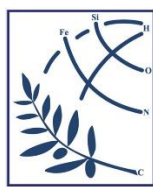


**INTERNATIONAL CONFERENCE ON PLANNING, CHALLENGES OF DISASTER
MANAGEMENT AND RESILIENCE (ICPCDMR)**

PROCEEDINGS OF THE ICPCDMR

Organized by:

**International Hellenic University
School of Science**



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**PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON PLANNING, CHALLENGES
OF DISASTER MANAGEMENT AND RESILIENCE (ICPCDMR)**

**PROGRAMME
&
BOOK OF ABSTRACTS**

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**INSTITUTE OF MANAGEMENT OF MANMADE AND NATURAL DISASTERS -
PANHELLENIC NETWORK OF CIVIL PROTECTION AND CRISIS MANAGEMENT S.C.E.**

WELCOMING ADDRESS BY CHAIRPERSON OF THE CONFERENCE

On the behalf of Organizing Committee, I express a sincere welcome to all representatives attending the **International Conference on Planning, Challenges of Disaster Management and Resilience** which take part by distance using the zoom platform and YouTube and with physical presence in Athens, the capital of Greece, a place that combines the famous historical past with the modern, scientific – oriented present.

Today(11-Feb), 112 Day, the International Conference on Planning, Challenges of Disaster Management and Resilience, organized by the Department of Chemistry - Hephaestus Advanced research Laboratory- of International Hellenic University, has solemnly opened here.

Also, Happy Day to all First Responders and everyone response in Crisis Management.

Before I proceed, I would like to mention that today, 11th of February, has declared by the United Nations General Assembly as the International Day of Women and Girls in Science in 2015, in order to achieve full and equal access to and participation in science for women and girls, and further achieve gender equality and the empowerment of women and girls.

In our conference of 416 participants 38.5% are women, the 59,4% men and 2,1 others.

So, Returning to our main topic:

Developmental considerations contribute to all aspects of the disaster management cycle.

One of the main goals of disaster management, and one of its strongest links with development, is the promotion of sustainable livelihoods and their protection and recovery during disasters and emergencies.

Where this goal is achieved, people have a greater capacity to deal with disasters and their recovery is more rapid and long lasting.

In a development-oriented disaster management approach, the objectives are to reduce hazards, prevent disasters, and prepare for emergencies. Therefore, developmental considerations are strongly represented in the mitigation and preparedness phases of the disaster management cycle.

In appropriate development processes can lead to increased vulnerability to disasters and loss of preparedness for emergency situations.

This is a distinguished cross-century gathering of the world's information circles.

Experts and entrepreneurs from many countries have come together under the same hybrid room to exchange academic viewpoints, display technological achievements, and explore development trends, this will have an important influence on the development of the world's Disaster Management and Resilience technology.

The aim of the Conference is:

To answer one of the major issues of our time which is related with the climate crisis.

To stress the multiple dangers, to analyze today's data and to suggest solutions for the disaster risk reduction and management and to resilience.

To show off the importance of new technologies offering the chance of promotion to research, study and implementation of those technologies which conduce to the easing off or the solution to the problems regarding the disaster risk reduction and management.

To show the importance of cross-scientific methodology and collaboration in dealing with the problem of disaster risk reduction and management, which are objectively multi-dimensional, and to promote the communication among those who study, handle and deal with the problem of disaster risk reduction and management.

More specifically, it is aimed to attain the following objectives:

- 1) Collaborate, communicate, coordinate and capitalize on effective climate crisis adaptation and mitigation strategies such as land use planning, utilization of alternative and renewable energy, among others, in order to limit global warming to safer levels;
- 2) Embark on studies to improve the resilience of all ecosystems to avert adverse effects on food production, health, and economic security and
- 3) serve as venue in pursuing an enabling environment of change geared toward mitigating the worsening effects of climate crisis.

The Conference will cover a wide range of topics such as:

- 1) Disaster Preparedness
- 2) Disaster Response
- 3) Disaster Rehabilitation and Recovery
- 4) Disaster Prevention and Mitigation
- 5) Integration of risk and Resilience with Disaster management

The conference addresses chemists, engineers and other experts and professionals, from different countries who are occupied with the research and the development of activities, in a wide range, regarding issues of Climate Crisis, disaster Management and Resilience.

It also addresses the competent state, communal, social, and business carriers who are involved in these issues.

All accepted and presented papers in this conference will have the opportunities to be published in Proceedings and in a Book indexed by Sci-Scopus.

The conference has received 87 submitted papers, whereby 69 papers have been accepted by the committees for presentation and to be included in the proceedings.

These papers on various topics are divided into 7 sessions and 2 workshops in the conference.

To all members of the organizing committees, the scientific committee, the reviewers, and the collaboration partners, we would like to thank all of them for their tremendous efforts to organize this conference successfully

The organization of the international conference together with the small-scale exhibition, aspires, on the one hand, to bring together the scientific knowledge and applied technology and on the other to boost the dissemination of scientific information and the expansion of the possibility of free access of all citizens to knowledge.

Thus everyone, citizens, producers, scientists, planners, and researchers can become familiar with the themes of the conference in order to contribute towards the constant preservation of disaster risk reduction and management

The local Organizing Committee, the Scientific Committee, and the secretary desk (Institute of Management of Manmade and Natural Disasters -Panhellenic Network of Civil Protection and Crisis Management S.C.E.) are here to help you.

Even though all of you who are visiting Athens will be very busy working for productive days, I wish you an enjoyable staying in our city and I hope you will find some time to state some typical characteristics of the country, its nature, and history, its culture and heritage, its food and tradition.

