



TIEMS 2023 HYBRID ANNUAL CONFERENCE PROGRAM

PORT ALFRED, SOUTH AFRICA, 11TH - 15TH SEPTEMBER 2023



| Day/Chair Time CEST | Monday 11 th September Workshop | Monday 11 th September Chair: Juliet Chipumuro | Tuesday 12 th September Chair: Roman Tandlich | Wednesday 13 th September Chair: Siviwe Shwababa | Thursday 14 th September Chair: Stenden DM academic | Friday 15 th September Chair: Rene Oosthuizen | Friday 15 th September Workshop |
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| 0800 0830 | Registration for Workshop/ Conference | | Registration for Conference | Registration for Conference | Registration for Conference | Registration for Workshop & Conference | |
| 0830 0900 | Conference Official Opening | | Session 5 30 th Anniversary Presentation by TIEMS President | Session 9 Panel Discussion | Session 14 Panel Discussion | | |
| 0900 1000 | TQC & TQAC Workshop Physical Instructor: K. Harald Drager | Session 1 Emergency and Disaster Management in South Africa and Botswana | Panel Discussion on TIEMS International Certification – TQC & TQAC | Artificial Intelligence Use, Benefits and Challenges in Emergency Management | Smart City Operational and Technological Solutions for Improved Public Safety | Session 19 Multitude of Challenges in Crisis, Emergency and Disaster Risk management | TQC & TQAC Workshop Physical Instructor: K. Harald Drager |
| 1000 - 1030 | Coffee/Tea | | Coffee/Tea | Coffee/Tea | Coffee/Tea | Coffee/Tea | |
| 1030 1100 | TQC & TQAC Workshop Physical | Session 2 Keynote Godwell Nhamo <i>Southern African Disaster Risk Management and Human Security</i> | Session 6 Disaster Healthcare, Challenges and Adaptive Planning | Session 10 Keynote Meen Chhetri <i>The Role of Good Governance for Effective Disaster Risk Reduction and Management</i> | Session 15 Keynote Juliet Chipumuro <i>or Stenden South Africa Academics from School of Disaster Management</i> | Session 20 Contemporary Challenges in the Crisis, Emergency and Disaster Risk Management | TQC & TQAC Workshop Physical |
| 1100 1200 | Southern African Disaster Risk Management and Organisational Considerations | | TIEMS Annual General Meeting | Special Session Early Warning and Hydrometeorological Disasters | Session 16 Public Awareness, Administration and Community Engagement in Crises, Emergencies and Disasters | | |
| 1200 1300 | | | | Session 11 Panel Discussion Health and Wellbeing during Disasters | | | |
| 1300 1350 | Lunch | Lunch | Lunch | Lunch | Lunch | Lunch | Lunch |
| 1350 1530 | TQC & TQAC Workshop Physical | Session 3 Cybersecurity and Artificial Intelligence in Crisis, Emergencies & Disasters | Session 7 Modelling, Vulnerability and Uncertainty in Crisis, Emergency and Disaster Risk Management | Session 12 Emergency Management, Education and Society | Session 17 International Dimensions of Crisis, Emergency and Disaster Risk Management | Session 21 Keynote <i>Post-Covid19 Context in Crisis, Emergency and Disaster Risk Management</i> | TQC & TQAC Workshop Physical |

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| 1530 1600 | Coffee/Tea | | Coffee/Tea | Coffee/Tea | Coffee/Tea | Coffee/Tea | |
| 1600 1630 | TQC & TQAC Workshop Physical | Session 4 Drones and Satellite Technology in Emergency and Disaster Risk Management | Session 8 Hydrometeorological Disasters, Water Security and Emergency Planning | Special Session Academic Publishing and Emergency/Disaster Risk Management | Session 18 TIEMS 2024 in India and Military/Security Applications in Crisis, Emergency and Disaster Risk Management | Session 21 Post-Covid19 Context in Crisis, Emergency and Disaster Risk Management | TQC & TQAC Workshop Virtual |
| 1630 1700 | | | | Session 13 Citizen Preparedness and Community Role in Crisis, Emergency and Disaster Risk Management | | | |
| 1700 1800 | End of Day 1 | | End of Day 2 | Free Time | End of Day 4 | End of Conference | |
| 1800 1830 | | | Free time | | | | |
| 1830 2130 | | | Welcome Reception | Conference Gala Dinner | | | |

Sponsored by *(more sponsors are welcome):*



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Welcome to Rhodes University, founded in 1904. The University has a well-established reputation for academic excellence. Rhodes University looks to the future with confidence.



Stenden South Africa is a unique Higher Education Institution based in the seaside town of Port Alfred. Established in 2001, it prides itself with an impressive track record of top-quality higher education.



Pacific Disaster Center - PDC located in Hawaii conducts research and analysis on a variety of subjects related to disaster risk and preparedness worldwide.

