7th IEEE International Multi-Conference on Systems, Signals & Devices

SSD 10

Program of the Multi-Conference on Systems, Signals & Devices

SSD 2010

June 27-30, 2010

Philadelphia University, Amman, Jordan

IEEE

Seventh International Multi-Conference on Systems, Signals and Devices SSD'10

June 27-30, 2010
Amman – Jordan

Organized by:

Philadelphia University (Jordan)

University of Sfax, Ecole Nationale d'Ingénieurs de Sfax (ENIS), (Tunisia)

University of Chemnitz, (Germany)

Narvik University College, (Norway)

Supported by:

IEEE Region 8

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Technology Business Incubator, Philadelphia University (Jordan)

Philadelphia University (Jordan)

Jordan Engineering Association (Jordan)

Tunisian Scientific Society (TSS) (Tunisia)

Association Tunisienne des Sciences Appliquées et de Technologies (ATSAT) (Tunisia)

Preface

Following the success of SSD'01 held in Hammamet-Tunisia, SSD'03 and SSD'05 held in Sousse-Tunisia, SSD'07 held in Hammamet-Tunisia, SSD'08 held in Amman-Jordan, SSD'09 held in Djerba-Tunisia, the seventh International Multi-Conference on Systems, Signals and Devices - SSD'10 to be held at Philadelphia University-Jordan, 27th to the 30th of June 2010. The conference program consists of 4 plenary sessions and 23 oral sessions. SSD'10 multi-conference is organized to include 4 conferences covering different fundamental and applied aspects:

1. "Int. Conf. on Systems Analysis and Automatic Control" (SAC)

2. "Int. Conf. on Power Electrical Systems" (PES)

3. "Int. Conf. on Communication and Signal Processing" (CSP)

4. "Int. Conf. on Sensors, Circuits and Instrumentation Systems" (SCI)

SSD'10 secretariat has received 145 submissions from 22 countries: Algeria, Austria, Bahrain, Canada, Egypt, Finland, France, Germany, India, Iraq, Italy, Jordan, Lebanon, Libya, Oman, Romania, Saudi Arabia, South Africa, Spain, Tunisia, U.A.E., United Kingdom, U.S.A.

Each paper has been reviewed by at least two reviewers of the program committee which consisted of more than 100 scientists from more than 30 countries. Only 104 papers have been accepted.

We would like to express our deep gratitude to all chairs and members of the program committee for their substantial reviews. Special thanks are due to all members of the organizing committees for their determination to make this event a promising success.

Finally, we would like to extend our deep gratitude to all those who have contributed to the financial support of SSD'10 financially.

<div align="center">

Professor Munther N. Baker

Amman, Jordan

June, 2010

</div>

General Informations
Date and Location

The SSD Multi-Conference will be held in Amman, Jordan on 27-30 of June 2010 to give an opportunity to contributors to visit other attractive corners of Jordan.

Location and Access:

The Conference will be held at Philadelphia University: http://www.philadelphia.edu.jo/

Conference Hotels

Philadelphia University recommends the following hotels. For reservations, participants should use the links above.

University shuttle buses will be available for transportation between the hotels and university.

Alfanar Palace Hotel (4*)

The hotel is located in the heart of Queen Rania Al-Abdullah Street. The Commercial, shopping district in Amman the capital city of Jordan. It is only (30) minutes away from Queen Alia International Airport and (10) minutes away from the old city center. Each of the Rooms and Suites are slightly varies from each other, in an atmosphere that makes you feel home the moment you check on. All Rooms and Suites feature 16 satellites television programs, fully stocked mini bar, safety deposit box, hair dryer additional amenities are provided in all Suites. Connecting and non-smoking Rooms as well as Rooms featuring balconies are available upon request. Full size extra beds available, baby coats are provided free of the charge. Room Prices:(including Breakfast) Single 40JD Double 50JD.

http://www.hotels-jordan-booking.com/al_fanar_palace_hotel_amman.htm

Rio Jordan Hotel (3*)

Rio Jordan Hotel is a three star hotel headquartered in Amman Jordan. It is 25 min. away from Queen Alia International Airport and just 10 min. away from the center of the city. Tours with local guides can be organized directly from the hotel to all the nice places of Jordan such as Petra, Wadi Rum, Dana, Dead Sea, Madaba, Mount Nebo, Jerash, Um Qeis, Pella and so on. Room Prices:(including Breakfast) Single 20JD Double 40JD.

www.riojordan-hotel.com

Granada Hotel

This hotel was established on 1967. It was renovated on 2007. Nowadays, Jebal Amman is thriving with restaurants and cafés due to its magnificent location, ambiance and relaxing atmosphere in addition of-course to the view. Old houses are being renovated and turned into either a 5 star restaurant or a chilled out café. It remains to be one of Jordan's favorite destinations for many locals, residents and foreigners.

www.granadajordan.com

The Host Country Jordan

Official Language

The official language in Jordan is Arabic. The second language is English and is spoken by almost all people.

Jordan: Overview

Jordan is a great tourist country with its Arabian eastern history and modern culture. There is plenty to see and visit. So it is worth to take the opportunity and visit the different beautiful sites.

Visit to Jordan

Please visit the website http://www.visitjordan.com/, and choose the preferred language.

You can see the weather in Jordan by visiting the website:

http://www.weatheronline.co.uk/Jordan/Amman.htm

Currency Exchange:

International currencies can be changed in every bank or post-office in Jordan to Jordan Dinars (JOD). The exchange rates to and from €, US\$ and Tunisian Dinar (TND) are approximately:

1 JOD $\simeq$ 0.86 €	1 € $\simeq$ 1.16 JD
1 JOD $\simeq$ 1.40 US\$	1 US\$ $\simeq$ 0.71 JD
1 JOD $\simeq$ 2.14 TND	1 TND $\simeq$ 0.467 JD

For more exact rates, see the website: www.xe.com

Conference Web-Site

▶ http://www.ssd-conf.org

Conference Registration Desk

The Conference registration desk will be indicated in the University of Philadelphia, and will be open on Monday, June 28, from 8:00am to 4:00pm.

Payment Method and Registration Fees

The registration fee includes admission to all conference events, a copy of the proceedings CD, local transportation, conference dinner, all coffee breaks and refreshments.

