

WUWNET 2016 SCHEDULE

(2016.10.23 - 2016.10.26)

Date	Time	Place	Content
2016.10.23	17:00 - 19:00	Lobby	Registration
2016.10.24	08:00 - 08:50		Registration/Breakfast
	08:50 - 09:05	3 rd Floor Ballroom2 Salon A	Opening Remarks (Xiaoli Ma and Dajun Sun) 5 min Address by Representative from Nantong Lanpeng Info. Tech. Co. (Gold)
	09:05 - 09:55		Keynote Speech I (Payman Arabshahi) "Emerging Underwater QoS Requirements and the U/W SDN Architecture" Speaker: Prof. Mario Gerla, University of California, Los Angeles
	09:55 - 10:20		Best Experimental Student Paper in Memory of Giovanni Toso
	10:20 - 10:35		Design and Evaluation of a Low-Cost Acoustic Chamber for Underwater Networking
	10:35 - 11:45		Break
			Technical Session I: (Zheng Peng) Underwater Modem Design, Adaptive and Cognitive Communications
			Acoustic Modem for Micro AUVs: Design and Practical Evaluation
			A Dynamic Spectrum Decision Algorithm for Underwater Cognitive Acoustic Networks
			Statistical QoS-Driven Power Allocation Over Underwater Cognitive Acoustic Networks
			Real-Time Transceiver Implementation for SCFDE Acoustic Modems
		A LTE-based Communication Architecture for Coastal Networks	
	Multiple-input Multiple-output Under-ice Acoustic Communication in Shallow Water		
WaterCom: Connecting Research Configurations with Practical Deployments			
11:45 - 13:00	3 rd Floor Ballroom2 Salon B	Lunch (Posters/Demos Setup)	

Date	Time	Place	Content
2016.10.24	13:00-14:15	3 rd Floor Ballroom2 Salon A	Technical Session II: Best Paper Candidate Session (Payman Arabshahi) Chirp-Based LPD/LPI Underwater Acoustic Communications with Code-Time-Frequency Multidimensional Spreading
			Autonomous Acoustic Trigger for Distributed Underwater Visual Monitoring Systems
	An Adaptive Control Law for Controlled Lagrangian Particle Tracking		
	14:15 - 14:30		Break
	14:30 - 16:25		Technical Session III: Underwater Systems, Experiments, & Comm. (Jintao Wang) SEANet G2: Toward a High-Data-Rate Software Defined Underwater Acoustic Networking Platform
			Robust Communication in Bursty Impulsive Noise with Rayleigh Block Fading
			A Compact Low-Power Underwater MagnetoInductive Modem
			R&D of a spread spectrum acoustic communication modem with ranging capability
			Mobile Underwater Acoustic Communication Based on Hyperbolic Frequency Modulation Signal
			Experimental evaluation of NNCLMS sparse channel estimation for shallow water acoustic communication
			Spatial Channel Model for Underwater Wireless Optical Communication Links
	16:25 - 17:30		Angle of Arrival Modeling for Underwater Wireless Optical Communication Systems
16:25 - 17:30	Poster/Demo Session		
17:30 - 19:00	3 rd Floor Ballroom2 Salon B	Welcome Reception	

Date	Time	Place	Content
2016.10.25	08:00 - 08:50	3 rd Floor Ballroom2 Salon A	Registration/Breakfast
	08:50 - 09:40		<p style="text-align: center;">Keynote Speech II (Wen Xu)</p> <p>“High Date Rate Underwater Acoustic Communications and Relative UUV Techniques”</p> <p style="text-align: center;">Speaker: Jianguo Huang, Northwestern Polytechnical University</p>
	09:40 - 10:10		<p style="text-align: center;">Technical Session IV: Systems and Platforms (Jingwei Yin)</p> <p>Pilot-subcarrier Based Impulsive Noise Mitigation for Underwater Acoustic OFDM Systems</p>
			Time Reversal Acoustic Communication of Mobile Platform Using Doppler Correction Without Resampling
	10:10 - 10:30		Break
	10:30 - 11:50		<p style="text-align: center;">Technical Session V: Coding, MAC and Networking (Zheng Peng)</p> <p>Predicting the performance of a dual-band bidirectional transceiver for Shallow water deployments</p>
			Handshake Triggered Chained-Concurrent MAC Protocol for Underwater Sensor Networks
			Protocol Design and Implementation based on Hierarchical State Machine for Underwater Acoustic Networks
			A Multi-channel MAC Protocol in Underwater Acoustic Sensor Networks
			A New MAC Based on RTT Prediction for Underwater Acoustic Networks
			MAC Protocols for Measurement Signal Broadcasting in Distributed Ocean Current Estimation Using Underwater Acoustic Sensor Networks
			A Cooperative ARQ-based MAC Protocol for Underwater Wireless Sensor Networks Program at-a-glance

