



**SOCIETY
for
HISTORY
TECHNOLOGY**

**SHOT ANNUAL MEETING
PHILADELPHIA (PENNSYLVANIA, USA)
26-29 OCTOBER 2017**

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2017 Program Committee

Karin Zachmann, Chair (Technische Universität München, Germany)

Ling-Fei Lin (Nanyang Technological University, Singapore)

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2017 Local Arrangements Committee

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Ronald Brashear (Othmer Library of Chemical History, Chemical Heritage Foundation)

Mike Geselowitz (IEEE History Center at Stevens Institute of Technology)

Ann N. Greene (University of Pennsylvania)

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Erik Rau (Hagley Museum and Library)

Ruth Schwartz Cowan (University of Pennsylvania)

Amy Slaton (Drexel University)

Kathy Steen (Drexel University)

Heidi Voskuhl (University of Pennsylvania)

The Society for the History of Technology

The Society for the History of Technology (SHOT) was formed in 1958 to encourage the study of the development of technology and its relations with society and culture. As an interdisciplinary organization, SHOT is dedicated not only to the history of technological devices and processes, but also to the relationships of technology with politics, economics, labor, social change, business, the environment, public policy, science, and the arts and humanities. SHOT includes almost 1500 individual members and 1000 institutional subscribers. In addition to professional historians and museum curators, SHOT members include practicing scientists and engineers, anthropologists, librarians, political scientists, and economists. An international society, SHOT meets annually in North America, Europe, or Asia and also jointly sponsors smaller conferences focused on more specialized topics of common interest with other scholarly societies and organizations. *Technology and Culture*, a quarterly journal, is published by the Johns Hopkins University Press for the Society for the History of Technology. In addition, SHOT publishes an annual newsletter, and, jointly with the American Historical Association, a booklet series, *Historical Perspectives on Technology, Society, and Culture*. For further information about the Society, please contact Jan Korsten, SHOT Secretary, at SHOT.secretariaat@tue.nl, or visit our website, <http://www.historyoftechnology.org>.

SHOT Officers 2017

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Welcome to Philadelphia!

The Consortium for History of Science, Technology and Medicine and the local organizing committee look forward to welcoming you to the 2017 SHOT Meeting in Philadelphia. Philadelphia is home to some of the New World's oldest scientific institutions. They, and other area institutions established later, have been collecting books, manuscripts and historic artifacts since the eighteenth century and their collections now span the world and reach back to early human history.

The Old City neighborhood, where the conference venues are located, has many of the city's best restaurants and galleries. Dining options of every variety, live music, and many other entertainment options are within easy walking distance. Within a few blocks you will find: Independence Hall and the Liberty Bell; Pennsylvania Hospital (North America's oldest), with its archives and surgical amphitheater, the home of Phillip Syng Physick (known as the "father of American surgery"), Christ Church Burial Ground, Elfreth's Alley (oldest continually inhabited street in the U.S.), the First and Second Banks of the United States, Carpenters' Hall, Franklin Court Museum and Historic Site, the Betsy Ross House, the Museum of the American Revolution, the National Museum of American Jewish History and the Athenaeum of Philadelphia. Restaurants, nightlife, historic sites, museums and libraries are sprinkled from Old City by the Delaware River across Philadelphia to UPenn in University City by the Schuylkill River. Of particular interest to conference participants would be the Library Company of Philadelphia (established in 1731), the library and museum of the American Philosophical Society (founded 1743), the Mütter Museum at the College of Physicians of Philadelphia (founded 1787), the Academy of Natural Sciences of Drexel University (founded 1812), and the Wagner Free Institute of Science (founded 1855) -- in addition to the libraries and museums of the Chemical Heritage Foundation and UPenn.

Philadelphia is once again a growing city with a vibrant cultural and intellectual life. The region is home to a large and active community of historians of technology, science and medicine. We are very please to be helping with the local arrangements for the SHOT meeting and look forward to welcoming you to Philadelphia.

Babak Ashrafi
Executive Director
Consortium for History of Science, Technology & Medicine

Overview of Events and Activities

Thursday, 26 October

8:00 AM–5:00 PM	Registration Desk
9:00 AM–14:30 PM	Executive Council Meeting (open to all members) (Cook Room)
11:00 AM–5:00 PM	Insider Tour of Hagley Museum and Library
3:00–4:30 PM	Session Block 1 (Flower room, Frampton Room, Shippen Room, and Whitpen Room)
3:30–4:30 PM	Technology and Culture Editorial Committee meeting (Cook Room)
5:30–7:00 PM	Opening Plenary Technology, Democracy and Participation (Chemical Heritage Foundation, 315 Chestnut St.)
7:00–9:00 PM	Opening Reception (Chemical Heritage Foundation, 315 Chestnut St.)

Friday, 27 October

7:00–9:00 AM	Breakfast (for all attendees) (Ballroom Foyer)
8:00 AM–5:00 PM	Registration Desk
8:00 AM–5:00 PM	Book Exhibit (Ballroom C)
8:00–10:00 AM	Session Block (Claypoole Room, Bromley Room, Shippen Room, Reynolds Room, Flower Room, Cook Room, Ballroom A1, Ballroom A2, Ballroom D, Ballroom E1, and Ballroom E2)
10:00–11:30 AM	Collections of the American Philosophical Society Tour
10:00–10:30 AM	Coffee Break (Ballroom C)
10:30 AM–12:30 PM	Session Block 3 (Claypoole Room, Bromley Room, Shippen Room, Reynolds Room, Flower Room, Cook Room, Ballroom A1, Ballroom A2, Ballroom D, Ballroom E1, and Ballroom E2)
10:30 AM–12:30 PM	Italian Market Tour
12:30–2:00 PM	Lunch (Attendees will be on their own)
12:30–2:00 PM	Lunch Meetings and events <ul style="list-style-type: none">• Commemorative Event for Ann Johnson (Ballroom D)• Grab the Mike and tell us about your work in five minutes (Cook Room)• The Road to Uppsala: 25 Years of SHOT's Internationalization (Reynolds Room)• SIGCIS Lunch (Hamilton Room)• ECIG Lunch (Flower Room)• EDITH Lunch (Taste 2)
14:00–3:30 PM	Session Block 3 (Claypoole Room, Bromley Room, Shippen Room, Reynolds Room, Flower Room, Cook Room, Ballroom A1, Ballroom A2, Ballroom B, Ballroom D, Ballroom E1, and Ballroom E2)
14:00–3:30 PM	Fairmont Water Works Tour

3:30–4:00 PM	Coffee Break (<i>Ballroom C</i>)
4:00–5:30 PM	Session Block 4 (<i>Claypoole Room, Bromley Room, Shippen Room, Reynolds Room, Flower Room, Cook Room, Ballroom A1, Ballroom A2, Ballroom B, Ballroom D, Ballroom E1, and Ballroom E2</i>)
6:30–8:30 PM	Plenary Lecture and Hors d'Oeuvres, 2015 da Vinci Medalist (<i>Ballroom B</i>)
8:30–11:00PM	Graduate Student Mixer (<i>Hamilton Room</i>)
9:00–12:00 PM	Hospitality Suite (<i>Taste 2</i>)

Saturday, 28 October

7:00–9:00 AM	Breakfast (for all attendees) (<i>Ballroom Foyer</i>)
7:00–8:00 AM	Breakfast Meetings <ul style="list-style-type: none"> • Graduate Student Breakfast (<i>Ballroom B</i>) – take breakfast from <i>Ballroom Foyer</i> and then go to the venue • International Scholars Breakfast (<i>Ballroom B</i>) – take breakfast from <i>Ballroom Foyer</i> and then go to the venue • Asia Network Breakfast Meeting (<i>Frampton Room</i>) – Breakfast in room • Envirotech Breakfast Meeting (<i>Hamilton Room</i>) – Breakfast in room
8:00 AM–5:00 PM	Registration Desk
8:00 AM–4:00 PM	Book Exhibit (<i>Ballroom C</i>)
8:00–10:00 AM	Session Block 5 (<i>Claypoole Room, Bromley Room, Shippen Room, Reynolds Room, Flower Room, Cook Room, Ballroom A1, Ballroom A2, Ballroom B, Ballroom D, Ballroom E1, and Ballroom E2</i>)
10:00–10:30 AM	Coffee Break (<i>Ballroom C</i>)
10:00 AM –12:00 PM	Barnes Foundation Tour
10:30 AM–12:30 PM	Session Block 6 (<i>Claypoole Room, Bromley Room, Shippen Room, Reynolds Room, Flower Room, Cook Room, Ballroom A1, Ballroom A2, Ballroom B, Ballroom D, Ballroom E1, and Ballroom E2</i>)
10:30 AM–12:30 PM	Philadelphia Navy Yard Tour
12:30–2:00 PM	Lunch (<i>Attendees will be on their own</i>)
12:30–2:00 PM	Lunch Meetings <ul style="list-style-type: none"> • SHOT Business Meeting (<i>Ballroom B</i>) • WITH Lunch Meeting (<i>Hamilton Room</i>) – lunch included • Jovians and Mercurians Lunch Meeting (<i>In Restaurant 2nd Story Brewing Company, 117 Chestnut St. The group will leave from the main lobby of the hotel at noon on Saturday</i>)
1:30–3:30 PM	Delaware River Waterfront Tour
2:00–3:30 PM	Session Block 7 (<i>Claypoole Room, Bromley Room, Shippen Room, Reynolds Room, Flower Room, Cook Room, Ballroom A1, Ballroom A2, Ballroom B, Ballroom D, Ballroom E1, and Ballroom E2</i>)
3:30–4:00 PM	Coffee Break (<i>Ballroom C</i>)

4:00–5:30 PM	Session Block 8 (<i>Claypoole Room, Bromley Room, Shippen Room, Reynolds Room, Flower Room, Cook Room, Ballroom A1, Ballroom A2, Ballroom B, Ballroom D, Ballroom E1, and Ballroom E2</i>)
6:30–7:30 PM	Cocktail Reception (<i>Chemical Heritage Foundation, 315 Chestnut St.</i>)
7:30–10:00 PM	Awards Banquet (<i>Chemical Heritage Foundation, 315 Chestnut St.</i>)
10:00–12:00 PM	Hospitality Suite (<i>Taste 2</i>)