At least one author per paper must register and pay the full registration fee (at the non-student rate) according to the following schedule:

Registration fee Schedule	Before June 1st 2008	Late Registration
Full Fare for one paper	300 USD	350 USD
Student	200 USD	250 USD
Additional paper	50 USD	100 USD

Students must show a valid proof of their student status.

Additional Proceedings

An additional copy of the conference summary book costs 20 JOD

An additional copy of the conference CD-ROM costs 20 JOD

Author Informations

Official Language of the Conference

The official language of the conference is English and will be used for all presentations and printed material.

Oral Presentations

A 20 min time slot (including discussion) is allocated for each contributed oral presentation. A standard slide projector and eventual a video projector are available. In all cases you should have necessarily slides at the same time.

SSD'10 : Conference Program

	8 h 30 – 9 h 00	9 h 00 – 9 h 20	9 h 20 – 9 h 40	9 h 40 – 10 h 00	10 h 00 – 10 h 20	10 h 20 – 10 h 40	10 h 40 – 11 h 10	11 h 10 – 14 h 00	14 h 00 – 15 h 30	15 h 30 – 17 h 30	17 h 30 – 19 h 00	19 h 00
Sunday June, 27										Registration		
Monday June, 28	Registration	Official Opening	Plenary Session 1		Plenary Session 2		Coffee Break	Parallel Sessions SAC 1-2, PES 1-2, CSP 1-2	Lunch	Parallel Sessions SAC 3-4 CSP 3-4, SCI 1-2	Free Activities	
Tuesday June, 29	Registration	Plenary Session 3		Plenary Session 4		Coffee Break	Parallel Sessions PES 3-4, CSP 5-6, SCI 3-4		Lunch	Parallel Sessions SAC 5-6, PES 5, CSP 7-8	Closure	Conference Dinner
Wednesday June, 30	**Post Conference Program**											

Conference on
Systems Analysis & Automatic Control

Conference chair:

Tarek A. Tutunji (Jordan)
Philadelphia University, Amman, Jordan

Scientific Program committee:

Abdel-Kader, Hussain (Jordan)	Boudjemaa, Fares (Algeria)	Mahir, Rami (Jordan)
Abdelkrim, Afef (Tunisia)	Brogliato, Bernard (France)	Melchior, Pierre (France)
Abdrabbo, Saber (Egypt)	Cotta, Carlos (Spain)	Minf, Faiçal (Oman)
AL-Akhras, Mousa (Jordan)	Choura, Slim (Tunisia)	M'Saad, Mohamed (France)
Al-Din, Monaf (Jordan)	Chaillet, Antoine (France)	Neshat, Mehdi (Iran)
Al-Hiddabi, Saif (Oman)	Dahhou, Boutaieb (France)	Ould Bouamama, Belkacem (France)
Ali, Mohammed Mehdi (Jordan)	Derbel, Nabil (Tunisia)	Ouali, Abderrazak (Tunisia)
Al-Saif, Abdulwahid (KSA)	Dieulot, Jean-Yves (France)	Paul, Leesha Paul (India)
Alsmadi, Izzat (Jordan)	Djemel, Mohamed (Tunisia)	Pilishkin, Vladimir (Russia)
Al-Sunni, Fouad (KSA)	Farza, Modher (France)	Saad, Maarouf (Canada)
Al-Taee, Majid (Jordan)	Feki, Moez (Tunisia)	Saleem, Ashraf (Jordan)
Askari, Mohsen (Iran)	Gao, Zhiwei (China)	Soudani, Dhaou (Tunisia)
Baker, Munther (Jordan)	Garcia, Germain (France)	Tutunji, Tareq (Jordan)
Barazane, Linda (Algeria)	Gasmi, Moncef (Tunisia)	Werner, Herbert (Germany)
Benrejeb, Mohame (Tunisia)	Jerew, Dahkil (Oman)	Yang, Jianxi (China)
Bettayeb, Maamar (UAE)	Jumah, Mazin (Bahrain)	Yusuf, Hasan (Oman)

Topics

Advances in linear control theory, System optimization, Multivariable control, Large scale and infinite dimension systems, Nonlinear control, Distributed control, Predictive control, Geometric control, Adaptive control, Optimal and stochastic control, Robust control, Hierarchical and man-machine systems, Intelligent control systems, Robotics and mechatronics, System identification, Biological and economical models & control, Neural networks and neural control, Fuzzy systems and fuzzy control.

SSD'10 : SAC – Conference Program

	8 h 30 – 9 h 00	9 h 00 – 9 h 20	9 h 20 – 9 h 40	9 h 40 – 10 h 00	10 h 00 – 10 h 20	10 h 20 – 10 h 40	10 h 40 – 11 h 10	11 h 10 – 12 h 40	12 h 40 – 14 h 00	14 h 00 – 15 h 30	15 h 30 – 16 h 30	16 h 30 – 17 h 30	17 h 30 – 19 h 00	19 h 00
Sunday June, 27										Registration				
Monday June, 28	Registration	Official Opening	Plenary Session 1		Plenary Session 2		Coffee Break	Session SAC 1	Session SAC 2	Lunch	Session SAC 3	Session SAC 4	Free Activities	
Tuesday June, 29	Registration	Plenary Session 3		Plenary Session 4		Coffee Break	Free Activities			Lunch	Session SAC 5	Session SAC 6	Closure	Conference Dinner
Wednesday June, 30	Post Conference Program													

Sunday, 27 of June, 2010

Registration

Monday, 28 of June, 2010

Monday, 8h30-9h00

Registration

Monday, 9h00-9h20

Official Opening

Monday, 9h20-10h00

Plenary Session 1 :

Chairs : M. N. Baker (Jordan)
T. Tutunji (Jordan)

1569330946 Industrial linked mechatronics, an application in autotronics ....
Y. H. Hossamel-din ....(Egypt)

Monday, 10h00-10h40

Plenary Session 2 :

Chairs : H.-R. Tränkler (Germany)
A. I. Saleem (Jordan)

1569288097 Diversification of the eddy current technology ....
*J. Himmel, M. Heidary Dastjerdi, C. Knopf, C. Sehestedt, J. Weidenmüller and
O. Kanoun* .... (Germany)

