



## The 4<sup>th</sup> International Symposium on Flash Floods in Wadi Systems (4<sup>th</sup> ISFF2018)

“Urban Flood Risk Management: Mitigation and Adaptation Measures in the MENA Region”

December 4<sup>th</sup> - 6<sup>th</sup> December, 2018, Hotel Palace d’Anfa, Casablanca

### POSTER SESSIONS PROGRAMME

## Programme du 4<sup>ème</sup> Symposium International sur les Inondations Rapides dans les Bassins des Oueds (4<sup>th</sup> ISFF2018)

“Gestion du risque d’inondations urbaines: Mesures d’atténuation et d’adaptation dans la région MENA”

4-6 Décembre, Hotel Palace d’Anfa, Casablanca, Maroc

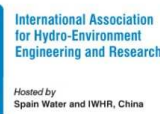
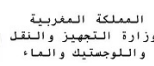
### PROGRAMME des SESSIONS POSTER

All sessions will be held in the Hotel conference hall  
Toutes les sessions du Symposium auront lieu dans la salle de Conférence de l’Hôtel

**1<sup>st</sup> Symposium Day:** Tuesday December 4<sup>th</sup>, 2018

**1<sup>er</sup> Jour du Symposium:** Mardi 4 Décembre 2018

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| 14:00-14:30  |  | <b>1<sup>st</sup> Poster session – 1<sup>ère</sup> Session Posters</b>   |  |
| <b>Chair: Dr. Mohammed Amin Hafnaoui, CRSTRA-Algeria and Dr. Ahmed Hadidi, Gutech-Oman</b>   |  |  |  |
| Modeling of rainfall- discharge relationship by tank model, coupled with Kalman filter. Application to the Bouchegouf watershed (Wilaya of Guelma) |  | <i>Mohamed Amireche<sup>1</sup>, Abdelmalek Bermad<sup>2</sup>, Abdelkader Izerroukyene<sup>2</sup>, Tarek Merabtene<sup>3</sup> and Djamel Boutoutaou<sup>4</sup></i>   |  |
|  |  | <sup>1</sup> University of Oum El Bouaghi, Algeria<br><sup>2</sup> Polytechnic National School, Algeria<br><sup>3</sup> University of University of Sharjah, United Arab Emirates<br><sup>4</sup> University of Ouargla, Algeria |  |
| Soil moisture applications and downscaling using SMOS and SMAP: Review   |  | <i>Hibatoullah Laachrate<sup>1</sup>, Abdelhamid Fadi<sup>2</sup>, Abdessamad Ghafiri<sup>1</sup></i>  |  |
|  |  | <sup>1</sup> Ben M'sik Faculty of Sciences, Hassan II University of Casablanca, Morocco<br><sup>2</sup> Hassania School of Public Works, Casablanca, Morocco   |  |



