



**International Conference on
Powder, Granule and Bulk Solids: Innovations
and Applications (PGBSIA 2013)**

CONFERENCE PROGRAM



भारत सरकार
विज्ञान और प्रौद्योगिकी मंत्रालय
विज्ञान और प्रौद्योगिकी विभाग
GOVERNMENT OF INDIA
Ministry of Science and Technology
Department of Science and Technology
Technology Bhavan, New Mehrauli Road
New Delhi - 110016

Department of Science and Technology
Government of India



Council for Scientific and Industrial Research
Government of India



National Project Implementation Unit



National Thermal Power Corporation Limited



Larsen and Toubro (L&T), India



Fujian Longking Co. Ltd., China



International Conference on Powder, Granule and Bulk Solids: Innovations and Applications (PGBSIA 2013)

Thapar University, Patiala, India, November 28-30, 2013

DAY 1: 2811.2013

MAIN AUDITORIUM			
8.15-9.00	Registration		
9.00-9.30	Opening Ceremony		
9.30-10.10	Lecture by Chief Guest		
10.10-10.50	Advances in bulk material handling technology – linking research and industry Peter Wypych, University of Wollongong, Australia		
10.50-11.20	High Tea (near to the main auditorium)		
11.20-12.00	Some fundamental aspects of the rheology of dense granular materials Prabhu R. Nott, Indian Institute of Science, Bangalore, India		
12.00-12.40	Control of dust in particulate process industries C.R. Copeland and S. Komar Kawatra, Michigan Technological University, USA		
12.40-13.40	Lunch (near to the main auditorium)		
	TAN BUILDING (ROOM-A): Bulk Solids Handling and Processing Session Chair:	TAN BUILDING (ROOM-B): Particle Synthesis, Properties and Characterization Session Chair:	TAN BUILDING (ROOM-C): Fluidization and Granular Flow Session Chair:
13.40-14.00	An investigation into friction forces of particulate plugs moving in vertical and horizontal pipes Semion Shaul and Haim Kalman, Ben-Gurion University of the Negev, Israel	IR spectrum of the wet very fine particulate material Tomas Sverak, Christopher G. J. Baker and Katerina Sikorova, Brno University of Technology, Czech Republic	The porosity distribution in monodisperse and polydisperse fixed beds and its impact on the fluid flow Sebastian Schulze, Petr A. Nikrityuk, Bernd Meyer, Institute of Energy Process Engineering and Chemical Engineering, Germany
14.00-14.20	Local mean velocity measurement of pneumatically conveyed particles using electrostatic sensor arrays and cross-correlation method Shengnan Wang, Chuanlong Xu, Shimin Wang and Yuezhu Wu, Southeast University, Nanjing University, Nanjing, China	Study of wettability and surface energy characteristics of nano-coated pharmaceutical excipient powders Vikram Karde and Chinmay Ghoroi, Indian Institute of Technology, Gandhinagar, India	Material Behaviour of Spherical Elastic-Plastic Granules at Diametrical Compression Alexander Russell, Peter Müller and Jürgen Tomas, Otto von Guericke University of Magdeburg, Germany
14.20-14.40	A comparative study on gravity-induced flow and forced flow of pulverized coal Haifeng Lu, Xiaolei Guo, Fuyu Wu, Xiaolin Sun, Kai Liu and Xin Gong, Shanghai Engineering Research Centre of Coal Gasification, Institute of Clean Coal Technology, East China University of Science and Technology, China	A Scientific approach to evaluate normal class room chalk and imported dustless chalk: an application of instrumentation and control engineering Manish Thakker, Dinesh O.Shah, Premal Shukla, Dharmasinh Desai University, India, University of Florida, USA	Droplet spreading on micro-patterned and micro-porous granular beds Ananth Praveen Kumar, Venkatanarayana Prasad S, Tamal Banerjee and Dipankar Bandyopadhyay, Indian Institute of Technology, Guwahati, India
14.40-15.00	Vibrological effects in rapid gravity flows of particulate solids on a rough chute Viktor N. Dolgunin, Andrew N. Kudy, Pavel A. Ivanov, Oleg O. Ivanov, Anatoliy M. Klimov and Vasilii A. Pronin, Tambov State Technical University, Tambov, Russian Federation	Influence of pH on the stability of alumina and silica nanosuspensions produced by stirred media milling Chetan M. Patel, Mousumi Chakraborty and Z. V. P. Murthy, National Institute of Technology, Surat, India	Droplet spreading on micro-patterned and micro-porous granular beds Ananth Praveen Kumar, Venkatanarayana Prasad S, Tamal Banerjee and Dipankar Bandyopadhyay, Indian Institute of Technology, Guwahati, India
