

**SYMPOSIUM WEEK AT A GLANCE**  
**May 5 - 10, 2019**

Time	Sunday 5	Monday 6	Tuesday 7	Wednesday 8	Thursday 9	Friday 10			
		Registration Trade Show Until 17:00	Trade Show Until 17:00	Trade Show Until 12:00	Trade Show Until 17:00	Trade Show Until 12:00			
8:30		OPENING Presentations	Presentations	Presentations	Presentations	Presentations			
10:00		Break	Break	Break	Break	Break			
10:30		Presentations	Presentations	Moderated Sessions	Presentations	Presentations			
12:00		Lunch	Lunch	CLOSE	Lunch	CLOSE			
13:00	Registration	Presentations	Presentations	Daytime Fireworks	Presentations				
13:30									
15:00							Break	Break	Break
15:30							Presentations	Workshop: Regulations	Workshop: Always Safe
17:00							CLOSE	CLOSE	CLOSE
18:00									
19:00	Welcome Reception					Gala Dinner			
Evening		Fireworks	Fireworks		Fireworks	Fireworks			

**Special MHC Events**

**Monday 6**      19:00 Meet and depart from the Sheraton Buganvilias  
 20:00 “Sender of Light” procession  
 20:30 Opening Ceremony by MHC  
 21:30 Fireworks— Pirotecnia Santiago / Oaxaca  
 22:00 Fireworks - Unión de Pirotécnicos del Estado de Jalisco

**Tuesday 7**      20:00 Meet and depart from the Sheraton Buganvilias  
 21:00 Fireworks - Piroshow / Puebla  
 21:30 Fireworks - Fireworks Martarello Ramos  
 Zumpango, Estado de México

**Wednesday 8**      13:00 Daytime Fireworks – Pirotecnia El Caperuzo  
 Tultepec, Estado de México

**Thursday 9**

- 20:30 Meet and depart from the Sheraton Buganvilias  
21:00 Fireworks - Unión de Pirotécnicos de San Mateo  
Tlalchichilpan, A.C.  
22:00 Fireworks – México Bailando, Tultepec,

**Friday 10**

- 17:30 Meet and depart from the Sheraton Buganvilias  
18:00 **GALA DINNER (17<sup>th</sup> ISF Event, Optional)**  
22:30 Fireworks - Grupo de Pirotécnicos de San Pedro Zumpango  
Zumpango, Estado de México

**Registration**

Registration for the 17<sup>th</sup> International Symposium on Fireworks includes entry to receptions, meals and refreshment breaks, all technical sessions (paper presentations), workshops, full access to the Trade Show, and all events and activities organized by the Mexico Host Committee (MHC).

Registrants will receive a distinctive attendee bag, both a printed and digital copy of the 17<sup>th</sup> ISF Proceedings, which is a compilation of the scientific and technical papers presented at the symposium, a printed Program, and other promotional materials supplied by sponsors and advertisers.

**Trade Show**

Exhibits will open each day at 9:00 Monday to Friday, and will close at the same time as the technical sessions. Attendees are strongly encouraged to visit our outstanding exhibitors and discuss their products and services. The exhibitors' participation is a highly welcome and necessary part of the Symposium.

# 17<sup>th</sup> INTERNATIONAL SYMPOSIUM ON FIREWORKS

## PRESENTATIONS SCHEDULE

May 6-10, 2019

**SUNDAY: May 5, 2019**

**13:00 to 17:00**      **Registration**

**19:00**              **Welcome Reception** (Sponsored by FireOne -  
Pyrotechnics Management, Inc)

**MONDAY: May 6**

**8:30 OFFICIAL OPENING**

*Opening by the ISFS Ltd - Dr. Roger L. Schneider, Vice President and Secretary of the International Symposium on Fireworks Society, Ltd.*

*Welcome by the ISFS Ltd - Ettore Contestabile, President of the International Symposium on Fireworks Society, Ltd.*

*Welcome, Local - Ing. Arturo Dávalos Peña, Presidente Municipal de Puerto Vallarta, Mayor of the City of Puerto Vallarta*

*Welcome, Local - Enrique Alfaro Ramírez, Gobernador Constitucional del Estado de Jalisco, Governor of the State of Jalisco*

*Presentations* – mementos, gifts and certificates of appreciation

*Introduction of Honorary Chairman - Maestro Gerónimo Miguel Zamora Nuño*

*Ceremonial transfer of the Honorary Chairman Name Tag from Mr. Yoshihiko Satoh (Vice Mayor, Daisen City, Japan, representing the 16<sup>th</sup> ISF Honorary Chairman, Professor Masamitsu Tamura) to the 17<sup>th</sup> ISF Honorary Chairman, Maestro Gerónimo Miguel Zamora Nuño.*