Monday, 10h40-11h10

Coffee Break

Session SAC 1 : Complex Systems

Chairs : R. Mahir (Jordan)

N. Derbel (Tunisia)

1569287875	Composite control of a delayed singularly perturbed system by using lambert-W function .... *N. Abdelkrim, A. Tellili and M. N. Abdelkrim* ....(Tunisia)
1569288049	An improved output feedback decentralized control approaches for interconnected large scale systems .... *N. Bedioui, S. Salhi and M. Ksouri* ....(Tunisia)
1569288059	A delay decomposition approach for exponential stability of perturbed neutral systems with mixed delays .... *I. Amri , D. Soudani and M. Benrejeb* ....(Tunisia)
1569293549	FieldBus Scheduling Using Boltzmann Machine .... *U. M. Ali and K. Al-Jeboury* ....(Iraq–Jordan)
1569297089	An adaptive fault tolerant control in interconnected systems .... *A. Challouf, N. Abdelkrim, A. Tellili, M. N. Abdelkrim and C. Aubrun*......... ....(Tunisia–France)

Session SAC 2 : Robust Control

Chairs : T. Tutunji (Jordan)

M. N. Abdelkrim (Tunisia)

1569277137	Robust adaptive path following for a nonlinear third order Nomoto's ship model *M. Taktak-Meziou, J. Ghommam and N. Derbel* ....(Tunisia)
1569293323	Structured mixed-sensitivity H_∞ design using particle swarm optimization .... *S. Bouallègue, J. Haggège and M. Benrejeb* ....(Tunisia)
1569296287	Sliding mode control for non linear water treatment system .... *N. Zitouni, R. Andoulsi, A. Sellami, A. Mami and A. Hssen* ....(Tunisia)
1569297069	On the internal model control of uncertain systems .... *M. Naceur, I. Ben Cheikh Ahmed, D. Soudani and M. Benrejeb* ......(Tunisia)
1569314778	A hybrid evolutionary design of neuro-fuzzy systems .... *R. El-Hamdi, M. Njah and M. Chtourou* ....(Tunisia)
1569320027	Strong simultaneous stabilization problem using linear matrix .... *A.-W. A. Saif* ....(Saudi Arabia)

Lunch

Session SAC 3 : Fuzzy Systems

Chairs :   M. M. Ali (Jordan)
             J. Ghommam (Tunisia)

1569268111   Fuzzy adaptive sliding-mode control for a class of nonlinear systems ....
E. EL-Madbouly, M. Hashim, B. Abouzalam and Y. Kabil .... (Egypt)

1569287091   Fuzzy optimal control of nonlinear systems ....
E. Kolsi and N. Derbel .... (Tunisia)

1569290861   Fuzzy predictive control based on Takagi-Sugeno model for nonlinear systems .
L. Dalhoumi, M. Djemel and M. Chtourou .... (Tunisia)

1569299988   Fuzzy control of a two-wheel balancing robot using DSPIC ....
S. Miasa, M. Al-Mjali, A. Al-Haj Ibrahim and T. Tutunji .... (Jordan)

1569320345   Fuzzy control approach for optimization mobile robot navigation in a cluttered environment ....
N. Yousfi, C. Rekik, M. Jallouli and N. Derbel .... (Tunisia)

1569330986   Gait analysis and shaft synchronization of hexapod walking vehicle via fuzzy logic
S. Abd Rabbo .... (Egypt)

Session SAC 4 : Neural Networks

Chairs :   Y. H. Hossamel-din (Egypt)
             M. Feki (Tunisia)

1569283209   Comparison between neural network based PI and PID controllers ....
M. Y. Hassan and G. Kothapalli .... (Iraq–Australia)

1569287205   Neural emulation applied to chemical reactors ....
A. Atig, F. Druaux, D. Lefebvre, K. Abderrahim and R. Ben Abdennour ....
.... (France–Tunisia)

1569292047   Neural Approches for Modelling Nonlinear systems ....
A. Turki, M. Chtourou and M. Djemel .... (Tunisia)

Tuesday, 28 of June, 2010

Plenary Session 3 :

Chairs :   M. N. Baker (Jordan)
             N. Derbel (Tunisia)

1569330948   Autonomous aerial vehicles: guidance, control and signal processing platform ..
M. A. Al-Jarah .... (U.A.E.)

Plenary Session 4 :
Chairs : M. Ajor (Jordan)
A. Masmoudi (Tunisia)

1569329494 Electromagnetic Fields and Human Health ....
G. M. Amer .... (Egypt)

Coffee Break

Assistance at other Conferences

Lunch

Session SAC 5 : Robotic Systems
Chairs : M. Al-Jarah (UAE) (U.A.E.)
J. Ghommam (Tunisia)

1569284723 Adaptive tracking control of a mobile manipulator ....
A. Karray and M. Feki .... (Tunisia)
1569287887 Power wheelchair driver behavior modelling ....
H. Emam, Y. Hamam, E. Monacelli and K. Djouani ....(France–South Africa)
1569288067 Mutual and external synchronization control of multi-robot systems ....
Y. Bouteraa, J. Ghommam, N. Derbel and G. Poisson .... (Tunisia–France)
1569288151 Vibration controllability and observability of a single-link flexible manipulator .
M. Baroudi, M. Saad, W. Ghie,A. Kaddouri and H. Ziade . (Canada–Lebanon)
1569327414 A real time vision feedback system for automation of a nano-assembly manipulator inside scanning electron microscope ....
M. Al-Fandi, M. A. Jaradat, A. Abusaif and T. C. Yih .... (Jordan–USA)
1569327414 A rule-based system for trajectory planning of an indoor mobile robot ....
S. M. Sharef, W. K. Saïd and F. S. Khoshaba ....(Iraq)

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Session SAC 6 : Observers

Chairs :   A. Al-Saif (KSA)
           M. N. Abdelkrim (Tunisia)

1569287871   Output feedback controller using the high gain observer and the immersion technique for an induction motor ....
             H. Chehimi, S. Hadj Saïd and F. M'Sahli ....(Tunisia)

