



8TH AFRICAN RIFT GEOTHERMAL CONFERENCE (ARGeo-C8)



FIRST DRAFT CONFERENCE PROGRAMME



Virtual ARGeo-C8 Conference

2-6 November 2020

Nairobi, Kenya

Pre Conference Meetings (2-3 November 2020)

Meetings	Dates	Venue
IGA- BOD Meeting	1 November 2020	Virtual To be convened by IGA
Eleventh ARGeo Steering committee meeting (ARGeo-SC 12)	2 November 2020 –	Virtual
Ninth steering committee Meeting of the African Geothermal Center of Excellence (AGCE-SC 9)	2 November 2020	Virtual
Kenya Investment Forum- Moderated by Geothermal Association of Kenya (GAK)	3 November 2020	Virtual

Pre- Conference Short Courses, 2-3 November 2020 under the Auspices of IPCU-AGCE *

SC No.	Expected Participants	Short Course Title	Facilitator	Convener	Venue
SC- I	45	<i>Low-medium temperature Geothermal Systems and Direct Use Applications</i>	IPCU-AGCE	GRO-GTP	Virtual
SC-II	45	Geothermal Project Management and Financing for Development	IPCU-AGCE	NZGAF	Virtual
SC-III	45	Geothermal Reservoir Engineering and Modeling	IPCU-AGCE	GRG	Virtual
Sc-IV	40	Leapfrog Geothermal : How 3D Conceptual Model help in Decsion making	IPCU-AGCE	SEEQUENT	Virtual
03 November 2020 – Award of Certificates					

*A separate programme is developed for the four parallel short courses

DAY 1: WEDNESDAY, 04 November 2020

8:00 - 9:00 Geothermal Theme song					
Moderator: Representative from the Region					
9:00-10:30	Key Note Speaker: Global Geothermal Outlook and sustainable Development 2020 – Prof. Roland Horne, Stanford University, USA				
	Panelist 1: Surya Darma: Indonesia				
	Panelist 2: Hiroto Kamiishi, Japan				
	Panelist 3: Adele Manzella- Italy				
	Panelist 4: Greg Usher- New Zealand				
Panelist 5: Peter Omenda- Africa					
10:30-11:00 Cultural Show					
OPENING CEREMONY: MC: Dr. Joseph Njoroge					
11:00 - 12:00	Welcoming remarks by Chairperson, Organizing Committee, Chrispin Lupe,				
	Remarks by IGA President - Andy Blair				
	Remarks by UNEP – REGIONAL DIRECTOR, Africa Office , Dr. Juliette Biao Koudoukpo-				
	Remarks by Africa Union Commission- Dr. Amani Abou-Zeid, Commissioner for Infrastructure and Energy				
	Remarks by Minister for Energy, Kenya; H.E. Charles Keter				
H.E. Ólafur Ragnar Grímson, Former President of Iceland and Global Geothermal Ambassador (Guest of Honour)					
12:00 – 13:00	Ministerial – Roundtable: Science-Policy- implementation for sustainable geothermal development towards the objective of achieving SDG's (Chair – CS Charles Keter, Co-Chair AUC/UNEP)				
	Ministerial makers of the following countries: Burundi, Comoros, Democratic Republic of Congo, Djibouti, Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Somalia, South Sudan, Tanzania, Uganda, status,				
13:00-13:30	Launch of African Women in Geothermal (Chief Guest)* H.E. Ólafur Ragnar Grímson Former President of Iceland and Global Geothermal Ambassador				
Opening of Exhibition / Press Conference					
Breakout Sessions: 14:30-16:00					
14:30 – 16:30	PARALLEL 1: Country Update-1: Moderator- Rapporteur-	PARALLEL 2: Exploration 1 (Geology): Moderator - Rapporteur -	PARALLEL 3: Geophysics-1: Moderator	PARALLEL 4: Social Aspects of Geothermal Development: Moderator - Rapporteur, Anne Mwangi	PARALLEL 5: Geochemistry Moderator- Rapporteur-
14:30 – 14:50	Country Update for Kenya 2020 - Omenda et al.	Evaluation of Structural Permeability of the Northern Lake Abaya Geothermal Field, Southern	Resistivity Structure Of High- Temperature Geothermal System In Arta Prospect,	Women Empowerment, Improvement and Implementation of a gender policy for the geothermal	Geochemical Characterization Of The Kyavitumbi Thermal Spring, D.R. Congo-Mukandala et al.

