

(18) Thermoelectrics

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DETAILED PROGRAMME

Tuesday, 13-12-2016

Session I : 10.15-11.45 hrs

10.15-10.45 Invited Talk (1)	<u>Kanishka Biswas</u>	ABS-Email-ICYRAM Phonon transport and ultralow thermal conductivity in complex metal chalcogenides
10.45-11.15 Invited Talk (2)	<u>V Kanchana</u>	ABS-Email-ICYRAM Natural Bulk-Superlattice Thermoelectric Materials: An Ab-initio Study
11.15-11.30 Oral (1)	<u>S R Popuri</u> M. Pollet, , R. Decourt, A. D. Fortes, J. W. G. Bos	ABS-513-ICYRAM Enhanced thermoelectric performance in polycrystalline SnSe: role of texturing and structural anharmonicity
11.30-11.45 Oral (2)	<u>R Murugasami</u> P Vivekanandhan S Kumaran R Suresh Kumar T John Tharakan	ABS-596-ICYRAM Nanostructured Silicon-Germanium Thermoelectric Alloy Doped with Phosphorous using Spark Plasma Sintering

Tuesday, 13-12-2016

Session II : 12.00-13.15 hrs

12.00-12.30 Invited Talk (3)	<u>Ajay Soni</u>	ABS-Email-ICYRAM Structural Complexity and Phonons in Thermoelectric Materials
12.30-13.00 Invited Talk (4)	<u>Per Eklund</u>	ABS-761-ICYRAM Novel approaches to thermoelectric materials
13.00-13.15 Oral (3)	<u>Praveen Tanwar</u> Sukhvir Singh, A. K. Panwar A. K. Srivastava	ABS-28-ICYRAM Structural, Thermoelectric and Optical Properties of SnTe Thin Film Deposited by Thermal Evaporation Technique

Tuesday, 13-12-2016
Session III : 16.00-18.00 hrs

16.00-16.30 Invited Talk (5)	<u>B Paul</u> J. Lu, P. Eklund	ABS-779-ICYRAM Nanoarchitected Flexible Thermoelectric Ca ₃ Co ₄ O ₉ Thin Films for Next Generation Wearable Electronics
16.30-17.00 Invited Talk (6)	<u>Sivaiah Bathula</u> Bhasker Gahtori M. Saravanan N. K. Upadhyay Radhey Shyam, Ajay Dhar	ABS-Email-ICYRAM Role of microstructural modification in enhancing the thermoelectric performance employing novel materials processing techniques
17.00-17.15 Oral (4)	<u>Manoj K Jana</u> Koushik Pal Umesh V Waghmare Kanishka Biswas	ABS-278-ICYRAM The origin of ultralow thermal conductivity in complex chalcogenides: Lone pair induced anharmonic rattling
17.15-17.30 Oral (5)	<u>Somnath Acharya</u> Juhi Pandey, Ajay Soni	ABS-172-ICYRAM Thermoelectric Performance of Transition Metal and Rare-Earth Element Doped SnTe

Wednesday, 14-12-2016
Session IV : 10.15-11.45 hrs

10.15-10.45 Invited Talk (7)	<u>Titas Das Gupta</u>	ABS-Email-ICYRAM Magnesium silicide based materials for thermoelectric power generation
10.45-11.15 Invited Talk (8)	<u>Suresh Perumal</u> Subhajit Roychowdhury Devendra S. Negi Ranjan Datta Kanishka Biswas	ABS-438-ICYRAM High Thermoelectric Performance and Enhanced Mechanical Stability of p-type Ge _{1-x} Sb _x Te
11.15-11.30 Oral (6)	<u>Satya N Guin</u> Kanishka Biswas	ABS-321-ICYRAM The effect of order-disorder phase transitions and electronic structure modulation on the thermoelectric properties of superionic AgCuS

Poster Session :**Wednesday : 14-12-2016: Time : 14.15-17.15 hrs**

18-Poster-01	Khushboo Agarwal Deepak Varandani B R Mehta	ABS-199-ICYRAM Simultaneous enhancement in power factor and phonon scattering of Bi ₂ Te ₃ composites for thermoelectric applications
18-Poster-02	S Roychowdhury U. S. Shenoy U. V. Waghmare K. Biswas	ABS-353-ICYRAM Tailoring of electronic structure and thermoelectric properties of topological crystalline insulator by chemical doping
18-Poster-03	Ananya Banik Badri Vishal, Suresh Perumal Ranjan Datta Kanishka Biswas	ABS-385-ICYRAM The origin of low thermal conductivity in Sn _{1-x} Sb _x Te: phonon scattering via layered intergrowth nanostructures
18-Poster-04	M Samanta S Roychowdhury, B Vishal R Dutta, K Biswas	ABS-416-ICYRAM Ultrahigh Average Thermoelectric Figure of Merit and Extremely Low Lattice Thermal Conductivity in TAGSS-80
18-Poster-05	R. G. Vaidya N. S. Sankeshwar B.G. Mulimani	ABS-472-ICYRAM Thermoelectric Power in Phosphorene
18-Poster-06	P Vivekanandhan R Murugasami S Kumaran	ABS-585-ICYRAM Structural Characterization and Mechanical Properties of Mg ₂ Si:Al Thermoelectric compound prepared by Spark Plasma Sintering
18-Poster-07	P C Sreeparvathy V Kanchana	ABS-608-ICYRAM Thermoelectric properties of CaSrX (X: Si, Ge, Sn, Pb): A first principle study
18-Poster-08	M Vasundhara V R Akshay	ABS-696-ICYRAM Tailoring thermoelectric properties of Bi-Te nanostructures synthesised by refluxing method
18-Poster-09	Ramesh Manickam Krishnendu Biswas	ABS-760-ICYRAM CuCrO ₂ and its composite with Graphene for high temperature thermoelectric application