1569288117   Sliding mode observer for nonlinear mechanical systems subject to non-smooth impacts ....
             M. Mchiri, K. Trabelsi and S. Belghith ....(Tunisia)

1569288533   Robust speed and position observer using HOSM for sensor-less SPMSM control

             D. Zaltni and M. N. Abdelkrim ....(Tunisia–France)

Closure

Conference Dinner

Wednesday, 29 of June, 2010

Post Conference Program

Conference on
Power Electrical Systems

Conference chair:
Mahmoud Zeidan (Jordan)

Scientific Program committee:

Aït-Ahmed, Nadia (France)
Ajour, Mohammad (Jordan)
Alfaouri, Audeh (Jordan)
Al-Issa, Rateb (Jordan)
Allano, Sylvain (France)
Alolah, Abdurrahman (KSA)
Alomoush, Muwaffaq (Jordan)
Al-Zeoud, Abdullah (Jordan)
Amer, Ghada M. (Egypt)
Awad , Mahmoud (Jordan)
Badran, Ibrahim (Jordan)
Baker, Munther (Jordan)
Belahrach, Hassan (Morocco)
Ben Alla, Hocine (Algeria)
Besbes, Mondher (France)
Borne, Pierre (France)
Bouillault, Frédéric (France)

Boussak, Mohamed (France)
Boutana, Ilhem (Algeria)
Colak, Tufan (UK)
Denai Mouloud A. (Algeria)
Djennoune, Said (Algeria)
El-Antably, Ahmed (USA)
El-Hajjaji, Ahmed (France)
El-Kady, Mohamed (KSA)
Elleuch, Mohamed (Tunisia)
Gabsi, Mohamed (France)
Guermazi, Abdessttar (Tunisia)
Hadj Abdallah, Hsan (Tunisia)
Henneberger, Gerard (Germany)
Kamoun, Mohamed B. A. (Tunisia)
Kirtley, Jim L. (USA)
Krichen, Lotfi (Tunisia)
Lazim, Mohammed (Jordan)

Magetto, Gaston (Belgium)
Marchand, Claude (France)
Marta, Molinas (Norway)
Mekidèche, Mohamed (Algeria)
Mimouni, Mohamed F. (Tunisia)
Moghavvemi, Mahmoud (Malaysia)
Multon, Bernard (France)
Muthafar, Mohammad (Jordan)
Nair, Nirmal (New Zeland)
Néji, Rafik (Tunisia)
Perfumo, Francesco (Italy)
Rufer, Alfred (Suitzerland)
Saied, Basil (Iraq)
Saman, Wasim (Australia)
Tamura, Junji (Japan)
Zeidan, Mahmoud (Jordan)

Topics

Electric machines modelling and control, Electric machine design, Special machines, Power electronic converters, Variable speed drives, Automotive electrical systems, Monitoring and diagnostics, Power systems, Renewable energy generation, Electromagnetic compatibility Variable speed generating systems Transformers.

SSD'10 : PES – Conference Program

	8 h 30 – 9 h 00	9 h 00 – 9 h 20	9 h 20 – 9 h 40	9 h 40 – 10 h 00	10 h 00 – 10 h 20	10 h 20 – 10 h 40	10 h 40 – 11 h 10	11 h 10 – 12 h 40	12 h 40 – 14 h 00	14 h 00 – 15 h 30	15 h 30 – 17 h 30	17 h 30 – 19 h 00	19 h 00
Sunday June, 27										Registration			
Monday June, 28	Registration	Official Opening	Plenary Session 1		Plenary Session 2		Coffee Break	Session PES 1	Session PES 2	Lunch	Free Activities		
Tuesday June, 29	Registration	Plenary Session 3		Plenary Session 4		Coffee Break	Session PES 3		Session PES 4	Lunch	Session PES 5	Closure	Conference Dinner
Wednesday June, 30	Post Conference Program												

Sunday, 27 of June, 2010

Registration		**Sunday, 14h00-19h00** at Rio Jordan Hotel, Amman

Monday, 28 of June, 2010

Registration		**Monday, 8h30-9h00**

Official Opening		**Monday, 9h00-9h20**

Monday, 9h20-10h00

Plenary Session 1 :
Chairs :   M. N. Baker (Jordan)
            T. Tutunji (Jordan)

1569330946   Industrial linked mechatronics, an application in autotronics ....
           Y. H. Hossamel-din ....(Egypt)

Monday, 10h00-10h40

Plenary Session 2 :
Chairs :   H.-R. Tränkler (Germany)
            A. I. Saleem (Jordan)

1569288097   Diversification of the eddy current technology ....
           J. Himmel, M. Heidary Dastjerdi, C. Knopf, C. Sehestedt, J. Weidenmüller and
           O. Kanoun ....(Germany)

Coffee Break		**Monday, 10h40-11h10**

Session PES 1 : Converters

Chairs :   M. Elleuch (Tunisia)
R. Al-Issa (Jordan)

1569284363   The investigation of power distortion in a three-phase modified controlled converter circuit ....
B. M. Saied and R. K. Antar .... (Iraq)

1569287561   Application of SHE-PWM for seven-level inverter output voltage enhancement based on particle swarm optimization ....
A. Kouzou, M. O. Mahmoudi and M. S. Boucherit ....(Algeria)

1569287587   Fuel cell PWM DC/DC chopper interface based on particle swarm optimization
A. Kouzou, M. Hatti, M. O. Mahmoudi and M. S. Boucherit ....(Algeria)

1569288119   Comparison among electronic start up methods for induction motors ....
L. Ghodhbani, B. Rebhi, F. Kourda, M. Elleuch and M. Abidi ....(Tunisia)

1569296377   Stability analysis of a two-cell DC/DC converter using a dynamic time delayed feedback controller ....
K. Koubaa, M. Feki, A. El Aroudi, B. G. M. Robert and N. Derbel ....
....(Tunisia–Spain–France)

1569296789   Design of new street lighting lamp ....
B. A. Nasir, Z. M. Abdullah and M. H. Yaseen ....(Iraq)

Session PES 2 : Diagnostics

Chairs :   M. Lazim (Jordan)
B. Saied (Iraq)

1569286587   Analysis of stator short-circuit faults for induction machine using finite element modelling ....
A. Lebaroud and G. Clerc .... (France)

1569288027   Classification of induction machine faults ....
T. Boukra and A. Lebaroud ....(Algeria)

1569295237   Disturbance performance improvement of distance relay with aid of wavelet ...
M. F. Al-Kababjie and N. H. Al-Namee ....(Iraq)

Lunch

Assistance at other Conferences

Tuesday, 29 of June, 2010

Plenary Session 3 :
Chairs :   M. N. Baker (Jordan)
              N. Derbel (Tunisia)

1569330948   Autonomous aerial vehicles: guidance, control and signal processing platform ..
M. A. Al-Jarah .... (U.A.E.)