DAILY SCHEDULES

TIEMS 2023 Hybrid Annual Conference Monday 11th September 2023

Chairperson: K. Harald Drager

| TIME CEST | Presenter/ <i>Authors</i> | Title | Organization(s) | Country |
|----------------|--------------------------------------------------------------|-------|-----------------|---------|
| 08:00 09:00 | REGISTRATION | | | |
| 09:00 17:00 | TQC/TQAC WORKSHOP (PHYSICAL) INSTRUCTOR: K. HARALD DRAGER | | | |

TIEMS 2023 Hybrid Annual Conference Monday 11th September 2023

Chairperson: Juliet Chipumuro, Stenden South Africa, South Africa

| Time CEST | Presenter/ <i>Authors</i> | Title | Organization(s) | Country |
|----------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------|
| 08:00 08:30 | REGISTRATION | | | |
| 08:30 10:00 | SESSION 1 INTRODUCTION TO DAY 1 BY CHAIRS: JULIET CHIPUMURO SOUTHERN AFRICAN DISASTER RISK MANAGEMENT AND HUMAN SECURITY | | | |
| 08:30 08:45 | K. Harald Drager/Roman Tandlich | OPENING OF THE CONFERENCE | TIEMS | NORWAY SOUTH AFRICA |
| 08:45 09:00 | Wouter Hessens and Sandile Khamanga | WELCOME MESSAGE FROM THE ORGANISING INSTITUTIONS | Stenden South Africa and Rhodes University | SOUTH AFRICA |
| 09:00 09:20 | Suna Meyer and Eric T. Stoch | THE STATUS QUO OF FIRE BRIGADE SERVICES IN THE NORTH-WEST PROVINCE AND THEIR RELATIONSHIP WITH THE FIRE PROTECTION ASSOCIATIONS | Northwest University/ Northwest Provincial Umbrella FPA | SOUTH AFRICA |

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| 09:20 09:40 | Dithapelo Lefoko Keorapetse and Stanley Ehiane | DISASTER MANAGEMENT IN A PANDEMIC: BOTSWANA'S RESPONSE TO THE COVID-19 PANDEMIC AND ITS IMPLICATION ON DEMOCRACY | University of Botswana | BOTSWANA |
| 09:40 10:00 | Christopher Dick-Sagoe | ENHANCING DISASTER PREPAREDNESS FOR EFFECTIVE RESPONSE: ASSESSING THE PERFORMANCE OF THE NATIONAL DISASTER MANAGEMENT ORGANIZATION, GHANA | University of Botswana | BOTSWANA |
| 10:00 10:30 | COFFEE/TEA/WATER | | | |
| 10:30 13:00 | SESSION 2 SOUTHERN AFRICAN DISASTER RISK MANAGEMENT AND ORGANISATIONAL CONSIDERATIONS | | | |
| 10:30 11:00 | Godwell Nhamo | Keynote SOUTHERN AFRICAN DISASTER RISK MANAGEMENT AND HUMAN SECURITY | University of South Africa | SOUTH AFRICA |
| 11:00 11:20 | Emma D. Chapman and Roman Tandlich | ANALYSIS OF PUBLIC AND PARLIAMENTARY DISCOURSE IN SOUTH AFRICA RELATED TO ACCOUNTABILITY AND COVID19 | Rhodes University | SOUTH AFRICA |
| 11:20 11:40 | Sonwabo Namba and Eric T. Stoch | SENDAI SUSTAINABLE DEVELOPMENT GOALS RELATED TO DISASTER RISK REDUCTION WITH SPECIAL REFERENCE TO FIRE PROTECTION ASSOCIATIONS | Northwest University and Northwest Provincial Umbrella FPA | SOUTH AFRICA |
| 11:40 12:00 | K. Mogomotsi, W. L. Hambira, G.E.J. Mogomotsi and Stanley Ehiane | CLIMATE CHANGE AND ADAPTATION OF RESCUE AND RESPONSE FORCES IN BOTSWANA: POLICY ANALYSIS | University of Botswana | BOTSWANA |
| 12:00 12:20 | Edric Jonathan Stoch, Heidi Helene Coetzee and Eric Joseph Stoch | INTER-ORGANISATIONAL CONFLICT AND THE IMPACT OF JURISDICTION ON INCIDENT COMMAND: WITH SPECIAL REFERENCE TO THE NORTH WEST PROVINCE OF SOUTH AFRICA | Northwest University | SOUTH AFRICA |
| 12:20 12:40 | Eric Thabo Stoch and Roman Tandlich | POTENTIAL INTERNATIONAL DISPUTE BETWEEN BOTSWANA AND SOUTH AFRICA TRIGGERED BY CROSS-BORDER FIRES | Rhodes University and Northwest Provincial Umbrella FPA | SOUTH AFRICA |
| 12:40 13:00 | Kailash Gupta and Pankaj Sharma | DISASTER DECEASED/ INJURED TISSUES TRANSPLANTATION | Amity University Jaipur | INDIA |
| 13:00 13:50 | LUNCH | | | |
| 13:50 15:30 | SESSION 3 CYBERSECURITY AND ARTIFICIAL INTELLIGENCE IN CRISES/EMERGENCIES/DISASTERS | | | |

