



International Conference, Day-by-day scientific sessions agenda

Monday, 13 August 2018

	Monday			
Time	Salon A	Salon B	Salon C	Gallery B
9:00-10:30	Opening Ceremonies			
11:00-12:30	International Conference Plenary session			
1:30-3:00	M-A-03	M-B-03	M-C-03	Agricultural Greenhouse Gases Program (AGGP) Workshop
3:30-5:00	M-A-04	M-B-04	M-C-04	
5:00-6:30				

SALON A-B-C International Conference Plenary session	
11:00-11:20	Agricultural Water Futures in an era of Changing Agriculture and Climate - Dr. John Pomeroy
11:20-11:40	Reflections on Water Management for More Productive & Resilient Agriculture - Dr. Peter McCornick
11:40-12:00	Climate-smart crops: delivering global food security in the era of climate change - Dr. Maurice Moloney
12:00-12:30	Panel Discussion - Drs. Pomeroy, McCornick and Moloney

SALON A M-A-03: Socioeconomic value of irrigation		#
1:30-1:45	Strategic role of Drip Irrigation in efficient management of water resources and enhancing livelihoods: select case study –India - Surayya Teki (Adikavi Nannaya University, Rajahmundry, India)	22
1:45-2:00	Constraints in Adoption of High Efficiency Irrigation Systems in Punjab, Pakistan - Israr Hussain Kazim (University of Agriculture, Faisalabad), Allah Bakhsh (University of Agriculture, Faisalabad)	43

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



2:00-2:15	<u>Multiple interrelated factors affect cropping intensity and land productivity in a central rice production area in Solok Regency, West Sumatra, Indonesia</u>	<u>354</u>
	- Nova Anika (Tokyo University of Agriculture and Technology), Tasuku Kato (Tokyo University of Agriculture and Technology)	
2:15-2:30	Uplifting the socio economics of farmers in Muda area: the role of irrigation systems	152
	- Rumzi Ahmad (Muda Agricultural Development Authority), Mukhlis Zainol Abidin (Muda Agricultural Development Authority)	
2:30-2:45	Participatory approach and socioeconomic improvement for sustainable irrigation water management	222
	- Tariq Gamal (CMRI), Tarek Elsamman (CMRI)	
2:45-3:00		
SALON A	M-A-04: Water-food-energy nexus	#
3:30-3:45	Integrating the water – energy – food nexus into national irrigation planning: South African perspectives	111
	- Tafadzwanashe Mabhaudhi (University of KwaZulu-Natal), Sylvester Mpandeli (Water Research Commission), Dhesigen Naidoo (Water Research Commission), Luxon Nhamo (International Water Management Institute), Aiden Senzanje (University of KwaZulu-Natal)	
3:45-4:00	Actions for green economy through linkages between water, energy and food security	251
	- Vijay Labhsetwar (International Commission on Irrigation and Drainage (ICID))	
4:00-4:15	Irrigation Canal Automation to Improve Water Delivery Performance, Reducing Groundwater Extraction, and Carbon Emission	353
	- S. Mehdy Hashemy Shahdany (Aburaihan Campus, University of Tehran), Jaber Soltani (Aburaihan Campus, University of Tehran), Saleh Taghvaeian (Department of Biosystems and Agricultural Engineering, Oklahoma State University), Poolad Karimi (Water Science & Engineering Department, IHE Delft Institute for Water Education), Jose M Maestre (Department of Systems and Automation Engineering, University of Seville)	
4:15-4:30	<u>Dynamic water, food, and trade modeling: case study for Egypt</u>	<u>296</u>
	- Ahmed Abdelkader (University of Saskatchewan), Amin Elshorbagy (University of Saskatchewan), Hussam Fahmy (National Water research center, Ministry of water Resources & Irrigation)	
4:30-4:45	<u>An Integrated Model for Dynamic Assessment of the Food-Energy-Water nexus in Saskatchewan</u>	<u>316</u>
	- Lina Wu (University of Saskatchewan), Ahmed Abdelkader (University of Saskatchewan), Amin Elshorbagy (University of Saskatchewan)	
4:45-5:00	<u>Applicability Analysis and Evaluation of Sunflower Growth Model Based on Photosynthetic Characteristics under Salt-nitrogen Coupling Conditions</u>	<u>382</u>
	- Yixiao Song (State Key Laboratory of Water Resources and Hydropower Engineering Science, Wuhan University), Jiesheng Huang (State Key Laboratory of Water Resources and Hydropower Engineering Science, Wuhan University), Wenzhi Zeng (State Key Laboratory of Water Resources and Hydropower Engineering Science, Wuhan University), Guoqing Lei (State Key Laboratory of Water Resources and Hydropower Engineering Science, Wuhan University)	

Underlined text: participating in the student award competition

Bold titles: solicited presentations



SALON B	M-B-03: Climate change and its impact on agriculture, irrigation, and drainage (I)	#
1:30-1:45	Perspectives on California's Wet and Wild 2016-17 Winter Season - David Curtis (WEST Consultants)	17
1:45-2:00	Agricultural water management of small and medium water reservoirs in Burkina Faso: case of the Mogtedo water reservoir - Farid Traoré (Institute of Environment and Agricultural Research), Sié Palé (University of Liège), Francis Guyon (Irrigation Development Support Program), Rodrigue P. Walbeogo (Irrigation Development Support Program), Kibissi Paré (Irrigation Development Support Program), Adolphe B.V.C Zangré (irrigation Development Support Program)	18
2:00-2:15	Potential Constraint of Rainwater availability on the Establishment and Expansion of Agroforestry in Limpopo Province, South Africa - Phokele Maponya (Agricultural Research Council), Sonja Louise Venter (Agricultural Research Council), Christiaan Phillipus Du Plooy (Agricultural Research Council), Gerhard Backeberg (Water Research Commission), Sylvester Mpandeli (Water Research Commission), Edward Nesamvuni (University of Venda)	39
2:15-2:30	Challenges for irrigation management under the conditions of climate change and reforms in agriculture and water sector in Ukraine - Olga Zhovtonog (Institute of Water Problems and Land Reclamation), Vitalii Polishchuk (Institute of Water Problems and Land Reclamation), Larysa Filipenko (Institute of Water Problems and Land Reclamation)	190
2:30-2:45	Climate Change Impact Assessment on Water Balance of Agricultural Reservoirs in Korea - Jaepil Cho (APEC Climate Center), Sewoon Hwang (Gyeongsang National University), Gwangdon Ko (Korea Rural Community Corporation), Kwangyoung Kim (Korea Rural Community Corporation), Jihoon Park (APEC Climate Center)	240
2:45-3:00		
SALON B	M-B-04: Climate change and its impact on agriculture, irrigation, and drainage (II)	#
3:30-3:45	<u>Drought hazard to rice cultivation in the Mun River Basin, Thailand</u> - Saowanit Prabnakorn (IHE Delft Institute for Water Education), Shreedhar Maskey (IHE Delft Institute for Water Education), F.X. Suryadi (IHE Delft Institute for Water Education), Charlotte de Fraiture (IHE Delft Institute for Water Education)	<u>249</u>
3:45-4:00	Possible effects of climate change on cropping pattern in northeast of Iran: A climate smart approach - Nozar Ghahreman (University of Tehran), Iman Babaeian (National Climatology Institute)	193
4:00-4:15	Development of a sustainable national irrigation strategy: lesson learned in Hungary - András Molnár (Research Institute of Agricultural Economics), Gábor Kemény (Research Institute of Agricultural Economics), Andrea Kiss (Research Institute of Agricultural Economics), Enikó Vári (Research Institute of Agricultural Economics)	254

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



4:15-4:30 Drought Vulnerability Assessment for the Middle Rio Grande 262
- **Luciana Cunha** (WEST Consultants Inc.), **Anne Marken** (Middle Rio Grande Conservancy District), **David Gensler** (Middle Rio Grande Conservancy District), **Brian Wahlin** (WEST Consultants Inc)

4:30-4:45

4:45-5:00

SALON C **M-C-03: Water reuse and water quality management (I)** **#**

1:30-1:45 Irrigation Reuse of Wastewater in California, USA 57

- **Walter Roche** (Consultant, Member USCID)

1:45-2:00 Improving water reuse in paddy field districts with cascaded on-farm ponds using hydrologic model simulations 21

- **Xuezhi Tan** (Wuhan University), **Dongguo Shao** (Wuhan University)

2:00-2:15 WITHDRAWN

2:15-2:30 Characterizing Drain Water Quality within the Taber Irrigation District, Alberta, Canada 233

- **Evan Hillman** (Alberta Agriculture and Forestry)

2:30-2:45 The Preliminary Study on the Development of Integrated Environmental Monitoring and Pollution Investigation Mechanism in Agricultural Production Environment 216

- **Ke-Chun Lin** (Taiwan Research Institute on Water Resources and Agriculture), **Ming-Kai Hsieh** (Taiwan Research Institute on Water Resources and Agriculture), **Ming-De Hong** (Council of Agriculture), **Sheng-Hsin Hsieh** (Council of Agriculture), **Yun-Chen Chung** (Department of Bioenvironmental Systems Engineering, National Taiwan University), **Chihhao Fan** (Department of Bioenvironmental Systems Engineering, National Taiwan University)

2:45-3:00 Investigating the effects of ABR wastewater irrigation management techniques on growth and yield parameters of madumbe (*Colocasia esculenta*) in Durban, Republic of South Africa 108