Date	Time	Place	Content
2016.10.25	11:50 - 13:15	3 rd Floor Ballroom2 Salon B	Lunch (Posters/Demos Setup)
	13:15 - 13:45	3 rd Floor Ballroom2 Salon A	Plenary Speech I (Xiaoli Ma) "Toward the Internet of Underwater Things: A Roadmap" Speaker: Tommaso Melodia, Northeastern University
	13:45 - 14:40		Technical Session VI: Underwater Vehicles and Applications (Chengbing He) Building a Data Base of Ocean Channel Impulse Responses for Underwater Acoustic Communication Performance Evaluation: Issues, Requirements, Methods and Results
			Time and Frequency Domain Analysis and Measurement Results of Varying Acoustic Signal to Determine Water Pollutants in St. Petersburg Bay
			Towards Multi-Functional Light-Weight Long-Term Real-Time Coastal Ocean Observation System
			Operational Conditions of an Unmanned Aerial Vehicle (UAV) Based Underwater Data Collection System
			Outage Probability Analysis for Unmanned Underwater Vehicle Based Relaying
			Improved Node Dynamic Cooperation with Network Lifetime Optimization for Underwater Sensor Networks
	14:40 - 15:00		Break
	15:00 - 16:00		Panel "Smart Ocean: A Buzz Word or Real Trend?" (Jun-Hong Cui & Xiaoli Ma) (Payman Arabshahi, Mario Gerla, Tommaso Melodia, T.C. Yang, & Fumin Zhang)
16:00 - 17:30	Poster/Demo Session (Cont.)		
18:00 - 20:00	Conference Dinner (Presenting Best Student Paper Award)		

Date	Time	Place	Content
2016.10.26	08:00 - 08:30	3 rd Floor Ballroom2 Salon A	Registration/Breakfast
	08:30 - 09:00		<p>Plenary Speech II (Xiaoli Ma) “ZERO Seafloor Observatory, and Resolving Doppler in Underwater Acoustics Communications” Speaker: Fengzhong Qu, Zhejiang University</p>
	09:00 - 10:10		<p>Technical Session VII: Systems and Experiments (Huifang Chen) A Flexible and Modular Platform for Development of Short-Range Underwater Communication</p>
			Efficient MAC-Layer Spectrum Sensing Scheme Over Underwater Cognitive Acoustic Networks
			Fractile-Piecewise Processing Based Spectrum Sensing Algorithms for Underwater Cognitive Acoustics with Impulsive Noise
			Harmonic Potential Field Based Routing Protocol for 3D Underwater Sensor Networks
			DoF Achieving Distance Aligned Structure for Layered Underwater Acoustic 2x3x3 X Networks
			A Multipath Diversity Combining in Underwater CDMA System
			Implementation and Application of Underwater Acoustic Sensor Nodes
			A Simulator for Swarm AUVs Acoustic Communication Networking
			10:10 - 10:25

Date	Time	Place	Content
2016.10.26	10:25 - 12:00	3 rd Floor Ballroom2 Salon A	Technical Session VIII: Data Processing, Localization and Security (Jun Liu)
			On-Surface Wireless-Assisted Opportunistic Routing for Underwater Sensor Networks
			AUV Dead-Reckoning Navigation Based On Neural Network Using a Single Accelerometer
			Optimal Method for USBL Underwater Acoustic Positioning by Combining TDOA and TOA
			A Novel Indirect Localization Scheme for Underwater Wireless Sensor Networks
			A Method Based on Time-Frequency Masking for MFSK Underwater Acoustic Communication Signal Enhancement
			An Effective Method for Underwater Target Radiation Signal Detecting and Reconstructing
			A Novel M-ary Differential Underwater Acoustic Direct Sequence Spread Spectrum Communication System
			Distributed Sensor Layout Optimization for Target Detection with Data Fusion
			On the Probability of Finding a Receiver in an Ellipsoid Neighborhood of a Sender in 3D Random UANs
	Coverage Control Study of Mobile UWASNs Nodes Based on Particle Swarm Optimization Algorithm		
	On Analyzing Eavesdropping Behaviors in Underwater Acoustic Sensor Networks		
	12:00 - 12:10		Presenting Demo Awards by Representative from Seatech China Co. (Silver)
12:10 - 12:15		Closing Remarks and Adjourn	
12:30 - 13:30	3 rd Floor Ballroom2 Salon B	Lunch	