

13th International High Energy Materials Conference & Exhibits (HEMCE-22) May 26-28, 2022

(Fourth List)

The following papers based on extended abstract have been accepted by organizing committee for 13th International High Energy Materials Conference & Exhibits (HEMCE-22) May 26-28, 2022.

Sr No	Registration No	Name of Author	Paper title
1.	1868	Kavita Devi	Thermal management study of condensed aerosolbasedfire extinguishing system
2.	4744	Piyali, G.	Effects of Applied Electric Voltage on Initial Temperature and Burn Rate of Solid Propellants
3.	4746	Ciju Paul	Pyroshock characterisation through simulatedimpact using numerical simulation and experimental validation
4.	4765a	Arjun V S Kidavu	Designing of a Helmholtz Photoacoustic Cell for the Spectroscopy Detection of Explosives in Acetone Solution Using UV-Mid-IR and Terahertz Regime Sources and Generation of Higher Acoustic Harmonics
5.	4765b	Arjun V S Kidavu	Study of Thermal Decomposition roots and detection of explosives from defense test range soil samples using a tunable Mid IR QCL laser based Photoacoustic themal analyzer
6.	4772	Hoque, E	Rheo-kinetic study of 4- (dimethylsilyl) butyl ferrocene grafted HTPB based composite propellant
7.	4773B	Rushikesh Kore	Performance analysis of bell nozzle for solid rocket motor using cfd approach
8.	4775	Vikranth, Thaltiri	Challenges and Approaches Towards the Synthesis of Nitropyrroles as High Energy Density Materials
9.	4779	Arun Prakash Gummadi	Detection of the binary explosive mixtures using laser induced breakdown spectroscopy (LIBS)
10.	4781	Karri. Veerandra Yadav	Effect Of Ageing on The Burning Characteristics of Ammonium Perchlorate With Copper Chromite as Additive
11.	4788B	Sai Shiva	Enhancement of laser induced shock parameters generated from multi-material thin films
12.	4789	Manikanta Elle	TNT equivalence of laser generated micro blast/plasma in ambient air
13.	4794-1	Macharla Arun Kumar	Laser ignition of high energy materials by using synthesized gold nanorods as photo-absorbing additive
14.	4794-2	Rajanna Gugulothu	Preparation of ammonium dinitramide (ADN) prills using melt prilling method
15.	4794-3	Mandadi Sneha Reddy	Synthesis and characterization of nanoparticles of copper chromite
16.	4794-4	Vanam Shiva	TG-FTIR-GCMS analysis of catalytic decomposition of ammonium dinitramide (ADN)
17.	4807	Tirthadeb Ghosh	Study of Transient burningcharacteristics of Base Bleed Propellant during Rapid Depressurization

18.	4859	Bishwajyoti Dutta Majumdar	Numerical Modeling and Experimental Validation of Sub-Scale Spherical Air Blast towards Design of Crew Escape System in Human Space Mission
19.	4864	Anusree T. C	Development of metal doped spinel CuCr_2O_4 catalyst for ammonium dinitramide (ADN) monopropellants
20.	4871	Dipanjan Banerjee	Real-time Multiple Explosives Sensing with Picosecond Bessel Beam Fabricated Silver Nanostructures
21.	4880	Ajithkumar H	Studies on propellant liner for solid rocket motors
22.	4883	Elaprolu Narsimha Rao	Orientation dependence of mechanical sensitivity of β -5-nitro-2,4-dihydro-3H-1,2,4-triazol-3-one (nto): a high pressure study
23.	4886	Rakesh Kumar	Lopa and fuzzy logic based risk assessment model to identify sil requirement in a explosive manufacturing facility
24.	4890	PRASHANT KUMAR	Numerical modelling of im (insensitive munition) compliance criteria for large calibre warhead
25.	4891A	Harikrishnan E. S	Thermokinetic and Combustion study of moderate burning Zr-Ni based gasless delay composition
26.	4891B	Nimesh S	Computational approach to Predict novel Tetrazine N-oxides as potential hedms
27.	4892	Manpreet Kaur	Urotropinium based energetic ionic liquids
28.	4893	Jaswanth Gangolu	A novel numerical method for reinforced concrete members subjected to blast loading
29.	4894	Priyanka	Synthesis, Crystal Structure and Energetic Performance of Copper based Tetranuclear Energetic Complex
30.	4895A	P. Naveen Kumar	Real Time Terahertz Imaging of concealed objects for security applications
31.	4895B	P. Naveen Kumar	Terahertz imaging based aging studies of secondary explosive molecules
32.	4896	Sreejith M	Core-shell particles of phase stabilized ammonium nitrate (psan): synthesis, characterization and propellant evaluation
33.	4897	Deepak Govindaraj	Pressure time curve prediction of solid rocket motor using image processing
34.	4898	Mittal Nitika	Modeling of roll torque generation in artillery rockets due to internal ballistics
35.	4900	Billakanti Srinivas	Synthesis of organic capped stable nano aluminium
36.	4902	Meet Savla	Numerical modelling and experimental validation of dual cartridge performance prediction in a vented vessel setup
37.	4903	Pankaj Negi	Development of Curing Cycle for Large Sized Solid Rocket Motors Using Finite Element Analysis
38.	4904	¹ Nirmal, C,	A novel approach for repair of elastomeric thermal insulation material using room temperature curing rubber compound
39.	4906	Sashank K S R	Numerical investigations through MD simulations for predicting the crack nucleation fracture locus in particles under impact