- **Isiaka Toyin Busari** (Bioresources Engineering Department, School of Engineering, University of KwaZulu-Natal, South Africa), **Aidan Senzanje** (Bioresources Engineering Department, School of Engineering, University of KwaZulu-Natal, South Africa), **Alfred A Odindo** (Crop Science Department, School of Agricultural, Earth and Environmental Sciences, University of KwaZulu-Natal, South Africa), **Chris A Buckley** (Pollution Research Group, School of Engineering, University of KwaZulu-Natal, South Africa)

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



SALON C	M-C-04: Water reuse and water quality management (II)	#
3:30-3:45	Long-Term Assessment and Modeling of Agricultural Contaminant in Groundwater Systems of Thailand - Aksara Putthividhya (Chulalongkorn University), Ratchapon Pipitsombat (Chulalongkorn University)	26
3:45-4:00	Application of Resin Capsules in Heavy Metal Monitoring in Irrigation Water - Po-Kang Shih (Department of Bioenvironmental Systems Engineering, National Taiwan University), Sheng-Chi Lin (Graduate Institute of Innovation and Technology, National Pingtung University of Science and Technology), Tsun-Kuo Chang (Department of Bioenvironmental Systems Engineering, National Taiwan University), Sheng-Hsin Hsieh (Council of Agriculture, Executive Yuan), Ming-Der Hong (Council of Agriculture, Executive Yuan), Yu-Lin Chang (Council of Agriculture, Executive Yuan)	155
4:00-4:15	Forewarning analysis of the irrigation water quality by linking automatic monitoring system - Yu-Jung Hsu (Department of Bioenvironmental Systems Engineering, National Taiwan University), Shih-Chi Hsu (Sinotech Environmental Technology, Ltd), I-Chun Chen (Sinotech Environmental Technology, Ltd), Ming-De Hong (Council of Agriculture), Sheng-Hsin Hsieh (Council of Agriculture), Chihhao Fan (Department of Bioenvironmental Systems Engineering, National Taiwan University)	212
4:15-4:30	The national water quality monitoring network in Egypt: Assessment and rationalization approach - Eman Ragab (Groundwater Research Institute – National Water Research Centre)	329
4:30-4:45	Effect of treated wastewater on water use efficiency at different levels of irrigation in surface irrigation - Azra Karami (University of Tehran), Seyyed Ebrahim Hashemi Garmdareh (University of Tehran)	398
4:45-5:00		
GALLERY B	Agricultural Greenhouse Gases Program workshop	
1:30-1:45	Opening remarks - Felix Reinders, President (International Commission on Irrigation and Drainage (ICID)) The Agriculture and Agri-Food Canada Greenhouse Gases Program and the Global Research Alliance - Steve Lovshin (Agriculture and Agri-Food Canada) and Curtis Snell (Agriculture and Agri-Food Canada)	
1:45-2:10	Adoption of water table management practices by fruit and vegetable farms in Eastern Canada - Ana-Maria Bogdan (Department of Agricultural and Resource Economics, University of Saskatchewan, Saskatoon, SK) and Suren Kulshreshtha (Department of Agricultural and Resource Economics, University of Saskatchewan, Saskatoon, SK)	
2:10-2:35	Greenhouse gas emissions from horticultural production systems in Eastern Canada - Kaitlin Lloyd (Department of Bioresource Engineering, Macdonald Campus, McGill University) and Chandra A. Madramootoo (Department of Bioresource Engineering, Macdonald Campus, McGill University)	

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



- 2:35-3:00 Effect of irrigation practices on soil nitrogen cycling microbial populations and nitrous oxide emissions in a Merlot vineyard in the Okanagan Valley of British Columbia
- **Louise Nelson** (Biology Department University of British Columbia, Okanagan Campus, BC), **Tanja Voegel** (Biology Department University of British Columbia, Okanagan Campus, BC) **Mesfin Fentabil** (Earth, Environmental and Geographic Sciences, University of British Columbia, Okanagan Campus, BC), **Craig Nichol** (Earth, Environmental and Geographic Sciences, University of British Columbia, Okanagan Campus, BC) and **Melanie Jones** (Biology Department University of British Columbia, Okanagan Campus, BC)
- 3:00-3:30 **Health break**
- 2:45-3:10 Farmer-oriented Management Support Toolbox for Shelterbelt Systems in Saskatchewan
- **Suren N. Kulshreshtha** (Department of Agricultural and Resource Economics, University of Saskatchewan, SK), **Beyhan Y. Amichev** (Department of Agricultural and Resource Economics, University of Saskatchewan, SK), **Colin P. Laroque** (Department of Agricultural and Resource Economics, University of Saskatchewan, SK), **Kenneth W. Belcher** (Department of Agricultural and Resource Economics, University of Saskatchewan, SK), **Murray J. Bentham** (Department of Agricultural and Resource Economics, University of Saskatchewan, SK), and **Ken C.J. Van Rees** (Department of Agricultural and Resource Economics, University of Saskatchewan, SK)
- 3:45-4:10 Subsurface recycling irrigation of grazed perennial forage in Atlantic Canada and baseline greenhouse gas fluxes
- **Fredeen A.** (Dept. Animal Sci. and Aqua, Dalhousie Faculty of Agric., NS), **Havard P.** (Dept. of Eng., Dalhousie Faculty of Agr., Truro, NS), **Papadopoulos Y.** (Agric and Agri-Food Canada, NS), **Bouman, T** (Dept. Biology, Cape Breton Univ., NS), **Astatkie, T.** (Dept. of Eng., Dalhousie Faculty of Agr., NS); **Madramootoo C.** (Dept. Biores. Eng., Macdonald College, Univ. McGill, QC)
- 4:10-4:35 GHG emissions as affected by fertilizer and water table management
- **N.A. Abbasi** (Department of Bioresource Engineering, McGill University, QC), **T.Q. Zhang** (Harrow Research and Development Center, Agriculture and Agri-Food Canada, ON), **C. A. Madramootoo** (Department of Bioresource Engineering, McGill University, QC), **J. K. Whalen** (Department of Natural Resource Sciences, McGill University, QC), **C.S. Tan** (Harrow Research and Development Center, Agriculture and Agri-Food Canada, ON)
- 4:35-5:00 An Economic assessment of water table management and its impact on GHG emissions from corn production in Quebec and Ontario.
- **M. Essien** (Department of Bioresource Engineering, McGill University, QC), **R.Cairns** (Department of Economics, McGill University, QC) and **C. A. Madramootoo** (Department of Bioresource Engineering, McGill University, QC)



Tuesday, 14 August 2018

Time	Tuesday			Hilton Hotel: Prince Albert Room
	Salon A	Salon B	Salon C	
9:00-10:30	T-A-01	T-B-01	Irrigation Production	
11:00-12:30	T-A-02	T-B-02	Irrigation Production	
1:30-3:00	T-A-03	T-B-03	Financing Irrigation	FAO3 closed event
3:30-5:00	T-A-04	T-B-04	Financing Irrigation	
5:00-6:30	Gallery A POSTERS T- P: 2.1; 2.3; 3.1 (28 posters)			

SALON A	T-A-01: Irrigation & water resources management in trans-boundary basins	#
9:00-9:15	Irrigation Development as an Instrument for Economic Growth in Saskatchewan: An Economic Impact Analysis - Jillian Brown (University of Saskatchewan), Suren Kulshreshtha (University of Saskatchewan),	13
9:15-9:30	Irrigation and water resources management in transboundary basins - Khalilurrahman Omar (Ministry of Agriculture Irrigation and livestock)	119
9:30-9:45	Investigating the vulnerability of irrigated agriculture across the Saskatchewan River Basin under different future scenarios - Syed Mustakim Ali Shah (Global Institute for Water Security), Saman Razavi (Global Institute for Water Security), Andrew Slaughter (Global Institute for Water Security), Howard Wheeler (Global Institute for Water Security)	366
9:45-10:00	Protecting Water through Traditional Knowledge - Land use planning in the Athabasca River Watershed - Laura Gaitan (Memorial University of Newfoundland)	381

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



10:00-10:15 Optimal irrigation management system based on hydraulic analysis of irrigation channel 242
 - **Jong Won Do** (Korea Rural Community Corporation(KRC)), **Kwang Ya Lee** (Korea Rural Community Corporation(KRC)), **Hanjoong Kim** (Hankyong National University), **Ku Kang** (Hankyong National University)

10:15-10:30

SALON A **T-A-02: Irrigation & water resources management in trans-boundary basins AND managing Competing water demands (I)** #

11:00-11:15 Water Resources Management under Competing Demands in the North Western Province Water Deficit Areas, Sri Lanka 25
 - **G.M.R.Asoka Perera** (Mahaweli Water Security Investment Programme (MWSIP))

11:15-11:30 An Evaluation of the Apportionment Agreements of the Transboundary Rivers of the Saskatchewan River Basin under Future Climate Change Scenarios 337
 - **Kasra Keshavarz** (School of Environment and Sustainability, University of Saskatchewan), **Saman Razavi** (School of Environment and Sustainability, University of Saskatchewan), **Andrew Slaughter** (School of Environment and Sustainability, University of Saskatchewan)

11:30-11:45 Blockchain, a new technology that would be able to manage competing water demands 369
 - **Ahmad Doosti** (Student IKIU), **Mitra Matloubi** (Student)

11:45-12:00 Water Balance and Water Allocation Study for Small Scale Irrigation Schemes Using Results of Analysis from WEAP Model 104
 - **S. Jalal Jebelli** (Qanat Consulting Company)

12:00-12:15 An economic perspective on dry season water allocation scheme under risks and uncertainties in Thailand 24
 - **Aksara Putthividhya** (Chulalongkorn University), **Thanathip Phaersomboon** (Chulalongkorn University), **Thanut Thammathiwat** (Chulalongkorn University)