For the participants by distance, I hope next time have the opportunity to visit the Greece due to their participation on the 2nd International Conference on Planning, Challenges of Disaster Management and Resilience...

We look forward to having a successful conference, and we hope that all the attendees enjoy and benefit from this conference.

Yours Sincerely

Michail Chalaris, MA, PhD
Conference chair of ICPCDMR
Assistant Professor, IHU
Research Director on Risk, Hazards, Crises, and Safety
Hephaestus Advanced research Laboratory
Rtd Major General (HFCs)

**SPEECH BY PROFESSOR (EM.) DR. (HEIDELBERG) ATHANASSIOS KAISSIS,
PRESIDENT OF THE GOVERNING BOARD OF THE INTERNATIONAL HELLENIC
UNIVERSITY, CORRESPONDING FELLOW OF THE INSTITUTE FOR FOREIGN LAW,
INTERNATIONAL LAW, COMPARATIVE LAW, CONFLICTS OF LAW AND
INTERNATIONAL BUSINESS LAW, UNIVERSITY OF HEIDELBERG,**

Dear all,

Allow me first to introduce the International Hellenic University.

The International Hellenic University, a pillar of excellence in education and research, focuses at the same time on internationalization, on the application of research results, on teaching and learning innovation, on the development of entrepreneurship and on linking the University with society.

The International Hellenic University offers 69 postgraduate programmes, 25 of them are offered in English.

The IHU also operates the University Centre of International Programmes of Studies (UCIPS) (www.ihu.gr/ucips/) which offers international students and professionals specialised programmes of study at postgraduate level, conducted entirely in English. UCIPS is an integral part of IHU and a Greek public university. Our permanent academic staff are reinforced by distinguished visiting professors, from Greece and abroad. Together they constitute the nucleus of the centre for excellence in teaching and research which forms our primary aspiration as a university.

The UCIPS comprises two (2) Schools offering twenty-four (24) postgraduate programmes in flexible modes [Full time (1 year) or part time (2 years) or Executive mode (weekends) or Distance learning mode].

Moreover, during this period in order to increase extroversion and connect the university with the business world more than 15 Memorandums of Understanding were signed between the International Hellenic University and various organisations, universities, financial establishments, chambers of commerce and other in Greece and abroad.

The strategic mission of the International Hellenic University has four main axes:

1. Digital Transformation, for the provision of high-level education.
2. Green Deal, as regards environmental protection and energy saving.
3. Extroversion (Cooperation with Universities in Europe, the USA and Asia).
4. Cooperation with industry and agriculture.

From 14/02/2020, when the new Governing Board of the International University of Greece took office, until today, more than one hundred meetings of the Governing Board of the International University of Greece were held, where various academic, financial and administrative issues were discussed and decided.

We would be delighted to welcome you to the International Hellenic University if you visit Thessaloniki in the near future. We could then show you more of the University, the old Thessaloniki city and our country, Greece.

This is an important event regarding disaster management and resilience, and I would like to congratulate the Department of Chemistry of the IHU and Assistant Professor M. Chalaris for organising this conference.

PROGRAMME

Friday, February 11th, 2022

12:00 - 18:00	DELEGATES ACCREDITATION
SESSION I	
Chair	Nancy Alonistioti, Aspasia Karamanou, Nikolaos Katopodis
14:00 - 14:15	STUSTAINABLE DEVELOPMENT CONCEPT - FIASCO OR THE ONLY HOPE TO SURVIVE O.Popovski, L. Shosholovski
14:15 - 14:30	CLIMATE CHANGE AND CHALLENGES THAT ARE BEING CREATED N. Taneski, S. Smileski, A. Iliev
14:30 - 14:45	BIBLIOGRAPHIC MONITORING OF RESEARCH PERFORMANCE OF GREEK RESEARCHERS IN DISASTER MANAGEMENT C. Stefanis, E. Giorgi, K. Kaletzis, A. Tselemonis, C. Tsigalou, E. Nena, C. Kontogiorgis, Y. Kourkoutas, C. Voidarou, E. Chatzaki, I. Dokas, T. Konstantinidis, E. Bezirtzoglou
14:45 - 15:00	UTILIZATION OF THE VIDEO FOR DISTANCE EDUCATION OF EDUCATORS,TEACHERS AND STUDENTS IN MATTERS OF CIVIL PROTECTION IN THE FRAMEWORK OF THE PROJECTS "MY NAME IS TEACHER" AND "PANTOPOULOS TEACHING PROJECT" F. Pantopoulos, I. Chalvantzi
15:00 - 15:15	SnR, SECURITY & RESILIENCE IN DISASTER MANAGEMENT Marta Burgos González
15:15 - 15:30	THE EMERGING ROLE OF TRANSLATION AND INTERPRETING IN CRISIS MANAGEMENT C. Vafeiadaki
15:30 - 15:45	COFFEE BREAK
SESSION II	
Chair	Nikolaos Katopodis, Dimitrios Emmanouloudis, Panagiotis Nastos
15:45 - 16:00	THE APPLICATION OF SEWER MINING TECHNOLOGY IN THE CITY OF ATHENS: CIRCULAR ECONOMY AND WATER N. Tsalas, G. Katsouras, D. Angeliki, A. Lyras, I. Dafnos, V. Polychniatou, S. Samios, E. Lytras and G. Sachinis
16:00 - 16:15	ADAPTATION TO CLIMATE CHANGE EFFECTS ON WATER RESOURCES: UNDERSTANDING INSTITUTIONAL BARRIERS IN NIGERIA O. Sola, H. Mensah, E. Albrecht and B. Ibrahim