

1st International Conference on Aerospace Science & Engineering

August 18 - 20, 2009

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Master Program



Day - 1 (Aug 18, 2009)

- Registration: 0800 - 0950
- 18A: Inaugural Ceremony: 1000 - 1100
- Tea: 1100 - 1120

18B Dynamic Systems			Chair: Engr. Imran Rahman	
S/P. No.	Time	Title	Speaker	Affiliation
18B-1/O-001	1120 ~ 1200	<i>Effect of Turbulence Modeling on Computation of Internal Flows involving Ejector Phenomenon → keynote</i>	Dr. Jehanzeb Masud	Air University, Islamabad
18B-2/O-002	1200 ~ 1240	<i>Rotorcraft performance controls &amp; Aerodynamics: A multidisciplinary approach → keynote</i>	Dr. Adeel Khalid	Georgia Institute of Technology, USA
18B-3/O-003	1240 ~ 1300	Improving USAF DATCOM Predictions of Missile Aerodynamics	Bilal A. Siddiqui	King Fahd University, Saudi Arabia
18B-4/O-004	1300 ~ 1320	Design of Single Chamber Dual Thrust Solid Rocket Motor using Hybrid Numerical Optimization	M. Aamir Raza	NESCOM

- Lunch: 1320 - 1420

18C1 Satellite Systems Design			Chair: Dr. M. A. K. Lodhi	
S/P. No.	Time	Title	Speaker	Affiliation
18C1-1/O-020	1420 ~ 1500	<i>Innovative micro-satellites as moderate cost test beds for advanced optical satellites demonstrations, scientific observations, and educational-amateurial purposes: the PonySat case → Keynote</i>	Dr. Giorgio Perotta	SpaceSys, Italy
18C1-2/O-021	1500 ~ 1540	<i>Building small satellites in the developing world: a waste of time and money? → Keynote</i>	Dr. Ron Olivier	Sun Space & Information Systems, South Africa
18C1-3/O-022	1540 ~ 1600	Parameters affecting performance of Unscented Kalman Filter over extended Kalman Filter in case of multiple satellites Formation flying in LEO	Muhammad Ilyas	NESCOM
18C1-4/O-023	1600 ~ 1620	Design of On-board Data Handling System using COTS for Low Cost LEO Spacecraft	Syed Ashar Akhtar	SUPARCO
18C1-5/O-024	1620 ~ 1640	Trend Analysis of GSO Satellite Fillings in Different Frequency Bands	Sana Aijaz	SUPARCO
18C1-6/O-025	1640 ~ 1700	Advanced Space Satellite Power Generation and Management	Javed Sami	University of Punjab, Lahore

- Tea: 1700 - 1720
- Recreational Visit: 1720 onwards

18C2 High Temperature & Aerospace Materials			Chair: Dr. Fazal Khalid	
S/P. No.	Time	Title	Speaker	Affiliation
18C2-1/O-068	1420 ~ 1500	<i>Application of Ceramic Coatings in Contemporary Jet Engines → Keynote</i>	Dr. Amir Azam Khan	NUST
18C2-2/O-069	1500 ~ 1540	<i>Laser-Ultrasound and Related Mathematical Modeling with Applications to Nondestructive Testing → Keynote</i>	Dr. Uvais Qidwai	Qatar University, Qatar
18C2-3/O-070	1540 ~ 1600	Efficient dome Profiles for Composite Pressure Vessels with Similar Dome Openings	Asad Muhammad Butt	NUST
18C2-4/O-071	1600 ~ 1620	The equivalent use of explosively formed projectile in lethality of anti-tactical ballistic missile (ATBM) warhead in field test	Ghulam Hussain	NUST
18C2-5/O-072	1620 ~ 1640	Mechanical Properties Enhancement and Analysis of thermal stress gradient in gel-spun drawn UHMWPE fibers for light weight ballistic armor structures	M Bilal Khan	NUST
18C2-6/O-073	1640 ~ 1700	Indispensability of spectroscopy in exploring Inter-metallic Nano-particles	Dr. Khalid Mehmood	Universitat Leipzig, Germany

