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## CRUSER Technical Continuum (archived)

Monterey, California: Naval Postgraduate School

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## CRUSER Events

CRUSER sponsors several events in support of our yearly innovation thread.

- 2016\_09 Warfare Innovation Workshop
- 2016\_07 CRUSER TechCon
- 2016\_05 CRUSER Expo 2016
- 2016\_04 Robots in the Roses
- 2016\_03 RoboEdu
- 2015\_09 Warfare Innovation Workshop
- 2015\_04 TechCon
- 2015\_04 Robots in the Roses
- 2015\_04 Robo Ethics
- 2015\_03 Warfare Innovation Workshop
- 2015\_03 CRUSER Colloquium
- 2015\_01 CRUSER Colloquium
- 2014\_09 Warfare Innovation Workshop
- 2014\_05 Mine Warfare Symposium
- 2014\_05 CRUSER Tech Expo
- 2014\_04 TechCon
- 2014\_04 Robots in the Roses
- 2014\_03 RoboEthics
- 2013\_09 Warfare Innovation Workshop
- 2013\_09 RoboEthics
- 2013\_04 TechCon
- 2013\_04 Robots in the Roses
- 2013\_03 Warfare Innovation Workshop

## ← 2013\_04 TechCon

### CRUSER Technical Continuum

#### Details

#### Where & When

- **Date:** 9-10 Apr 2013
- **Time:** 0900-1500 PDT
- **Location:** NPS CAVR

#### Contact

##### CRUSER

NPS Consortium for Robotics and Unmanned Systems Education and Research (CRUSER) Second Annual Technical Continuum (TechCon) and Third Annual Robots in the Roses Re from 9 - 11 April in coordination with National Robotics Week. These events are for NPS s faculty interested in all education, experimentation and research related to employing unm systems in operational environments.

The TechCon's intent is three fold. It will further concepts developed during the September Warfare Innovation Workshop by showing NPS student and faculty work in advancing unc operations capabilities, hear from currently funded CRUSER research programs, and prov for FY14 research proposals to CRUSER. The TechCon is seminar-based and will be held Center for Autonomous Vehicle Research (CAVR) spaces. We anticipate presentations to 30 minutes long, discuss on-going student and faculty research, or be proposals for futur FY14 funding in research related to unmanned systems. Seven distinct concepts were sel those presented at the September 2012 Warfare Innovation Workshop, but they are broac include a host of specific research questions. For example, non-lethal stopping concepts hardening gel that block ship board heat exchangers when ingested from under the hull. E topics like this support both material science (can we create such a gel?) to legal and ethi Selected concepts include:

- Decoys and military deception (MILDEC): Designs to obfuscate targeting or cloud the operational picture - such as a USV swarm fleet or acoustic deception by unmanned s
- Vessel tagging: For domain awareness and tracking - such as remora tag with hydro-f
- Non-lethal kinetic effects: Generation of non-lethal stopping tactics and mechanisms - condenser fouling agents.
- Undersea positioning, navigation and timing: For navigation accuracy and domain awa alternative to GPS and surrogate for underwater use.
- Undersea "garage": Autonomous docking, power generation and transfer, deployment extend time on station.
- Hybrid unmanned vehicles: Multi-domain vehicles that transition between domains.
- Crowd-sourcing: Leveraging white shipping, regional fishing fleet and other entities to

2012_10 Fleet Week	data collection needs.
2012_09 Warfare Innovation Workshop	Specific concept areas recommended by the September 2012 workshop may be found in the NWDC/CRUSER Warfare Innovation Workshop After Action Report (FOUO) which is upon request from <a href="#">Lyla Englehorn</a> .
2012_05 TechCon	To be clear, NPS CRUSER TechCon presentations are not meant to present or propose or demonstrate the entire concept for advancing the design of undersea warfare, but rather to demonstrate specific important elements to show the concept's feasibility. One page abstracts may be NLT 15 March 2013 to CRUSER Operations Manager <a href="#">Lisa Trawick</a> . Presentations that are to be FY14 CRUSER funding proposals will be asked to submit a full proposal with budget at Techcon.
2012_05 Robots in the Roses	
2012_01 RoboEthics	
2012_01 CRUSER Lecture	
2011_11 CRUSER Lecture	
2011_09 Warfare Innovation Workshop	The TechCon will conclude with the Third Annual Robots in the Roses Research Fair starting Thursday, 11 April, on the Quad and Spruance Plaza. This will provide a venue for NPS staff and faculty to demonstrate their research in unmanned systems or robotics to students, faculty across campus. Families are welcome to attend Robots in the Roses as it is also a STEM
2011_08 CRUSER Lecture	
2011_03 Robots in the Roses	



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