Plenary Session 4 :
Chairs :   M. Ajor (Jordan)
              A. Masmoudi (Tunisia)

1569329494   Electromagnetic Fields and Human Health ....
G. M. Amer .... (Egypt)

Coffee Break

Session PES 3 : Power Systems
Chairs :   M. Zeidan (Jordan)
              G. M. Amer (Egypt)

1569287601   Participation of direct drive wind turbine to the grid ancillary services using a flywheel energy storage system ....
M. Khaterchi, J. Belhadj and M. Elleuch ....(Tunisia)

1569288547   FACTS placement multiobjective optimization for reactive power system compensation ....
M. Belazzoug and M. Boudour ....(Algeria)

1569296897   Optimal reactive power value in Mosul ring bus-bars using genetic algorithm ..
B. F. A. Mohammed and M. S. M. Al-Hafid ....(Iraq)

1569296923   Optimal Interaction between PSS and FACTS devices in damping power systems oscillations: part I ....
A. F. Bati ....(South Africa)

1569297147   Modelling and simulation of a gird connected PV generation system with MPPT fuzzy logic control ....
F. Bouchafaa, D. Beriber and M. S. Boucherit ....(Algeria)

1569307899   Study the Iraqi national super grid power flow based optimum generation in case of multi-contingency ....
S. S. Mustafa and M. K. Salman ....(Iraq)

Session PES 4 : Machine Control

Chairs : M. Al-Taee (Jordan)

H. Djeghloud (Algeria)

1569287849 Torque and speed estimators to be implemented in a control strategy dedicated to TSTPI-fed BDCM drives ....
A. Ben Rhouma and A. Masmoudi ....(Tunisia)

1569288127 Braking of induction motor with the technique of discrete frequency control ...
M. Abidi, B. Rebhi, F. Kourda, M. Elleuch and L. Ghodhbani ....(Tunisia)

1569288275 Sensorless speed and flux control scheme for an induction motor with an adaptive backstepping observer ....
R. Trabelsi, A. Kheder, F. Mimouni and F. M'Sahli ....(Tunisia)

Lunch

Session PES 5 : Electromagnetics

Chairs : M. Ajour (Jordan)

A. Masmoudi (Tunisia)

1569287625 Finite element method analysis of three phase transformer core accounting for anisotropy and air gaps ....
M. Khelil and M. Elleuch ....(Tunisia)

1569290589 Mitigation of magnetic field under Egyptian 500 kV overhead transmission line
A. Z. El-Dein ....(Egypt)

1569290617 Computation of Electric field and human body induced current under overhead transmission lines ....
A. Z. El-Dein, M. A. A. Wahab, M. M. Hamada and T. H. Emmary ..(Egypt)

1569290621 The effect of compensating conductors' parameters of 500 kV transmission line on right-of-way and corona ....
A. Z. El-Dein ....(Egypt)

1569290715 The effect of the artificial backfill materials on the ampacity of the underground cables ....
O. E. Gouda, A. Z. El Dein and G. M. Amer ....(Egypt)

1569296997 3D FEA based feature investigation of a claw pole alternator with DC excitation in the stator ....
A. Ibala and A. Masmoudi ....(Tunisia)

1569330212 Theoretical study on torque ripples generation in permanent magnet synchronous machine ....
I. Al-Edwan and O. Badran ....(Jordan)

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	Tuesday, 17h30-18h00
Closure	

	Tuesday, 19h00
Conference Dinner	

Wednesday, 29 of June, 2010

Post Conference Program	

Conference on
Communication & Signal Processing

Conference chair:
Abdel-Rahman Qawasmi (Jordan)

Scientific Program committee:

Abdel-jaber, Hussein (UK)	Abdel-Kader, Hussain (Jordan)	Abu-Isbeih, Ibrahim (Jordan)
Al-Aubidy, Kasim (Jordan)	Al-Omoush, Abdallah (Jordan)	Alimi, M. A. (Tunisia)
Aljebory, Karim (Jordan)	Alkuran, M. (USA)	Al-Qawasmi, A.-R. (Jordan)
Al-Qdah, Malik (Jordan)	Aqil, Musbah (Jordan)	Badri, Lubna (Jordan)
Bani Younis, M. (Germany)	Ben Amar, C. (Tunisia)	Daqrouq, Khaled (Jordan)
Derya Ubeyli, Elif (Turkey)	Dieulot, Jean-Yves (France)	Djemal, Khalifa (France)
Drira, Khalil (France)	Elhajj, Imad (Lebanon)	Essoukri-Ben Amara, N. (Tunisia)
Fahmi, Mujahid (Jordan)	Jaradat, Mohammad (Jordan)	Kamoun, Lotfi (Tunisia)
Khalaf, Emad (Jordan)	Khwaldeh, Ali (Jordan)	Kulpa, Krzysztof (Poland)
Lin, Jeng-Wei (Taiwan)	Maity, Chandan (India)	Nakamatsu, Kazumi (Japan)
Nassar, Elias (Lebanon)	Ouali, Mohamed (Tunisia)	Potapenko, Alexander (Russia)
Qahwaji, Rami (UK)	Rao, Batta Srinivasa (India)	Röck, H. (Germany)
Said Marai, Khalil (Jordan)	Said, Aziz (Egypt)	Salahat, Mazooz (Jordan)
Sarhan, Hussien (Jordan)	Sellami, Mokhtar (Algeria)	Sherif, Mohamed (Jordan)
Sliwa, Edward (Poland)	Speidel, Joachim (Germany)	Tlemçani, Abdelhalim (Algeria)
Vinod, A. (Singapore)		

Topics

Signal Processing for e-Learning Communications, Digital signal processing, Image and video compression algorithms, Speech recognition, Person Authentication, Biometry and medical imaging, Data fusion, Pattern recognition, Modulation and signal design, Communication theory and techniques, Communication Protocols and Standards, Telecommunication systems, Coding compression, Information theory, Communication networks, Wireless communication, Optical communication, Wireless Sensor Networks, MIMO Communications, Artificial intelligence, Information retrieval, Adaptive antennas, Smart antennas.

