications
11.05-11.30 Invited Talk (3)	<u>O. Moutanabbir</u> A. Attiaoui, S. Mukherjee J.-H. Fournier-Lupien	ABS-Email-ICYRAM Extreme Light Absorption in Silicon-Germanium-Tin Heterostructures and Nanowires
11.30-11.45 Oral (1)	<u>Arup Kumar Rath</u> D Mandal P Goswami	ABS-82-ICYRAM Colossal light soaking effect in low temperature processed TiO ₂ /PbS quantum dot solar cells

Thursday : 15-12-2016**Session II : 12.00-13.15**

12.00-12.25 Invited Talk (4)	Vassilios Binas	ABS-Email-ICYRAM Modified TiO ₂ based photocatalysts for improved air and health quality
12.25-12.50 Invited Talk (5)	Sudip K. Batabyal	ABS-Email-ICYRAM Solution Processable Quaternary Metal Chalcogenides for Solar Energy Harvesting
12.50-13.15 Invited Talk (6)	<u>Somobrata Acharya</u>	ABS-Email-ICYRAM Controlling Band Offsets in Heterojunction Quantum Dots for Photovoltaics

Thursday : 15-12-2016

Session II : 14.15-15.45

14.15-14.40 Invited Talk (7)	<u>M Navaneethan</u> H. Ikeda	ABS-Email-ICYRAM Investigation of thermoelectric properties of SiGe nanostructured materials
14.40-14.55 Oral (2)	<u>R Shwetharani</u> Laveena P D'Souza Geetha R Balakrishna	ABS-86-ICYRAM Enhanced Photovoltaic Performance with ZnS Modification in Nd-TiO ₂ Semiconductor for Quantum Dot-Sensitized Solar Cells
14.55-15.10 Oral (3)	<u>Yogesh A Jadhav</u> Pragati R. Thakur Santosh K. Haram	ABS-107-ICYRAM Copper Zinc Tin Sulphide/Selenide (CZTS _x Se _{1-x}) Alloy Nanocrystals: An Estimation of Composition Dependent Band Edge Parameters using Cyclic Voltammetry
15.10-15.25 Oral (4)	<u>K Kumari</u> A Jayanthi S Avasthi	ABS-126-ICYRAM Effect of Grain-Boundaries on Efficiency of Thin-Film Gallium Arsenide Solar Cells with Columnar Grain Structure
15.25-15.40 Oral (5)	<u>Pramod Ravindra</u> Sushobhan Avasthi	ABS-161-ICYRAM Zinc Molybdenum oxide: A new absorber for solar photovoltaics

Thursday : 15-12-2016

Session II : 16.00-18.00

16.00-16.15 Oral (6)	<u>Yogini D Gujarathi</u> Santosh K. Haram	ABS-208-ICYRAM Novel Room Temperature Approaches for the Preparation of Air-stable and Crystalline CH ₃ NH ₃ PbI ₃ perovskite
16.15-16.30 Oral (7)	<u>Vineet Kumar Singh</u> Sushobhan Avasthi	ABS-215-ICYRAM Tunnel Diodes for Silicon/Perovskite Tandem Solar Cell
16.30-16.45 Oral (8)	<u>Sandra Dias</u> Nagabhushan Patel Saraswathi Chirakkara S.B Krupanidhi	ABS-315-ICYRAM Gallium and Indium co-doped ZnO as a Transparent Conducting Oxide for Cu ₂ SnS ₃ Solar Cells

16.45-17.00 Oral (9)	<u>Brajendra S. Sengar</u> Vivek Garg , Vishnu Awasthi , Shailendra Kumar , C. Mukherjee Shaibal Mukherjee	ABS-437-ICYRAM Dual ion beam sputtered Cu ₂ ZnSn(S,Se) ₄ thin films without selenization from a single target
17.00-17.15 Oral (10)	<u>Geeta R. Mutta</u> Srinivasa R. Popuri Nick S. Bennett	ABS-534-ICYRAM Nanostructured vanadium oxides and their possible applications in Dye sensitized solar cells
17.15-17.30 Oral (11)	<u>Khadija Kanwal Khanum,</u> Praveen C. Ramamurthy	ABS-713-ICYRAM Hierarchical Structures of Thiophene, Carbazole and Pyrrole Derivatives for Photovoltaic Application: Morphological advances
17.30-17.45 Oral (12)	<u>E M Vinod</u> I. Zimmermann C. Roldán-Carmona G. Grancini M. Buffiere , A. Belaidi and Mohammad KhajaNazeeruddin	ABS-752-ICYRAM Cu based Hole Transport Materials for Perovskite Solar Cells

Poster Session :

Wednesday : 14-12-2016 : Time : 10.15-13.15

16-Poster-01	Nisha Singh N Sivasankar A Subramania	ABS-51-ICYRAM Quaternary Cu ₂ ZnSnSe ₄ quantum dots sensitized electrospun nanoporous TiO ₂ nanofibers as photoanode for QDSSC
16-Poster-02	Margi Jani Dhyey Raval Arvind Chavda Indrajit Mukhopadhyay Abhijit Ray	ABS-79-ICYRAM Structure induced band offset minimization in low cost and eco-friendly CZTS/solid-solution Zn(O,S) thin films solar cells by spray pyrolysis
16-Poster-03	Subhajit Nandy Pavana S V Mocherla C Sudakar	ABS-114-ICYRAM Role of Oxygen Vacancy on the Electrical and Photoconductivity properties of Spark Plasma Sintered Bi _{1-x} CaxFeO _{3-d} Pellets
16-Poster-04	R. Parimaladevi K. Thamaraiselvi M. Umadevi	ABS-116-ICYRAM Structural and Photovoltaic Characteristics of Copper Doped Tungsten Oxide Hydrate (WO ₃ .H ₂ O) Nanoparticles
16-Poster-05	Kusum Rawat P.K. Shishodia	ABS-142-ICYRAM Effect of temperature on the structural and optical