**Guest Speakers**

**9:00 Observations on the Mexican Fireworks Industry (10 Year Challenge) - Jorge Mauro Márquez Márquez, Lux Pirotecnia, S.A. de C.V., México**

**9:30 The Psychology of Safety in the Fireworks Industry - Creating a safer environment by nurturing the conscience and culture of safety in the fireworks industry - Alberto Navarro and Susan Hunt, Infinity Visions Inc., Bellevue, WA, USA**

**10:00 BREAK**

## **MONDAY: May 6 continued**

### **Session 1**

**Session Chairperson:** Alejandro Mantecón González – Pyrosmart Mexico

**10:30 Creation of Pyrotechnic Standards in Mexico** - *Colleen S. Patton*, Promedsa, Naucalpan de Juárez, Mexico

**11:00 Mestre Coheter - History, Relationships and Rituals in the Pyrotechnic Communities in Puebla**, *Luis Manuel Mora del Carmen*, Puebla, Mexico

**11:30 16<sup>th</sup> International Symposium on Fireworks – Omagari Report** - *Shinetsu Sakaki*, Omagari Chamber of Commerce and Industry, Daisen, Akita, Japan

### **12:00 LUNCH**

### **Session 2**

**Session Chairperson:** *Lino Flores*, Piroflores, Mexico

**13:30 Comprehensive Safety Considerations for Businesses Handling Explosives** - *Björn Eckhardt and Dietrich Eckhardt*, PyroKnowHow/Modicolitor, Germany

**14:00 Fireworks Disaster - A Preventable Tragedy** - *Nir Haimov*, The National Fireworks Laboratory, and *Aharon Goren*, The Israeli Explosives Safety Center, Caesarea, Israel

**14:30 Ballistic and Safety Advantages of Modern Propellants in Fireworks** - *Gabor Tasnadi*, TÜV InterCert, Budapest, Hungary, *Dietrich Eckhardt*, PyroKnowHow/Modicolitor, Berlin, Germany, and *Marc Speer*, Speer Pyrotechnik, Bremen, Germany

### **15:00 BREAK**

### **Session 3**

**Session Chairperson:** *Dietrich Eckhardt*, PyroKnowHow/Modicolitor, Germany

**15:30 Fragile Coloration Mechanism of Traditional Japanese Sparkler, Senko-Hanabi** - *Chihiro Inoue, Taiki Watanabe, and Yuzo Inokuchi*, Department of Aeronautics and Astronautics, Kyushu University, Japan

**16:00 Fireworks Accidents in Japan During 2016-2017** - *Yuji Wada*, Research Institute of Science for Safety and Sustainability (RISS), National Institute of Advanced Industrial Science and Technology (AIST), and Institute of Advanced Sciences, Yokohama National University, *Ryoji Makino, Shoko Abe, Takako Itou, Maki Suzui, Nobuo Nakajima, and Masahide Wakakura*, Research Institute of Science for Safety and Sustainability (RISS), National Institute of Advanced Industrial Science and Technology (AIST), *Akiko Matsuo*, Dept. Mechanical Engineering, Keio University, and *Atsumi Miyake*, Institute of Advanced Sciences, Yokohama National University, Japan

**MONDAY: May 6 continued**

**Session 3 continued**

**16:30 Study of the Influence of PM2.5 Concentration in Ambient Air Quality in China** - *JiangYou Huang*, Liuyang Fireworks Administration Bureau, *BenHua Tao*, Liuyang Zhitong Fireworks Industry Development Strategy Research Center, Liuyang Fireworks and Firecrackers General Association, Hunan, China

**CLOSE**

**TUESDAY: May 7**

**Session 4**

**Session Chairperson:** *Martyne Gagnon*, Entertainment Manager and Director of L'International des Feux Loto-Québec presented by TELUS, Canada

**8:30 Challenges Facing the China Fireworks Industry** - *Carson Lee*, Up Pyro & Boomwow Fireworks, Liuyang, Hunan, China

**9:00 Sync or Swim - Achieving Reliable Time Code** - *Dan Barker*, FireOne - Pyrotechnics Management, Inc, USA

**9:30 External and Internal Ballistics Study and Pressure Evaluation for the Safe Design of a 1,575 mm (62 Inch) Mortar** - *Eric M. Krug*, Krug Consulting LLC, Loveland, CO, USA

**10:00 BREAK**

**Session 5**

**Session Chairperson:** *Kevin Li*, General Manager of Chili Fireworks, President of Chamber of Liling Fireworks Commerce, China

**10:30 Chemical Products Storage and Handling in the Pyrotechnics Industry** - *Francesc Lleches Barber*, Pyrolab, S.L., Valencia, Spain