SSD'10 : CSP – Conference Program

	8 h 30 – 9 h 00	9 h 00 – 9 h 20	9 h 20 – 9 h 40	9 h 40 – 10 h 00	10 h 00 – 10 h 20	10 h 20 – 10 h 40	10 h 40 – 11 h 10	11 h 10 – 12 h 40	12 h 40 – 14 h 00	14 h 00 – 15 h 30	15 h 30 – 16 h 30	16 h 30 – 17 h 30	17 h 30 – 19 h 00	19 h 00
Sunday June, 27										Registration				
Monday June, 28	Registration	Official Opening	Plenary Session 1		Plenary Session 2		Coffee Break	Session CSP 1	Session CSP 2	Lunch	Session CSP 3	Session CSP 4	Free Activities	
Tuesday June, 29	Registration	Plenary Session 3		Plenary Session 4		Coffee Break	Session CSP 5		Session CSP 6	Lunch	Session CSP 7	Session CSP 8	Closure	Conference Dinner
Wednesday June, 30	Post Conference Program													

Sunday, 27 of June, 2010

		Sunday, 14h00-19h00
Registration		at Rio Jordan Hotel, Amman

Monday, 28 of June, 2010

		Monday, 8h30-9h00
Registration		

	Monday, 9h00-9h20
Official Opening	

Monday, 9h20-10h00

Plenary Session 1 :
Chairs :   M. N. Baker (Jordan)
             T. Tutunji (Jordan)

1569330946   Industrial linked mechatronics, an application in autotronics ....
              Y. H. Hossamel-din ....(Egypt)

Monday, 10h00-10h40

Plenary Session 2 :
Chairs :   H.-R. Tränkler (Germany)
             A. I. Saleem (Jordan)

1569288097   Diversification of the eddy current technology ....
              J. Himmel, M. Heidary Dastjerdi, C. Knopf, C. Sehestedt, J. Weidenmüller and
              O. Kanoun ....(Germany)

Monday, 10h40-11h10

Coffee Break	

Session CSP 1 : Image Processing

Chairs :   S. Sheik Mohammed (Oman)
A. J. Jameel (Bahrain)

1569287873   An improved OTSU based watershed algorithm and its implementation on virtex II pro platform ....
N. S. Zghal and D. Sellami-Masmoudi ....(Tunisia)

1569287935   An eigen value based watermarking scheme for tamper detection in gray level images ....
A. Hassine, R. Rhouma and S. Belghith ....(Tunisia)

1569289483   A new algorithm for automatic extraction of GIS layers ....
M. B. Al-Zoubi ....(Jordan)

1569296445   A comparative study to select an image deconvolution method ....
S. Saadi, A. Kouzou, A. Guessoum and M. Bettayeb ....(Algeria–U.A.E.)

1569315271   Pixel-level similarity fusion for image classification ....
A. P. James ....(Australia)

Session CSP 2 : Network Communication

Chairs :   S. B. Sadkhan (Iraq)
M. Al-Akhras (Jordan)

1569297943   Ad Hoc networks security challenges ....
A. El-Mousa and A. Suyyagh ....(Jordan)

1569307507   Performance analysis of the effects of network density and network mobility on velocity-based scheme in mobile Ad hoc network ....
M. Bani Yassein, A. Abu Al-Hassan, and Z. Abu Tayé ....(Jordan)

1569320305   Coverage planning in 3G multimedia networks based on walsh coding ....
O. Alani, O. Daoud and I. Abu-Isbeih ....(U.K.–Jordan)

Lunch

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Session CSP 3 : Signal Processing

Chairs :   A. Al-Qawasimi (Jordan)

K. Sayidmarai (Iraq)

1569266713   Implementation of 8-point slantlet transform based polynomial cancellation coding-OFDM system using FPGA ....
H. N. Abdullah and S. A. Ali .... (Iraq)

1569284635   DES96 - Improved DES security ....
M. M. Alani .... (Bahrain)

1569285821   Digital IIR filter approximation of the fractional delay operator ....
T. Bensouici, A. Charef and F. Abdelliche .... (Algeria)

1569287669   Effect of coefficient quantization on the frequency of response of an IIR digital filter by using software ....
A. A. Eletri, E. S. EB.Salem, A. R. Zerek and S. A. Elgandus .... (Libya)

1569297073   Accuracy of the sine-wave normalized frequency estimation by interpolated DFT method with rectangular window ....
D. Belega, D. Dallet and D. Petri .... (Romania–France–Italy)

Session CSP 4 : Biomedical

Chairs :   M. Al-Taee (Jordan)

A. P. James (Australia)

1569288011   Preprocessing of the ECG signals using the His-Purkinje fractal system ....
M. Benmalek, A. Charef and F. Abdelliche .... (Algeria)

1569296411   Bacterial foraging algorithm for neutron radiography image quality improvement

S. Saadi, A. Kouzou, A. Guessoum and M. Bettayeb .... (Algeria–U.A.E.)

1569296599   RSA Based encryption/decryption of medical images ....
N. Anane, M. Anane, H. Bessalah, M. Issad and M. Issad .... (Algeria)

Tuesday, 29 of June, 2010

Plenary Session 3 :

Chairs :   M. N. Baker (Jordan)

N. Derbel (Tunisia)

1569330948   Autonomous aerial vehicles: guidance, control and signal processing platform ..
M. A. Al-Jarah .... (U.A.E.)