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| 13:50 14:10 | Henry Chima Ukwuoma, Gilles Dusserre, Gouenou Coatrieux, Johanne Vincent and Nasir Baba Ahmed | DIGITAL TWIN BASED ANOMALY DETECTION FOR AN IMPROVED CYBER SECURITY IN A WATER DISTRIBUTION SYSTEM | IMT Mines Ales, Ales | FRANCE |
| 14:10 14:30 | Song Shombot Emmanuel, Gilles Dusserre, Robert Bestak and Nasir Baba Ahmed | STATE-OF-THE-ART ANALYSIS OF CYBERATTACK TRENDS IN THE HEALTHCARE SECTOR | IMT Mines Ales, Ales | FRANCE |
| 14:30 14:50 | Nasir Baba Ahmed, Gilles Dusserre and Dayo Ashonibare | CYBERSECURITY AND INCIDENT RESPONSE CHALLENGES IN THE AFRICAN CONTINENT: A CASE OF THE NIGERIAN SYSTEM | IMT Mines Ales, Ales | FRANCE |
| 14:50 15:10 | Sachin Gaur and Kyle King | FOUNDATION MODEL FOR GENERALIST EMERGENCY RESPONSE AND DISASTER MANAGEMENT ARTIFICIAL INTELLIGENCE | Norwegian AI Research Consortium/Capacity Building International | NORWAY/USA |
| 15:10 15:30 | Thomas Robertson | AI RISKS AND EMERGENCY MANAGEMENT | Thinking teams | USA |
| 15:30 16:00 | COFFEE/TEA/WATER | | | |
| 16:00 17:00 | SESSION 4 DRONES AND SATELLITE TECHNOLOGY IN EMERGENCY AND DISASTER RISK MANAGEMENT | | | |
| 16:00 16:20 | Mykhailo Popov, Sergey Stankevich, Sergey Mosov and Ievgen Saprykin | DRONE-BASED LANDMINE DETECTION BY IMAGE AND SIGNAL FUSION | Scientific Centre for Aerospace Research of the Earth | UKRAINE |
| 16:20 16:40 | Anna Nałęcz-Kobierzycka, Jakub Ryzenko and Emil Wrzosek | COLLARIS: COLLABORATIVE NETWORK ON UNMANNED AERIAL SYSTEMS (UAS) AND THEIR APPLICATIONS IN THE FIELD OF DISASTER RESPONSE | CIK CBK | POLAND |
| 16:40 17:00 | Eirini Marinou, Efthymios Magkoufis, Christos Kontopoulos and Vasiliki Charalampopoulou | CLUSTER OF INTEROPERABLE AND HOLISTIC CIVIL PROTECTION SYSTEMS (CO-PROTECT): THE ROLE OF GEOSPATIAL DATA MANAGEMENT AND VISUALIZATION FOR ENHANCING GREECE'S RESPONSE TO NATURAL DISASTERS | Geosystems Hellas S.A. | GREECE |
| 1700 | SUMMARY OF DAY 1 BY CHAIR: JULIET CHIPUMURO | | | |
| END OF CONFERENCE DAY 1 | | | | |

TIEMS 2023 Hybrid Annual Conference Tuesday 12th September 2023

Chairperson: Roman Tandlich, Rhodes University/TIEMS, South Africa

| Time CEST | Presenter/Authors | Title | Organization(s) | Country |
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| 08:00 08:30 | REGISTRATION | | | |
| 08:30 10:00 | SESSION 5 INTRODUCTION TO DAY 2 BY CHAIR: ROMAN TANDLICH 30 TH ANNIVERSARY OF TIEMS AND FOCUS ON CURRENT ACTIVITIES | | | |
| 08:30 08:50 | K. Harald Drager | TIEMS CELEBRATES ITS 30TH ANNIVERSARY - WHAT IS ACHIEVED AND WHAT ARE THE PLANS FOR THE FUTURE | TIEMS PRESIDENT | NORWAY |
| 08:50 10:00 | K. Harald Drager Yosuke Okita Owen Becker Sergio Pirone Sandro Bologna | PANEL DEBATE ON: TIEMS INTERNATIONAL CERTIFICATIONS - TQC & TQAC - COMPARED WITH OTHER CERTIFICATION SCHEMES WORLDWIDE <ul style="list-style-type: none"> ▪ TQC/TQAC INTERNATIONAL CERTIFICATION ▪ JAPANESE CERTIFICATION ▪ SOUTH AFRICAN CERTIFICATION ▪ EUROPEAN CERTIFICATION ▪ IAEM CERTIFICATION AND AUSTRALIAN CERTIFICATION ▪ OPEN DISCUSSION | TIEMS AND INTERNATIONAL STAKEHOLDERS | NORWAY JAPAN SOUTH AFRICA ITALY |
| 10:00 10:30 | COFFEE/TEA/WATER | | | |
| 10:30 12:40 | SESSION 6 DISASTER HEALTHCARE, CHALLENGES AND ADAPTIVE PLANNING | | | |
| 10:30 11:00 | Roberick B. Walker | PLENARY LECTURE - CLEAN HANDS COMBATING COVID19 | Rhodes University | SOUTH AFRICA |
| 11:00 11:20 | Angeli Medina and Jaime Almora M.D. | THE IMPLICATIONS OF NURSING SHORTAGE ON GLOBAL HEALTHCARE CONTINUITY | Kennesaw State University | PHILIPPINES/USA |