15.00-15.20	Combustible Dust Explosion Risk Management Felipe Ong, BS&B Safety Systems, Singapore	Control of nanoparticle agglomeration: role of synthesis technique & surfactant Chandni Khurana, O.P Pandey and Bhupendra Chudasama, Thapar University, India	Study of the dynamics of wet granulates under shear Jayati Sarkar and Dheerendra Dubey, Indian Institute of Technology, Delhi, India
15.20-15.40	Tea/Coffee Break + Exhibition		
	TAN BUILDING (ROOM-A): Bulk Solids Handling and Processing	TAN BUILDING (ROOM-B): Particle Mechanics and Simulation Session Chair:	TAN BUILDING (ROOM-C): Applications of Particle Technology Session Chair:
15.40-16.00	WORKSHOP: Design, case-studies and troubleshooting of dense-phase pneumatic conveying systems Peter Wypych and S.S.Mallick, University of Wollongong, Australia and Thapar University, India	Discrete element modeling of grain flow pattern in continuous cross-flow grain dryer R. P. Kingsly Ambrose, Josephine M. Boac and Dirk Maier, Kansas State University, U.S.A	Improving lubrication of EDM oil at higher shear rate and temperature with carbon nanotubes Balram Tripathi and B. Ravindra and Y.M. Joshi, Indian Institute of Technology, Jodhpur, India
16.00-16.20		Effect of elliptical particles orientation on macro and micromechanical behaviour during direct shear test Ali Asghar Mirghasemi and Morteza Naeij, University of Tehran, Iran	Powder mixed dielectric: an approach for improved process performance in EDM Ajay Batish, Anirban Bhattacharya and Naveen Kumar, Thapar University, India
16.20-16.40		Modeling of nano-suspension droplet drying by CFD-DEM approach Y.Ostrovski, A. Levy, Ben-Gurion University of the Negev, Israel	A novel multipurpose powder/small particle composition for detection of fingerprints on a legion of crime scenes G.S. Sodhi and Jasjeet Kaur, S.G.T.B. Khalsa College, Shaheed Rajguru College of Applied Sciences for Women, Delhi, India
16.40-17.00		A study of CFD modelling on variation of solid fraction in a batch fluidized bed G Srinivas and Y Pydi Setty, National Institute of Technology, Warangal, India	Oil agglomeration of coal fines in continuous Mode of Operation Ankush Gupta, H.V.C. Chary Guntupalli, M.G. Dastidar, Indian Institute of Technology, Delhi, Central Pollution Control Board, Delhi, India
17.00-17.20		ASPEN Plus simulation and experimental study of different dry biomass solid waste gasification process using air-steam fluidized bed gasifier R. Tripathy and A. Sahoo, National Institute of Technology, Rourkela, India	A comparative study on physico-chemical characteristics and synthesis of typical nanofluids Ajay Vasishth, K.S.R. Murthy and Gagan Anand, University of Petroleum and Energy Studies, Dehradun, India
17.20-17.30	Tea/Coffee Break + Exhibition		
	TAN BUILDING (ROOM-A): Bulk Solids Handling in Thermal Power Plants	TAN BUILDING (ROOM-D): Particle Synthesis, Characterization and Applications	
17.30-18.00	Practical issues of coal handling plant operation in a thermal power plants I.K.Rajdeva, National Thermal Power Corporation (NTPC), India	WORKSHOP: Application of powder technology to detection of fingerprints on crime scene evidence G.S. Sodhi, S.G.T.B. Khalsa College, Delhi, India	
18.00-18.30	Latest developments in ash handling systems in Indian power plants Tirupati Rao, Bharat Heavy Electricals Limited (BHEL), Bangalore, India	WORKSHOP: Nanoparticle synthesis, characterization, engineering applications: present challenges and future developments Coordinator: Dr. Bonamali Pal, Thapar University, India (in collaboration with subject experts)	
18.00-19.00	Advances in pneumatic, slurry conveying within industry Sumantra Sen, Tecpro Systems Limited, Kolkata, India		
19.00-20.00	Welcome Reception (near to the main Auditorium)		

International Conference on Powder, Granule and Bulk Solids: Innovations and Applications (PGBSIA 2013)