Sunday, 29 October

7:00–9:00 AM	Breakfast (<i>Ballroom Foyer</i>)
7:00–8:00 AM	SIG Albatrosses Breakfast (<i>Ballroom A2</i>) – take breakfast from Ballroom Foyer
7:00–8:00 AM	SIGCIS Breakfast (<i>Hamilton Room</i>)
8:30–9:30 AM	SIG Prometheans Breakfast Meeting (<i>Cook Room</i>) – take breakfast from Ballroom Foyer
8:00 AM–12:00 PM	SIGCIS Workshop (<i>Ballroom B, break out rooms Shippen Room and Reynold Room</i>)
9:30 –11.30 AM	Prometheans Sunday Meeting (<i>Cook Room</i>)
11:00 AM–1:00 PM	Albatrosses Workshop (<i>Ballroom A2</i>)
11:00 AM–1:00 PM	EDITH and WITH Lightning Session (<i>Ballroom A1</i>)
12:00–2:00 PM	SMiTInG lunch meeting (<i>Restaurant 2nd Story Brewing Company, 117 Chestnut St. – group will leave from main hotel lobby at noon</i>)
12:00 PM–1:00 PM	SIGCIS Lunch (<i>Hamilton Room</i>)
1:00 PM–5:45 PM	SIGCIS Workshop (<i>Ballroom B, Shippen Room and Reynold Room</i>)

IEE History Committee Meeting (Ballroom E, lunch in Ballroom D)

Tours

Note: all tours will depart promptly from the main entrance of the Sheraton Philadelphia Society Hill Hotel at the times listed below.

Thursday, 26 October

11:00 AM–17:00 PM

Insider Tour of Hagley Museum and Library

Hagley Museum and Library is a premier nineteenth-century industrial site museum and the most important research collection in the history of American business, technology, and industrial design. Located on 235 acres along the banks of the Brandywine in Wilmington, Delaware, Hagley is the site of the gunpowder works founded by E. I. du Pont in 1802. The museum and industrial landscape includes working rolling mills, waterwheels, and turbines, a belt-powered machine shop, workers' housing, and the du Pont family mansion. The library collections document the history of business, technology, design, industrial environments and consumer culture from the 18th century through the present day. The visit will include a behind-the-scenes view of the library's published, audiovisual, manuscript, and digital collections, an insider tour of the museum and property, and the opportunity to explore and converse with Hagley archivists, curators, and guides. Participants can expect to traverse a few stairs and engage in a modest level of walking. Please note that box lunches have to be ordered separately.

Friday, 27 October

10:00–11:30 AM

Collections of the American Philosophical Society Tour

The American Philosophical Society, the oldest learned society in the United States, was founded in 1743 by Benjamin Franklin for the purpose of "promoting useful knowledge." This tour offers the opportunity to discover some of the Society's renowned collections that trace American history and science from the Founding Fathers to the digital age. The collections include over 2.5 miles of manuscript pages and approximately one million rare books, prints, photographs, paintings, scientific instruments, Native American language recordings, and other objects.

10:30 AM–12:30 PM

Italian Market Tour

Starting at the always-colorful South Street, head off through the neighborhood of Bella Vista in South Philly. Grab a drink at a local coffee shop and see one of the city's great murals located across from a typical neighborhood park. Swing by a historic deli, duck into a tempting bakery and stroll along Christian Street before getting to the noises, aromas and sights of the famous Italian Market of Philadelphia or, more accurately, 9th Street Market.

"The market is the oldest and largest everyday open-air market in the USA, and it's easy to understand why it is one of Philly's must-see attractions. With your local guide leading the way, explore the huge variety of stores located here, many of which are Italian in heritage. Tempt taste buds as you wander past cheeses, chocolates, spices and olive oils. Discover bakeries, butchers and a myriad of other produce stalls, plus a wonderful kitchen store. And don't worry, if the temptation to purchase becomes too great, you're likely to get a bargain, as many of these stores discount for our travelers. Along the way, you'll get the chance to talk to some of the owners and employees of these shops and stalls, and hear fascinating stories of the development of this area over the years."

14:00 PM–15:30 PM

Fairmount Water Works

Short description: Tour Philadelphia's 19th-century municipal waterworks on the bank of the Schuylkill River. Operational from 1812 to 1909, the Fairmount Water Works became a National Historic Landmark for its Classical Revival architectural design and for its innovative engineering, including using steam engines, waterwheels, and then turbines to pump water up the hill on which the Philadelphia Museum of Art currently sits for gravity distribution across the city.

Saturday, 28 October

10:00 AM–12:00 PM

Barnes Foundation tour

Impressionist art museum.

Presentation at 10:00 by Martha Lucy; docent-led tour(s) at 10:30.

The Barnes Foundation was founded in 1922 by Albert C. Barnes. He made his fortune by co-developing Argyrol, an antiseptic silver compound that was used to combat gonorrhea and inflammations of the eye, ear, nose, and throat. This tour offers the opportunity to discover some of the art collection, especially the works by Impressionist, Post-Impressionist, and Modernist masters.

10:30 AM–12:30 PM

Philadelphia Navy Yard

For almost two centuries the Philadelphia Navy Yard was an important US Naval Shipyard. Late 20th century the US Navy ended most of its activities. The city of Philadelphia took over the land and started redeveloping it. During the tour you will get to know more on the history and the future of the yard.

1:30–3:30 PM

Delaware River Waterfront Tour

The wharves and docks of William Penn's city that helped build a nation are gone—lost to the onslaught of more than three hundred years of development. Yet the bygone streets and piers of Philadelphia's central waterfront were once part of the greatest trade center in the American colonies. Local historian Harry Kyriakodis will take us on a walk through the city's original port district, covering topics including Quaker settlers who first lived in caves along the Delaware River, pirates who trolled along the riverside, and the devastating yellow fever epidemic of 1793. The tour will then touch upon the waterfront's heyday as a maritime center and its later-twentieth century history, which saw much of the riverfront razed for highway purposes. The Penn's Landing zone includes many engineering, technological and historic attractions, such as the anchorage to the Benjamin Franklin Bridge, the High Pressure Water Pumping Station, and Elfreth's Alley. Pier 3 Condominium, the Race Street Pier, and Pier 19 (currently Dave & Busters) are also noteworthy for their engineering, technological and historic features, as are some ships encountered along the way. Penn's Landing has been in the news lately because funding to erect a \$225 million cap over I-95 and Delaware Avenue at Penn's Landing has been approved. This will, once again, dramatically change the city's central waterfront—making it more friendly for pedestrians rather than a gritty route for automobiles. Join Kyriakodis as he strolls Delaware Avenue and Front Street to learn the story of Philadelphia's lost waterfront.

Harry Kyriakodis is a historian and writer about Philadelphia, and has collected what is likely the largest private collection of books about the City of Brotherly Love—more than 2,800 titles, new and old. He is a founding/certified member of the Association of Philadelphia Tour Guides and gives walking tours and presentations on unique yet unappreciated parts of the city for various groups.

Special Interest Group Events

The **Albatrosses**, whose interests cover all things related to aviation and aerospace, will gather over Breakfast at **Sunday**. Those who wish to attend should grab their food first, then meet up with the group. The Albatrosses are also organizing a workshop on **Sunday** from 11:00 AM–1:00 PM.

To promote scholarship on Asian topics and to encourage historians from Asia to participate in our activities, SHOT members have organized the **Asia Network**. In Philadelphia, network members will meet over breakfast on **Saturday** at 7:00 AM. For more information on the SHOT Asia Network, visit <http://groups.google.com/group/SHOTsigAsia> or contact Honghong Tinn at hhtinn@gmail.com.

The SIG on **Computers, Information and Society** (SIGCIS) will gather over lunch on **Friday** at 12:30 PM (\$17.50). SIGCIS is also organizing a workshop on **Sunday** from 9:00 AM–5:00 PM, for US\$35 (buffet breakfast and lunch included). For more details about this workshop, please visit <http://www.sigcis.org>.

EDITH (Exploring Diversity in Technology's History) supports both scholars and scholarship currently underrepresented in the history of technology and SHOT. In Philadelphia, the group will meet over lunch on **Friday** at 12:30 PM (\$17.50). EDITH is also organizing in collaboration with WITH a Lightning Session on **Sunday** from 11:00 AM–1:00 PM.

WITH (Women in Technological History) will gather over lunch on **Saturday** at 12:30 PM (\$17.50). WITH is also organizing in collaboration with EDITH a Lightning Session on **Sunday** from 11:00 AM–1:00 PM.

Envirotech will have a breakfast meeting on **Saturday**.

The **Mercurians**--the Communications Technology Interest Group--and the **Jovians**--the Electrical History Interest Group--will be holding their annual luncheon meeting at the 2nd Story Brewing Company, 117 Chestnut St. The group will leave from the main lobby of the hotel, gathering at noon on Saturday. There will be the usual agenda and conversation. If you are in a session that ends at 12:30, please walk directly to the restaurant! I ask interested members to contact me, Andrew Butrica (abutrica@earthlink.net), because a group reservation probably will need to be made for us.

The **Prometheans** (SHOT's Engineering SIG) will hold a breakfast meeting at the conference hotel (self-pay) on **Sunday** from 8:30am-9:30am, followed by a work-in-progress session and open discussions about the Prometheans and the International Network for Engineering Studies (INES) from 9:30 – 9:30 AM in the Cook Room A). Please contact the organizer, Atsushi Akera at akeraa@rpi.edu for additional details.

SMiTnG, the Military Technology Interest Group will be holding a **Sunday** lunchtime meeting at 2nd Story Brewing Company, 117 Chestnut St. The group will leave from the main lobby of the hotel, gathering 12o cloc. No agenda, just conversation. Please contact Hacker, Bart [Hackerb@si.edu], for reservations sake.

ECIG, SHOT's **Early Career SIG**, will gather for a lunch meeting on **Friday** from 12.30 PM–14:00 PM. Those who wish to attend should grab their food first, then meet up with the group.

