S. No.	Special Sessions (Papers from Invited Speakers only)
1	Sensing Strategy for Wave-based SHM: Chair by Zhongqing Su (HKPU); Key words: Guided waves, Sensor and sensor network, Real-world implementation
2	SHM/NDE for Civil Infrastructures: Recent Development and Challenges; Chair by Salvatore Salamone (U. of Buffalo); Keywords: Ultrasonic SHM/NDE technology, Signal processing and analysis techniques, Damage prognosis techniques, Sensors development, Remote sensing, Field implementation
3	Source Localization; Chair by Tribikram Kundu (U of A); Key words: Acoustic source localization, Acoustic emission, Triangulation techniques, Time reversal techniques, Optimization for source localization
4	Very Dense Arrays of Sensors; Chair by Branko Glisic (Princeton U.) and Daniele Zonta (University of Trento, Italy); Keywords: Distributed fiber optic sensors, Sensing skins, sheets, and paints, Self-sensing materials, Dense arrays of wave propagation sensors, Distributed/decentralized data analysis, Wireless nodes for dense arrays of sensors
5	Data Interpretation and Modeling for SHM; Chair by Hui Li (HIT)
6	Fiber Optics Sensors and SHM for Composites; Chair by Jinsong Leng (HIT)
7	Guided Waves in Structures for SHM; Chair by Wieslaw Ostachowicz (PAS)
8	SHM Technology in Wind Turbines; Chair by Wieslaw Ostachowicz (PAS)
9	SHM for Harsh Environments; Chair by Debbie Senesky (Stanford U.); Keywords: Structures under extreme environment, High temperature/pressure conditions, Sensor survivability, Signal processing/data communication at extreme conditions
10	Bio-Inspired and Bio-mimetic Materials, Sensors and Manufacturing: Chair by Bill Yu (CWRU); Keywords: Bio-inspired functional materials, Bio-inspired sensors, Manufacturing of bio-mimetic material systems
11	Optical fiber sensor based SHM system studies for aircraft structures - JASTAC Project Results: Chair by Nobuo Takeda (U of Tokyo)

12	Novel SHM/NDE techniques for Precursor to Material Damage Quantification: Chair by Anindya Ghoshal (ARL) and Sourav Banerjee (U of S.Carolina)
13	Next-Generation Sensing Systems for SHM: Chair by Yang Wang (GIT) and Ken Loh (UC Davis); Key words: Wireless sensing, Passive and low-power sensors, Multi-functional smart skin, Nanotechnology, Sensor array and sensor network, Damage detection, Real-time monitoring
14	Statistical Methods for SHM: Chair by Armen Der Kiureghian (UC Berkeley), Branko Glisic (Princeton U), Matteo Pozzi (Carnegie Mellon U) and Daniele Zonta (University of Trento, Italy)
15	Structural Health Monitoring of Space Systems: Chair by Andrei Zagrai (New Mexico Tech) and Lance Richards (NASA)
16	Monitoring on Manufacturing Sponsored By The Advanced Institute of Manufacturing with High-tech Innovations (AIM-HI): Chair by Meng-Shiun Tsai (National Chung Cheng University, Taiwan); Keywords: Manufacturing, Health monitoring of transmission shaft, MEMS acceleration and temperature sensing, Cutting condition monitoring
17	Standards and V&V for Aerospace: Chair by Holger Speckmann (Airbus). Keywords: SHM Guidebooks, SHM Standardization, Aerospace structures, Validation, Verification, and Implementation
18	Impairment Detection: Chair by Gary T. Fry (Texas A&M University). Keywords: Impairment Detection, Sensor Design, Sensor Networks, Autonomous Real-Time Evaluation, Field Implementation, Non-Destructive Evaluation
19	SHM for Rotorcraft: Chair : TBD. Keywords: Rotorcraft SHM technologies, Fatigue crack, Corrosion, Vibration, Impact damage

20	Standards and V&V for Civil Infrastructures: Chair by Helmut Wenzel (University of Vienna). Keywords: Guidebooks for Civil infrastructures, Standardization, Civil infrastructures, Validation and verification, Implementation
21	Probability of detection and reliability of SHM for aerospace structures: Chair by J.B.Ihn (Boeing) and Eric Lindgren (AFRL). Keywords: POD, Reliability