12:15-12:30

SALON A **T-A-03: Managing competing water demands (II)** #

1:30-1:45 Remote sensing, Machine Learning and Water Accounting: New-age tools to support and age-old challenge 134
 - **Caren Jarman** (Stellenbosch University)

1:45-2:00 Managing competing water demands through a partnership approach in Northern Victoria, Australia 99
 - **Carl Walters** (Goulburn Broken Catchment Management Authority), **Megan McFarlane** (Goulburn Broken Catchment Management Authority), **Chris Nicholson** (Goulburn Broken Catchment Management Authority), **Vicki Mackenzie** (Goulburn Broken Catchment Management Authority), **David Lawler** (Goulburn Broken Catchment Management Authority)

2:00-2:15 Regional Water Strategy in Central Asia: Way to Healthy Aral Sea Ecosystems 168
 - **Vadim Sokolov** (Agency for project implementation of the International Fund for the Aral Sea Saving)

Underlined text: participating in the student award competition

Bold titles: solicited presentations



2:15-2:30	<u>Alternative institutional arrangement for sustainable irrigation: a study of local water users association in Indonesia</u>	195
	- Sitti Rahma Ma'mun (Centre for Global Food and Resources, The University of Adelaide), Michael Young (Centre for Global Food and Resources, The University of Adelaide), Adam Loch (Centre for Global Food and Resources, The University of Adelaide)	
2:30-2:45	Exploration of management system of water saving irrigation engineering and technical research highlights in China	214
	- Jing Bai (China Irrigation and Drainage Development Center), Chongbao Xie (China Irrigation and Drainage Development Center)	
2:45-3:00	Formulating diagnostic assessment and modernization approach for large irrigation systems	237
	- Muhammad Usman Rashid (University of Management and Technology), Farooq Raees (Cosmos Science Corporation), Ali Ajwad (University of Management and Technology)	
SALON A	T-A-04: Managing competing water demands (III)	#
3:30-3:45	<u>An Evaluation of Current and Future Water Allocation Strategies in the Saskatchewan River Basin, Canada</u>	245
	- Leila Eamen (University of Saskatchewan), Saman Razavi (University of Saskatchewan), Roy Brouwer (University of Waterloo), Laurie Tollefson (Agriculture and Agri-Food Canada)	
3:45-4:00	Improving Resilience of Water Resources Systems through Public Awareness: The Key Role of Media in Affecting Agricultural Water Use	246
	- Mohammad Ghoreishi (University of Saskatchewan), Saman Razavi (University of Saskatchewan), Amin Elshorbagy (University of Saskatchewan)	
4:00-4:15	Water resources management modelling for achieving equitable sharing of water within the Saskatchewan River Basin	334
	- Andrew Slaughter (Global Institute for Water Security, University of Saskatchewan, National Hydrology Research Center), Saman Razavi (Global Institute for Water Security, University of Saskatchewan, National Hydrology Research Center), Kasra Keshavarz (School of Environment and Sustainability, University of Saskatchewan), Syed Mustakim Ali Shah (Global Institute for Water Security, University of Saskatchewan, National Hydrology Research Centre)	
4:15-4:30	Practice of Improving Water Management in Nepal: A case study of Kankai Irrigation System	340
	- Birendra Kumar Yadav (Department of Irrigation), Sanjeev Kumar Mishra (Irrigation and Water Resources Management Project)	
4:30-4:45	Bow River Sim – A Serious Game for Communicating Bow River Integrated Water Management	342
	- Khaled Akhtar (Alberta Environment and Parks), Patrick Grover (BGC Engineering), Tom Tang (Alberta Environment and Parks), Gerald Magnusson (BGC Engineering), Quinn Brander (Centre for Digital Media), Brooke Waddington (Centre for Digital Media)	
4:45-5:00	Competition for irrigation water - Case studies	327
	- Clarke Ballard (Ballard Consulting)	

Underlined text: participating in the student award competition

Bold titles: solicited presentations



SALON B	T-B-01: Climate change and its impact on agriculture, irrigation, and drainage (III)	#
9:00-9:15	Lake Diefenbaker, Saskatchewan Canada. A Visionary 20 st Century Start on 21 st Century Issues. - Graham F. Parsons (President, Organisation for Western Economic Cooperation)	407
9:15-9:30	Impact of climate change in irrigation water management in Babai river basin, Nepal - Yogendra Mishra (Department of Irrigation)	330
9:30-9:45	CO2 Emissions of Rice Observed from A Paddy Field Under System of Rice Intensification - Shiang-Min Chen (National Pingtung University of Science and Technology), Yu-Min Wang (National Pingtung University of Science and Technology), Bougssare Mathieu (National Pingtung University of Science and Technology), Ying-Tzy Jou (National Pingtung University of Science and Technology), Tapsoba Alexis (National Pingtung University of Science and Technology)	344
9:45-10:00	Irrigation in the Context of Climate Change in Canada - Laurie Tollefson (Agriculture and Agri-Food Canada), John Harrington (Agriculture and Agri-Food Canada), Dale Tomaszewicz (Agriculture and Agri-Food Canada)	357
10:00-10:15	Estimating near-surface soil moisture under climate change using an improved configuration of the Variable Infiltration Capacity (VIC) model based on Grouped Response Units (GRU) - Shervan Gharari (University of Saskatchewan), Saman Razavi (University of Saskatchewan), Jefferson Wong (University of Saskatchewan), Alain Pietroniro (University of Saskatchewan), Howard Wheeler (University of Saskatchewan)	370
10:15-10:30	Assessing the irrigation demands in Sweden under changing climate - Abraham Joel (Department of Soil and Environment, SLU), Ingrid Wesström (Department of Soil and Environment, SLU)	371
SALON B	T-B-02: Climate change and its impact on agriculture, irrigation, and drainage (III) AND Irrigation water footprint (I)	#
11:00-11:15	Review of climate change and variability impacts on water resources, irrigation and agricultural sector performance in Southern Africa - Charles Nhemachena (International Water Management Institute), Greenwell Matchaya (International Water Management Institute), Charity Ruramai Nhemachena (Graduate School of Business Leadership, University of South Africa), Luxon Nhamo (International Water Management Institute), Binganidzo Muchara (Graduate School of Business Leadership, University of South Africa), Selma Karuaihe (Department of Agricultural Economics, Extension and Rural Development, University of Pretoria)	50
11:15-11:30	Food Security in the Face of Climate Change, Population Growth, and Resources Constraints: Implications for China - Jianxin Mu (State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research), Hejing Ren (State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research), Yao Zhu (Division of Foreign Affairs, China Institute of Water Resources and Hydropower Research), Zhenyu Lv (State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research)	223
11:30-11:45	Irrigation Certification in Saskatchewan - Cara Drury (Saskatchewan Ministry of Agriculture)	91

Underlined text: participating in the student award competition

Bold titles: solicited presentations



11:45-12:00	Alberta Irrigation Sector 2005-2015 Conservation, Efficiency and Productivity Plan and Evaluation	192
	- Margo Redelback (Alberta Irrigation Projects Association)	
12:00-12:15	Water Resource Management for Irrigated Agriculture in China: Problems and Prospects	290
	- Changshun Liu (China Institute of Water Resources and Hydropower Research), Shan Jiang (China Institute of Water Resources and Hydropower Research), Lijuan Du (China Institute of Water Resources and Hydropower Research)	
12:15-12:30		
SALON B	T-B-03: Irrigation water footprint (II)	#
1:30-1:45	Quantification of alfalfa water uptake from different layers and root zones under drip irrigation using stable hydrogen	230
	- Jiabin Wu (China Institute of Water Resources and Hydropower Research)	
1:45-2:00	<u>Assessment of crop water use and stress using multirate satellite data</u>	<u>396</u>
	- Paavan Kumar Reddy Gollapalli (Indian Institute of Remote Sensing), N.R. Patel (Indian Institute of Remote Sensing), Abhishek Danodia (Indian Institute of Remote Sensing)	
2:00-2:15	Study on Water Demand and Suitable Soil Water Content of Banana, Guangdong, China	235
	- Haili Wang (Guangdong Research Institute of Water Resources and Hydropower), Xuanqing Gu (Guangdong Research Institute of Water Resources and Hydropower), Xiaojun Wang (Guangdong Research Institute of Water Resources and Hydropower), Xiaobing Yi (Guangdong Research Institute of Water Resources and Hydropower)	
2:15-2:30	Strategies for reducing water consumption in vineyard grapevines without affecting water status, yield and wine quality.	377
	- Pilar M. Gil (Pontificia Universidad Católica de Chile), Daniela Cea (Pontificia Universidad Católica de Chile), Daniel Knopp (Pontificia Universidad Católica de Chile), Claudia Bonomelli (Pontificia Universidad Católica de Chile), Natalia Brossard (Pontificia Universidad Católica de Chile), Edmundo Bordeu (Pontificia Universidad Católica de Chile)	
2:30-2:45	Application of remote sensing to evaluate the spatial-temporal variation in irrigation performance in Central Nebraska, USA	385
	- Ivo Zution Gonçalves (Daugherty Water for Food Global Institute, University of Nebraska), Mesfin Mekonnen (Daugherty Water for Food Global Institute, University of Nebraska), Christopher M. U. Neale (Daugherty Water for Food Global Institute, University of Nebraska), Isidro Campos (Universidad de Castilla-La Mancha, Instituto de Desarrollo Regional, Spain), Patricio Grassini (Department of Agronomy and Horticulture, University of Nebraska - Lincoln), Michael R. Neale (Department of Civil and Environmental Engineering, Colorado State University)	
2:45-3:00		