Session Schedule

Thursday, October 26, 2017

3:00 – 4:30 PM

1: Engineers and Democracy

Flower Room

Organizer and Chair: **Andrew Butrica** (Independent Scholar)

Sadegh Foghani (University of South Carolina): *Engineers as Politicians and Politicians as Engineers in Twentieth-Century Iran*

Eric Hardy (Loyola University): *Engineers on the Edge: Environmental Regulation and the Challenges of Managing Urban Infrastructure 1960-2000*

James Risk (University of South Carolina): *Promoting Fresnel in America: The Army Corps of Topographical Engineers and the De-democratization of Science in the Nineteenth-Century United States*

Annie Tomlinson (Cornell University): *How to Sell a Neutron Bomb: Captain John Morse and Technopolitical Network-Building, 1958-64*

2: The Politics of Material Objects

Shippen Room

Chair: **Rachel Maines** (Rachel Maines Inc.)

Aditya Kiran Kakati (Princeton University): *The Moral of Morale: Encounters of Weapons, Technologies and Knowledge in Imperial Frontiers during the Second World War on the India-Burma Borderworlds*

Phoebe Sengers (Cornell University): *How to Make the Future of Fish*

Ariel Rogers (Northwestern University): *The Screen and the Apparatus: Synchronization across Media*

3: Energy in History: Some Thoughts on Causation and Contingency

Whitpen Room

Organizer: **Jack Brown** (University of Virginia)

Chair: **Richard Hirsh** (Virginia Tech)

Commentator: **Ann Norton Greene** (University of Pennsylvania)

Jack Brown (University of Virginia): *Reckoning with Energy to Recast US History*

Jeffrey Manuel (Southern Illinois University): *The Original Bridge Fuel: Camphene Lighting in Antebellum America and the Origins of the Oil and Gas Energy Regime*

David Hecht (Bowdoin University): *Rhetoric, Reality and Nuclear Power*

5:30 – 7:00 PM

Welcome and Plenary Session Technology, Democracy and Participation

Chemical Heritage Foundation

Organizers: **The Local Organizing Committee**

Chair: **Babak Ashrafi** (Consortium for the HSTM, Philadelphia)

Donna Riley (Virginia Tech)

Nathan Ensmenger (Indiana University)

7:00 – 9:00 PM

Opening Reception

Chemical Heritage Foundation

Friday, October 27, 2017

8.00 – 10.00 AM

4: Graduate Students Workshop I

Ballroom B

Organizer: **Jennifer Alexander** (University of Minnesota)

5: Technological Unemployment and the Future of Work: This Time Is Different – Or Is it?

Ballroom E1

Organizer: **Jonathan Coopersmith** (Texas A&M)

Chair: **Daryl Hafter** (Eastern Michigan University)

Janet Abbate (VPI): *Diversity and the Future of Work: How Can we Make It Different This Time?*

Yakup Bektas (Tokyo Institute of Technology): *The Luddites: From Machine Breakers to Dreamy Romantics*

Amy Bix (Iowa State University): *Do Robots Own the Future? A History-Centered Examination of Technological Unemployment and Economic Uncertainties*

Louis Hyman (Cornell University): *This Time is Not Different: The Politics of Productivity*

Philip Scranton (Rutgers University): *The Future of Work: Good Jobs for All?*

Chris Rasmussen (Fairleigh Dickinson University): *Men Or Robots?*

6: Beyond Borders: Aviation History from a Global View

Claypoole Room

Organizer: **Jenifer Van Vleck** (Smithsonian Institution)

Chair and Commentator: **James Gormly** (Washington & Jefferson College)

Steven Harris (University of Mary Washington): *Cold War Friendly Skies: Pan Am, Aeroflot and the Political Economy of Detente*

Christopher Zakroff (Georgia Institute of Technology): *The Global Failure of Supersonic Air Travel: Insight from the Soviet Union*

Sean Seyer (University of Kansas): *A Monroe Doctrine of the Air? The United States and the 1928 Havana Convention*

7: Where is the Sex in the History of Technology?

Shippen Room

Organizer: **Donna Drucker** (TU Darmstadt)

Chair: **Marie Hicks** (University of Wisconsin-Madison)

Commentator: **Heather Munro Prescott** (Central Connecticut State University)

Donna Drucker (TU Darmstadt): *Form and Reform: Technology and Women's Sexuality in Late Nineteenth-Century American Medicine*

Hallie Lieberman (Georgia Institute of Technology): *State of the Sex Toy Studies Field*

Katherine Parkin (Monmouth University): *Sexuality and the Automobile: A Cultural Historiography*

8: Maintaining Natures

Reynolds Room

Organizers: **Alice Clifton** (Georgia Institute of Technology) and **Nicole Welk-Joerger** (University of Pennsylvania)

Chair: **David Nye** (University of Southern Denmark)

Commentator: **Thomas Zeller** (University of Maryland)

Angelica Agredo Montealegre (King's College London): *Urgent Roads for the 'Unknown': The Roads of the Algerian Sahara in the 1950s*

Alice Clifton (Georgia Institute of Technology) [**Robinson Prize Candidate**]: *Front-Line Fowl: Messenger Pigeons as Communications Technology in the United States Army*

Slawomir Lotysz (Polish Academy of Sciences): *Hydro or Social Engineering? The Question of Draining the Polesie Marshes in Interwar Poland*

Nicole Welk-Joerge (University of Pennsylvania): *Measuring Maintenance: Cow Condition and Calorimeters in America's Early 20th Century*

9: Computers and Futures: Expectations of a Future with Computers in Eight Countries 1945-75

Flower Room

Organizer: **Dick van Lente** (Erasmus University, Rotterdam)

Chair: **Andrew Russell** (SUNY Polytechnic Institute)

Commentator: **Thomas Misa** (University of Minnesota)

Janet Toland (Victoria University, Wellington New Zealand): *The Social Impact of Computers in New Zealand, Anticipations and Concerns 1968-78*

Mirosław Sikora (Institute of National Remembrance Katowice, Poland): *Imagining the Future Role of Computers in the Shadow of Communism: The Polish People's Republic from the Early 50s to the Early 70s of the 20th Century*

Barbara Walker (University of Nevada, Reno): *Too Many Mathematicians? How the Soviets Lost the Cold War Computer Hardware Competition but (maybe) are Winning the Hacking War*

Dick van Lente (Erasmus University, Rotterdam): *Society Transformed by Computers: The Netherlands in the 1950s and 60s*

10: Infrastructures of Maintenance: Animals, Regulations and Expertise

Cook Room

Organizer: **Benjamin Wollet** (University of Delaware)

Chair: **Ann Greene** (University of Pennsylvania)

Tasha Rijke-Epstein (University of Michigan): *Maintaining Life: Managing Geographies of Excess in an African City 1890s-1940s*

Facundo Martin (Universidad Nacional de Cuyo) and **Mark Healey** (University of Connecticut): *The Faltering of the Hydraulic Mission: Technology and the Limits of Irrigation in Cuyo, Argentina 1960-90*

Eira Tansey (University of Cincinnati Libraries and Hillel Arnold, Rockefeller Archive Center): *For Good Measure: The Role of Regulatory Records in Environmental Maintenance*

Benjamin Wollet (University of Delaware): *Maintaining Trade, Technology and Ecosystems along the US-Mexico Border 1992-2004*

11: The Sky's the Limit: Alternative and Ephemeral Effluence in Transboundary Technological Systems

Ballroom A1

Organizer: **Lisa Ruth Rand** (University of Wisconsin-Madison)

Chair: **Sabine Höhler** (KTH Royal Institute of Technology Stockholm)

Commentator: **Max Liboiron** (Memorial University of Newfoundland)

Sara Pritchard (Cornell University): *Seeing Skyglow: Materializing Artificial Light at Night at the US National Park Service*

Nina Wormbs (KTH Royal Institute of Technology): *Radio Pollution: From Sparks to White Spots*

Jennifer Hsieh (Stanford University): *Boundary Crossings of Sound and Vibration: Low Frequency Noise Regulations in Taipei, Taiwan*

Lisa Ruth Rand (University of Wisconsin-Madison): *'Allow Equitable Access to this Orbit': Resistance to the Technological Colonization of Geosynchronous Space 1972-80*

12: 'The Measure of Men': Human-Machine Encounters in East Asia's Long Twentieth Century

Ballroom A2

Organizer: **Victor Seow** (Harvard University)

Chair: **Francesca Bray** (University of Edinburgh)

Commentator: **Hong-Hong Tinn** (Earlham College)

Victor Seow (Harvard University): *Engines of Energy Extraction: Technology and Labor in Manchurian Coal Mining*

Hyungsub Choi (Seoul National University of Science and Technology): *'Farms Echoing with the Clamor of Machines': The Kyŏngun'gi and Rural Mechanization in South Korea*

Tae-Ho Kim (Chonbuk National University): *Searching for 'a Refrigerator for Koreans': The (Re)invention of the Kimchi Refrigerator in South Korea in the 1990s*

Chihyung Jeon (Korea Advanced Institute of Science and Technology): *Asian Fit for Asian Bodies: 3D Anthropometry and the Functionalization of Body Differences in East Asia*

13: Presidential Panel on Theorizing Human Agency and the Self: What Does/Can History Of Technology Contribute to the Humanities?