		Main Ethiopian Rift, Using Soil Gas Approach- Gebrewold et al.	Republic Of Djibouti- Ibrahim Ahmed	sector in case of the Djiboutian Office of Geothermal Energy Development- Abdek Mahamoud and Soumeya Ali Aouad	
14:50 – 15:10	Geothermal Development and Exploration in Malawi-Country Update -Eliyasi	Mapping Land Surface Temperature Using LANDSAT 8 OLI/TIRS Satellite data and GIS -ArcGIS Model Builder for geothermal exploration purpose-Lisbeth Garcia	1-D, 2-D and 3-D Inversions Method of Magneto telluric Data to Characterized the Depth and Nature of Resistivity of the Cap rock and Geothermal Reservoir of Aluto Langano field, Ethiopia-Hadush Nega	Gender Mainstreaming Initiatives; A Geothermal Sector Perspective on diversity and inclusion- Mukiri	Multivariate Analysis as An Insight into Mechanisms and Processes Affecting Geothermal Fluids at Panyimur, Uganda: Towards Selecting an Appropriate Geothermometer-Achieng' and Fujimitsu
15:10 – 15:30	Geothermal Resource Exploration in Rwanda: A Country Update- Rutagarama	Giant geothermal sites along the EARS: the determinant volcano-structural control- Varet	1D Inversion Of Magnetotelluric Data From Ashute, Butajira Geothermal Prospect-Tadesse	Community-based geothermal projects along the EARS: the need for another (or a new) approach of ESIA- ESMP-Onyango	Geochemical study of Arta geothermal field, Djibouti- Sadik Bashir et al
15:30 – 15:50	Geothermal Energy Exploration in Uganda, Country Update-Bahati & Natukunda	Structural Geology, a control of the North and South Kivu Geothermal sites, A Preliminary Report-Wisdom	Analysis of a Geothermal System Based on 3D Resistivity and Gravity Method-Gichira and Noor	Social acceptance and social acceptability of geothermal project: In case of East-African Countries-Abdek Abdi	Mapping and Geochemistry of Geological Formations around the Lilida Thermal Spring, DR Congo-Kawa et al
15:50-16:10	Geothermal Development in Djibouti- Kayad Moussa	Application Of Landsat 8 Sattelite Images, Hydrothermal Alteration Mapping, Thermal Anomalies And Correlation With XRD Analysis: Case Study Of Ne Goubbet Area (Djibouti)-Aden	Subsurface Characterization of Panyimur Geothermal Prospect, NW Uganda using Magnetotellurics-Eriya et al.	Community Engagement in Geothermal Development in Uganda-Aijuka	GEOCHEMISTRY OF EXTENSIONAL-TYPE GEOTHERMAL SYSTEM IN UGANDA- Twesigye
16:10 – 16:30	Geothermal Development in the Democratic Republic of the Congo-a Country Update- Mukandala and Mahinda	Progress of Geothermal Energy Exploration at Buranga Prospect, Western Uganda – Natukunda and Bahati	A joint geophysical analysis of the Arta geothermal field, Djibouti- Fahman Abdallah et al	Geothermal for Peace: explore the Bidu-Dubbi, a huge geothermal potential along the border (Bidu Woreda, Afar Regional State, Ethiopia and Southern Red Sea Region, Southern	THE RELATIONSHIP BETWEEN SEISMICITY AND THE OCCURRENCE OF GEOTHERMAL SPRINGS- Eliyasi

				Denkhalya subregion, Eritrea)-Varet	
END OF DAY 1					

*A separate programme will be prepared for this event.