40.	4910A	Ashutosh Sharma	Comparative studies on effect of copper chromite and iron oxide on ageing characteristics of composite propellant
41.	4910B	Ashutosh Sharma	Analysis of effects of process variations and bem hardware on tail-off characteristics during bem firing
42.	4911	Samadhan Khairnar	Modified Epoxy Based Inhibition Resin for Composite Propellants
43.	4911B	SamadhanKhairnar	Synthesis, Characterization and Application of TDI Dimer as an Adhesion Promoter in Liner Resin for Composite Propellant
44.	4913	SRINIVAS VANGARA	Energetic functionalized aryl-pyrazole/imidazole derivatives: synthesis, characterization, and energetic studies
45.	4915	G, Murali Krishna	Electrochemical investigation of Hexaalkylhexaazaisowurzitane compounds
46.	4917	Sagar Prakash	Hazard identification and risk assessment of bladeless propellant mixer
47.	4918	Bijeesh CA	Studies on the thermomechanical and rheological characteristics of asbestos free inhibition system for solid rocket motors
48.	4919	Vinay Siram	Determining real time Nozzle throat and Thrust coefficient evolution during burn time of an SRM
49.	4920	Mahesh Shrikishan Ingole	Study of Variation of Burn Rates of Ammonium Perchlorate Monopropellant with the Production Source
50.	4922	Meenakshi Rohilla	Effect of size of Hematite on performance of aerosol forming composites for fire extinguishing application
51.	4923	Shaik Mujeeb	Selection of appropriate particle size analysis technique for ammonium perchlorate for solid propellant processing
52.	4924	V.S. Vendamani	Plasmonic Nanoparticles Decorated Nanocrystalline Silicon for SERS-based Explosives Detection
53.	4926	SM Kolhe	Comparative Analysis of Bi-axial Oriented Polymers for Manufacture of High Energy Density Capacitors for Pulsed Power Technology
54.	4929	Prathap Kumar Jharapla	DBX-1 (C2Cu2N10O4) : Potential Replacement for Lead Azide
55.	4930	Srivastava, N	Effect of altered combustion chamber pressure on ballistics and heat transfer in spinning solid rocket motors
56.	4931	Dilu Devarajan	Computational Study on hydroxylammonium based Salts as energetic materials
57.	4933	Prem Chand	Experimental study of factors affecting linear burn rate of condensed aerosol forming composite used for fire extinguishing applications
58.	4935	Vikas	Determination of Equation of State Parameters of mouldable PBX using cylinder Expansion Test with Photonic Doppler Velocimeter
59.	4938	Sudha Malik	Compatibility and thermal decomposition kinetics of 4-amino-1, 2, 4-triazolium picrate with polyester based polyurethane
60.	4941	Sankalp Sharma	Dynamic Response of Submerged Structures due to Underwater Explosion