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



SALON B	T-B-04: Drainage and flood control strategies (I)	#
3:30-3:45	Assessing the difference between trencher and trenchless subsurface drainage methods through groundwater level observations - Heidi Salo (Aalto university School of Engineering), Ilkka Mellin (Aalto university School of Science), Maija Paasonen-Kivekäs (Sven Hallin Research Foundation sr), Helena Äijö (Finnish Field Drainage Association), Seija Virtanen (Drainage Foundation sr), Harri Koivusalo (Aalto university School of Engineering)	224
3:45-4:00	Impacts of supplementary drainage on the water balance of a poorly drained clayey agricultural field - Olle Häggblom (Aalto University), Heidi Salo (Aalto University), Mika Turunen (Luonnonvarakeskus, Natural Resources Institute Finland), Jyrki Nurminen (Salaajituksen tutkimusyhdistys ry), Laura Alakukku (Helsinki University), Merja Mylly (Natural Resources Institute Finland)	231
4:00-4:15	The effect of supplementary subsurface drainage on nutrient and sediment loading in clay soil - Helena Äijö (Finnish Field Drainage Association), Merja Mylly (LUKE), Jyrki Nurminen (Finnish Field Drainage Research Association), Maija Paasonen-Kivekäs (Sven Hallin Research Foundation sr), Heidi Salo (Aalto University), Olle Häggblom (Aalto University)	250
4:15-4:30	Integrating Taber Irrigation District into our Watershed: More than Mitigation - Christopher Gallagher (Taber Irrigation District)	277
4:30-4:45	Application of Public Access Two-Dimensional Hydrodynamic and Distributed Hydrological Models for Flood Forecasting in Ungauged Basins - Ahmad Shayeq Azizi (Ministry of Energy and Water), Yuji Toda (Nagoya University)	335
4:45-5:00		

SALON C	Special sessions
	Irrigation Production Forum
9:00-9:10	Introduction
9:10-9:30	The Changing Role of the Irrigation Producer in the Global Food Chain - Brent Paterson , Paterson Earth & Water Consulting
9:30-9:50	Challenges and Opportunities for Irrigation Producers in Alberta, Canada - Richard Stamp – Owner, Stamp Seeds, Enchant, Alberta, Canada
9:50-10:10	Rainmaker Farms – Making it Rain When the Sun Shines - Gordon Kent , Irrigation Producer, Riverhurst Project, Saskatchewan, Canada
10:10-10:30	Challenges and Opportunities for Irrigation Producers in South Africa - Jan Potgieter , Deputy Director, Department of Agriculture, Forestry and Fisheries, Pretoria, South Africa
10:30-11:00	Health Break
11:00-11:20	Water Supply and Irrigation Production in the United States of America - Sam Schaefer , GIE Consultants, Bakersfield, California, United States
11:20-11:40	Water Supply and the Irrigation Production Challenges in Australia - Carl Walters , Goulburn Broken Catchment Management, Victoria, Australia
11:40-12:00	Water Supply and Irrigation Production Challenges in Alberta, Canada - Richard Phillips – Manager, Bow River Irrigation District, Vauxhall, Alberta, Canada
12:00-12:30	General Discussion

Underlined text: participating in the student award competition

Bold titles: solicited presentations



Development and Financing Models for the Irrigation and Drainage Sector – Special Seminar

- 1:30-1:40 Introduction about objective of Seminar
- **Roger Hohm**, President CWRA
- 1:40-2:00 Address
- **U.P. Singh**, Secretary, Ministry of Water Resources, River Development and Ganga Rejuvenation, Govt. of India
- 2:00-2:20 Key note: Overview of Development and Financing models
- **Francois Onimus**, Sr. Water Resources Management Specialist in the Water Global Practice in the MENA region, World Bank
- 2:20-2:40 National Committee presentation: Canada
- **Jennifer Nitschelm**, Director, Alberta Ministry of Agriculture and Forestry-Basin Water Management Section) and **Jason Drury**, Manager, Saskatchewan Ministry of Agriculture-Irrigation
- 2:40-3:00 National Committee presentation: Australia
- **Momir Vranes**, Chairman, Australian National Committee
- 3:00-3:30 **Health Break**
- 3:30-3:50 National Committee presentation: China
- **Gao Zhanyi**, President Hon., ICID
- 3:50-4:10 National Committee presentation: India
- **K Vohra**, Commissioner (State Projects), Ministry of Water Resources, River Development and Ganga Rejuvenation, Govt. of India
- 4:10-4:30 National Committee presentation: Morocco
- **Ahmed EL BOUARI**, Director of Irrigation and Agricultural Land Planning at the Ministry of Agriculture, Fisheries, Rural Development and Forests
- 4:30-4:50 National Committee presentation: USA
- **tbd**
- 4:50-5:00 Discussions: Way Forward and Wrap Up

HILTON
GARDEN INN
– PRINCE
ALBERT
ROOM



FAO Side event

1:30-5:00 FAO3. Senegal River Basin (closed event)

Poster Board #	T-P: Gallery A/Foyer	#
1	<u>Water resource management and conflict laws: case study of Iran</u> - Mansour Mohammadi Dinani (water resource management)	<u>28</u>
2	<u>Development and evaluation of a toolkit for sustainable Revitalization of Smallholder Irrigation Schemes: Free State Province, South Africa.</u> - Hennie Grobler (Free State Department of Agriculture and Rural Development), Cobus Botha (Agricultural Research Council)	<u>56</u>
3	Utilization of Augmented flow for Irrigation, Hydro power and Flood Control a case study of “Budi Gandaki Hydroelectric Storage Project” - Suraj Lamichhane (Institute of Engineering, Pulchowk Campus)	55

Underlined text: participating in the student award competition

Bold titles: solicited presentations



4	Socioeconomic value of irrigation: case study of Bakalori irrigation scheme in Nigeria - Abdulrahman Abdullahi Ogole (Federal Ministry of Water Resources)	260
5	The Demand said analysis of transferring agricultural water to industrial water in Changhua and Yunlin - Yawen Chiueh (Department of Environmental and Cultural Resource, Tsing Hua University)	264
6	Socioeconomic value of irrigation: Bulk water rates for irrigation in Haharashtra state, India - Shivaji Sangle (Maharashtra Water Resources Regulatory Authority (MWRRA)), K P Bakshi (Maharashtra Water Resources Regulatory Authority (MWRRA))	305
7	Climate change and management of risk and uncertainty in Indian Agriculture - Shivaji Sangle (Member, Maharashtra Water Resources Regulatory Authority (MWRRA))	328
8	Socioeconomic Impacts of Khodaafarin irrigation Network Project on Moqan Plain, Iran - Alireza Moridnejad (Samanabrah Consulting Engineers)	364
9	Integrated method for identification of irrigable sites in the transnational Tisza river basin in Central Eastern Europe - János Tamás (University of Debrecen, Faculty of Agricultural and Food Sciences and Environmental Management, Institute of Water and Environmental Management), János Fehér (University of Debrecen, Faculty of Agricultural and Food Sciences and Environmental Management, Institute of Water and Environmental Management), Csaba Juhász (University of Debrecen, Faculty of Agricultural and Food Sciences and Environmental Management, Arid Land Research Center), Attila Nagy (University of Debrecen, Faculty of Agricultural and Food Sciences and Environmental Management, Institute of Water and Environmental Management)	220
10	Preliminary Application Experiment of Water Saving irrigation techniques at the Paddy Field for the Water-Energy-Food Nexus Approach - Eunhee Choi (Rural Research Institute, Korea Rural Community & Corporation), Seungheon Lee (Rural Research Institute, Korea Rural Community & Corporation), Seokman Kang (Rural Research Institute, Korea Rural Community & Corporation), Seungoh Hur (National Institute of Agricultural Sciences, RDA)	157
11	A Case Study of Food-Water-Energy Nexus During Drought in Taoyuan City, Taiwan - Harold Yih-Chi Tan (National Taiwan University), Kai-Yuan Ke (National Taiwan University), Ya-Zhu Yu (National Taiwan University)	189
12	Water-Energy-Food Nexus: Climate Risks and Opportunities for Irrigation Expansion in Southern Africa - Sylvester Mpandeli (Water Research Commission), Dhesigen Naidoo (Water Research Commission), Luxon Nhamo (International Water Management Institute), Tafadzwanashe Mabhaudhi (University of KwaZulu-Natal)	314
13	<u>Water footprint and food production: Exploring food losses and waste in Water-Food-Energy nexus</u> - Bashir Adelodun (Kyungpook National University), Kyung-Sook Choi (Kyungpook National University)	<u>341</u>