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| 11:20 11:40 | Earl Prinsloo and Garth L. Abrahams | ADDITIVE MANUFACTURING OF LOW-COST NUCLEIC ACID ELECTROPHORESIS EQUIPMENT: A CASE FOR 3D PRINTERS AS STANDARD LABORATORY EQUIPMENT AND APPLICATIONS IN EMERGENCY MANAGEMENT | Rhodes University | SOUTH AFRICA |
| 11:40 12:00 | Brian Holecek | "THE LONG WAIT" MARKING TIME, THE FLOODS ARE REALLY HEADING YOUR WAY! | TIEMS Australia | AUSTRALIA |
| 12:00 13:00 | TIEMS ANNUAL GENERAL MEETING ONLY FOR TIEMS MEMBERS | | | |
| 13:00 13:50 | LUNCH | | | |
| 13:50 15:30 | SESSION 7 MODELLING, VULNERABILITY AND UNCERTAINTY IN CRISIS, EMERGENCY AND DISASTER RISK MANAGEMENT | | | |
| 13:50 14:10 | A. A. Virajh Dias, A.M.K.B. Attapathu, J.A.D.N.A. Jayasooriya and H.M.J.M.K. Herath | RECTIFICATION OF ROAD-BASED UNCERTAINTY IN LANDSLIDE DISASTER EMERGENCIES | Independent researchers | SRI LANKA |
| 14:10 14:30 | Gregory Vigneaux | MANAGING UNCERTAINTY IN EMERGENCY MANAGEMENT THROUGH EXPLANATION | Operational Coherence | USA |
| 14:30 14:50 | Nanlok Henry Nimlang, Gilles Duserre, Sandrine Bayle, Kivanc Ertugay and Sebnem Duzgun | MALARIA RISK PREDICTIVE MODELLING IN THE NORTHERN ZONE OF PLATEAU STATE, NIGERIA | IMT Mines Ales, Ales | FRANCE, TURKEY, USA |
| 14:50 15:10 | Mahmood Fayazi, Lisa Bornstein, Gonzalo Lizarralde, Manel Djmel and Armita Farzadnia | THE IMPACT OF POST-FLOOD BUYOUTS ON VULNERABILITIES: A CASE STUDY OF RELOCATED HOUSEHOLDS AFTER THE 2017 AND 2019 FLOODS IN QUEBEC, CANADA | Research Center of Innovation on Civil Security | CANADA |
| 15:10 15:30 | Nimisingha Jacob Amakama, Gilles Dusserre, Axelle Cadiere, R. Wade Schuette, Greg Zacharewicz and Nasir- Baba Ahmed | AN EVALUATION OF THE EFFECT OF AMBULANCE STRATEGY ON PATIENT MORTALITY OUTCOME FROM HOSPITAL SYSTEMS: A SIMULATION STUDY IN THE CONTEXT OF INDUSTRIAL DISASTER RESPONSE. | IMT Mines Ales, Ales | FRANCE |
| 15.30 16:00 | COFFEE/TEA/WATER | | | |

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| 16:00 17:00 | SESSION 8 HYDROMETEOROLOGICAL DISASTERS, WATER SECURITY AND EMERGENCY PLANNING | | | |
| 16:00 16:20 | Vinod Chandra Menon | PREPAREDNESS, RESPONSE AND RISK REDUCTION FOR HYDRO-METEOROLOGICAL DISASTERS | TIEMS India | INDIA |
| 16:20 16:40 | Chi-Ming Peng, Sheng-Yu Wu, Zhi-Sheng Li, Yu-Ting Liao, Yun-Hsuan Chen, Sheng-Tsung Liu, Gary Li-Kai Hsiao, Di-Sheng Huang, I-Hung Chang, Kuo-Chung Cheng and Ching-An Lee | SHORT-DURATION INTENSE RAINFALL FORECASTING TECHNOLOGY INTO AN EMERGENCY OPERATIONS CENTER DURING RAINFALL AND FLOOD EMERGENCIES | Weatherrisk INC/New Taipei City Fire Department | TAIWAN |
| 16:40 17:00 | Josias Shiriyedete, Aneesah Khan and Stanley Ehiane | THE WATER CRISIS AND ITS IMPACT ON SUSTAINABLE DEVELOPMENT IN CAPE TOWN, SOUTH AFRICA | University of Botswana and University of Johannesburg | SOUTH AFRICA/BOTSWANA |
| 17:00 | SUMMARY OF DAY 2 BY CHAIR: ROMAN TANDLICH | | | |
| 17:00 | END OF CONFERENCE DAY 2 | | | |
| 17:00 18:30 | FREE TIME | | | |
| 18:30 20:00 | WELCOME RECEPTION | | | |

TIEMS 2023 Hybrid Annual Conference Wednesday 13th September 2023

Chairperson: Siviwe Shwababa, Rhodes University, South Africa

| CEST Time | Presenter/Authors | Title | Organization(s) | Country |
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| 08:00 08:30 | REGISTRATION | | | |
| 08:30 10:00 | SESSION 9 INTRODUCTION TO DAY 3 BY CHAIR: SIVIWE SHWABABA ARTIFICIAL INTELLIGENCE USE, BENEFITS AND CHALLENGES IN EMERGENCY MANAGEMENT | | | |