Ballroom E2

Organizer and Chair: **Martin Collins** (Smithsonian Institution)

Katherine Boyce-Jacino (Johns Hopkins University)
Christopher Otter (Ohio State University)
Amy Slaton (Drexel University)
Ashwini Tambe (University of Maryland)
Adelheid Voskuhl (University of Pennsylvania)

10:30 AM – 12:30 PM

14: Graduate Students Workshop II

Ballroom B

Organizer: Jennifer Alexander (University of Minnesota)

15: Presidential Roundtable: Thinking with Ann Johnson

Ballroom D

Organizer: Lee Vinsel (Virginia Tech)

Chair: Karen Rader (VCU)

David Brock (Computer History Museum): *Knowing Technology: Ann Johnson, Knowledge Communities and Historical Epistemology*

Alexandra Hui (Mississippi State University): *Beyond Disciplines: From Knowledge Communities to Mensch-Hood*

Allison Marsh (University of South Carolina): *Neurodiversity and Invisible Disabilities, Thinking About our Profession and our Students*

Patrick McCray (University of California Santa Barbara): *Seeking Closure: Ann Johnson on Emerging Technologies*

Timothy Minella (University of South Carolina): *Ann Johnson on Engineering and Natural History in Early America*

Cyrus Mody (Maastricht University): *Ann Asked, We Should Try to Answer: What if we Wrote the History of Science from the Perspective of Applied Science?*

Lee Vinsel (Virginia Tech): *It's Hip to be Square: How Ann Johnson Showed us a Way beyond Social Construction*

Adelheid Voskuhl (University of Pennsylvania): *Aren't we all, deep down, Closeted Philosophers? Ann Johnson's Suggestions and Concerns about the Place of Philosophy in HPS, STS, Engineering Studies and Contemporary Universities*

16: Technologies, Bodies and the Self

Ballroom E1

Chair and Commentator: Ronald Kline (Cornell University)

Laura Puaca (Christopher Newport University): *Gender, Technology and Disability: The Creation of Assistive Devices for Disabled Homemakers in the Post-World War II US*

David Foord (St Thomas University): *Hands across Borders during the Cold War: Making Bionic Upper Limbs in America, Canada, Germany, Italy, UK and USSR from 1945-89*

Denise Pilato (Eastern Michigan University): *A Patented Self*

17: Conceptual History Meets History of Concepts: Rethinking Technology, Innovation and Applied Science

Ballroom E2

Organizer: **Eric Schatzberg** (Georgia Institute of Technology)

Chair: **Philip Scranton** (Rutgers University)

Benoit Godin (INRS): *Technological Change: The Study of a Transdiscursive Object*

Robert Bud (Science Museum London): *Defining Technology through the Instructions of Training*

Eric Schatzberg (University of Wisconsin-Madison): *Critiquing the Critiques: Public Discourse about the Technology during the Long 1960s*

Raymond Laureano-Ortiz (CEAPRC - Centro de Estudios Avanzados de Puerto Rico y el Caribe): *History of Puerto Rico's Science & Technology Innovation Policy as Part of the Island's Economic Development Efforts*

18: International Scholars

Ballroom A1

Organizer: **Jenny Leigh Smith** (Hong Kong University of Science and Technology)

Chair: **Adam Lucas** (University of Wollongong, Australia)

Waqar Zaidi (Lahore University of Management Sciences)

Edison Renato Silva (Universidade Federal do Rio de Janeiro)

Yang Haiyan (Peking University)

Marta Macedo (Institute of Social Sciences of the University of Lisbon)

Zhang Zhuihui (Institute for History of Natural Sciences, Chinese Academy of Sciences)

19: Electrifying the World: Post-Colonial Narratives in Electrification

Shippin Room

Organizer: **George Wilkenfeld** (George Wilkenfeld and Associates)

Chair and Commentator: **George Wilkenfeld** (George Wilkenfeld and Associates)

George Wilkenfeld (George Wilkenfeld and Associates): *Municipal Pride versus State Power: Electrification in Colonial New South Wales and Federation Australia, 1890-1914*

Esra Bakkalbasioglu (University of Washington Seattle): *Politics of Electrification in the Dissident Regions: Electrification of the Eastern Provinces of Turkey in the 1930s*

Nathan Kapoor (University of Oklahoma): *'Left Far Behind': The Electrification of Reefton as a Model for Imperial Energy Transitions*

Srinivasa Rao (Bharathidasan University, India): *Electricity and Urbanization in the Madras Presidency 1895-1947*

20: Governance in the History of Information Technology: Law, Policy and Regulation

Reynolds Room

Organizer: **Gerardo Con Diaz** (University of California Davis)

Chair and Commentator: **Nathan Ensmenger** (Indiana University)

Gerardo Con Diaz (University of California Davis): *IBM and its Patent Portfolio: Antitrust and Intellectual Property Law in the History of Software 1956-69*

Devin Kennedy (Harvard University) [**Robinson Prize Candidate**]: *The Machine in the Market: Computing and Financial Techno-Regulation at the New York Stock Exchange 1963-75*

Meg Jones (Georgetown University): *A Right to a Human in the Loop: A Comparative Legal History of Automated Decision-Making and Personhood from Data Banks to Algorithms*

Rebecca Slayton (Cornell University): *Governing by Numbers: Metrics and the Irreducible Uncertainties of Cybersecurity*

21: Presidential Roundtable on Method and Scale in the Global History of Technology

Cook Room

Organizer: **Aleksandra Kobiljski**, (CNRS France)

Chair: **Francesca Bray** (University of Edinburgh)

Francesca Bray (University of Edinburgh)

Aleksandra Kobiljski (CNRS France)

Lissa Roberts (University of Twente)

Giorgio Riello (University of Warwick)

Mikael Hard (Technical University of Darmstadt)

22: Participation and Barriers to Participation in the Development of Industrialized Mining

Flower Room

Organizer: **Fredric Quivik** (Michigan Technological University)

Chair: **William Storey** (Millsaps College)

Commentator: **Sarah Grossman**

Fredric Quivik (Michigan Technological University): *The Anaconda Company and the Deer Lodge Valley Farmers: Metal Mining and a Failed Legislative Effort in 1903 to Control Industrialization's Environmental Impacts*

Eric Nystrom (Arizona State University): *Beyond Butte: Anaconda Copper, Geological Exploration and the Creation of a Worldwide Mining Firm*

Mark Hendrickson (University of California San Diego): *Exporting Expertise and Capital: American Mining Engineers and Foreign Direct Investment in the Chilean Copper Mining Industry 1894-1930*

Bode Morin (Eckley Miners Village): *Reaction to Deindustrialization on the Anthracite Landscape*

23: Trans-Global South Conversation on the Concept of 'Technology'

Ballroom A2

Organizers: **Clapperton Mavhunga** (MIT and Projit Mukharji, University of Pennsylvania)

Clapperton Chakanetsa Mavhunga (MIT)

Projit Mukharji (University of Pennsylvania)

Pablo Gomez (University of Wisconsin)

Gabriela Soto-Laveaga (Harvard University)

Kathryn de Luna (Georgetown University)

Carla Nappi (University of British Columbia)
Geri Augusto (Brown University)
Robyn d'Avignon (NYU)
Marwa Elshakry (Columbia University)

12.30 – 2.00 pm

Commemorative Event for Ann Johnson

Ballroom D

Organizer: **Lee Vinsel** (Virginia Tech)

Grab the Mike and tell us about your work in five minutes

Cook Room

Organizer: **John Krige** (Georgia Institute of Technology)

The Road from Uppsala: 25 Years of SHOT's Internationalization

Reynolds Room

Organizers: **Francesca Bray** (University of Edinburgh) and **Mats Fridlund** (Aalto University)

2.00 – 3.30 PM

24: Technologies Derived From Conflict

Ballroom A1

Chair and Commentator: **Edward Jones-Imhotep** (York University)

Michael Laurentius (York University) [**Robinson Prize Candidate**]: *North of Modernity: Pragmatism and the DEW Line*

Daniel Volmar (Harvard University) [**Robinson Prize Candidate**]: *The Missile, The Forest and The Garbage Can: Reliable Design and Rational Decision-Making in the Minuteman Program*

Charles Berret (Columbia University): *Collecting Randomness for the Vernam System: The Cryptographic Use of Noise at Bell Labs, 1917-45*

25: Communication and Technologies

Claypoole Room

Chair: **Mara Mills** (New York University)

Commentator: **Ramesh Subramanian** (Quinnipiac University, Connecticut)

Po-Jen Bono Shih (Virginia Polytechnic Institute and State University): *Opening Up the Internet and Finding It Discriminatory, The Public Discourse on Network Neutrality in the US*

Mette Simonsen Abildgaard (Aalborg Universitet) and **Lee Humphreys** (Cornell University): *Don't Sit Around and Blab Your Mouth: The Changing Social Structures of Family Life Seen Through Accounting Practices of 20th Century Landline Telephony in Denmark*

26: Cold War Technologies

Ballroom A2

Chair and Commentator: **John Krige** (Georgia Institute of Technology)

Michael Hankins (Kansas State University) [**Robinson Prize Candidate**]: *Rebuilding the Knights of the Air: The Cultural Origins of Fourth Generation Fighter Aircraft*

Ekaterina Babintseva (University of Pennsylvania): *Trading PLATO: US-Soviet Cooperation in Computer-Based Education*

Thomas Lassman (Smithsonian National Air and Space Museum and Historical Office, Office of the Secretary of Defense): *Weapons Acquisition in the 1980s U.S. Army: A New Perspective on the History of the Reagan-Era Defense Buildup*

27: Technology in the Anthropocene Roundtable Discussion

Ballroom B

Organizer and Chair: **Scott Knowles** (Drexel University)

Scott Knowles and Students

28: Grassroots Motorsports

Reynolds Room

Organizer: **John Alic** (Independent Scholar)

Chair: **Andrew Russell** (SUNY Polytechnic Institute)

David Lucsko (Auburn University): *It's Out in the Garage: The Culture and Technology of Street-Based Motorsports*

Alison Kreitzer (University of Delaware): *The Mighty Midget: Grassroots Open-Wheel Racing*

Norman Mayersohn: *Unlikely Innovators: Motorsport Pioneers Imprisoned in WWII for Japanese Ancestry*

Jeremy Kinney (National Air and Space Museum, Smithsonian Institution): *High Class and Grassroots: Sports Cars in American Automotive Culture*

John Alic (Consultant): *Wrenching and Racing in the 1960s*

29: Problematizing the Pipeline: Understanding Disability/Ability in STEM

Ballroom E1

Organizer: **Jessica Martucci** (Chemical Heritage Foundation)

Chair: **Jody Roberts** (Chemical Heritage Foundation)

Commentator: **David Caruso** (Chemical Heritage Foundation)

Amy Slaton (Drexel University): *Making a Difference: Some Challenges for Historical Studies of Disability and Technology*

Jessica Martucci (Chemical Heritage Foundation): *'Everyone Wanted One Just Like Mine': Questioning Assumptions about Adaptive Technology and Dis-/ability in the Lab*

Kristoffer Whitney (Rochester Institute of Technology): *Beyond Accessible Design: NTID, DeafSpace and the Construction of Sociotechnical Spaces*

30: Bridge and Curb Chain: The Impacts of Technology and Knowledge in the Relationship between the China and Tributary Countries during Ming and Qing