**11:00 Transport, Storage, Standards and Brexit** - *Andy Hubble*, Star Fireworks Ltd, Berkshire, United Kingdom

**11:30 Safe Use and Storage of Fireworks in The Netherlands** - *Piet Timmers and Soedesh Mahesh*, RIVM, National Institute for Public Health and the Environment Centre for Environmental Safety and Security, Bilthoven, The Netherlands

***Presentation by a representative of Chamber of Liling Fireworks Commerce, China, Sponsor of Today's Lunch***

**12:00 LUNCH**

## **Session 6**

**Session Chairperson:** *César Cantú*, Pyrotech, Mexico

**13:30 Basic Methods for Assigning Firing System Addresses** - *Will Harvey*, Finale Fireworks, Palo Alto, CA, USA

**14:00 Automatic Translation of Effect Names from Spanish and other Languages to VDL** - *Will Harvey*, Finale Fireworks, Palo Alto, CA, USA

**14:30 “Secured E-Match” - Revolution: How to Set a Display Safely and Fast!** - *Luigi L. P. Monetti*, Monetti Srl, Italy

## **15:00 BREAK**

## **Session 7**

**Session Chairperson and Workshop Moderator:** *William Adan Palma*, Pirotecnia Espectacular ADAN, Mexico

**15:30 Workshop: Fireworks Regulations** – Presentation by representatives from various countries, followed by a Question and Answer Period

*All are welcome, including non-registered guests.*

## **CLOSE**

## **EXTRA PRESENTATION**

**"Normas Oficiales Mexicanas para Pirotecnia NOMs"** - A discussion topic led by Jorge Márquez and Francisco Lleches from Pyrolab

*All are welcome, including non-registered guests.*

## **WEDNESDAY: May 8**

## **Session 8**

**Session Chairperson:** *Sara Vergara*, Promedsa, Mexico

**8:30 The Pyrotechnics Guild International – Celebrating 50 Years of Collaboration between Professional and Amateur Pyrotechnists and Pyrotechnicians** - *Bruce Blom*, Vice President, PGI Publications, *Michael Scott Swisher*, FSA Scot, *John Steinberg*, 1<sup>st</sup> Vice-President, PGI, USA

**9:00 Testing for Fireworks Safety in a Global Market** - *John D. Rogers*, American Fireworks Standards Laboratory (AFSL) Bethesda, MD, USA

**9:30 Products and Processes Certification Procedure in Pyrotechnics** - *Ángel Santamaría Martín*, *Juan Casín Loya*, *Natalia Vázquez Viñuela*, *Isabel Amez Arenillas*, and *Blanca Castells Somoza*, Laboratorio Oficial José María Madariaga (L.O.M.), Madrid, Spain

## **WEDNESDAY: May 8 continued**

### **10:00 BREAK**

#### **Session 9**

**Session Chairperson:** *Mitsuru Arai*, University of Tokyo, Japan, and  
*Jorge M. Márquez M.*, Lux Pirotecnia, S.A. de C.V., Mexico

#### **Moderated Sessions**

##### **10:30 – 12:30**

Each of the moderated session topics listed below will be assigned to a designated table. The number of participants at each table will be limited. Symposium attendees wishing to take part in the discussion of a particular topic will be required to place their name on the appropriate Moderated Session Form. This should be done prior to 9:00 on Wednesday.

Each topic will be presented for discussion in two separate, 45 minute sessions, with a short break between the two presentations. This will provide participants with the opportunity to attend two different topics, if they wish. Note that translation services will not be available for the moderated sessions; however, some moderators can converse in more than one language.

#### **Tentative Topics and Moderators**

1. Large-Diameter Mortar Design and Shell Launch - *Eric Krug*
2. Safe Handling of Explosives - *Dietrich Eckhardt*
3. Japan 16<sup>th</sup> ISF preparation and Japan society's fireworks support structure - *Sakaki Shinetsu*
4. Music for Fireworks - *Martin Hildeberg* and *Dominykas Juknelevicius*
5. Consumer Fireworks Retail Sales Facilities – Reference to Tultepec Fireworks Market (Before and now rebuilt) - *Shulin Nie, Jorge Marquez, Ettore Contestabile*
6. Opportunity to help improve VDL for understanding effect names in your native language - *Will Harvey*
7. Resisting the Impact of an Exploding 6” (150 mm) Dud Aerial Display Shell: Design and Testing of a Protective Roof Pergola – *Roger L. Schneider*
8. Modern Propellants - *Marc Speer*
9. The Positive side of Fireworks as it relates to Tourism in Malta - *Roderick Zammit* and *Lionel Gerada*
10. Developing Workplace Strategies for a Safety Mindset (English and Spanish) - *Alberto Navarro*
11. Normas Oficiales Mexicanas para Pirotecnia (NOMs) – *Francesc “Paco” Lleches*
12. The Impact of Safety Regulations on Market Growth - *John Rogers*