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| 08:30 10:00 | Kyle King, Thomas Robertson and Sachin Gaur | <p>PANEL DEBATE</p> <p>ON ARTIFICIAL INTELLIGENCE USE, BENEFITS AND CHALLENGES IN EMERGENCY MANAGEMENT</p> <ul style="list-style-type: none"> Artificial Intelligence and recent developments, e.g. ChatGPT, ProctorFree, big data and NATO, cybersecurity implications Ethical implications of the technology and the balance between progress and potential harm Practical examples and discussion about the applications to date Q & A and Conclusions and Further Development | TIEMS ¹⁾ Capacity Building International Norwegian AI Research Consortium | USA NORWAY |
| 10:00 10:30 | COFFEE/TEA/WATER | | | |
| 10:30 12:40 | SESSION 10 KEYNOTE LECTURE: | | | |
| 10:30 11:00 | Meen B. Poudyal Chhetri | <i>THE ROLE OF GOOD GOVERNANCE FOR EFFECTIVE DISASTER RISK REDUCTION AND MANAGEMENT (DRRM)</i> | Disaster Preparedness Network-Nepal/ Queensland University of Technology | NEPAL AUSTRALIA |
| SPECIAL SESSION – EARLY WARNING AND HYDROMETEOROLOGICAL DISASTERS | | | | |
| 11:00 11:20 | Chris Chiesa Deputy Executive Director | ENHANCING GLOBAL EARLY WARNING FOR ALL: NASA-PDC INNOVATIONS AND THE POWER OF DISASTER-AWARE | Pacific Disaster Center | USA |
| 11:20 12:00 | Chris Chiesa Deputy Executive Director | DEMONSTRATION SESSION EMPOWERING DISASTER MANAGEMENT PROFESSIONALS: OPERATIONALISING DISASTER-AWARE [®] PRO FOR EFFECTIVE MULTI-HAZARD MONITORING, EARLY WARNING AND ACTION | Pacific Disaster Center | USA |
| SESSION 11 Panel Discussion Health and Wellbeing During Disasters | | | | |
| 12:00 12:30 | Allan Wilson Majee | KEYNOTE HEALTH PROMOTION AND DISASTER MANAGEMENT IN ACCELERATED TIMES | University of Missouri | USA |

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| 12:30 13:00 | Roman Tandlich (<i>Chair</i>), Allan Wilson Majee, Roderick B. Walker, Earl Prinsloo & Garth L Abrahams | <p style="text-align: center;">PANEL DISCUSSION ON HEALTH AND ZONOTIC DISEASES IN EMERGENCY AND DISASTER RISK MANAGEMENT</p> <ul style="list-style-type: none"> ▪ Enthronization of space and the spread of pandemics such as COVID19 ▪ Uncertainty and the continuous threats and risks from antigenic drift and human exposure to the meta-population of viruses ▪ Preparedness of the crisis, emergency, and disaster risk management systems to deal with novel diseases and the links to public health ▪ Q & A about TIEMS and other work in this context | TIEMS, UNISA, Rhodes University | BELGIUM, SOUTH AFRICA |
| 13:00 13:50 | LUNCH | | | |
| 13:50 15:30 | SESSION 12 EMERGENCY MANAGEMENT, EDUCATION AND SOCIETY | | | |
| 13:50 14:10 | Yosuke Okita, Harald Drager, Sandro Bolonga, Larry Porter and Grace Endina | CERTIFICATION SYSTEMS FOR DISASTER AND EMERGENCY MANAGEMENT | TIEMS | JAPAN, ITALY, USA, NORWAY, INDONESIA |
| 14:10 14:30 | Olumoye Mosud, Dominique E. Uwizeyimana and Stanley Ehiane | EMERGENCY RESPONSE TO CYBER THREATS AND ATTACKS IN A UNIVERSITY COMPUTER NETWORK SYSTEM | University of Johannesburg, University of Botswana | SOUTH AFRICA, BOTSWANA |
| 14:30 14:50 | Aditi Tyagi | SOCIO-PSYCHOLOGICAL IMPACT OF COVID-19 PANDEMIC ON CHILDREN IN INDIA | Institute of Public Administration, Patna University | INDIA |
| 14:50 15:10 | Lee Miles | META-LEADERSHIP AND SINGLE POINTS OF FAILURE' EVALUATING THE NOVEMBER 2021 WELLINGTON FUEL TANKER INCIDENT IN SIERRA LEONE | Bournemouth University | UNITED KINGDOM |
| 15:10 15:30 | Mark Ashley Parry | TRUST, TRUTH, THE NIHILISTIC STATE AND DISASTER RISK REDUCTION | Northumbria University | UNITED KINGDOM |
| 15.30 16:00 | COFFEE/TEA/WATER | | | |
| 16:00 16:30 | SPECIAL SESSION ACADEMIC PUBLISHING AND EMERGENCY/DISASTER RISK MANAGEMENT RICHARD A DeVITO JR.: PEER REVIEW PROCESS PROFESSIONAL IN EMERGENCY MANAGEMENT | | | |

