TECHNICAL PROGRAMME OF
INTERNATIONAL CONFERENCE ON PHYSICS OF MATERIALS AND TECHNOLOGY (ICPMT2022) (ONLINE)

ORGANIZED BY
DEPARTMENT OF PHYSICS
SIKKIM MANIPAL INSTITUTE OF TECHNOLOGY
SIKKIM MNAIPAL UNIVERSITY
SIKKIM, INDIA

Use the following link to JOIN DAY1 of ICPMT2022 INAUGURAL and INVITED SESSION_1
https://bit.ly/3p5iaTB_DAY1_ICPMT2022_INAUGURATION_INVITEDSESSION_1

DAY-1 OF THE CONFERENCE (16 FEBRUARY 2022)
09:30-10:00 AM
INAUGURATION

DAY-1-SESSION 1

KEYNOTE SESSION
(CHAIRPERSON: PROF. UTPAL DEKA, MIT BANGALURU; DR SANJIB KABI, SMIT)

TIME (IST)

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<td>KN1</td>
<td>10:05-10:40</td>
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<td>KN2</td>
<td>10:45-11:20</td>
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“Materials Analysis and Manipulations Using Ion Beams”
DR. BIBHUDETTA ROUT, ASSOCIATE PROFESSOR, DEPARTMENT OF PHYSICS, UNIVERSITY OF NORTH TEXAS, DENTON, TX 76203, USA.

DR. BIBHU PRASAD SWAIN, ASSOCIATE PROFESSOR & (HOD) DEPARTMENT OF PHYSICS; NIT MANIPUR

INVITED SESSION
PHYSICS OF MATERIALS (PM)
(CHAIRPERSON: PROF. UTPAL DEKA, MIT BANGALURU; DR. SANJIB KABI, SMIT)

PAPERID TIME (IST)
PM1 11:30-11:40

“INVESTIGATION ON LOW-TEMPERATURE PL OF GO-ZNO NANOCOMPOSITE FOR UV DETECTION APPLICATION.”BY BIBEK CHETTRI, SANAT KR. DAS, BIKASH SHARMA, PRONITA CHETTRI, UTPAL DEKA
PM2  11:40-11:50  “A NEW QUANTUM MECHANICAL PSEUDO MATERIAL: APPLICATION IN CRYPTOGRAPHY”, BY CHARLI CHINMAYE PAL, SUBODHA MISHRA

PM3  11:50-12:00  EFFECT OF TENSILE AND COMPRESSIVE STRAIN ON THE ELECTRONIC PROPERTIES OF INPNBI USING MULTI-BAND K DOT P HAMILTONIAN” BY INDRANIL MAL, AND DIP PRAKASH SAMAJDAR

PM4  12:00-12:10  “EFFECT OF VERY LOW TEMPERATURE: BOSE-EINSTEIN CONDENSATION AND LOW TEMPERATURE TUNNELLING” BY JAYAKRUSHNA SAHU, SUBODHA MISHRA, RABINARAYAN PANDA

SYNTHESIS AND CHARACTERIZATION OF MATERIALS(SCM)  
(CHAIRPERSON: DR. SAIKAT CHATTOPADHYAY, MUJ; DR. SANJIB KABI, SMIT)

SCM1  12:10-12:20  “MICROWAVE ASSISTED SYNTHESIS OF NANOCRYSTALLINE CATIO3 FORM TARTRATE PRECURSOR.”, BY BHIMARAO PATIL

SCM2  12:20-12:30  “ADDITIVE MANUFACTURING (3D PRINTING): RECENT PROGRESS ON ADVANCEMENT OF MATERIALS AND CHALLENGES” BY DIPAK M. HAJARE AND TRUPTI S. GAJBHIYE.