**WEDNESDAY: May 8 continued**

**12:00 CLOSE – Free Afternoon**

**THURSDAY: May 9**

**Session 10**

**Session Chairperson:** *Roderick Zammit*, Executive Events, Malta Tourism Authority (MTA), Malta

**8:30 Using Calculations to Determine and Control Electrostatic Hazards in Fireworks Manufacturing and Use (Part 1)** - *Roger L. Schneider*, Rho Sigma Associates, Inc., USA

**9:00 Using Calculations to Determine and Control Electrostatic Hazards in Fireworks Manufacturing and Use (Part 2)** - *Roger L. Schneider*, Rho Sigma Associates, Inc., USA

**9:30 Comparative Analysis of Fireworks Transport Dangerous Classification Test Results and Default List** - *Zhang Guanghui, Xiao Jiayong, Tan Aixi, Jiang Zicheng, Qiu Lina, Tan Jingru*, Fireworks & Firecracker Inspection Centre of Hunan Entry-Exit Inspection and Quarantine Bureau, China, and *Y. S. Chua*, International Quality Assurance B.V., China

**10:00 BREAK**

**Session 11**

**Session Chairperson:** *Dan Barker*, FireOne - Pyrotechnics Management, Inc, USA

**10:30 Determination of Measures for Safe Production Depending on the Hazardous Properties of Explosive Substances (Pyrotechnic Compositions)** - *Lutz Kurth*, Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin, Germany

**11:00 The Assessment of the Dangerous Characteristics of Pyrotechnic Composition and Articles (For Safe Production)** - *Lutz Kurth*, Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin, Germany

**11:30 Overview of ISO Standards of Fireworks** - *Andrew Tang*, General Manager, TCPL, Deputy Secretary General, IFA, and Asian Section-China Director, Treasurer, ISFS, China

**11:50 18<sup>th</sup> ISF Location Proposal Presentation**

**12:00 LUNCH**

## **THURSDAY: May 9 continued**

### **Session 12**

**Session Chairperson:** *Gilberto Caballero*, Pyrotech, Mexico

**13:30 Study on the General Safety Standard of Firework Machinery Touching Gunpowder -**  
*Shixing Ouyang*, Liuyang Ouyang Technology Trade Co., Ltd., Liuyang, China

**14:00 Effect of Carboxylate Coating on Degradation of Magnesium Based Fireworks -**  
*Yosuke Nishiwaki*, Graduate School of Yokohama National University, *Mitsuru Arai*, The University of Tokyo,  
*Takehiro Matsunaga*, National Institute of Advanced Industrial Science and Technology, *Mieko Kumasaki*, Graduate School of Yokohama National University, Japan

**14:30 Blue Strobe Pyrotechnic Compositions with Different Additives -**  
*Dominykas Juknelevicius*, Faculty of Chemistry and Geosciences, Vilnius University, Lithuania, *Thomas M. Klapötke*, Department of Chemistry, Ludwig Maximilian University of Munich, Germany, and *Arunas Ramanavicius*, Faculty of Chemistry and Geosciences, Vilnius University, Lithuania

### **15:00 BREAK**

### **Session 13**

**Session Chairperson:** *Oswaldo Avalos*, Atomic Professional Fireworks, Mexico

**Workshop: Siempre Seguro (Always Safe)** – Presentation by representatives from various countries, followed by a Question and Answer Period

*All are welcome, including non-registered guests.*

## **CLOSE**

## **FRIDAY: May 10**

### **Session 14**

**Session Chairperson:** *Jorge Márquez*, Lux Pirotecnia, S.A. de C.V., Mexico

**9:00 Historical Aspects of Firework Safety: The Introduction of Potassium Chlorate and Potassium Perchlorate into Pyrotechny,** *Barry T. Sturman*, Australia

**9:30 The Cause of Muzzle Breaks -** *Ken G. Nixon*, Pyrolock LLC, Pebble Beach, CA, USA

### **10:00 BREAK**

**FRIDAY: May 10 continued**

**Session 15**

**Session Chairperson:** *Colleen Sharon Patton*, Promedsa, Mexico

**10:30 Pyro Safety: Is it Enough, ... Or Until Someone Gets Hurt?** - *Maque daVis*, Fremont  
Theatrical, Retired USA State Safety Inspector, Seattle, WA, USA

**11:00 The Fireworks as a Symbol of Culture and Crafts in Tultepec** - *Mayra Denise Torres Hernández*, Tultepec, State of México, México

**11:30 Tultepec Magic and Color** - *Claudia Hernández Sánchez*, H. Town Hall of Tultepec State of México, México

**12:00 CLOSE**

**Closing Remarks and Ceremony**