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| 16:30 17:30 | SESSION 13 CITIZEN PREPAREDNESS AND COMMUNITY ROLE IN CRISIS, EMERGENCY AND DISASTER RISK MANAGEMENT | | | |
| 16:30 16:50 | Eric T. Stoch and Roman Tandlich | THE DEVELOPMENT OF A NWUFPA COMMUNITY RESILIENCE OFFICER PROGRAMME NEW RESILIENCE POLICIES: HOW INSTITUTIONS CAN ACT TOWARDS A SHARED AGENDA FOR ACTION | Northwest Provincial Umbrella FPA, Rhodes University | SOUTH AFRICA |
| 16:50 17:10 | Maria Lauda Joel Goyayi and Stanley Ehiane | CITIZEN'S PREPAREDNESS: EXPLORING NEW TECHNOLOGIES FOR BUILDING A CULTURE OF RESILIENCE | University of Johannesburg, University of Botswana | SOUTH AFRICA, BOTSWANA |
| 17:10 17:30 | Lungile Prudence Zondi and Stanley Ehiane | THE PILGRIMAGE OF CITIZENS PREPAREDNESS: A CONTRIBUTION TO A WEAKER STATE OF GOVERNANCE IN SOUTH AFRICA | University of KwaZulu-Natal, University of Botswana | SOUTH AFRICA, BOTSWANA |
| 17:30 | SUMMARY OF DAY 3 BY CHAIR: SIVIWE SHWABABA | | | |
| 17:30 | END OF CONFERENCE DAY 3 | | | |
| 17:30 18:30 | FREE TIME | | | |
| 18:30 21:30 | CONFERENCE GALA DINNER | | | |

TIEMS 2023 Hybrid Annual Conference Thursday 14th September 2023

Chairperson: Academic from the School of Disaster Management, Stenden South Africa, South Africa

| CEST Time | Presenter/Authors | Title | Organization(s) | Country |
|----------------|-----------------------------------------------------------------------------|-------|-----------------|---------|
| 08:00 08:30 | REGISTRATION | | | |
| 08:30 10:00 | SESSION 14 INTRODUCTION TO DAY 4 BY CHAIR: STENDEN SOUTH AFRICA ACADEMIC | | | |

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| 08:30 10:00 | Sandro Bologna, Paolo Nesi, Dimitris Katsaros, Joachim Levy and Liviu Muresan | <p>PANEL DEBATE</p> <p>SMART CITY OPERATIONAL AND TECHNOLOGICAL SOLUTIONS FOR IMPROVED PUBLIC SAFETY</p> <ul style="list-style-type: none"> Smart City concept and implications for the crises and emergencies that can arise Smart City ecosystem and disaster risk landscape Complexity and uncertainty in relation to smart cities and emergency management Research in smart city concepts and cyber security by TIEMS | TIEMS, University of Florence EXUS MEPE CINEDIT EURISC | ITALY, GREECE, SWITZERLAND, ROMANIA |
| 10:00 10:30 | COFFEE/TEA/WATER | | | |
| 10:30 12:40 | SESSION 15 KEYNOTE SPEECH | | | |
| 10:30 11:00 | Juliet Chipumuro or Stenden South Africa Academics from School of Disaster Management | TO BE CONFIRMED | Stenden South Africa | SOUTH AFRICA |
| 11:00 13:00 | SESSION 16 PUBLIC AWARENESS, ADMINISTRATION AND COMMUNITY ENGAGEMENT IN CRISES, EMERGENCIES AND DISATERS | | | |
| 11:00 11:20 | Dukhi Sah | MASS AWARENESS AND TRAINING AS MITIGATION TOOLS FOR SUSTAINABLE DEVELOPMENT OF RESILIENT CITIES | Retired Police Chief and Engineering professional | INDIA |
| 11:20 11:40 | Jaiye Dukiya | COMMUNITY CONFLICT MANAGEMENT AND EFFECTIVE EMPOWERMENT INTERVENTIONS IN NIGERIA | Federal University of technology, Minna | NIGERIA |
| 11:40 12:00 | Johanes Belle and Puleng Sehloho | ASSESSING PUBLIC AWARENESS ON HAZARDOUS INSTALLATIONS: THE CASE OF PETROL STORAGE AT MASERU INDUSTRIAL AREA IN LESOTHO | University of the Free State | SOUTH AFRICA |
| 12:00 12:20 | Dr Yp Chawla and Prof N Vinod Chandra Menon | DISASTER RESILIENT-FUTURE READY COMMUNITIES-A FRAMEWORK (PRACTITIONERS' PERSPECTIVE) | TIEMS India/International Institute of Information Technology | INDIA |