Ballroom E2

Organizer: **Yuyu Dong** (Shanghai Jiao Tong University)

Chair: **Suzanne Moon** (University of Oklahoma)

Commentator: **Sa Rina** (Shanghai Jiao Tong University)

Yuyu Dong (Shanghai Jiao Tong University): *Presenting Tribute, Pacification Policy and Spreading of Technology: Overseas Students' Contribution in Fujian to Transmission of Timing Technology by Water Clock and its Effect on Ryukyu from the 17th to 18th Century*
Yuzhen Guang (University of Science and Technology in China): *Reverse the Positions: The Conflict of Measuring Technology between East and West during the Geodesic Survey to Korea in the 18th Century*
Jing Zhu (University of Edinburgh): *Authenticating 'Human Science' in late Imperial China: the Case of Miao Albums*

31: History of AI and Its Discontents

Flower Room

Organizer: **Colin Garvey** (RPI)

Chair and Commentator: **Thomas Haigh** (University of Wisconsin)

Youjung Shin (KAIST) [**Robinson Prize Candidate**]: *'The Brain and the Computer: the meaning of Hanguk for AI researchers in South Korea in the late 1980s'*

Colin Garvey(RPI): *The Evolution of AI Risk in America, 1956-96*

Kira Lussier (University of Toronto): *Intuition, Automation and Corporations: Debates over Artificial Intelligence in Corporate America, 1970-90*

32: Nuclear Science and Engineering in the Michigan Memorial-Phoenix Project

Cook Room

Organizer: **Joseph Martin** (Consortium HSTM)

Chair and Commentator: **Audra Wolfe** (The Outside Reader)

Joseph Martin (Consortium HSTM): *The Phoenix Project at the Science-Industry Nexus*

David Munns (Rachel Carson Center for Environment and Society, LMU Munich/CUNY): *'Civilizing the Atom': Training Nuclear Engineers in Michigan*

Gisela Mateos (UNAM) and **Edna Suárez-Díaz** (UNAM): *'A Country Worthy of Attention': Mexican Students at the Phoenix Project*

33: The Hidden Material Histories of Data as Sites of Epistemic Virtue

Bromley Room

Organizer: **Aaron Plasek**, (Columbia University)

Chair: **Thomas Misa** (University of Minnesota)

Caroline Jack (Data and Society): *'Our Commercial Babies': Lotus Marketplace and Visions of Consumer Intimacy*

Andi Dixon (Columbia University): *'Fusion Centers and Intelligence Sharing: A Match Made in Heaven or Hell?'*

Aaron Plasek (Columbia University): *Constructing Words: Material Computing Devices, 'Tractable' Problems and the Origins of the Belief in the 'Unreasonable Effectiveness of Data'*

34: Tracing Tracks, Monitoring Flows in Logistics Environments

Shippen Room

Organizer: **Felix Mauch** (TU Munich)

Chair: **Adelheid Voskuhl** (University of Pennsylvania)
Commentator: **Mats Fridlund** (Aalto University, Finland)

Felix Mauch (TU Munich): *Knowing the Land – Territorialism and the Production of Logistical Space*

Joe Lupton (Georgia Institute of Technology): *Origins and Evolution of the 3PL in International Transportation, 1960-2008*

35: Work and Use in the Pre-Industrial Textile Industry

External Room: *The Costume and Textiles Study Room, The Dorrance H. Hamilton Center for Costume and Textiles, Philadelphia Museum of Art, which is located on the 2nd Floor of the Perelman Building, 2525 Pennsylvania Ave at Fairmount Avenue (N. 25th Street). For directions see in the back of this program.*

Organizers: **Sarah Lowengard** (The Cooper Union and Daryl Hafter, Eastern Michigan University)

Chair and Commentator: **Daryl Hafter** (Eastern Michigan University)

Sarah Lowengard (The Cooper Union): *Dye Technologies, Technology Transfer and New Markets in Eighteenth Century Europe*

Elena Phipps (Independent Scholar): *Silk in Colonial Mexico*

Linda Welters (University of Rhode Island): *American Homespun*

36: Technologies of Global Health in Africa

Ballroom D

Organizer: **Heidi Morefield** (Johns Hopkins University)

Chair: **Anne Pollock** (Georgia Institute of Technology)

Kirsten Moore-Sheeley (Johns Hopkins University): *Making Insecticide-Treated Nets appropriate for Africa in the Late Twentieth and Early Twenty-First Centuries*

Mari Webel (University of Pittsburgh): *Research, Development and the Emergence of the 'NTDs': Cases from Post-Colonial Africa*

Heidi Morefield (Johns Hopkins University) [**Robinson Prize Candidate**]: *Appropriate for Whom? Appropriate Technology and International Health in South Africa and Zimbabwe*

Anne Pollock (Georgia Institute of Technology): *In the Shadows of the Dynamite Factory: Material and Social Legacies of Extraction for Pharmaceuticals in South Africa*

4:00 – 5:30 PM

37: Playing with Technology: Fun and Games for Citizens and Consumers

Ballroom A1

Organizers: **Jesse Smith** (University of Pennsylvania) and **Ingrid Ockert** (Princeton University)

Chair and Commentator: **Roger Turner** (Independent Scholar)

Angela Cope (York University): *Summertime and the Living is Plastic: PVC and the Creation of a Summer Toy Industry*

Ingrid Ockert (Princeton University): *As Seen on TV: Science, Technology and the Television Set*

Jesse Smith (University of Pennsylvania): *Carnival Cruise Line's 'Fun Ships': Transforming Technologies of Transportation into Technologies of Fun*

Artemis Yagou (Deutsches Museum): *Technology, Play, Participation: Construction Toys and the Shaping of Ideal Citizens (19th and 20th centuries)*

38: Democratizing the Technologies of Pop Music: Songs in the Key of Gender, Fandom and Digital Sampling

Ballroom A2

Organizer: **Asif Siddiqi** (Fordham University)

Chair: **Patrick McCray** (University of California Santa Barbara)

Susan Schmidt Horning (St John's University): *Rebel Rousers: Girls Playing with Sound and Technology in the 1960s* (

Louie Dean Valencia-Garcia (Texas State University): *MMMBop: From Analogue to Digital, Oklahoma to the Internet*

Asif Siddiqi (Fordham University): *Digital Sampling as History of Technology: MIA's 'Paper Planes' and the Sonic Quotations of Globalized Pop*

39: Men-Machine Relationships in the 20th Century: How Technology Mediated Concepts, Practices and Models of the Human

Reynolds Room

Organizer: **Martina Hessler** (Helmut-Schmidt University, Hamburg)

Chair and Commentator: **Oliver Müller** (University of Freiburg // BrainLinks-BrainTools)

Max Gawlich (University of Heidelberg): *Nothing More Than Button Pushing? Men-Machine Relations in Psychiatric Therapy in the middle of the 20th Century*

Kevin Liggieri (University of Bochum): *German Psychotechnics and the Men-Machine Adaptions*

Martina Hessler (Helmut-Schmidt University, Hamburg): *Thinking Machines? How the Computer Changed Concepts and the Practices of Playing Chess*

40: Fear of Technology – Technology of Fear

Shippen Room

(non-traditional, interdisciplinary session)

Organizer: **Karena Kalmbach** (TU Eindhoven)

Chair and Commentator: **Ariel Rogers** (Northwestern University)

Karena Kalmbach (TU Eindhoven, History): *The co-creation and entanglement of fear and technology – perspectives for historical research*

Andreas Spahn (TU Eindhoven, Philosophy): *Ethics of technology and fear – a philosophical perspective*

Ginevra Sanvitale (TU Eindhoven, Anthropology): *From Computerphobia to Cyberpunk: The role of fear in Personal Computer acceptance and use*

Katharina Loew (University of Massachusetts Boston, Cinema Studies): *Between Technophobia and Technophilia: Metropolis (1927)*

41: Nuclear Danger

Flower Room

Chair: **Stefan Esselborn** (Technische Universität Munich)

Andrew McGee (Carnegie Mellon University): *Computing's Promise, Bomb's Peril: The Culpeper Computing Switch, the Federal Reserve's Nuclear Bunker and Concomitant Narratives of Technological Transformation of American Society, 1969-89*

Thomas Kelsey (King's College London) [**Robinson Prize Candidate**]: *The Peculiar Expense of the British Atom: The Internal Critics of the British Nuclear Power Programme, 1957-83*

Andrei Stsiapanau (European Humanities University): *An Undefined Nuclear Legacy: How to Classify and Manage the Nuclear Waste in Modern Russia?*

42: History of AI and Its Discontents II

Cook Room

Organizer and Chair: **Colin Garvey** (RPI)

Commentator: **Sepanie A. Dick** (University of Pennsylvania)

Mi-seon Maeng (Seoul National University): *AlphaGo Shock and AI's Effect on Korean Society*

Shreeharsh Kelkar (University of California Berkeley): *The Unreasonable Success of Intelligent Tutoring Systems*

Andrew Iliadis (Temple University): *Upper Level Ontologies: The Contested Languages of Artificial Intelligence*

43: Technological Innovation and the Diffusion of Techniques and Expertise in Britain, France and America in the Eighteenth and Nineteenth Centuries

Ballroom E1

Organizer: **Adam Lucas** (University of Wollongong, Australia)

Chair and Commentator: **Marie Thébaud-Sorger** (CNRS France)

Jérôme Baudry (University of Geneva): *Judging Technology: The French Académie des Sciences and the Examination of Inventions, 1750-1835*

Adam Lucas (University of Wollongong, Australia): *Technological Innovation and Diffusion in the British Coal Mining Industry, 1825-95*

Steven Walton (Michigan Technological University): *For the Public Good? The Role of the State in the Promotion of Technology in the Long Nineteenth Century*

44: The Changing Faces of 'Technoscience': Chemistry and Industry from the Eighteenth Century until the Twentieth Century

Ballroom E2

Organizer: **Joris Mercelis** (Johns Hopkins University)

Chair and Commentator: **Ellan Spero** (MIT)

Leslie Tomory (McGill University, Montreal): *Chemical Knowledge and the 18th Century Chemical Industry*

Joris Mercelis (Johns Hopkins University): *Beyond Synthetic Organic Chemistry: Photographic and Electrochemical Technoscience c. 1880-1914*