		properties of CZTS nanoparticles
16-Poster-06	P.P Biswas P Murugavel	ABS-143-ICYRAM Thickness dependent photovoltaic effect of BiFeO ₃ thin films fabricated by Spin coating technique
16-Poster-07	Almas M Mujawar Kashmira S. Shaikh Kalpana S. Pawar Rupesh S. Devan Sandesh S. Jadkar Habib M. Pathan	ABS-147-ICYRAM Studies of Nickel Oxide and Titanium Oxide multilayer photoanode and its application in Dye Sensitized Solar Cell
16-Poster-08	Kashmira S Shaikh Almas M. Mujawar Kalpana S. Pawar Rupesh S. Devan Sandesh R. Jadkar Habib M. Pathan	ABS-148-ICYRAM Studies of Nickel-Zinc Oxide and Titanium Oxide Multilayer Photoanode and its Application in Dye Sensitized Solar Cell
16-Poster-09	Benjamin Hudson Baby D Bharathi Mohan	ABS-156-ICYRAM The Effect of CTAB on the Synthesis of SnS Nanorods for Thin Film Photovoltaics: Phase Formation, Optical and Electrical Properties
16-Poster-10	Sudarshan Singh Ajit K. Katiyar Arijit Sarkar S. K. Ray	ABS-237-ICYRAM Fabrication of CZTS/Si radial Heterojunction for optoelectronic applications
16-Poster-11	Kalpana S Pawar Sunita. S. Salunkhe-Gawali Altafhusain B. Nadaf Habit M. Pathan	ABS-259-ICYRAM Dye sensitized solar cell based on ZrO ₂ nanoparticles with combination of sensitizers; Pandan dye and Eosin-Y dyes
16-Poster-12	Charu Seth Deepa Khushalani	ABS-265-ICYRAM Degradation and Regeneration of Hybrid Perovskites
16-Poster-13	Ayan Sarkar Ashutosh Kumar Singh Debasish Sarkar Gobinda Gopal Khan	ABS-270-ICYRAM BiFeO ₃ /TiO ₂ Nano-heterostructure Arrays for Solar Energy Conversion and Energy Storage
16-Poster-14	Kulwinder Kaur Mohit Sood Mukesh Kumar	ABS-323-ICYRAM Cadmium-free alternative buffer layer and interface engineering for efficient carrier transport in earth abundant Cu-Zn-Sn-S solar cells

16-Poster-15	Ramesh S Kapadnis Vishal S. Kadam Sampat S. Kale Habib M. Pathan	ABS-368-ICYRAM Chemically Deposited CdTe and CdS Films and their Physico-Chemical Properties for Semiconductor Sensitized Solar Cells
16-Poster-16	Kusuma Jagadish B Hemavathi Geetha R Balakrishna	ABS-395-ICYRAM Novel polymer as hole transport layer for quantum dot sensitized solar cells and its performance degradation study
16-Poster-17	Swetha S, Suraj Soman, Sourava C Pradhan A Peer Mohammed K N Narayanan Unni U S Hareesha	ABS-446-ICYRAM Zinc oxide-Titania hybrid architectures as active layer in Dye-sensitized solar cell
16-Poster-18	Vivek Garg Brajendra S. Sengar Vishnu Awasthi Shailendra Kumar C. Mukherjee Shaibal Mukherjee	ABS-477-ICYRAM Band Alignment Study of Ion-beam Sputtered MgZnO/CIGSe Heterojunction for realization of all Sputtered Solar Cells
16-Poster-19	Surajit Ghosh Jayanta Chakraborty	ABS-506-ICYRAM Rapid synthesis of nanoforest on Al-doped ZnO transparent conducting film for fabrication of solar cells
16-Poster-20	Sanjay B Bansode Trupti T.Ghogare Sampat S.Kale Habib M.Pathan	ABS-509-ICYRAM Indium Sulfide and Indium Selenide Films: Deposition and their Application in Semiconductor Sensitized Solar Cell
16-Poster-21	Anjana J Kothari	ABS-524-ICYRAM Solution-processed Metal sulphide - ZnO Nanostructure Heterojunction for Solar Cells
16-Poster-22	Swarnim Sinha Susanta Kumar Sahoo Udai P. Singh	ABS-526-ICYRAM Deposition of Mo by DC Magnetron Sputtering as Back Contact for Thin Film Solar Cell
16-Poster-23	Pallavi Singh Prem Jyoti Singh Rana Prasenjit Kar	ABS-643-ICYRAM Unveiling the Novel Properties of Mg/Pb Binary Metal Mixed Halide $\text{CH}_3\text{NH}_3\text{Pb}_x\text{Mg}_{1-x}\text{I}_{1+2x}\text{Cl}_{2-2x}$ Perovskite
16-Poster-24	T Subashini T.Prakash B.S.Murty	ABS-686-ICYRAM Mechanochemical synthesis of cerium sesquisulfide photo-absorber for quantum dots sensitized solar cells

16-Poster-25	S N Karthick B. Balamuralitharan S. Selvam K.V. Hemalatha A. Dennyson Savariraj Hee Je Kim Moonsuk Yi	ABS-730-ICYRAM One step MoS ₂ thin film and powder preparation by simple chemical bath technique for solar cell and supercapacitor applications
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