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| 12:20 12:40 | Simona Cavallini | DIGITAL RESILIENCE OF PUBLIC ADMINISTRATION: A NEW CHALLENGE FOR LOCAL AND REGIONAL AUTHORITIES | Progress Consulting | ITALY |
| 12:40 13:00 | Orlin Nikolov, Kostadin Lazarov and Genadi Kolev | MODELLING AND SIMULATION IN SUPPORT OF BUILDING RESILIENCE AND MASS MOVEMENT MANAGEMENT | NATO | BULGARIA |
| 13:00 13:50 | LUNCH | | | |
| 13:50 15:30 | SESSION 17 INTERNATIONAL DIMENSIONS OF CRISIS, EMERGENCY AND DISASTER RISK MANAGEMENT | | | |
| 13:50 14:10 | Stanley Ehiane, Dominique Uwizeyimana and Caleb Ayuba | MANAGING THE EMERGENCY CONSEQUENCES OF TERRORIST ATTACK IN CABO DELGADO, MOZAMBIQUE | University of Johannesburg, University of Botswana | SOUTH AFRICA, BOTSWANA |
| 14:10 14:30 | Stanley Ehiane, Caleb Ayuba and Tanaka Candida Mugabe | EMERGENCY PREPAREDNESS RESPONSE TO MARITIME PIRACY IN NIGERIA: A CHALLENGE TO NATIONAL SECURITY | Emergency Management Agency | SOUTH AFRICA, BOTSWANA |
| 14:30 14:50 | Johnston Wong, Lina Lai, Candy Zhou and Paul Tsang | TURKEY-SYRIA EARTHQUAKE, A NEW CHALLENGE FOR EMERGENCY RESPONSE AND RECOVERY | Social Workers Across Borders | CHINA |
| 14:50 15:10 | Jorge Diaz | FROM A LOCAL CRISIS TO A GLOBAL PERSPECTIVE ON HUMANITARIAN AID MANAGEMENT | Progress Consulting | PERU |
| 15:10 15:30 | Vinod Chandra Menon | COMPASSION AND VOLUNTEERISM TO TRANSFORM HUMANITARIAN ACTION IN A CHANGING WORLD | TIEMS India | INDIA |
| 15.30 16:00 | COFFEE/TEA/WATER | | | |
| 16:00 17:00 | SESSION 18 MILITAR/SECURITY APPLICATIONS IN CRISIS, EMERGENCY AND DISASTER RISK MANAGEMENT TIEMS 2024 IN INDIA AND MILITARY | | | |
| 16:00 16:20 | Jean-Paul Monet | HOW SOME COMMAND AND CONTROL HARMONISATION MAY IMPROVE EUROPEAN CIVIL PROTECTION RESPONSE: COMPARISON, PROPOSAL, MONITORING OF THE LEVEL OF INTEROPERABILITY FOR INTERNATIONAL JOINED CIVIL PROTECTION OPERATIONS | TIEMS Europe | FRANCE |

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| 16:20 16:40 | Jozef Sabol | THE MILITARY FIGHTING IN UKRAINE AND ITS ACTUAL AND POTENTIAL IMPLICATIONS IN AFFECTING RADIATION AND NUCLEAR SECURITY IN THE COUNTRY | Academy of the Czech Police Service | CZECH REPUBLIC |
| 16:40 17:00 | Vinod Chandra Menon | KEYNOTE <i>TIEMS ANNUAL CONFERENCE 2024 IN INDIA</i> | TIEMS India | INDIA |
| 17:00 | SUMMARY OF DAY 4 BY CHAIR: STENDEN SOUTH AFRICA ACADEMIC | | | |
| 17:00 18:00 | STUDENT POSTER PRESENTATIONS | | | |
| 1800 | END OF CONFERENCE DAY 4 | | | |

TIEMS 2023 Hybrid Annual Conference Friday 15th September 2023

Chairperson: K. Harald Drager

| CEST Time | Presenter/Authors | Title | Organization(s) | Country |
|----------------|-------------------------------------------------------------------|-------|-----------------|---------|
| 08:00 09:00 | REGISTRATION | | | |
| 09:00 17:00 | TQC/TQAC WORKSHOP (VIRTUAL) PRESENTER: K. HARALD DRAGER | | | |

TIEMS 2023 Hybrid Annual Conference Friday 15th September 2023

Chairperson: Rene Oosthuizen, Rhodes University, South Africa

| CEST Time | Presenter/Authors | Title | Organization(s) | Country |
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| 08:00 09:00 | REGISTRATION | | | |
| 09:00 10:00 | SESSION 19 MULTITUDE OF CHALLENGES IN CRISIS, EMERGENCY AND DISASTER RISK MANAGEMENT INTRODUCTION TO DAY 5 BY CHAIR: RENE OOSTHUIZEN | | | |
| 09:00 09:20 | Meen B. Poudyal Chhetri | RISK TRANSFER IN DISASTER RISK REDUCTION (DRR): STRATEGIES, CHALLENGES, AND OPPORTUNITIES | Disaster Preparedness Network-Nepal/ Queensland University of Technology | NEPAL AUSTRALIA |
| 09:20 09:40 | Lorena Daphna Kuratle, Irina Dallo and Michèle Marti | A FRAMEWORK TO REFLECT THE POTENTIAL OF EMERGING TECHNOLOGIES FOR DRR- THE SOCIETAL PERSPECTIVE | ETHZ | SWITZERLAND |
| 09:40 10:00 | Asante Msimang and Roman Tandlich | CONTINUED ACCOUNTABILITY IN THE AFTERMATH OF THE 2017-2018 EPIDEMIC DISASTER OF LISTERIOSIS IN SOUTH AFRICA. | RHODES UNIVERSITY | SOUTH AFRICA |
| 10:00 10:30 | COFFEE/TEA/WATER | | | |
| 10:30 12:40 | SESSION 20 CONTEMPORARY CHALLENGES IN THE CRISIS, EMERGENCY AND DISASTER RISK AMANGEMENT | | | |
| 10:30 10:50 | Guosheng Qu and Haiying Wang | ANALYSIS OF THE DAMAGE MECHANISM, EMERGENCY RESPONSE AND RESCUE DIFFICULTIES OF THE 7.8 MAGNITUDE EARTHQUAKE IN TURKEY | China's National Disaster Reduction Commission (NDRC); China National Earthquake Response Support Service (NERSS), China Earthquake Administration | CHINA |
| 10:50 11:10 | Farhad Mizraei | LIVESTOCK EMERGENCY RESPONSE IN THE CONTEXT OF DROUGHT AND WATER DEFICIT: IRAN EXPERIENCES | Animal Science Research Institute of Iran | IRAN |
| 11:10 11:30 | Ørjan Nordhus Karlsson and Jacob Kringen | A CHANGE OF PLANS? - THE ROLE OF CRISIS MANAGEMENT PLANS AT THE ONSET OF A COMPLEX, TRANSBOUNDARY CRISIS - THE CASE OF COVID-19 IN NORWAY | Nord University Business School Directorate for Civil protection | NORWAY |