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



14	The Water-Food-Energy Nexus in Taiwan	351
	- Wan-Yu Lien (Department of Bioenvironmental Systems Engineering, National Taiwan University), Yu-Pin Lin (Department of Bioenvironmental Systems Engineering, National Taiwan University), Tsair-Fuh Lin (Department of Environmental Engineering National Cheng Kung University), Chia-Jen Yu (Department of Bioenvironmental Systems Engineering, National Taiwan University), Dai-Jung Wu (Department of Bioenvironmental Systems Engineering, National Taiwan University), Jen-Wei Hung (Department of Bioenvironmental Systems Engineering, National Taiwan University)	
15	Water-Energy-Food Nexus Investigation for Resources Intensive Farming in Korea	380
	- Jin-Yong Choi (Seoul National University), Kwihoon Kim (Seoul National University), Yoonhee Lee (Seoul National University), Sungoh Hur (Rural Development Administration), Eunhee Choi (Korea Rural Community Corporation), Pu Reun Yoon (Seoul National University)	
16	Boosting crop productivity through irrigation water systems	393
	- Maxi Mbidde Ssenyondo (Regional Climatic Change Support Initiative (RCCSI) ,Kyotera), Halimah Namatovu (Regional Climatic Change Support Initiative (RCCSI) ,Kyotera), Lawrence Luzinda (Makerere University Kampala, Uganda)	
17	Impact of climate on Nepal economy and Way forward	12
	- Karunakar Ghimire (Evergreen Agro Farm and Research Nepal)	
18	The Effect of Climate Change Adaptation on Rural Community Livelihoods	160
	- Emilly Tumuheirwe Kakooko Ndyomugenyi (Global Community Based Environmental Initiatives (GCBEI)-Masaka), Jane Kobusingye (Millennium Environmental Research Alliance(MERA)-Mukono), Denis Kawuku (Makerere University,Kampala)	
19	Potential impact of climate change to the regional climate and irrigation water demand in future	179
	- Lia Pervin (Bangladesh University of Engineering and Technology), Thian Gan (University of Alberta), Chun-Chao Kuo (University of Alberta), MD Saiful Islam (University of Alberta)	
20	<u>Potential climatic shocks on small-scale farming and adaptation strategies in Vhembe District, South Africa.</u>	<u>208</u>
	- Zongho Kom (University of Venda), Nthaduleni Nethengwe (University of Venda), Sylvester Mpandeli (Water Research Commission,), Hector Chikoore (University of Venda)	
21	Improvement of adaptive ability of the drainage systems in the Irpin's and Zdvzyh's Rivers basins to climate change	215
	- Anatoliy Shevchenko (Institute of Water Problems and Land Reclamation NAAS), Dmytro Savchuk (Institute of Water Problems and Land Reclamation NAAS), Ruslana Bozhenko (Institute of Water Problems and Land Reclamation NAAS), Kateryna Shatkovska (Institute of Water Problems and Land Reclamation NAAS), Andriy Zabuga (Irpin's Interregional Water Management Department of Kyiv Water Resources of the State Agency of Water Resources of Ukraine)	
22	Climate change implications over wheat production system of Punjab, Pakistan	310
	- Mirza Junaid Ahmad (Kyungpook National University), Kyung-Sook Choi (Kyungpook National University)	

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



23	A drought early warning system for agricultural reservoirs using real-time water level	318
	- Jongwon Do (KRC(Korea Rural Community Corporation)), Kwang Ya Lee (KRC(Korea Rural Community Corporation)), Won Ho Nam (Hankyong National University)	
24	The Influence of Climate Change on Cultivation Interval and Field Irrigation Requirement for Paddy Rice in Taiwan	319
	- Ching-Tien Chen (Department of Civil and Water Resources Engineering, National Chiayi University), Chin-Fa Chang (Department of Civil and Water Resources Engineering, National Chiayi University), Yi-Ju Lin (Department of Resources Engineering, National Cheng Kung University), Cheng-Haw Lee (Department of Resources Engineering, National Cheng Kung University)	
25	Exploring the adaptive capacity of agriculture to climate variability across the Canadian Prairies	360
	- Aston Chipanshi (Agriculture and Agri-Food Canada), Dongzhi Qi , Yinsuo Zhang (Agriculture and Agri-Food Canada), Sana Khan (University of Regina), Patrick Cherneski (Agriculture and Agri-Food Canada), Mark Berry (Agriculture and Agri-Food Canada)	
26	Assessment of climate change-related risks on smallholder farmers in the Capricorn district of Limpopo Province, South Africa	361
	- Sylvester Mpandeli (Water Research Commission of South Africa), Mokhele Moeletsi (Agricultural Research Council), Teboho Masupha (Agricultural Research Council), Stanley Liphadzi (Water Research Commission of South Africa), Edward Nesamvuni (University of Venda, School of Environmental Sciences), Khathutshelo Tshikolomo (Limpopo Department of Agriculture)	
27	Spatial-temporal changes of main crops irrigation water requirements in China during 1986-2015	372
	- Lei Wang (State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research, National Center for Efficient Irrigation Engineering and Technology Research-Beijing), Bo Lei (State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research, National Center for Efficient Irrigation Engineering and Technology Research-Beijing), Zhigong Peng (State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research, National Center for Efficient Irrigation Engineering and Technology Research-Beijing), Yu Liu (State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research, National Center for Efficient Irrigation Engineering and Technology Research-Beijing)	
28	Reflections on Climate Change and its Impact on Agriculture in Nepal	389
	- Khem Raj Sharma (Nepal Engineering College, Center for Postgraduate Studies), Anish Ghimire (Nepal Engineering College, Center for Postgraduate Studies)	
29	Modeling the integrated effects of Climate, Soil, Groundwater, and Irrigation water on Root Zone water and salt fluxes for Maize Crop: A Case Study in Faisalabad, Pakistan	355
	Syed Shah (University of Agriculture, Faisalabad), Muhammad Kashif (University of Agriculture, Faisalabad), Muhammad Waqas (University of Agriculture, Faisalabad)	
30	<u>Direct Measurement of Prairie Reservoir Evaporation: Towards Improving Estimation Methods</u>	<u>358</u>
	Jennifer Attema (University of Saskatchewan), Warren Helgason (University of Saskatchewan), Chris Spence (Environment and Climate Change Canada)	

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



- 31 Integrated analyzes of the Impacts of Streamflow Fluctuations and irrigation efficiency improvement on Irrigation and Drainage Networks using Performance Indices 303
- **Behzad Navidi Nassaj** (Department of Water Science Engineering, Ahvaz Branch, Islamic Azad University, Iran), **Narges Zohrabi** (Department of Water Science Engineering, Ahvaz Branch, Islamic Azad University, Iran), **Ali Shahbazi** (Head of water and environment modelling center, Khuzestan Water and Power Authority)



Wednesday, 15 August 2018

Wednesday

Time	Salon A	Salon B	Salon C	Gallery B
9:00-10:30	W-A-01	W-B-01	Geosynthetics workshop	FAO1 side event 1
11:00-12:30	W-A-02	W-B-02		FAO2 side event 2
1:30-3:00	W-A-03	W-B-03		
3:30-5:00	W-A-04	W-B-04		
5:00-6:30	Gallery A POSTERS W-P: 2.2; 3.2; 3.3; 3.4 (27 posters)			

SALON A	W-A-01: Drainage and flood control strategies (II)	#
9:00-9:15	Sustainable development of the lowlands of the Netherlands in the Cultural context (Solicited)	283
	- Bart Schultz (IHE - Delft)	
9:15-9:30	Development of irrigation and drainage in the world: Perspectives of development, international cooperation, investment policies, issues of state support	206
	- Irene Bondarik (All-Russian research institute for hydraulic engineering and land reclamation)	
9:30-9:45	Risk analysis of polder drainage system in Semarang City	362
	- Slamet Imam Wahyudi (Sultan Agung Islamic University)	
9:45-10:00	Saskatchewan Irrigation Infrastructure Management System	338
	- Ryan Husband (Saskatchewan Ministry of Agriculture), Kevin Schmidt (Saskatchewan Ministry of Agriculture)	

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



10:00-10:15	Experimental Study on Effect of Rain Shelter Cultivation Management on Mango Yield and Quality	196
	- Pan Guo (Guangxi Irrigation Experiment Center Station), Shi-hua Su (Guangxi Irrigation Experiment Center Station), Mei-ying Liang (Guangxi Irrigation Experiment Center Station), Guang Feng (Guangxi Irrigation Experiment Center Station), Hai-xiong Zhao (Guangxi Irrigation Experiment Center Station), Chang-zhi Wu (Guangxi Irrigation Experiment Center Station)	
10:15-10:30	Sub-surface tile drainage project at the Canada-Saskatchewan Irrigation Diversification Centre	268
	- Kelly Farden (Government of Saskatchewan- Ministry of Agriculture)	
SALON A	W-A-02: Irrigation, drainage, and flood control for resilient agriculture (I)	#
11:00-11:15	Irrigation and Drainage for Global Food Security	234
	- Vijay Labhsetwar (International Commission on Irrigation and Drainage (ICID), India)	
11:15-11:30	Effect of controlled drainage and sub-irrigation on groundwater level, drain discharge, nutrient loadings and yields	352
	- Seija Virtanen (Drainage Foundation sr), Maija Paasonen-Kivekäs (Sven Hallinin tutkimussäätiö), Jaana Uusi-Kämpä (Natural Resources Institute Finland (Luke)), Helena Äijö (Finnish Drainage Association), Kari Ylivainio (Natural Resources Institute Finland (Luke)), Rainer Rosendahl (Österbottens Lantbruks Sällskapet)	
11:30-11:45	<u>Controlled drainage for reducing nitrogen losses and salt concentrations in a clay soil under rice production in Rwanda</u>	<u>365</u>
	- Olive Tuyishime (Swedish University of Agricultural Sciences), Ingrid Westrom (Swedish University of Agricultural Sciences), Francois Xavier Naramabuye (University of Rwanda), Sankaranarayanan Muthiah (University of Rwanda), Abraham Joel (Swedish University of Agricultural Sciences)	
11:45-12:00	Irrigation in Saskatchewan	404
	- Jason Drury (Government of Saskatchewan, Ministry of Agriculture)	
12:00-12:15	Solar powered irrigation for sustainable agricultural development	405
	- Maher Salman (Land and Water Division, FAO), Claudia Casarotto (Land and Water Division, FAO), Ahmed Abdelfattah (Land and Water Division, FAO)	
12:15-12:30	Harvesting water to grow resilient agro-ecosystems and livelihoods in the face of climate change	406
	- Maher Salman (Land and Water Division, FAO-HQs, Italy), Laura Guarnieri (Land and Water Division, FAO-HQs, Italy), Fethi Lebdi (AgWA, Addis Ababa, Ethiopia)	
SALON A	W-A-03: Irrigation, drainage, and flood control for resilient agriculture (II) AND Irrigation infrastructure development (I)	#
1:30-1:45	China's Irrigation, Drainage, and Flood Control Legacy	14
	- Bruce Jones (SouthWest Conference on Asian Studies (SWCAS))	
1:45-2:00	Evaluation of Resilient Water Supply Alternatives for a Large Irrigation Reservoir According to the Drought Scenarios	117
	- Kwang-Sik Yoon (Rural & Bio-Systems Eng. Dept. Chonnam National University)	
2:00-2:15	The Development of Concrete Lined Ditches Mix with Rubber Latex for Farm Irrigation System	23
	- Pheerawat Plangoen (Department of Civil Engineering, Siam University)	

