



KABARAK UNIVERSITY
SCHOOL OF SCIENCE, ENGINEERING AND TECHNOLOGY
CONFERENCE ON BASIC SCIENCES

MAIN CONFERENCE PROGRAMME

THEME:

9TH OCTOBER 2020

REGISTRATION

Session Chair: Dr. Phillip Nyawere

TIME	ACTIVITY	FACILITATOR
8.00 – 8.30 AM	REGISTRATION	SECRETARY
8.30 – 8.40 AM	MEDITATION	PROVOST
8.40 – 8.50 AM	WELCOMING REMARKS	DEAN - SSET
8.50 – 9.00 AM (FLEXIBLE)	OPENING REMARKS	PROF. HENRY KIPLANGAT
9.00 – 9.45 AM	KEY NOTE ADDRESS	DR. AKIN-OJO OMOLOLU EAIFR – RWANDA
9.45 – 9.50 AM	VOTE OF THANKS	DR. C. MAGHANGA
9.50 – 10.00 AM	BREAK	

Paper Presentations

Session Chair:**DR. PETER TANUI**

Session rapporteur: **MR. ROBERT ROTICH**

PAPER	PRESENTER	TIME
01 Berry Curvature and Multiband Formation in TaP	Albert Disi – The Catholic University of Eastern Africa	
02 Cost of cloud Computing on record maintenance in Nyandarua institute of Science and technology, Nyandarua county, Kenya	Pauline Wangui - Researcher	10.00 – 10.20
06 Comparative Study on the Accuracy of Selected Solar Radiation Models Against Measured Data Under Tropical Climate	W.K. Cheruiyot – University of Eldoret	10.20- 10.40
04 Computational Design of a Dual Template Molecularly Imprinted Polymer	Emily Chesari – Harbin Institute of Technology	10.40- 11.00
07 Cooperative Jahn-Teller effects in ScF ₃	Domitiler Kemunto Orori – The Catholic	11.00- 11.20

	University of Eastern University	
13 Feed Formulation Ratios for Layers Using Two-level Factorial Designs	Grace Chumba – Kabarak University	11.20-11.40
03 Highly Sensitive Hydrogen Gas Sensor based on Fiber Bragg Grating (FBG) and Laser ablation technology	Joseph Karanja – Pwani University	11.40-12.00
12 Hole Superconductors	Peter Tanui – Kabarak University	12.00-12.20
05 Landau Criteria for Superfluidity for a mixture of Boson & Fermions	Stanslous Obota – University of Kabianga	12.20-12.40
LUNCH BREAK		
08 Origin of band inversion in topological Bi ₂ Se ₃ Author(s): Stephen Chege Mbugua	Stephen Chege Mbugua – Technical University of Kenya	2.00-2.20
11 Spontaneous Polarization in BiGaO ₃	Joy Wanjiku – The Catholic University of Eastern Africa	2.20-2.40
14 Synthesis, Characterization of ZnO Nanoparticles and their Application in Removal of Heavy Metals from Waste Water	Lucy Chebor – Kabarak University	2.40-3.00
09 The Interplay Of Lattice Distortion and Bands Near The Fermi Level in ATiO ₃ (A=Ca, Sr, Ba)	Patrick Ning’i – Technical University of Kenya	3.00-3.20
10 Thermoelectric Transport Properties of Tin Selenide from First Principles Calculations	Bill Oyomo – The Technical University of Kenya	3.20-3.40
17 Ab Initio Study of Mechanical Properties of Lead Halide Perovskite For Photovoltaic Application	Truphena Kipkwarwar – Kabarak University	3.40-4.00

4.00 – 4.20 PM Closing Remarks

NB: SLIGHT ADJUSTMENTS MAY COME IN DUE TO VC ADDRESS