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| | | | Norway University of Stavanger Directorate for Civil Protection | |
| 11:30 11:50 | Sandro Bologna | INFRASTRUCTURE INTERDEPENDENCIES AND RISKS DUE TO CLIMATE CHANGE IMPACTS | TIEMS | ITALY |
| 11:50 12:10 | Gilles Henschger, Baptiste Giovagnoli, Jean-Jacques Bozabalian, Florian Bozec, Christophe Morin, Emmanuel Anat and Jean-Paul Monet | BATTERIES AND CELLS FOR ELECTRIC MOBILITY: A NEW CHALLENGE FOR SAFETY STUDY CASES ON: PROCESS AND STORAGE SAFETY, AND RESPONDERS BEST PRACTICES | Corporate HSES director, Automotive Cells Company (ACC), Bordeaux. TIEMS Europe Regional Director. | FRANCE |
| 12:10 12:30 | George Markowsky and Linda Markowsky | THE STATE OF PANDEMIC TRACKING IN THE UNITED STATES | Kennesaw State University | USA |
| 12:30 12:50 | Dianne L. Chase | WHAT COVID-19 HAS TAUGHT US ABOUT EFFECTIVE EMPLOYEE COMMUNICATION (AND HOW THE LEARNINGS CAN BE APPLIED TOWARD MANAGING OTHER CRISES) | C4CS, LLC | USA |
| 12:50 | LUNCH | | | |
| 13:50 17:00 | SESSION 21 KEYNOTE SPEECH AND POST-COVID19 CONTEXT IN CRISIS, EMERGENCY AND DISASTER RISK MANAGEMENT | | | |
| 13:50 14:20 | Siyanda Manqele | ETHICAL AND RESEARCH CONSIDERATIONS DURING PANDEMICS AND IN THE POST-PANDEMIC ERA IN HIGHER EDUCATION | University of Zululand | SOUTH AFRICA |
| 14:20 14:40 | Josef Leitmann | BUILDING RESILIENCE IN AN URBANIZING WORLD: AN UNPRECEDENTED OPPORTUNITY FOR REDUCING DISASTER RISKS | TIEMS Vice President | USA |
| 14:40 15:00 | Sergey Stankevich, Irina Piestova and Artur Lysenko | SATELLITE SYNTHETIC APERTURE RADAR SUPERRESOLUTION FOR DISASTER MONITORING | Scientific Centre for Aerospace Research of the Earth, NAS of Ukraine | UKRAINE |
| 15:00 15:20 | Keratilwe Bodilenyane and Stanley Ehiane | ORGANIZATIONAL LEARNING AND LEARNING ORGANIZATION AS EMERGENCY RESPONSE BY THE ADMINISTRATORS OF LEARNING INSTITUTIONS IN THE WAKE OF COVID-19 PANDEMIC IN BOTSWANA | University of Botswana | BOTSWANA |

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| 15:20 15:40 | Mabuyi Gumede and Stanley Ehiane | COVID-19 PANDEMIC: COULD THIS BE THE DEMISE OF THE INFORMAL ECONOMIC SECTOR: AN ASSESSMENT OF SOUTH AFRICA EMERGENCY MANAGEMENT APPROACH | University of KwaZulu-Natal, University of Botswana | SOUTH AFRICA, BOTSWANA |
| 15:40 16:00 | Nonhlanhla S Ngubane, Mbali Mahlangu and Stanley Ehiane | WORKPLACE INEQUALITY: EXPLORING THE COPING STRATEGIES OF WOMEN IN THE CHANGING WORLD OF TECHNOLOGY IN THE WORKPLACE IN SOUTH AFRICA | University of KwaZulu-Natal, University of Botswana | SOUTH AFRICA, BOTSWANA |
| 16:20 16:40 | Zukiswa Roboji, Stanley Ehiane and Keratilwe Bodilenyane | ADAPTING AMIDST CHAOS: EMERGENCY MANAGEMENT IN THE DIGITALIZATION IN SOUTH AFRICA AND BOTSWANA'S OF HIGHER EDUCATION | Walter Sisulu University, University of Botswana | SOUTH AFRICA, BOTSWANA |
| 16:40 17:00 | Jaroslav Pejcoch and Monika Kudrlova | EUROSTARS BEST PROJECT - CONFINED SPACE EVACUATION & FLUID MODELLING & DYNAMIC VISUALISATION | T-Soft | CZECH REPUBLIC |
| 17:00 | SUMMARY OF DAY 5 BY CHAIR: RENE OOSTHUIZEN | | | |
| 17:00 18:00 - | CLOSING REMARKS WOUTER HESSENS, SANDILE KHAMANGA AND K. HARALD DRAGER | | | |
| 18:00 | END OF CONFERENCE | | | |