Underlined text: participating in the student award competition

Bold titles: solicited presentations



2:15-2:30 Best Management Practice for a Solar-Powered Center Pivot Irrigation System 363
- **Hafiz Faizan** (University of Saskatchewan), **Warren Helgason** (University of Saskatchewan)

2:30-2:45 Improving Water Delivery within Main Irrigation Canals in Arid Regions Using In-Line Reservoirs 346
- **S. Mehdy Hashemy Shahdany** (Aburaihan Campus, University of Tehran), **Jaber Soltani** (Aburaihan Campus, University of Tehran)

2:45-3:00

SALON A **W-A-04: Irrigation infrastructure development (II)** #

3:30-3:45 Egypt's experience in biological weed control by grass carp, *Centropharyngodon idella* 221

- **Yasser Ali** (CMRI), **Tarek El-Samman** (CMRI), **Magdy Salah Eldeen** (CMRI)

3:45-4:00 Facility Improvements to Increase Conveyance and Recharge Capacity as a Regional Adaptive Strategy in Poso Creek Integrated Regional Water Management Plan Area, Kern County, CA 272

- **Sam Schaefer** (GEI Consultants, Inc), **Vanessa Yap** (GEI Consultants, Inc)

4:00-4:15 Emerging design considerations for modernisation of national irrigation systems in the Philippines 217

- **Mona Liza Delos Reyes** (University of the Philippines Los Baños), **Bart Schultz** (IHE Delft)

4:15-4:30 Fuzzy Sarsa Learning (FSL) algorithm convergence and generalization in small and large space proglnes for water delivery in irrigation canals 348

- **Kazem Shahverdi** (Tarbiat Modares University), **Mohammad Javad Monem** (Tarbiat Modares University)

4:30-4:45 Strategy of irrigation and drainage rehabilitation and development in Ukraine up to 2030 156

- **Mykhailo Romashchenko** (Institute of Water Problems and Land Reclamation, NAAS), **Mykhailo Yatsiuk** (Institute of Water Problems and Land Reclamation, NAAS), **Oksana Dekhtyar** (Institute of Water Problems and Land Reclamation, NAAS), **Tetiana Matiash** (Institute of Water Problems and Land Reclamation, NAAS), **Olga Zhovtonog** (Institute of Water Problems and Land Reclamation, NAAS), **Roman Saydak** (Institute of Water Problems and Land Reclamation, NAAS)

4:45-5:00

SALON B **W-B-01: Climate smart agriculture and innovative technologies for enhancing water use efficiency (I)** #

9:00-9:15 Impacts of laser land leveling in Wheat Production in Kabul and Nangarhar Provinces of Afghanistan. 68

- **Hayatkhan Shams** (Irrigation Directorate- MAIL), **Mir Mohd Shafee Hashimi** (CLAP Project MAIL)

9:15-9:30 Implementation of Capacity Development Initiatives as a Means of Enhancing Water Use Efficiency in Small Scale Irrigation Schemes 105

- **S. Jalal Jebelli** (Qanat Consulting Company)

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



9:30-9:45	<u>Utilizing Plant Response Indices for Delineating Intra-field Irrigation Management Zones</u>	<u>373</u>
	- Jay Bauer (University of Saskatchewan AAFC), Warren Helgason (College of Engineering, University of Saskatchewan), Angela Bedard-Haughn (Department of Soil Science, University of Saskatchewan), Evan Derdall (Agriculture and Agri-food Canada)	
9:45-10:00	Microwave Soil Moisture Sensing from Pivot Irrigation Systems	173
	- Maik Wolleben (Skaha Remote Sensing Ltd.)	
10:00-10:15	<u>Simulation of soil water dynamics under Moistube irrigation</u>	<u>176</u>
	- Edwin Kanda (University of KwaZulu-Natal), Tafadzwanashe Mabhaudhi (University of KwaZulu-Natal), Aidan Senzanje (University of KwaZulu-Natal)	
10:15-10:30	Tropical Perennial Rice farming systems (SALIBU technology) for the 2nd Green Revolution against climate change	187
	- Kazumi Yamaoka (Japan International Research Center for Agricultural Sciences (JIRCAS)), Htay Khin Mar (Department of Agricultural Research, Ministry of Agriculture, Livestock and Irrigation), Joseph Ofori (Soil and Irrigation Research Center, School of Agriculture, University of Ghana), Resfa Fitri (Faculty of Economics and Management, Bogor Agricultural University), Erdiman Erdiman (Faculty of Economics and Management, Bogor Agricultural University)	
SALON B	W-B-02: Climate smart agriculture and innovative technologies for enhancing water use efficiency (II)	#
11:00-11:15	Climate smart agriculture and innovative technologies and enhancing water use efficiency	267
	- Pradeep Bhalage (Water and Land Management Institute, Aurangabad), Shivaji Sangale (Former Professor and Head, Department of Economics), Babasaheb Ambedkar (Marathawada University, Aurangabad (M.S), India)	
11:15-11:30	Micronutrient Requirements of Irrigated Crops in Saskatchewan, Canada	239
	- Dale Tomasiewicz (Agriculture and Agri-Food Canada), Gary Kruger (Saskatchewan Ministry of Agriculture)	
11:30-11:45	IrrisAT - An Australian experience in the development and use of innovative technology for enhancing water use efficiency	247
	- John Hornbuckle (Deakin University), Jamie Vleeshouwer (CSIRO), James Brinkhoff (Deakin University), Carlos Ballester (Deakin University)	
11:45-12:00	In-situ Monitoring and Application of Passive Microwave Sensors for Variable Rate Irrigation Systems	259
	- Jarrett Powers (Agriculture & Agri-Food Canada - Science and Technology Branch)	
12:00-12:15	Promoting sensor technology in monitoring soil moisture and nutrient movement for climate -smart agriculture achievement.	15
	- Isaac Fandika (Department of Agricultural Research Service, Kasinthula Agricultural Research Station, Malawi.), Richard Stirzaker (Australian Centre of international Agricultural Research (ACIAR), Australia), Geoffrey Mwepa (Department of Irrigation), Jonathan Chikankheni (Department of Agricultural Research Services)	
12:15-12:30		

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



SALON B	W-B-03: Climate smart agriculture and innovative technologies for enhancing water use efficiency (III)	#
1:30-1:45	Supporting farmers with satellite information increases their resilience and saves water: The FruitLook story - Caren Jarmain	133
1:45-2:00	Investigating potential of the upcoming Radarsat-2 Constellation Mission (RCM) for retrieving surface soil moisture content in vegetated agricultural fields - Zhaoqin (Quinlee) Li (Global Institute for Water Security, University of Saskatchewan), Karl-Erich Lindenschmidt (Global Institute for Water Security, University of Saskatchewan)	280
2:00-2:15	Usage of vegetation indices for water availability detection under different structure of agrolandscapes - Iuliia Danylenko (Institute of Water Problems and Land Reclamation, Kyiv, Ukraine), Vsevolod Bohaienko (Institute of Cybernetics of NAS of Ukraine, Kyiv, Ukraine), Yuriy Mykhailov (Institute of Water Problems and Land Reclamation, Kyiv, Ukraine), Serhij Liutnitski (Institute of Water Problems and Land Reclamation, Kyiv, Ukraine), Irina Honcharuk (Institute of Water Problems and Land Reclamation, Kyiv, Ukraine)	356
2:15-2:30	Enhancing Drought Resilience of Agro-pastoralists through Modelling and Improved Flood Management Systems in Ethiopia. - Tilahun Amede (ICRISAT (International Crops Research Institute for the Semi-arid Tropics)), Sridhar Gummadi (ICRISAT), Getnet Mezgebu (ICRISAT), Wolf Berdel (GIZ-SDR), Elisabeth van den Akker (GIZ-SDR)	333
2:30-2:45	Customizing irrigation strategy to soil type and climate using the APSIM crop model - Allan Peake (CSIRO Agriculture and Food)	345
2:45-3:00	Sustainable Technology to Reduce Energy Use in Travelling Sprinkler Irrigation - Graziano Ghinassi (GESAAF Department - University of Florence), Francesco Garbati Pegna (GESAAF Department - University of Florence), Antonio Guiso (Carbon Sink Group)	359
SALON B	W-B-04: Climate smart agriculture and innovative technologies for enhancing water use efficiency (IV)	#
3:30-4:00	Variable Rate Irrigation Systems with Sensor-feedback (Solicited) - Susan A. O'Shaughnessy (USDA-ARS), Manuel A. Andrade (Oak Ridge Institute for Science and Education sponsored by USDA-ARS), Steven R. Evett (USDA-ARS)	238
4:00-4:30	New technologies for more accurate estimation of crop water requirement without the crop coefficient Kc (Solicited) - Ragab Ragab (CEH-Wallingford)	397
4:30-4:45	Exploring management of subsurface drip irrigation technology in southern Alberta: indoor insights and field findings - Willemijn Appels (Lethbridge College)	391
4:45-5:00	Can you increase the crop yield with just a few irrigation events? - Ingrid Wesström (Department of soil and environment, Swedish University of Agricultural Sciences), Abraham Joel (Department of soil and environment, Swedish University of Agricultural Sciences)	374

Underlined text: participating in the student award competition

Bold titles: solicited presentations



SALON C

Geosynthetics workshop, sponsored by the International Geosynthetics Society

9:00-10:30

Theme: Waterproofing of canals and dams with geomembranes.