DAY 2: THURSDAY 5 November 2020

09:00-10:00	PLENARY SESSION 2: Innovative Financing Scheme for Geothermal Projects in Africa				
	Moderator: Mike Allen/ Representative from the Region				
	Key note Speaker. - Eyob Easwaran : Trade and Power Development Bank				
	Panelist 1: Alemayehu Wubishet - African Development Bank-				
	Panelist 2: Elin Hallgrimsdottir - The World Bank				
	Panelist 3: Michael Andres, GRMF – German Development Bank (KfW.)				
	Panelist 4: Philippe Dumas (Geo Risk)- EGEC				
	Panelist 5: Julian Richardson, (Geofutre)				
10:00 - 11:00	PLENARY SESSION 3: Unlocking the Contribution of Private sector players and developers in the Region.				
	Moderator: TIM Jackson, Infra Africa / Representative from the Region				
	Key note Speaker - Magnus Asbjornsson, Reykjavik Geothermal				
	Panelist 1: Eddy Njoroge - Corbetti				
	Panelist 2: Darell Boyd (Tulu Moye)				
	Panelist 3 Mugwe Manga, MD Olsuswa Energy.				
	Panelist 4 Peter Neal Vivian (Kalhari)				
11:00 - 11:30 BREAK					
11:30 - 13:00	PLENARY SESSION 4: Role of Geothermal in RE Mix. Moderator – PN/ Representative from the Region				
	Key-note Speaker: Atef Marzouk (African Union Commission-AUC)				
	Panelist 1: Mr. Stephen Dihwa; SAPP				
	Panelist 2: Zelalem Gebre Hiwot; EAPP				
	Panelist 3: Zerubabel Getachew Teferra- UON				
	Panelist 4: Tichakunda Simbini- NEPAD				
	Panelist 5: KENGEN-				
	Panelisi 6: , Malama Chileshe-COMESA				
13:00 - - 14:00 LUNCH BREAK					
BREAK OUT SESSION: (30 Papers)					
14:00 – 16:00	PARALLEL 1: DIRECT USE 3; Moderator: Rapporteur,	PARALLEL 2: Capacity Building. Moderator: Rapporteur:	PARALLEL 3: Geochemistry; Moderator:	Parallel 4: Country Update;	Parallel 5: Power Plant

14:00-14:20	OPPORTUNITIES OF GEOTHERMAL AQUACULTURE DEVELOPMENT IN UGANDA- Kwagalakwe	Geothermal Training Programs in Japan-Itoi et al.	Optimized analyses of soil gas emissions in geothermal exploration- Anna Jentsch and Egbert Jolie	Geothermal Exploration and Development in Ethiopia-Fikru et al.-	OPERATIONS STRATEGIES IN OLKARIA GEOTHERMAL POWER PLANTS-Kemboi
14:20-14:40	OPPORTUNITIES FOR DIRECT GEOTHERMAL UTILIZATION IN ETHIOPIA-Kebede and Amdeberhan	UNU Geothermal Training Programme 1979-2019: The Legacy in Africa-Georgsson	New evidence of potential sites for geothermal helium mining in the East African Rift-Kraml	Geothermal Development: Case of Cameroon- Tuwa and Ganno	Extra Power from Geothermal Brine-Langat
14:40-15:00	Potential of Direct Use of Geothermal Energy Uganda- Natukunda and Bahati	JICA's Cooperation in Geothermal Development in Africa's Great Rift Valley- Hiroto KAMIISHI et al.	The Rift 4.0 – Digitalization as a new opportunity for emerging Geothermal Hotspots- Rumberg and Brommer	Geothermal Exploration in Eritrea: Country Update - Yohannes	Wellhead Turbine Rotor Repairs – A KenGen Experience-Kutswa and Maingi
15:00-15:20	Direct Utilisation of Geothermal Resources - overview with focus on Africa- Lilja Tryggvadóttir et al.	UNESCO GRÓ Geothermal Training Programme: Maintaining the momentum of UNU-GTP training for Africa-Haraldsson and Axelsson	Helium Isotopes As Heat Source Indicator- Sinetebeba et al.	Geothermal Progress in Tanzania-Kajugus et al.	Energy Analysis of a Proposed Wellhead Geothermal Plant in Menengai Field-Okoth
15:20-15:40	Direct uses of geothermal energy: A case of Chinyunyu hot springs-Chomba	Geothermal Data Management and Best Practices - Benegar and Kennedy	The Value of 3D Models in the Communication and Advancement of Geothermal Projects- Chelsea Cervantes	1D Joint Inversion of Electromagnetic Data from Meteka Geothermal Prospect-Getenesh	Brine Recovery Solution from existing Single Flash Unit - Pingaro Emanuele and Bonafin Joseph
15:40-16:00	VALUATION OF GEOTHERMAL GRAIN DRYERS-Nyambura	An Innovative Approach to Geothermal Prospecting through Interactive Analytics-Harms et al.	Remote sensing: Structural- and InSAR analyses for a Geothermal Exploration Programme in Northern Tanzania-Kai Hahne	Multiscale workflow and methodology for the assessment of geothermal potential- Marchetti et al.	A Remote-Diagnostics and Predictive Maintenance Solution for Geothermoelectric Plants-Renato Papale
16:00-17:00	Annual General Meeting- Africa Regional Branch of International Geothermal Association				

DAY 3: FRIDAY 06 November 2020

09:00 - 10:00	Plenary Session V: Direct use application of low to medium temperature geothermal systems and its contribution to SDGs and AU Agenda 2063:
	Moderator: Representative from the Region
	Key note Speaker - Jon Orn Johnsson (Iceland)
	Panelist 1: Andy Blair (New Zealand)
	Panelist 2: Prof. Pan Zang (China)
	Panelist 3: Jacques Varet (France)