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| <p>Pilot study of the flood forecast: Case of Oued Fes in Morocco</p>  | <p><i>Badr El Fathi</i><br/>Euro-Mediterranean University of Fes, Morocco</p>   |
| <p>Le développement du réseau d'annonce de crues déterminant dans la protection contre les inondations<br/><i>Flood warning system development for flood control enhancement</i></p> | <p><i>Hassan Elbadraoui, Miloud Ouchalla, Abdeljalil Lokrifa</i><br/>Cadi Ayyad University, Marrakech, Morocco</p>  |
| <p>Stormwater network modelling of Ain Harrouda county, Morocco</p>  | <p><i>Leila Ennajem, Dalila Loudyi</i><br/>Faculty of Sciences and Technics, Hassan II University of Casablanca, Morocco</p>  |
| <p>Assessment of TRMM 3b42v7 satellite precipitation product using fully distributed hydrological model over the Blue Nile basin</p>   | <p><i>Hadir Abd-El Moneim, Mohamed Reda Soliman and Hossam Mohamed Moghazy</i><br/>Faculty of Engineering, Alexandria University, Egypt</p>   |
| <p>Assessment of Sentinel-1 potential for flood mapping in tropical catchments: Case of Bujumbura floodplain, Burundi</p>  | <p><i>Emmanuel Niyongabire, Hassan Rhinane</i><br/>Hassan II University of Casablanca, Morocco</p>  |
| <p>Study of the characteristics of the hydraulic jump in the abrupt expansion</p>  | <p><i>Malika Aouimeur, Saadia Benmamar</i><br/>Polytechnic National School (ENP), Algeria</p>   |
| <p>Coupled SWAT model and flood frequency analysis in Xeropotamos ungauged watershed, Greece.</p>  | <p><i>Nada Joumar<sup>1</sup>, Yiannis Kontogeorgos<sup>2</sup>, Ourania Tzoraki<sup>2</sup>, Lahcen Benaabidate<sup>3</sup>, Dalila Loudyi<sup>1</sup></i><br/><sup>1</sup>Water and Environmental Engineering, Faculty of Sciences and Technics, Hassan II University of Casablanca, Morocco<br/><sup>2</sup>Aegean University, Greece<br/><sup>3</sup>Faculty of Sciences and Technics, University Sidi Mohamed Ben Abdellah, Fez, Morocco</p> |
| <p>Analysis of rainfall extreme impact on Annaba city sewer system</p>   | <p><i>Boutaghane Hamouda<sup>1</sup>, Bessakelia Hanene<sup>2</sup>, Kaouachi Anouar<sup>3</sup></i><br/><sup>1</sup>Badji Mokhtar-Annaba University, Algeria<br/><sup>2</sup>Faculty of Technology, University of Abou Bekr Belkaid, Algeria<br/><sup>3</sup>Amar Telidji University, Algeria</p>  |
| <p>Synthesis of research work on the flooding phenomenon in the city of Annaba (from 2005 to 2018)</p>   | <p><i>Hamouda Boutaghane</i><br/>Badji Mokhtar-Annaba University, Algeria</p>   |
| <p>Evaluation of TRMM rainfall products on runoff prediction over Mellegue basin</p>   | <p><i>Tayeb Boulmaiz<sup>1</sup>, Hamouda Boutaghane<sup>2</sup></i><br/><sup>1</sup>Ghardaia university, Algeria<br/><sup>2</sup>Badji Mokhtar-Annaba University, Algeria</p>  |
| <p>Overview of the economic, social and environmental damages of floods in the Sidi Ifni city -Morocco</p>   | <p><i>Saad Aicha</i><br/>Polydisciplinary Faculty of Taroudant, Ibn Zohr University, Morocco</p>  |



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| Evaluation of vulnerability to flooding in Jeddah, Saudi Arabia: The neighborhood of Abruq al Aaghama as a case study | <i>Saeed Alharbi, Gerald Mills</i><br>University College Dublin, Ireland  |
| Three dimensional simulation of a centennial flood of Mohammedia city in wadi el Maleh watershed, Morocco             | <i>Mohamed Salem Chaabane, Naima Abouali, Taieb Boumeaza, Mohamed Zahouily</i><br>Hassan II University of Casablanca, Morocco |

**2<sup>nd</sup> Day of Symposium : Wednesday December 5<sup>th</sup>, 2018**  
**2<sup>ème</sup> Jour du Symposium: Mercredi 5 Décembre 2018**

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| <b>13:45-14:15   2<sup>nd</sup> Posters session - 2<sup>ème</sup> Session Posters</b>   |   |
| <b>Chair: Dr. Mohammed Amin Hafnaoui, CRSTRA-Algeria and Dr. Ahmed Hadidi, Gutech-Oman</b>  |   |
| Impact of the Mohammedia Benslimane landfill on the quality of groundwater  | <i>Zineb Hamri, Latifa Mouhir, Laila Saafadi, Salah Souabi</i><br>Faculty of Sciences and Technics-Mohammedia, Hassan II University of Casablanca, Morocco  |
| L'intégration de l'adaptation au changement climatique dans la planification local : Cas des inondations à la Métropole Casablancaise<br><i>Integrating climate change adaptation in local planning: Casablanca city flood case</i> | <i>Nidal Lotfi, Mohammed-Said Karrouk</i><br>Faculty of Human Sciences of Ben M'Sick, Hassan II University of Casablanca, Morocco   |
| Measuring technique for sediment transport during Wadi flash floods   | <i>Takahiro Koshiba, Sameh Kantoush, Tetsuya Sumi</i><br>DRPI, Kyoto University, Japan  |
| Impact analysis of a port development on beach stability  | <i>Mimoun Oukadr, Hassan Ayad, Mohamed Chagdali</i><br>Hassan II University of Casablanca, Morocco  |
| Assessing resilience to floods based on PCA in three flood affected municipalities in Morocco   | <i>Narjiss Satour<sup>1</sup>, Badreddine Benyacoub<sup>1</sup>, Otmane Raji<sup>2</sup>, Ilias Kacimi<sup>1</sup></i><br><sup>1</sup> Mohammed V University, Rabat, Morocco<br><sup>2</sup> Mohammed VI Polytechnic University, Bengrir, Morocco |
| Impact of floods on siltation of dams. Case Study: Al Wahda Dam on the Sebou Basin  | <i>Nouhaila Mazigh</i><br>Faculty of Sciences and Technics, Hassan II University of Casablanca, Morocco   |
| Etude de la consommation actuelle des eaux du barrage Idriss Premier, Maroc septentrional<br><i>A study current water use of Idriss I dam, northern Morocco</i>   | <i>Marouane Laaraj<sup>1</sup>, Lahcen Benaabidate<sup>1</sup>, Valérie Mesnage<sup>2</sup></i><br><sup>1</sup> Faculty of Sciences and Technics-Fez, Morocco<br><sup>2</sup> Université de Rouen, France   |