Thapar University, Patiala, India, November 28-30, 2013

DAY 2: 29.11.2013

MAIN AUDITORIUM			
8.15-8.20	Announcements by Organizing Secretary		
8.20-9.00	Recent advances in long distance belt conveyors Gabriel Lodewijks, Delft University of Technology, Netherlands		
9.00-9.40	Using threshold velocities to determine flow regime maps for pneumatic conveying Haim Kalman, Ben-Gurion University of the Negev, Israel		
9.40-10.20	Discrete element simulation of granular and multiphase flows Navid Mostoufi, University of Tehran, Iran		
10.20-10.40	Tea/Coffee Break (near to the main auditorium)		
10.40-11.20	Modelling milling processes Avy Levy, Ben-Gurion University of the Negev, Israel		
11.20-12.00	Chemical imaging applied to particles and particles Systems characterization: fundamentals Giuseppe Bonifazi and Silvia Serranti, University of Rome, Italy		
12.00-12.40	Nucleophile induced reversible dissolution of metal in aqueous surfactant solution: an astounding conclusion Tarasankar Pal, Indian Institute of Technology, Kharagpur, India		
12.40-13.40	Lunch (near to the main auditorium)		
	TAN BUILDING (ROOM-A): Bulk Solids Handling and Processing	TAN BUILDING (ROOM-B): Particle Synthesis, Properties and Characterization Session Chair:	TAN BUILDING (ROOM-C): Fluidization and Granular Flow Session Chair:
13.40-14.00	WORKSHOP: Conveyor dynamics Gabriel Lodewijks Delft University of Technology, Netherlands	Chemical imaging applied to particles and particles Systems characterization: case studies Giuseppe Bonifazi and Silvia Serranti, University of Rome, Italy useia Serranti,	Pressure drop and gas holdup studies in a spout-fluid bed Sujan Kumar B and Venu Vinod A, National Institute of Technology, Warangal, India
14.00-14.20		Facile synthesis of anisotropic Au nanostructures by laser irradiation and study their optical and electro-kinetic properties Bonamali Pal and Rupinder Kaur, Thapar University, India	Effects of physical and mechanical properties on fluidized bed drying of rajma seed S. Jena and A. Sahoo, National Institute of Technology, Rourkela, India
14.20-14.40		Magnetic properties of nano-structured Co and Ni synthesized by modified NaBH₄ reduction route Shankar B. Dalavi and Rabi N. Panda, BITS Pilani, Goa, India	Studies on parameter optimization for particle growth in a fluidized bed granulator: interval halving method Abanti Sahoo and Lisa Sahoo, National Institute of Technology, Rourkela, India
14.40-15.00		Effect of processing variables on WC nanoparticles synthesized by solvothermal route Gourav Singla, K. Singh and O. P. Pandey, Thapar University, India	Segregation in horizontally shaken binary granular mixtures in Christmas-tree channel Ashish Bhateja, Ishan Sharma and Jayant K Singh, Indian Institute of Technology, Kanpur, India
15.00-15.20		A simple aqueous solution based chemical methodology for preparation of mesoporous alumina: efficient adsorbent for defluoridation of water Desagani Dayananda, Venkateswara Rao Sarva, Sivankutty Vadakkethonippurathu Prasad, Jayaraman Arunachalam, Narendra Nath Ghosh, BITS Pilani, Goa, Bhabha Atomic Research Centre, Hyderabad, India, National Institute for Interdisciplinary Science and Technology (NIIST-CSIR), Kerala, India	Exhibition
15.20-16.00	Poster Presentation + Exhibition (TAN BUILDING)		
	TAN BUILDING (ROOM-A): Bulk Solids Handling and Processing	TAN BUILDING (ROOM-B): Particle Mechanics and Simulation Session Chair:	TAN BUILDING (ROOM-C): Applications of Particle Technology Session Chair:
16.00-16.20	WORKSHOP: Bulk material storage facilities – design and management considerations Peter Wypych University of Wollongong, Australia	Effect of dune formation on pressure drop in horizontal pneumatic conveying system Ajay B. Makwana, Ramjee Korada and Manaswita Bose, Indian Institute of Technology, Bombay, India	Hot deformation behaviour of Aluminium composite produced through powder metallurgy route A. Rajeshkannan, University of the South Pacific, Laucala Campus, Fiji
16.20-16.40		An investigation on flow pattern and velocity fields in a two dimensional flat bottomed rectangular silo with central and off-centre discharge Sanjay K. Sardar, Ritwik Maiti, Prasanta K. Das and Gargi Das, Indian Institute of Technology, Kharagpur, India	Effect of different ceramic particle on the sliding wear behavior of Al-Si alloy composites Ranvir Singh Panwar, Suresh Kumar, O.P. Pandey, Thapar University, India
16.40-17.00		CFD simulation for hydrodynamic behaviour of fine particles in a fluidized bed P. Sahoo and A. Sahoo, National Institute of Technology, Rourkela, India	Sol gel derived hierarchially porous granular ceramics and aerogels for multifunctional applications Linsha Vazayal, K.V. Mahesh and S. Ananthakumar, National Institute for Interdisciplinary Science and Technology, Kerala, India
17.00-17.20		CFD analysis of hydrodynamic behavior in FC crystallizer Anis Bakhsh and H. M. Jena, National Institute of Technology, Rourkela, India	AC and DC conductivity studies on lead free ceramics: Sr_{1-x}Ca_xBi₄Ti₄O₁₅(x=0, 0.2, 0.4, 0.6, 0.8) Gagan Anand, Ajay Vasishth, Piyush Kuchhal and P. Sarah, University of Petroleum and Energy Studies, Dehradun, India
17.20-17.40		Numerical simulation of solid liquid two-phase flow behavior in centrifugal slurry Pump Satish Kumar, Thapar University, India	Development of closed-cell aluminum composite foams Suresh Kumar, Ranvir Singh Panwar and O. P. Pandey, Thapar University, India
19.45-20.15	Cultural Program (Main Auditorium)		
20.15-22.00	Conference Dinner (Guest House Lawn)		