Panelist 4: UNEP					
BREAK OUT SESSION (15 Papers)					
Time	PARALLEL 1: Environment: Moderator:	PARALLEL 2: Finance Moderator:	PARALLEL 3: DRILLING: Moderator:	PARALLEL 4: EXPLORATION; Moderator:	PARALLEL 5: Reservoir Engineering - Moderator
10:30 - 10:50	Unique, resource rich Olkaria in Hells Gate National Park-Mwandigha	The Silent Killer of Geothermal Projects: Long-Term Resource Risk-Ram	Drilling of Shallow Production and Re-injection Wells at Tendaho (Dubti) Geothermal Field (Project), Afar Region, Ethiopia-Tadese	A Geothermal Civilization in the Afar Region: Era Boru (Teru woreda, Ethiopia)- Varet	Analysis Of Well Testing, Temperature And Pressure In High-Temperature Wells Of Aluto-Langano, Ethiopia- Biru
10:50 - 11:10	ENVIRONMENTAL, HEALTH, SAFETY AND SOCIAL FACTORS IN GEOTHERMAL DEVELOPMENT-SITALI	GEORISK - Framework conditions for establishing a risk mitigation scheme-Lupi and Sidiqqi	How Oil & Gas Expertise Can Benefit Geothermal Well Design-Kakoma et al.	IDENTIFICATION OF THERMAL SPRINGS IN EASTERN DRC, CASE STUDY OF KATANGA, KIVU AND ITURI PROVINCES-Odhipio	Simulation Studies of Various Extraction Schemes and Recovery Factors of a Geothermal Reservoir – Puppala and Shibani Khanra
11:10 - 11:30	Impacts of Alalobad Geothermal Project On wild Animals-Degefa	Results of risk assessment to support the development of risk mitigation schemes in Europe and beyond- Ferid Seyidov et al	Analysis of Equipment Performance of a Drilling Rig in Menengai Geothermal Field-Roti	Impacts of lithological heterogeneity and anisotropy on geothermal drilling techniques And risks, methods and costs and well productivity in the East African Rift setting-Onacha	GEOTHERMAL RESERVOIR EVALUATION USING CURRENT MODELING TECHNIQUES & DRAWDOWN TEST DATA FROM OLKARIA DOMES GEOTHERMAL FIELD-A CASE STUDY OF OW-907B, OW-912B & OW-917 – Otieno, KenGen
11:30 - 11:50	Environmental Baseline Survey for Geothermal Development in Uganda-Ouma	Private Sector Geothermal Energy Development constraints in the East Africa Region-Onacha	Effective interpretation of directional drilling measurements in drilling geothermal wells: Case study of Well MW-35A in Menengai, Kenya-Rotich	INVESTIGATING THE GEOTHERMAL RESOURCE POTENTIAL SITES IN AREAS AROUND LAKE NATRON, TANZANIA IN THE EAST AFRICA RIFT SYSTEM BY USING REMOTE SENSING SATELLITE DATA- Maswi	The Comparison of Reservoir Characterizations and Operational Challenges at High Temperature Geothermal Reservoirs in Western Anatolia (Turkey) and Kenya- Fusun S. Tut Hakiidir, Jesse Nyokabi
11:50 - 12:10	Effective stakeholder engagement & Management in geothermal development by private sector – Supeyo and Onacha	SMOOTH MAGNETOTELLURIC TRANSFER FUNCTIONS ESTIMATED BY AN INVERSE METHOD-Rizzello	Impacts of abstraction of surface water for geothermal drilling on Alalobad geothermal project-Bekele	BOREHOLE GEOLOGY OF WELL FIALE 3, ASAL-FIALE GEOTHERMAL FIELD, DJIBOUTI-Ahmed et al.	Production well steam-lifting-Kitimo, KenGen
12:10 - 12:30	The essence of Surface Geology and Shallow Temperature Gradient Wells for Geothermal System Characterization in Kiejo-Mbaka Prospect, SE Tanzania-Mkangala and Sylvester	The Geothermal Village project (GV1): Supported by the LEAP-RE Research Programme launched by the EU in partnership with the AU - Varet	The Barrier Volcanic Complex: Exploration Techniques Employed In A Surface Studies Program – Njau et al	Strategies to Mitigate Potential Problem During Planning and Designing a Geothermal Well-Kinfe	EFFICIENT METHODS FOR PLANNING AND EVALUATING GEOTHERMAL ENERGY PROJECTS IN DEVELOPING COUNTRIES-REAL OPTION ANALYSIS-Kiprotich et al.