1. Overview of the functions and characteristics of geomembranes
 - **Herve Plusquellec**
2. Design challenges associated with the use of geomembranes: review failure mechanisms and long-term performance of different types of geomembranes
 - **Herve Plusquellec**
3. Case study 1: Bituminous geomembrane to reduce water losses in canals
 - **Ted Aguirre, Bertrand Breul and Bernard Breul** (Coletanche)
4. Case study 2: Geosynthetics for Channels: the manufacturer perspective
 - **Mauricio Ossa** (Solmax)

10:30-11:00

Health Break

11:00-12:30

Theme: Shore protection and erosion control with geosynthetics.

1. Overview of various geosynthetic matting (permanent / biodegradable), geotextiles and bio- engineering solutions
 - **Ravin Nag** (Maccaferri)
2. Irrigation canal erosion protection - solutions and case studies
 - **Robert Creel** (Huesker)

12:30-1:30

Lunch

1:30-3:00

Theme: Sub-surface drainage with geosynthetics.

1. Overview of the functions and characteristics of geosynthetic drainage systems and geotextile filters
 - **Dr. Fleming**
2. Review of the long-term performance of geotextile filters and drainage geosynthetics
 - **Dr. Fleming**
3. Case study 1: Geosynthetic filter applications for canals
 - **Robert Creel** (Huesker)
4. Case study 2: 30 years of development in filtration for agriculture applications in Québec
 - **Alain Chassé** (Texel), **Stephan Fourmont** (Afitex-Texel)

3:00-3:30

Health Break

3:30-5:00

Theme: Design guidance and recommendations

1. Testing of geosynthetics: performance and durability
 - **Eric Blond**
2. Geosynthetics Materials Standards and Specifications
 - **Eric Blond**
3. Question and answers – All speakers



GALLERY B

FAO Side events

**FAO1. Hydroeconomic modeling for transboundary river basin management –
Towards more integrated approaches**

- 9:00-9:15 Introduction to the event: overview and objectives
- **Maher Salman, FAO**
- 9:15-9:30 Keynote speech: informed decision making at the River Basin level
- **Amadou Lamine Ndiaye, OMVS**
- 9:30-9:45 Setting the scene: how can hydro-economic models help policy making?
- **Claudia Casarotto, FAO**
- 9:45-10:05 Overcoming barriers between hydroeconomic model and policy application
- **Frank Ward, New Mexico State University**
- 10:05-10:15 Q&A session
- 10:15-10:30 **Health Break**
- 10:30-10:50 Benefits and costs of the coordinated development and management of the Senegal River Basin
- **Amaury Tilmant, Université Laval**
- 10:50-11:10 HEM for identifying water resource vulnerabilities in data-scarce basins -The case of the Tigris-Euphrates River Basin
- **Charles Rougé, Université Laval**
- 11:10-11:20 Q&A session
- 11:20-11:50 Moderated discussion: from research to policy
a) Perspective of the policymaker
- **Amadou Lamine Ndiaye, OMVS**
b) Perspective of the researcher
- **TBD**
c) Moderated discussion
- **Moderator: Fethi Lebdi, AgWA**
- 11:50-12:00 Wrap-up and conclusions
- **Maher Salman, FAO**

FAO2. Data driven improvements of water use efficiency in small-scale irrigatin

1st Session: Diagnosis and Challenges of Agricultural Water Management in smallholders' traditional irrigation systems in Africa

- 2:00-2:30 Introducing the diagnostic approaches of assessing Agricultural Water Management in small-scale irrigation schemes in Africa:
- Trends and Outlook: The current state of smallholders' Agricultural Water Management in Africa: the consequences of low water use efficiency and water productivity in food insecure developing countries
- **Maher Salman, CBL, FAO**
 - Measurement, Interpretation and Use of Water Productivity Data
- **Thomas Trout, USDA Agricultural Research Service, Fort Collins**
 - Insight into the AquaCrop and MASSCOTTE approach and its application to improve Agricultural Water Management in small-scale traditional irrigation schemes in Africa
- **Fethi Lebdi, AgWA**

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



- 2:30-2:50 Identified factors preventing farmers and scheme management from increasing their water use efficiency in Africa: Results of applied methodologies in Burkina Faso and Uganda
- **Serme Idriss, INERA (Burkina Faso) and Charles Mutumba, NARO (Uganda)**
- 2:50-3:00 Questions and Answers
2nd Session: Improving water-efficient irrigation: Prospects and difficulties of innovative technologies and practices in agricultural water management
- 3:15-3:40 Traditional and non-traditional technologies to address water data gaps in small-scale irrigation in Africa
- Measurement technologies and data acquisition to establish discharge history in traditional irrigation schemes in Burkina Faso and Uganda
- **Abdelouahid Fouial, CIHEAM Bari & Eva Pek, CBL, FAO**
 - Critical assessment and addressed challenges in deploying innovative technologies in small-scale irrigation scheme in Uganda
- **Abdelouahid Fouial, CIHEAM Bari & Eva Pek, CBL, FAO**
- 3:40-4:20 Interpreting water use data into management rules to improve Agricultural Water Management through increasing water use efficiency
- Flexible Water Service approach for maximizing benefits through optimal water use
- **Fethi Lebdi, AgWA**
 - Expected outcomes of Flexible Water Service approach: increasing farm profitability and water save through Flexible Water Service: case studies of Burkina Faso and Uganda
- **Emmanuel Compaore (Burkina Faso) and Charles Mutumba (Uganda)**
- 4:20-4:35 Encouraging small-scale farmers to embrace participatory water-management for applying technology and new irrigation methods
- **Maher Salman, CBL, FAO**
- Discussion and Conclusion
- 4:35-4:50 Panel discussion on role of technologies and data in agricultural water management in rural Africa
- 4:50-5:00 Conclusions and future prospects of developing water management in Africa



Poster Board #	W-P: Gallery A/Foyer	#
1	Hydraulic performance of a trickle irrigation system with special reference to emitters and energy loss along laterals - Israr Hussain Kazim (University of Agriculture, Faisalabad)	32
2	<u>Research on the variability of Sense heat flux under inhomogeneous underlying surface</u> - Han Xin (State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research&China Agricultural University of Water Conservancy and Civil Engineering), Zhang Baozhong (State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research&National Center of Efficient Irrigation Engineering and Technology Research-Beijing), Li Yinong (State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research&National Center of Efficient Irrigation Engineering and Technology Research-Beijing)	<u>61</u>
3	Research on the Threshold Value of Agricultural areas under the Constraint of Total Amount of Water Consumption in North China - Zhigong Peng (State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research, China)	93
4	Effect of SAP on Growing Seedlings in Substrate and Growth of Rape in Sand - Qinghong Yan (China Institute of Water Resources and Hydropower Research), Mingying Yu (School of Water Conservancy Science and Engineering, Taiyuan University of Technology), Juan Xiao (School of Water Conservancy Science and Engineering, Taiyuan University of Technology)	132
5	<u>Effects Of Subsurface Drip Irrigation With Different Emitters Depth And Spacing On Yield And Water Productivity Of Sugarcane(Var. CP69-1062) In Iran</u> - Elham Zanganeh (Shahid Chamran University of Ahvaz), Abed Ali Naseri (Shahid Chamran university of Ahvaz), Abdol Rahim Hooshmand (Shahid Chamran university of Ahvaz), Saeed Boroomand Nasab (Shahid Chamran university of Ahvaz), Masoud Parvizi (Khuzistan sugarcane and by-products research and training institute)	<u>175</u>
6	Water and energy safe precision irrigation system: a Hungarian example - Csaba Juhász (University of Debrecen, Faculty of Agricultural and Food Sciences and Environmental Management, Arid Land Research Center), János Tamás (University of Debrecen, Faculty of Agricultural and Food Sciences and Environmental Management, Institute of Water and Environmental Management), Péter Riczu (University of Debrecen, Faculty of Agricultural and Food Sciences and Environmental Management, Institute of Water and Environmental Management), Bernadett Gálya (University of Debrecen, Faculty of Agricultural and Food Sciences and Environmental Management, Institute of Water and Environmental Management), Attila Nagy (University of Debrecen, Faculty of Agricultural and Food Sciences and Environmental Management, Institute of Water and Environmental Management)	219
7	Contans as an integrated pest management tool for irrigated soils - Gary Kruger (Saskatchewan Ministry of Agriculture), Joel Peru (Saskatchewan Ministry of Agriculture), Dale Ziprick (United Agri Products)	236
8	Development of farmers' education model for water saving as a drought measure - Seulgi Lee (Kyungpook National University), Kyung Sook Choi (Kyungpook National University), Jong Won do (Korea Rural Community Corporation), Gwang Ya Lee (Korea Rural Community Corporation)	299