International Conference on Powder, Granule and Bulk Solids: Innovations and Applications (PGBSIA 2013)

Thapar University, Patiala, India, November 28-30, 2013

DAY 3: 30.11.2013

MAIN AUDITORIUM			
8.55-9.00	Announcements by Organizing Secretary		
9.00-9.40	Recent advances in pipe conveyor technology Renhu Pan, Fujian Longking Company, China		
9.40-10.20	Re-interpretation of fluidization Xianfeng Fan, University of Edinburgh, UK		
10.20-11.00	Energy saving pneumatic conveying of bulk solids Arika Rinoshika, Yamagata University, Japan		
11.00-11.20	Tea + Coffee Break (near to the main auditorium)		
11.20-12.00	The significant parameter for the production of nanoparticles by stirred media milling B. Pitchumani, Institute of Technology, New Delhi, India		
12.00-12.40	Modelling dense-phase pneumatic conveying of bulk solids Chandana Ratnayake, Tel-Tek Institute, Norway		
12.40-13.40	Lunch (near to the main auditorium)		
	TAN BUILDING (ROOM-A): Bulk Solids Handling and Processing	TAN BUILDING (ROOM-B): Particle Synthesis, Properties and Characterization Session Chair:	TAN BUILDING (ROOM-C): Applications of Particle Technology Session Chair:
13.40-14.00	WORKSHOP: Ash handling systems in thermal power plants Renhu Pan Fujian Longking Company, China	Enhanced stability, conductance and catalytic activity of gold nanoparticles via oxidative dissolution by $KMnO_4$ Anila Monga and Bonamali Pa, Thapar University, India	Improvement of aerated discharge rate of cohesive powders by nano-coating Sanat Chandra Maiti, Vikram Karde and Chinmay Ghoroi, Indian Institute of Technology, Gandhinagar, India
14.00-14.20		Effect of pH on synthesis of single phase Titania (TiO_2) nanoparticles and its characterization G. Sarala Devi K. Shanth Kumar, Indian Institute of Chemical Technology, Hyderabad, India	Experimental investigation of magnetic field assisted EDM with powders mixed in dielectric Geeta Bhatt, Ajay Batish, Anirban Bhattacharya, Thapar University, India
14.20-14.40		Processing and characterization of plasma spray coatings of glass micro-spheres premixed with Al_2O_3 particles Gaurav Gupta and Alok Satapathy, National Institute of Technology, Rourkela, India	Epoxy composites filled with micro-sized AlN particles for microelectronic applications Alok Agrawal, Alok Satapathy National Institute of Technology, Rourkela, India
14.40-15.00		Morphological study of carbon nanoparticles synthesized at high temperature and pressure Mani Mahajan, K. Singh and O. P. Pandey, Thapar University, India	Study of broken glass granules to find cause of failure of windshield automobiles glass Bhupinder Kaur and O.P. Pandey, Thapar University, India
15.00-15.20		Exhibition	Mineralogical studies of fly ash that acts as a soil ameliorant in agriculture Rajinder Kaur and Dinesh Goyal, Thapar University, India
15.20-15.40	Tea/Coffee Break + Exhibition		
	TAN BUILDING (ROOM-A): Bulk Solids Handling and Processing Session Chair:	TAN BUILDING (ROOM-B): Particle Synthesis, Properties and Characterization Session Chair:	TAN BUILDING (ROOM-C): Applications of Particle Technology Session Chair:
15.40-16.00	Understanding powder caking as a consequence of a range of mechanisms by means of powder rheometry Tim Freeman, Nishil Malde and Yogin Chandorkar, Freeman Technology, UK and Aimil India	Effect of thermal treatment on morphology and photocatalytic activity of Fe-impregnated sodium titanate nanotubes Inderpreet S. Grover, Satnam Singh and Bonamali Pal, Thapar University, India	High sensitivity and selective response of ZnO: Nb2O5 nanocomposite based hydrogen gas sensor G.Sarala Devi, P. Siva Prasad Reddy and K. Ramya, Indian Institute of Chemical Technology, Hyderabad, India
16.00-16.20	Coal blending for Indian power plants –a case study Dipta Sundar Mallick, Development Consultants Private Limited, Kolkata, India	Photocatalytic degradation of Janus Green B using TiO_2 nanoparticles synthesized by sol gel method Pooja Singla, Manoj Sharma, O.P. Pandey and K. Singh, Sri Guru Granth Sahib World University, Thapar University, India	Development of plasma spray coatings using Linz-Donawitz (LD) slag particles Pravat Ranjan Pati and Alok Satapathy, National Institute of Technology, Rourkela, India
16.20-16.40	Present day scenario of handling bottom ash Debashish De, Development Consultants Private Limited, Kolkata, India	Exhibition	Development of gypsum powder admixture for exterior wall plaster Sudhir K. Singh, Thapar University, Patiala, India
16.40-17.00	Powder consolidation – why it is a problem and how to solve it Nilay Shah, Brookfield Engineering USA	Exhibition	Exhibition
17.00-17.20	Modern bulk materials handling techniques and various logistics solutions relevant to fly ash Anil Seth, Libran Engineering and Services, India	Exhibition	Exhibition
16.40-17.00	Collection of Certificates		
17.00-17.45	Conference Closing Ceremony (Main Auditorium)		