Spring Greeney (Beckman Center for the History of Chemistry, Chemical Heritage Foundation); *'The Question we Told Our Correspondents to Ask Washerwomen': American Consumers and the Construction of Industrial Expertise, 1890-1950*

45: The Genres of the History of Technology

Ballroom D

Organizer: **Jennifer Lieberman** (University of North Florida)

Chair: **Jennifer Lieberman** (University of North Florida)

Jennifer Lieberman (University of North Florida)

Clifford Siskin (New York University)

Rosalind Williams (MIT)

Chanda Prescod-Weinstein (University of Washington)

Suzanne Moon (University of Oklahoma)

46: Standardizing Taste: Techniques to Tame Market Judgement by Objectifying the Senses

Bromley Room

Organizer: **Xaq Frohlich** (Auburn University)

Chair and Commentator: **Roger Horowitz** (Hagley Library and Museum)

Xaq Frohlich (Auburn University): *An Age of Standards: The Rise of the FDA's Food 'Standards of Identity' System, 1930s-50s*

Galina Shyndriayeva (University of Tokyo): *Standardizing 'Natural' Scents: Contested Expertise in Perfume Materials in the Early Twentieth Century*

Feng-en Tu (Harvard University): *Standardizing Freshness: Peppermint, Toothpaste and the Manufacturing of Cleanliness in Modern Japan*

6:30 – 8:30 PM

Da Vinci Lecture and Hors d'Oeuvres

Ballroom B

Saturday, October 28, 2017

08.00 – 10.00 AM

47: Presenting History of Technology in 21st Century Exhibits at The National Air and Space Museum

Ballroom A1

Organizer: **Michael Neufeld** (National Air and Space Museum, Smithsonian Institution)

Chair: **Deborah Douglas** (MIT Museum)

Commentator: **Emily Gibson** (National Science Foundation)

Tom Crouch (National Air and Space Museum, Smithsonian Institution): *Reinventing the Early Flight Gallery*

Rober van der Linden (National Air and Space Museum, Smithsonian Institution): *America Takes Flight: The Democratization of Air Travel*

Dorothy Cochrane (National Air and Space Museum, Smithsonian Institution): *We All Fly: General Aviation and the Relevance of Flight*

Michael Neufeld (National Air and Space Museum, Smithsonian Institution): *Destination Moon: Lunar Flight Technology from Ancient Dreams to Contemporary Exploration*

48: Eclectic Makers of Industrial Transitions in the Long Nineteenth Century, 1790-1922 *Ballroom A2*

Organizer: **Pamela Edwards** (Independent Scholar)

Chair: **Pamela Edwards** (Independent Scholar)

Commentator: **Ruth Cowan** (University of Pennsylvania)

This panel is sponsored by EDITH

Pamela Edwards (Independent Scholar): *Looking for Ladies and Finding Lads: The Diverse Makers of Mid-Atlantic Appalachia, 1790-1870*

Dianne Roman (Virginia Commonwealth University): *From Glover to a Women's Typographical Union, 19th Century Women Continually Venture into the Printing Trade*

Laura Scherling (Teachers College, Columbia University): *Design Utopia or Design Fiction? Reassessing the History of Design Education and Industrialization in the US and UK*

Sohee Koo (Teachers College, Columbia University): *Breathing within the History: The Ever Evolving 'Making' in the Art Studio at Teachers College*

49: Fostering Postwar Innovation: A Collection of Schemes

Reynolds Room

Organizer: **Eric Hintz** (Smithsonian Institution)

Chair and Commentator: **Kathryn Steen** (Drexel University)

Samuel Franklin (Brown University) [**Robinson Prize Candidate**]: *Between Novelty and Progress: Corporate Innovation in a Consumer Age*

Matthew Wisnioski (Virginia Tech): *Incubating Entrepreneurs: University Innovation Centers and the Making of Innovators in the 1970s*

Eric Hintz (Smithsonian Institution): *The Return of the Lone Inventor*

Sangwoon Yoo (Seoul National University) [**Robinson Prize Candidate**]: *Innovation in Practice: The 'Technology Drive Policy' and the 4M DRAM R&D Consortium in the 1980s and 1990s, Korea*

50: Data Management: A Mandated Opportunity

Flower Room

Organizer: **Jonathan Coopersmith** (Texas A&M University)

Chair and commentator: **Jonathan Coopersmith** (Texas A&M University)

Fred Konz (National Science Foundation): *Data Management and Sharing*

Megan Finn (University of Washington): *Adventures in Data Management: Challenges and Key Developments in Collaborative Research*

Kim Fortun (RPI): *Making the Invisible Visible: Data Management and the Historian*

Alex Wellerstein (Stevens Institute of Technology): *What Tools Do Historians Need to Address the Data Gap?*

51: Natural Resources, Technology and Politics in the Twentieth Century

Cook Room

Organizer: **Hanna Vikström** (KTH Royal Institute of Technology)

Chair and Commentator: **Roger Eardley-Pryor** (Chemical Heritage Foundation)

Hanna Vikström (KTH Royal Institute of Technology): *Is There a Supply Crisis? Sweden's Critical Metals, 1917-2014*

Karl Bruno (KTH Royal Institute of Technology): *Swedish Mineral Resource Ideologies and Politics in the Third World: The Case of LAMCO in Liberia, 1955-80*

Roberto Cantoni (CERI Sciences Po, France): *The Rush to the North Sea: Oil Security in Britain during the Cold War*

Ole Sparenberg (Saarland University, Germany): *Deep Sea Mining (c. 1965-82) or Why the Ocean Floor has not become a Space for Resource Extraction (Yet)*

52: Engineering Education and Practice

Ballroom E1

Organizer: **Atsushi Akera** (RPI)

Chair: **Atsushi Akera** (RPI)

Commentator: **Jeff Schramm** (Missouri University of Science and Technology)

Mark Clark (Oregon Institute of Technology): *Writing the History of Engineering Technology Education at the Oregon Institute of Technology*

Amy Bix (Iowa State University): *Floating a Concrete Canoe: The Growth of College Engineering Competitions as Professional Training, 1970-2017*

John Davis (Harvard University) [**Robinson Prize Candidate**]: *Reconstructing the Cape Fear: Re-engineering the Coast after the American Civil War*

53: The 'Failed' Tools of Empire: The Rejected and Unexpected Technological Innovations and Networks that Shaped the British Empire

Ballroom E2

Organizer: **Katie Streit** (University of Houston)

Chair and Commentator: **William Storey** (Millsaps College)

Daniel LeClair (Lone Star College, Texas) [**Robinson Prize Candidate**]: *'The Great Mass are Utterly Worthless': Ordnance Committees and the Invention Screening Process in Victorian Britain*

Aja Tolman (University of Oklahoma): *Coal, Steel and the British Raj: Geologists and Indian Independence, 1870-1910*

Katie Streit (University of Houston) [**Robinson Prize Candidate**]: *An Indian Road Revolution in Africa: The Expansion of Inter-Regional Automotive Transportation in Southern Tanzania*

54 Along the Margins: Prisons, Disabilities and Technological Knowledge-Making of the Social Periphery

Bromley Room

Organizer: **Beth Robertson** (Carleton University, Canada)

Chair: **Robert MacDougall** (University of Western Ontario)

Commentator: **Mara Mills** (New York University)

Aparna Nair (University of Oklahoma): *Troubling Modernity: Technologies for the Deaf in Colonial South Asia*

Beth Robertson (Carleton University, Canada): *'Rehabilitation Aids for the Blind': Disabling Technological Knowledges in Cold War Canada*

David Theodore (McGill University, Montreal): *Correctionetics: Prison Technology and the Carceral State*

Bess Williamson (School of the Art Institute of Chicago): *Designing from the Margins: Women as Producers of Disability Technologies in the mid 20th Century US*

55: The Republic of Plants: Plant Agency in the Movement of Crops

Shippin Room

Organizer: **Tiago Saraiva** (Drexel University)

Chair: **Francesca Bray** (University of Edinburgh)

Commentator: **Tiago Saraiva** (Drexel University)

Franziska Torma (Technische Universität München): *From Savior to Frankenstein: The Changing Crops of Corn in Germany, 1950s to 2000*

Timo Myllintaus (University of Turku, Finland): *Political Economy of Emergency Food: Class Conflict on Bark Bread during the Great Finnish Famine of the 1860s*

Maria do Mar Gago (University of Lisbon): *Standardizing Robusta: Coffee Beans, Agricultural Science and Colonial Angola*

Elena Kunadt (University of Wuppertal, Germany): *Corn Production with Atrazine, Atrazine's Use in the United States and West Germany, 1950-91*

56: Round Table on the BHC at SHOT: Beyond Firms and Machines

Ballroom D

Organizer: **Xaq Frohlich** (Auburn University, Erik Rau, Hagley Museum and Library and Jonathan Coopersmith, Texas A&M)

Hyungsub Choi (Seoul National University)

Barbara Hahn (Texas Tech)

Richard John (Columbia University)

Philip Scranton (Rutgers University)

Lee Vinsel (Virginia Tech)

JoAnne Yates (MIT)

10:30 AM – 12:30 PM

57: Safety Tested: (Dis)Proving Technical Safety in History I

Ballroom A1

Organizer: **Stefan Esselborn** (Technische Universität Munich)

Chair: **Nina Lerman** (Whitman College)

Commenator: **Karin Zachmann** (Technische Universität Munich)

Johnathan Puff (University of Michigan): *The Architecture of Fire Testing in 19th Century American Cities*

Arthur Daemmrich (Smithsonian Institution): *What About the Children? Chemical Testing Programs in the United States and European Union*

Christopher Neumaier (Zentrum für Zeithistorische Forschung Potsdam): *'Safe Enough' or Hazardous to Public Health? The Changing Classifications of Diesel Emissions in the USA and in Europe since the 1970s*

Renée Blackburn (MIT): *Slow Down and Live! The Postwar Focus on Safe Travel*

58: Big Power and the People: Electrification Projects and the Publics They Engage

Ballroom A2

Organizer: **Julie Cohn** (University of Houston)

Chair: **David Nye** (University of Southern Denmark)