Plenary Session 4 :
Chairs :   M. Ajor (Jordan)
           A. Masmoudi (Tunisia)

1569329494   Electromagnetic Fields and Human Health ....
              G. M. Amer .... (Egypt)

Coffee Break

Session CSP 5 : Wireless Communication
Chairs :   A. El-Mousa (Jordan)
           O. Daoud (Jordan)

1569277827   Critical communication radius prediction with random distributed nodes in wireless sensor network ....
              C. Maity, A. Gupta and M. Maity .... (India)

1569287909   Using empirical mode decomposition for subscriber behaviour analysis in cellular networks in South Africa ....
              A. Kurien, K. Djouani, B. J. Van Wyk, Y. Hamam and A. Mellouk ....
              .... (South Africa–France)

1569291993   Specific absorption rate (SAR) induced in human heads of various sizes when using a mobile phone ....
              A. Z. El-Dein and A. Amr .... (Egypt–Jordan)

1569296727   Efficient encoding and decoding schemes for wireless underwater communication systems ....
              N. Nasri, L. Andrieux, A. Kachouri and M. Samet ....(Tunisia–France)

1569296747   Performance enhancement of wireless communication systems using transmit and receive diversity ....
              A. J. Jameel ....(Bahrain)

1569297053   Performance enhancement of wireless communication systems using loading algorithm ....
              A. J. Jameel ....(Bahrain)

1569315279   Enhancing the MIMO-OFDM radar systems performance ....
              O. Daoud, A. Damati and W. Al-Sawalmeh ....(Jordan)

1569320828   Hybrid multi-agent architecture (HMAA) for meeting scheduling ....
              S. Al-Ratrout and F. Siewe ....(Jordan–U.K.)

Session CSP 6 : Pattern Recognition

Chairs :   A. Z. El Dein (Egypt)
Q. Hamarsha (Jordan)

1569288041   A new rule pruning text categorization method ....
F. Thabtah, W. Hadi, H. Abu-Mansour and L. McCluskey ....(Jordan–U.K)

1569288269   High level estimation of implementation cost of using morphological filter in edge detection ....
K. Hamwi, M. Khaddour and O. Hammami ....(France)

1569307479   A proposed digital modulated signal identification based on pattern recognition
S. B. Sadkhan ....(Iraq)

Lunch

Session CSP 7 : Speech Processing

Chairs :   A. Shaban (Libya)
M. Alani (Bahrain)

1569296407   Switched split vector quantifier applied for encoding the LPC parameters of the 2.4 Kbits/s MELP speech coder ....
M. Bouzid, S. E. Cheraitia and M. Hireche ....(Algeria)

1569315273   Evaluating The NGN performance based on duplicate transmission of voice packets ....
M. Al-Akhras and O. Daoud ....(Jordan)

1569315975   Perceptual evaluation of speech enhancement ....
M. Al-Akhras, K. Daqrouq and A.-R. Al-Qawasmi ....(Jordan)

1569320307   Wavelet in conjunction with neural network method for speech enhancement quality evaluation ....
K. Daqrouq and G. Amer ....(Jordan–Egypt)

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Session CSP 8 : Antenna

Chairs : O. Daoud (Jordan)

C. Maity (India)

1569277141 Wideband modified dipole antenna for passive UHF RFID tags ....
A. M. A. Sabaawi and K. M. Quboa ....(Iraq)

1569284503 Amplitude-only beam scanning in linear antenna arrays ....
K. H. Sayidmarie and B. J. M. Jasem ....(Iraq)

1569296977 A 2.45GHz Sierpinski carpet edge-fed microstrip patch fractal antenna for WPT
rectenna ....
S. Sheik Mohammed, K. Ramasamy and T. Shanmuganantham ....(Oman)

1569317375 Design of fractal quadratic koch antenna ....
A. B. Shaalan ....(Jordan)

Closure

Conference Dinner

Wednesday, 29 of June, 2010

Post Conference Program

Conference on
Sensors, Circuits & Instrumentation Systems

Conference chair:
Ashraf I. Saleem (Jordan)

Scientific Program committee:

Abid, Mohamed (Tunisia)	Akama, Seiki (Japan),	Al-Nama, Fawzi (Pakistan)
Attari, Mokhtar (Algeria),	Brasseur, Gerog (Austria)	Demidenko, Serge (Malaisia)
Fischerauer, Gerhard (Germany)	Gasulla, Manel (Spain)	Ghariani, Ghariani (Tunisia)
Gupta, Vinod Kumar (India)	Hans, Volker (Germany),	Ismail, Mohamed (USA)
Kanoun, Olfa (Germany),	Khdair, Adnan (Jordan),	Kulpa, Krzysztof (Poland),
Ladjici, Ahmad Amine (Algeria)	Landi, Carmine (Italy)	Lay-Ekeaukille, Aimé (Italy),
Lewis, Noelle (France)	Loulou, Mourad (Tunisia)	Masmoudi, Mohamed (Tunisia)
Masmoudi, Nouri (Tunisia)	Mukhopadhyay, Subhas (New Zeland)	Nakamatsu, Kazumi (Japan)
Ortmanns, Maurits (Germany)	Qahwaji, Rami (UK),	Reindl, Leonard (Germany)
Renaud, Sylvie (France)	Rock, H. (Germany),	Salahat, Mazouz (Jordan),
Samet, Mounir (Tunisia)	Sharawi, Mohammad S. (Jordan)	Zagar, Bernhard (Austria)

Topics

Fundamentals and physics, Self test, Fault tolerance, System diagnosis, Simulation and design, Calibration and quality insurance, Sensors and actuators, Transducer design, Optical sensors and applications, Biomedical instrumentation systems, Circuits and systems, Full custom and semi-custom integrated circuits (Design concepts, architectures and high-performance and low-power circuits), Analog and digital signal processing, Neural networks implementation, Pulse mode neural networks, Genetic algorithm implementation, Sigma delta converters, Design for testability, Low-voltage design, Low-power VLSI design, RF circuit design, Smart home, Life sciences, Environmental applications, Opto-electronics, Micro-machines.