61.	4942	Meeta Baghel	Instrumentation data of blast parameters generated for HD 1.2 ammunition placed inside LRC Igloo
62.	4943	Kamal Saroha	Development of Thermal Transient Test (T-T-T) for Non-Destructive Screening of Electro Explosive Devices
63.	4944A	Prabhanjan Kumar Thakur	Experimental Validation of Optimum Depth of Burst for Maximization of Crater Volume in Mixed Soil
64.	4944B	Prabhanjan Kumar Thakur	Tolerance of Human against Blast and its Effects: A Case Study
65.	4944C	Neelam Saxena	Establishing Quantity Distances for storage of Ammunition containing propellants in ISO containers protected by modular Traverses
66.	4945	K Athiraj	Assessment of explosion effects of UN HD 1.1 ammunition stored in ISO container protected with modular traverses
67.	4946	Ashok Kumar	Attenuation of Blast Wave to avoid Sympathetic Detonation of Adjacent Ammunition
68.	4948	Kumar Kaushik	Small-scale setup for performance evaluation of fire-fighting foam and development of SPGG coupled foam based fire extinguishers
69.	4949	Ramu Guda	Synthesis, characterization and energetic applications of polyphosphazenes modified with trifluoroalkoxy, 2-nitroalkoxy, 4-pirydimethylenealkoxy and imidazolyl substituents
70.	4950	Moinuddin Hassan	Metallic Actuator Membranes for Pyrogas Confinement in Pyrovalves
71.	4951	Satish Ashok Ture	Fluorescence Sensing of High Energy Materials by Using Doped Polyaniline: A Mechanistic Approach
72.	4954	Jagannath Rathod	Flexible-based SERS substrates for the detection of RDX and Thiram
73.	4955	Shete Mayuresh Kailas	Energy Transfer Margins of Safe Arm devices for Human Rated Launch Vehicles – Numerical Assessment & Experimental Validation
74.	4956	Mohammad Munis	Design of shaped charge based separation system for sounding rockets
75.	4958	Gayathri, S	Self-healing insensitive polymer bonded explosives (pbx) enabled by sigmatropic rearrangement: aspects of stability and safety
76.	4960	R S Rana	Quinol Ether as a Vulcanizing agent for epdm Rubber for Solid Rocket Motor Case Insulation
77.	4961	Vikranth Thaltiri	A novel synthetic approach for the synthesis of 1-methyl-2,3,4,5-tetrahydro-1H-pyrrole – a potential high energy melt cast material
78.	4962	Lakshman Y	Studies on process optimization for unsymmetrical dimethyl hydrazine (udmh) -the fuel for earth storable liquid motors in rocketry
79.	4963A	Vibhav Kumar	Development of a pyrogen igniter for hybrid motor
80.	4963B	Priyanka Shukla	A case study of parameters affecting peak pressure in third stage igniter of launch vehicle
81.	4964	Rahul	The effect of heating rate on the thermite reaction of Al/CNT/Fe ₂ O ₃ nanothermites

82.	4965	Ovas Rasool	Assessment of the effect of detonation of 5 mt (nec) of hd 1.2 ammunition inside the lrc box type igloo structure and determine the corresponding quantity distances (qds
83.	4966	Akhil Srivas KM	Design approach of a skirt mounted destrcut system
84.	4968A	Dr. Rani Krishnan K. R	Studies on lowering of isolation resistance in zirconium – potassium perchlorate based pyros
85.	4968B	Rani Krishnan K. R	Disposal management of aged ordnance systems
86.	4968C	Dr. Rani Krishnan K. R	Evolution of first fire elements- challenges faced and development strategy
87.	4973	Yogesh Kumar Singh	Isoconversional Approach for the non-isothermal decomposition kinetics of 2,2',4,4',6,6'-Hexanitrostilbene-II (HNS-II)
88.	5188	Surendra Singh Barala	Light weight Composites for High Energy Radiation Shielding
89.	5192	Abhiroop Goswami	Fragment impact from cased explosive charges: why should it be realistically considered?
90.	5195	Priyavrat Sharma	Simulation for prediction of over pressures and structural response by 1 kg tnt sand burried explosion at different depth of burial
91.	ASL	J. Senthil Kumar	Evaluation of internal ballistics properties of naturally aged solid propellant rocket motor
92.	4774	Jyothsna Yerra	Challenges in Development of Dual Pulse Solid Propulsion System for Extended Ranges
93.	4813	Sumit, S	Combustion characteristics of bkno3 pellets
94.	4959	Kuldeep Kumar Tomar	Removal of Solid Propellant & Insulation to recover the hardware of Solid Rocket Motor by Water Jet Cutting Technique
95.	5196	Ravindra Kumar Sharma	Role of High Voltage Pulsed Power Technology in ka Current-dumps
96.	5200	Pawan Kumar	Free surface velocity measurement of explosively driven flyer plate and particle velocity measurement of explosive/metallized-window interface using Photon Doppler Velocimetry (PDV) with dual-fiber probe

- Prepare and submit full paper as per instructions and template given on website.
- The fifth list of accepted paper based on abstract will be displayed soon.