Underlined text: participating in the student award competition

Bold titles: solicited presentations



9	Multispectral Imager Onboard Unmanned Aerial Vehicle for Estimating Paddy Rice Chlorophyll in South of Taiwan	311
	- Tzu-Hsuan Wen (National Pingtung University of Science and Technology), Yu-Min Wang (National Pingtung University of Science and Technology), Seydou Traore (Texas A&M)	
10	Assessment the Performance of Rice Cultivation between Alternate Wetting and Drying (AWD) and System of Rice Intensification (SRI) in Southern Taiwan	320
	- Rui-Qi Chen (National Pingtung University of Science and Technology), Yu-Min Wang (National Pingtung University of Science and Technology), Kissou Ouindinboudé Jacques (National Pingtung University of Science and Technology), Wen-Shin Lin (National Pingtung University of Science and Technology)	
11	Management of the hydrothermic regime of the irrigated field while growing early potatoes in the arid zone	349
	- Alina Buber (The federal state budget institution "All-Russian State Institute of Hydraulic and Land Reclamation named after A.N.Kostyakov")	
12	<u>Non-destructive leaf area estimation method; using image processing techniques</u>	<u>378</u>
	- Mahdi Mohammadi (Imam Khomeini International University), Masoud Soltani (Imam Khomeini International University), Mahdavi Mohamad Amin (Imam Khomeini International University)	
13	<u>Investigating the Effect of Irrigation Network Improvement on reducing underground water resources usage and CO2 Gas Emissions Using Intelligent Precision Automatic Control System (MPC)</u>	<u>20</u>
	- Maryam Morady	
14	<u>Making an efficient irrigation system and rain garden</u>	<u>66</u>
	- Aditya Shah	
15	Irrigation Channel construction and its impact on crops yields and farmers economic growth	129
	- Shams Hayat khan , Hashimi Mir Mohd Shafee (Irrigation Directorate), Nasari Pervaiz Ahmad (Irrigation Directorate), Watanabe Fumio (Tokyo University of Agriculture)	
16	Influencers of food security and food dietary diversity in rural semi - Arid communities	177
	- Emilly Tumuheirwe Kakooko Ndyomugenyi (Global Community Based Environmental Initiatives (GCBEI)-Masaka)	
17	<u>The response property of inverted siphon in long distance water distribution system</u>	<u>307</u>
	- Guanghua Guan (State Key Laboratory of Water Resources and Hydropower Engineering Science, Wuhan University), Zhonghao Mao (State Key Laboratory of Water Resources and Hydropower Engineering Science, Wuhan University), Xiaobo Feng (State Key Laboratory of Water Resources and Hydropower Engineering Science, Wuhan University)	
18	Managing equitable distribution of water and providing demanded pressure in Hirmand 1 Irrigation Network	367
	- Seyed Hosein Farshi (Samanabrah Consulting Engineers), Omid Moridnejad (Samanabrah Consulting Engineers)	

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018



19	The contribution of simple irrigation technologies to crop production in the arid lands of North Eastern Uganda	394
	- Skyler Jayden Dembe (Green World Uganda (GWU)-Masaka), B Kitiibwa (Green World Uganda (GWU)-Masaka), Halimah Nakasaga (Green World Uganda (GWU)-Masaka), Peter Ekwiri (Makarere University, Kampala, Uganda)	
20	Desalination of seawater for hydroponic agriculture to adapt to climate change	9
	- David Murray (KWL Science Ltd.)	
21	Predicting the depth and water velocity of bio-sand filter with linear models for the removal of organic matter from rainwater	36
	- Mohamad Ali Fulazzaky (Ministry of Public Works and Housing)	
22	Freshwater Swaps; Potential for Wastewater Reuse in Peri-Urban Agriculture, A case study of Kabul, Afghanistan	96
	- Masoom Hamdard (Ministry of Agriculture Irrigation and Livestock)	
23	Pollutant load estimation considering the land-use scenarios of reclaimed agricultural land in Saemangeum, Korea.	124
	- Chansung Oh (Korea Rural Community Corporation), Hanyong Um (Korea Rural Community Corporation)	
24	<u>Using Colored Dissolved Organic Matter in End Member Mixing Analysis</u>	<u>137</u>
	- Megan Ludwig (UBC Okanagan), Jeff Curtis (UBC Okanagan), Janice Brahney (Utah State University)	
25	Review of Agriculture Environmental Heavy Metal Control Standards in Taiwan	213
	- Dai-Ming Li (Department of Bioenvironmental Systems Engineering, National Taiwan University), Pao-Hsuan Huang (Sinotech Environmental Technology, Ltd.), I-Chun Chen (Sinotech Environmental Technology, Ltd.), Ming-De Hong (Council of Agriculture), Sheng-Hsin Hsieh (Council of Agriculture), Chihhao Fan (Department of Bioenvironmental Systems Engineering, National Taiwan University)	
26	The Preliminary Study on the Development of Integrated Environmental Monitoring and Pollution Investigation Mechanism in Agricultural Production Environment	216
	- Ke-Chun Lin (Taiwan Research Institute on Water Resources and Agriculture), Ming-Kai Hsieh (Taiwan Research Institute on Water Resources and Agriculture), Ming-De Hong (Council of Agriculture), Sheng-Hsin Hsieh (Council of Agriculture), Yun-Chen Chung (Department of Bioenvironmental Systems Engineering, National Taiwan University), Chihhao Fan (Department of Bioenvironmental Systems Engineering, National Taiwan University)	
27	The classification system and regionalization applied to safety management of agricultural producing environment	218
	- Chihhao Fan (Department of Bioenvironmental Systems Engineering, National Taiwan University), Yi Lin (Geographic Information Technology Co.,Ltd), Jiun-Yan Ye (Geographic Information Technology Co.,Ltd), Ming-De Hong (Council of Agriculture), Sheng-Hsin Hsieh (Council of Agriculture), Yun-Chen Chung (Department of Bioenvironmental Systems Engineering, National Taiwan University)	
28	Assessment of Water Quality in Alberta's Irrigation Districts	232
	- Janelle Villeneuve (Alberta Agriculture and Forestry), Jollin Charest (Alberta Agriculture and Forestry)	

Underlined text: participating in the student award competition

Bold titles: solicited presentations



29	Investigation of the influence of water quality on technological parameters of the drip irrigation systems	255
	- Rushena Kupiedinova (Institute of water problems and land reclamation), Olga Marchenko (Institute of water problems and land reclamation), Natalia Didenko (Institute of water problems and land reclamation)	
30	<u>Controlling Poly Vinylidene Fluoride (PVDF) Membrane Design for Water and Wastewater Treatment</u>	<u>323</u>
	- Mahboobeh Maghami (University of Saskatchewan), Amira Abdelrasoul (University of Saskatchewan)	
31	Forecasting heavy metal concentration of water in the irrigation canals	350
	- Yu-Pin Lin (National Taiwan University), Wan-Yu Lien (National Taiwan University), Cheng-Fu Chou (National Taiwan University), Jyun-Hong He (National Taiwan University), Dai-Jung Wu (National Taiwan University)	
32	Effect of treated wastewater and deficit irrigation on water use efficiency	399
	- Mohammad Amerian (University of Tehran), Seyyed Ebrahim Hashemi Garmdareh (University of Tehran)	
33	Modernization of irrigation schemes in Indonesia: A perspective of sustainability	85
	- Soekrasno S (Indonesian Commission on Irrigation and Drainage (INACID)), Muradi R (Directorate of Irrigation and Lowland Ministry of Public Works Republic of Indonesia), Mohamad Ramdani (Directorate of Irrigation and Lowland Ministry of Public Works Republic of Indonesia), Nita Yuliati (Directorate of Irrigation and Lowland Ministry of Public Works Republic of Indonesia)	
34	A pilot study on subsurface water using at Kaopin River, Taiwan	198
	- Ming-young Jan (I-Shou University), Chang-chi Cheng (Chien Hsin University of Science and Technology)	
35	Using potash to control invasive mussels in Alberta's irrigation infrastructure	229
	- Barry Olson (Alberta Agriculture and Forestry), Brad Calder (Alberta Agriculture and Forestry), Lloyd Healy (Alberta Agriculture and Forestry), Ivan Friesen (Eastern Irrigation District), Evan Hillman (Alberta Agriculture and Forestry)	
36	Evaluation of hydraulic performance of E-dong reservoir according to the design criteria change for dams considering climate changes	339
	- Jeongryeol Jang (Rural Research Institute, KRC), Euncheol Jang (Rural Research Institute, KRC)	
37	<u>The Assessment of Optimization Algorithms of GA and PSA methods for multi-reservoirs utilization in climate change conditions</u>	<u>368</u>
	- Javad Piadeh Koohsar (Student IKIU), Hamed Mazandarani Zadeh (Faculty of Technical and Engineering IKIU), Ahmad Doosti (Student IKIU)	
38	Drainage water level prediction model for farmland in Taiwan	205
	- Ray-Shyan Wu (Department of Civil Engineering, National Central University), Jih-Shun Liu (Department of Civil Engineering, National Central University. Assistant Researcher and deputy head of Information Division, Agricultural Engineering Research Center), Hsiang-Chuan Wu (Assistant Researcher, Information Division, Agricultural Engineering Research Center)	

Underlined text: participating in the student award competition

Bold titles: solicited presentations

Current as of 8 August 2018