SSD'10 : SCI – Conference Program

	8 h 30 – 9 h 00	9 h 00 – 9 h 20	9 h 20 – 9 h 40	9 h 40 – 10 h 00	10 h 00 – 10 h 20	10 h 20 – 10 h 40	10 h 40 – 11 h 10	11 h 10 – 12 h 40	12 h 40 – 14 h 00	14 h 00 – 15 h 30	15 h 30 – 16 h 30	16 h 30 – 17 h 30	17 h 30 – 19 h 00	19 h 00
Sunday June, 27										Registration				
Monday June, 28	Registration	Official Opening	Plenary Session 1		Plenary Session 2		Coffee Break	Free Activities		Lunch	Session SCI 1	Session SCI 2	Free Activities	
Tuesday June, 29		Plenary Session 3		Plenary Session 4		Coffee Break	Session SCI 3		Session SCI 4	Lunch	Free Activities		Closure	Conference Dinner
Wednesday June, 30	Post Conference Program													

Sunday, 27 of June, 2010

<table>
<tr><td rowspan="2"></td><td rowspan="2"></td><td>Sunday, 14h00-19h00</td></tr>
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		<u>**Sunday, 14h00-19h00**</u>
Registration		at Rio Jordan Hotel, Amman

Monday, 28 of June, 2010

		<u>**Monday, 8h30-9h00**</u>
Registration		

		<u>**Monday, 9h00-9h20**</u>
Official Opening		

	<u>**Monday, 9h20-10h00**</u>
Plenary Session 1 :	

Chairs : M. N. Baker (Jordan)
T. Tutunji (Jordan)

1569330946 Industrial linked mechatronics, an application in autotronics ....
Y. H. Hossamel-din ....(Egypt)

	<u>**Monday, 10h00-10h40**</u>
Plenary Session 2 :	

Chairs : H.-R. Tränkler (Germany)
A. I. Saleem (Jordan)

1569288097 Diversification of the eddy current technology ....
*J. Himmel, M. Heidary Dastjerdi, C. Knopf, C. Sehestedt, J. Weidenmüller and
O. Kanoun* ....(Germany)

		<u>**Monday, 10h40-11h10**</u>
Coffee Break		

		<u>**Monday, 11h10-14h00**</u>
Assistance at other Conferences		

Lunch

Session SCI 1 : Analogue Circuits

Chairs :   A. Saleem (Jordan)

J. Himmel (Germany)

1569281653   Design-kit development based upon ISIT'S CMOS 1μM process technolgy ..... *A. Chenouf, A. Slimane, M. L. Berrandjia, A. K. Oudjida, A. Smatti and L. Akak* ....(Algeria)

1569287663   Design and simulation of a single stage single switch input current shaping circuit for AC/DC converter based on PWM technique .... *M. M. Alagele, M. M. Abdalla and A. Zerek* ....(Libya)

1569290205   Memorization behaviors of different MIOS structures .... *F. M. Wagah and S. A. Lukman* ....(Jordan–Iraq)

Session SCI 2 : Sensors

Chairs :   W. Mohammed (Jordan)

W. Sawalmah (Jordan)

1569315883   Influence of processing parameters on properties of strain sensors based on carbon nanotube films .... *Lei Bu, J. Steitz and O. Kanoun* ....(Germany)

1569318706   Algorithmic construction of optimal and load balanced clusters in wireless sensor networks .... *M. Hammoudeh, S. Mount, O. Aldabbas and M. Alfawair* ....(U.K.–Jordan)

1569323146   Detection and localization of cable faults by time and frequency domain measurements .... *Q. Shi, U. Troeltzsch and O. Kanoun* ....(Germany)

Tuesday, 29 of June, 2010

Plenary Session 3 :

Chairs :   M. N. Baker (Jordan)

N. Derbel (Tunisia)

1569330948   Autonomous aerial vehicles: guidance, control and signal processing platform .. *M. A. Al-Jarah* ....(U.A.E.)

Plenary Session 4 :
Chairs :   M. Ajor (Jordan)
              A. Masmoudi (Tunisia)

1569329494   Electromagnetic Fields and Human Health ....
              G. M. Amer .... (Egypt)

Coffee Break

Session SCI 3 : Software & Hardware Implementation
Chairs :   O. Daoud (Jordan)
              A. Oudjida (Algeria)

1569286275   Design and test of general-purpose SPI master/slave IPs on OPB bus ....
              A. K. Oudjida, M. L. Berrandjia, A. Liacha, R. Tiar, K. Tahraoui and Y. N.
              Alhoumays .... (Algeria)

1569298483   A neural network based algorithm for assessing risk priority of medical equipments

              F. Al-Naima and A. H. A. Al-Timemy .... (Iraq–U.K.)

1569307179   Hardware implementation and experiment validation of the VDDRHF color image
              filter ....
              A. Boudabous, A. Ben Atitallah, L. khriji, P. Kadionik and N. Masmoudi ....
              .... (Tunisia–Oman–France)

1569307189   An efficient pipeline execution of H.264/AVC intra 4x4 frame design ....
              S. Smaoui, H. Loukil, A. Ben Atitallah and N. Masmoudi .... (Tunisia)

1569307239   An efficient pipeline execution of H.264/AVC intra 4x4 frame design ....
              S. Smaoui, H. Loukil, A. Ben Atitallah and N. Masmoudi .... (Tunisia)

1569314071   Hardware implementation of pulse mode RBFNN based edge detection system
              on virtex V platform ....
              A. Gargouri, M. Krid and D. Sellami-Masmoudi .... (Tunisia)

Session SCI 4 : Electronic Communication

Chairs :   F. M. M. Al-Naima (Jordan)

            A. Zerek (Lybia)

1569287983   Fractional spline wavelet for numerical analysis in electromagnetic . . . .
M. Lashab, S. Ladaci, F. Abdelliche, C. Zebiri and F. Benabdelaziz . . . (Algeria)

1569288241   Linearization of power amplifier class AB using cartesian feedback . . . .
K. K. Mohammed and R. B. Mohammed . . . . (Iraq)

1569290629   Tunable - compact bandstop defected ground structure (DGS) with lumped element . . . .
A. Z. El-Dein, A. B. Abdel-Rahman, R. E. Fat-Helbary and A. M. Montaser . . . . (Egypt)

Tuesday, 14h00-15h30

Lunch

Monday, 15h30-17h30

Assistance at other Conferences

Tuesday, 17h30-18h00

Closure

Tuesday, 19h00

Conference Dinner

Wednesday, 29 of June, 2010

Post Conference Program

Looking forward to seeing you on SSD'11

March 22-25, 2011

Sousse, Tunisia,

Thank you

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