ROYAUME DU MAROC  
MINISTÈRE DE L'EQUIPEMENT, DU TRANSPORT,  
DE LA LOGISTIQUE ET DE L'EAU



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وزارة إعداد الأوب الوطني للتعمير والإسكان وسياسة المدينة  
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International Association  
for Hydro-Environment  
Engineering and Research  
Hosted by  
Spain Water and IWRH, China



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| <p>Traditional techniques of water resources exploitation and flood control in arid environments: Case of the Oases of Maïder in south-east of Morocco</p>                             | <p><i>Mouhcine Ayacine<sup>1</sup>, Abdeslam Taleb<sup>2</sup>, Mohamed El Bouchikhi<sup>3</sup>, Khalid Obda<sup>1</sup></i></p> <p><sup>1</sup>Faculty of Humans Sciences Saïs, Fez, Morocco<br/><sup>2</sup>Faculty of Sciences and Technics, Mohammedia, Morocco<br/><sup>3</sup>Polydisciplinary Faculty, Taza, USMBA, Morocco</p> |
| <p>Les risques des précipitations extrêmes sur la ville de Casablanca: inondations de l'oued Bouskoura<br/><i>Extreme rainfall risks in Casablanca city: Oued Bouskoura floods</i></p> | <p><i>Majda Chair, Mohamed Saïd Karrouk</i></p> <p>Faculty of Human Sciences, Hassan II University of Casablanca, Morocco</p>   |
| <p>Study of the Effects of Stabilized Leachate Residues from the City of Mohammedia's Landfill Site on Regional Waters and Soils</p>   | <p><i>Jamal Mabrouki<sup>1</sup>, Souad El Hajjaji<sup>1</sup>, Ahmed Moufti<sup>2</sup></i></p> <p><sup>1</sup>Faculty of Sciences, Mohammed V University of Rabat, Morocco<br/><sup>2</sup>Regional Center for Careers in Education and Training Casablanca-Settat, Morocco</p>   |
| <p>Potential impacts of groundwater flooding on urban areas and the role of remote sensing and GIS techniques in preventing it.</p>  | <p><i>Aicha Oushire<sup>1</sup>, Abdessamad Ghafiri<sup>1</sup>, Hassane Oulidi Jarar<sup>2</sup></i></p> <p><sup>1</sup>Hassan II University of Casablanca, Morocco<br/><sup>2</sup>Hassania School of Public Works (EHTP), Morocco</p>  |
| <p>Protection study against the flooding of the city of Sidi Kassi – north east Algeria</p>  | <p><i>Iyes Lekouaghet, Bisma Abdelmadjid and Hamouda Boutaghane</i></p> <p>Badji Mokhtar Annaba, Algeria</p>  |
| <p>Flood Protection Dams in Oman</p>   | <p><i>Munir Al Zadjali</i></p> <p>Ministry of Regional Municipalities and Water Resources, Oman</p>   |
| <p>Designing of Jurf dam in Duqm on geologically complicated foundation rocks – a case study</p>   | <p><i>Saif Al Hinai, Maroof Shah, Mohammed Al Mahrouqi</i></p> <p>Oman Company for the Development of Special Economic Zone Authority at Duqm, Oman</p>   |
| <p>Aménagement de la plaine de Bouteldja nord est algérien contre les inondations<br/><i>Plain management against flood in Bouteldja north east of Algeria</i></p>                     | <p><i>Soraya Bouslah and Fouad Sennaoui</i></p> <p>University Badji Mokhtar- Annaba, Algeria</p>  |