Julie Cohn (University of Houston): *Electrification's Golden Spike: The 1967 Completion of North America's Power Grid*

Stephan Miescher (University of California Santa Barbara): *Ghana's Electric Dreams: Waiting for Light*

Anto Mohsin (Northwestern University in Qatar): *The Southeast Asian Power Grid*

Joseph Stromberg (San Jacinto College, Texas): *Destined to be Unsafe: Anti-Nuclear Activism at the South Texas Nuclear Project*

59: The Changing Realities of Democracy, Politics and Communication Technologies

Reynolds Room

Organizer: **Jonathan Coopersmith** (Texas A&M University)

Chair and Commentator: **Richard John** (Columbia University)

Commentator: **Richard John** (Columbia University)

Bo An (Yale University): *Self-Organization and Radical Networking: FidoNet in China (1995-98)*

Jonathan Coopersmith (Texas A&M University): *Forging the Fax: From Astroturf to 'Alternative Facts'*

Rosalind Donald (Columbia University): *Citizen Scientists, Political Animals: Lay Science in Political Debates*

Ramesh Subramanian (Quinnipiac University, Connecticut): *The Jallikattu Protests of Tamil Nadu: An Exercise in Reviving Cultural Heritage through Social Media*

60: Technical Environments and Envirotechniques

Flower Room

Organizer: **Etienne Benson** (University of Pennsylvania)

Chair: **Sara Pritchard** (Cornell University)

Commentator: **Nicholas Shapiro** (Chemical Heritage Foundation)

Leah Aronowsky (Harvard University): *Making Technology, Unmaking the Environment: Accounting for Ecosystems in the Modern Risk Society*

Etienne Benson (University of Pennsylvania): *Direct Experience and the Envirotechniques of Global Mega-Geomorphology*

61: Technology in the History of the Modern Middle East

Cook Room

Organizer: **Aleksandra Kobiljski** (CNRS France)

Chair: **Aleksandra Kobiljski** (CNRS France)

Commentators: **Suzanne Moon** (University of Oklahoma) and **Akhram**

Khater (International Journal of Middle East Studies)

Elizabeth Williams (Brown University): *Of Plows and Tractors*

Ahmad Shokr (Swarthmore College): *Decolonizing Infrastructure?*

Ziad Abu-Ris (Ohio University): *Popular Protests, Public Utilities*

Joseph Lombardo (The New School for Social Research, New York): *Dammed Rivers, Lost Souls*

62: History of Engineering Ideas, Values and Design

Ballroom E1

Organizer: **Amy Bix** (Iowa State University)

Chair and Commentator: **Jennifer Alexander** (University of Minnesota)

Julie Mark Cohen (Independent Scholar): *Causes and Consequences of Unrecognized and Misused Codified Knowledge*

Marie Kleine (Virginia Tech): *The Evolving Values of Justice in Engineering-for-Development*

John Alic (Independent Scholar): *Engineering Intangibles*

Simona Casonato and **Luca Reduzzi** (National Museum of Science and Technology Leonardo da Vinci, Milan): *Embedded Social Thought and Italian Computer Technologies: The Case of Olivetti's ELEA 9003*

63: The Republic of Plants: Plant Agency in the Movement of Croscapes II

Ballroom E2

Organizer: **Tiago Saraiva** (Drexel University)

Chair: **Francesca Bray** (University of Edinburgh)

Commentator: **Barbara Hahn** (Texas Tech)

Harro Maat (Wageningen University, Netherlands): *From India to the Guyanas: The Origins of Rice Production in British Guyana and Surinam*

Sam Smiley (Independent Scholar): *Ornamentalism: The Migrations and Translations of Japanese Knotweed*

Marta Macedo (University of Lisbon): *The Resistance of Nature: Imperial Imaginaries in the early 20th-Century in Sao Tome Islands*

Yuan Yi (Columbia University): *Rogue Species: The Cultivation of American Upland Cotton in Early Twentieth Century China*

64: Teaching the History of Technology to Non-History Majors

Ballroom B

Organizers: **Alan Meyer** and **Monique Laney** (Auburn University)

Chair: **Monique Laney** (Auburn University)

Atsushi Akeru (RPI)

Richard Hirsh (Virginia Tech)

Hugh Gorman (Michigan Tech)

Alan Meyer (Auburn University)

Merritt Roe Smith (MIT)

Steve Usselman (Georgia Institute of Technology)

65: Computers and Futures: Expectations of a Future with Computers in Eight Countries, 1945-75 II

Bromley Room

Organizer: **Dick van Lente** (Erasmus University, Rotterdam)

Chair: **Andrew Russell** (SUNY Polytechnic Institute)

Commentator: **James Cortada** (University of Minnesota)

Margarita Boenig-Liptsin (Harvard University): *The Information Society and How to Live In It according to the United States, France and the Soviet Union*

Ksenia Tatarchenko (Geneva University): *Man-Machine Dialogues in Image and Print: Circulating, Interpreting and Appropriating Representations of the Computer across the Iron Curtain*

David Schumde (Stevens Institute of Technology): *Business Machines in the Mainframe Era: Making the Future Tangible*

Martin Schmitt (Center for Contemporary History, Potsdam) [**Robinson Prize Candidate**]: *Banking the Future and the Future of Banking: Why German Savings Banks in the East and West Entered the Digital Age*

66: Time Out of Joint

Shippen Room

Organizers: **Kathryn de Luna** (George Town University) and **Cyrus Mody** (Maastricht University)

Chair and Commentator: **Cyrus Mody** (Maastricht University)

Josh Grace (University of South Carolina): *(When) Was Post-Colonial Technological Nationhood Possible?: Tanzania, OPEC, and the Momentum of Material Absence*

Kathryn de Luna (Georgetown University): *Striking Technologies: A 5000-Year History of Pyrotechnology and Sparkle in Central Africa*

Pamela O. Long (Independent Scholar): *Against Teleological History of Technology: Methodological Considerations in Writing a History of Engineering in Late Sixteenth-Century Rome*

Alexandre Hocquet (LHSP Archives Poincaré, France and Frederic Wieber, LHSP Archives Poincaré, France): *Looking for Flame Wars*

67: Maintaining Natures II

Claypoole Room

Organizers: **Alice Clifton** (Georgia Institute of Technology) and **Nicole Welk-Joerger** (University of Pennsylvania)

Chair: **Lee Vinsel** (Virginia Tech)

Commentator: **Ann Greene** (University of Pennsylvania)

Katrin Boniface (University of California Riverside) [**Robinson Prize Candidate**]:

Manufacturing the Horse: Understandings of Inheritance in the Long 18th Century

Felicity McWilliams (King's College London): *Maintaining Tractors and Caring for Horses: Looking after Draught Power Technologies in Twentieth Century British Farming*

Sarah Mittlefehldt (Northern Michigan University): *Saving the Earth through the Power of the Sun: Solar Energy Advocacy and Opposition in the US since the 1950s*

Samantha Muka (University of Pennsylvania); *Maintaining Model Ecosystems in the Laboratory: Adey's Caribbean Reef Microcosm Tank*

12:30 – 2:00 PM

SHOT Business Meeting

Ballroom B

2:00 – 3:30 PM

68: Nuclear Civil Defense Studies: New Approaches and Directions

Ballroom A1

Organizer: **Sarah Robey** (Idaho State University)

Chair: **Mats Fridlund** (Aalto University, Finland)

Commentator: **Sarah Robey** (Idaho State University)

Katrin Heilmann (Peking University): *Chinese Civil Defence Education: China's Response to the Nuclear Threat, 1956-71*

Rachel Maines (Columbia University): *The Incombustible Meets the Unthinkable: Asbestos in Fallout Shelters in Cold War America*

Sarah Robey (Temple University): *Civil Defense and Scientific Expertise: Cultural Images and Authority*

69: Making and Buying the Natural: The Democratization of Back-to-Nature Experiences

Ballroom A2

Organizer: **Ai Hisano** (Harvard Business School)

Chair: **Kathryn Steen** (Drexel University)

Commentator: **Arwen Mohun** (University of Delaware)

Michael Kideckel (Columbia University) [**Robinson Prize Candidate**]: *The Most Natural Meal of the Day: Breakfast Cereal and the Return to Nature*

Rachel Gross (University of Wisconsin-Madison): *Buckskin Meets Buck Skin™: The Outdoor Industry and Marketing Improvements on Nature*

Ai Hisano (Harvard Business School): *Imagining the Color of Nature: The Florida Orange Industry and Color Management Practice, 1930s-50s*

70: Radio and the Public Sphere in Democracy and Dictatorship

Reynolds Room

Organizer: **Elizabeth Bruton** (Science Museum London)

Chair and commentator: **Michael Krysko** (Kansas State University)

Bruce Campbell (The College of William and Mary): *The Hobby of Totalitarianism: Ham Radio in the Third Reich*

Elizabeth Bruton (Science Museum London): *The Best of Everything (But Politics): John Reith and the BBC's Coverage in the 1920s*

Heidi Tworek (University of British Columbia): *Radio and Nation-Building in Germany, Great Britain and the United States*

71: Moving Beyond the Glass Case: Novel Engagements with Material Culture

Flower Room

Organizer: **Christopher McKenna** (University of Oxford)

Chair: **Allison Marsh** (University of South Carolina)

Commentator: **Elizabeth Rodini** (Johns Hopkins University)

Christopher McKenna (University of Oxford): *Teaching with Artifacts to Understand the Global History of Trade (TAUGHT): An Ongoing Experiment at the University of Oxford*

Anna Guagnini (University of Bologna): *Corporate Museums: A Look Beyond the Shop Window*

Joyce Bedi (Smithsonian Institution): *Extrapolating from Artifacts*

72: Regulating Transnational Knowledge Flows in Cold War America

Cook Room

Organizer: **John Krige** (Georgia Institute of Technology)

Chair: **Robert Bud** (Science Museum London)

Mario Daniels (Georgetown University): *Controlling Knowledge by Controlling People: The Interplay of US Visa Restrictions and Export Controls in the Cold War*

John Krige (Georgia Institute of Technology): *Export Controls as Regulatory Instruments of Knowledge Circulation in Cold War America*

Jayita Sarkar (Boston University): *Postwar Controls and Transnational Linkages in India's Atomic Energy Program, 1948-54*