POSTER PRESENTATIONS

	Exploration/Geochemistry	Geology	Geophysics	Geothermal Development	Geothermal Projects
1	A Geochemical Study of Springs in a volcanic field, case of Virunga and Kahuzi Bienga, DRC-Kambale et al	Petrology And Hydrothermal Alteration Mineral Distribution Of The Wells (La-9d & La-10d) In Aluto Geothermal Field-Dereje Moges	Design of Wind and PV-Solar Hybrid System for Transient Electromagnetic Method (TEM) Equipment in Geophysical Exploration for Geothermal Energy-Musila	Geothermal investment in Democratic Republic of Congo-Kambale and Kambale	Direct Uses of Geothermal Resources-Wangari
2	Application of Multiferroic Alloy to Convert Waste Heat from Brine to Electricity-Kulundu	Report on Dallol Geothermal Prospect Abdulahi and Mengiste	Multidimensional Resistivity Imaging Using Magnetotelluric Data and its Geological Interpretation in Kiejo-Mbaka Geothermal Field-Tumbu et al.	Review of Geothermal Development in the Western Branch of the East African Rift System-Mugagga et al.	Application of Geothermal Energy in Agro-based industries: A Case study of Geothermal Dryer in Menengai Geothermal Field-Towett et al.
3	Harnessing geothermal resource in radioactivity prone potential sites - A case of Lubungu hot springs- Chomba et al	GEOLOGY OF EXTENSIONAL-TYPE GEOTHERMAL SYSTEMS IN UGANDA-Rusoke	An Integrated Leapfrog/Autough2-SC model of the Menengai Geothermal Field-Baraza	A Goal Programming Approach to Resource Allocation in Geothermal Energy Projects-Mubiru	Geothermal Tour Management-Srivastava
4	A Study on recovery of lithium from Geothermal Water: Case of Djibouti-Daoud et al.	COMPARATIVE STUDY OF PETROGROPHY AND HYDROTHERMAL ALTERATION MINERALOGY BETWEEN THE LAKE-ASAL AND THE HATCHOBARU GEOTHERMAL FIELDS-	Structural interpretation of a 3D gravity and magnetic models over Arta geothermal prospect-Awaleh	Project for Development of Geothermal Resources in the Ruwenzori Sector-Mukandala et al.	Developing an Eco-Industrial Park and the role of Geothermal Resources: A case study of the KenGen Green Energy Park, Kenya-Ronoh
5	Exploration Surface Study of Arta Geothermal Prospect, Republic of Djibouti-Suge et al.	Lithochemical approaches and effect of alteration: An application to the Asal-rift geothermal field-Mohamed Abdillahi et al.	Geothermal Wells Productivity Controls Case Study of Wells Drilled In The Greater Olkaria Geothermal Area, Kenya-Nyandigisi	Overcoming Accessibility, Economic and Power Evacuation Constraints in Geothermal Power Development-Mukuka et al.	INFRASTRUCTURAL AND ENVIRONMENTAL CHALLENGES AFFECTING GEOTHERMAL DEVELOPMENT IN KENYA-Omeny and Aruya
6	APPLICATION OF SPECTRAL ANALYSIS OF MAGNETIC DATA TO DETERMINE CURIE POINT ISOTHERM DEPTH FOR GEOTHERMAL TEMPERATURE ESTIMATION-Nyakundi	Preliminary geological exploration for geothermal resources with emphasis on faults a case study of Nord-Ghoubbet- Samod Youssouf et al.	Evaluation of Potential Re-completions of Asal offset wells: Techniques and Challenges Assets Evaluations-Farah	Automation of Continuous Portable Water Distribution System at the Menengai Geothermal Project in Kenya-Kiok	Geothermal Knowledge in educational institutions, case of Democratic Republic of Congo-Kambale and Kambale
7	Another geothermal site in North-Eastern Afar:	Hydrothermal alteration mapping for geothermal	Alteration Mineralogy of Well KW02 in the Karisimbi Geothermal Prospect-Ngaruye		

	Harak (Bidu woreda, Afar regional state, Ethiopia), that marks the southernmost extension of the Danakil Sea 110m bsl - Varet	exploration in Manda-Inakir area-Ahmed			
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CLOSING CEREMONY	
14:00 - 15:00	Summary of Resolutions- UNEP
	Announcement of ARGeo-C9
	Closing Remarks by Chief Guest – GOK

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