International Conference on Powder, Granule and Bulk Solids: Innovations and Applications (PGBSIA 2013)

Thapar University, Patiala, India, November 28-30, 2013

Poster Session: DAY 2 (29.11.13), time: 15.20-16.00, TAN Building First Floor

- Cyclic loading of spherical elastic-plastic granules at diametrical compression**
Alexander Russell, Peter Müller and Jürgen Tomas, Otto von Guericke University of Magdeburg, Germany
- Influence of the growth agglomeration process duration on the produced fraction of agglomerates and their mechanical properties**
Zheni Radeva, Peter Müller and Jürgen Tomas, Otto von Guericke University, Magdeburg, Germany
- Stability criterion for transition from homogeneous to bubbling fluidization**
Naval V. Koralkar, Gopee K. Krushna and Manaswita Bose, Indian Institute of Technology, Bombay
- Experimental study on coefficients of restitution for of solid particles**
Vikul Tomar and Manaswita Bose, Indian Institute of Technology, Bombay
- Effect of vortex finder diameter on flow field and collection efficiency of cyclone separators**
L.S. Brar, R.P. Sharma and R. Dwivedi, BIT Mesra, Ranchi
- Predicting pipe blockage condition for dense phase pneumatic conveying systems**
Gautam Setia and S.S.Mallick, Thapar University, India
- Study of pressure fluctuations during dense phase pneumatic conveying of powders**
Anu Mittal and S.S.Mallick, Thapar University, India
- Micro and macro mechanics of particle breakage**
Ahad Bagherzadeh-Khalkhali and Sohrab Bagheri, Moshanir Power Engineering Consultants, Zanjan Regional Water Co., Tehran, Iran
- CFD analysis of bed voidage characteristic of three phase fluidized bed with distributor**
Sambhurisha Mishra and Hara Mohan Jena, National Institute of Technology, Rourkela, India
- Experimental investigation of collision modes in particulate systems**
Praveen Kumar, Toni C. Veeramani, Indian Institute of Technology, Roorkee, India
- CFD simulation of biomass-sand mixing in a bubbling fluidized bed**
Shadab Alam, Rohit G. S.Srinath, G.Venkat Reddy, National Institute of Technology, Warangal, India
- Collision methodology for resolution of particulate interaction in three dimensional framework**
C. Veeramani, Indian Institute of Technology, Roorkee, India
- Effect of aggregation and dispersion of nanoparticle on tensile strength of polymer/fullerene(C₆₀) nanocomposite: molecular dynamics simulation**
Sunil Kumar and Sudip K. Pattanayek, Indian Institute of Technology, New Delhi, India
- Synthesis of zinc oxide nano particles by high energy ball milling**
S. Purnachandra Rao and R. Nagarajan, Indian Institute of Technology, Madras, India
- Experimental analysis on influence of temperature and concentration of nanofluids on thermophysical properties**
Mahesh Juneja and D. Gangacharyulu, Thapar University, India
- SERS activities of green synthesized silver nanoparticles: size effect**
M.R.Bindhu, V.G. Sathe and M. Umadevi, Mother Teresa Women's University, Kodaikanal; UGC-DAE Consortium for Scientific Research, University Campus, India