SCM3  12:30-12:40  “RECYCLING OF SAW DUST AS A FILLER REINFORCED COTTON SEED OIL RESIN AMALGAMATED POLYSTYRENE COMPOSITE MATERIAL FOR SUSTAINABLE WASTE MANAGEMENT APPLICATIONS” BY NEWTON BALAKRISHNAN MERCY EBEN, PAVANKUMAR MURALKAR, MANO RANJANA PONRAJ, SEEMANTINI NADIGER, DHANDAYUTHAM SARAVANAN, JUSTUS SHAKINA JEBASINGH BHAGAVATH SINGH

LUNCH BREAK

DAY-1-SESSION 2

Use following link to Join the Invited Session-2

https://bit.ly/34Pj4w0_DAY1_INVITEDSESSION_2

KEYNOTE SESSION  
(CHAIRPERSON: DR. RANJAN GADAI, SMIT; DR. SANAT KR DAS, SMIT)

KN3  14:15-14:55  “PLASMONIC NANOMATERIALS FOR THERAPEUTIC APPLICATIONS.”  
DR. AMIT JAISWAL, ASSOCIATE PROFESSOR, SCHOOL OF BASIC SCIENCES, IIT MANDI.

KN4  14:55-15:35  “A ROADMAP FOR INTEGRATED CIRCUIT (IC) DESIGN WITH NANOSCALE EMERGING DEVICES”  
DR. SANJAY KR JANA, HOD, DEPT. OF ECE, NIT SIKKIM.
INVITED SESSION

DEVICE PHYSICS (DP)
(CHAIRPERSON: DR. RANJAN GADAI, SMIT; DR. SANAT KR DAS, SMIT)

DP1 15:40-15:50  “OPTIMIZATION OF CARBON COATING ON NA3V2(PO4)3 FOR IMPROVED ELECTROCHEMICAL PERFORMANCE AS CATHODE MATERIAL IN SODIUM-ION BATTERY BY USING PEG.” BY AMALENDU DAS

DP2 15:50-16:00  “ANTI-REFLECTIVE COATING FOR EFFICIENCY IMPROVEMENT OF GALLIUM ARSENIDE (GAAS) NANOSTRUCTURE BASED SOLAR CELLS” BY ANKIT KUMAR TENWAR, SADHNA SINGH, DIP PRAKASH SAMAJDAR

DP3 16:00-16:10  “INVESTIGATION THE ROLE OF SODIUM ALGINATE AND POLYVINYL ALCOHOL ACT AS AQUEOUS BINDER IN BIOGRAPHENE/ LITHIUM-MIXED METAL OXIDE ENERGY STORAGE DEVICE.” BY HIMANGSHU PAL, ARJIT GHOSH, SOMENATH CHATTERJEE, RAJAT MAHAPATRA

DP4 16:10-16:20  “FIRST PRINCIPLE STUDY OF RH/RU DOPED PENTAGONAL PDSE2 FOR DETECTION OF SO2 AND SO3 GAS”, BY BIBEK CHETTRI, ARMAN SHARMA, SANAT KR. DAS, BIKA SHARMA,

DP5 16:20-16:30  “ENHANCED LIGHT HARVESTING IN GAAS THIN-FILM SOLAR CELLS BY PLASMONIC GOLD (AU) NANOPARTICLES ABSORBER”, BY D.V. PRASHANTA, SUNEET KUMAR AGNIHOTRIA AND D.P. SAMAJDARA

DP6 16:30-16:40  “CURRENT SITUATION ANALYSIS OF SOLAR PV WASTE MANAGEMENT IN INDIA” MANISHA SHEORAN, PANCHAM KUMAR, SUSHEELA SHARMA AND MAHIPAL BUKYA

DP7 16:40-16:50  “GEOMETRICAL OPTIMIZATION OF GALLIUM ARSENIDE (GAAS)NANOSTRUCTURE BASED SOLAR CELL”, BY SADHNA SINGH, INDRANIL MAL, DIP PRAKASH SAMAJDAR AND KOUSHIK DUTTA

DP8 16:50-17:00  “A COMPARATIVE ANALYSIS OF SILICON (SI) AND INDIUM PHOSPHIDE (INP) NANOSTRUCTURE BASED SOLAR CELLS”, BY SIDDHARTH SAURABHA, SADHNA SINGHA, DIP PRAKASH SAMAJDARA

END OF DAY-1 OF THE CONFERENCE (16 FEBRUARY 2022)