73: Historicizing the Visual: Technology and Media

Ballroom E1

Organizer: **Stefka Hristova** (Michigan Technological University)

Chair: **Karena Kalmbach** (Eindhoven University of Technology)

Kelly McCormick (University of California Los Angeles) [**Robinson Prize Candidate**] : *'Now, Even Women Can Take Pictures': Writing a Cultural Biography of the Postwar Japanese Camera*

Joel Beatty (Western Connecticut State University): *The CIE Color Space: A Case Study of Visual Theory's Influence on Visual Technologies*

Gökhan Ersan (SUNY Binghamton University): *Disseminating Science and Technology: Marie Neurath's Books for All Ages, 1947-71*

74: Technology, Law and Injury in the 20th Century United States

Ballroom E2

Organizer: **Mary Mitchell** (Purdue University)

Chair and Commentator: **Angela Creager** (Princeton University)

Sharra Vostral (Purdue University): *Testing Tampons: Gendered Injury, Regulatory Conflict and Standard Setting*

Evan Hepler-Smith (Harvard University): *SMILES to go: Chemical Harm, Regulatory Weakness and a Computational Tool*

Mary Mitchell (Purdue University): *Shadow and Substance: Nuclear Weapons, Radiation Injury and International Law after the Bravo Disaster*

75: Ideologies of Industrialization in the Early American Republic

Bromley Room

Organizer: **Katheryn Viens** (Massachusetts Historical Society)

Chair and Commentator: **Merritt Roe Smith** (MIT)

Katheryn Viens (Massachusetts Historical Society) [**Robinson Prize Candidate**]: *Virtuous Capital: Mechanization and Economic Independence in the Early Republic*

Lindsay Schakenbach Regele (The Miami University of Ohio): *Industrial Manifest Destiny?: Territorial Expansion and American Weapon Improvement*

Kara Swanson (Northeastern University): *Beyond Industrial Policy: Patents, Invention and Citizenship in the Early Republic*

76: Envirotechnical Responses to Pollution Concerns

Ballroom B

Organizer: **Carl Zimring** (Pratt Institute)

Chair and Commentator: **Scott Knowles** (Drexel University)

Hugh Gorman (Michigan Technological University): *Atmospheric Monitoring, Fish Consumption Advisories and the Governance of Boundary-Crossing Chemicals*

Ellen Spears (University of Alabama): *Toxic Contamination in a Warming World: A Case Study of PCBs*

Carl Zimring (Pratt Institute): *Reform or Reinforcement? Recycling and the Large Technological System of Global Aluminum Production* (Carl Zimring, Pratt Institute)

77: Detecting Crime

Shippen Room

Chair: **Richard Hirsh** (Virginia Tech)

Jamie Pietruska (Rutgers University): *'The Private Detective Business is no Different than any other Business or Profession': Technologies of Paperwork and Bureaucracy in American Detective Agencies*

Noah McClain (Illinois Institute of Technology): *The Crime Scene of Technology: Technical Felonies in the New York Subway Metrocard*

Victor Marquez (Independent Scholar): *Airport Passenger Security in Hindsight: Playing Politics or Addressing True Threats?*

78: Engineers and Society

Claypoole Room

Chair: **Andrew Butrica** (Independent Scholar)

Jordan Howell (Rowan University, New Jersey): *Ambivalence, Ecological Identity and Burning Garbage: Honolulu's HPOWER Incinerator as a Medium-Term Technology*

Dazhi Yao (Chinese Academy of Sciences): *Between Scientific Education and Engineering Training: The Early History of the École Polytechnique*

4:00 – 5:30 PM

79: Presidential Roundtable: Technology, Democracy and Participation

Ballroom B

Organizers: **the Local Organizing Committee**

Chair: **Amy Slaton** (Drexel University)

Yanna Lambrinidou (Virginia Tech)

Barbara Hahn (Texas Tech)

Jose Torero (University of Maryland)

80: Safety Tested: (Dis)Proving Technical Safety in History II

Ballroom A1

Organizer: **Stefan Esselborn** (Technische Universität Munich)

Chair: **Arwen Mohun** (University of Delaware)

Commentator: **Lee Vinsel** (Virginia Tech)

Stefan Esselborn (Technische Universität Munich): *Nuclear Safety by the Numbers: The Deutsche Risikostudie Kernkraftwerke as a 'Trading Zone'*

Ismail Goumri (Descartes University/IRSN): *Expert's Judgment to Probabilistic Safety Assessment: The Reception and Use of the Rasmussen Report in France during the 1970s*

Christine Hassauer (Technische Universität Munich): *The Role of Scientific and Intuitive Risk Analysis in the Evidencing Practice for Food Safety*

81: Incorporating Technologies of Mobility: Planning, Using, Deliberating, Democratizing

Ballroom A2

Organizer, Chair and Commentator: **Mimi Sheller** (Drexel University)

Hans-Liudger Diemel (Berlin University of Technology): *From Stakeholder Involvement to Public Participation: Two Phases of Deliberative Decisionmaking in Infrastructural Planning 1970-2020*

Ruth Oldenziel (Eindhoven University of Technology) and **Adri Albert de la Bruhèze** (University of Twente): *Glocalizing Cycling in a Global World*

Mathieu Flonneau (University Paris I Panthéon-Sorbonne): *Liberalism and Urban Mobilities in Long Term Perspective: Are Contemporary Uberized Smart Metropolis Compatible with 'Mobile Justice'?*

82: Historicizing the Visual: Visual Environments

Reynolds Room

Organizer: **Stefka Hristova** (Michigan Technological University)

Chair: **Joel Beatty** (Michigan Technological University)

Christine Filippone (Millersville University): *Eco-Art: Open Systems as Feminist Systems*

John Cloud (NOAA Central Library): *Regarding the Pacific Coast: The Coast and Geodetic Survey and Premature Visual Technologies of the Late 19th Century*

Samantha Thompson (Arizona State University): *Television as an Aid to Astronomy*

83: Non-Participation, Refusal, Resistance and Inaction

Flower Room

Organizer: **Alana Staiti** (Cornell University)

Chair: **Sam Franklin** (Brown University)

Commentator: **Matthew Wisnioski** (Virginia Tech)

Alana Staiti (Cornell University): *When Hidden Figures want to Stay Hidden: Non-Participation and Historical Narrative*

Jeffrey Mathias (Cornell University): *Spectral Territories: Interference and Obstnacy in the US National Radio Quiet Zone*

Erinn McComb (Del Mar College, Texas): *'My Name is José Jiménez': Hispanics and Non-Participation in Early Cold War Democratic Spaceflight*

Rebecca Perry (University of Virginia): *Rendered Invisible – Non-Union Laborers in a Union Town*

Meredith Sattler (Virginia Tech): *Unknown Participation as Non-Participation: Mysterious Actors and Missing Masses within the Biosphere 2 Enclosure Missions, 1991-94*

84: Women and Gender in Computing

Cook Room

Chair and Commentator: **Tom Misa** (University of Minnesota)

Eileen Clancy (City University of New York) [**Robinson Prize Candidate**]: *Sekiko Yoshida: Scientific Computation with an Abacus in the Early US Space Program*

Kera Allen (Georgia Institute of Technology): *The Fiction of Meritocracy: Race and Gender in the Computing and IT Workforce*

Thomas Haigh (University of Wisconsin): *The Other Women of ENIAC: Gendered Labor in Historical Memory*

85: 'Hidden Figures' in Technology History: Inclusive Research Methodologies and Storytelling Techniques

Ballroom E1

Organizer and Chair: **Fallon Samuels Aidoo** (Northeastern University)

Discussants: **Chanda Prescod-Weinstein** (University of Washington), **Kara Swanson** (Northeastern University) and **Suzanne Moon** (University of Oklahoma)

Ellen Foster (RPI): *Re-making, Re-constituting and Playing with Gender in the Historical Narrative*

Geoff Zylstra (NYC College of Technology): *Geographies of Servitude: Black Experiences of Industrialization in Philadelphia, 1830-80*

Fallon Samuels Aidoo (Northeastern University): *The 'Public History' and 'Hidden Figures' of Data Storytelling*

86: Technological Utopianism in the Twenty-First Century

Ballroom E2

Organizer and Chair: **Paul Josephson** (Colby College)

Commentator: **Howard Segal** (University of Maine)

Mario Bianchini (Georgia Institute of Technology): *On Track to Utopia: Model Railroading and Utopian Futures in East Germany*

Jordan Bimm (York University): *Rethinking the Overview Effect: A Problematic Utopianism in Spaceflight*

Roger Connor (National Air and Space Museum, Smithsonian Institution): *Rotors on the Rooftops: Aerial Utopianism in the City, Yesterday and Today*

Jessa Lingel (University of Pennsylvania): *From democracy to populism: Political metaphors of digital utopianism*

87: Cold War Information Technology and the Interpretation of Culture

Bromley Room

Organizer: **Ian Hartman** (Northwestern University)

Chair: **Ling-Fei Lin** (Nanyang Technological University)

Commentator: **Jennifer Light** (MIT)

Beatrice Choi (Northwestern University): *Intergenerational Innovation: Reinterpreting Past Failures in Brazil's Infant Industries*

Ian Hartman (Northwestern University): *Cybernetics 'At A Distance': Cold War Anthropology, the RCC Project and the Interpretation of Culture*

Christopher Miles (Indiana University) [**Robinson Prize Candidate**]: *'Democracy Must Be Made Safe for Computing: On the Cultural Origins of Computer Security*

88: Constructing Engineering, Constructing Identity: The Recent History of Women Engineers in Sweden and the US

Shippen Room

Organizer: **Malin Nordvall** (Chalmers University of Technology, Sweden)

Chair and Commentator: **Amy Bix** (Iowa State University)

Laura Ettinger (Clarkson University, New York): *'You're Never Quite One of the Group': The Choices and Challenges of American Women Engineers from the Baby Boom Generation*

Malin Nordvall (Chalmers University of Technology, Sweden): *The Resistant Profession: Gender Equality Work in the 1970s Swedish Engineering Union*

Hined Rafeh (RPI): *Gendered Engineering: The Construct of Gender in Historical and Quantitative Analyses of Engineering Identity*

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