- Effect of pH on Size of ZnS nanoparticles and its application for dye degradation**
Jagdeep Kaur, Manoj Sharma and O. P. Pandey, Thapar University, India
- Green synthesis of Al₂O₃ nanoparticles under different reaction conditions**
Prasant Sutradhar and Mitali Saha, National Institute of Technology, Agartala, India
- An investigation into the stability and thermal conductivity of silver/water nanofluids**
Apoorva Singh, B.Pal and S.S. Mallick, Thapar University, India
- Green synthesis of Al₂O₃ nanoparticles under different reaction conditions**
Prasant Sutradhar and Mitali Saha, National Institute of Technology, Agartala, India
- A method for the determination of the particle size distribution of multi-sized coal particulates**
Arunanshu Chakravarty, Satish Kumar and S.K.Mohapatra, Thapar University, India
- Role of different range of particle size on wear characteristics of Al-Rutile composites**
Rama Arora, Suresh Kumar, Gurmel Singh and O.P. Pandey, Punjabi University, Thapar University, India
- Material transfer mechanism during ED-machining of MMC's with powder**
Sarabjeet Singh Sidhu, Ajay Batish and Sanjeev Kumar, Thapar University, India
- Effect of extended milling of scheelite ore with activated charcoal on direct synthesis of nano tungsten carbide**
Harjinder Singh and O. P. Pandey, Thapar University, India
- Crystallization and glass transition kinetics of Na₂S-P₂S₅ based super-ionic glasses**
Paramjyot Kumar Jha, O. P. Pandey and K. Singh, Thapar University, India
- A study on titanium oxide micro-particles filled epoxy with enhanced heat conductivity for microelectronic packaging applications**
Madhusmita Sahu and Alok Satapathy, National Institute of Technology, Rourkela, India
- Photoetching of SiO₂(shell) at CdS(core) nanostructure: An effect of CdS core size on photodecomposition of methyl orange under visible light irradiation**
Nidhi Gupta and Bonamali Pal, Thapar University, India
- An experimental investigation into the thermal properties of nanofluids**
Amit Kumar, Nikhilesh Bhargava, Tushar Sinha and S. S.Mallick, Thapar University, India
- Conductivity and dielectric relaxation studies of La_{0.9}Ba_{0.1}GaO_{3-d} system synthesized through P/M Route**
Kapil Sood, K. Singh, O.P. Pandey, Thapar University, Bhai Gurdas Institute of Engineering & Technology, India
- Effect of Dispersion parameters on thermal conductivity of Alumina (Al₂O₃) and Copper Oxide (CuO) based nanofluids**
Kundan Lal and S. S. Mallick, Thapar University, India
- Effect of addition of fly ash on the rheological properties of bottom ash slurry at varying temperature environment**
Satish Kumar, Thapar University, India
- Influence of CuO nanostructures on the thermal conductivity of DI water and ethylene glycol based nanofluids**
Bhupender Pal and Bonamali Pal, Thapar University, India
- Effect of particle size on wear behaviour of Al-garnet composite**
Anju Sharma, Suresh Kumar, Gurmel Singh and O.P. Pandey, Punjabi University, Thapar University, Patiala, India