- Tea: 1700 - 1720
- Recreational Visit: 1720 onwards

**Day - 2 (Aug 19, 2009)**

19A Remote Sensing & Space Environment			Chair: Dr. Giorgio Perotta	
S/P. No.	Time	Title	Speaker	Affiliation
19A-1/O-026	0900 ~ 0940	<i>The Solar Modulation Impact on Satellite Orbit and Space Communication → Keynote</i>	Dr. M.A.K. Lodhi	Texas Tech University, USA
19A-2/O-027	0940 ~ 1000	Improving Land Cover Classification Using Advanced Remote Sensing Method	Mohammad Awad	National Council for Scientific Research, Lebanon
19A-3/O-028	1000 ~ 1020	Integrated Risk Management for Africa: ANTIC-based approach for bushfires	Malick Diagne	Centre Suivi ecologique, Senegal
19A-4/O-029	1020 ~ 1040	Consequences of Global Warming and Sea Level Rise in Bangladesh	Muhammad Shah Alam	SPARRSO, Bangladesh
19A-5/O-030	1040 ~ 1100	Discrimination between water activity sites and false impression of seepage sites along irrigation canals through high resolution remote sensing data and supervised classification technique	Dr. Muhammad Arshad	IST

- Tea: 1100 - 1120

19B Advanced & Nanotechnology Materials			Chair: Dr. Amir Azam Khan	
S/P. No.	Time	Title	Speaker	Affiliation
19B-1/O-074	1120 ~ 1200	Titanium dioxide supported gold nano catalyst for green house gasses emission control → Keynote	Dr Tajammul H Syed	Quaid-e-Azam University, Islamabad
19B-2/O-075	1200 ~ 1240	Microstructure and properties of Shape Memory Alloys → Keynote	F. Ahmed Khalid	GIKI
19B-3/O-076	1240 ~ 1300	Preparation of Controlled Gold Nano-colloid Dispersion for small Diameter Silicon Nano-wire Growth	Saeed Akhtar	Tokyo Institute of Technology, Japan
19B-4/O-077	1300 ~ 1320	Large scale Assembly of Single - Walled Carbon Nanotubes and its application in Bio/Chem/IR Sensors	Dr. Saleem Rao	IST

• Lunch: 1320 - 1420

19C Vehicle Control			Chair: Dr. S.A. Sarapuloff	
S/P. No.	Time	Title	Speaker	Affiliation
19C-1/O-006	1420 ~ 1500	Space Vehicle Steering → Keynote	Dr. Sarwar Naqvi	IST
19C-2/O-007	1500 ~ 1520	Modeling and parametric study of Circulation Control on RAE 104 Airfoil	Syed Ali Abbas Zaidi	NUST
19C-3/O-008	1520 ~ 1540	Stability analysis and LQR design for longitudinal/lateral mode for autonomous vehicle	A.M. Mughal	CESAT, Islamabad
19C-4/O-009	1540 ~ 1600	Flight path/trajectory control of a cannon launched unguided spin-stabilized projectile	Taimoor J. Durrani	IST
19C-5/O-010	1600 ~ 1620	Numerical simulation and performance investigation of a Turbojet Engine Afterburner	Asadollah Kordshooli	Malek-e-Ashtar University of Technology, Iran

• Tea: 1620 - 1640

19D Embedded Systems			Chair: Dr. Olivier Ron	
S/P. No.	Time	Title	Speaker	Affiliation
19D-1/O-031	1640 ~ 1720	<i>Embedded Systems: From Concept to Completion → Keynote</i>	<i>Dr. Shoaib A. Khan</i>	<i>NUST</i>
19D-2/O-032	1720 ~ 1740	Journalized Stack Processor for Reliable Embedded Systems	Mohsin Amin	University Paul Verlaine, France
19D-3/O-033	1740 ~ 1800	Microcontroller based Digital Line Coding Experience of PRSS	Syed Ashar Akhtar	SUPARCO
19D-4/O-034	1800 ~ 1820	FPGA Implementation of MIL-STD-1553B Bus	M. Kashif Siddiqui	IST
19D-5/O-035	1820 ~ 1840	Design of an adaptable system-on-chip (SoC) memory controller/ interface and implementation of FPGA	Qasim Raza	IST

- Visit: Satellite Ground Station (SUPARCO)
- Gala Dinner

**Day - 3 (Aug 20, 2009)**

20A1 Communication Technologies			Chair: Dr. Maqbool Ahmed	
S/P. No.	Time	Title	Speaker	Affiliation
20A1-1/O-036	0900 ~ 0940	<i>Communication Technologies → Keynote</i>	<i>Dr. Waqar Mahmood</i>	<i>KICS, UET</i>
20A1-2/O-037	0940 ~ 1000	X Band Beam forming Network with Micro-strip Antenna Array	Omar Masood Khan	NESCOM
20A1-3/O-043	1000 ~ 1020	Implementation, Evaluation and analysis of GSM-06.10 Speech Codec	Dr Jameel Ahmed	HITEC University, Taxila
20A1-4/O-039	1020 ~ 1040	DVB-H based mobile TV service for Pakistan	Fahad Ahmed	University of Melbourne, Australia
20A1-5/O-038	1040 ~ 1100	Time and Frequency Synchronization of SISO and MIMO OFDM system	Omair Ahmed Awan	IST

- Tea: 1100 - 1120

20A2 Aerospace Miscellaneous Topics			Chair: Dr. Jehanzeb Masud	
S/P. No.	Time	Title	Speaker	Affiliation
20A2-1/O-011	0900 ~ 0940	<i>Evaluation of Non Ideal Propulsion → Keynote</i>	<i>M. Bilal Khan</i>	NUST
20A2-2/O-012	0940 ~ 1000	Simulation of flow over Blunted cone	Emad ud Din	NUST
20A2-3/O-013	1000 ~ 1020	Aerodynamic modeling of an Ogive nose cylinder at supersonic speed	S. Ahmed Hasnain Bokhari	NUST
20A2-4/O-014	1020 ~ 1040	Simulating disturbances induced by liquid slosh dynamics of a moving tank	M. Ajmal Khan	NESCOM
20A2-5/O-015	1040 ~ 1100	Quantitative and Qualitative analysis of stresses generated in thin-walled composite box beam under constrained torsional loading	Uzma Syed	Air University, Islamabad

- Tea: 1100 - 1120

20B Sensors and Systems			Chair: Dr. Uvais Qidwai	
S/P. No.	Time	Title	Speaker	Affiliation
20B-1/O-041	1120 ~ 1200	<i>Low cost UHF Electromechanical Gyroscope with High-Q Toroidal Dielectric Resonator → Keynote</i>	<i>Dr. S.A. Sarapuloff</i>	<i>National Technical University of Ukraine, Ukraine</i>
20B-2/O-042	1200 ~ 1220	Energy harvesting from sources of static charge for microelectronics & micro-electro-mechanical systems (MEMS) applications	Abdul Basit	Michigan State University, USA
20B-3/O-040	1220 ~ 1240	Multi-Observability Methods for SINS State Errors	Anwar Ali Gaho	SUPARCO
20B-4/O-044	1240 ~ 1300	Implementation of Extended Kalman Filter in INS/GPS Integration	Mujahidullah Khan	SUPARCO
20B-5/O-045	1300 ~ 1320	GPS/INS Integration using Neural Network Aided Kalman Filter	Iftikhar Khan	SUPARCO

- Lunch & Poster Session: 1320 - 1500
- Concluding Ceremony: 1500 onwards
- Tea